

Lewis County
Department of Public Works
Engineering Division

**CONTRACT
PROVISIONS AND PLANS
FOR THE:
PIGEON SPRINGS RD MP 0.5
(FRASE CREEK) CULVERT
REPLACEMENT PROJECT
COUNTY MAINTENANCE PROJECT NO. 1515**

February 2019

Lewis County Public Works
2025 NE Kresky Ave.
Chehalis, WA 98532-2626



BOARD OF COUNTY COMMISSIONERS

Edna J. Fund, District No. 1
Robert C. Jackson, District No. 2
Gary Stamper, District No. 3

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1 **INTRODUCTION**

2 The following Amendments and Special Provisions shall be used in conjunction with the 2018 Standard
3 Specifications for Road, Bridge, and Municipal Construction.
4

5 **AMENDMENTS TO THE STANDARD SPECIFICATIONS**

6
7 The following Amendments to the Standard Specifications are made a part of this contract and supersede
8 any conflicting provisions of the Standard Specifications. For informational purposes, the date following
9 each Amendment title indicates the implementation date of the Amendment or the latest date of revision.
10

11 Each Amendment contains all current revisions to the applicable section of the Standard Specifications
12 and may include references which do not apply to this particular project.
13

14 **Section 1-02, Bid Procedures and Conditions**

15 April 2, 2018

16 **1-02.6 Preparation of Proposal**

17 Item number 1 of the second paragraph is revised to read:

- 18
19 1. A unit price for each item (omitting digits more than two places to the right of the decimal point),
20

21 In the third sentence of the fourth paragraph, "WSDOT Form 422-031" is revised to read "WSDOT Form
22 422-031U".
23

24 The following is inserted after the third sentence of the fourth paragraph:

25
26 Bidders shall submit a UDBE Broker Agreement documenting the fees or commissions charged by
27 the Broker for any Broker listed on the UDBE Utilization Certification in accordance with the Special
28 Provisions. Bidders shall submit a completed UDBE Trucking Credit Form for each UDBE Trucking
29 firm listed on the UDBE Utilization Certification in accordance with the Special Provisions. WSDOT
30 Form 272-058 is available for this purpose.
31

32 The following new paragraph is inserted before the last paragraph:

33
34 The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance
35 form (WSDOT Form 272-009). Failure to return this certification as part of the Bid Proposal package
36 will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law
37 Compliance form is included in the Proposal Forms.
38

39 **1-02.13 Irregular Proposals**

40 Item 1(h) is revised to read:

- 41
42 h. The Bidder fails to submit Underutilized Disadvantaged Business Enterprise Good Faith Effort
43 documentation, if applicable, as required in Section 1-02.6, or if the documentation that is
44 submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was
45 made;
46

1 Item 1(i) is revised to read the following three items:
2

- 3 i. The Bidder fails to submit an Underutilized Disadvantaged Business Enterprise Trucking Credit
4 Form, if applicable, as required in Section 1-02.6, or if the Form that is submitted fails to meet
5 the requirements of the Special Provisions;
- 6
7 j. The Bidder fails to submit an Underutilized Disadvantaged Business Enterprise Broker
8 Agreement, if applicable, as required in Section 1-02.6, or if the documentation that is submitted
9 fails to demonstrate that the fee/commission is reasonable as determined by the Contracting
10 Agency; or
- 11
12 k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms
13 of the Bid invitation.
14

15 **SECTION 1-05, CONTROL OF WORK**

16 April 2, 2018

17 **1-05.9 Equipment**

18 The following new paragraph is inserted before the first paragraph:
19

20 Prior to mobilizing equipment on site, the Contractor shall thoroughly remove all loose dirt and
21 vegetative debris from drive mechanisms, wheels, tires, tracks, buckets and undercarriage. The
22 Engineer will reject equipment from the site until it returns clean.
23

24 This section is supplemented with the following:
25

26 Upon completion of the Work, the Contractor shall completely remove all loose dirt and vegetative
27 debris from equipment before removing it from the job site.
28

29 **SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**

30 April 2, 2018

31 **1-07.5 Environmental Regulations**

32 This section is supplemented with the following new subsections:
33

34 **1-07.5(5) U.S. Army Corps of Engineers**

35 When temporary fills are permitted, the Contractor shall remove fills in their entirety and the affected
36 areas returned to pre-construction elevations.
37

38 If a U.S. Army Corps of Engineers permit is noted in Section 1-07.6 of the Special Provisions, the
39 Contractor shall retain a copy of the permit or the verification letter (in the case of a Nationwide
40 Permit) on the worksite for the life of the Contract. The Contractor shall provide copies of the permit
41 or verification letter to all subcontractors involved with the authorized work prior to their
42 commencement of any work in waters of the U.S.
43

44 **1-07.5(6) U.S. Fish/Wildlife Services and National Marine Fisheries Service**

45 The Contracting Agency will provide fish exclusion and handling services if the Work dictates.
46 However, if the Contractor discovers any fish stranded by the project and a Contracting Agency
47 biologist is not available, they shall immediately release the fish into a flowing stream or open water.
48

1 **1-07.5(1) General**

2 The first sentence is deleted and replaced with the following:

3
4 No Work shall occur within areas under the jurisdiction of resource agencies unless authorized in
5 the Contract.

6
7 The third paragraph is deleted.
8

9 **1-07.5(2) State Department of Fish and Wildlife**

10 This section is revised to read:

11 In doing the Work, the Contractor shall:

- 12 1. Not degrade water in a way that would harm fish, wildlife, or their habitat.
- 13 14 2. Not place materials below or remove them from the ordinary high water line except as may
15 be specified in the Contract.
- 16 17 3. Not allow equipment to enter waters of the State except as specified in the Contract.
- 18 19 4. Revegetate in accordance with the Plans, unless the Special Provisions permit otherwise.
- 20 21 5. Prevent any fish-threatening silt buildup on the bed or bottom of any body of water.
- 22 23 6. Ensure continuous stream flow downstream of the Work area.
- 24 25 7. Dispose of any project debris by removal, burning, or placement above high-water flows.
- 26 27 8. Immediately notify the Engineer and stop all work causing impacts, if at any time, as a result
28 of project activities, fish are observed in distress or a fish kill occurs.

29
30 If the Work in (1) through (3) above differs little from what the Contract requires, the Contracting
31 Agency will measure and pay for it at unit Contract prices. But if Contract items do not cover those
32 areas, the Contracting Agency will pay pursuant to Section 1-09.4. Work in (4) through (8) above
33 shall be incidental to Contract pay items.
34
35
36

37 **1-07.7(1) General**

38 The first sentence of the third paragraph is revised to read:

39
40 When the Contractor moves equipment or materials on or over Structures, culverts or pipes, the
41 Contractor may operate equipment with only the load-limit restrictions in Section 1-07.7(2).
42

43 The first sentence of the last paragraph is revised to read:

44
45 Unit prices shall cover all costs for operating over Structures, culverts and pipes.
46

47 **1-07.9(2) Posting Notices**

1 The second sentence of the first paragraph (up until the colon) is revised to read:

2
3 The Contractor shall ensure the most current edition of the following are posted:

4
5 In items 1 through 10, the revision dates are deleted.

6
7 **1-07.11(2) Contractual Requirements**

8 In this section, “creed” is revised to read “religion”.

9
10 Item numbers 1 through 9 are revised to read 2 through 10, respectively.

11
12 After the preceding Amendment is applied, the following new item number 1 is inserted:

- 13
14 1. The Contractor shall maintain a Work site that is free of harassment, humiliation, fear, hostility
15 and intimidation at all times. Behaviors that violate this requirement include but are not limited
16 to:
- 17 a. Persistent conduct that is offensive and unwelcome.
 - 18 b. Conduct that is considered to be hazing.
 - 19 c. Jokes about race, gender, or sexuality that are offensive.
 - 20 d. Unwelcome, unwanted, rude or offensive conduct or advances of a sexual nature which
21 interferes with a person’s ability to perform their job or creates an intimidating, hostile, or
22 offensive work environment.
 - 23 e. Language or conduct that is offensive, threatening, intimidating or hostile based on race,
24 gender, or sexual orientation.
 - 25 f. Repeating rumors about individuals in the Work Site that are considered to be harassing or
26 harmful to the individual’s reputation.
- 27
28
29
30
31
32
33

34 **1-07.11(5) Sanctions**

35 This section is supplemented with the following:

36
37 Immediately upon the Engineer’s request, the Contractor shall remove from the Work site any
38 employee engaging in behaviors that promote harassment, humiliation, fear or intimidation including
39 but not limited to those described in these specifications.

40
41 **1-07.11(6) Incorporation of Provisions**

42 The first sentence is revised to read:

43
44 The Contractor shall include the provisions of Section 1-07.11(2) Contractual Requirements (1)
45 through (5) and the Section 1-07.11(5) Sanctions in every subcontract including procurement of
46 materials and leases of equipment.

47
48 **1-07.18 Public Liability and Property Damage Insurance**

1 Item number 1 is supplemented with the following new sentence:

2
3 This policy shall be kept in force from the execution date of the Contract until the Physical Completion
4 Date.

5
6

1 **1-01.3 Definitions**
2 (January 4, 2016 APWA GSP)

3
4 Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them with
5 the following:

6
7 **Dates**

8 ***Bid Opening Date***

9 The date on which the Contracting Agency publicly opens and reads the Bids.

10 ***Award Date***

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

13 ***Contract Execution Date***

14 The date the Contracting Agency officially binds the Agency to the Contract.

15 ***Notice to Proceed Date***

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

17 ***Substantial Completion Date***

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

23 ***Physical Completion Date***

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

27 ***Completion Date***

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

32 ***Final Acceptance Date***

33 The date on which the Contracting Agency accepts the Work as complete.

34
35 Supplement this Section with the following:

36
37 All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions,
38 to the terms "Department of Transportation", "Washington State Transportation Commission",
39 "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer"
40 shall be revised to read "Contracting Agency".

41
42 All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless
43 the reference is to an administrative agency of the State of Washington, a State statute or
44 regulation, or the context reasonably indicates otherwise.

45
46 All references to "State Materials Laboratory" shall be revised to read "Contracting Agency
47 designated location".

48
49 All references to "final contract voucher certification" shall be interpreted to mean the Contracting
50 Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

1 **Additive**

2 A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which
3 may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.
4

5 **Alternate**

6 One of two or more units of work or groups of bid items, identified separately in the Bid Proposal,
7 from which the Contracting Agency may make a choice between different methods or material of
8 construction for performing the same work.
9

10 **Business Day**

11 A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.
12

13 **Contract Bond**

14 The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s)
15 are required by the Contract Documents, which may be a combination of a Payment Bond and a
16 Performance Bond.
17

18 **Contract Documents**

19 See definition for "Contract".
20

21 **Contract Time**

22 The period of time established by the terms and conditions of the Contract within which the Work
23 must be physically completed.
24

25 **Notice of Award**

26 The written notice from the Contracting Agency to the successful Bidder signifying the Contracting
27 Agency's acceptance of the Bid Proposal.
28

29 **Notice to Proceed**

30 The written notice from the Contracting Agency or Engineer to the Contractor authorizing and
31 directing the Contractor to proceed with the Work and establishing the date on which the Contract
32 time begins.
33

34 **Traffic**

35 Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian
36 traffic.
37

38 **1-02, BID PROCEDURES AND CONDITIONS**

39 **1-02.1 Prequalification of Bidders**

40
41 Delete this Section and replace it with the following:
42

43 **1-02.1 Qualifications of Bidder**

44 *(January 24, 2011 APWA GSP)*
45

46 Before award of a public works contract, a bidder must meet at least the minimum qualifications of
47 RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public
48 works project.
49

50 **1-02.2 Plans and Specifications**

51 *(*****)*
52

1
2 The first paragraph of section 1-02.2 is revised to read:

3
4 Copies of the plans and specifications are on file in the office of:

5
6 Lewis County Public Works Department
7 2025 N.E. Kresky Avenue
8 Chehalis, Washington 98532
9 (360) 740-2612
10

11 The second paragraph of section 1-02.2 is revised to read:

12
13 Prospective bidders may obtain plans and specifications from Lewis County Public
14 Works Department in Chehalis, Washington or download from Lewis County Website at
15 www.lewiscountywa.gov.
16

17 **1-02.6 Preparation Of Proposal**

18 (August 2, 2004)

19 The fifth and sixth paragraphs of Section 1-02.6 are deleted.

22 **1-02.12 Public Opening Of Proposal**

23 (*****)
24

25 Section 1-02.12 is supplemented with the following:

27 **Date and Time of Bid Opening**

28 The Board of County Commissioners of Lewis County or designee, will open sealed proposals and
29 publicly read them aloud on or after 11:00 a.m. on **February 26, 2019**, at the Lewis County
30 Courthouse, Chehalis, Washington, for the Pigeon Springs Road MP 0.50 (Frase Creek) Culvert
31 Replacement Project, CMP-1515.
32

33 **SEALED BIDS MUST BE DELIVERED BY OR BEFORE** 34 **11:00 A.M. on Tuesday, February 26, 2019**

35 (Lewis County official time is displayed on Axxess Intertel phones in the office of the Board of County Commissioners.
36 **Bids submitted after 11:00 AM will not be considered for this project.**)
37

38 **Delivery and Marking of Sealed Bid Proposals**

39 Sealed proposals must be delivered to the Clerk of the Board of Lewis County Commissioners
40 (351 N.W. North Street, Room 210, CMS-01, Chehalis, Washington 98532) by or before **11:00**
41 **a.m.** on the date specified for opening, and in an envelope clearly marked: **"SEALED BID FOR**
42 **THE PIGEON SPRINGS ROAD MP 0.50 (FRASE CREEK) CULVERT REPLACEMENT**
43 **PROJECT, CMP-1515, TO BE OPENED ON OR AFTER 11:00 A.M. ON FEBRUARY 26, 2019"**.
44
45
46
47

48 **1-02.13 Irregular Proposals**

49 (June 20, 2017 APWA GSP)
50

51 Delete this section and replace it with the following:

- 52
53 1. A Proposal will be considered irregular and will be rejected if:
54 a. The Bidder is not prequalified when so required;

- b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
 - c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
 - d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
 - e. A price per unit cannot be determined from the Bid Proposal;
 - f. The Proposal form is not properly executed;
 - g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
 - h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
 - i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
 - j. The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
 - k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
 - l. More than one Proposal is submitted for the same project from a Bidder under the same or different names.
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. Receipt of Addenda is not acknowledged;
 - d. 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
 - e. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders
(July 31, 2017 APWA GSP, Option B)

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; or does not meet Supplemental Criteria 1-7 listed in this Section.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-7 shall be provided by the Bidder as stated later in this Section.

In addition, the Bidder shall submit to the Contracting Agency a signed "Certification of Compliance with Wage Payment Statutes" document where the Bidder under penalty of perjury verifies that the Bidder is in compliance with responsible bidder criteria in RCW 39.04.350 subsection (1)(g). A form appropriate for "Certification of Compliance with Wage Payment Statutes" will be provided by the Contracting Agency in the Bid Documents. The form provided in the Bid Documents shall be submitted with the Bid as stated in Section 1-02.9.

1 **1. Delinquent State Taxes**

- 2
- 3 A. Criterion: The Bidder shall not owe delinquent taxes to the Washington State
4 Department of Revenue without a payment plan approved by the Department of
5 Revenue.
- 6
- 7 B. Documentation: The Bidder shall not be listed on the Washington State Department of
8 Revenue’s “Delinquent Taxpayer List” website:
9 <http://dor.wa.gov/content/fileandpaytaxes/latefiling/dtlwest.aspx> , or if they are so listed,
10 they must submit a written payment plan approved by the Department of Revenue, to
11 the Contracting Agency by the deadline listed below.

12

13 **2. Federal Debarment**

- 14
- 15 A. Criterion: The Bidder shall not currently be debarred or suspended by the Federal
16 government.
- 17
- 18 B. Documentation: The Bidder shall not be listed as having an “active exclusion” on the
19 U.S. government’s “System for Award Management” database (www.sam.gov).

20

21 **3. Subcontractor Responsibility**

- 22
- 23 A. Criterion: The Bidder’s standard subcontract form shall include the subcontractor
24 responsibility language required by RCW 39.06.020, and the Bidder shall have an
25 established procedure which it utilizes to validate the responsibility of each of its
26 subcontractors. The Bidder’s subcontract form shall also include a requirement that
27 each of its subcontractors shall have and document a similar procedure to determine
28 whether the sub-tier subcontractors with whom it contracts are also “responsible”
29 subcontractors as defined by RCW 39.06.020.
- 30
- 31 B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy
32 of its standard subcontract form for review by the Contracting Agency, and a written
33 description of its procedure for validating the responsibility of subcontractors with which
34 it contracts.

35

36 **4. Claims Against Retainage and Bonds**

- 37
- 38 A. Criterion: The Bidder shall not have a record of excessive claims filed against the
39 retainage or payment bonds for public works projects in the three years prior to the bid
40 submittal date, that demonstrate a lack of effective management by the Bidder of making
41 timely and appropriate payments to its subcontractors, suppliers, and workers, unless
42 there are extenuating circumstances and such circumstances are deemed acceptable to
43 the Contracting Agency.
- 44
- 45 B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of
46 the public works projects completed in the three years prior to the bid submittal date that
47 have had claims against retainage and bonds and include for each project the following
48 information:
- 49
- 50 • Name of project
 - 51 • The owner and contact information for the owner;
 - 52 • A list of claims filed against the retainage and/or payment bond for any of the
53 projects listed;

- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

5. **Public Bidding Crime**

- A. **Criterion:** The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.
- B. **Documentation:** The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

6. **Termination for Cause / Termination for Default**

- A. **Criterion:** The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. **Documentation:** The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances. .

7. **Lawsuits**

- A. **Criterion:** The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency
- B. **Documentation:** The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts

As evidence that the Bidder meets Supplemental Criteria 3-7 stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets supplemental criteria 3-7 together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with Supplemental Criteria 3-7. The Contracting Agency reserves the right to request further documentation as needed from the low Bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in

1 their evaluation. The Contracting Agency may consider mitigating factors in determining whether
2 the Bidder complies with the requirements of the supplemental criteria.

3
4 The basis for evaluation of Bidder compliance with these mandatory and supplemental criteria
5 shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or
6 third parties) including but not limited to: (i) financial, historical, or operational data from the
7 Bidder; (ii) information obtained directly by the Contracting Agency from others for whom the
8 Bidder has worked, or other public agencies or private enterprises; and (iii) any additional
9 information obtained by the Contracting Agency which is believed to be relevant to the matter.

10
11 If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria
12 above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in
13 writing, with the reasons for its determination. If the Bidder disagrees with this determination, it
14 may appeal the determination within two (2) business days of the Contracting Agency's
15 determination by presenting its appeal and any additional information to the Contracting Agency.
16 The Contracting Agency will consider the appeal and any additional information before issuing its
17 final determination. If the final determination affirms that the Bidder is not responsible, the
18 Contracting Agency will not execute a contract with any other Bidder until at least two business
19 days after the Bidder determined to be not responsible has received the Contracting Agency's
20 final determination.

21
22 Request to Change Supplemental Bidder Responsibility Criteria Prior to Bid: Bidders with
23 concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria
24 may make or submit requests to the Contracting Agency to modify the criteria. Such requests
25 shall be in writing, describe the nature of the concerns, and propose specific modifications to the
26 criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5)
27 business days prior to the bid submittal deadline and address the request to the Project Engineer
28 or such other person designated by the Contracting Agency in the Bid Documents.

29 30 **1-02.15 Pre Award Information** 31 (August 14, 2013 APWA GSP)

32
33 Revise this section to read:

34
35 Before awarding any contract, the Contracting Agency may require one or more of these items or
36 actions of the apparent lowest responsible bidder:

- 37 1. A complete statement of the origin, composition, and manufacture of any or all materials to be
38 used,
- 39 2. Samples of these materials for quality and fitness tests,
- 40 3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time
41 required for the various phases of the work,
- 42 4. A breakdown of costs assigned to any bid item,
- 43 5. Attendance at a conference with the Engineer or representatives of the Engineer,
- 44 6. Obtain, and furnish a copy of, a business license to do business in the city or county where the
45 work is located.
- 46 7. Any other information or action taken that is deemed necessary to ensure that the bidder is the
47 lowest responsible bidder.

48 49 **1-03, AWARD AND EXECUTION OF CONTRACT**

50 51 **1-03.3 Execution of Contract**

1 (October 1, 2005 APWA GSP)
2

3 Revise this section to read:
4

5 Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for
6 signature by the successful bidder on the first business day following award. The number of copies
7 to be executed by the Contractor will be determined by the Contracting Agency.
8

9 Within 15 calendar days after the award date, the successful bidder shall return the signed
10 Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and
11 a satisfactory bond as required by law and Section 1-03.4. Before execution of the contract by the
12 Contracting Agency, the successful bidder shall provide any pre-award information the Contracting
13 Agency may require under Section 1-02.15.
14

15 Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor
16 shall any work begin within the project limits or within Contracting Agency-furnished sites. The
17 Contractor shall bear all risks for any work begun outside such areas and for any materials ordered
18 before the contract is executed by the Contracting Agency.
19

20 If the bidder experiences circumstances beyond their control that prevents return of the contract
21 documents within the calendar days after the award date stated above, the Contracting Agency may
22 grant up to a maximum of 5 additional calendar days for return of the documents, provided the
23 Contracting Agency deems the circumstances warrant it.
24

25 **1-03.4 Contract Bond**

26 *(July 23, 2015 APWA GSP)*
27

28 Delete the first paragraph and replace it with the following:
29

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

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

- 1 6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor
2 or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or
3 vice president, unless accompanied by written proof of the authority of the individual signing the
4 bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such
5 effect signed by the president or vice president).
6

7 **1-05, CONTROL OF WORK**

8 (March 13, 1995)

9 **1-05.7 Removal Of Defective And unauthorized Work**

10 (October 1, 2005 APWA GSP)

11 Supplement this section with the following:
12

13 If the Contractor fails to remedy defective or unauthorized work within the time specified in a written
14 notice from the Engineer, or fails to perform any part of the work required by the Contract Documents,
15 the Engineer may correct and remedy such work as may be identified in the written notice, with
16 Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.
17

18 If the Contractor fails to comply with a written order to remedy what the Engineer determines to be
19 an emergency situation, the Engineer may have the defective and unauthorized work corrected
20 immediately, have the rejected work removed and replaced, or have work the Contractor refuses to
21 perform completed by using Contracting Agency or other forces. An emergency situation is any
22 situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or
23 might cause serious risk of loss or damage to the public.
24

25 Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying
26 defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by
27 the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the
28 Contractor. Such direct and indirect costs shall include in particular, but without limitation,
29 compensation for additional professional services required, and costs for repair and replacement of
30 work of others destroyed or damaged by correction, removal, or replacement of the Contractor's
31 unauthorized work.
32

33 No adjustment in contract time or compensation will be allowed because of the delay in the
34 performance of the work attributable to the exercise of the Contracting Agency's rights provided by
35 this Section.
36

37 The rights exercised under the provisions of this section shall not diminish the Contracting Agency's
38 right to pursue any other avenue for additional remedy or damages with respect to the Contractor's
39 failure to perform the work as required.
40

41 **1-05.13 Superintendents, Labor and Equipment of Contractor**

42 (August 14, 2013 APWA GSP)

43 Delete the sixth and seventh paragraphs of this section.
44

45 **1-05.15 Method of Serving Notices**

46 (March 25, 2009 APWA GSP)

47 Revise the second paragraph to read:
48
49
50

1 All correspondence from the Contractor shall be directed to the Project Engineer. All
2 correspondence from the Contractor constituting any notification, notice of protest, notice of dispute,
3 or other correspondence constituting notification required to be furnished under the Contract, must
4 be in paper format, hand delivered or sent via mail delivery service to the Project Engineer's office.
5 Electronic copies such as e-mails or electronically delivered copies of correspondence will not
6 constitute such notice and will not comply with the requirements of the Contract.
7
8

9 **1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**

10 **1-07.2 State Taxes**

11 Delete this section, including its sub-sections, in its entirety and replace it with the following:
12

13 **1-07.2 State Sales Tax**

14 *(June 27, 2011 APWA GSP)*
15

16 The Washington State Department of Revenue has issued special rules on the State sales tax.
17 Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should
18 contact the Washington State Department of Revenue for answers to questions in this area. The
19 Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax
20 liability.
21

22 The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract
23 amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2)
24 describes this exception.
25

26 The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-
27 funded Project) only if the Contractor has obtained from the Washington State Department of
28 Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051).
29 The Contracting Agency may deduct from its payments to the Contractor any amount the
30 Contractor may owe the Washington State Department of Revenue, whether the amount owed
31 relates to this contract or not. Any amount so deducted will be paid into the proper State fund.
32
33

34 **1-07.2(1) State Sales Tax — Rule 171**

35 WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc.,
36 which are owned by a municipal corporation, or political subdivision of the state, or by the United
37 States, and which are used primarily for foot or vehicular traffic. This includes storm or combined
38 sewer systems within and included as a part of the street or road drainage system and power lines
39 when such are part of the roadway lighting system. For work performed in such cases, the
40 Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or
41 other contract amounts, including those that the Contractor pays on the purchase of the materials,
42 equipment, or supplies used or consumed in doing the work.
43
44

45 **1-07.2(2) State Sales Tax — Rule 170**

46 WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing
47 buildings, or other structures, upon real property. This includes, but is not limited to, the
48 construction of streets, roads, highways, etc., owned by the state of Washington; water mains and
49 their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and
50 disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph,
51
52

1 electrical power distribution lines, or other conduits or lines in or above streets or roads, unless
2 such power lines become a part of a street or road lighting system; and installing or attaching of any
3 article of tangible personal property in or to real property, whether or not such personal property
4 becomes a part of the realty by virtue of installation.

5
6 For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail
7 sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to
8 each payment to the Contractor. For this reason, the Contractor shall not include the retail sales
9 tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following
10 exception.

11
12 Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a
13 subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable
14 supplies not integrated into the project. Such sales taxes shall be included in the unit bid item
15 prices or in any other contract amount.

16
17 **1-07.2(3) Services**

18
19 The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly
20 for professional or other services (as defined in Washington State Department of Revenue Rules
21 138 and 244).

22
23 **1-07.5 Environmental Regulations**

24 Section 1-07.5 is supplemented with the following:

25
26 **(September 20, 2010)**

27 **Environmental Commitments**

28 The following Provisions summarize the requirements, in addition to those required elsewhere in the
29 Contract, imposed upon the Contracting Agency by the various documents referenced in the **Special**
30 **Provision Permits and Licenses**. Throughout the work, the Contractor shall comply with the
31 following requirements:

32
33 **1-07.5(2) State Department of Fish and Wildlife**

34 Section 1-07.5(2) is supplemented with the following:

35
36 (April 2, 2018)

37 The following Provisions summarize the requirements, in addition to those required elsewhere in the
38 Contract, imposed upon the Contracting Agency by the Washington State Department of Fish and
39 Wildlife. Throughout the work, the Contractor shall comply with the following requirements:

40
41 (April 2, 2018)

42 The Contractor may begin Work below the Ordinary High Water Line on ***July 1st*** and must
43 complete all the Work by ***September 15th***.

44
45 (April 2, 2018)

46 All costs to comply with this special provision are incidental to the Contract and are the responsibility
47 of the Contractor. The Contractor shall include all related costs in the associated bid prices of the
48 Contract.

49
50 **Payment**

51 (August 3, 2009)

52 All costs to comply with this special provision for the environmental commitments and requirements
53 are incidental to the contract and are the responsibility of the Contractor. The Contractor shall
54 include all related costs in the associated bid prices of the contract.

1
2 **(*****)**

3 **U.S. Army Corps of Engineers**

4 Section 1-07.5(2) is supplemented with the following:

5
6 (April 2, 2018)

7 The following Provisions summarize the requirements, in addition to those required elsewhere in the
8 Contract, imposed upon the Contracting Agency by the U.S. Army Corps of Engineers. Throughout
9 the work, the Contractor shall comply with the following requirements:

10
11 (February 25, 2013)

12 The Contractor shall retain a copy of the most recent U.S. Army Corps of Engineers Nationwide
13 Permit Verification Letter, conditions, and permit drawings on the worksite for the life of the Contract
14 (See Special Provision titled Permits and Licenses). The Contractor shall provide copies of the items
15 above listed to all Sub-Contractors involved with the authorized work prior to their commencement
16 of any work.

17
18 (February 25, 2013)

19 Temporary structures and dewatering of areas under the jurisdiction of the U.S. Army Corps of
20 Engineers must maintain normal downstream flows and prevent upstream and downstream flooding
21 to the maximum extent practicable.

22
23 (February 25, 2013)

24 Any temporary fills placed must be removed in their entirety and the affected areas returned to their
25 pre-construction elevation.

26
27 (April 2, 2018) 2

28 All costs to comply with this special provision are incidental to the Contract and are the responsibility
29 of the Contractor. The Contractor shall include all related costs in the associated bid prices of the
30 Contract.

31
32 **1-07.6 Permits and Licenses**

33 Section 1-07.6 is supplemented with the following:

34
35 (January 2, 2018)

36 The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the
37 permit(s) is attached as an appendix for informational purposes. Copies of these permits, including
38 a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

39
40 Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through
41 the Engineer with the exception of when the Construction Stormwater General Permit coverage is
42 transferred to the Contractor, direct communication with the Department of Ecology is allowed. The
43 Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional
44 approvals (e.g. Request for Chemical Treatment Form). The Contractor shall obtain additional
45 permits as necessary. All costs to obtain and comply with additional permits shall be included in the
46 applicable Bid items for the Work involved.

47
48 **(*****)**

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
Department of the Army Section 404 Nationwide 27 and 13	Corps of Engineers Seattle District	NWS-2018-684

Section 401 Water Quality Certification	Department of Ecology	Certified per NWS-2018-684
Erosivity Waiver Certification	Department of Ecology	N/A
Hydraulic Project Approval	Department of Fish & Wildlife	2018-5-67+01

1
2 **1-07.7 Load Limits**

3 Section 1-07.7 is supplemented with the following:

4
5 (*****)

6 If the source of materials provided by the Contractor necessitates hauling over roads other than
7 Lewis County roads, the Contractor shall, at the Contractor's expense, make all arrangements for
8 the use of the haul routes.

9
10 Any vehicle providing material paid for by the ton, on the project, will provide licensed tonnage for
11 that vehicle.

12
13 **1-07.9 Wages**

14
15 **General**

16 Section 1-07.9(1) is supplemented with the following:

17
18 (*****)

19 The State rates incorporated in this contract are applicable to all construction activities
20 associated with this contract.

21
22 (April 2, 2007)

23 **Application of Wage Rates for the Occupation of Landscape Construction**

24 State prevailing wage rates for public works contracts are included in this contract and show a
25 separate listing for the occupation:

26
27 Landscape Construction, which includes several different occupation descriptions such as:
28 Irrigation and Landscape Plumbers, Irrigation and Landscape Power Equipment Operators,
29 and Landscaping or Planting Laborers.

30
31 In addition, federal wage rates that are included in this contract may also include occupation
32 descriptions in Federal Occupational groups for work also specifically identified with landscaping
33 such as:

34
35 Laborers with the occupation description, Landscaping or Planting, or

36
37 Power Equipment Operators with the occupation description, Mulch Seeding Operator.

38
39 If Federal wage rates include one or more rates specified as applicable to landscaping work,
40 then Federal wage rates for all occupation descriptions, specific or general, must be considered
41 and compared with corresponding State wage rates. The higher wage rate, either State or
42 Federal, becomes the minimum wage rate for the work performed in that occupation.

43
44 Contractors are responsible for determining the appropriate crafts necessary to perform the
45 contract work. If a classification considered necessary for performance of the work is missing
46 from the Federal Wage Determination applicable to the contract, the Contractor shall initiate a
47 request for approval of a proposed wage and benefit rate. The Contractor shall prepare and

submit Standard Form 1444, Request for Authorization of Additional Classification and Wage Rate available at <http://www.wdol.gov/docs/sf1444.pdf> , and submit the completed form to the Project Engineer's office. The presence of a classification wage on the Washington State Prevailing Wage Rates For Public Works Contracts does not exempt the use of form 1444 for the purpose of determining a federal classification wage rate.

1-07.11 Requirements For Nondiscrimination

Section 1-07.11 is supplemented with the following:

(August 5, 2013)

Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Contractor's attention is called to the Equal Opportunity Clause and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth herein.
2. The goals and timetables for minority and female participation set by the Office of Federal Contract Compliance Programs, expressed in percentage terms for the Contractor's aggregate work force in each construction craft and in each trade on all construction work in the covered area, are as follows:

Women - Statewide

Timetable

Goal

Until further notice

6.9%

Minorities - by Standard Metropolitan Statistical Area (SMSA)

Spokane, WA:

SMSA Counties:

Spokane, WA

2.8

WA Spokane.

Non-SMSA Counties

3.0

WA Adams; WA Asotin; WA Columbia; WA Ferry; WA Garfield; WA Lincoln, WA
Pend Oreille; WA Stevens; WA Whitman.

Richland, WA

SMSA Counties:

Richland Kennewick, WA

5.4

WA Benton; WA Franklin.

Non-SMSA Counties

3.6

WA Walla Walla.

Yakima, WA:

SMSA Counties:

Yakima, WA

9.7

WA Yakima.

Non-SMSA Counties

7.2

WA Chelan; WA Douglas; WA Grant; WA Kittitas; WA Okanogan.

1	Seattle, WA:	
2	SMSA Counties:	
3	Seattle Everett, WA	7.2
4	WA King; WA Snohomish.	
5	Tacoma, WA	6.2
6	WA Pierce.	
7	Non-SMSA Counties	6.1
8	WA Clallam; WA Grays Harbor; WA Island; WA Jefferson; WA Kitsap; WA Lewis;	
9	WA Mason; WA Pacific; WA San Juan; WA Skagit; WA Thurston; WA Whatcom.	
10		
11	Portland, OR:	
12	SMSA Counties:	
13	Portland, OR-WA	4.5
14	WA Clark.	
15	Non-SMSA Counties	3.8
16	WA Cowlitz; WA Klickitat; WA Skamania; WA Wahkiakum.	
17		

18 These goals are applicable to each nonexempt Contractor's total on-site construction
19 workforce, regardless of whether or not part of that workforce is performing work on a Federal,
20 or federally assisted project, contract, or subcontract until further notice. Compliance with
21 these goals and time tables is enforced by the Office of Federal Contract compliance
22 Programs.

23
24 The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-
25 4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative
26 action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to
27 meet the goals. The hours of minority and female employment and training must be
28 substantially uniform throughout the length of the contract, in each construction craft and in
29 each trade, and the Contractor shall make a good faith effort to employ minorities and women
30 evenly on each of its projects. The transfer of minority or female employees or trainees from
31 Contractor to Contractor or from project to project for the sole purpose of meeting the
32 Contractor's goal shall be a violation of the contract, the Executive Order and the regulations
33 in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours
34 performed.

- 35
36 3. The Contractor shall provide written notification to the Office of Federal Contract Compliance
37 Programs (OFCCP) within 10 working days of award of any construction subcontract in
38 excess of \$10,000 or more that are Federally funded, at any tier for construction work under
39 the contract resulting from this solicitation. The notification shall list the name, address and
40 telephone number of the Subcontractor; employer identification number of the Subcontractor;
41 estimated dollar amount of the subcontract; estimated starting and completion dates of the
42 subcontract; and the geographical area in which the contract is to be performed. The
43 notification shall be sent to:

44
45 U.S. Department of Labor
46 Office of Federal Contract Compliance Programs Pacific Region
47 Attn: Regional Director
48 San Francisco Federal Building
49 90 – 7th Street, Suite 18-300
50 San Francisco, CA 94103(415) 625-7800 Phone
51 (415) 625-7799 Fax

52
53 Additional information may be found at the U.S. Department of Labor website:
54 <http://www.dol.gov/ofccp/TAguides/ctaguide.htm>

1
2 4. As used in this Notice, and in the contract resulting from this solicitation, the Covered Area is
3 as designated herein.
4

5 Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive
6 Order 11246)
7

8 1. As used in these specifications:
9

- 10 a. Covered Area means the geographical area described in the solicitation from which
11 this contract resulted;
12
13 b. Director means Director, Office of Federal Contract Compliance Programs, United
14 States Department of Labor, or any person to whom the Director delegates authority;
15
16 c. Employer Identification Number means the Federal Social Security number used on
17 the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;
18
19 d. Minority includes:
20
21 (1) Black, a person having origins in any of the Black Racial Groups of Africa.
22
23 (2) Hispanic, a fluent Spanish speaking, Spanish surnamed person of Mexican,
24 Puerto Rican, Cuban, Central American, South American, or other Spanish
25 origin.
26
27 (3) Asian or Pacific Islander, a person having origins in any of the original
28 peoples of the Pacific rim or the Pacific Islands, the Hawaiian Islands and
29 Samoa.
30
31 (4) American Indian or Alaskan Native, a person having origins in any of the
32 original peoples of North America, and who maintain cultural identification
33 through tribal affiliation or community recognition.
34

35 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work
36 involving any construction trade, it shall physically include in each subcontract in excess of
37 \$10,000 the provisions of these specifications and the Notice which contains the applicable
38 goals for minority and female participation and which is set forth in the solicitations from which
39 this contract resulted.
40

41 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by
42 the U.S. Department of Labor in the covered area either individually or through an
43 association, its affirmative action obligations on all work in the Plan area (including goals and
44 timetables) shall be in accordance with that Plan for those trades which have unions
45 participating in the Plan. Contractors must be able to demonstrate their participation in and
46 compliance with the provisions of any such Hometown Plan. Each Contractor or
47 Subcontractor participating in an approved Plan is individually required to comply with its
48 obligations under the EEO clause, and to make a good faith effort to achieve each goal under
49 the Plan in each trade in which it has employees. The overall good faith performance by other
50 Contractors or Subcontractors toward a goal in an approved Plan does not excuse any
51 covered Contractor's or Subcontractor's failure to take good faith effort to achieve the Plan
52 goals and timetables.
53

- 1 4. The Contractor shall implement the specific affirmative action standards provided in
2 paragraphs 7a through 7p of this Special Provision. The goals set forth in the solicitation from
3 which this contract resulted are expressed as percentages of the total hours of employment
4 and training of minority and female utilization the Contractor should reasonably be able to
5 achieve in each construction trade in which it has employees in the covered area. Covered
6 construction contractors performing construction work in geographical areas where they do
7 not have a Federal or federally assisted construction contract shall apply the minority and
8 female goals established for the geographical area where the work is being performed. The
9 Contractor is expected to make substantially uniform progress in meeting its goals in each
10 craft during the period specified.
11
- 12 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with
13 whom the Contractor has a collective bargaining agreement, to refer either minorities or
14 women shall excuse the Contractor's obligations under these specifications, Executive Order
15 11246, or the regulations promulgated pursuant thereto.
16
- 17 6. In order for the nonworking training hours of apprentices and trainees to be counted in
18 meeting the goals, such apprentices and trainees must be employed by the Contractor during
19 the training period, and the Contractor must have made a commitment to employ the
20 apprentices and trainees at the completion of their training, subject to the availability of
21 employment opportunities. Trainees must be trained pursuant to training programs approved
22 by the U.S. Department of Labor.
23
- 24 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity.
25 The evaluation of the Contractor's compliance with these specifications shall be based upon
26 its effort to achieve maximum results from its action. The Contractor shall document these
27 efforts fully, and shall implement affirmative action steps at least as extensive as the following:
28
 - 29 a. Ensure and maintain a working environment free of harassment, intimidation, and
30 coercion at all sites, and in all facilities at which the Contractor's employees are
31 assigned to work. The Contractor, where possible, will assign two or more women to
32 each construction project. The Contractor shall specifically ensure that all foremen,
33 superintendents, and other on-site supervisory personnel are aware of and carry out
34 the Contractor's obligation to maintain such a working environment, with specific
35 attention to minority or female individuals working at such sites or in such facilities.
36
 - 37 b. Establish and maintain a current list of minority and female recruitment sources,
38 provide written notification to minority and female recruitment sources and to
39 community organizations when the Contractor or its unions have employment
40 opportunities available, and maintain a record of the organizations' responses.
41
 - 42 c. Maintain a current file of the names, addresses and telephone numbers of each
43 minority and female off-the-street applicant and minority or female referral from a
44 union, a recruitment source or community organization and of what action was taken
45 with respect to each such individual. If such individual was sent to the union hiring
46 hall for referral and was not referred back to the Contractor by the union or, if
47 referred, not employed by the Contractor, this shall be documented in the file with the
48 reason therefor, along with whatever additional actions the Contractor may have
49 taken.
50
 - 51 d. Provide immediate written notification to the Director when the union or unions with
52 which the Contractor has a collective bargaining agreement has not referred to the
53 Contractor a minority person or woman sent by the Contractor, or when the

1 Contractor has other information that the union referral process has impeded the
2 Contractor's efforts to meet its obligations.

- 3
4 e. Develop on-the-job training opportunity and/or participate in training programs for the
5 area which expressly include minorities and women, including upgrading programs
6 and apprenticeship and trainee programs relevant to the Contractor's employment
7 needs, especially those programs funded or approved by the U.S. Department of
8 Labor. The Contractor shall provide notice of these programs to the sources
9 compiled under 7b above.
- 10
11 f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions
12 and training programs and requesting their cooperation in assisting the Contractor in
13 meeting its EEO obligations; by including it in any policy manual and collective
14 bargaining agreement; by publicizing it in the company newspaper, annual report,
15 etc.; by specific review of the policy with all management personnel and with all
16 minority and female employees at least once a year; and by posting the company
17 EEO policy on bulletin boards accessible to all employees at each location where
18 construction work is performed.
- 19
20 g. Review, at least annually, the company's EEO policy and affirmative action
21 obligations under these specifications with all employees having any responsibility for
22 hiring, assignment, layoff, termination or other employment decisions including
23 specific review of these items with on-site supervisory personnel such as
24 Superintendents, General Foremen, etc., prior to the initiation of construction work at
25 any job site. A written record shall be made and maintained identifying the time and
26 place of these meetings, persons attending, subject matter discussed, and
27 disposition of the subject matter.
- 28
29 h. Disseminate the Contractor's EEO policy externally by including it in any advertising
30 in the news media, specifically including minority and female news media, and
31 providing written notification to and discussing the Contractor's EEO policy with other
32 Contractors and Subcontractors with whom the Contractor does or anticipates doing
33 business.
- 34
35 i. Direct its recruitment efforts, both oral and written to minority, female and community
36 organizations, to schools with minority and female students and to minority and
37 female recruitment and training organizations serving the Contractor's recruitment
38 area and employment needs. Not later than one month prior to the date for the
39 acceptance of applications for apprenticeship or other training by any recruitment
40 source, the Contractor shall send written notification to organizations such as the
41 above, describing the openings, screening procedures, and tests to be used in the
42 selection process.
- 43
44 j. Encourage present minority and female employees to recruit other minority persons
45 and women and where reasonable, provide after school, summer and vacation
46 employment to minority and female youth both on the site and in other areas of a
47 Contractor's work force.
- 48
49 k. Validate all tests and other selection requirements where there is an obligation to do
50 so under 41 CFR Part 60-3.
- 51
52 l. Conduct, at least annually, an inventory and evaluation of all minority and female
53 personnel for promotional opportunities and encourage these employees to seek or
54 to prepare for, through appropriate training, etc., such opportunities.

- 1
- 2 m. Ensure that seniority practices, job classifications, work assignments and other
- 3 personnel practices, do not have a discriminatory effect by continually monitoring all
- 4 personnel and employment related activities to ensure that the EEO policy and the
- 5 Contractor's obligations under these specifications are being carried out.
- 6
- 7 n. Ensure that all facilities and company activities are nonsegregated except that
- 8 separate or single-user toilet and necessary changing facilities shall be provided to
- 9 assure privacy between the sexes.
- 10
- 11 o. Document and maintain a record of all solicitations of offers for subcontracts from
- 12 minority and female construction contractors and suppliers, including circulation of
- 13 solicitations to minority and female contractor associations and other business
- 14 associations.
- 15
- 16 p. Conduct a review, at least annually, of all supervisors' adherence to and performance
- 17 under the Contractor's EEO policies and affirmative action obligations.
- 18
- 19 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling
- 20 one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor
- 21 association, joint contractor-union, contractor-community, or other similar group of which the
- 22 Contractor is a member and participant, may be asserted as fulfilling any one or more of the
- 23 obligations under 7a through 7p of this Special Provision provided that the Contractor actively
- 24 participates in the group, makes every effort to assure that the group has a positive impact on
- 25 the employment of minorities and women in the industry, ensure that the concrete benefits of
- 26 the program are reflected in the Contractor's minority and female work-force participation,
- 27 makes a good faith effort to meet its individual goals and timetables, and can provide access
- 28 to documentation which demonstrate the effectiveness of actions taken on behalf of the
- 29 Contractor. The obligation to comply, however, is the Contractor's and failure of such a group
- 30 to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- 31
- 32 9. A single goal for minorities and a separate single goal for women have been established. The
- 33 Contractor, however, is required to provide equal employment opportunity and to take
- 34 affirmative action for all minority groups, both male and female, and all women, both minority
- 35 and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a
- 36 particular group is employed in substantially disparate manner (for example, even though the
- 37 Contractor has achieved its goals for women generally, the Contractor may be in violation of
- 38 the Executive Order if a specific minority group of women is underutilized).
- 39
- 40 10. The Contractor shall not use the goals and timetables or affirmative action standards to
- 41 discriminate against any person because of race, color, religion, sex, or national origin.
- 42
- 43 11. The Contractor shall not enter into any subcontract with any person or firm debarred from
- 44 Government contracts pursuant to Executive Order 11246.
- 45
- 46 12. The Contractor shall carry out such sanctions and penalties for violation of these
- 47 specifications and of the Equal Opportunity Clause, including suspensions, terminations and
- 48 cancellations of existing subcontracts as may be imposed or ordered pursuant to Executive
- 49 Order 11246, as amended, and its implementing regulations by the Office of Federal Contract
- 50 Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties
- 51 shall be in violation of these specifications and Executive Order 11246, as amended.
- 52
- 53 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific
- 54 affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of

1 this Special Provision, so as to achieve maximum results from its efforts to ensure equal
2 employment opportunity. If the Contractor fails to comply with the requirements of the
3 Executive Order, the implementing regulations, or these specifications, the Director shall
4 proceed in accordance with 41 CFR 60-4.8.

- 5
- 6 14. The Contractor shall designate a responsible official to monitor all employment related activity
7 to ensure that the company EEO policy is being carried out, to submit reports relating to the
8 provisions hereof as may be required by the government and to keep records. Records shall
9 at least include, for each employee, their name, address, telephone numbers, construction
10 trade, union affiliation if any, employee identification number when assigned, social security
11 number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of
12 changes in status, hours worked per week in the indicated trade, rate of pay, and locations at
13 which the work was performed. Records shall be maintained in an easily understandable and
14 retrievable form; however, to the degree that existing records satisfy this requirement, the
15 Contractors will not be required to maintain separate records.
- 16
- 17 15. Nothing herein provided shall be construed as a limitation upon the application of other laws
18 which establish different standards of compliance or upon the application of requirements for
19 the hiring of local or other area residents (e.g., those under the Public Works Employment Act
20 of 1977 and the Community Development Block Grant Program).
- 21
- 22 16. Additional assistance for Federal Construction Contractors on contracts administered by
23 Washington State Department of Transportation or by Local Agencies may be found at:

24
25 Washington State Dept. of Transportation
26 Office of Equal Opportunity
27 PO Box 47314
28 310 Maple Park Ave. SE
29 Olympia WA
30 98504-7314
31 Ph: 360-705-7090
32 Fax: 360-705-6801
33 <http://www.wsdot.wa.gov/equalopportunity/default.htm>

34 35 **1-07.17 Utilities And Similar Facilities**

36 (April 2, 2007)

37 Section 1-07.17 is supplemented with the following:

38
39 Locations and dimensions shown in the Plan for existing facilities are in accordance with available
40 information obtained without uncovering, measuring, or other verification.

41
42 The following addresses and telephone numbers of utility companies known or suspected of having
43 facilities within the project limits are supplied for the Contractor's convenience:

44
45 Lewis County P.U.D. No. 1
46 321 NW Pacific Avenue
47 Chehalis, WA 98532
48 Telephone (360) 748-9261

49
50 CenturyLink
51 Dioni Cariaga
52 Dioni.Cariaga@CenturyLink.com
53 Telephone (206) 733-5261

1 The Contractor shall call the Underground locate service (800-424-5555) two to ten days prior to
2 construction at each project site. The Contractor shall notify the Utility Owner of any utilities that are
3 within two feet of the planned construction. The above list of Utility Owners may not be complete. As
4 per RCW 19.122 it shall be the Contractors responsibility to contact the owners of utilities known or
5 suspected of having services close to the project site.

6
7 **1-07.18 Public Liability and Property Damage Insurance**

8
9 Delete this section in its entirety, and replace it with the following:

10
11 **1-07.18 Insurance**

12 *(January 4, 2016 APWA GSP)*

13
14 **1-07.18(1) General Requirements**

- 15 A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-
16 07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-:
17 VII and licensed to do business in the State of Washington. The Contracting Agency reserves the
18 right to approve or reject the insurance provided, based on the insurer's financial condition.
- 19
20 B. The Contractor shall keep this insurance in force without interruption from the commencement of
21 the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical
22 Completion date, unless otherwise indicated below.
- 23
24 C. If any insurance policy is written on a claims made form, its retroactive date, and that of all
25 subsequent renewals, shall be no later than the effective date of this Contract. The policy shall
26 state that coverage is claims made, and state the retroactive date. Claims-made form coverage
27 shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or
28 earlier termination of this Contract, and the Contractor shall annually provide the Contracting
29 Agency with proof of renewal. If renewal of the claims made form of coverage becomes
30 unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period
31 ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure
32 financial responsibility for liability for services performed.
- 33
34 D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability
35 insurance policies shall be primary and non-contributory insurance as respects the Contracting
36 Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or
37 self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's
38 insurance and shall not contribute with it.
- 39
40 E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of
41 any policy cancellation, within two business days of their receipt of such notice.
- 42
43 G. The Contractor shall not begin work under the Contract until the required insurance has been
44 obtained and approved by the Contracting Agency
- 45
46 H. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material
47 breach of contract, upon which the Contracting Agency may, after giving five business days' notice
48 to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion,
49 procure or renew such insurance and pay any and all premiums in connection therewith, with any
50 sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of
51 the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- 52
53 I. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the
54 Contract and no additional payment will be made.

1
2 **1-07.18(2) Additional Insured**

3 All insurance policies, with the exception of Workers Compensation, and of Professional Liability
4 and Builder's Risk (if required by this Contract) shall name the following listed entities as additional
5 insured(s) using the forms or endorsements required herein:

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

7
8 The above-listed entities shall be additional insured(s) for the full available limits of liability
9 maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are
10 greater than those required by this Contract, and irrespective of whether the Certificate of
11 Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those
12 maintained by the Contractor.

13
14 For Commercial General Liability insurance coverage, the required additional insured
15 endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and
16 CG 20 37 10 01 for completed operations.

17
18 **1-07.18(3) Subcontractors**

19 The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that
20 complies with all applicable requirements of the Contractor-provided insurance as set forth herein,
21 except the Contractor shall have sole responsibility for determining the limits of coverage required
22 to be obtained by Subcontractors.

23
24 The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2)
25 as additional insureds, and provide proof of such on the policies as required by that section as
26 detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing
27 operations and CG 20 37 10 01 for completed operations.

28
29 Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency
30 evidence of insurance and copies of the additional insured endorsements of each Subcontractor of
31 every tier as required in 1-07.18(4) Verification of Coverage.

32
33 **1-07.18(4) Verification of Coverage**

34 The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and
35 endorsements for each policy of insurance meeting the requirements set forth herein when the
36 Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand
37 such verification of coverage with these insurance requirements or failure of Contracting Agency to
38 identify a deficiency from the insurance documentation provided shall not be construed as a waiver
39 of Contractor's obligation to maintain such insurance.

40
41 Verification of coverage shall include:

- 42 1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
43 2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as
44 additional insured(s), showing the policy number. The Contractor may submit a copy of any
45 blanket additional insured clause from its policies instead of a separate endorsement.
46 3. Any other amendatory endorsements to show the coverage required herein.
47 4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these
48 requirements – actual endorsements must be submitted.

49
50 Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a
51 full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this

1 Project, a full and certified copy of that policy is required when the Contractor delivers the signed
2 Contract for the work.

3
4 **1-07.18(5) Coverages and Limits**

5 The insurance shall provide the minimum coverages and limits set forth below. Contractor's
6 maintenance of insurance, its scope of coverage, and limits as required herein shall not be
7 construed to limit the liability of the Contractor to the coverage provided by such insurance, or
8 otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

9
10 All deductibles and self-insured retentions must be disclosed and are subject to approval by the
11 Contracting Agency. The cost of any claim payments falling within the deductible or self-insured
12 retention shall be the responsibility of the Contractor. In the event an additional insured incurs a
13 liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured
14 retention shall be the responsibility of the Contractor.

15
16 **1-07.18(5)A Commercial General Liability**

17 Commercial General Liability insurance shall be written on coverage forms at least as broad as
18 ISO occurrence form CG 00 01, including but not limited to liability arising from premises,
19 operations, stop gap liability, independent contractors, products-completed operations, personal
20 and advertising injury, and liability assumed under an insured contract. There shall be no
21 exclusion for liability arising from explosion, collapse or underground property damage.

22
23 The Commercial General Liability insurance shall be endorsed to provide a per project general
24 aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

25
26 Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's
27 completed operations for at least three years following Substantial Completion of the Work.

28
29 Such policy must provide the following minimum limits:

30 \$1,000,000 Each Occurrence
31 \$2,000,000 General Aggregate
32 \$2,000,000 Products & Completed Operations Aggregate
33 \$1,000,000 Personal & Advertising Injury each offence
34 \$1,000,000 Stop Gap / Employers' Liability each accident

35
36 **1-07.18(5)B Automobile Liability**

37 Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written
38 on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of
39 pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

40
41 Such policy must provide the following minimum limit:

42 \$1,000,000 Combined single limit each accident

43
44 **1-07.18(5)C Workers' Compensation**

45 The Contractor shall comply with Workers' Compensation coverage as required by the Industrial
46 Insurance laws of the State of Washington.

47
48 **1-07.23, Public Convenience and Safety**

49
50 **1-07.23(1) Construction Under Traffic**

51 Section 1-07.23(1) is supplemented with the following:
52

(January 2, 2012)

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	10 *
40 mph	15
45 to 55 mph	20
60 mph or greater	30

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

1-08, PROSECUTION AND PROGRESS

1-08.0 Preliminary Matters
(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference
(October 10, 2008 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 establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. 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
(December 8, 2014 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 a.m. and 6:00 p.m. 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 3 working days 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.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1
2 **1-08.1 Subcontracting**
3 *(February 16, 2018 APWA GSP)*

4
5 The eighth and ninth paragraphs are revised to read:

6
7 On all projects, the Contractor shall certify to the actual amount received from the Contracting Agency
8 and amounts paid to all firms that were used as Subcontractors, lower tier subcontractors,
9 manufacturers, regular dealers, or service providers on the Contract. This includes all Disadvantaged,
10 Minority, Small, Veteran or Women's Business Enterprise firms. This Certification shall be submitted
11 to the Engineer on a monthly basis each month between Execution of the Contract and Physical
12 Completion of the Contract using the application available at: <https://wsdot.diversitycompliance.com>.
13 A monthly report shall be submitted for every month between Execution of the Contract and Physical
14 Completion regardless of whether payments were made or work occurred.

15
16 The Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011, 39.76.020, and
17 39.76.040, in particular regarding prompt payment to Subcontractors. Whenever the Contractor
18 withholds payment to a Subcontractor for any reason including disputed amounts, the Contractor
19 shall provide notice within 10 calendar days to the Subcontractor with a copy to the Contracting
20 Agency identifying the reason for the withholding and a clear description of what the Subcontractor
21 must do to have the withholding released. Retainage withheld by the Contractor prior to completion
22 of the Subcontractors work is exempt from reporting as a payment withheld and is not included in the
23 withheld amount. The Contracting Agency's copy of the notice to Subcontractor for deferred payments
24 shall be submitted to the Engineer concurrently with notification to the Subcontractor.

25
26 Section 1-08.1 is supplemented with the following:

27
28 (October 12, 1998)

29 Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to
30 the Engineer a certification (WSDOT Form 420-004) that a written agreement between the
31 Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has
32 been executed. This certification shall also guarantee that these subcontract agreements include
33 all the documents required by the Special Provision **Federal Agency Inspection**.

34
35 A Subcontractor or lower tier Subcontractor will not be permitted to perform any work under the
36 contract until the following documents have been completed and submitted to the Engineer:

- 37
38 1. Request to Sublet Work (Form 421-012), and
39 2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for Federal-aid
40 Projects (Form 420-004).

41
42 The Contractor's records pertaining to the requirements of this Special Provision shall be open to
43 inspection or audit by representatives of the Contracting Agency during the life of the contract and
44 for a period of not less than three years after the date of acceptance of the contract. The Contractor
45 shall retain these records for that period. The Contractor shall also guarantee that these records of
46 all Subcontractors and lower tier Subcontractors shall be available and open to similar inspection or
47 audit for the same time period.

48
49 **1-08.1(1) Subcontract Completion and Return of Retainage Withheld**

50 Section 1-08.1(1) is revised to read:

51
52 (June 27, 2011)

53 The following procedures shall apply to all subcontracts entered into as a part of this Contract:

1
2 **Requirements**

- 3 1. The Prime Contractor or Subcontractor shall make payment to the Subcontractor not later
4 than ten (10) days after receipt of payment from the Contracting Agency for work
5 satisfactorily completed by the Subcontractor, to the extent of each Subcontractor's interest
6 therein.
7
8 2. Prompt and full payment of retainage from the Prime Contractor to the Subcontractor shall
9 be made within 30 days after Subcontractor's Work is satisfactorily completed.
10
11 3. For purposes of this Section, a Subcontractor's work is satisfactorily completed when all
12 task and requirements of the Subcontract have been accomplished and including any
13 required documentation and material testing.
14
15 4. Failure by a Prime Contractor or Subcontractor to comply with these requirements may
16 result in one or more of the following:
17
18 a. Withholding of payments until the Prime Contractor or Subcontractor complies
19
20 b. Failure to comply shall be reflected in the Prime Contractor's Performance Evaluation
21
22 c. Cancellation, Termination, or Suspension of the Contract, in whole or in part
23
24 d. Other sanctions as provided by the subcontractor or by law under applicable prompt
25 pay statutes.
26

27 **Conditions**

28 This clause does not create a contractual relationship between the Contracting Agency and any
29 Subcontractor as stated in Section 1-08.1. Also, it is not intended to bestow upon any
30 Subcontractor, the status of a third-party beneficiary to the Contract between the Contracting
31 Agency and the Contractor.
32

33 **Payment**

34 The Contractor will be solely responsible for any additional costs involved in paying retainage
35 to the Subcontractors. Those costs shall be incidental to the respective Bid Items.
36

37 **1-08.3(2)A Type A Progress Schedule**
38 *(March 13, 2012 APWA GSP)*
39

40 Revise this section to read:

41
42 The Contractor shall submit **\$\$\$ 3 \$\$\$** copies of a Type A Progress Schedule no later than one week
43 before the preconstruction conference, or some other mutually agreed upon submittal time. The
44 schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule
45 format. Regardless of which format used, the schedule shall identify the critical path. The Engineer
46 will evaluate the Type A Progress Schedule and approve or return the schedule for corrections
47 within 15 calendar days of receiving the submittal.
48

49 **Contractor's Weekly Activities**
50 *(*****)*
51

52 The Contractor shall submit a weekly schedule to the Engineer. The schedule shall indicate the
53 Contractor's proposed activities for the forthcoming week along with the hours of work. This will

1 permit the Engineer to more effectively provide the contract engineering and inspection for the
2 Contractor's operations.

3
4 The written weekly activity schedule shall be submitted to the Engineer or a designated assistant
5 before the end of the last shift on the next to the last working day of the week preceding the indicated
6 activities, or other mutually agreeable time.

7
8 If the Contractor proceeds with work not indicated on the weekly activity schedule, or in a sequence
9 differing from that which has been shown on the schedule, the Engineer may require the Contractor
10 to delay unscheduled activities until they are included on a subsequent weekly activity schedule.

11
12 Separately, and in addition to the weekly schedule, the Contractor shall submit weekly a summary
13 of project activities to the Engineer. The summary of activities shall include a report of the nature
14 and progress of each of the major activities that were advanced on the project within the previous
15 week.

16
17 It shall be sufficiently detailed that a composite history of the project develops. The locations and
18 approximate quantity guardrail and traffic control work shall be reported. Unusual activity, and
19 conditions or events that may affect the course of the project shall also be reported.

20 21 **1-08.4 Prosecution of Work**

22
23 Delete this section and replace it with the following:
24

25 **1-08.4 Notice to Proceed and Prosecution of Work**

26 *(July 23, 2015 APWA GSP)*

27
28 Notice to Proceed will be given after the contract has been executed and the contract bond and
29 evidence of insurance have been approved and filed by the Contracting Agency. The Contractor
30 shall not commence with the work until the Notice to Proceed has been given by the Engineer. The
31 Contractor shall commence construction activities on the project site within ten days of the Notice to
32 Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the
33 work to the physical completion date within the time specified in the contract. Voluntary shutdown
34 or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to
35 complete the work within the time(s) specified in the contract.

36
37 When shown in the Plans, the first order of work shall be the installation of high visibility fencing to
38 delineate all areas for protection or restoration, as described in the Contract. Installation of high
39 visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and
40 traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor
41 shall request the Engineer to inspect the fence. No other work shall be performed on the site until
42 the Contracting Agency has accepted the installation of high visibility fencing, as described in the
43 Contract.

44 45 **1-08.5 Time for Completion**

46 *(September 12, 2016 APWA GSP, Option B)*

47
48 Revise the third and fourth paragraphs to read:
49

50 Contract time shall begin on the first working day following the \$\$14 \$\$ calendar day after the
51 Notice to Proceed date. If the Contractor starts work on the project at an earlier date, then contract
52 time shall begin on the first working day when onsite work begins.
53

54 Each working day shall be charged to the contract as it occurs, until the contract work is physically

1 complete. If substantial completion has been granted and all the authorized working days have been
2 used, charging of working days will cease. Each week the Engineer will provide the Contractor a
3 statement that shows the number of working days: (1) charged to the contract the week before; (2)
4 specified for the physical completion of the contract; and (3) remaining for the physical completion of
5 the contract. The statement will also show the nonworking days and any partial or whole day the
6 Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the
7 Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the
8 Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and
9 amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be
10 deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours
11 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
12 worked would ordinarily be charged as a working day, then the fifth day of that week will be charged
13 as a working day whether or not the Contractor works on that day.

14
15 Revise the sixth paragraph to read:
16

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

- 20 1. The physical work on the project must be complete; and
- 21 2. The Contractor must furnish all documentation required by the contract and required by law, to
22 allow the Contracting Agency to process final acceptance of the contract. The following
23 documents must be received by the Project Engineer prior to establishing a completion date:
 - 24 a. Certified Payrolls (per Section 1-07.9(5)).
 - 25 b. Material Acceptance Certification Documents
 - 26 c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract
27 Provisions.
 - 28 d. Final Contract Voucher Certification
 - 29 e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all
30 Subcontractors
 - 31 f. Property owner releases per Section 1-07.24

32
33 (*****)

34 This project shall be physically completed within *** 53 *** working days. The first working day shall be
35 July 1, 2019 and be completed by the last working day September 13, 2019.

36 37 **1-08.9 Liquidated Damages**

38 (*****)

39
40 Revise the fourth paragraph to read:

41
42 When the Contract Work has progressed to Substantial Completion as defined in the Contract, the
43 Engineer may determine that the work is Substantially Complete. The Engineer will notify the
44 Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring
45 after the date so established, the formula for liquidated damages shown above will not apply. For
46 overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall
47 be assessed on the basis of direct engineering and related costs or Environmental fines assignable
48 to the project until the actual Physical Completion Date of all the Contract Work. The Contractor
49 shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer,
50 the Contractor shall furnish a written schedule for completing the physical Work on the Contract.
51

52 **1-09, MEASUREMENT AND PAYMENT**

1
2 **1-09.7 Mobilization**

3 Section 1-08.5 is supplemented with the following:
4

5 **(*****)**

6 The Contracting Agency shall provide a temporary staging site during construction of the project. The
7 temporary staging area shall be staked in the field prior to use. After construction is completed, the
8 Contractor shall remove all debris, rock, and wood to restore the staging area to the original field
9 condition or as directed by the Engineer. The Contractor may submit alternate staging areas (within the
10 APE) to the Engineer for review and written approval prior to any construction activities commencing at
11 proposed staging area locations. Alternate staging areas shall be reviewed for compliance with
12 County, State or Federal permitting requirements.
13

14 **1-09.9 Payments**

15 *(March 13, 2012 APWA GSP)*
16

17 Delete the first four paragraphs and replace them with the following:
18

19 The basis of payment will be the actual quantities of Work performed according to the Contract and
20 as specified for payment.
21

22 The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction
23 Conference, to enable the Project Engineer to determine the Work performed on a monthly basis.
24 A breakdown is not required for lump sum items that include a basis for incremental payments as
25 part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make
26 a determination based on information available. The Project Engineer's determination of the cost of
27 work shall be final.
28

29 Progress payments for completed work and material on hand will be based upon progress
30 estimates prepared by the Engineer. A progress estimate cutoff date will be established at the
31 preconstruction conference.
32

33 The initial progress estimate will be made not later than 30 days after the Contractor commences
34 the work, and successive progress estimates will be made every month thereafter until the
35 Completion Date. Progress estimates made during progress of the work are tentative, and made
36 only for the purpose of determining progress payments. The progress estimates are subject to
37 change at any time prior to the calculation of the final payment.
38

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

- 40 1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work
41 completed multiplied by the unit price.
42 2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum
43 breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
44 3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other
45 storage area approved by the Engineer.
46 4. Change Orders — entitlement for approved extra cost or completed extra work as determined
47 by the Engineer.
48

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

- 50 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.

1-09.9(1) Retainage

Section 1-09.9(1) is supplemented with the following:

Retainage of 5 percent shall be as required by RCW 60.28.011.

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction

(July 23, 2015 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that any 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 any 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 36.01.05 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 any such claims or causes of action. It is further mutually agreed by the parties that when any 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 any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

1-09.13(3) Claims \$250,000 or Less

(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total \$250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

(July 23, 2015 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

1 Court of the county in which the Contracting Agency's headquarters is located, provided that where
2 claims subject to arbitration are asserted against a county, RCW 36.01.05 shall control venue and
3 jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the
4 decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

5
6 **1-09.13(4) Claims in Excess of \$250,000**

7
8 Section 1-09.13(4) is hereby deleted and replaced with the following:

9
10 **CLAIMS RESOLUTION**

11 **(*****)**

12
13 Any dispute arising from the contract shall be processed in accordance with Section 1-04.5 and
14 Sections 1-09.11 through 1-09.13(1) of the Standard Specifications. The provisions of these
15 sections must be complied with in full as a condition precedent to the Contractor's right to seek
16 claims resolution through arbitration or litigation. The Contractor may file with the Engineer a
17 request for binding arbitration; the Engineer's decision regarding that request shall be final and
18 unappealable. Nothing in this paragraph affects or tolls the limitations period as set forth in
19 Section 1-09.11(3) of the Standard Specifications. However, if the Contractor files a lawsuit raising
20 any claim(s) arising from the contract, the parties shall, if the Engineer so directs, submit such
21 claim(s) to binding arbitration, subject to the rights of any party thereto to file with the Lewis County
22 Superior Court motions to dismiss or for summary judgment at any time. In any binding arbitration
23 proceeding, the provisions of subparagraphs (a) and (b) shall apply.

24
25 a) Unless the parties otherwise agree, all disputes subject to arbitration shall be heard in
26 a single arbitration hearing, and then only after completion of the contract. The parties
27 shall be bound by Ch. 7.04 RCW generally, and by the arbitration rules hereafter stated,
28 and shall, for purposes of administration of the arbitration, comply where applicable
29 with the 1994 Lewis County Superior Court Mandatory Arbitration Rules (LMAR)
30 sections 1.1(b), 1.3, 2.3, 3.1, 3.2(a) and (b), 5.1, 5.2 (except as referenced to MAR
31 5.2), 5.3, 6.1, 6.2 (including the referenced MAR 6.2), and 8.6. There shall be one
32 arbitrator, to be chosen by mutual agreement of the parties from the list provided by
33 the Lewis County Superior Court Administrator. If the parties cannot agree on a person
34 to serve as arbitrator, the matter shall be submitted for appointment of an arbitrator
35 under LMAR 2.3. The arbitrator shall determine the scope and extent of discovery,
36 except that the Contractor shall provide and update the information required by Section
37 1-09.11(2) of the Standard Specifications. Additionally, each party shall file a
38 statement of proof with the other party and the arbitrator at least 20 calendar days
39 before the scheduled arbitration hearing. The statement of proof shall include:

- 40
41 1. The name, business address and contact telephone number of each
42 witness who will testify at the hearing.
- 43
44 2. For each witness to be offered as an expert, a statement of the subject
45 matter and a statement of the facts, resource materials (not protected by
46 privilege) and learned treatises upon which the expert is expected to
47 testify and render an opinion(s), synopsis of the basis for such opinion(s),
48 and a resume of the expert detailing his/her qualifications as an expert
49 and pursuant to rendering such opinion(s). A list of documents and other
50 exhibits the party intends to offer in evidence at the arbitration hearing.
51 Either party may request a copy of any document listed, and a copy or
52 description of any other exhibit listed. The party receiving the request
53 shall provide the copies or description within five (5) calendar days. The
54 parties or arbitrator may subpoena parties in accordance with the Superior

1 Court Mandatory Arbitration Rules (MAR) of Washington, Rule 4.3, and
2 witness fees and costs shall be provided for under Rule 6.4, thereof. The
3 arbitrator may permit a party to call a witness or offer a document or other
4 exhibit not included in the statement of proof only upon a showing of good
5 cause.

6
7 b) The arbitration hearing shall be conducted at a location within Lewis County,
8 Washington. The extent of application of the Washington Rules of Evidence shall be
9 determined in the exercise of sound discretion of the arbitrator, except that such Rules
10 should be liberally construed in order to promote justice. The parties should stipulate
11 to the admission of evidence when there is no genuine issue as to its relevance or
12 authenticity. The decision of the arbitrator and the specific grounds for the decision
13 shall be in writing. The arbitrator shall use the contract as a basis for its decisions.
14 The County and the Contractor agree to be bound by the decision of the arbitrator,
15 subject to such remedies as are provided in Ch. 7.04 RCW. Judgment upon the award
16 rendered by the arbitrator shall be entered as judgment before the presiding judge of
17 the Superior Court for Lewis County. Each party shall bear its own costs in connection
18 with the arbitration. Each party shall pay one-half of the arbitrator's fees and expenses.
19

20 **1-10, TEMPORARY TRAFFIC CONTROL**

21 **1-10.2 Traffic Control Management**

22 **1-10.2(1) General** 23 (December 1, 2008)

24 Section 1-10.2(1) is supplemented with the following:

25 (January 3, 2017)

26 Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State
27 of Washington. The Traffic Control Supervisor shall be certified by one of the following:

28
29 The Northwest Laborers-Employers Training Trust
30 27055 Ohio Ave.
31 Kingston, WA 98346
32 (360) 297-3035

33
34 Evergreen Safety Council
35 12545 135th Ave. NE
36 Kirkland, WA 98034-8709
37 1-800-521-0778

38
39 The American Traffic Safety Services Association
40 15 Riverside Parkway, Suite 100
41 Fredericksburg, Virginia 22406-1022
42 Training Dept. Toll Free (877) 642-4637
43 Phone: (540) 368-1701

44 **1-10.2(2) Traffic Control Plans** 45 (*****)

46 Section 1-10.2(2) is supplemented with the following:
47
48
49
50
51
52

1 The Contracting Agency has attached a Traffic Control Plan in Appendix A for temporary traffic
2 control use on this project. Two-way traffic shall be maintained by the Contractor as shown in the
3 Traffic Control Plan. All signs and traffic control devices required for this project (as shown on the
4 Traffic Control Plan) shall be the Contractors responsibility to furnish, erect, maintain, and remove
5 immediately after construction. The Contractor shall adopt the Traffic Control Plan in writing to the
6 Engineer or furnish a new plan for review. The Contractor shall conduct his operations on the
7 roadway in a manner that one-way traffic is maintained at all times, unless otherwise directed by the
8 Engineer.

9
10 If determined by the Engineer that additional signing (not shown on the Traffic Control Plan) is
11 needed, it shall be the Contractors responsibility to furnish, erect, and maintain these additional signs
12 at no cost to the Contracting Agency.

14 **1-10.2(3) Conformance to Established Standards**

15 (*****)

16 Section 1-10.2(3) is supplemented with the following:

17
18 The latest revision of the WSDOT Manual M54-44 "Work Zone Traffic Control Guidelines"
19 (WZTCG) is hereby made a part of this contract by reference as if contained fully herein.

21 **1-10.4 Measurement**

23 **1-10.4(1) Lump Sum Bid for Project (No Unit Items)**

24 Section 1-10.4(1) is supplemented with the following:

25
26 (August 2, 2004)

27 The proposal contains the item "Project Temporary Traffic Control," lump sum. The provisions
28 of Section 1-10.4(1) shall apply.

30 **EXISTING SIGNS**

31 (*****)

32
33 During the life of the contract, the Contractor shall be responsible for all existing signs damaged or
34 removed by construction operations.

35
36 Warning and regulatory signs may be temporarily relocated to portable sign stands for convenience of
37 construction subject to the approval of the Engineer. The signs shall be located at or as near as practical
38 to their original locations and shall have a minimum vertical clearance above the pavement in accordance
39 with the Manual on Uniform Traffic Control Devices. Upon completion of construction in the area
40 immediately surrounding the permanent sign location, the Contractor shall reinstall the sign and supports
41 in their permanent locations.

42
43 Signs damaged or removed shall be replaced by the Contractor at no cost to the County.

44
45 All costs involved in removing, maintaining and resetting existing signing as specified shall be considered
46 incidental to the project and included in the various bid items therein. No additional compensation will be
47 allowed.

49 **DIVISION 2**

50 **EARTHWORK**

52 **2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

1 **2-02.1 Description**

2 Section 2-02.1 is supplemented with the following:

3
4 (*****)

5 This work shall consist of removing miscellaneous items and existing culvert items listed in the Contract
6 Plans.

7
8 **2-02.3 Construction Requirements**

9 Section 2-02.3 is supplemented with the following:

10
11 (*****)

12 **Removing Miscellaneous Items**

13
14 The following miscellaneous items shall be removed and disposed of:

15
16 *** Traffic items ***

17 *** Fencing ***

18
19 Remove existing Corrugated Metal Squash Pipe, Concrete Liner, and headwalls.

20
21 Removal of the existing culvert shall not commence until the approved stream diversion by-pass system
22 has been fully implemented. Backfill after removal of the culvert within the roadway or roadway fill slopes
23 shall be select borrow material or native material meeting the select borrow material requirements under
24 9-03.14(2).

25
26
27 (*****)

28 ***Requirements for Closing Road to Traffic Prior to Beginning Removal***

29 The Contractor shall not close the existing road to traffic, and shall not begin culvert removal
30 operations, until the following conditions are met:

- 31
32 1. The Contractor has received the Engineer's approval of the culvert removal plan.
- 33
34 2. The traffic control for the detour road shall be operational and opened to traffic prior to
35 closure.
- 36
37 3. The Contractor shall furnish a report on the status of material delivery to the Engineer.
38 The report shall specify the materials already available at the site, the materials yet to
39 arrive at the site, and the scheduled delivery dates of the materials yet to arrive at the
40 site.
- 41
42 4. The Contractor has received the Engineer's approval to proceed.

43
44 **2-02.4 Measurement**

45
46 No specific unit of measurement will apply to the lump sum item of "Removal of Structures and
47 Obstructions". Traffic signs to be adjusted or moved shall be considered incidental to this bid item. All
48 signs shall remain the property of Lewis County. Removal and disposal of the existing culvert, concrete
49 liner, and headwalls shall be considered incidental to this bid item.

50
51 **2-02.5 Payment**

52 Section 2-02.5 is supplemented with the following:

1 Payment will be made in accordance with Section 1-04.1, for the following Bid item when it is included in
2 the Proposal:

3
4 "Removal of Structures and Obstructions", lump sum.

5
6 If pavements, sidewalks, curbs, or gutters lie within an excavation area, their removal will be paid for
7 as part of the quantity removed in Roadway Excavation Incl. Haul.
8

9 **2-03, ROADWAY EXCAVATION AND EMBANKMENT**

10 **(*****)**

11 **2-03.3 Construction Requirements**

12 **2-03.3(7) Disposal of Surplus Material**

13 Section 2-03.3(7) is supplemented with the following:

14
15 No waste site has been provided to the Contractor for the disposal of unsuitable and excess
16 excavation material. The Contractor shall make his own arrangement to acquire a site for the
17 disposal of unsuitable and excess excavation material.
18

19
20 The Contractor shall make his own arrangements to acquire a site and obtain all environmental
21 permits required for the disposal of the unsuitable excavation material. The Contracting Agency
22 must approve the waste site prior to it being utilized. Approval cannot be given until the Contracting
23 Agency receives copies of all environmental approvals.
24

25 All costs for acquiring a disposal site and for the loading, hauling, and disposal of unsuitable and
26 excess excavation material shall be considered incidental to the project and be included in the unit
27 contract prices for the various items of work therein.
28

29 The contractor shall re-use native excavated material for Channel Excavation to backfill the existing
30 abandoned stream channel as depicted in the plans.
31

32 **2-03.3(14)M Excavation of Channels and Ditches**

33 Section 2-03.3(14)M is supplemented with the following:

34
35 The Contractor shall protect existing vegetation and channel slopes outside the stream re-grade
36 areas. All excavation and construction activities shall be conducted within the cut limits of the project
37 staked by the Engineer, access roads through areas not designated for clearing shall not be
38 permitted.
39

40 **Temporary Bypass Road**

41 The Contractor shall construct the Temporary Bypass Road as shown in the plans. Material removed
42 for this Temporary Bypass Road shall be stockpiled and replaced after construction is completed to
43 form a streambank and terrace that reasonably represents the original ground contours (cuts and
44 fills within 0.25-feet of surrounding contours). The Contractor supplied material to construct the
45 Temporary Bypass Road (In the area shown to be removed after Construction) shall remain the
46 property of the Contractor after removal. The following is an approximate list of quantities for the
47 bypass road:
48

49	Excavation (Including Stockpiling)	410 C.Y.
50	Removal (Temporary Bypass Material)	250 C.Y.
51	Construction Geotextile for Separation	1,550 S.Y.
52	Corrugated Polyethylene Culv. Pipe 36 In. Dia.	60 L.F.

Select Borrow Incl. Haul (Fill for Bypass Road Grading)	165 Ton
Crushed Surfacing Base Course	770 Ton
Reshaping after Bypass removal	160 C.Y. from Stockpile

2-03.4 Measurement

Section 2-03.4 is supplemented with the following:

(March 13, 1995)

Only one determination of the original ground elevation will be made on this project. Measurement for roadway excavation and embankment will be based on the original ground elevations recorded previous to the award of this contract. Control stakes will be set during construction to provide the Contractor with all essential information for the construction of excavation and embankments.

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

“Channel Excavation Incl. Haul” shall be measured per C.Y. Shaping the new channel and backfilling of the existing stream bed channel that is to be abandoned shall be with native material (Common Borrow approximately 900 C.Y.) and Topsoil Type B (approximately 250 C.Y.) excavated from the newly constructed Frase Creek channel, both of these materials shall considered incidental to the bid item “Channel Excavation Incl. Haul”. Approximately 32 ton of Rock for Erosion and Scour Protection Cl. A shall be placed at the upstream intersection between the abandoned / new channel as shown on sheet D03 of the Contract Plans and shall be considered incidental to “Channel Excavation Incl. Haul”. The Contractor may collect Rock for Erosion and Scour Protection Cl. A from the abandoned channel prior to filling or import this material from an alternate source. All Channel Excavation, equipment, labor, grading, depositing spoils in the abandoned channel, capping spoils with Top Soil Type B (from new channel), Rock for Erosion and Scour Protection Cl. A, stockpiling and hauling shall be included in the Cubic Yard price for “Channel Excavation Incl. Haul”.

Traffic signs to be adjusted or moved shall be considered incidental to “Removal of Structures and obstructions”.

No specific unit of measurement will apply to “Temporary Bypass Road”.

2-03.5 Payment

Section 2-03.4 is supplemented with the following:

Backfilling the existing stream bed channel that is to be abandoned with native material (spoils, Top B and Rock for Erosion and Scour Protection Cl. A) excavated from the newly constructed Frase Creek channel is considered incidental to the bid item “Channel Excavation Incl. Haul”.

(*****)

“Temporary Bypass Road”, lump sum.

The lump sum contract price for “Temporary Bypass Road” shall be full payment to perform the work as shown in the Contract Plans, including excavation, stockpiling native material, construction geotextile for separation, select borrow, crushed surfacing base course, temporary 36-inch diam. culvert pipe, maintaining the bypass road, removing the bypass road, replacing excavated material, and restoring the area to original ground contours within 0.25 of a foot.

2-09, STRUCTURE EXCAVATION

1
2 **2-09.1 Description**

3 (*****)

4 Section 2-09.1 is supplemented with the following:

5
6 **Temporary Stream Diversion for Structure & Channel Excavation**

7 Temporary Stream Diversion for Structure & Channel Excavation work shall consist of installation and
8 maintenance of stream diversion/bypass for the creek during all in-water construction. Temporary
9 Stream Diversion for Structure Excavation shall be conducted in a manner that does not violate State
10 Water Quality Standards. All work in and adjacent to the stream shall be accomplished in strict
11 accordance with the requirements of the WDFW HPA. This work also consists of adjustments to the
12 location of the dewatering systems as deemed necessary by the Contractor to complete the project and
13 comply with all environmental regulations, permits, specifications and special provisions for this project.

14
15 **The Contracting Agency has designed a Temporary Stream Diversion Plan on Sheet 3 of 15 in the**
16 **Contract Plans for the Contractor's approval. The Contractor may submit a different plan as**
17 **outlined below for approval by the Engineer at their discretion.**

18
19 Upon completion of in-water construction, the Contractor shall promptly remove all stream diversion
20 materials and equipment as directed by the Engineer. Disposal of surplus material and debris remaining
21 from dewatering operations shall be incidental to and included in this item of work. The Stream Diversion
22 Plan is an integral component of stormwater management for this site. If work is required above the
23 ordinary high water mark after the in-water work window has expired, additional BMPs not shown in the
24 Contract Plans shall be proposed by the Contractor for approval by the Engineer. BMPs installed and
25 maintained after the in-water work window has expired shall control stormwater generated from the site
26 during final construction activities. Payment for BMPs shall be per Contract Unit Bid prices or via Section
27 1-09.

28
29 **Submittals**

30 One week prior to beginning stream diversion/bypass and dewatering work, the Contractor shall submit
31 the following in writing to the Engineer for approval:

- 32
33 1. Plans for the installation and commissioning of the dewatering system throughout the duration of
34 the structure excavation.
- 35
36 a) Drawings for Information: Show arrangement, locations, and details of temporary
37 diversion structure, pump locations and discharge line, discharge point, temporary erosion
38 control, and removal of stranded fish.
- 39 b) Include a written report outlining control procedures to be adopted if stream bypass
40 problems arise. Photograph or videotape, in sufficient detail, existing conditions of
41 adjoining construction and site improvements that might be misconstrued as damage
42 caused by stream bypass operations.
- 43 2. Method of stream diversion/bypass throughout the duration of the structure excavation.

44
45 Work shall not commence until the submittals are approved in writing by the Engineer.

46
47 **2-09.3 Construction Requirements**

48 (*****)

49 Section 2-09.3 is supplemented with the following:

50
51 **Preparation**

52 Protect facilities from damage caused by settlement, lateral movement, undermining, washout, and other
53 hazards created by stream diversion operations.

1 Install the stream diversion system to ensure minimum interference with the existing streambed, and
2 other facilities surrounding the dewatering site.

3
4 Disturbance of the bed and banks should be limited to that necessary to place the structure, embankment
5 protection, and any required channel modification associated with the installation. All disturbed areas
6 should be protected from erosion within seven (7) calendar days of completion using vegetation or other
7 means.

8
9 Isolation of the construction site from stream flow shall be accomplished using techniques such as:

- 10 By pumping the stream flow around the site.
- 11 The installation of a sheetpile or sandbag wall.
- 12 The use of a water-filled cofferdam.

13
14
15 Exception may be granted if siltation or turbidity is reduced to acceptable levels by means approved by
16 the Engineer, the Washington Department of Fish and Wildlife (WDFW) and Washington Department of
17 Ecology.

18 **Installation**

19
20 Install the stream diversion system utilizing pipes, pumps (with WDFW approved fish screens), culverts,
21 flexible hose or similar methods complete with pump equipment, standby power and pumps, valves,
22 appurtenances, water disposal, and surface-water controls.

23
24 It is anticipated that a pump bypass system will be utilized to by-pass stream around the excavation area.

25
26 Provide standby equipment on-site available for immediate operation, to maintain stream bypass on
27 continuous basis if any part of system becomes inadequate or fails. At a minimum the Contractor shall
28 provide and have on hand additional pumps as a backup to the stream bypass system. If stream bypass
29 requirements are not satisfied due to inadequacy or failure of stream bypass system, restore damaged
30 structures and foundation soils at no additional expense to the County.

31
32 Fish rescue shall be conducted within the zone of isolation. All fish shall be transferred downstream of
33 the project site using Washington State Department of Transportation (WSDOT) fish exclusion protocols.
34 Fish shall be removed from the project area using a seine net, dip net and five gallon buckets. When fish
35 rescue is completed the site may be dewatered. Pumps shall draw down water at a slow rate so that fish
36 remaining may be rescued and no fish stranding shall occur.

37
38 Any wastewater from project activities and dewatering shall be routed to an area outside the ordinary
39 high water line to allow settling of fine sediments and other contaminants prior to being discharged back
40 into the subject stream. Do not permit open-sump pumping that leads to loss of fines, soil piping,
41 subgrade softening, and slope instability. Dewatering operations shall comply with regulatory water
42 disposal requirements of authorities having jurisdiction. The stream diversion/bypass and shall be
43 sufficiently maintained to avoid significant leaks that may result in flows through the work zone. All in-
44 water work shall be in strict conformance with permits obtained for this project.

45
46 Remove and dispose of the stream bypass system from project site once the new stream channel has
47 been constructed and approved by the Engineer. Upon decommissioning, flows shall be reintroduced
48 gradually so as to minimize the mobilization of sediments.

49 **2-09.3(1)C Removal of Unsuitable Base Material** 50 **(*****)**

51
52 Section 2-09.3(1)C is supplemented with the following:
53

1 The bottom of the excavation area shall be evaluated for stability upon completion of Structure
2 Excavation Class A. The Engineer shall determine if the base material is adequate or unsuitable. If
3 this material is deemed unsuitable by the Engineer, the Contractor shall remove unsuitable material
4 below originally planned grade (not depicted in the Contract Plans) to a depth not to exceed 2-feet
5 below the planned excavation limits. Unsuitable excavated material shall be disposed of and paid
6 per the Contract unit price for Structure Excavation Class A Incl. Haul. The additional excavation
7 area shall be backfilled with Quarry Spalls (also not depicted in the Contract Plans) and compacted
8 prior to placing Crushed Surfacing Base Course for the concrete culvert and wingwall foundation.

9
10 Quarry Spalls for Unsuitable Base Material shall meet the requirements of Section 9-13.1(5) Quarry
11 Spalls and compacted to the satisfaction of the Engineer. An estimated quantity of Quarry Spalls
12 for Unsuitable Base Material if required has been entered into the Proposal, the conditions of Section
13 1-04.6 Variation in Estimated Quantities shall not apply.

14 **2-09.3(1)E Backfilling**

15 Section 2-03.3(1)E is supplemented with the following:

16
17
18 The contractor may elect to re-use Structure Excavation Class A material for backfill depicted on the
19 Contract Plans if the testing is conducted to conclude the material meets the specified requirements.

20
21 The material used to perform general backfill for Culvert, Cast In Place Walls, and Precast Wing
22 Walls shall be Select Borrow meeting the requirements under 9-03.14(2).

23 **2-09.4 Measurement**

24 (*****)

25 Section 2-09.4 is supplemented with the following:

26
27
28 Foundation Material Class A shown in the Contract Plans and material description in Section 9-03.17 of
29 these Special Provisions shall replace Gravel Backfill for Foundation as described in Section 2-09.4 of
30 the Standard Specifications.

31
32 No specific unit of measurement will apply to "Temporary Stream Diversion".

33
34 "Quarry Spalls for Unsuitable Base Material" shall be measured per ton.

35 **2-09.5 Payment**

36 (*****)

37 Section 2-09.5 is supplemented with the following:

38
39
40 Payment will be made in accordance with Section 1-04.1 for the following bid item included in the
41 proposal:

42
43 "Temporary Stream Diversion", lump sum.

44
45 The lump sum contract price for "Temporary Stream Diversion" shall be full payment to perform the work
46 as specified, including dewatering, stream diversion/bypass, fish rescue, and any sandbagging, pumping
47 (with WDFW approved fish screens, fish exclusion, sediment removal, filtration or other materials
48 necessary to complete the work.

49
50 "Quarry Spalls for Unsuitable Base Material" per ton shall be full payment for Quarry Spalls, hauling,
51 placing, and compacting material.

1 **DIVISION 3**
2 **PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING**
3

4 **3-01 PRODUCTION FROM QUARRY AND PIT SITES**

5 **3-01.4 Contractor Furnished Material Sources**

6
7 **3-01.4(1) Acquisition and Development**

8 (*****)

9 Section 3-01.4(1) is supplemented with the following:

10
11 No source has been provided for any materials necessary for the construction of this project.
12
13

14 **DIVISION 4**
15 **BASES**
16

17 **4-04, BALLAST AND CRUSHED SURFACING**

18
19 **4-04.3 Construction Requirements**

20
21 **4-04.3(5) Shaping and Compacting**

22 (*****)

23 Section 4-04.3(5) is supplemented with the following:

24
25 **Shoulder Finishing**

26 Shoulder finishing material shall not be placed until the abutting pavement has been completed,
27 unless designated by the Engineer. Shoulder finishing material (Crushed Surfacing Top Course)
28 shall be placed by a spreader box in one lift. Processing of the shoulder finishing material on the
29 roadway shall not be permitted.
30

31 The existing shoulder material, as well as any additional crushed surfacing material required shall
32 be placed, watered, and compacted against the vertical edge of the pavement, including road
33 approaches. Hand work may be required in areas of road approaches and guardrail. The Contractor
34 shall grade the shoulder material to a uniform slope, remove all debris (sod, large rocks, etc.) and
35 dress all berms resulting from this operation to the satisfaction of the Engineer. The material shall
36 be graded into place and compacted by wheel rolling a minimum of two passes with a motor grader
37 or comparable piece of equipment in areas where the shoulder is narrow. All other areas shall be
38 compacted to the satisfaction of the Engineer. In all areas where the shoulder is wide enough, as
39 determined by the Engineer, a steel drum vibratory compactor shall be used. For compaction, water
40 shall be applied as determined by the Engineer. Damage to the HMA mat due to the Contractor's
41 operation shall be repaired at no cost to the Contracting Agency.
42

43 Following the placement of crushed surfacing material each day, the new mainline and shoulder
44 pavement shall be cleaned of all dirt and debris to the satisfaction of the Engineer. Prior to
45 commencing work on the Shoulder Finishing operation the Contractor shall submit the selected
46 method of compaction and equipment to be used to the Engineer for approval.
47

48 **4-04.4 Measurement**

49 (*****)

50 Section 4-04.4 is supplemented with the following:

1
2 "Shoulder Finishing" shall be measured per ton.

3
4 **4-04.5 Payment**

5 (*****)

6 Section 4-04.5 is supplemented with the following:

7
8 The unit contract price per ton for "Shoulder Finishing" shall be full pay for furnishing crushed
9 surfacing, hauling, grading existing material, placing additional material, watering, compacting and
10 all other work as specified. Water for compaction of shoulder rock shall be considered incidental to
11 this bid item.

12
13 **DIVISION 5**
14 **SURACE TREATMENTS AND PAVEMENTS**

15 (*****)

16 **5-04, HOT MIX ASPHALT**

17 Section 5-04 is supplemented with the following:

18
19
20 Delete WSDOT Section 5-04, Hot Mix Asphalt as printed in the Standard Specifications for
21 Road, Bridge and Municipal Construction, 2018 edition, and replace it with Section 5-04, Hot
22 Mix Asphalt as printed in the Standard Specifications for Road, Bridge and Municipal
23 Construction, 2016 edition.

24 **5-04.1 Description**

25 (*****)

26 Section 5-04.1 is supplemented with the following:

27
28 The term "Approach" shall include Road approaches, driveways, and extensions.

29
30 Superintendents, Labor, and Equipment of Contractor
31 Section 5-04.1 is supplemented with the following:

32
33 The Contractor shall have a sufficient number of qualified personnel on the project to
34 insure the following minimum crew size:

35
36
37 One paving superintendent
38 One paver operator
39 Two screed operators
40 Three roller operators
41 Two rakers

42
43 These workers shall be present and not assigned to dual activities that would stop them
44 from fulfilling their assigned task while the paver is in operation. There will be one
45 assigned supervisor who will be in charge of paving operations and who will be responsible
46 for work performed.

47
48 **5-04.3 Construction Requirements**

49 (*****)

50 Section 5-04.3 is supplemented with the following:

1 Sand and tack all edges, cold joints, and tapers which join existing asphalt, (such as asphalt
2 concrete approaches, intersections, and curb and gutter).

3
4 Wing out, rake, and compact a beveled edge when paving past approaches (driveways), street
5 intersections, curb faces, edges of gutters and, where applicable, provide an acceptable transition
6 from roadway to approaches by paving an adequate ramp as directed by the Engineer. Mainline
7 shall be paved before road approaches. Any approach greater than 30 feet at its narrowest point
8 shall be done with a paving machine.

9
10 Pave to a depth of one inch or less at the curb face, unless otherwise directed by the Engineer.

11
12 **5-04.3(3) Hot Mix Asphalt Pavers**

13 (*****)

14 Section 5-04.3(3) is supplemented with the following:

15
16 **5-04.3(7) Preparation of Aggregates**

17
18 **5-04.3(7)A Mix Design**

19
20 **5-04.3(7)A1 General**

21 (*****)

22 Supplement Section 5-04.3(7)A1 with the following:

23
24 The maximum quantity of RAP allowable in all HMA used in a pavement course shall not exceed
25 20%.

26
27 The Engineer shall approve the RAP stockpile prior to use.

28
29 The Contractor shall submit four samples of the designed Hot Mix Asphalt mix to the
30 Engineer's representative for ignition furnace calibration at least five (5) days prior to paving.
31 Samples will be taken in conformance to WSDOT Test Method T 726.

32
33 **5-04.3(7)A2 Statistical or Nonstatistical Evaluation**

34 (*****)

35
36 Delete this section and replace it with the following;

37
38 **5-04.3(7)A2 Nonstatistical and Commercial Evaluation**

39
40 Mix designs for HMA accepted by Nonstatistical or Commercial evaluation shall;

- 41
- 42 • Be submitted to the Project Engineer on WSDOT Form 350-042
 - 43 • Have the aggregate structure and asphalt binder content determined in accordance with WSDOT
44 Standard Operating Procedure 732 and meet the requirements of Sections 9- 03.8(2) and 9-
45 03.8(6).
 - 46 • Have anti-strip requirements, if any, for the proposed mix design determined in accordance
47 with WSDOT Test Method T 718 or based on historic anti-strip and aggregate source
48 compatibility from WSDOT lab testing. Anti-strip evaluation of HMA mix designs utilized that
49 include RAP will be completed without the inclusion of the RAP.
50 At or prior to the preconstruction meeting, the contractor shall provide one of the following mix
51 design verification certifications for Contracting Agency review;
 - 52 • The proposed mix design indicated on a WSDOT mix design/anti-strip report that is within
53 one year of the approval date
 - 54 • The proposed HMA mix design submittal (Form 350-042) with the seal and certification (stamp
& signature) of a valid licensed Washington State Professional Engineer.

- The proposed mix design by a qualified City or County laboratory mix design report that is within one year of the approval date.

The mix design will be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO Material Reference Laboratory (AMRL) program.

At the discretion of the Engineer, agencies may accept mix designs verified beyond the one year verification period with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design. Evaluation of anti-strip additives are to be provided as part of the mix design acceptance criteria. Acceptable anti-strip evaluations include 1.) a WSDOT validated mix design showing the validated anti-strip additive and dosage 2.) an historic anti-strip determination from WSDOT not greater than two (2) calendar years old or 3.) a passing TSR test at the anti-strip dosage proposed by the Contractor.

No paving shall begin prior to Contracting Agency approval of the Contractor provided mix design.

5-04.3(8)A1, General
(*****)

Delete this section and replace it with the following:

5-04.3(8)A1, General

Acceptance of HMA shall be as defined under nonstatistical or commercial evaluation. Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.

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 Project Engineer and must be made in accordance with Section 9-03.8(7).

Commercial evaluation may be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. Commercial HMA can be accepted by a contractor certificate of compliance letter stating the material meets the HMA requirements defined in the contract.

5-04.3(8)A4, Definition of Sampling Lot and Sublot
(*****)

Section 5-04.3(8)A4 is supplemented with the following:

For HMA in a structural application, sampling and testing for total project quantities less than 400 tons is at the discretion of the engineer. For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed:

If 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 as needed to determine a CPF shall be performed.

1
2 **5-04.3(8)A5 Test Results**

3 (*****)

4 The first paragraph of this section is deleted.

5
6 **5-04.3(8)A6 Test Methods**

7 (*****)

8 Delete this section and replace it with the following;

9
10 **5-04.3(8)A6 Test Methods**

11
12 Testing of HMA for compliance of Va will be at the option of the Contracting Agency. If tested,
13 compliance of Va will be by WSDOT Standard Operating Procedure SOP 731. Testing for
14 compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308. Testing for
15 compliance of gradation will be by WAQTC FOP for AASHTO T 27/T 11.

16
17 **5-04.3(9) Spreading and Finishing**

18 (*****)

19 Section 5-04.3(9) is supplemented with the following:

20
21 The Contractor shall meet with the Engineer or representative by the end of each working day
22 to verify and confirm in writing and by signature the daily yields and quantities.

23
24 If the Contractor fails to follow this procedure, the Contractor accepts the Engineer's
25 estimated quantities for the work completed that day.

26
27 **5-04.3(10) Compaction**

28
29 **5-04.3(10)B Control**

30 (*****)

31 Section 5-04.3(10)B1 thru 5-04.3(10)B4 are deleted and replaced with:

32
33 HMA used in traffic lanes, including lanes for ramps, truck climbing, weaving, speed changes,
34 and left turn channelization, and having a specified compacted course thickness is greater than
35 0.10 foot, shall be compacted to a specified level of relative density. The specified level of
36 relative density shall be a Composite Pay Factor (CPF) of not less than .75, using a minimum
37 of 92.0 percent of the reference maximum density as determined by WSDOT FOP for AASHTO
38 T 209. The level of compaction attained will be determined as the average of not less than 3
39 nuclear density gauge tests taken on the day the mix is placed (after completion of the finish
40 rolling) at randomly selected locations within each lot. The quantity of a lot shall be no greater
41 than a single day's production or approximately 300 tons, whichever is less. The quantity
42 represented by each sub-lot will be 100 tons or a portion of 100 tons within the lot.

43
44 A test section(s) shall be constructed for the purpose of determining if the mix is compactable,
45 to establish a nuclear density gauge correlation factor, and meets the requirements of Sections
46 5-04.

47
48 The test section shall be constructed at the beginning of production paving for the project and
49 will be at least 40 tons and a maximum of 60 tons. The first and last 25 feet of paving will not
50 be included in the test section. No further paving will be performed for the remainder of the day,
51 and the next two days following the test section, or as directed by the Engineer.

52
53 Construction of the test section shall be done using the equipment and rolling patterns that the
54 Contractor expects to use in the paving operation. A test section will be considered to have

1 established compactibility, based on the results of three density determinations, when the
2 average of the three tests exceeds 93 percent or when all three tests individually exceed 92
3 percent of the maximum density determined by WSDOT FOP for AASHTO T209. This will
4 require consideration of the presence of the correlation factor for the nuclear density gauge and
5 may require resolution after the correlation factor is known. When results have demonstrated
6 that the mix is not compactable, or not capable of meeting the requirements in Sections 5-04,
7 the Contractor shall construct a new test section after appropriate adjustments to the mix have
8 been made.

9
10 The HMA used for the test section shall be measured by the ton and paid for as part of its
11 associated HMA bid item. All costs associated with constructing the test section or sections will
12 be incidental to the cost of the HMA.

13
14 On the initial days' production with a new HMA mix a test section may be avoided if the Agency
15 and Contractor agree to accept the compaction based on a nuclear gauge density correlation
16 factor of 1.0 with 92 percent of maximum density nuclear gauge reading. Compaction results
17 less than 92 percent of maximum density will be subject to a price adjustment in accordance
18 with special provision 5-04.5(1)B. Subsequent compaction testing shall be completed and
19 accepted using density correlation values determined in accordance with WSDOT SOP T 730
20 and nuclear gauge density readings conducted in a accordance with WSDOT FOP for WAQTC
21 T 355

22
23 For compaction lots falling below a 1.00 pay factor and thus subject to price reduction or
24 rejection, cores may be used as an alternate to the nuclear density gauge tests. When cores
25 are requested by the Contractor the request shall be made by noon of the first working day
26 following placement of the mix. The contractor shall be responsible for obtaining the core
27 samples at the locations designated by the Engineer. The Contractor shall be responsible for
28 providing traffic control. The Engineer shall be responsible for the testing of the core samples
29 and the costs incurred. When the cores indicate the acceptable level of compaction within a lot
30 has not been achieved, the cost for the testing will be deducted from any monies due or that
31 may become due the contractor under the contract at the rate of \$200 per core.

32
33 HMA, constructed under conditions other than listed above shall be compacted on the basis of
34 a test point evaluation of the compaction train. The test point evaluation shall be performed in
35 accordance with instruction from the Engineer. The number of passes with an approved
36 compaction train, required to attain the maximum point density, shall be used on all subsequent
37 paving.

38
39 The number of passes with an approved compaction train, required to attain the maximum test
40 point density, shall be used on all subsequent paving.

41
42 In addition to the randomly selected locations for tests of the density, the Engineer may also
43 isolate from a normal lot any area that is suspected of being defective in relative density. Such
44 isolated material will not include an original sample location. A minimum of 5 randomly located
45 density tests will be taken. The isolated area will then be evaluated for price adjustment in
46 accordance with the statistical evaluation section, considering it as a separate lot.

47
48 Control lots not meeting the prescribed density standard shall be removed and replaced with
49 satisfactory material. At the option of the Engineer, non-complying material may be accepted
50 at a reduced price. See 5-04.5(1)B of this Special Provision.

51
52 **5-04.3(12) Joints**

53 **(*****)**

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

1
2 **Sealing Joints and Feather Ends**

3
4 After placement of the HMA Pavement, the Contractor shall seal all joints, including approaches
5 or any feathered ends with pavement grade asphalt and sand.

6
7 All costs associated with providing and placing the liquid asphalt as specified above shall be
8 incidental to and included in the unit contract price per ton for the HMA.

9
10 **5-04.4 Measurement**

11 (*****)

12 Section 5-04.4 is supplemented with the following:

13
14 "HMA 1/2 In. PG 58H-22" per Ton.

15
16 **5-04.5 Payment**

17 (*****)

18 Section 5-04.5 is supplemented with the following:

19
20 **5-04.5(1) Quality Assurance Price Adjustment**

21 (*****)

22 Delete the fourth sentence of Section 5-04.5(1).

23
24 Supplement Section 5-04.5(1) with the following:

25
26 In the event that test results indicate the HMA does not meet specifications, a change order will be
27 issued for the price adjustments for Quality of HMA Mixture and Quality of HMA Compaction based
28 upon these specifications.

29
30 **5-04.5(1)B Price Adjustments for Quality of HMA Compaction**

31 (*****)

32 Delete this section and replace it with the following:

33
34 The maximum CPF of a compaction lot is 1.00.

35
36 For each compaction lot of HMA when the CPF is less than 1.00, a Nonconforming
37 Compaction Factor (NCCF) will be determined. THE NCCF equals the algebraic difference of
38 CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated
39 as the product of the NCCF, the quantity of HMA in the lot in tons and the unit contract price
40 per ton of the mix.

41
42 (*****)

43 The CPF shall be as follows:

<u>Compaction</u>	<u>CPF</u>
91.0% to 91.9%	95%
90.0% to 90.9%	90%
89.0% to 89.9%	80%
88.0% to 88.9%	75%
At or below 87.9%	Mix is removed

52
53 **DIVISION 6**
54 **STRUCTURES**

1

2 **6-14, GEOSYNTHETIC RETAINING WALLS**

3 **6-14.1 Description**

4 (*****)

5 Section 6-14.1 is supplemented with the following:

6
7 This Work consists of furnishing and installing Flex MSE Bank Protection in accordance with these
8 Specifications and as shown in the Plans or as designated by the Engineer. An approved equal product
9 may be used as approved by the Engineer.

10
11 **6-14.2 Materials**

12 (*****)

13 Section 6-14.2 is supplemented with the following:

14
15 Materials shall meet the requirements of this section.

16
17 **6-14.2(1) Flex MSE Plate**

18 The patented and branded Flex MSE Plate is composed of 100% polypropylene (100% recycled
19 postindustrial content), must be weather resistant to minus 30 Degrees Celsius and must be 100%
20 recyclable. 3 conical spikes protrude from the top and 8 conical spikes protrude from the bottom of the
21 unit to interlock a total of three filled Flex MSE Bags. 2 'Friction Strips' with Geogrid Hooks cross the
22 width of the top of the Plate, providing additional shear strength and frictional contact. The Flex MSE
23 Plate is to be used in all applications, including those using geogrid for reinforced walls and slopes,
24 gravity walls, and erosion control applications.

25
26 **6-14.2(2) Flex MSE Bags**

27 The labeled Flex MSE GTX Bag is sewn from a proprietary non-woven geotextile that will not rot or
28 mildew, is non-biodegradable and able to withstand significant cutting or tearing without negatively
29 affecting system performance. Flex MSE Bags provide a filtering functionality and are water permeable
30 and root friendly. Flex MSE Bags have met all following applicable ASTM standards for geotextile
31 testing:

- 32 a. Weight (typical) ASTM D5261,
33 b. Grab Tensile ASTM D4632,
34 c. Grab Elongation ASTM D4632,
35 d. Trap Tear ASTM D4533,
36 e. CBR Puncture ASTM D6241,
37 f. Mullen Burst ASTM D6786 (modified),
38 g. A.O.S. ASTM D 4751,
39 h. Permittivity ASTM D 4491,
40 i. Water Flow ASTM D 4491,
41 j. U.V. Resistance ASTM D4355,
42 k. ASTM D256

43
44 **6-14.2(3) Flex MSE Bag Fill Material**

45 Topsoil Type A in accordance with Section 9-14.1(1) of these Special Provisions.

46
47 **6-14.2(4) Flex MSE System Vegetation**

48 Vegetation is applied through hydroseeding and brush layering methods. All hydroseeding shall
49 conform to the requirements of Section 8-01 of these Special Provisions.

50
51 (*****)

52 **6-14.3 Construction Requirements**

1 Section 6-14.3 is supplemented with the following:
2

3 **A(1) Site Preparation**

- 4 a) Clear and grub existing area.
5 b) If Flex MSE Bags are filled on site, prepare a suitable “work area” located in close proximity to the
6 site that allows for safe stockpiling.
7

8 **A(2) Subgrade**

- 9 a) Refer to Engineer drawings for specified excavation, embedment depths and compaction for
10 each application type and comply with requirements.
11 b) Excavate to depths shown on drawings allowing for specified number of below grade Flex MSE
12 Bag layers on top of specified depth of compacted granular base or compacted native mineral
13 layer.
14 c) Prepare a stable, reasonably level base and proof compact to specified density.
15

16 **A(3) Preparation of Flex MSE Bags**

- 17 a) Fill the Flex MSE bags with Topsoil Type A according to section 9-14.1(1). Pre-seed the bags with
18 the seed mix identified on the contract plans.
19 b) Fill the Flex MSE Bags completely, to a consistent weight and size, allowing just enough geotextile
20 material for the secure closure of the Bag.
21 c) Secure the closure at a consistent place on every Bag. Bag closure methods include but are not
22 limited to cable or rebar ties, hog rings, or machine sewing with appropriate hardware and industrial
23 threads.
24

25 **A(4) Flex MSE Construction**

- 26 a) Refer to Engineer drawings for layout dimensions and installation techniques.
27 b) Begin by placing a Flex MSE Plate between the base layer (eg: crush, native material, or
28 leveling pad) and first row.
29 c) Install the base course of filled Flex MSE Bags as per Engineer drawings. Start installation at
30 the lowest point and dig Bags into the material at appropriate elevation changes. Leave no more
31 than an inch between each Bag to allow for spread during compaction. Place Bags with the
32 seam level and facing inwards towards backfill material. Hand tamp, or machine compact each
33 layer. There shall be no gaps between tamped/compacted Bags to ensure backfill material
34 containment. Place a Flex MSE Plate equally over the juncture of each bag in the row. Plate
35 placement must be set back specific so that Plates are fully enveloped by successive Bags and
36 gain full reinforcement engagement. For successive layers, lay Flex MSE Bags over the Plate
37 and joint of the two Bags underneath, maintaining the typical Segmental Retaining Wall ‘running
38 bond’ pattern. If the ends of Bags on the working layer get within 8 inches (200mm) of the Bag
39 joints underneath, lay a spacing Tie--Back unit down to reset the running bond pattern (refer to
40 the Flex MSE Tie Back CAD for illustration). Hand tamp or lightly (1000lb) machine compact
41 each layer to fully engage the spikes of the Flex MSE Plate to the Bags on top and underneath.
42 d) For walls with a 1H:2V slope it is required to rotate 90 degrees every 2nd Bag on every 2nd row
43 for up to 1.5m height. For heights up to 2m, rotating 90 degrees every 2nd Bag on every row is
44 required.
45 e) Place and compact backfill to Specification every two courses of compacted Flex MSE Bags or
46 per Engineer’s specification. Structures with lower slopes and greater setback may require
47 placement and compaction of backfill every row to prevent slumping of Bags backwards. Bags
48 are hand tamped every Row or machine compacted every two rows with light weight
49 compaction equipment.
50 f) Maintain the specified batter or slope as rows of Flex MSE Bags and Interlocking Plates are
51 placed through measurement, Batter Board/Jig or level. Any change in batter from the drawing
52 must be approved by the Designing Engineer. Account for changes in Unit set back and profile
53 as a result of Flex MSE Bag compaction.

- g) Backfill shall be placed, spread, and compacted from the facing units toward the back of the fill zone to maintain reinforcement tension.
- h) Only light weight hand operated compaction equipment shall be operated with 3 feet (1m) of the back of the Flex MSE units.
- i) Tracked equipment shall not be operated directly on the reinforcing. A minimum thickness of 6 inch of fill is required prior to operating tracked equipment over the reinforcing.
- j) Rubber tired equipment may be operated on the reinforcing, avoiding sudden braking and sharp turns.
- k) At the end of each workday, the Contractor shall grade the backfill away from the wall area to Engineer's specifications and direct runoff away from the wall area. Surface runoff from adjacent areas must be directed away from the work area.

A(5) Vegetation

- a) Hydroseed: Hydroseeding is the preferred method of seeding. Apply hydroseeded material to the face of the Flex MSE structure in a manner that achieves complete coverage of all contours of the exposed Bag face. Engineered hydroseed products for Extreme Slopes must be used in applications steeper than 1H:2V. Pre- Seeding of Flex MSE Bags per the mix described on the contract plans at the specified weight/volume rates must be followed to expose as much seed as possible to surface light, warmth, and moisture.
- b) Brush Layering: Live stakes shall be installed no wider than spacing of 36" on center. The live denser spacing will provide greater anchor of each bag together as the roots continue to grow throughout the wall system.

A(6) Field Review

- a) Pursuant to the Contract, field review should be undertaken at regular intervals to ensure satisfactory germination and/or coverage of the Flex MSE Bags.

6-14.4 Measurement

(*****)

Section 6-14.4 is supplemented with the following:

“Flex MSE Bank Protection” will be measured per square yard of material placed as depicted in the Contract Plans.

6-14.5 Payment

(*****)

Section 6-14.5 is supplemented with the following:

The bid item “Flex MSE Bank Protection” per square yard shall be the full pay for the supply delivery, placement, and all affiliated work with placing the Flex MSE bank protection bags in accordance with the Contract Plans.

**DIVISION 7
DRAINAGE STRUCTURES, STORM SEWERS,
SANITARY SEWERS, WATER MAINS, AND CONDUITS**

7-02 CULVERTS

7-02.2 Materials

Section 7-02.2 is supplemented with the following:

(*****)

Precast Reinf. Conc. Split Box Culvert

1 Portland cement shall conform to Section 9-01.

2 Steel reinforcing bar, wire, and mesh shall conform to Section 9-07.

3 Concrete curing materials and admixtures shall conform to Section 9-23.

4 Water shall conform to Section 9-25.1.

5 Grout shall conform to Manufacturer's recommendations.

6 **7-02.3 Construction Requirements**

7 Section 7-02.3 is supplemented with the following:

8 **(*****)**

9 ***Precast Reinf. Conc. Split Box Culvert***

10 **Design Criteria**

11 The Contractor shall design the precast reinforced concrete split box culvert including all
12 precast reinforced concrete attachments to the box culverts such as headwalls and wingwalls,
13 in accordance with the AASHTO Standard Specifications for Highway Bridges, 17th Edition –
14 2002, Chapters 6 and 16, load factor design method. The box culvert structures shall support
15 an AASHTO HL-93 loading with a maximum soil bearing pressure of 4,000 pounds per square
16 foot. Precast units shall be connected using weld ties at 6-foot on center maximum or an
17 approved equivalent. Precast concrete structures shall include wingwalls at two corners and
18 one headwall per details in the Contract Plans.

19 Concrete for precast reinforced concrete split box culverts, including all precast reinforced
20 concrete attachments to the box culverts, shall attain a minimum 28 day compressive strength
21 of 7,000 psi.

22 The Pigeon Springs Rd MP 0.50 (Frase Creek) culvert design shall incorporate an attachment
23 method for guardrail via WSDOT Standard Plan C-20.41-01 or an alternate method approved
24 by Lewis County. Guardrail attachments shall be capable of supporting TL-2 (35 MPH speed
25 limit).

26 **Submittals**

27 The Contractor shall submit two sets of shop drawings for culvert and shall be stamped and
28 certified by a Civil Engineer licensed in the State of Washington. Stamped Plans shall be
29 provided to Lewis County within thirty working days of contract award. Plans shall include
30 connection details, lifting details, assembly, and installation details, with two sets of supporting
31 design calculations, to the Engineer in accordance with Sections 6-01.9 and 6-02.3(28)A. In
32 addition to items 1 through 6 under the Section 6-02.3(28)A requirements for shop drawing
33 content, the following shop drawing details shall also be submitted:

- 34 1. Erection and backfill procedure.
- 35 2. Complete, site specific, itemized bar list for all reinforcing steel.

36 **Culvert Section Fabrication**

37 The Manufacturer shall determine concrete wall/top/bottom thickness, split-box culvert
38 dimensions/configuration and wingwall design to achieve interior culvert dimensions and
39 required wingwall limits depicted in the Contract Plans. Plans depict estimated wall
40 thicknesses, footing dimensions, etc. Note, proposed concrete split-box culvert base units
41 shall incorporate interior side heights as depicted to allow placement of streambed material
42 prior to placing top units.

1
2 The Contractor shall fabricate the precast elements of the precast reinforced concrete split
3 box culvert (consisting of "U" shaped base elements with "lid" panels and staggered base and
4 lid joints as shown in the Plans) in accordance with Section 6-02.3(28), and the shop drawings
5 as approved by the Engineer.
6

7 Notification shall be given to Lewis County Public Works at least seven working days in
8 advance of beginning fabrication of the precast elements for this project.
9

10 The Contractor shall pick, move, and store the precast reinforced concrete split box culvert
11 elements in the cast position until the concrete reaches a minimum compressive strength
12 equal to the final design strength specified in the shop drawing and design calculation
13 submittal.
14

15 Prior to shipping, the precast reinforced concrete split box culvert fabricator shall furnish the
16 Inspector a complete documentation package for each culvert component. The
17 documentation package shall include the following information for each culvert component:
18

- 19 1. Concrete batch tickets
- 20 2. Concrete cylinder break results.
- 21 3. Material certifications.
- 22 4. Copies of all changes from the Plans and Specifications.
23
24
25
26

27 The following information shall be legibly and permanently marked on one inside face of each
28 "U" shaped element by indentation, waterproof paint, or other means approved by the
29 Engineer:
30

- 31 1. Box section span and rise dimensions, minimum and maximum design earth cover
32 dimensions, and an AASHTO HL-93 loading.
- 33 2. Date of fabrication.
- 34 3. Name or trademark of the fabricator.
35
36
37

38 **Culvert Erection**

39 The Contractor shall erect and backfill precast reinforced concrete split box culverts in
40 accordance with the erection sequence specified in the shop drawings as approved by the
41 Engineer, and construction equipment shall not be placed on the structure until grout has attained
42 a minimum compressive strength of 2,500 psi.
43

44 **7-02.4 Measurement**

45 Section 7-02.4 is supplemented with the following:
46

47 (April 2, 2007)

48 "Precast Reinf. Conc. Split Box Culvert" shall not be measured.
49

50 **7-02.5 Payment**

51 Section 7-02.5 is supplemented with the following:
52

53 (April 2, 2007)

54 "Precast Reinf. Conc. Split Box Culvert", lump sum.

1 The lump sum contract price for "Precast Reinf. Conc. Split Box Culvert". The 20' Span x 11' Rise"
2 x 50' Long, w/Headwall & w/ 2 Wingwalls shall be full pay for performing the work as specified,
3 including designing, fabricating, headwalls, footings, wingwalls, delivery, erecting, and grouting the
4 precast concrete elements for the culvert.

5
6 **DIVISION 8**
7 **MISCELLANEOUS CONSTRUCTION**
8

9 **8-01, EROSION CONTROL AND WATER POLLUTION CONTROL**

10
11 **8-01.3 Construction Requirements**

12 Section 8-01.3 is supplemented with the following:

13
14
15 **(*****)**

16 **Treatment of pH for Concrete Work**

17 Stormwater or dewatering water that has come in contact with concrete pours shall be maintained
18 between pH 6.5 and pH 8.5 before it is allowed to enter surface waters and discharges shall not
19 cause a receiving water pH change of more than 0.2 pH units.

20
21 The Contractor shall test runoff during each rain event causing runoff to leave the project site during
22 concrete pouring activities, and during the first three storms following those activities. If discharging
23 directly to surface waters the Contractor shall test the pH of the water at the point of discharge, once
24 the pour has begun for each shift, and periodically, as requested by the Engineer, thereafter. If a test
25 indicates the pH is above 8.5, the Contractor shall immediately discontinue work and initiate
26 treatment according to the plan to lower the pH.

27
28 Unless specific measures are identified in the Special Provisions, the pH of water may be reduced
29 by infiltration, or dispersion in vegetation or compost.

30
31 Work may resume, with treatment, once the pH of the treated material is between 6.5 and 8.5 or it
32 can be demonstrated that the runoff will not reach surface waters.

33
34 Any additional BMP items as stated in the Contract Plan and ordered to be placed by the Engineer
35 but not included in the Proposal shall be paid by force account as provided in Section 1-09.6 of the
36 Standard Specifications.

37
38 **8-01.3(1) General**
39 (April 3, 2006)

40
41 **8-01.3(1)A Submittals**

42 Section 8-01.3(1)A is supplemented with the following:

43
44 Prior to beginning any concrete work, the Contractor shall submit a plan, for the Engineer's review
45 and approval, outlining the procedures to be used to prevent high pH stormwater or dewatering water
46 from entering surface waters. The plan shall include how the pH of the water will be maintained
47 between pH 6.5 and pH 8.5 prior to being discharged from the project or entering surface waters.

1
2 **8-01.3(2) Seeding, Fertilizing, and Mulching**

3
4 **8-01.3(2)B Seeding and Fertilizing**

5 (*****)

6 Section 8-01.3(2)B is supplemented with the following:

7
8 Seed Mix - Roadside: Grass seed, of the following composition, proportion, and quality shall be
9 applied at the rate of *****See Contract Plans***** pounds of pure live seed per acre on all areas
10 requiring permanent roadside seeding within the project limits.

11
12 After seeding the Contractor shall be responsible to ensure a healthy stand of grass, otherwise, the
13 Contractor shall, restore eroded areas, clean up materials, and reapply the seed, at no cost to the
14 Contracting Agency.

15
16 Seeds shall be certified "Weed Free," indicating there are no noxious or nuisance weeds in the seed.

17
18 **8-01.3(2)D Mulching**

19 (*****)

20 Section 8-01.3(2)D is supplemented with the following:

21
22 Long-Term Wood Cellulose Fiber mulch shall be applied at a rate of 4,000 pounds per acre with all
23 permanent seed mixes and shall conform to Section 9-14.4(2)A Long-Term Mulch of the Standard
24 Specifications. No more than 2,000 pounds shall be applied in any single lift.

25
26 **8-01.3(2)E Tackifiers**

27 (*****)

28 Section 8-01.3(2)E is supplemented with the following:

29
30 PAM shall be added to seed mixes at the time of hydraulic application. Application rates and
31 methods shall conform to Section 8-01.3(2)E of the Standard Specifications.

32
33 **8-01.3(7) Stabilized Construction Entrance**

34 (*****)

35 The first paragraph is revised to read:

36
37 Temporary stabilized construction entrance shall be constructed in accordance with the Standard
38 Plan (I-80.10-02), prior to beginning any clearing, grubbing, embankment or excavation. All quarry
39 spall material used for stabilized construction entrance shall be free of extraneous materials that
40 may cause or contribute to track out.

41
42 **8-01.3(9)A Silt Fence**

43 (*****)

44 Section 8-01.3(9)A is supplemented with the following:

45
46 In areas designated in the Plans for the application of silt fence, or as directed by the Engineer, the
47 Contractor shall install **high visibility orange colored silt fence**. High visibility orange silt fence shall
48 meet the requirements of Section 9-33.2(1), Table 6.

49
50 High visibility silt fence shall be installed with the materials and equipment positioned and working from
51 outside the sensitive area shown in the Plans or as staked in the field by the Engineer. If silt fence
52 cannot be installed without intrusion into the sensitive area, hand installation will be required.

53
54 The Contractor shall remove high visibility silt fence after completion of the project and seeding has been

1 accepted or as directed by the Engineer.

2 Approximate quantity of high visibility silt fence: 330 linear feet.

3 Approximate quantity of standard production color silt fence: 0 linear feet.

6 **8-01.4 Measurement**

7 (*****)

8 Section 8-01.4 is supplemented with the following:

9
10 “Stabilized Construction Entrance” will be measured by the square yard for each entrance constructed.
11 The work shall include all costs associated with constructing, material, operating, maintaining, removal
12 of stabilized construction entrance, and return of the area to the condition prior to construction.

13 **8-01.5 Payment**

14 (*****)

15 Section 8-01.5 is supplemented with the following:

16
17 “Stabilized Construction Entrance” per square yard.

18
19 The unit contract price per Linear Foot (L.F.) for “High Visibility Silt Fence” shall be full pay for all
20 cost to obtain, install, maintain, and remove the fence as specified. Once removed, the fencing
21 shall remain the property of the Contractor.
22
23

24 **8-02 ROADSIDE RESTORATION**

25 **8-02.1 Description**

26 Section 8-02.1 is supplemented with the following:

27 (*****)

28 The work described in this section, regardless of the nature or type of the materials encountered,
29 includes supplying plant material, planting and installing plant protectors as shown in the contract
30 plans, staked in the field, and directed by the engineer. This work shall be accomplished in
31 accordance with all environmental permits regulating the work.
32
33
34

35 **8-02.3 Construction Requirements**

36 Section 8-02.3 is supplemented with the following:

37 (*****)

38 **PLANTING MITIGATION CONSTRUCTION**

39
40
41 The Contractor shall grade, plant, and otherwise construct mitigated planting areas as shown in
42 the Contract Plans, staked in the field, and required by the Engineer. The planting of the
43 enhancement sites shall be performed by a biologist, horticulturist, landscape architect or other
44 similar professional. The credentials of the supervisor of this work shall be approved by the
45 Engineer prior to beginning work on this item. All work shall be performed as outlined in the
46 Contract Plans along with WSDOT Standard Plan H-10.10-00.
47
48

Planting Zones

See Contract Plan Sheets P01 – P03 for Plant List and Location

Planting zones shall be as follows:

Planting Zone	Scientific Name	Scientific Name	Size of Plants (Material)	Size of Plants (Material)	Proportion of Planting in Strata (%)	Number of Plants
Zone A: Disturbed Area above Ordinary High Water	<i>Hordeum brachyantherum</i>	Meadow Barley	Seed	3 lbs. / 1,000 SF	38.5	-
	<i>Bromus carinatus</i>	California Brome	Seed		20	-
	<i>Festuca rubra rubra</i>	Native Red Fescue	Seed		12	-
	<i>Glyceria occidentalis</i>	Northwestern Mannagrass	Seed		10	-
	<i>Rosa nutkana</i>	Nootka Rose	Seed		5	-
	<i>Symphoricarpos alba</i>	Common Snowberry	Seed		5	-
	<i>Mahonia aquifolium</i>	Oregon Grape	Seed		4.5	-
	<i>Deschampsia cespitosa</i>	Tufted Hairgrass	Seed		3	-
	<i>Agrostis exarata</i>	Spike Bentgrass	Seed		1.5	-
	<i>Holodiscus discolor</i>	Oceanspray	Seed		0.5	-
Area: 21,924 sf						
Zone C: Disturbed Area from Grading and Construction Activities	<i>Elymus glaucus</i>	Blue Wildrye	Seed	1 lbs / 1,000 SF	43	-
	<i>Hordeum brachyantherum</i>	Meadow Barley	Seed		37	-
	<i>Lolum multiflorum</i>	Annual Ryegrass	Seed		11	-
	<i>Festuca idahoensis</i>	Idaho Fescue	Seed		7	-
	<i>Festuca ovina</i>	Sheep Fescue	Seed		1	-
	<i>Deschampsia elongata</i>	Slender Hairgrass	Seed		0.6	-
	<i>Koeleria macrantha</i>	Junegrass	Seed		0.4	-
Area: 27,682 sf						

Plant Establishment

(*****)

The Contractor shall provide a one-year plant guarantee period from the date of final acceptance, in accordance with performance standards of local, state and federal permits. At the end of the one-year guarantee period, all dead and unacceptable plant materials shall be replaced by the Contractor at the Contractor’s expense. The Contractor shall provide maintenance and monitoring efforts during the guarantee period.

8-02.4 Measurement

Section 8-02.4 is supplemented with the following:

(*****)

“Planting Mitigation Construction” per Lump Sum.

No specific unit of measure will apply to this lump sum item. Items specified are approximate and are provided for estimating purposes only. The successful Contractor shall provide the Contracting Agency a lump sum breakdown of all items after bid award.

8-02.5 Payment

Section 8-02.5 is supplemented with the following:

“Planting Mitigation Construction”

The unit contract price per Lump Sum for “Planting Mitigation Construction” shall be full

1 compensation for furnishing and installing all plants, specified seed mixes, mulch, and PAM,
2 weed and grass control/removal immediately prior to seeding to produce the specified surface
3 conditions, scarification of compacted areas, minor filling of ruts, and all material and equipment
4 necessary and incidental to the approved application of the specified seed - as described in
5 Special Provision and in accordance with the USACE NWP Permit on the project site and all
6 other applicable requirements and regulations. Material descriptions and construction
7 requirements are as described in this Special Provision. The long term monitoring and
8 maintenance (after one-year plant guarantee period) shall be completed by others. The unit
9 price per Lump Sum for "Planting Mitigation Construction" also includes the placement Top Soil
10 Type B (Approximately 570 C.Y.) as depicted in the plans.
11

12 **8-15 RIPRAP**

13 **8-15.2 Materials**

14 (*****)

15 Section 8-15.1 is supplemented with the following:

16 Streambed Boulder, One-Man	9-03.11(3)
17	
18 Streambed Sediment	9-03.11(1)
19	
20 Streambed Cobbles	9-03.11(2)
21	
22 Select Borrow	9-03.14(2)
23	
24	

25 **Large Woody Debris**

26
27 Large woody debris shall consist of logs with and without root wads attached as shown in the
28 Plans. Trunk length and diameter shall be as shown in the Plans. Root wads shall consist of stout
29 roots, minimum 2-inch diameter, that form a root wad diameter as listed on page C01 in the
30 Contract Plans. Large woody debris shall be Douglas fir or Western Red Cedar species that are
31 free from rot or decay.
32

33 **Scour Protection Slope Face Bags**

34
35 The scour protection bags that are placed on Select Borrow shall be Flex MSE GTX Bags by
36 Trexiana with interlock or approved equal. See Special Provision 6-14.
37

38 **8-15.3 Construction Requirements**

39 (*****)

40 Section 8-15.3 is supplemented with the following:

41 **Streambed Boulder, One-Man**

42
43 Set streambed boulders as directed by the Engineer during construction. The one man boulders are
44 to be mixed in with the stream bed mix as directed by the Engineer.
45
46

47 **Large Woody Debris**

48
49 This work consists of placing large woody debris along the toe of the stream channel slope where
50 shown and as detailed in the Plans. Care should be taken when handling log materials to minimize
51 damage such as abrasion, splitting, crushing and shearing to the tree trunk and root wads where
52 intact and required.
53

54 **Streambed Mix**

1 Streambed Mix (Streambed Cobbles, One-Man Boulders, and Sediment) shall be mixed at the
2 rock pit or on-site per the ratios stipulated in the Plans and as directed by the Engineer. Place
3 Streambed Mix in the new stream channel and culvert as profiled and detailed in the Plans.
4 Compact until firm and stable in 12-inch maximum lifts. Additional Streambed Sediment shall be
5 placed on top of the Streambed Mix to provide stability to the cobble mix and be placed in area of
6 voids and watered to create a uniform, non-porous bed. This additional Streambed Sediment shall
7 be paid as "Streambed Mix".
8
9

10 11 **Scour Protection for Wall Banks**

12
13 The Contractor shall place the scour protection rock and Flex MSE Bank Protection bags as
14 depicted in the Contract Plan details to the dimensions shown. The contractor shall place Select
15 Borrow in a manner that sufficiently builds up the side embankment without disturbing material
16 below on subsequent lifts. Select Borrow shall be placed a minimum of 2 feet above the wall
17 footing or as otherwise depicted in the Contract Plans.
18

19 Once all of the Select Borrow has been adequately placed on the banks, the contractor shall place
20 the Flex MSE Bank Protection bags per the manufacturer's recommendations as an outer layer of
21 scour protection. The contractor will not be compensated for placing extra scour protection
22 material other than areas depicted in the Contract Plans for the walls facing the South Fork
23 Newaukum River.
24

25 **8-15.4 Measurement**

26 (*****)

27 Section 8-15.4 is supplemented with the following:
28

29 "Large Woody Debris" shall be measured per each installed regardless of length, diameter, or
30 attached root wad.
31

32 "Streambed Mix" will be measured per Ton. This measurement includes the one man
33 boulders placed in conjunction with the Streambed Mix as depicted in the Contract Plans. The
34 provisions of Section 1-04.6 Variation in Estimated Quantities does not apply to this bid item.
35

36 **8-15.5 Payment**

37 (*****)

38 Section 8-15.5 is supplemented with the following:
39

40 "Large Woody Debris", per each.

41 Payment for "Large Woody Debris" per each, shall be full pay for the Work described in this
42 Section including excavation, backfilling, and compaction.
43

44 "Streambed Mix" per Ton. The Unit Price "Streambed Mix" includes the supply and placement
45 of the one man boulders within the Streambed Mix. It is anticipated that approximately 440
46 one-man boulders will be required on the project.
47

48 **8-23, TEMPORARY PAVEMENT MARKINGS**

49 **8-23.4 Measurement**

50 Section 8-23.4 is revised to read:
51

52 (*****)

53 No measurement will be made for Temporary Pavement Markings.

1
2 **8-23.5 Payment**

3 Section 8-23.5 is revised to read:

4
5 (*****)

6 All costs for furnishing, installing, and maintaining Temporary Pavement Markings shall be
7 included in the cost of the HMA.

8
9 **DIVISION 9**
10 **MATERIALS**

11 (*****)

12 **SECTION 9-02, BITUMINOUS MATERIALS**
13

14 **9-02.1 Asphalt Material, General**

15 The second paragraph is revised to read:

16
17 The Asphalt Supplier of Performance Graded (PG) asphalt binder and emulsified asphalt shall have
18 a Quality Control Plan (QCP) in accordance with WSDOT QC 2 "Standard Practice for Asphalt
19 Suppliers That Certify Performance Graded and Emulsified Asphalts". The Asphalt Supplier's QCP
20 shall be submitted and receive the acceptance of the WSDOT State Materials Laboratory. Once
21 accepted, any change to the QCP will require a new QCP to be submitted for acceptance. The
22 Asphalt Supplier of PG asphalt binder and emulsified asphalt shall certify through the Bill of Lading
23 that the PG asphalt binder or emulsified asphalt meets the Specification requirements of the
24 Contract.
25

26 **9-02.1(4) Performance Graded Asphalt Binder (PGAB)**

27 This section's title is revised to read:

28 **Performance Graded (PG) Asphalt Binder**

29 The first paragraph is revised to read:

30
31 PG asphalt binder meeting the requirements of AASHTO M 332 Table 1 of the grades specified in
32 the Contract shall be used in the production of HMA. For HMA with greater than 20 percent RAP by
33 total weight of HMA, or any amount of RAS, the new asphalt binder, recycling agent and recovered
34 asphalt (RAP and/or RAS) when blended in the proportions of the mix design shall meet the PG
35 asphalt binder requirements of AASHTO M 332 Table 1 for the grade of asphalt binder specified by
36 the Contract.
37

38
39 The second paragraph, including the table, is revised to read:

40
41 In addition to AASHTO M 332 Table 1 specification requirements, PG asphalt binders shall meet the
42 following requirements:
43

		Additional Requirements by Performance Grade (PG) Asphalt Binders					
Property	Test Method	PG58S-22	PG58H-22	PG58V-22	PG64S-28	PG64H-28	PG64V-28
RTFO Residue: Average Percent Recovery	AASHTO T 350 ¹			30% Min.	20% Min.	25% Min.	30% Min.

@ 3.2 kPa							
¹Specimen conditioned in accordance with AASHTO T 240 – RTFO.							

The third paragraph is revised to read:

The RTFO $J_{nr diff}$ and the PAV direct tension specifications of AASHTO M 332 are not required.

This section is supplemented with the following:

If the asphalt binder verification sample test results fail to meet AASHTO Test Method T 350 “Standard Method of Test for Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)” for average percent recovery @ 3.2 kPa for the applicable grades of binder in accordance with Section 9-02.1(4), the Contracting Agency may elect to test the sample using AASHTO Test Method T 301 “Standard Method of Test for Elastic Recovery Test of Asphalt Materials by Means of a Ductilometer.”

When AASHTO T 301 is used, a minimum of 65% elastic recovery (ER) will be required when tested at $25^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$.

9-03 AGGREGATES

9-03.8 Aggregates for Hot Mix Asphalt

9-03.8 (2) HMA Test Requirements (*****)

Section 9-03.8(2) is supplemented with the following:

ESAL's

The number of ESAL's for the design and acceptance of the HMA for paving shall be *** 1*** million.

9-03.8(7) HMA Tolerances and Adjustments

(*****)

Delete item 1 and replace it with the following:

1. **Job Mix Formula Tolerances.** After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

	Nonstatistical Evaluation	Commercial Evaluation
Aggregate, percent passing		
1", ¾", ½", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±4%	±8%
U.S. No. 16 sieve	±4%	±8%
U.S. No. 30 sieve	±4%	±8%
U.S. No. 50 sieve	±4%	±8%
U.S. No. 100 sieve	±4%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%

VMA	1.5% below minimum value in 9-03.8(2)
VFA	min. and max. as listed in 9-03.8(2)
Va	2.5% minimum and 5.5% maximum

These tolerance limits constitute the allowable limits as described in Section 1-06.2. The tolerance limit for aggregate shall not exceed the limits of the control points section, except the tolerance limits for sieves designated as 100% passing will be 99-100.

9-03.17 Foundation Material Class A and Class B

(*****)

Section 9-03.17 is replaced with the following:

Foundation Material Class A shall conform to the following gradation:

Sieve Size	Class A -- Percent Passing
2 1/2"	99 - 100
2"	65 - 100
1"	50 - 85
No. 4	26 - 44
No. 40	16 max.
No. 200	9.0 max
Dust Ratio:	2/3 max
Sand Equivalent	35 min

All percentages are by weight

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.1 Topsoil

9-14.1(1) Topsoil Type A

(*****)

Asphalt or other construction debris, aggregates, bark or wood chip mulch, clearing and grubbing debris, live weeds, sod or other undesirable vegetation as determined by the Engineer, or rocks greater than 1/2 inch in diameter will not be allowed. Rocks shall not comprise more than 10% by volume of Topsoil Type A.

Topsoil Type A shall be mixed of the following components.

- 50% Sand meeting the requirements of 9-03.13 of the Standard Specifications, Backfill for Sand Drains
- 20% Loam soil. Contractor shall provide certified test results from an independent, accredited laboratory approved by the Engineer, and dated within 6 months prior to proposed application, showing the following criteria of the Loam soil:

1. Meet the particle size distribution for "loam soil" according the NRCS Soil Texture Triangle and as documented in a Particle Size Analysis, AASHTO T88 "Particle Size Analysis of Soils".

2. Organic matter content greater than 3% but less than 15% as measured on a dry weight basis as documented by a laboratory accredited to perform AASHTO T 267 "Determination of Organic Content in Soils by Loss on Ignition."
3. pH shall be between 5 and 7 as documented by a laboratory accredited to perform AASHTO T289 "Standard Method of Test for Determining pH of Soil."
4. Acute Toxicity, Solvents, and Heavy Metals standards documented in Section 9-14.4(2)Table 1.

30% Fine Compost (as defined by Section 9-14.4(8))
40 lbs. of seed per 1000 cubic yards (4% by volume) as per the seed mix defined in the Special Provision "Seeding".

9-14.2 Seed

Seed type, mix and distribution are indicated within the Contract Plans.

9-14.3 Fertilizer

No fertilizers are to be used within this project.

9-14.4(7) Tackifier

Use organic tackifiers only.

POWER EQUIPMENT

(*****)

The successful bidder will be required to furnish the County a list of all equipment that they anticipate utilizing on this project.

The bidder's attention is directed to the attached Power Equipment Form, which the successful bidder will be required to complete and return with the contract documents. This information will enable hourly rental rates to be computed by the County, utilizing the "Rental Rate Blue Book for Construction Equipment". No payment for any force account work will be allowed until this form has been returned and accepted by the County.

E-VERIFY

(*****)

"Effective June 21st, 2010, all contracts with a value of \geq \$100,000 shall require that the awarded contractor register with the Department of Homeland Security E-Verify program. Contractors shall have sixty days after the execution of the contract to register and enter into a Memorandum of Understanding (MOU) with the Department of Homeland Security (DHS) E-Verify program. After completing the MOU the contractor shall have an additional sixty days to provide a written record on the authorized employment status of their employees and those of any sub-contractor(s) currently assigned to the contract. Employees hired during the execution of the contract and after submission of the initial verification will be verified to the county within 30 days of hire, as reported from the E-Verify program. The contractor will continue to update the County on all corrective actions required and changes made during the performance of the contract."

BOND

1 (*****)

2
3 The Bidder's special attention is directed to the attached bond form, which the successful bidder will be
4 required to execute and furnish the County. **NO OTHER BOND FORMS WILL BE ACCEPTED.** The
5 bond shall be for the full amount of the contract.
6

7 **LEWIS COUNTY ESTIMATES AND PAYMENT POLICY**

8 (*****)

9 Payment cutoff shall be the last day of each month, inclusive of that day. On or before the 5th day of
10 each calendar month during the term of this contract, the Contracting Agency shall prepare monthly
11 Progress Payments for work completed and material furnished. If the Contractor agrees, the
12 Contractor will approve the Progress Payment and return the estimate to the Contracting Agency by the
13 10th day of that same calendar month. The Contracting Agency shall prepare a voucher based upon
14 the approved Progress Payment and payment based thereon shall be due the Contractor near the 10th
15 day of the next calendar month. Material Supply contracts involving delivery of prefabricated material
16 or stockpile material only (no physical work on Contracting Agency property) may be reimbursed via
17 Contractor generated invoices upon written approval by the Engineer. Reimbursement by invoice shall
18 not be subject to late charges listed on the Contractor's standard invoice form.
19

20 When the Contractor reports the work is completed he/she shall then notify the Contracting Agency.
21 The Contracting Agency shall inspect the work and report any deficiencies to the Contractor. When the
22 Contracting Agency is satisfied the work has been completed in accordance with all plans and
23 specifications, the Contracting Agency shall then accept the work.
24

25 Upon completion of all work described in this Contract, the Contracting Agency shall prepare a Final
26 Progress Payment and Final Contract Voucher for approval by the Contractor and processing for final
27 payment. Release of the Contract Bond will be 60 days following Contracting Agency Final Acceptance
28 of Contract, provided the conditions of Section 1-03.4 and Section 1-07.2 of these Special Provisions
29 have been satisfied.
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47 **APPENDICES**

48 (July 12, 1999)

49 The following appendices are attached and made a part of this contract:
50

51 ***** APPENDIX A:

Pigeon Springs Road MP 0.50
(Frase Creek) Culvert Replacement Project
CMP-1515

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Traffic Control Plan
Geotechnical Engineering Report—Frase Creek

APPENDIX B:
Washington State Prevailing Wage Rates
Wage Rate Supplement
Wage Rate Benefit Code Key

APPENDIX C:
Bid Proposal Documents

APPENDIX D:
Contract Documents

APPENDIX E:
Permit Documents

APPENDIX F:
Geotechnical Engineering Report

APPENDIX G:
Contract Plans *****

1

2

(January 7, 2019)

STANDARD PLANS

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 16-048, effective August 6, 2018 is made a part of this contract.

The Standard Plans are revised as follows:

A-40.10

Section View, PCCP to HMA Longitudinal Joint, callout, was – “Sawed Groove ~ Width 3/16” (IN) MIN. to 5/16” (IN) MAX. ~ Depth 1” (IN) MIN. ~ see Std. Spec. 5-04.3(12)B” is revised to read; “Sawed Groove ~ Width 3/16” (IN) MIN. to 5/16” (IN) MAX. ~ Depth 1” (IN) MIN. ~ see Std. Spec. Section 5-04.3(12)A2”

Section View, Transverse Contraction Joint, dimension, was – “D/4” is revised to read: “D/3 to D/4”

A-50.10

Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20

Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

A-50.30

Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.1

B-10.60

DELETED

B-82.20

DELETED

B-90.40

Valve Detail - DELETED

C-2C

CASE 9A (typical of 2 callouts): The dimensions were “3'-0” MIN. ~ TO FACE OF GUARDRAIL”. are now revised to read “5'-0” MIN ~ TO FACE OF GUARDRAIL”.

C-4b

DELETED

C-4e

DELETED

C-4f

Sheet 1, BULLNOSE GRADING PLAN: Slopes shall be not steeper than 10H:1V for the bullnose guardrail system including slopes into the guardrail face to 1 foot behind the guardrail post.

Sheet 2, POST 1R & 1L, 2R & 2L, 3R TO 8R and 3L TO 8L, 9R TO 12 R and 9L TO 12L elevation view details: Slopes into the guardrail face to 1 foot behind the guardrail post shall not be steeper than 10H:1V.

Sheet 3, SECTION B, callout – was: “THE NUT SHALL BE ASTM A563D STEEL, AND GALVANIZED ACCORDING TO STANDARD SPEC. 9-16.3(3).” Is revised to read: “THE NUT SHALL BE ASTM A307 STEEL, AND GALVANIZED ACCORDING TO STANDARD SPEC. 9-16.3(3).”

C-20.14

CASE 3-31: The dimension was “5'-0” MIN” from the back of guardrail to the center of railroad signal support is now revised to “5'-0” MIN” from face of guardrail to the front edge of the railroad signal support.

Note 3, was – “The slope from the edge of the shoulder into the face of the guardrail cannot exceed 10H : 1V when the face of the guardrail is less than 12' – 0” from the edge of the shoulder.” is revised to read: “The slope from the edge of the shoulder into the face of the guardrail cannot be steeper than 10H : 1V when the face of the guardrail is less than 12' – 0” from the edge of the shoulder. The slope from the edge of the shoulder into the face of the guardrail cannot be steeper than 6H : 1V when the guardrail is 12' – 0” or more from the edge of the shoulder.”

C-20.18

ALL CASES: The dimensions were “3'-0” MIN” from the face of guardrail to the front edge of the fixed feature are now revised to “5'-0” MIN” from the face of guardrail to the front edge of the fixed feature.

Note 1, was – “The slope from the edge of the shoulder into the face of the guardrail should not exceed 10H : 1V when the guardrail is within 12' – 0” from the edge of the shoulder.” Is revised to read: “The slope from the edge of the shoulder into the face of the guardrail should not be steeper than 10H : 1V when the guardrail is less than 12' – 0” from the edge of the shoulder. The slope from the edge of the shoulder into the face of the guardrail should not be steeper than 6H : 1V when the guardrail is 12' – 0” or more from the edge of shoulder.”

C-22.14

DELETED

C-22.16

Note 3, formula, was: “Elevation G = (Elevation S – D x (0.1) + 31” is revised to read: “Elevation G = (Elevation S – D x (0.1) + 31/12”

C-22.40

PLAN VIEW, MSKT-SP-MGS (TL-3) SHOWN: The dimension was “4'-0” MIN” from the face of the terminal to the edge of the widened embankment is now revised to “4'-0” MIN” from the back of the terminal post to the edge of the widened embankment.

Elevation View, MSKT-SP-MGS (TL-3), dimension, MSKT-SP-MGS (TL-3) SYSTEM LENGTH = 50' – 0” , dimension is revised to read: 46' – 10 1/2”

Elevation View, SOFTSTOP (TL-3), dimension, SOFTSTOP (TL-3) SYSTEM LENGTH = 50' – 9 1/2” , dimension is revised to read: 50' – 10 1/2”

Note 6, was – "...a maximum taper of 25.4 : 1 or flatter is allowed over the system length of 50' – 9 ½" with a maximum..." is revised to read: "...a maximum taper of 25.44 : 1 or flatter is allowed over the system length of 50' – 10 ½" with a maximum..."

C-22.45

PLAN VIEW, MSKT-SP-MGS (TL-2) SHOWN: The dimension was "4'-0" MIN" from the face of the terminal to the edge of the widened embankment is now revised to "4'-0" MIN" from the back of the terminal post to the edge of the widened embankment.

Elevation View, MSKT-SP-MGS (TL-2), dimension, MSKT-SP-MGS (TL-2) SYSTEM LENGTH = 25' – 0", dimension is revised to read 34' – 4 1/2"

Elevation View, SOFTSTOP (TL-2), dimension, SOFTSTOP (TL-2) SYSTEM LENGTH = 38' – 3 1/2", dimension is revised to read 38' – 4 1/2"

Note 6, was – "...flare of 38.29 : 1 or flatter is allowed over the system length of 38' – 3 ½" with a maximum..." is revised to read: "...flare of 38.38 : 1 or flatter is allowed over the system length of 38' – 4 ½" with a maximum..."

C-25.26

Elevation View, TYPE 23: The guardrail height dimension was 2'-8" from the top of the thrie beam to the top of the bridge curb is now revised to 2'-8" from the top of the thrie beam to the top of the ground line.

C-25.80

Plan View, callout, was – "12" (IN) BLOCKOUT" is revised to read; "12" (IN) or 8" (IN) BLOCKOUT (12" (IN) SHOWN)"

Elevation View, add labels to posts (below view); beginning at left side of view – Label Posts as follows; POST 1, POST 2 through POST 6".

General Notes, add Note 6. Note reads as follows; "6. Post 1 shall use an 8 inch blockout, and posts 2 through post 6 shall use 12 inch or 8 inch blockouts."

C-40.14

DELETED

C-90.10

DELETED

D-10.10

Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15

Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in

accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.20

Wall Type 3 may be used in all cases. The last sentence of Note 6 on Wall Type 3 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.25

Wall Type 4 may be used in all cases. The last sentence of Note 6 on Wall Type 4 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

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

Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45

Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

D-15.10

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.20

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.30

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

F-10.12

Section Title, was – "Depressed Curb Section" is revised to read: "Depressed Curb and Gutter Section"

F-10.40

“EXTRUDED CURB AT CUT SLOPE”, Section detail - Deleted

F-10.42

DELETE – “Extruded Curb at Cut Slope” View

H-70.20

Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

I-30.30

8” Diameter Wattle Spacing Table, lower left corner, was –“Slope:1H : 1V, Maximum Spacing:10’ – 0”” is revised to read: “Slope:1H : 1V, Maximum Spacing:8’ – 0””.

J-10.21

Note 18, was – “When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details.” Is revised to read; “When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details.”

J-10.22

Key Note 1, was – “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305.” Is revised to read; “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel.”

Key Note 4, “Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt “T” rated). Is revised to read: “Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt “T” rated).”

Key Note 14, was – “Hinged dead front with ¼ turn fasteners or slide latch.” Is revised to read; “Hinged dead front with ¼ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s).”

Key Note 15, was – “Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b.” is revised to read; “Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details.”

Note 1, was – “...socket box mounting detail, see Standard Plan J-3b.” is revised to read to read: “...socket box mounting detail, see Standard Plan J-10.20.”

Note 6, was – “...See door hinge detail, Standard Plan J-3b.” is revised to read: “...See door hinge detail, Standard Plan J-10.20.”

J-20.10

Add Note 5, “5. One accessible pedestrian signal assembly per pedestrian pushbutton post.”

J-20.11

Sheet 2, Foundation Detail, Elevation, callout – “Type 1 Signal Pole” is revised to read: “Type PS or Type 1 Signal Pole”

Sheet 2, Foundation Detail, Elevation, add note below Title, “(Type 1 Signal Pole Shown)”

Add Note 6, “6. One accessible pedestrian signal assembly per pedestrian pushbutton post.”

J-20.26

Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

J-20.16

View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10

Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"

Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR.. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ ¾" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ ¾" (IN) Diam. Torque Clamping Bolts (see Note 1)"

Detail F, callout, "¾" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "¾" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

J-21.15

Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-21.16

Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15

Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0"

(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½" DIAM. is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-40.10

Sheet 2 of 2, Detail F, callout, "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 12" S. S. FLAT WASHER" is revised to read; "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 1/2" (IN) S. S. FLAT WASHER"

J-60.14

All references to J-16b (6x) are revised to read; J-60.11

K-80.30

In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

Plan Title, was "ALTERNATIVE TEMPORARY CONC. BARRIER (F-SHAPE)" is revised to read: "CONCRETE BARRIER TYPE F"

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-40.00-00.....8/11/09	A-50.30-00.....11/17/08
A-10.20-00.....10/5/07	A-40.10-03.....12/23/14	A-50.40-00.....11/17/08
A-10.30-00.....10/5/07	A-40.15-00.....8/11/09	A-60.10-03.....12/23/14
A-20.10-00.....8/31/07	A-40.20-04.....1/18/17	A-60.20-03.....12/23/14
A-30.10-00.....11/8/07	A-40.50-02.....12/23/14	A-60.30-01.....6/28/18
A-30.30-01.....6/16/11	A-50.10-00.....11/17/08	A-60.40-00.....8/31/07
A-30.35-00.....10/12/07	A-50.20-01.....9/22/09	

B-5.20-02.....1/26/17	B-30.50-03.....2/27/18	B-75.20-02.....2/27/18
B-5.40-02.....1/26/17	B-30.70-04.....2/27/18	B-75.50-01.....6/10/08
B-5.60-02.....1/26/17	B-30.80-01.....2/27/18	B-75.60-00.....6/8/06
B-10.20-02.....3/2/18	B-30.90-02.....1/26/17	B-80.20-00.....6/8/06
B-10.40-01.....1/26/17	B-35.20-00.....6/8/06	B-80.40-00.....6/1/06
B-10.70-00.....1/26/17	B-35.40-00.....6/8/06	B-85.10-01.....6/10/08
B-15.20-01.....2/7/12	B-40.20-00.....6/1/06	B-85.20-00.....6/1/06
B-15.40-01.....2/7/12	B-40.40-02.....1/26/17	B-85.30-00.....6/1/06
B-15.60-02.....1/26/17	B-45.20-01.....7/11/17	B-85.40-00.....6/8/06
B-20.20-02.....3/16/12	B-45.40-01.....7/21/17	B-85.50-01.....6/10/08
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B-20.60-03.....3/15/12	B-55.20-02.....2/27/18	B-90.20-00.....6/8/06
B-25.20-02.....2/27/18	B-60.20-01.....6/28/18	B-90.30-00.....6/8/06
B-25.60-02.....2/27/18	B-60.40-01.....2/27/18	B-90.40-01.....1/26/17
B-30.10-03.....2/27/18	B-65.20-01.....4/26/12	B-90.50-00.....6/8/06
B-30.15-00.....2/27/18	B-65.40-00.....6/1/06	B-95.20-01.....2/3/09
B-30.20-04.....2/27/18	B-70.20-00.....6/1/06	B-95.40-01.....6/28/18
B-30.30-03.....2/27/18	B-70.60-01.....1/26/17	
B-30.40-03.....2/27/18		

C-1.....6/28/18	C-20.15-02.....6/11/14	C-40.18-03.....7/21/17
C-1a.....7/14/15	C-20.18-02.....6/11/14	C-70.10-01.....6/17/14
C-1b.....7/14/15	C-20.19-02.....6/11/14	C-75.10-01.....6/11/14
C-1d.....10/31/03	C-20.40-06.....7/21/17	C-75.20-01.....6/11/14
C-2c.....6/21/06	C-20.41-01.....7/14/15	C-75.30-01.....6/11/14
C-4f.....7/2/12	C-20.42-05.....7/14/15	C-80.10-01.....6/11/14
C-6a.....10/14/09	C-20.45.01.....7/2/12	C-80.20-01.....6/11/14
C-7.....6/16/11	C-22.16-06.....7/21/17	C-80.30-01.....6/11/14
C-7a.....6/16/11	C-22.40-06.....7/21/17	C-80.40-01.....6/11/14

C-8.....2/10/09	C-22.45-03.....7/21/17	C-80.50-00.....4/8/12
C-8a.....7/25/97	C-23.60-04.....7/21/17	C-85.10-00.....4/8/12
C-8b.....2/29/16	C.24.10-01.....6/11/14	C-85.11-00.....4/8/12
C-8e.....2/21/07	C-25.20-06.....7/14/15	C-85.14-01.....6/11/14
C-8f.....6/30/04	C-25.22-05.....7/14/15	C-85.15-01.....6/30/14
C-16a.....7/21/17	C-25.26-03.....7/14/15	C-85.16-01.....6/17/14
C-20.10-04.....7/21/17	C-25.30-00.....6/28/18	C-85.18-01.....6/11/14
C-20.11-00.....7/21/17	C-25.80-04.....7/15/16	C-85.20-01.....6/11/14
C-20.14-03.....6/11/14	C-40.16-02.....7/2/12	

D-2.04-00.....11/10/05	D-2.48-00.....11/10/05	D-3.17-02.....5/9/16
D-2.06-01.....1/6/09	D-2.64-01.....1/6/09	D-4.....12/11/98
D-2.08-00.....11/10/05	D-2.66-00.....11/10/05	D-6.....6/19/98
D-2.14-00.....11/10/05	D-2.68-00.....11/10/05	D-10.10-01.....12/2/08
D-2.16-00.....11/10/05	D-2.80-00.....11/10/05	D-10.15-01.....12/2/08
D-2.18-00.....11/10/05	D-2.82-00.....11/10/05	D-10.20-00.....7/8/08
D-2.20-00.....11/10/05	D-2.84-00.....11/10/05	D-10.25-00.....7/8/08
D-2.32-00.....11/10/05	D-2.86-00.....11/10/05	D-10.30-00.....7/8/08
D-2.34-01.....1/6/09	D-2.88-00.....11/10/05	D-10.35-00.....7/8/08
D-2.36-03.....6/11/14	D-2.92-00.....11/10/05	D-10.40-01.....12/2/08
D-2.42-00.....11/10/05	D-3.09-00.....5/17/12	D-10.45-01.....12/2/08
D-2.44-00.....11/10/05	D-3.10-01.....5/29/13	D-15.10-01.....12/2/08
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D-2.62-00.....11/10/05	D-3.15-02.....6/10/13	D-15.30-01.....12/02/08
D-2.46-01.....6/11/14	D-3.16-02.....5/29/13	

E-1.....2/21/07	E-4.....8/27/03
E-2.....5/29/98	E-4a.....8/27/03

F-10.12-03.....6/11/14	F-10.62-02.....4/22/14	F-40.15-03.....6/29/16
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F-10.40-03.....6/29/16	F-40.12-03.....6/29/16	F-80.10-04.....7/15/16
F-10.42-00.....1/23/07	F-40.14-03.....6/29/16	

G-10.10-00.....9/20/07	G-25.10-04.....6/10/13	G-90.10-03.....7/11/17
G-20.10-02.....6/23/15	G-30.10-04.....6/23/15	G-90.11-00.....4/28/16
G-22.10-04.....6/28/18	G-50.10-03.....6/28/18	G-90.20-05.....7/11/17
G-24.10-00.....11/8/07	G-60.10-04.....6/28/18	G-90.30-04.....7/11/17
G-24.20-01.....2/7/12	G-60.20-02.....6/18/15	G-90.40-02.....4/28/16
G-24.30-02.....6/28/18	G-60.30-02.....6/18/15	G-95.10-02.....6/28/18
G-24.40-07.....6/28/18	G-70.10-03.....6/18/15	G-95.20-03.....6/28/18
G-24.50-04.....7/11/17	G-70.20-04.....7/21/17	G-95.30-03.....6/28/18
G-24.60-05.....6/28/18	G-70.30-04.....7/21/17	

H-10.10-00.....7/3/08	H-32.10-00.....9/20/07	H-70.10-01.....2/7/12
H-10.15-00.....7/3/08	H-60.10-01.....7/3/08	H-70.20-01.....2/16/12
H-30.10-00.....10/12/07	H-60.20-01.....7/3/08	H-70.30-02.....2/7/12

I-10.10-01.....8/11/09	I-30.20-00.....9/20/07	I-40.20-00.....9/20/07
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I-30.10-02.....3/22/13	I-30.30-01.....6/10/13	I-50.20-01.....6/10/13
I-30.15-02.....3/22/13	I-30.40-01.....6/10/13	I-60.10-01.....6/10/13
I-30.16-00.....3/22/13	I-30.60-01.....3/7/18	I-60.20-01.....6/10/13
I-30.17-00.....3/22/13	I-40.10-00.....9/20/07	I-80.10-02.....7/15/16

J-10.....7/18/97	J-28.22-00.....8/07/07	J-50.25-00.....6/3/11
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J-10.22-00.....5/29/13	J-28.50-03.....7/21/16	J-75.20-01.....7/10/15
J-10.25-00.....7/11/17	J-28.60-02.....7/21/16	J-75.30-02.....7/10/15
J-12.15-00.....6/28/18	J-28.70-03.....7/21/17	J-75.40-02.....6/1/16
J-12.16-00.....6/28/18	J-29.10-01.....7/21/16	J-75.41-01.....6/29/16
J-15.10-01.....6/11/14	J-29.15-01.....7/21/16	J-75.45-02.....6/1/16
J-15.15-02.....7/10/15	J-29.16-02.....7/21/16	J-80.10-00.....6/28/18
J-20.10-03.....6/30/14	J-30.10-00.....6/18/15	J-80.15-00.....6/28/18
J-20.11-02.....6/30/14	J-40.05-00.....7/21/16	J-81.10-00.....6/28/18
J-20.15-03.....6/30/14	J-40.10-04.....4/28/16	J-86.10-00.....6/28/18
J-20.16-02.....6/30/14	J-40.20-03.....4/28/16	J-90.10-03.....6/28/18
J-20.20-02.....5/20/13	J-40.30-04.....4/28/16	J-90.20-03.....6/28/18
J-20.26-01.....7/12/12	J-40.35-01.....5/29/13	J-90.21-02.....6/28/18
J-21.10-04.....6/30/14	J-40.36-02.....7/21/17	J-90.50-00.....6/28/18
J-21.15-01.....6/10/13	J-40.37-02.....7/21/17	
J-21.16-01.....6/10/13	J-40.38-01.....5/20/13	
J-21.17-01.....6/10/13	J-40.39-00.....5/20/13	
J-21.20-01.....6/10/13	J-40.40-01.....4/28/16	
J-22.15-02.....7/10/15	J-45.36-00.....7/21/17	
J-22.16-03.....7/10/15	J-50.05-00.....7/21/17	
J-26.10-03.....7/21/16	J-50.10-00.....6/3/11	
J-26.15-01.....5/17/12	J-50.11-01.....7/21/17	
J-26.20-01.....6/28/18	J-50.12-01.....7/21/17	
J-27.10-01.....7/21/16	J-50.15-01.....7/21/17	
J-27.15-00.....3/15/12	J-50.16-01.....3/22/13	
J-28.10-01.....5/11/11	J-50.20-00.....6/3/11	

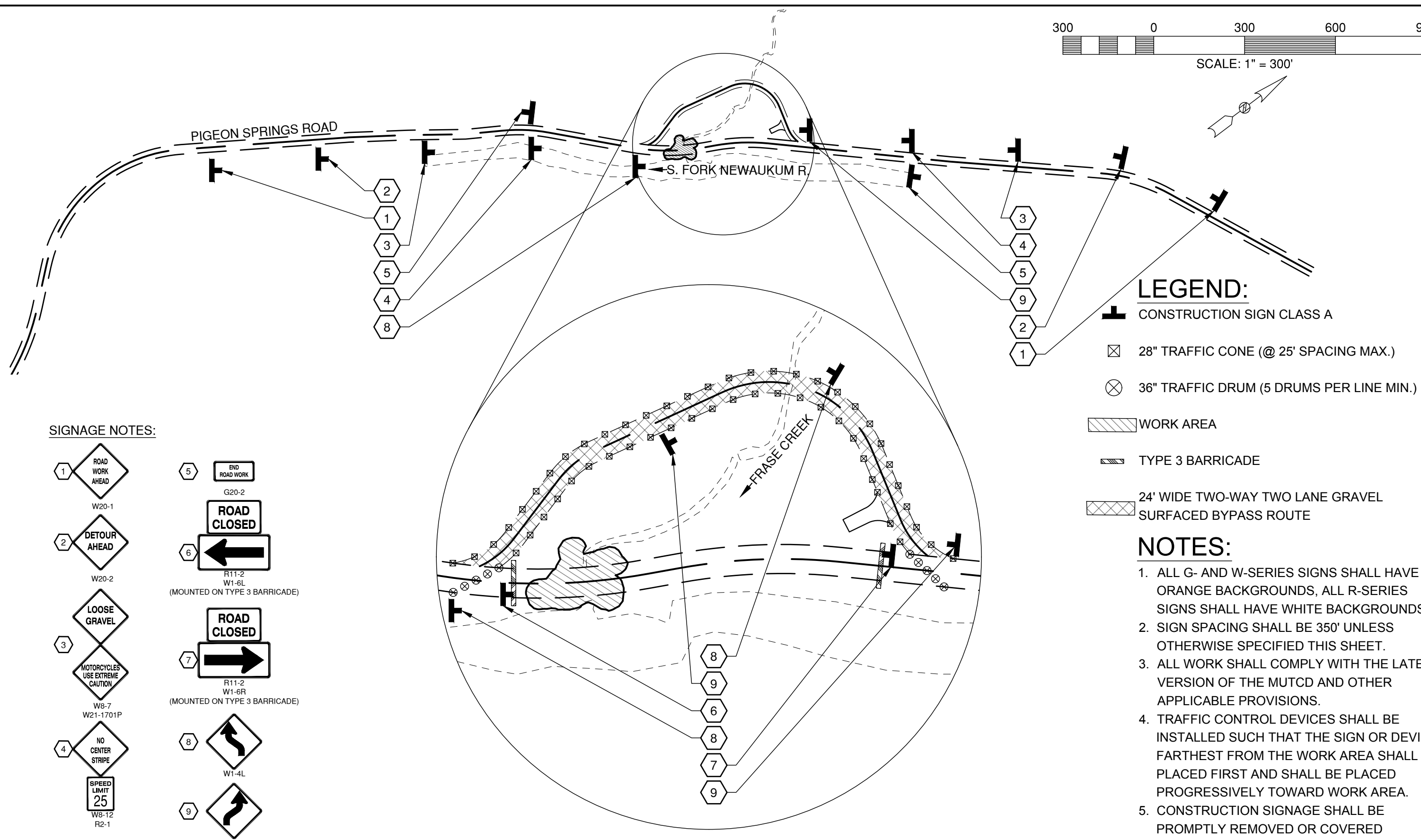
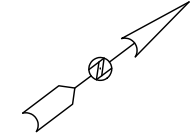
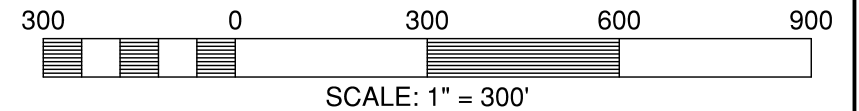
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 K-80.10-01.....6/1/16
 K-80.20-00.....12/20/06
 K-80.30-00.....2/21/07
 K-80.35-00.....2/21/07
 K-80.37-00.....2/21/07

L-10.10-02.....6/21/12	L-40.10-02.....6/21/12	L-70.10-01.....5/21/08
L-20.10-03.....7/14/15	L-40.15-01.....6/16/11	L-70.20-01.....5/21/08
L-30.10-02.....6/11/14	L-40.20-02.....6/21/12	







M-1.20-03.....6/24/14	M-12.10-01.....6/28/18	M-40.10-03.....6/24/14
M-1.40-02.....6/3/11	M-15.10-01.....2/6/07	M-40.20-00...10/12/07
M-1.60-02.....6/3/11	M-17.10-02.....7/3/08	M-40.30-01.....7/11/17
M-1.80-03.....6/3/11	M-20.10-02.....6/3/11	M-40.40-00.....9/20/07
M-2.20-03.....7/10/15	M-20.20-02.....4/20/15	M-40.50-00.....9/20/07
M-2.21-00.....7/10/15	M-20.30-04.....2/29/16	M-40.60-00.....9/20/07
M-3.10-03.....6/3/11	M-20.40-03.....6/24/14	M-60.10-01.....6/3/11
M-3.20-02.....6/3/11	M-20.50-02.....6/3/11	M-60.20-02.....6/27/11
M-3.30-03.....6/3/11	M-24.20-02.....4/20/15	M-65.10-02.....5/11/11
M-3.40-03.....6/3/11	M-24.40-02.....4/20/15	M-80.10-01.....6/3/11
M-3.50-02.....6/3/11	M-24.50-00.....6/16/11	M-80.20-00.....6/10/08
M-5.10-02.....6/3/11	M-24.60-04.....6/24/14	M-80.30-00.....6/10/08
M-7.50-01.....1/30/07	M-24.65-00.....7/11/17	
M-9.50-02.....6/24/14	M-24.66-00.....7/11/17	
M-9.60-00.....2/10/09		
M-11.10-02.....7/11/17		

APPENDIX A





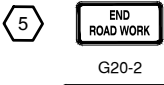




TRAFFIC CONTROL PLAN



LEGEND:

-  CONSTRUCTION SIGN CLASS A
-  28" TRAFFIC CONE (@ 25' SPACING MAX.)
-  36" TRAFFIC DRUM (5 DRUMS PER LINE MIN.)
-  WORK AREA
-  TYPE 3 BARRICADE
-  24' WIDE TWO-WAY TWO LANE GRAVEL SURFACED BYPASS ROUTE

SIGNAGE NOTES:

-  1 ROAD WORK AHEAD
W20-1
-  2 DETOUR AHEAD
W20-2
-  3 LOOSE GRAVEL
W8-7
W21-1701P
-  4 NO CENTER STRIPE
W8-12
R2-1
-  5 END ROAD WORK
G20-2
-  6 ROAD CLOSED
R11-2
W1-6L
(MOUNTED ON TYPE 3 BARRICADE)
-  7 ROAD CLOSED
R11-2
W1-6R
(MOUNTED ON TYPE 3 BARRICADE)
-  8
W1-4L
-  9
W1-4R

NOTES:

1. ALL G- AND W-SERIES SIGNS SHALL HAVE ORANGE BACKGROUNDS, ALL R-SERIES SIGNS SHALL HAVE WHITE BACKGROUNDS.
2. SIGN SPACING SHALL BE 350' UNLESS OTHERWISE SPECIFIED THIS SHEET.
3. ALL WORK SHALL COMPLY WITH THE LATEST VERSION OF THE MUTCD AND OTHER APPLICABLE PROVISIONS.
4. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA SHALL BE PLACED FIRST AND SHALL BE PLACED PROGRESSIVELY TOWARD WORK AREA.
5. CONSTRUCTION SIGNAGE SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.

DESIGNED BY : RTL	NO.	DATE	REVISION	BY	APP.
DRAWN BY : WSR					
CHECKED BY :					
DATE : 01/24/2019					



APPENDIX B

WASHINGTON STATE PREVAILING WAGE RATES

INCLUDING:

State Wage Rates

Wage Rate Supplements

Wage Rate Benefit Codes

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 2/5/2019

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
Lewis	Asbestos Abatement Workers	Journey Level	\$46.57	<u>5D</u>	<u>1H</u>	
Lewis	Boilermakers	Journey Level	\$66.54	<u>5N</u>	<u>1C</u>	
Lewis	Brick Mason	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Brick Mason	Pointer-Caulker-Cleaner	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Building Service Employees	Janitor	\$12.00		<u>1</u>	
Lewis	Building Service Employees	Shampooer	\$12.00		<u>1</u>	
Lewis	Building Service Employees	Waxer	\$12.00		<u>1</u>	
Lewis	Building Service Employees	Window Cleaner	\$13.22		<u>1</u>	
Lewis	Cabinet Makers (In Shop)	Journey Level	\$23.17		<u>1</u>	
Lewis	Carpenters	Acoustical Worker	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Bridge, Dock And Wharf Carpenters	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Carpenter	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Carpenters on Stationary Tools	\$60.17	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Creosoted Material	\$60.14	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Floor Finisher	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Floor Layer	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Carpenters	Scaffold Erector	\$60.04	<u>5D</u>	<u>4C</u>	
Lewis	Cement Masons	Journey Level	\$60.07	<u>7A</u>	<u>4U</u>	
Lewis	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$113.60	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Dive Supervisor/Master	\$76.33	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Diver	\$113.60	<u>5D</u>	<u>4C</u>	<u>8V</u>
Lewis	Divers & Tenders	Diver On Standby	\$71.33	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Diver Tender	\$64.71	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Manifold Operator	\$64.71	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Manifold Operator Mixed Gas	\$69.71	<u>5D</u>	<u>4C</u>	
Lewis	Divers & Tenders	Remote Operated Vehicle	\$64.71	<u>5D</u>	<u>4C</u>	

		Operator/Technician				
Lewis	Divers & Tenders	Remote Operated Vehicle Tender	\$60.29	<u>5A</u>	<u>4C</u>	
Lewis	Dredge Workers	Assistant Engineer	\$56.44	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Assistant Mate (Deckhand)	\$56.00	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Boatmen	\$56.44	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Engineer Welder	\$57.51	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Leverman, Hydraulic	\$58.67	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Mates	\$56.44	<u>5D</u>	<u>3F</u>	
Lewis	Dredge Workers	Oiler	\$56.00	<u>5D</u>	<u>3F</u>	
Lewis	Drywall Applicator	Journey Level	\$58.48	<u>5D</u>	<u>1H</u>	
Lewis	Drywall Tapers	Journey Level	\$59.32	<u>5P</u>	<u>1E</u>	
Lewis	Electrical Fixture Maintenance Workers	Journey Level	\$12.00		<u>1</u>	
Lewis	Electricians - Inside	Cable Splicer	\$71.81	<u>5C</u>	<u>1G</u>	
Lewis	Electricians - Inside	Journey Level	\$67.31	<u>5C</u>	<u>1G</u>	
Lewis	Electricians - Inside	Lead Covered Cable Splicer	\$76.31	<u>5C</u>	<u>1G</u>	
Lewis	Electricians - Inside	Welder	\$71.81	<u>5C</u>	<u>1G</u>	
Lewis	Electricians - Motor Shop	Craftsman	\$15.37		<u>1</u>	
Lewis	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
Lewis	Electricians - Powerline Construction	Cable Splicer	\$79.43	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Certified Line Welder	\$69.75	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Groundperson	\$46.28	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$69.75	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Journey Level Lineperson	\$69.75	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Line Equipment Operator	\$59.01	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Meter Installer	\$46.28	<u>5A</u>	<u>4D</u>	<u>8W</u>
Lewis	Electricians - Powerline Construction	Pole Sprayer	\$69.75	<u>5A</u>	<u>4D</u>	
Lewis	Electricians - Powerline Construction	Powderperson	\$52.20	<u>5A</u>	<u>4D</u>	
Lewis	Electronic Technicians	Journey Level	\$43.19	<u>6Z</u>	<u>1B</u>	
Lewis	Elevator Constructors	Mechanic	\$91.24	<u>7D</u>	<u>4A</u>	
Lewis	Elevator Constructors	Mechanic In Charge	\$98.51	<u>7D</u>	<u>4A</u>	
Lewis	Fabricated Precast Concrete Products	Journey Level	\$13.50		<u>1</u>	
Lewis	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$13.50		<u>1</u>	
Lewis	Fence Erectors	Fence Erector	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Fence Erectors	Fence Laborer	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Flaggers	Journey Level	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Glaziers	Journey Level	\$63.06	<u>7L</u>	<u>1Y</u>	
Lewis	Heat & Frost Insulators And	Journeyman	\$73.58	<u>5J</u>	<u>4H</u>	

	Asbestos Workers				
Lewis	Heating Equipment Mechanics	Journey Level	\$82.51	<u>7F</u>	<u>1E</u>
Lewis	Hod Carriers & Mason Tenders	Journey Level	\$50.42	<u>7A</u>	<u>3I</u>
Lewis	Industrial Power Vacuum Cleaner	Journey Level	\$12.00		<u>1</u>
Lewis	Inland Boatmen	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>
Lewis	Inland Boatmen	Cook	\$56.48	<u>5B</u>	<u>1K</u>
Lewis	Inland Boatmen	Deckhand	\$57.48	<u>5B</u>	<u>1K</u>
Lewis	Inland Boatmen	Deckhand Engineer	\$58.81	<u>5B</u>	<u>1K</u>
Lewis	Inland Boatmen	Launch Operator	\$58.89	<u>5B</u>	<u>1K</u>
Lewis	Inland Boatmen	Mate	\$57.31	<u>5B</u>	<u>1K</u>
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$12.00		<u>1</u>
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$12.00		<u>1</u>
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$12.78		<u>1</u>
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$12.00		<u>1</u>
Lewis	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$12.00		<u>1</u>
Lewis	Insulation Applicators	Journey Level	\$60.04	<u>5D</u>	<u>4C</u>
Lewis	Ironworkers	Journeyman	\$69.28	<u>7N</u>	<u>1O</u>
Lewis	Laborers	Air, Gas Or Electric Vibrating Screed	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Airtrac Drill Operator	\$50.42	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Ballast Regular Machine	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Batch Weighman	\$41.45	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Brick Pavers	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Brush Cutter	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Brush Hog Feeder	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Burner	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Caisson Worker	\$50.42	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Carpenter Tender	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Caulker	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Cement Dumper-paving	\$49.81	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Cement Finisher Tender	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Change House Or Dry Shack	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Chipping Gun (under 30 Lbs.)	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Chipping Gun(30 Lbs. And Over)	\$49.81	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Choker Setter	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Chuck Tender	\$48.90	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Clary Power Spreader	\$49.81	<u>7A</u>	<u>3I</u>
Lewis	Laborers	Clean-up Laborer	\$48.90	<u>7A</u>	<u>3I</u>

Lewis	Laborers	Concrete Dumper/chute Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Concrete Form Stripper	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Concrete Placement Crew	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Concrete Saw Operator/core Driller	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Crusher Feeder	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Curing Laborer	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Ditch Digger	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Diver	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Drill Operator (hydraulic,diamond)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Dry Stack Walls	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Dump Person	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Epoxy Technician	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Erosion Control Worker	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Faller & Bucker Chain Saw	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Fine Graders	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Firewatch	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Form Setter	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Gabian Basket Builders	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	General Laborer	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Grade Checker & Transit Person	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Grinders	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Grout Machine Tender	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Groutmen (pressure)including Post Tension Beams	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Guardrail Erector	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Hazardous Waste Worker (level A)	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Hazardous Waste Worker (level B)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Hazardous Waste Worker (level C)	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	High Scaler	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Jackhammer	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Laserbeam Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Maintenance Person	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Manhole Builder-mudman	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Material Yard Person	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Motorman-dinky Locomotive	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete &	\$49.81	<u>7A</u>	<u>3I</u>	

		Rock, Sandblast, Gunite, Shotcrete, Water Bla				
Lewis	Laborers	Pavement Breaker	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pilot Car	\$41.45	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pipe Layer Lead	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pipe Layer/tailor	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pipe Pot Tender	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pipe Reliner	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pipe Wrapper	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Pot Tender	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Powderman	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Powderman's Helper	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Power Jacks	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Railroad Spike Puller - Power	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Raker - Asphalt	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Re-timberman	\$50.42	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Remote Equipment Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Rigger/signal Person	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Rip Rap Person	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Rivet Buster	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Rodder	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Scaffold Erector	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Scale Person	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Sloper (over 20")	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Sloper Sprayer	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Spreader (concrete)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Stake Hopper	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Stock Piler	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Tamper (multiple & Self-propelled)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Toolroom Person (at Jobsite)	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Topper	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Track Laborer	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Track Liner (power)	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Traffic Control Laborer	\$44.33	<u>7A</u>	<u>3I</u>	<u>8R</u>
Lewis	Laborers	Traffic Control Supervisor	\$44.33	<u>7A</u>	<u>3I</u>	<u>8R</u>
Lewis	Laborers	Truck Spotter	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Tugger Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$107.60	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$112.63	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$116.31	<u>7A</u>	<u>3I</u>	<u>8Q</u>

Lewis	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$122.01	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$124.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$129.23	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$131.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$133.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$135.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Guage and Lock Tender	\$50.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Tunnel Work-Miner	\$50.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Lewis	Laborers	Vibrator	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Vinyl Seamer	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Watchman	\$37.67	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Welder	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Well Point Laborer	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Laborers	Window Washer/cleaner	\$37.67	<u>7A</u>	<u>3I</u>	
Lewis	Laborers - Underground Sewer & Water	General Laborer & Topman	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Laborers - Underground Sewer & Water	Pipe Layer	\$49.81	<u>7A</u>	<u>3I</u>	
Lewis	Landscape Construction	Landscape Laborer	\$37.67	<u>7A</u>	<u>3I</u>	
Lewis	Landscape Construction	Landscape Operator	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Lathers	Journey Level	\$58.48	<u>5D</u>	<u>1H</u>	
Lewis	Marble Setters	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Metal Fabrication (In Shop)	Fitter	\$15.16		<u>1</u>	
Lewis	Metal Fabrication (In Shop)	Laborer	\$12.00		<u>1</u>	
Lewis	Metal Fabrication (In Shop)	Machine Operator	\$12.00		<u>1</u>	
Lewis	Metal Fabrication (In Shop)	Painter	\$12.00		<u>1</u>	
Lewis	Metal Fabrication (In Shop)	Welder	\$15.16		<u>1</u>	
Lewis	Millwright	Journey Level	\$61.54	<u>5D</u>	<u>4C</u>	
Lewis	Modular Buildings	Cabinet Assembly	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Electrician	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Equipment Maintenance	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Plumber	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Production Worker	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Tool Maintenance	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Utility Person	\$12.00		<u>1</u>	
Lewis	Modular Buildings	Welder	\$12.00		<u>1</u>	
Lewis	Painters	Journey Level	\$42.50	<u>6Z</u>	<u>2B</u>	
Lewis	Pile Driver	Crew Tender	\$54.99	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$74.87	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker -	\$79.87	<u>5D</u>	<u>4C</u>	

		Compressed Air Worker 30.01 - 44.00 PSI				
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$83.87	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$88.87	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$91.37	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$96.37	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$98.37	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$100.37	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$102.37	<u>5D</u>	<u>4C</u>	
Lewis	Pile Driver	Journey Level	\$60.29	<u>5D</u>	<u>4C</u>	
Lewis	Plasterers	Journey Level	\$56.54	<u>7Q</u>	<u>1R</u>	
Lewis	Playground & Park Equipment Installers	Journey Level	\$12.00		<u>1</u>	
Lewis	Plumbers & Pipefitters	Journey Level	\$71.42	<u>5A</u>	<u>1G</u>	
Lewis	Power Equipment Operators	Asphalt Plant Operator	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Assistant Engineers	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Barrier Machine (zipper)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Batch Plant Operator: Concrete	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Bobcat	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Brooms	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Bump Cutter	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cableways	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Chipper	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Compressor	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42m	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Concrete Finish Machine - laser Screed	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>

Lewis	Power Equipment Operators	Conveyors	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes, 100 Tons - 199 Tons, Or 150 Ft Of Boom (including Jib With Attachments)	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: 200 tons to 299 tons, or 250' of boom (including jib with attachments)	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: 300 tons and over, or 300' of boom (including jib with attachments)	\$65.50	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: Friction 200 tons and over. Tower Cranes: over 250' in height from base to boom.	\$65.50	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Crusher	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Derricks, On Building Work	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Dozers D-9 & Under	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Drilling Machine	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Grade Engineer: Using Blueprints, Cut Sheets,etc.	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Gradechecker/stakeman	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Guardrail punch/Auger	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>

Lewis	Power Equipment Operators	Horizontal/directional Drill Locator	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Horizontal/directional Drill Operator	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Loaders, Plant Feed	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Loaders: Elevating Type Belt	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Locomotives, All	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Material Transfer Device	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Mechanics, All (Leadmen - \$0.50 Per Hour Over Mechanic)	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Motor patrol graders	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Pavement Breaker	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Posthole Digger, Mechanical	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Power Plant	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Pumps - Water	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Quad 9, HD 41, D10 And Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Rigger And Bellman	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Rigger/Signal Person,	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Bellman (Certified)				
Lewis	Power Equipment Operators	Rollagon	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Roller, Other Than Plant Mix	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Roto-mill, Roto-grinder	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Saws - Concrete	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Scrapers - Concrete & Carry All	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Service Engineers - Equipment	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shotcrete/gunite Equipment	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Slipform Pavers	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Spreader, Topsider & Screedman	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Subgrader Trimmer	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Tower Bucket Elevators	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Tower crane over 175' through 250' in height, base to boom	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Tower Crane Up: To 175' In Height, Base To Boom	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Transporters, All Track Or Truck Type	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Trenching Machines	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Truck Mount Portable Conveyor	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Welder	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Wheel Tractors, Farmall Type	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators	Yo Yo Pay Dozer	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>

Lewis	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Assistant Engineers	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator: Concrete	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Brooms	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cableways	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Chipper	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Compressor	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42m	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine - laser Screed	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Conveyors	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, 100 Tons - 199 Tons, Or 150 Ft Of Boom (including Jib With Attachments)	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, 200 tons to 299 tons, or 250' of boom (including jib with attachments)	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes, Over 300 Tons, Or 300' Of Boom Including Jib With Attachments	\$65.50	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	cranes: 300 tons and over, or 300' of boom (including jib with attachments)	\$65.50	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-	Cranes: A-frame - 10 Tons	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Underground Sewer & Water	And Under				
Lewis	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction 200 tons and over. Tower Cranes: over 250' in height from base to boom.	\$65.50	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Crusher	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Drilling Machine	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blueprints, Cut Sheets,etc.	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Gradechecker/stakeman	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Guardrail punch/Auger	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Locator	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Operator	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Hydralifts/Boom Trucks Over 10 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards.	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Underground Sewer & Water	But Not Including 8 Yards				
Lewis	Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Locomotives, All	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Mechanics, All (Leadmen - \$0.50 Per Hour Over Mechanic)	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Motor patrol graders	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Pavement Breaker	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Posthole Digger, Mechanical	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Power Plant	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Pumps - Water	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Quad 9, HD 41, D10 And Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Rigger And Bellman	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-	Rigger/Signal Person,	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Underground Sewer & Water	Bellman (Certified)				
Lewis	Power Equipment Operators- Underground Sewer & Water	Rollagon	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Roller, Other Than Plant Mix	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Roto-mill, Roto-grinder	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Saws - Concrete	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Scrapers - Concrete & Carry All	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Service Engineers - Equipment	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shotcrete/gunite Equipment	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Tower Bucket Elevators	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Tower crane over 175' through 250' in height, base to boom	\$64.86	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Tower Crane: Up To 175' In Height, Base To Boom	\$64.20	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Trenching Machines	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>

Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	\$62.51	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Welder	\$63.56	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	\$59.79	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	\$63.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Lewis	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$49.96	<u>5A</u>	<u>4A</u>	
Lewis	Power Line Clearance Tree Trimmers	Spray Person	\$47.37	<u>5A</u>	<u>4A</u>	
Lewis	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$49.96	<u>5A</u>	<u>4A</u>	
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer	\$44.57	<u>5A</u>	<u>4A</u>	
Lewis	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$33.60	<u>5A</u>	<u>4A</u>	
Lewis	Refrigeration & Air Conditioning Mechanics	Journey Level	\$70.71	<u>5A</u>	<u>1G</u>	
Lewis	Residential Brick Mason	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Residential Carpenters	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Lewis	Residential Cement Masons	Journey Level	\$60.07	<u>7A</u>	<u>4U</u>	
Lewis	Residential Drywall Applicators	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Lewis	Residential Drywall Tapers	Journey Level	\$45.19	<u>5P</u>	<u>1E</u>	
Lewis	Residential Electricians	Journey Level	\$32.28	<u>5A</u>	<u>1B</u>	
Lewis	Residential Glaziers	Journey Level	\$63.06	<u>7L</u>	<u>1Y</u>	
Lewis	Residential Insulation Applicators	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Lewis	Residential Laborers	Journey Level	\$36.68	<u>7A</u>	<u>1H</u>	
Lewis	Residential Marble Setters	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Residential Painters	Journey Level	\$42.50	<u>6Z</u>	<u>2B</u>	
Lewis	Residential Plumbers & Pipefitters	Journey Level	\$44.34	<u>5A</u>	<u>1G</u>	
Lewis	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$41.01	<u>5A</u>	<u>1G</u>	
Lewis	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$50.01	<u>7F</u>	<u>1R</u>	
Lewis	Residential Soft Floor Layers	Journey Level	\$49.43	<u>5A</u>	<u>3J</u>	
Lewis	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$34.76	<u>7J</u>	<u>1R</u>	
Lewis	Residential Stone Masons	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Residential Terrazzo Workers	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Lewis	Residential Terrazzo/Tile Finishers	Journey Level	\$43.44	<u>5A</u>	<u>1B</u>	
Lewis	Residential Tile Setters	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Lewis	Roofers	Journey Level	\$51.12	<u>5A</u>	<u>2O</u>	
Lewis	Roofers	Using Irritable Bituminous Materials	\$54.12	<u>5A</u>	<u>2O</u>	

Lewis	Sheet Metal Workers	Journey Level (Field or Shop)	\$82.51	<u>7F</u>	<u>1E</u>	
Lewis	Sign Makers & Installers (Electrical)	Journey Level	\$18.04		<u>1</u>	
Lewis	Sign Makers & Installers (Non-Electrical)	Journey Level	\$48.90	<u>7A</u>	<u>3I</u>	
Lewis	Soft Floor Layers	Journey Level	\$49.43	<u>5A</u>	<u>3J</u>	
Lewis	Solar Controls For Windows	Journey Level	\$12.00		<u>1</u>	
Lewis	Sprinkler Fitters (Fire Protection)	Journey Level	\$61.68	<u>7J</u>	<u>1R</u>	
Lewis	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		<u>1</u>	
Lewis	Stone Masons	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Lewis	Street And Parking Lot Sweeper Workers	Journey Level	\$16.00		<u>1</u>	
Lewis	Surveyors	Chain Person	\$58.95	<u>7A</u>	<u>3C</u>	
Lewis	Surveyors	Instrument Persion	\$59.49	<u>7A</u>	<u>3C</u>	
Lewis	Surveyors	Party Chief	\$60.49	<u>7A</u>	<u>3C</u>	
Lewis	Telecommunication Technicians	Journey Level	\$43.19	<u>6Z</u>	<u>1B</u>	
Lewis	Telephone Line Construction - Outside	Cable Splicer	\$41.22	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$23.12	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Installer (Repairer)	\$39.53	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Special Aparatus Installer I	\$41.22	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Special Apparatus Installer II	\$40.41	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$41.22	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$38.36	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Telephone Lineperson	\$38.36	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Television Groundperson	\$21.92	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Television Lineperson/Installer	\$29.13	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Television System Technician	\$34.68	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Television Technician	\$31.18	<u>5A</u>	<u>2B</u>	
Lewis	Telephone Line Construction - Outside	Tree Trimmer	\$38.36	<u>5A</u>	<u>2B</u>	
Lewis	Terrazzo Workers	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Lewis	Tile Setters	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Lewis	Tile, Marble & Terrazzo Finishers	Finisher	\$43.44	<u>5A</u>	<u>1B</u>	
Lewis	Traffic Control Stripers	Journey Level	\$45.53	<u>7A</u>	<u>1K</u>	
Lewis	Truck Drivers	Asphalt Mix Over 16 Yards	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Lewis	Truck Drivers	Asphalt Mix To 16 Yards	\$53.46	<u>5D</u>	<u>3A</u>	<u>8L</u>

Lewis	Truck Drivers	Dump Truck	\$53.46	<u>5D</u>	<u>3A</u>	<u>8L</u>
Lewis	Truck Drivers	Dump Truck & Trailer	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Lewis	Truck Drivers	Other Trucks	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Lewis	Truck Drivers - Ready Mix	Journey Level	\$37.70	<u>6I</u>	<u>2H</u>	
Lewis	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$18.18		<u>1</u>	
Lewis	Well Drillers & Irrigation Pump Installers	Oiler	\$12.00		<u>1</u>	
Lewis	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>	

**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 X 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 Special 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 DualFaced) 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 aluminum 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		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.]

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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.
 - 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.

Overtime Codes Continued

1. 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.
- S. 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 hours worked on holidays and 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.
- 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.
- W. 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.
- 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.
 - C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two 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.
 - G. 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 hours worked on Sunday shall be paid at two 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.
 - O. All hours worked on Sundays and holidays shall be paid at one and one-half times 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.
 - W. 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 first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on 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.
- A. 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 shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar (\$1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. 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.
 - C. 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 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 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.

Overtime Codes Continued

3.
 - E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.
 - 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.
 - I. All 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 during a five day work week (Monday through Friday,) or a four day-ten hour work week (Tuesday through Friday,) 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 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.
 - 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.

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.
 - B. All hours worked over twelve (12) hours per day and all hours worked on 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.

Overtime Codes Continued

4. 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.

- F. 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 20% over the hourly rate of wage. All hours worked on 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.

- 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.

- H. 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.

- 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.

- 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.

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- 4. 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.
- M. All hours worked on Sunday and Holidays shall be paid at double the hourly rate. Any employee reporting to work less than nine (9) hours from their previous quitting time shall be paid for such time at time and one-half times the hourly rate.
- N. 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, and all work performed between the hours of midnight (12:00 AM) and eight AM (8:00 AM) every day shall be paid at double the hourly rate of wage.
- O. All hours worked between midnight Friday to midnight Sunday shall be paid at one and one-half the hourly rate of wage. After an employee has worked in excess of eight (8) continuous hours in any one or more calendar days, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of six (6) hours or more. All hours worked on Holidays shall be paid at double the hourly rate of wage.
- P. All hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage.
- Q. The first four (4) 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 hours worked over twelve (12) hours Monday through Saturday shall be paid at double the hourly rate. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- R. All hours worked on Saturdays 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 on Sundays and holidays shall be paid at double the hourly rate of wage.
- R. Placeholder

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).

Holiday Codes Continued

- 5. 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).

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- 5. I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).
- 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).
- T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).
- 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).
- 6. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- E. Paid 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 a Half-Day On Christmas Eve Day. (9 1/2).
- 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).
- I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).

Holiday Codes Continued

6. 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.
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.
- 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.

Holiday Codes Continued

- 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

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observed as a holiday on the preceding Friday.

7. 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.
- M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). 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.
- R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- 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.
- T. Paid Holidays: New Year's Day, the Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and The Day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- 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.

Benefit Code Key – Effective 8/31/2018 thru 3/2/2019

Holiday Codes Continued

7. 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.
- 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, President's Day, Independence Day, Memorial 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.
15. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the 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.
- B. Holidays: New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. (9)
- C. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8)
- D. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and the day after Christmas.

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.

Note Codes Continued

8. P. 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.
- Q. 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.
- R. 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.
- 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.
- 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.

APPENDIX C

BID PROPOSAL DOCUMENTS

INCLUDING:

Notice to Contractor

Proposal Form

Non-Collusion Declaration

Proposal Signature Page

Certification of Compliance with Wage Payment Statutes



Lewis County Department of Public Works

Josh S. Metcalf, PE, Director

Tim D. Fife, PE, County Engineer

NOTICE TO CONTRACTORS

NOTICE IS HEREBY GIVEN that the Board of County Commissioners of Lewis County or designee, will open sealed proposals and publicly read them aloud on or after 11:00 a.m. on **Tuesday, February 26, 2019**, at the Lewis County Courthouse in Chehalis, Washington for the Pigeon Springs Rd MP 0.50 (Frase Creek) Culvert Replacement Project, CMP 1515.

SEALED BIDS MUST BE DELIVERED BY OR BEFORE 11:00 A.M. on Tuesday, February 26, 2019

(Lewis County official time is displayed on Axxess Intertel phones in the office of the Board of County Commissioners.
Bids submitted after 11:00 AM will not be considered for this project.)

Sealed proposals must be delivered to the Clerk of the Board of Lewis County Commissioners (351 N.W. North Street, Room 210, CMS-01, Chehalis, Washington 98532), by or before **11:00 A.M.** on the date specified for opening, and in an envelope clearly marked: ***“SEALED BID FOR PIGEON SPRINGS RD MP 0.50 (FRASE CREEK) CULVERT REPLACEMENT PROJECT, CMP 1515, TO BE OPENED ON OR AFTER 11:00 A.M. ON TUESDAY, FEBRUARY 26, 2019”.***

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory contract bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to the Lewis County Public Works Department.

Informational copies of maps, plans and specifications are on file for inspection in the office of the County Engineer of Lewis County in Chehalis, Washington. The contract documents may be viewed and downloaded from Lewis County's Web Site @ www.lewiscountywa.gov or you may call the Lewis County Engineers office @ (360)740-2612 and request a copy be mailed to you. All Contractor questions and Lewis County clarifying answers will be posted on our website and emailed to all Contractors registered on Lewis County's Planholder List. Plan or specification changes shall be accomplished through official project addendums.

The Lewis County Public Works Department in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin, or sex in consideration for an award.

PROPOSAL

TO: BOARD OF COUNTY COMMISSIONERS
LEWIS COUNTY
CHEHALIS, WASHINGTON 98532

This certifies that the undersigned has examined the location of the Pigeon Springs Rd MP 0.50 (Frase Creek) Culvert Replacement Project, CMP-1515, in Lewis County, Washington, and that the plans, specifications and contract governing the work embraced in these improvements, and the method by which payment will be made for said work is understood. The undersigned hereby proposes to undertake and complete the work embraced in this improvement, or as much thereof as can be completed with the money available in accordance with the said plans, specifications and contract, and the following schedules of rates and prices:

NOTE: Unit prices for all items, all extensions, and total amount of bid shall be shown: All entries must be typed or entered in ink.

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION	UNIT PRICE		AMOUNT	
			DOLLARS	CENTS	DOLLARS	CENTS
1	1 L.S.	MOBILIZATION				
2	1 L.S.	CLEARING AND GRUBBING				
3	1 L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS				
4	155 C.Y.	ROADWAY EXCAVATION INCL. HAUL	\$		\$	
5	3,870 TON	SELECT BORROW INCL. HAUL	\$		\$	
6	1,370 C.Y.	CHANNEL EXCAVATION INCL. HAUL	\$		\$	
7	325 TON	QUARRY SPALLS FOR UNSUITABLE BASE MATERIAL	\$		\$	
8	1,575 TON	STREAMBED MIX	\$		\$	
9	90 L.F.	UNDERDRAIN PIPE, 4 IN. DIAM.	\$		\$	
10	1 L.S.	TEMPORARY STREAM DIVERSION				
11	2,290 C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL	\$		\$	
12	105 C.Y.	GRAVEL BACKFILL FOR WALL	\$		\$	
13	4,340 LBS.	ST. REINF. BAR FOR WALL	\$		\$	
14	58 C.Y.	CONC. CLASS 4000	\$		\$	
15	1 L.S.	PRECAST REINF. CONC. SPLIT-BOX CULVERT				
16	550 TON	CRUSHED SURFACING BASE COURSE	\$		\$	
17	45 TON	SHOULDER FINISHING	\$		\$	
18	165 TON	HMA CL. 1/2 IN PG 58H-22	\$		\$	
19	12 DAY	ESC LEAD	\$		\$	
20	150 S.Y.	STABILIZED CONSTRUCTION ENTRANCE	\$		\$	
21	1 EST.	EROSION / WATER POLLUTION CONTROL				
					ESTIMATED	\$5,000.00

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION	UNIT PRICE		AMOUNT	
			DOLLARS	CENTS	DOLLARS	CENTS
22	90 S.Y.	FLEX MSE BANK PROTECTION	\$		\$	
23	12 EA.	LARGE WOODY DEBRIS	\$		\$	
24	1 L.S.	PLANTING MITIGATION CONSTRUCTION		LUMP SUM	\$	
25	1 L.S.	TEMPORARY BYPASS ROAD		LUMP SUM	\$	
26	330 L.F.	HIGH VISIBILITY SILT FENCE	\$		\$	
27	4 EA.	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	\$		\$	
28	250 L.F.	BEAM GUARDRAIL TYPE 31	\$		\$	
29	660 L.F.	PAINT LINE	\$		\$	
30	1 L.S.	PROJECT TEMPORARY TRAFFIC CONTROL		LUMP SUM	\$	
31	125 C.Y.	FOUNDATION MATERIAL CLASS A	\$		\$	
32	1 L.S.	TRIMMING AND CLEANUP		LUMP SUM	\$	
33	0 EST.	REIMBURSEMENT FOR THIRD PARTY DAMAGE		ESTIMATED		\$0.00
34	1 CALC.	MINOR CHANGE		CALCULATED		\$25,000.00
35	1 L.S.	SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN		LUMP SUM	\$	
				TOTAL BID	\$	

Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.

NOTICE TO ALL BIDDERS

To report rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

PROPOSAL - SIGNATURE PAGE

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

A proposal guaranty in an amount of five percent (5%) of the total bid, based upon the approximate estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

CASH IN THE AMOUNT OF _____

CASHIER'S CHECK _____ DOLLARS

CERTIFIED CHECK (\$_____) PAYABLE TO THE LEWIS COUNTY TREASURER

PROPOSAL BOND IN THE AMOUNT OF 5% OF THE BID

** Receipt is hereby acknowledged of addendum(s) No.(s) _____, _____, _____, & _____

SIGNATURE OF AUTHORIZED OFFICIAL(S)

Proposal Must be Signed

Firm Name

Address

State of Washington Contractor's License No.

Unified Business Identifier (U.B.I.) No.

Telephone No.

Federal ID No.

Note:

This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from the Lewis County Engineer will be cause for considering the proposal irregular and subsequent rejection of the bid.

*Attach Power of Attorney



Lewis County Department of Public Works

Erik P. Martin, PE, Director

Tim Fife, PE, County Engineer

Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (_____), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder's Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship Partnership Joint Venture Corporation

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

APPENDIX D

CONTRACT DOCUMENTS

INCLUDING:

Contract Form

Contract Bond

Power Equipment List

CONTRACT

THIS AGREEMENT, made and entered into this ___ day of _____, 2019, between the BOARD OF COUNTY COMMISSIONERS of LEWIS COUNTY, State of Washington, acting under and by virtue of RCW 36.77.040, hereinafter called

the Board, and _____ of _____

for ___sel___, heirs, executors, administrators, successors and assigns, hereinafter called the Contractor.

WITNESSETH:

That in consideration of the payments, covenants and agreements hereinafter mentioned to be made and performed by the parties hereto, the parties hereto covenant and agree as follows:

DESCRIPTION OF WORK:

1. The Contractor shall do all work and furnish all material necessary to improve Pigeon Springs Rd MP 0.50 (Frase Creek) Culvert by installing a stream bypass, traffic detour, removing the existing culvert, structure excavation, channel excavation, precast concrete split-box culvert installation, streambed restoration, road restoration with HMA, guardrail, hydroseeding, and other work, all in Lewis County Washington, in accordance with and as described in the attached plans and specifications, and in full compliance with the terms, conditions and stipulations herein set forth and attached, now referred to and by such reference incorporated herein and made a part hereof as fully for all purposes as if here set forth at length, and shall perform any alterations in or additions to the work covered by this contract and every part thereof and any extra work which may be ordered as provided in this contract and every part thereof.

The Contractor shall provide and be at the expense of all materials, labor, carriage, tools, implements and conveniences and things of every description that may be requisite for the transfer of materials and for constructing and completing the work provided for in this contract and every part thereof.

2. The County hereby promises and agrees with the Contractor to hire and does hire the Contractor to provide the materials and to do and cause to be done the above described work and to complete and furnish the same according to the attached plans and specifications and the terms and conditions herein contained, and hereby contracts to pay for the same according to the schedule of unit or itemized prices at the time and in the manner and upon the conditions provided for in this contract and every part thereof. The County further agrees to hire the contractor to perform any alterations in or conditions to the work covered by this contract and every part thereof and any force account work that may be ordered and to pay for the same under the terms of this contract and the attached plans and specifications.

3. The Contractor for himself, and for his heirs, executors, administrators, successors and assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

4. It is further provided that no liability shall attach to the County be reason of entering into this contract, except as expressly provided herein.

Contract - 1

5. CANCELLATION OF CONTRACT FOR VIOLATION OF STATE POLICY

This contract, pursuant to RCW 49.28.040 to RCW 49.28.060, may be canceled by the officers or agents of the Owner authorized to contract for or supervise the execution of such work, in case such work is not performed in accordance with the policy of the State of Washington.

6. DOCUMENTS COMPRISING CONTRACT

All documents hereto attached, including but not being limited to the advertisement for bids, information for bidders, bid proposal form, general conditions (if any), special conditions (if any), complete specifications and the complete plans, are hereby made a part of this contract.

IN WITNESS WHEREOF, the said Contractor has executed this instrument, and the said Board of County Commissioners of aforesaid County, pursuant to resolution duly adopted, has caused this instrument to be executed by and in the name of said Board by its Chairman, duly attested by its Clerk, the day and year first above written, and the seal of said Board to be hereunto affixed on the date in this instrument first above written.

By: _____

Contractor

Performance of foregoing contract assured in accordance with the terms of the accompanying bond.

Dated: _____, 2019

By: _____

Surety

By: _____

Attorney-in-fact

APPROVED AS TO FORM:

JONATHAN MEYER Prosecuting Attorney

By: _____

Civil Deputy

APPROVED:

County Engineer

Contract – 2

**CONTRACT BOND FOR
LEWIS COUNTY, WASHINGTON**

Bond No. _____

WE, _____ d/b/a _____
(Insert legal name of Contractor) (Insert trade name of Contractor, if any)

(hereinafter "Principal"), and _____ (hereinafter "Surety"), are held and firmly bound unto **LEWIS COUNTY, WASHINGTON** (hereinafter "County"), as Obligee, in an amount (in lawful money of the United States of America) equal to the total compensation and expense reimbursement payable to Principal for satisfactory completion of Principal's work under Contract No. **CMP 1515** between Principal and County, which total is *initially* _____ Dollars (\$ _____), for the payment of which sum Principal and Surety bind themselves, their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.. Said contract (hereinafter referred to as "the Contract") is for the **Pigeon Springs RD MP 0.50 (Frase Creek) Culvert Replacement Project** and is made a part hereof by this reference. The Contract includes the original agreement as well as all documents attached thereto or made a part thereof and amendments, change orders, and any other document modifying, adding to or deleting from said Contract any portion thereof.

This Bond is executed in accordance with the laws of the State of Washington, and is subject to all provisions thereof and the ordinances of County insofar as they are not in conflict therewith, and is entered into for the use and benefit of County, and all laborers, mechanics, subcontractors, and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions or supplies for the carrying on of the work covered by Contract No. **CMP 1515**, between the below-named Contractor and County for the **Pigeon Springs RD MP 0.50 (Frase Creek) Culvert Replacement Project**, a copy of which Contract, by this reference is made a part hereof and is hereinafter referred to as "the Contract." (The Contract as defined herein includes the aforesaid agreement together with all of the Contract documents including addenda, exhibits, attachments, modifications, alterations, and additions thereto, deletions therefrom, amendments and any other document or provision attached to or incorporated into the Contract)

THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly and faithfully perform the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

THE PARTIES FURTHER ACKNOWLEDGE & AGREE AS FOLLOWS:

- (1) Surety hereby consents to, and waives notice of, any alteration, change order, or other modification of the Contract and any extension of time made by County, except that any single or cumulative change order amounting to more than twenty-five percent (25%) of the penal sum of this bond shall require Surety's written consent.
- (2) Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the work or Contract Time and the amounts payable to Contractor. Subject to the limitations contained in paragraph (1) above, no such change or any combination thereof, shall void or impair Surety's obligation hereunder.
- (3) Surety is subject to the provisions contained in Section 1-03.4, "Contract Bond," of the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction. And such provisions are incorporated by reference. A copy may be viewed at WSDOT's website www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/.
- (4) Whenever County has declared Contractor to be in default and County has given Surety written notice of such declaration, Surety shall promptly (in no event more than thirty [30] days following receipt of such notice), specify, in written notice to County, which of the following actions Surety intends to take to remedy such default, and thereafter shall:
 - (a) Remedy the default within fifteen (15) days after its notice to County, as stated in such notice; or
 - (b) Assume within fifteen (15) days following its notice to County, full responsibility for the completion of the Contract in accordance with all of its provisions, as stated in such notice, and become entitled to payment of the balance of the Contract sum as provided in the Contract; or
 - (c) Pay County upon completion of the Contract, in cash, the cost of completion together with all other reasonable costs and expenses incurred by County as a result of Contractor's default, including but not limited to those incurred by County to mitigate its losses, which may include but are not limited to attorneys' fees and the cost of efforts to complete the work prior to Surety's exercising any option available to it under this Bond; or
 - (d) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon a determination by County and Surety jointly of the lowest responsible bidder, arrange for one or more agreements between such bidder and County, and make available as work progresses (even though there is a default or a succession of defaults under such agreement(s) for completion arranged for under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price, but not exceeding, including other costs and damages for which Surety may be liable hereunder, the penal sum of this Bond. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by County to Contractor under the Contract, less the amount properly paid by County to Contractor.

APPENDIX E

PERMIT DOCUMENTS



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 30, 2018
Project End Date: September 30, 2020

Permit Number: 2018-5-67+01
FPA/Public Notice Number: N/A
Application ID: 15388

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
Lewis County Public Works ATTENTION: Ann Weckback 2025 NE Kresky Ave Chehalis, WA 98532-2308	

Project Name: Frase Creek Culvert Replacement – CMP 1605

Project Description: Lewis County Maintenance is proposing replace the existing 5 ft x 7 ft corrugated metal squash pipe with a 20 ft wide x 11.5 ft tall x 50 ft long precast split box concrete culvert. Additional construction will include the realignment/regrade of 300 linear feet of channel, placement of streambed, placement of large woody debris, creation of two pools and planting of an approximate 35 ft riparian buffer. A retaining wall with extra bank protection using Flex MSE bags will be installed at the outlet of the project along the South Fork Newaukum River.

PROVISIONS

TIMING - PLANS - INVASIVE SPECIES CONTROL

1. TIMING LIMITATION: You may begin the project on July 30, 2018 and you must complete the project by September 30, 2020.
2. TIMING LIMITATION: Work below the ordinary high water line must only occur between July 1 and September 30.
3. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, 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.
4. INVASIVE SPECIES CONTROL: Follow Level 1 Decontamination protocol for low risk locations. Thoroughly remove visible dirt and organic debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. Properly dispose of any water and chemicals used to clean gear and equipment. For contaminated or high risk sites please refer to the Level 2 Decontamination protocol. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at <http://wdfw.wa.gov/publications/search.php?Cat=Aquatic Invasive Species>.

NOTIFICATION REQUIREMENTS

5. PRE-, DURING, AND POST-CONSTRUCTION NOTIFICATION: You, your agent, or contractor 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, one day before removing the temporary bypass 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.
6. FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION: If a fish kill occurs or fish are observed in distress at the



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 30, 2018

Permit Number: 2018-5-67+01

Project End Date: September 30, 2020

FPA/Public Notice Number: N/A

Application ID: 15388

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

7. Establish staging areas (used for 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.
8. Design and locate new temporary access roads to prevent erosion and sediment delivery to waters of the state.
9. Clearly mark boundaries to establish the limit of work associated with site access and construction.
10. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.
11. Confine the use of equipment to the specific access and work corridor shown in the approved plans.
12. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.
13. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.
14. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

15. Work in the dry watercourse (when no natural flow is occurring in the channel, or when flow is diverted around the job site).
16. Protect all disturbed areas from erosion. Maintain erosion and sediment control until all work and cleanup of the job site is complete.
17. All erosion control materials that will remain onsite must be composed of 100% biodegradable materials.
18. Straw used for erosion and sediment control, must be certified free of noxious weeds and their seeds.
19. Stop all hydraulic project activities except those needed to control erosion and siltation, if flow conditions arise that will result in erosion or siltation of waters of the state.
20. 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.
21. Route 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.
22. Deposit waste material from the project, such as construction debris, silt, excess dirt, or overburden, in an upland area above the limits of anticipated floodwater unless the material is approved by the Washington Department of Fish and Wildlife for reuse in the project.

CONSTRUCTION MATERIALS

23. 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.

IN-WATER WORK AREA ISOLATION USING BLOCK NETS



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 30, 2018

Permit Number: 2018-5-67+01

Project End Date: September 30, 2020

FPA/Public Notice Number: N/A

Application ID: 15388

24. Isolate fish from the work area by using block nets.

25. Install block nets at an angle to the direction of flow (not perpendicular to the flow) to avoid entrapping fish in the nets.

26. After the first block net is secured at the upstream end, use a second block net to herd fish downstream and out of the project area.

27. Install a downstream block net if fish may reenter the work area from downstream.

28. To anchor block nets, place bags filled with clean round gravel along the bottom of the nets.

29. To keep fish out of the job site, leave block nets in place until the work is complete and conditions are suitable for fish.

30. Check block nets at least three times a day for entangled fish and accumulated debris.

IN-WATER WORK AREA ISOLATION USING A TEMPORARY BYPASS

31. Isolate fish from the work area by using either a total or partial bypass to reroute the stream through a temporary channel or pipe.

32. Sequence the work to minimize the duration of dewatering.

33. Use the least-impacting feasible method to temporarily bypass water from the work area. Consider the physical characteristics of the site and the anticipated volume of water flowing through the work area.

34. Design the temporary bypass to minimize the length of the dewatered stream channel.

35. If the bypass is a pumped diversion, once started it must run continuously until it is no longer necessary to bypass flows. This requires back-up pumps on-site and twenty-four-hour monitoring for overnight operation.

36. If the diversion inlet is a pump diversion in a fish-bearing stream, the pump intake structure must have a fish screen installed, operated, and maintained in accordance with RCW 77.57.010 and 77.57.070. Screen the pump intake with one of the following:

- a) Perforated plate: 0.094 inch (maximum opening diameter);
- b) Profile bar: 0.069 inch (maximum width opening); or
- c) Woven wire: 0.087 inch (maximum opening in the narrow direction).

The minimum open area for all types of fish screens is twenty-seven percent. The screened intake facility must have enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Maintain fish screens to prevent injury or entrapment of fish.

37. The fish screen must remain in place whenever water is withdrawn from the stream through the pump intake.

FISH LIFE REMOVAL

38. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.

39. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.

CULVERT

40. Install and maintain the culvert to ensure unimpeded fish passage.

41. Establish the culvert invert elevation with reference point(s) or benchmark(s) created before to starting work on this project. Clearly mark and preserve the reference point(s) for post-project compliance. Before backfilling, confirm the invert elevation, as stated on the plans, relative to the reference points with at least a construction-grade leveling device (such as an optical auto-level or laser level).

42. Countersink the stream simulation culvert a minimum of thirty percent and a maximum of fifty percent of the culvert rise, but not less than two feet.



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- 43. The streambed must include a sinuous low-flow channel expected under common conditions in the reach and a high-flow bench on both sides of the culvert.
 - 44. Approach material must be structurally stable and composed of material that if eroded into the water will not harm fish life.
 - 45. The owner(s) must maintain the culvert to ensure it provides continued, unimpeded fish passage. If the culvert becomes a hindrance to fish passage, the owner must obtain an Hydraulic Project Approval and provide prompt repair.
- DEMOBILIZATION AND CLEANUP**
- 46. Upon completion of the project, restore the disturbed bed, banks, and riparian zone to preproject condition to the extent possible.
 - 47. Completely remove any temporary fill before the end of the in-water timing window if the fill material could erode and deliver sediment-laden water into waters of the state.
 - 48. To prevent fish from stranding, backfill trenches, depressions, and holes in the bed that may entrain fish during high water or wave action.
 - 49. To minimize sediment delivery to the stream or stream channel, do not return in-stream flows to the work area until all in-channel work is completed and the bed and banks are stabilized.
 - 50. Seed areas disturbed by construction activities with a native seed mix suitable for the site that has at least one quick-establishing plant species.
 - 51. 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.
 - 52. Remove temporary erosion and sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.

LOCATION #1:		Site Name: Frase Creek Culvert Replacement - MP 0.5 2025 NE Kresky Avenue, Chehalis, WA 98531				
WORK START:		June 15, 2019		WORK END:		September 30, 2019
<u>WRIA</u>		<u>Waterbody:</u>			<u>Tributary to:</u>	
23 - Upper Chehalis - Upstream of Porter		Frase Creek			Newaukum River SF	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SW 1/4	12	13 N	01 E	46.623512	-122.632245	Lewis
<u>Location #1 Driving Directions</u>						

From I-5 take exit 71 for WA-508 E toward Napavine/Onalaska and follow for 0.3 miles. Turn east onto WA-508 E/W Forest Napavine Rd and continue for 13.4 miles. Turn left onto Centralia Alpha Rd and continue for 0.5 miles. Continue straight onto Pigeon Springs Rd for 0.529 miles until you've reached your destination.

APPLY TO ALL HYDRAULIC PROJECT APPROVALS



HYDRAULIC PROJECT APPROVAL

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This Hydraulic Project Approval 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 Hydraulic Project Approval 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 shall be available on the job site at all times and all its provisions followed by the person(s) to whom this Hydraulic Project Approval 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 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 Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to 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 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 does not alter the project's impact to fish life or habitat and does 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 <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, 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 by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.



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MAJOR MODIFICATIONS TO THIS 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 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 <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, 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 mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. 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), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied 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 department 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. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

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 Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. 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 Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

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.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200


Issued Date: July 30, 2018
Project End Date: September 30, 2020

Permit Number: 2018-5-67+01
FPA/Public Notice Number: N/A
Application ID: 15388

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 Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. 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 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.

Habitat Biologist Scott.Brummer@dfw.wa.gov
Scott Brummer 360-785-0472

 for Director
WDFW



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, SEATTLE DISTRICT
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

Regulatory Branch

December 21, 2018

Lewis County Public Works
Attention: Ms. Ann Weckback
2025 Kresky Avenue
Chehalis, Washington 98532

Reference: NWS-2018-684
Lewis County Public Works
(Frase Creek Culvert
Replacement)

Dear Ms. Weckback:

We have reviewed your application to excavate and discharge fill in up to 400 linear feet of Frase Creek to replace a corrugated metal squash pipe with a pre-cast split box culvert as well as enhance ecological functions of the Frase Creek stream channel by installing streambed gravel and large wood material. Your application also included installation of bank protection in up to 75 linear feet of the South Fork Newaukum River. The proposed activity is located at the Pigeon Springs Road crossing, near Alpha, Lewis County, Washington. Based on the information you provided to us, Nationwide Permits (NWP) 27, Aquatic Habitat Restoration, Establishment, and Enhancement Activities, and NWP 13, Bank Stabilization (Federal Register January 6, 2017, Vol. 82, No. 4), authorize your proposal as depicted on the enclosed drawings dated December 6, 2018.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 27, Terms and Conditions*, *NWP 13, Terms and Conditions*, and the following special conditions:

- a. 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.

- b. In order to protect the listed threatened and endangered species in the project area, you may conduct the authorized activities in the work window as agreed to and documented in writing through consultation by the National Marine Fisheries Service in any year this permit is valid. If changes to the originally authorized work window are proposed, you must re-coordinate these changes with the NMFS and receive written concurrence on the changes. Copies of the concurrence must be sent to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, within 10 days of the date of the revised concurrence.

- c. Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) 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 NOAA Fisheries, 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 NOAA Fisheries to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

Section 7 Endangered Species Act (ESA) consultation, and Magnuson Stevens Act essential fish habitat (EFH) consultation was completed through the Washington State Regional Road Maintenance Program (NMFS Reference Numbers 2003-00313, 2004-00647, 2009-03290, and WCR-2014-304). The United States Fish and Wildlife Service completed National Historic Preservation Act consultation for its involvement in the proposed activity. For the purpose of this Department of the Army authorization, we have determined this project will comply with the requirements of these laws provided you comply with all of the permit general and special conditions. We have determined the permit action is sufficiently addressed in their ESA and EFH consultation documents. By this letter we are advising you and the NMFS, in accordance with 50 CFR 402.07 and 50 CFR 600.920(b), that this agency has served as the lead Federal agency for the ESA and EFH consultation responsibilities for the activity described above.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification (WQC) requirements for this NWP. No further coordination with Ecology for WQC is required.

You have not requested a jurisdictional determination for this proposed project. If you believe the Corps 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 18, 2022, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date and you have commenced or are under contract to commence this activity before March 18, 2022, you will have until March 18, 2023, 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. You must also obtain all local, State, and other Federal permits that apply to this project.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. 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. These documents and information about our program are available on our website at www.nws.usace.army.mil, select "Regulatory Branch, Permit Information" and then "Contact Us." If you have any questions, please contact me at Evan.G.Carnes@usace.army.mil or (206) 316-3049.

Sincerely,

A handwritten signature in black ink that reads "Evan G. Carnes". The signature is written in a cursive style with a large, stylized "E" and "C".

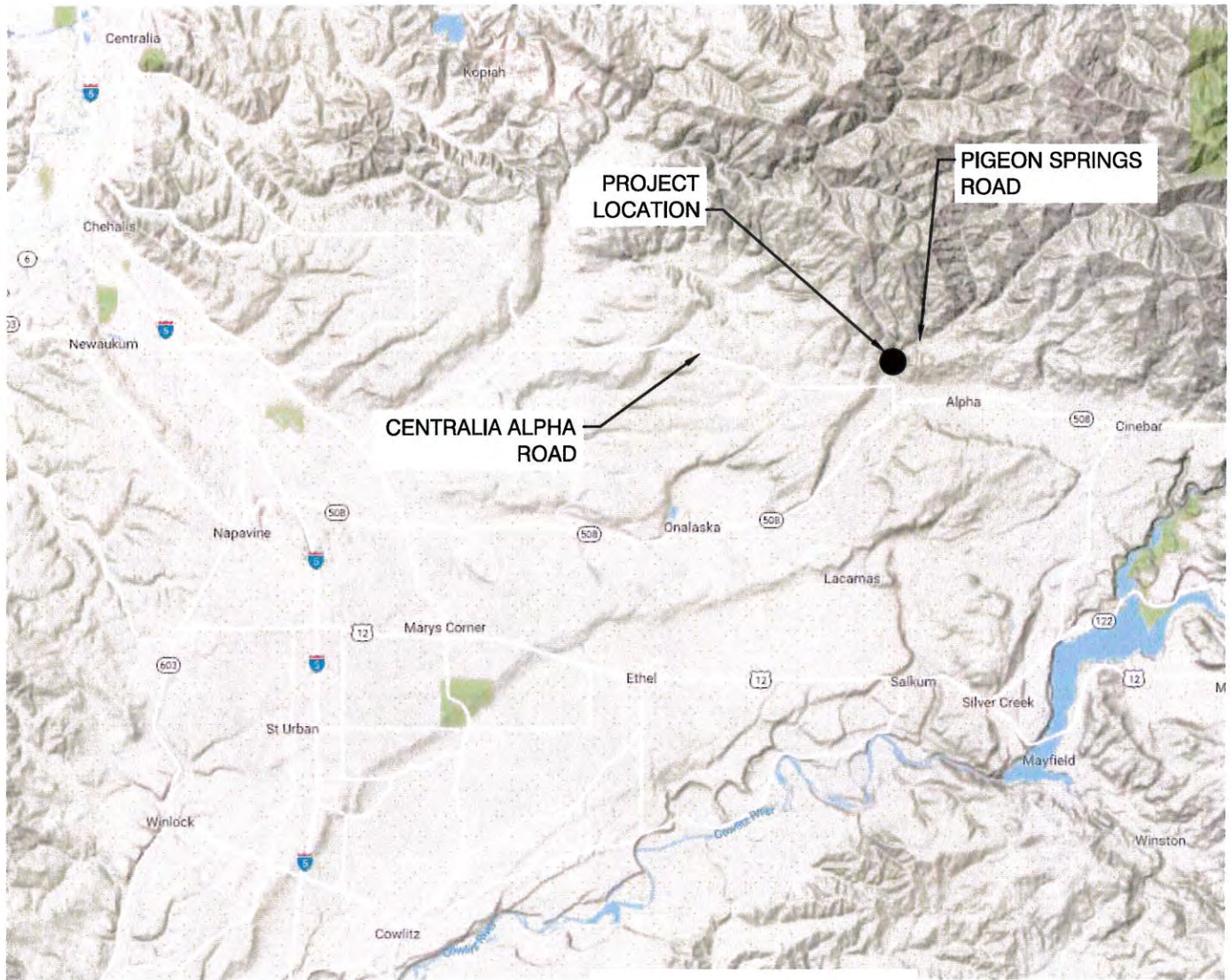
Evan G. Carnes, Project Manager
Regulatory Branch

Enclosures

cc:

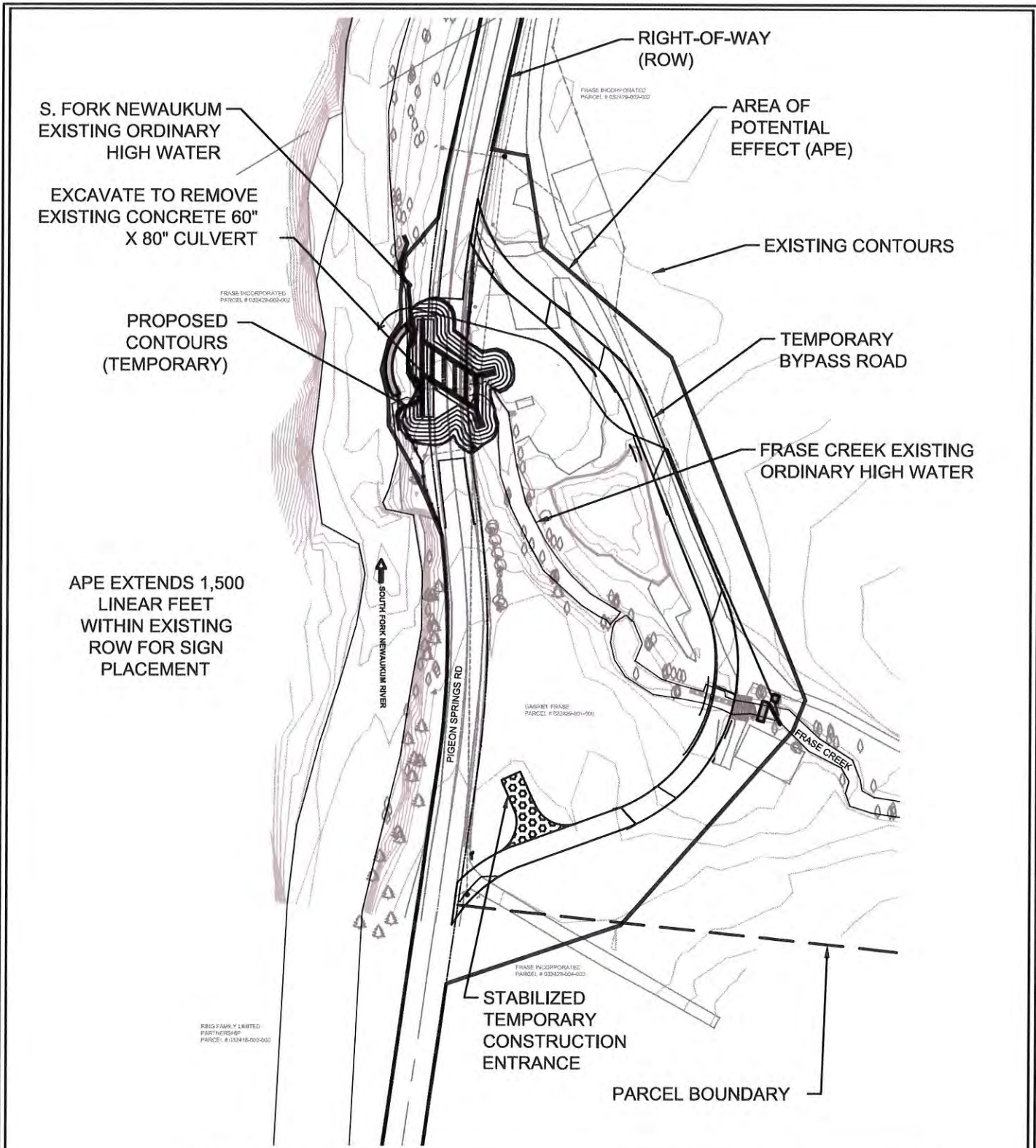
Washington Department of Ecology, Federal Permit Coordinator: ecyrefedpermits@ecy.wa.gov

National Marine Fisheries Service: frankie.johnson@noaa.gov



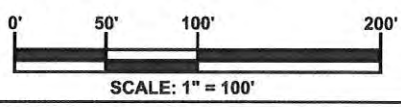
REFERENCE NUMBER:	CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
APPLICANT:	LEWIS COUNTY	LAT / LONG:	46.623512°, -122.632245°	IN (WATERBODY):	FRASE CREEK
ADJACENT PROPERTY OWNERS:		DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	TOWNSHIP / RANGE / SECTION:	T. 13N / R. 1E / SEC. 12
	1. PARCEL 032429-002-001 STEPHEN FRASE			NEAR / AT (CITY):	ALPHA
	2. PARCEL 032429-002-002 FRASE INC.			COUNTY:	LEWIS
	3. PARCEL 032429-001-000 GABRIEL FRASE			STATE:	WA
	4. PARCEL 032418-003-000 RING FAMILY			DATE:	12/6/2018
	5. PARCEL 032418-002-000 WEYHAEUSER				
	6. PARCEL 032429-004-000 FRASE INC.				
	7. PARCEL 032429-003-000 JOHN FRASE				
SHEET: 1 OF 8 VICINITY MAP					

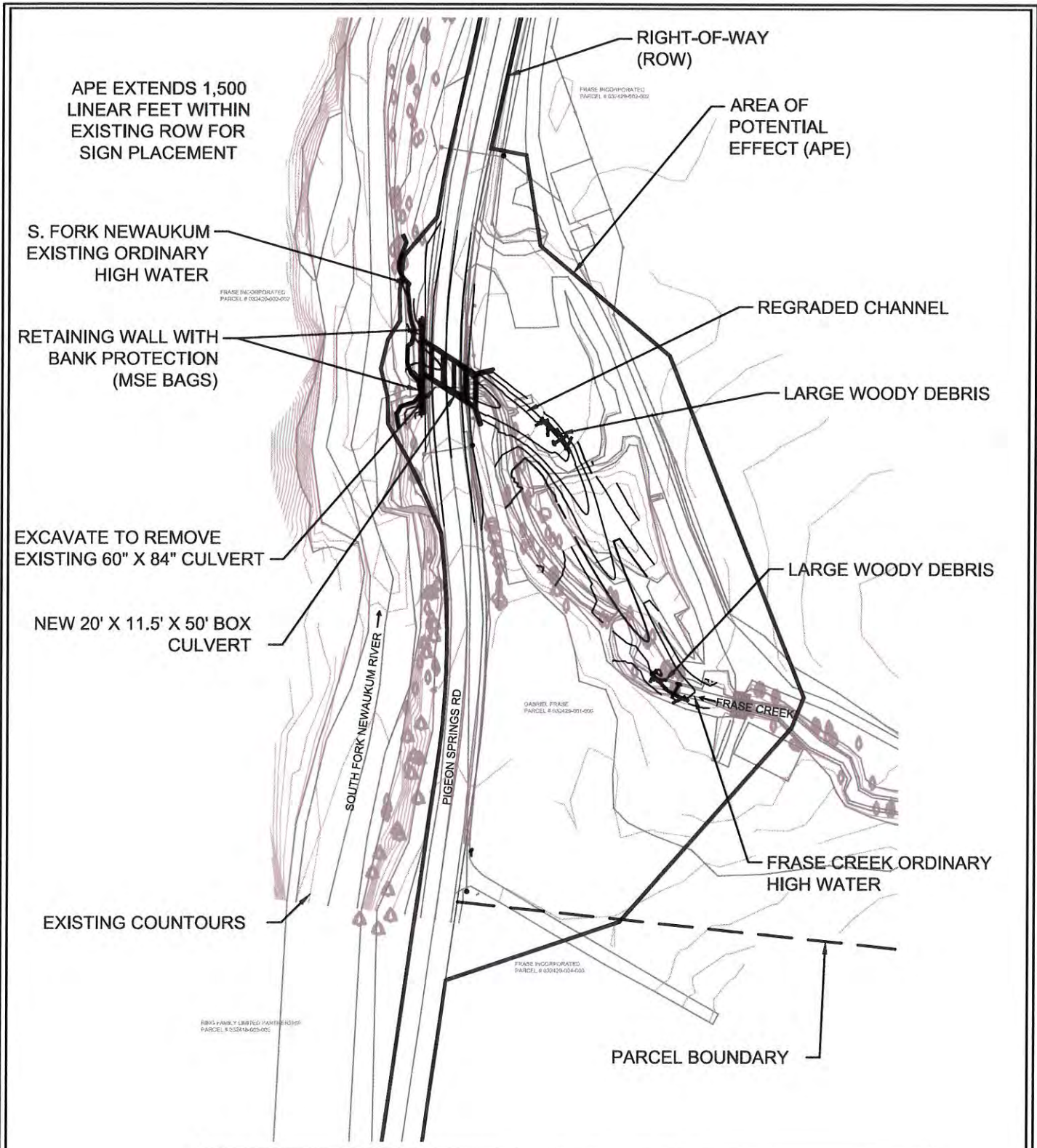




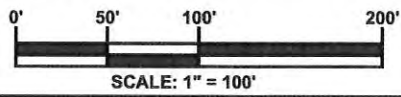
APE EXTENDS 1,500
LINEAR FEET
WITHIN EXISTING
ROW FOR SIGN
PLACEMENT

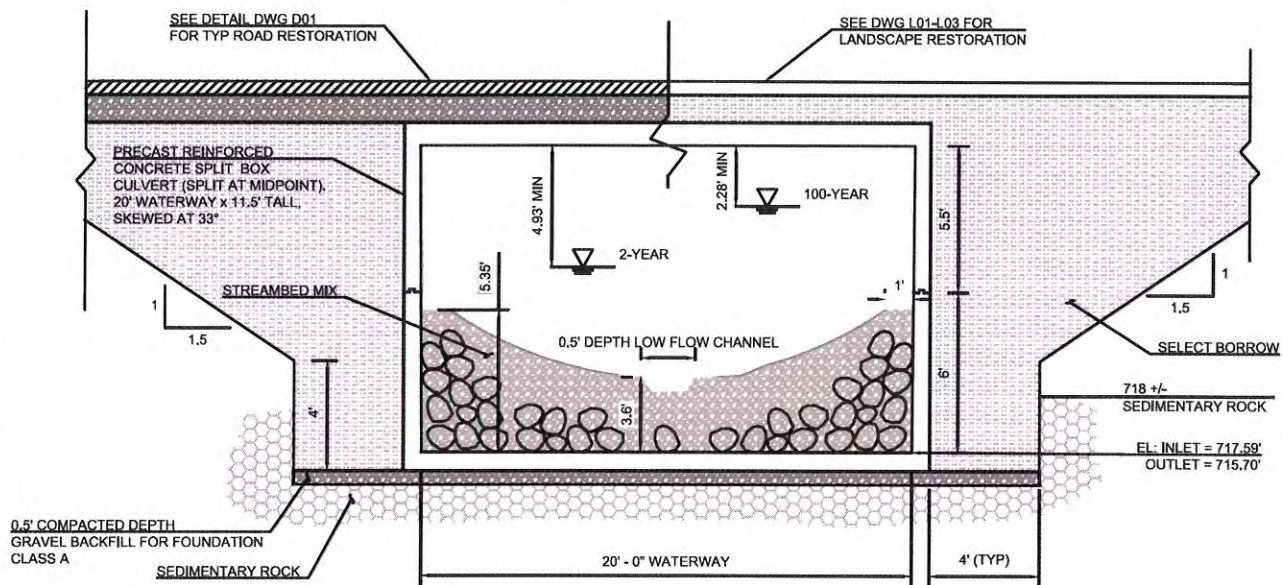
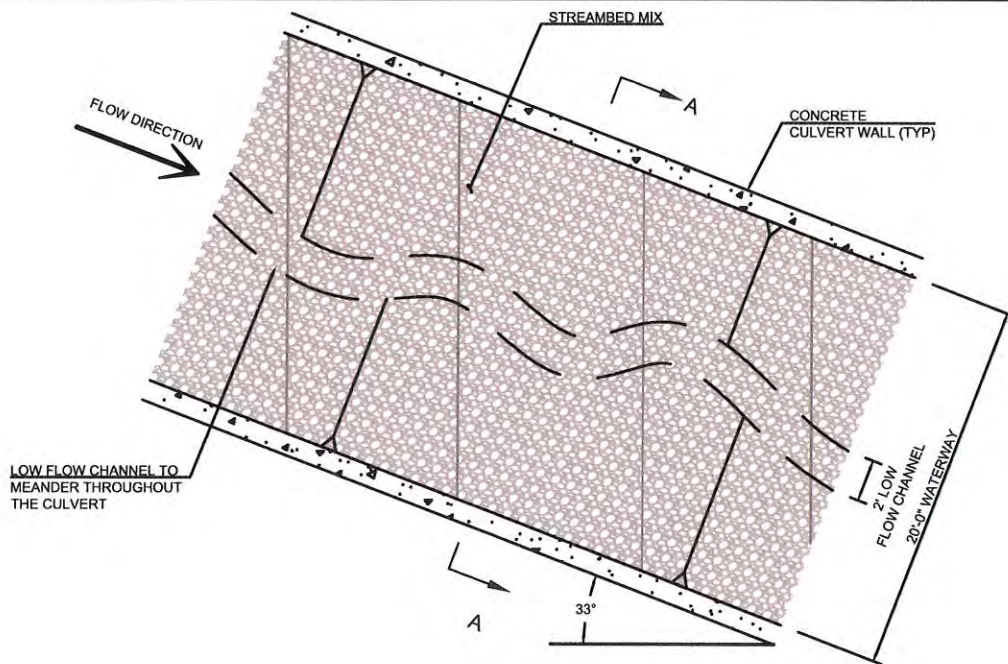
REFERENCE NUMBER:	CMP 1604 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
APPLICANT:	LEWIS COUNTY	DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE:	12/6/2018
SHEET: 2 OF 8 PLAN VIEW (SITE PREP)					





REFERENCE NUMBER:	CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
APPLICANT:	LEWIS COUNTY	DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE:	12/6/2018
SHEET: 3 OF 8 PLAN VIEW (CREEK/CULVERT)					





2-YEAR WATER SURFACE ELEVATIONS:
 INLET = 722.66'
 OUTLET = 722.17'

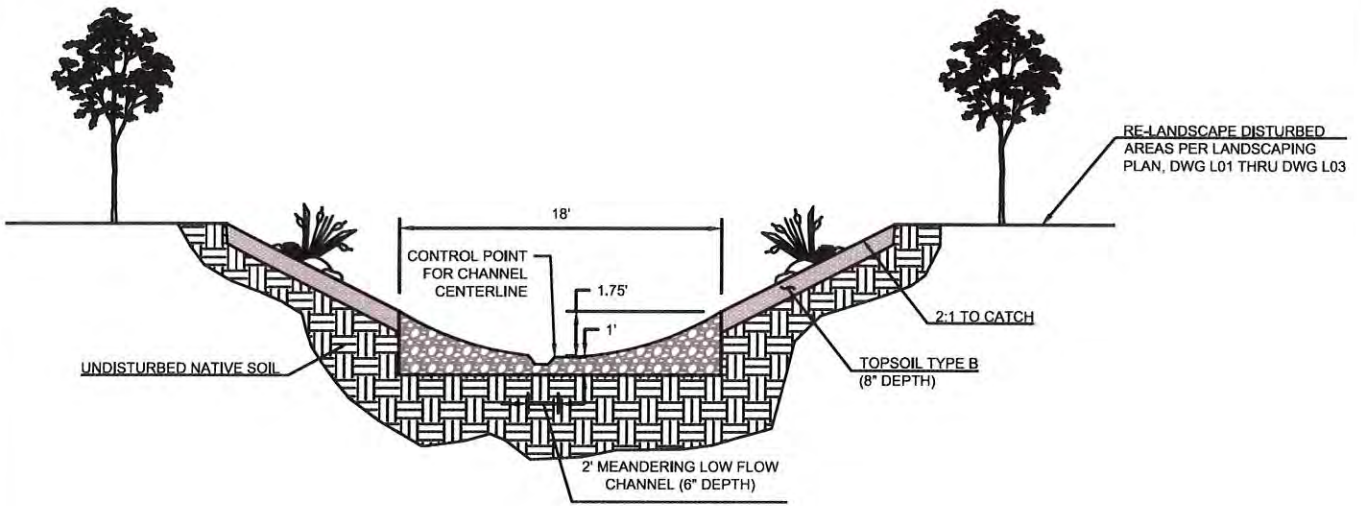
100-YEAR WATER SURFACE ELEVATIONS:
 INLET = 724.92'
 OUTLET = 724.86'

NOTE:
 CONTRACTOR SHALL PLACE TWO MAN
 STREAMBED BOULDERS AND COARSER
 MATERIAL ALONG THE CULVERT WALLS TO
 DEFINE THE CHANNEL IN THE CENTER OF THE
 CULVERT.

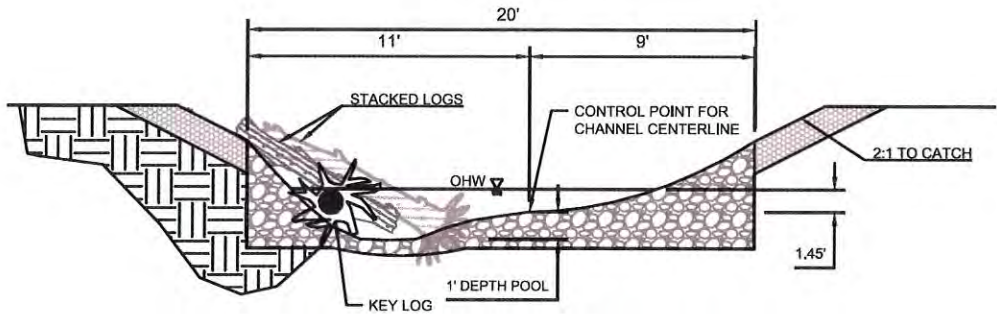
1 PRECAST SPLIT BOX CULVERT
 NOT TO SCALE

REFERENCE NUMBER:	CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
APPLICANT:	LEWIS COUNTY	DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE:	12/6/2018
SHEET: 4 OF 8 CULVERT CROSS-SECTION					





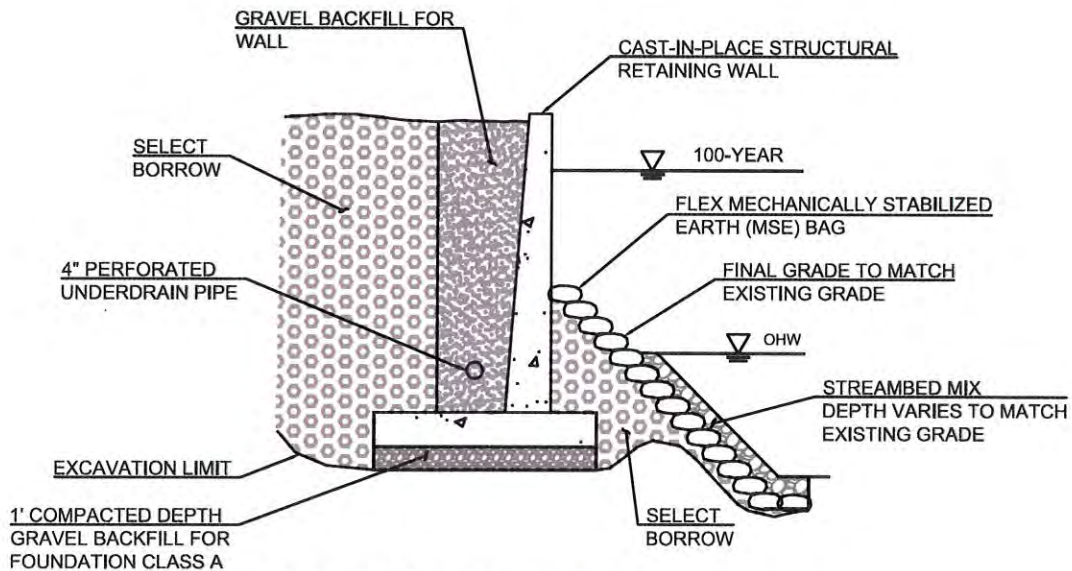
1 FRASE CREEK TYPICAL CHANNEL
NOT TO SCALE



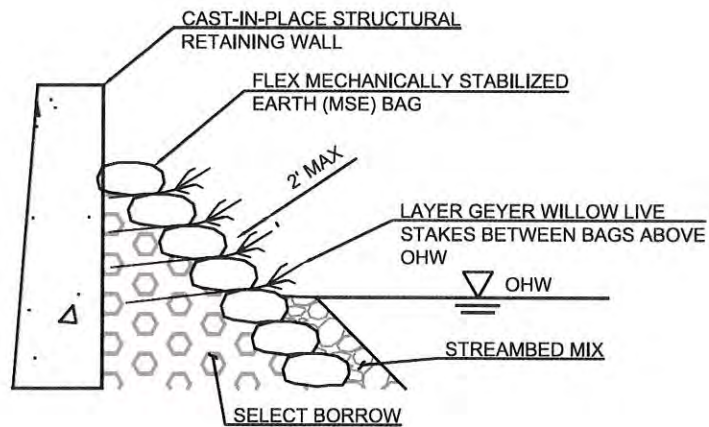
2 LARGE WOODY DEBRIS FEATURE
NOT TO SCALE

REFERENCE NUMBER:	CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
APPLICANT:	LEWIS COUNTY	DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE:	12/6/2018
SHEET: 5 OF 8 IN-STREAM FEATURES CROSS-SECTIONS					





1 BANK PROTECTION
NOT TO SCALE



2 FLEX MSE PLANTING
NOT TO SCALE



REFERENCE NUMBER:	CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS):	PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT:	FRASE CREEK CULVERT REPLACEMENT
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APPLICANT:	LEWIS COUNTY	DATUM:	NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE:	12/6/2018
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SHEET: 6 OF 8 BANK PROTECTION/PLANTING



NEW 20' X 11.5' X 50'
CULVERT
EXISTING 60" X
84" CULVERT

PLANT LIST				
SYM	QTY	NAME	CONTAINER	SPACING
TREES				
TAM	29	Acer macrophyllum Bigleaf Maple	B&B or 15 Gal 1" Cal	PER PLAN
TTP	13	Thuja plicata Western Red Cedar	B&B or 15 Gal 3' Height	PER PLAN
STAKES				
SSG	276	Salix geyeriana Geyer Willow	Live Stake or Cutting 0.5" Cal X 3' Long Minimum Dimensions	PER PLAN
ZONE A - DISTURBED AREA ABOVE ORDINARY HIGH WATER				
	22,583 SF	38.5% - <i>Hordeum brachyantherum</i> (Meadow Barley) 20% - <i>Bromus carinatus</i> (California Brome) 12% - <i>Festuca rubra rubra</i> (Native Red Fescue) 10% - <i>Glyceria occidentalis</i> (Northwestern Mannagrass) 5% - <i>Rosa nutkana</i> (Nootka Rose) 5% - <i>Symphoricarpos alba</i> (Common Snowberry) 4.5% - <i>Mahonia aquifolium</i> (Oregon Grape) 3% - <i>Deschampsia cespitosa</i> (Tufted Hairgrass) 1.5% - <i>Agrostis exarata</i> (Spike Bentgrass) 0.5% - <i>Holodiscus discolor</i> (Oceanspray)	Seed Mix	3 lbs / 1,000 SF
ZONE B - DISTURBED AREA FROM GRADING AND CONSTRUCTION ACTIVITIES				
	52,797 SF	43% - <i>Elymus glaucus</i> (Blue Wildrye) 37% - <i>Hordeum brachyantherum</i> (Meadow Barley) 11% - <i>Lolium multiflorum</i> (Annual Ryegrass) 7% - <i>Festuca idahoensis</i> (Idaho Fescue) 1% - <i>Festuca ovina</i> (Sheep Fescue) 0.6% - <i>Deschampsia elongata</i> (Slender Hairgrass) 0.4% - <i>Koeleria macrantha</i> (Junegrass)	Seed Mix	1 lbs / 1,000 SF

RETAINING WALL
WITH VEGETATED
BANK PROTECTION
(MSE BAGS WITH
WILLOW STAKES)

↑ SOUTH FORK NEWAUKUM RIVER

PIGEON SPRINGS RD

FRASE CREEK

AREA OF POTENTIAL EFFECT
(APE)

APE EXTENDS 1,500 LINEAR
FEET WITHIN EXISTING
ROW FOR SIGN PLACEMENT

REFERENCE NUMBER: CMP 1605
NWS-2018-684

PROJECT LOCATION (ADDRESS): PIGEON SPRINGS ROAD MP 0.529
CHEHALIS, WA 98352

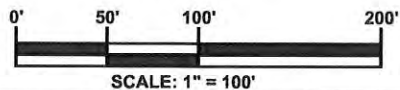
PROPOSED PROJECT: FRASE CREEK CULVERT REPLACEMENT

APPLICANT: LEWIS COUNTY

DATUM: NAVD88 VERTICAL,
NAD83 HORIZONTAL

DATE: 12/6/2018

SHEET: 7 OF 8 PLAN VIEW (PLANTINGS)



Activity (clear, dredge, fill, pile drive, etc.)	Waterbody Name	Impact	Duration of Impact	Amount of Material (cubic yards) to be placed in or removed from water body	Area (sq. ft. or linear ft.) of waterbody directly affected
Excavation - Culvert (Below Ditch Line)	Frase Creek	Below OHW	Temporary	714 cu. yd.	5,282 sq. ft.
		Above OHW		1,011 cu. yd.	5,976 sq. ft.
Fill - Select Borrow (Below Ditch Line)	Frase Creek	Below OHW	Permanent	414 cu. yd.	4,205 sq. ft.
		Above OHW		728 cu. yd.	4,890 sq. ft.
Fill - Bypass Road	Frase Creek	Below OHW	Temporary	36 cu. yd.	847 sq. ft.
		Above OHW		411 cu. yd.	10,914 sq. ft.
Fill - Structure Foundation Class A	Frase Creek	Below OHW	Permanent	59 cu. yd.	2,311 sq. ft.
Excavation - Bypass Road	Frase Creek	Below OHW	Temporary	36 cu. yd.	847 sq. ft.
		Above OHW		160 cu. yd.	4,339 sq. ft.
Channel Excavation	Frase Creek	Below OHW	Permanent	472 cu. yd.	3,985 sq. ft.
		Above OHW		585 cu. yd.	8,410 sq. ft.
Sandbags for Cofferdams	Frase Creek	Below OHW	Temporary	5 cu. yd.	6 lf
Fill - Streambed Mix (In Culvert)	Frase Creek	Below OHW	Permanent	160 cu. yd.	50 lf
Fill - Streambed Mix (In Channel)	Frase Creek	Below OHW	Permanent	301 cu. yd.	321 lf
		Above OHW		35 cu. yd.	321 lf
Fill - Existing Channel	Frase Creek	Below OHW	Permanent	189 cu. yd.	4,258 sq. ft.
		Above OHW		342 cu. yd.	6,741 sq. ft.
Fill - Two Man Streambed Boulders	Frase Creek	Below OHW	Permanent	20 cu. yd.	392 sq. ft.
Fill - Flex MSE Bank Protection	South Fork Newaukum River	Below OHW	Permanent	14 cu. yd.	58 lf
		Above OHW		8 cu. yd.	58 lf
Fill - Streambed Mix	South Fork Newaukum River	Below OHW	Permanent	22 cu. yd.	71 lf
Fill - Select Borrow	South Fork Newaukum	Below OHW	Permanent	12 cu. yd.	52 lf
		Above OHW		3 cu. yd.	52 lf



REFERENCE NUMBER: CMP 1605 NWS-2018-684	PROJECT LOCATION (ADDRESS): PIGEON SPRINGS ROAD MP 0.529 CHEHALIS, WA 98352	PROPOSED PROJECT: FRASE CREEK CULVERT REPLACEMENT
APPLICANT: LEWIS COUNTY	DATUM: NAVD88 VERTICAL, NAD83 HORIZONTAL	DATE: 12/6/2018
SHEET: 8 OF 8 QUANTITIES		



US Army Corps
of Engineers®
Seattle District

NATIONWIDE PERMIT 13

Terms and Conditions

Effective Date: March 19, 2017



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- A. Description of Authorized Activities
 - B. U.S. Army Corps of Engineers (Corps) National General Conditions for all NWP's
 - C. Corps Seattle District Regional General Conditions
 - D. Corps Regional Specific Conditions for this NWP
 - E. Washington Department of Ecology (Ecology) Section 401 Water Quality Certification (401 Certification): General Conditions
 - F. Ecology 401 Certification: Specific Conditions for this NWP
 - G. Coastal Zone Management Consistency Response for this NWP
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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

Bank Stabilization. Bank stabilization activities necessary for erosion control or prevention, such as vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all of the following criteria:

- (a) No material is placed in excess of the minimum needed for erosion protection;
- (b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects (an exception is for bulkheads – the district engineer cannot issue a waiver for a bulkhead that is greater than 1,000 feet in length along the bank);
- (c) The activity will not exceed an average of one cubic yard per running foot, as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;
- (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;
- (e) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;
- (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas);
- (g) Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization;
- (h) The activity is not a stream channelization activity; and
- (i) The activity must be properly maintained, which may require repairing it after severe storms or erosion events. This NWP authorizes those maintenance and repair activities if they require authorization.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization 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, 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 construction, 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. Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line. (See general condition 32.) (Authorities: Sections 10 and 404)

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL NWP's

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. Every person who may wish to obtain permit authorization under one or more NWP's, or who is currently relying on an existing or prior permit authorization under one or more NWP's, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

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

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

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP's 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 Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or

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

17. **Tribal Rights.** No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the 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 their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified

historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

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

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NHPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NHPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NHPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)). (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation. (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)). (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation. (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements)

may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

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

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

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

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and 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 permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

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

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

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWP's 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

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

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than

minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

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

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

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

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

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal. (2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes. (3) When agency coordination is required, the district engineer will immediately provide (e.g., via 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 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.

District Engineer's Decision: 1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre. 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns. 3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district

engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer. 4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information: 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP. 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law. 3. NWPs do not grant any property rights or exclusive privileges. 4. NWPs do not authorize any injury to the property or rights of others. 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

C. CORPS SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to all NWPs for the Seattle District in Washington State, unless specified.

1. **Project Drawings:** Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the U.S. 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.

2. **Aquatic Resources Requiring Special Protection:** Activities resulting in a loss of waters of the United States in mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, wetlands in coastal lagoons, and wetlands in dunal systems along the Washington coast cannot be authorized by a NWP, except by the following NWPs:

- NWP 3 – Maintenance
- NWP 20 – Response Operations for Oil and Hazardous Substances
- NWP 32 – Completed Enforcement Actions
- NWP 38 – Cleanup of Hazardous and Toxic Waste

In order to use one of the above-referenced NWPs in any of the aquatic resources requiring special protection, prospective permittees must submit a PCN to the Corps of Engineers (see NWP general condition 32) and obtain written authorization before commencing work.

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 on Corps website) cannot be authorized by NWP.

4. Commencement Bay: The following NWPs may not be used to authorize activities located in the Commencement Bay Study Area (see Figure 2 on Corps website):

- NWP 12 – Utility Line Activities (substations)
- NWP 13 – Bank Stabilization
- NWP 14 – Linear Transportation Projects
- NWP 23 – Approved Categorical Exclusions
- NWP 29 – Residential Developments
- NWP 39 – Commercial and Institutional Developments
- NWP 40 – Agricultural Activities
- NWP 41 – Reshaping Existing Drainage Ditches
- NWP 42 – Recreational Facilities
- NWP 43 – Stormwater and Wastewater Management Facilities

5. Bank Stabilization: All projects including new or maintenance bank stabilization activities require PCN to the Corps of Engineers (see NWP general condition 32). For new bank stabilization projects only, the following must be submitted to the Corps of Engineers:

- 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.

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 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 project proponent 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.

If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, project proponents must provide a monitoring plan with the PCN that specifies how the proposed culvert will be assessed over a five-year period from the time of construction completion to ensure its effectiveness in providing passage at all life stages at all flows where the salmonid species would naturally seek passage. 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.

7. Stream Loss: A PCN is required for all activities that result in the loss of any linear feet of stream beds. No activity shall result in the loss of any linear feet of perennial stream beds or the loss of greater than 300 linear feet of intermittent and/or ephemeral stream beds. A stream may be rerouted if it is designed in a manner that maintains or restores hydrologic, ecologic, and geomorphic stream processes, provided there is not a reduction in the linear feet of stream bed. Streams include brooks, creeks, rivers, and historical waters of the U.S. that have been channelized into ditches. This condition does not apply to ditches constructed in uplands. Stream loss restrictions may be waived by the district engineer on a case-by-case basis provided the activities result in net increases of aquatic resource functions and services.

8. Mitigation: Pre-construction notification is required for any project that will result in permanent wetland losses that exceed 1,000 square feet. In addition to the requirements of General Condition 23 (Mitigation), compensatory mitigation at a minimum one-to-one ratio will be required for all permanent wetland losses that exceed 1,000 square feet. When a PCN is required for wetland losses less than 1,000 square feet, the Corps of Engineers may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation for impacts to marine waters, lakes, and streams will be determined on a case-by-case basis. If temporary impacts to waters of the U.S. exceed six months, the Corps of Engineers may require compensatory mitigation for temporal effects.

9. Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat Essential Fish Habitat (EFH) is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. If EFH may be adversely affected by a proposed activity, the prospective permittee must provide a written EFH assessment with an analysis of the effects of the proposed action on EFH. The assessment must identify the type(s) of essential fish habitat (i.e., Pacific salmon, groundfish, and/or coastal-pelagic species) that may be affected. If the Corps of Engineers determines the project will adversely affect EFH, consultation with NOAA Fisheries will be required. Federal agencies should follow their own procedures for complying with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. If PCN is required for the proposed activity, Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

10. Forage Fish: For projects in forage fish spawning habitat, in-water work must occur within designated forage fish work windows, or when forage fish are not spawning. If working outside of a designated work window, or if forage fish work windows are closed year round, work may occur if the work window restriction is released for a period of time after a forage fish spawning survey has been conducted by a biologist approved by the Washington State Department of Fish and Wildlife (WDFW). Forage fish species with designated in-water work windows include Pacific sand lance (*Ammodytes hexapterus*), Pacific herring (*Clupea pallasii*), and surf smelt (*Hypomesus pretiosus*). This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

11. Notification of Permit Requirements: The permittee must provide a copy of the nationwide permit authorization letter, conditions, and permit drawings to all contractors and any other parties performing the authorized work prior to the commencement of any work in waters of the U.S. The permittee must

ensure all appropriate contractors and any other parties performing the authorized work at the project site have read and understand relevant NWP conditions as well as plans, approvals, and documents referenced in the NWP letter. A copy of these documents must be maintained onsite throughout the duration of construction.

12. Construction Boundaries: Permittees must clearly mark all construction area boundaries 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.

13. Temporary Impacts and Site Restoration

- a. Temporary impacts to waters of the U.S. must not exceed six months unless the prospective permittee requests and receives a waiver by the district engineer. Temporary impacts to waters of the U.S. must be identified in the PCN.
- b. No more than 1/2 acre of waters of the U.S. may be temporarily filled unless the prospective permittee requests and receives a waiver from the district engineer (temporary fills do not affect specified limits for loss of waters associated with specific nationwide permits).
- c. Native soils removed from waters of the U.S. for project construction should be stockpiled and used for site restoration. Restoration of temporarily disturbed areas must include returning the area to pre-project ground surface contours. If native soil is not available from the project site for restoration, suitable clean soil of the same textural class may be used. Other soils may be used only if identified in the PCN.
- d. The permittee must revegetate disturbed areas with native plant species sufficient in number, spacing, and diversity to restore affected functions. A maintenance and monitoring plan commensurate with the impacts, may be required. Revegetation must begin as soon as site conditions allow within the same growing season as the disturbance unless the schedule is approved by the Corps of Engineers. Native plants removed from waters of the U.S. for project construction should be stockpiled and used for revegetation when feasible. Temporary Erosion and Sediment Control measures must be removed as soon as the area has established vegetation sufficient to control erosion and sediment.
- e. If the Corps determines the project will result in temporary impacts of submerged aquatic vegetation (SAV) that are more than minimal, a monitoring plan must be submitted. If recovery is not achieved by the end of the monitoring period, contingencies must be implemented, and additional monitoring will be required.

This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

D. CORPS REGIONAL SPECIFIC CONDITIONS FOR THIS NWPS: None

E. ECOLOGY 401 CERTIFICATION: GENERAL CONDITIONS

In addition to all the Corps National and Seattle Districts' Regional permit conditions, the following State General Section 401 Water Quality Certification (Section 401) conditions apply to all Nationwide Permits whether **certified** or **partially certified** in the State of Washington.

1. **For in-water construction activities.** Ecology Section 401 review is required for projects or activities authorized under NWPs that will cause, or may be likely to cause or contribute to an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC). State water quality standards and sediment management standards are available on Ecology's website. Note: In-water activities include any activity within a wetland and/or activities below the ordinary high water mark (OHWM).

2. Projects or Activities Discharging to Impaired Waters. Ecology Section 401 review is required for projects or activities authorized under NWPs if the project or activity 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 listed parameter. To determine if your project or activity is in a 303(d) listed segment of a waterbody, visit Ecology's Water Quality Assessment webpage for maps and search tools.

3. Application. For projects or activities that will require Ecology Section 401 review, applicants must provide Ecology with a Joint Aquatic Resources Permit Application (JARPA) along with the documentation provided to the Corps, as described in National General Condition 32, Pre-Construction Notification, including, when applicable: (a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, best management practices (BMPs), and any other Department of the Army or federal agency permits used or intended to be used to authorize any part of the proposed project or any related activity. (b) Drawings indicating the Ordinary High Water Mark (OHWM), delineation of special aquatic sites and other waters of the state. Wetland delineations must be prepared in accordance with the current 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. (c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See State General Condition 5 for details on mitigation requirements. (d) Other applicable requirements of Corps Nationwide Permit General Condition 32, Corps Regional Conditions, or notification conditions of the applicable NWP. (e) Within 180 calendar days from receipt of applicable documents noted above **and** a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program Ecology will provide the applicant notice of whether an individual Section 401 will be required for the project. If Ecology fails to act within a year after receipt of **both** of these documents, Section 401 is presumed waived.

4. Aquatic resources requiring special protection. Certain aquatic resources are unique, difficult-to-replace components of the aquatic environment in Washington State. Activities that would affect these resources must be avoided to the greatest extent possible. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscape settings. Ecology Section 401 review is required for activities in or affecting the following aquatic resources (and not prohibited by Seattle District Regional General Condition): (a) 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 and mature forested wetlands.
- Wetlands in coastal lagoons.
- Interdunal wetlands.
- Vernal pools.
- Alkali wetlands.

(b) Fens, aspen-dominated wetlands, camas prairie wetlands. (c) Marine water with eelgrass (*Zostera marina*) beds (except for NWP 48). (d) Category I wetlands. (e) Category II wetlands with a habitat score ≥ 8 points. This State General Condition does not apply to the following Nationwide Permits: NWP 20 – *Response Operations for Oil and Hazardous Substances*, NWP 32 – *Completed Enforcement Actions*

5. Mitigation. Applicants are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resources wherever practicable. For projects

requiring Ecology Section 401 review with unavoidable impacts to aquatics resources, adequate compensatory mitigation 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 a minimum, 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 towards 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, including credit/debit methodology, advance mitigation, and other programmatic approach 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.

6. Temporary Fills. Ecology Section 401 review is required for any project or activity with temporary fill in wetlands or other waters of the state for more than 90 days, unless the applicant has received written approval from Ecology. Note: This State General Condition does not apply to projects or activities authorized under NWP 33, *Temporary Construction, Access, and Dewatering*

7. Stormwater pollution prevention: All projects that involve land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoid discharge of pollutants in stormwater runoff to waters of the State.

(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 runoff from impervious surfaces shall be provided.

Ecology's Stormwater Management and Design Manuals and stormwater permit information are available on Ecology's website.

8. State Section 401 Review for PCNs not receiving 45-day response from the Seattle District. In the event the Seattle District Corps does not issue a NWP authorization letter within 45 calendar days of receipt of a **complete** pre-construction notification, the applicant must contact Ecology for Section 401 review prior to commencing work.

F. ECOLOGY 401 CERTIFICATION: SPECIFIC CONDITIONS FOR THIS NWP:

Certified subject to conditions.

1. An individual Section 401 Certification is required for new, or expansion of existing, bank stabilization in marine and estuarine waters of the Salish Sea.
2. Ecology Section 401 review is required for projects or activities authorized under this NWP if:
 - a. The project or activity is greater than 500 feet in length.
 - b. The project or activity has not been designed and stamped by a Professional Engineer or Engineering Geologist.
 - c. The project or activity exceeds an average of one cubic yard per running foot below the Ordinary High Water Mark or High Tide Line.
 - d. The project or activity involves discharges of dredged or fill material into special aquatic sites.

G. COASTAL ZONE MANAGEMENT CONSISTENCY RESPONSE FOR THIS NWP:

(Note: This only applies in the following counties: Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum and Whatcom)

Response: Ecology concurs that this NWP is consistent with the CZMP, subject to the following condition: An individual Coastal Zone Management Consistency Determination is required for project or activities under this NWP if State Section 401 review is required.

General Conditions: For Non-Federal Permittees

1. **Necessary Data and Information.** A Coastal Zone Management Program “Certification of Consistency” form is required for projects located within a coastal county. “Certification of Consistency” forms are available on Ecology’s website. The form shall include a description of the proposed project or activity and evidence of compliance with the applicable enforceable policies of the Washington Coastal Zone Management Program (CZMP). Also, a map of the site location is required.
2. **Timing.** Within 6 months from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 6 month period, concurrence with the CZMP is presumed.

General Conditions: For Federal Permittees (Agencies)

1. **Necessary Data and Information.** Federal agencies shall submit the determination, information, and analysis required by 15 CFR 930.39 to obtain a federal consistency determination.
2. **Timing.** Within 60 days from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 60 day period, concurrence with the CZMP is presumed.



US Army Corps
of Engineers®
Seattle District

NATIONWIDE PERMIT 27

Terms and Conditions



Effective Date: March 19, 2017

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- A. Description of Authorized Activities
 - B. U.S. Army Corps of Engineers (Corps) National General Conditions for all NWP
 - C. Corps Seattle District Regional General Conditions
 - D. Corps Regional Specific Conditions for this NWP
 - E. Washington Department of Ecology (Ecology) Section 401 Water Quality Certification (401 Certification): General Conditions
 - F. Ecology 401 Certification: Specific Conditions for this NWP
 - G. 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

27. Aquatic Habitat Restoration, Enhancement, and Establishment Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To be authorized by this NWP, the aquatic habitat restoration, enhancement, or establishment activity must be planned, designed, and implemented so that it results in aquatic habitat that resembles an ecological reference. An ecological reference may be based on the characteristics of an intact aquatic habitat or riparian area of the same type that exists in the region. An ecological reference may be based on a conceptual model developed from regional ecological knowledge of the target aquatic habitat type or riparian area.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms, as well as discharges of dredged or fill material to restore appropriate stream channel configurations after small water control structures, dikes, and berms, are removed; the installation of current deflectors; the enhancement, rehabilitation, or re-establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to enhance, rehabilitate, or re-establish stream meanders; the removal of stream barriers, such as undersized culverts, fords, and grade control structures; the backfilling of artificial channels; the removal of existing drainage structures, such as drain tiles, and the filling, blocking, or reshaping of drainage ditches to restore wetland hydrology; the installation of structures or fills necessary to restore or enhance wetland or stream hydrology; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; re-establishment of submerged aquatic vegetation in areas where those plant communities previously existed; re-establishment of tidal wetlands in tidal waters where those wetlands previously existed; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services. Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., the conversion of a stream to wetland or vice versa) or uplands. Changes in wetland plant communities that occur when wetland hydrology is more fully restored during wetland rehabilitation activities are not considered a conversion to another aquatic habitat type. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments. Compensatory mitigation is not required for activities authorized by this NWP since these activities must result in net increases in aquatic resource functions and services.

Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding stream or wetland enhancement or restoration agreement, or a wetland establishment agreement, between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), U.S. Forest Service (USFS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the Office of Surface Mining Reclamation and Enforcement (OSMRE) or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity results in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting. For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) The binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary stream enhancement or restoration action or wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSMRE or the applicable state agency. The report must also include information on baseline ecological conditions on the project site, such as a delineation of wetlands, streams, and/or other aquatic habitats. These documents must be submitted to the district

engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing any activity (see general condition 32), except for the following activities: (1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies; (2) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency. However, the permittee must submit a copy of the appropriate documentation to the district engineer to fulfill the reporting requirement. (Authorities: Sections 10 and 404) Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee projects. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL NWPs

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. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

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

4. Migratory Bird Breeding Areas. 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 Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible

inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status. (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. **Tribal Rights**. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. **Endangered Species**. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the 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 their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out

appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

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

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district

engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)). (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWP's, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation. (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)). (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation. (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting

a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

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

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

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

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and 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 permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as

possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

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

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

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

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

(2) Location of the proposed activity;

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

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

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

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

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

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

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

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal. (2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes. (3) When agency coordination is required, the district engineer will immediately provide (e.g., via 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 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.

District Engineer's Decision: 1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre. 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method

may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns. 3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer. 4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information: 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP. 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law. 3. NWPs do not grant any property rights or exclusive privileges. 4. NWPs do not authorize any injury to the property or rights of others. 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

C. CORPS SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to all NWPs for the Seattle District in Washington State, unless specified.

1. Project Drawings: Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the U.S. 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.

2. Aquatic Resources Requiring Special Protection: Activities resulting in a loss of waters of the United States in mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, wetlands in coastal lagoons, and wetlands in dunal systems along the Washington coast cannot be authorized by a NWP, except by the following NWPs:

- NWP 3 – Maintenance
- NWP 20 – Response Operations for Oil and Hazardous Substances
- NWP 32 – Completed Enforcement Actions
- NWP 38 – Cleanup of Hazardous and Toxic Waste

In order to use one of the above-referenced NWPs in any of the aquatic resources requiring special protection, prospective permittees must submit a PCN to the Corps of Engineers (see NWP general condition 32) and obtain written authorization before commencing work.

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 on Corps website) cannot be authorized by NWP.

4. Commencement Bay: The following NWPs may not be used to authorize activities located in the Commencement Bay Study Area (see Figure 2 on Corps website):

- NWP 12 – Utility Line Activities (substations)
- NWP 13 – Bank Stabilization
- NWP 14 – Linear Transportation Projects
- NWP 23 – Approved Categorical Exclusions
- NWP 29 – Residential Developments
- NWP 39 – Commercial and Institutional Developments
- NWP 40 – Agricultural Activities
- NWP 41 – Reshaping Existing Drainage Ditches
- NWP 42 – Recreational Facilities
- NWP 43 – Stormwater and Wastewater Management Facilities

5. Bank Stabilization: All projects including new or maintenance bank stabilization activities require PCN to the Corps of Engineers (see NWP general condition 32). For new bank stabilization projects only, the following must be submitted to the Corps of Engineers:

- 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.

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

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 project proponent 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.

If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, project proponents must provide a monitoring plan with the PCN that specifies how the proposed culvert will be assessed over a five-year period from the time of construction completion to ensure its effectiveness in providing passage at all life stages at all flows where the salmonid species would naturally seek passage. 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.

7. Stream Loss: A PCN is required for all activities that result in the loss of any linear feet of stream beds. No activity shall result in the loss of any linear feet of perennial stream beds or the loss of greater than 300 linear feet of intermittent and/or ephemeral stream beds. A stream may be rerouted if it is designed in a manner that maintains or restores hydrologic, ecologic, and geomorphic stream processes, provided there is not a reduction in the linear feet of stream bed. Streams include brooks, creeks, rivers, and historical waters of the U.S. that have been channelized into ditches. This condition does not apply to ditches constructed in uplands. Stream loss restrictions may be waived by the district engineer on a case-by-case basis provided the activities result in net increases of aquatic resource functions and services.

8. Mitigation: Pre-construction notification is required for any project that will result in permanent wetland losses that exceed 1,000 square feet. In addition to the requirements of General Condition 23 (Mitigation), compensatory mitigation at a minimum one-to-one ratio will be required for all permanent wetland losses that exceed 1,000 square feet. When a PCN is required for wetland losses less than 1,000 square feet, the Corps of Engineers may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation for impacts to marine waters, lakes, and streams will be determined on a case-by-case basis. If temporary impacts to waters of the U.S. exceed six months, the Corps of Engineers may require compensatory mitigation for temporal effects.

9. Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat Essential Fish Habitat (EFH) is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. If EFH may be adversely affected by a proposed activity, the prospective permittee must provide a written EFH assessment with an analysis of the effects of the proposed action on EFH. The assessment must identify the type(s) of essential fish habitat (i.e., Pacific salmon, groundfish, and/or coastal-pelagic species) that may be affected. If the Corps of Engineers determines the project will adversely affect EFH, consultation with NOAA Fisheries will be required. Federal agencies should follow their own procedures for complying with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. If PCN is required for the proposed activity, Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

10. Forage Fish: For projects in forage fish spawning habitat, in-water work must occur within designated forage fish work windows, or when forage fish are not spawning. If working outside of a designated work window, or if forage fish work windows are closed year round, work may occur if the

work window restriction is released for a period of time after a forage fish spawning survey has been conducted by a biologist approved by the Washington State Department of Fish and Wildlife (WDFW). Forage fish species with designated in-water work windows include Pacific sand lance (*Ammodytes hexapterus*), Pacific herring (*Clupea pallasii*), and surf smelt (*Hypomesus pretiosus*). This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

11. Notification of Permit Requirements: The permittee must provide a copy of the nationwide permit authorization letter, conditions, and permit drawings to all contractors and any other parties performing the authorized work prior to the commencement of any work in waters of the U.S. The permittee must ensure all appropriate contractors and any other parties performing the authorized work at the project site have read and understand relevant NWP conditions as well as plans, approvals, and documents referenced in the NWP letter. A copy of these documents must be maintained onsite throughout the duration of construction.

12. Construction Boundaries: Permittees must clearly mark all construction area boundaries 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.

13. Temporary Impacts and Site Restoration

- a. Temporary impacts to waters of the U.S. must not exceed six months unless the prospective permittee requests and receives a waiver by the district engineer. Temporary impacts to waters of the U.S. must be identified in the PCN.
- b. No more than 1/2 acre of waters of the U.S. may be temporarily filled unless the prospective permittee requests and receives a waiver from the district engineer (temporary fills do not affect specified limits for loss of waters associated with specific nationwide permits).
- c. Native soils removed from waters of the U.S. for project construction should be stockpiled and used for site restoration. Restoration of temporarily disturbed areas must include returning the area to pre-project ground surface contours. If native soil is not available from the project site for restoration, suitable clean soil of the same textural class may be used. Other soils may be used only if identified in the PCN.
- d. The permittee must revegetate disturbed areas with native plant species sufficient in number, spacing, and diversity to restore affected functions. A maintenance and monitoring plan commensurate with the impacts, may be required. Revegetation must begin as soon as site conditions allow within the same growing season as the disturbance unless the schedule is approved by the Corps of Engineers. Native plants removed from waters of the U.S. for project construction should be stockpiled and used for revegetation when feasible. Temporary Erosion and Sediment Control measures must be removed as soon as the area has established vegetation sufficient to control erosion and sediment.
- e. If the Corps determines the project will result in temporary impacts of submerged aquatic vegetation (SAV) that are more than minimal, a monitoring plan must be submitted. If recovery is not achieved by the end of the monitoring period, contingencies must be implemented, and additional monitoring will be required.

This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

D. CORPS REGIONAL SPECIFIC CONDITIONS FOR THIS NWP:

1. A pre-construction notification (PCN) must be submitted to the district engineer (see NWP general condition 32) for any proposed project located in a Department of the Army permit compensatory mitigation site, Comprehensive Environmental Response, Compensation and Liability Act (Superfund)

site, Resource Conservation and Recovery Act hazardous waste clean-up site, Washington State Department of Ecology compensatory mitigation site, or Washington State Model Toxics Control Act clean-up site.

2. For projects subject to PCN, if there is a loss of waters of the U.S., the project proponent must explain in the PCN why the loss is necessary and show how it would be fully offset by the beneficial elements of the project.
3. The PCN must contain a description of pre-project site conditions (including photographs), aquatic functions the site provides, and benefits anticipated from project construction.
4. The project proponent must include maintenance and monitoring plans with the PCN.
5. Restoration projects involving shellfish seeding must use shellfish native to the watershed.

E. ECOLOGY 401 CERTIFICATION: GENERAL CONDITIONS

In addition to all the Corps National and Seattle Districts' Regional permit conditions, the following State General Section 401 Water Quality Certification (Section 401) conditions apply to all Nationwide Permits whether **certified** or **partially certified** in the State of Washington.

1. **For in-water construction activities.** Ecology Section 401 review is required for projects or activities authorized under NWPs that will cause, or may be likely to cause or contribute to an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC). State water quality standards and sediment management standards are available on Ecology's website. Note: In-water activities include any activity within a wetland and/or activities below the ordinary high water mark (OHWM).

2. **Projects or Activities Discharging to Impaired Waters.** Ecology Section 401 review is required for projects or activities authorized under NWPs if the project or activity 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 listed parameter. To determine if your project or activity is in a 303(d) listed segment of a waterbody, visit Ecology's Water Quality Assessment webpage for maps and search tools.

3. **Application.** For projects or activities that will require Ecology Section 401 review, applicants must provide Ecology with a Joint Aquatic Resources Permit Application (JARPA) along with the documentation provided to the Corps, as described in National General Condition 32, Pre-Construction Notification, including, when applicable: (a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, best management practices (BMPs), and any other Department of the Army or federal agency permits used or intended to be used to authorize any part of the proposed project or any related activity. (b) Drawings indicating the Ordinary High Water Mark (OHWM), delineation of special aquatic sites and other waters of the state. Wetland delineations must be prepared in accordance with the current 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. (c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See State General Condition 5 for details on mitigation requirements. (d) Other applicable requirements of Corps Nationwide Permit General Condition 32, Corps Regional Conditions, or notification conditions of the applicable NWP. (e) Within 180 calendar days from receipt of applicable documents noted above and a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program Ecology will provide the applicant notice of whether an individual Section 401 will be required for the project. If

Ecology fails to act within a year after receipt of **both** of these documents, Section 401 is presumed waived.

4. Aquatic resources requiring special protection. Certain aquatic resources are unique, difficult-to-replace components of the aquatic environment in Washington State. Activities that would affect these resources must be avoided to the greatest extent possible. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscape settings. Ecology Section 401 review is required for activities in or affecting the following aquatic resources (and not prohibited by Seattle District Regional General Condition): (a) 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 and mature forested wetlands.
- Wetlands in coastal lagoons.
- Interdunal wetlands.
- Vernal pools.
- Alkali wetlands.

(b) Fens, aspen-dominated wetlands, camas prairie wetlands. (c) Marine water with eelgrass (*Zostera marina*) beds (except for NWP 48). (d) Category I wetlands. (e) Category II wetlands with a habitat score ≥ 8 points. This State General Condition does not apply to the following Nationwide Permits: NWP 20 – *Response Operations for Oil and Hazardous Substances*, NWP 32 – *Completed Enforcement Actions*

5. Mitigation. Applicants are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resources wherever practicable. For projects requiring Ecology Section 401 review with unavoidable impacts to aquatic resources, adequate compensatory mitigation 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 a minimum, 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 towards 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, including credit/debit methodology, advance mitigation, and other programmatic approach 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.

6. Temporary Fills. Ecology Section 401 review is required for any project or activity with temporary fill in wetlands or other waters of the state for more than 90 days, unless the applicant has received written approval from Ecology. Note: This State General Condition does not apply to projects or activities authorized under NWP 33, *Temporary Construction, Access, and Dewatering*

7. Stormwater pollution prevention: All projects that involve land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoid discharge of pollutants in stormwater runoff to waters of the State.

(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 runoff from impervious surfaces shall be provided. Ecology's Stormwater Management and Design Manuals and stormwater permit information are available on Ecology's website.

8. State Section 401 Review for PCNs not receiving 45-day response from the Seattle District. In the event the Seattle District Corps does not issue a NWP authorization letter within 45 calendar days of receipt of a **complete** pre-construction notification, the applicant must contact Ecology for Section 401 review prior to commencing work.

F. ECOLOGY 401 CERTIFICATION: SPECIFIC CONDITIONS FOR THIS NWP:

Certified subject to conditions. Ecology Section 401 review is required for projects or activities authorized under this NWP if:

1. The project or activity involves fill in tidal waters.
2. The project or activity affects ½ acre or more of wetlands.
3. The project or activity is a mitigation bank or an advanced mitigation site.

The project or activity is in or adjoining a known contaminated or cleanup site.

G. COASTAL ZONE MANAGEMENT CONSISTENCY RESPONSE FOR THIS NWP:

(Note: This is only applies in the following counties: Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum and Whatcom)

Response: Ecology concurs that this NWP is consistent with the CZMP, subject to the following condition: An individual Coastal Zone Management Consistency Determination is required for project or activities under this NWP if State Section 401 review is required.

General Conditions: For Non-Federal Permittees

1. **Necessary Data and Information.** A Coastal Zone Management Program "Certification of Consistency" form is required for projects located within a coastal county. "Certification of Consistency" forms are available on Ecology's website. The form shall include a description of the proposed project or activity and evidence of compliance with the applicable enforceable policies of the Washington Coastal Zone Management Program (CZMP). Also, a map of the site location is required.

2. **Timing.** Within 6 months from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 6 month period, concurrence with the CZMP is presumed.

General Conditions: For Federal Permittees (Agencies)

1. **Necessary Data and Information.** Federal agencies shall submit the determination, information, and analysis required by 15 CFR 930.39 to obtain a federal consistency determination.

2. **Timing.** Within 60 days from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 60 day period, concurrence with the CZMP is presumed.



US Army Corps
of Engineers ©
Seattle District

CERTIFICATE OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT



Permit Number: NWS-_____

Name of Permittee: _____

Date of Issuance: _____

Upon completion of the activity authorized by this permit, please check the applicable boxes below, date and sign this certification, and return it to the following address:

Department of the Army
U.S. Army Corps of Engineers
Seattle District, Regulatory Branch
Post Office Box 3755
Seattle, Washington 98124-3755

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your authorization, your permit may be subject to suspension, modification, or revocation.

<input type="checkbox"/>	<p>The work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of this permit.</p> <p>Date work complete: _____</p> <p><input type="checkbox"/> Photographs and as-built drawings of the authorized work (OPTIONAL, unless required as a Special Condition of the permit).</p>
--------------------------	--

<input type="checkbox"/>	<p>If applicable, the mitigation required (e.g., construction and plantings) in the above-referenced permit has been completed in accordance with the terms and conditions of this permit (not including future monitoring).</p> <p>Date work complete: _____ <input type="checkbox"/> N/A</p> <p><input type="checkbox"/> Photographs and as-built drawings of the mitigation (OPTIONAL, unless required as a Special Condition of the permit).</p>
--------------------------	--

<input type="checkbox"/>	<p>Provide phone number/email for scheduling site visits (must have legal authority to grant property access).</p> <p>Printed Name: _____</p> <p>Phone Number: _____ Email: _____</p>
--------------------------	---

Printed Name: _____

Signature: _____

Date: _____

APPENDIX F

GEOTECHNICAL ENGINEERING REPORT

Geotechnical Engineering Report Fraser Creek Culvert Replacement Onalaska, Washington

February 6, 2017

Prepared for

Lewis County Public Works Department
2025 NE Kresky Avenue
Chehalis, Washington



1115 West Bay Drive NW, Suite 201
Olympia, WA 98502
(360) 791-3178

Geotechnical Engineering Report Fraser Creek Culvert Replacement Onalaska, Washington

This document was prepared by, or under the direct supervision of, the undersigned, whose seal is affixed below.

Name: Calvin McCaughan
Washington/No. 44709

Date: February 6, 2017



Document prepared by: Ben J Ford Benjamin Ford
Project Manager

Document reviewed by: Calvin McCaughan Calvin McCaughan, PE
Quality Reviewer

Date: February 6, 2017
Project No.: 1647001.010.011
File path: \\olympia1\PROJECTS\1647\001.010\R\Signature Page.docx
Project Coordinator: MCS

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2	Site and Exploration Plan
3	Geologic Cross Section

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APPENDICES

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LIST OF ABBREVIATIONS AND ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ASTM	ASTM International
bgs	below ground surface
CMP	corrugated metal pipe
County	Lewis County
FHWA	Federal Highway Administration
FS	factor of safety
ft	foot/feet
GRS-IBS	geosynthetic reinforced soil-integrated bridge system
H	height
LAI	Landau Associates, Inc.
MDD	maximum dry density
pcf	pounds per cubic foot
psf	pounds per square foot
RSF	reinforced soil foundation
WSDOT	Washington State Department of Transportation
yr	year

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1.0 INTRODUCTION

This geotechnical engineering report summarizes the results of services provided by Landau Associates, Inc. (LAI) for Lewis County's (County's) proposed Frase Creek Culvert Replacement project near Onalaska, Washington. The general project location is shown on Figure 1. The exploration locations and project site features are shown on Figure 2. A cross section showing the geologic conditions encountered is presented on Figure 3. Appendix A provides a description of the field explorations and presents summary logs of conditions observed as part of our investigation. Appendix B provides a description of our laboratory testing program and presents test results.

This report has been prepared based on our discussions with representatives of the County, preliminary design drawings provided by the County, data collected during our field exploration and laboratory testing programs, our familiarity with geologic conditions within the vicinity of the project site, and our experience with similar projects.

1.1 Project Understanding

The County plans to replace the existing 60-inch-tall by 84-inch-wide corrugated metal pipe that crosses Pigeon Springs Road (MP 0.5, CMP 1515). The culvert replacement will be either a three-sided concrete box culvert or a geosynthetic reinforced soil-integrated bridge system (GRS-IBS) and will follow a different alignment than the existing culvert. We expect that the replacement structure will be about 20 feet (ft) wide. The Frase Creek streambed will be regraded to soften a 4-ft drop that currently exists at the confluence of Frase Creek/South Fork Newaukum River.

We understand that no roadway realignments are required at the culvert replacement location. A stream bypass will be used to divert Frase Creek during construction.

1.2 Scope of Services

The County retained our geotechnical engineering services to support design of the Frase Creek Culvert Replacement project. Our services were provided in general accordance with Task Order Number 1, signed December 1, 2016. Our scope of services for this project included the following:

- compiled and reviewed readily available geotechnical and geologic information about the project site and its vicinity;
- coordinated a geotechnical investigation, marked exploration locations in the field, and notified Public Utility's "One-Call" service prior to beginning our field investigation;
- completed a field investigation that included advancing two geotechnical borings 26.5 and 27.5 ft below ground surface (bgs) at the location of the proposed Frase Creek crossing;
- completed limited laboratory testing to aid in the classification of soil index properties; and
- prepared and submitted this geotechnical engineering report that presents our conclusions and recommendations along with supporting data.

2.0 SITE CONDITIONS

This section discusses the geologic setting of the project area and describes the surface and subsurface conditions observed at the time of our field investigation. Interpretations of the site conditions are based on our review of available information and on the results of our site reconnaissance, subsurface explorations, and laboratory testing.

2.1 Geologic Setting

Geologic information for the project area was obtained from the Geologic Map of the Centralia 1:100,000 Quadrangle, Washington (Schasse, H.W 1987), published by the Washington State Department of Natural Resources. According to Schasse, near surface deposits in the site vicinity consist of alluvium (Qal), alpine outwash (Qapo), and Northcraft Formation (Tno). Alluvium generally consists of a moderately to well-sorted cobble, gravel, and sand with some silt, clay, and peat. Alpine outwash deposits generally consist of stratified sand, gravel, and cobbles and may include peat, silt, and clay. The Northcraft Formation generally comprises igneous rock flows and includes interbedded relationships with underlying sedimentary rock formations.

The geologic conditions encountered in our explorations are generally consistent with the mapped geologic conditions, with the exception of approximately 4 to 5 ft of undocumented embankment fill. Boulders and basalt outcrops were observed in the streambed of the adjacent South Fork Newaukum River during our field investigation but were not encountered in our explorations.

2.2 Surface Conditions

Pigeon Springs Road runs north–south through the project site. Topography surrounding the roadway embankment is generally flat to the west. The South Fork Newaukum River parallels the site to the east and is situated about 12 ft below the roadway. At the culvert crossing, the Frase Creek streambed is located about 8 to 9 ft below the existing roadway surface.

The project site is surrounded by rural, residential properties and undeveloped forestland. Vegetation in the vicinity of the project site generally consists of deciduous and coniferous trees with an undergrowth of brush and grasses.

2.3 Subsurface Conditions

Subsurface conditions were explored on December 16, 2016 by advancing and sampling two borings (B-1 and B-2) at the culvert crossing. The approximate locations of the explorations are shown on Figure 2 and a geologic cross section is shown on Figure 3. The explorations were completed by Holocene Drilling, Inc. of Puyallup, Washington under subcontract to LAI. More detailed information, including summary exploration logs, is provided in Appendix A.

Soils encountered below existing surface materials (i.e., topsoil or pavement) were categorized in four general units:

- **Fill:** Underlying the asphalt pavement section in boring B-1, this unit generally consisted of sandy, fine to coarse gravel with varying cobble and silt content. The fill encountered was typically brown and dense.
- **Alluvium:** Underlying the fill in boring B-1 and the topsoil in boring B-2, this unit varied from a silt with sand to a very silty fine sand. The alluvium unit was brown and loose in density.
- **Alpine outwash:** Encountered below the alluvium in both borings, the alpine outwash consisted of a cobbly, silty, fine to coarse sand with varying gravel content or a cobbly, silty, fine to coarse gravel with varying sand content. The alpine outwash was gray to brown and medium dense to very dense.
- **Mudstone:** Underlying the alluvium in borings B-1 and B-2, this unit consisted of a conglomerate of mainly silt and clay with varying amounts of sand and gravel. Considered an extremely soft rock, the mudstone varied from dark gray to reddish-gray.

Although not encountered in the borings, boulders could be found in the soils at the site. Contractors should be prepared to deal with these conditions.

At the time of our December 16, 2016 field investigation, groundwater was observed in boring B-1 at 11 ft bgs. After drilling was completed, the groundwater rose to 6 ft bgs in the borehole. We interpret the alpine outwash soil in exploration B-1 to be hydraulically connected to Frase Creek. Groundwater was not encountered in boring B-2. We anticipate groundwater elevations along the alignment of the replacement structure will be close to the surface water elevation of Frase Creek. Groundwater levels in the project area are expected to fluctuate seasonally, with maximum groundwater levels generally occurring during the late winter and early spring.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our field exploration, laboratory testing, and engineering analyses, it is our opinion that subsurface conditions at the site are suitable for both culvert replacement options: 1) a three-sided box culvert or 2) a GRS-IBS. Mudstone or alpine outwash units will be encountered at the base of foundation excavations. These materials will provide sufficient foundation support for the two culvert replacement options.

Alpine outwash has the potential to be highly permeable and may require dewatering. During our explorations, we noted that the groundwater rose in boring B-1. We attribute this to a hydraulic connection between groundwater in the alpine outwash unit and Frase Creek. It should be anticipated that a stream bypass combined with other dewatering methods will be required.

The following sections present geotechnical conclusions and recommendations in accordance with the scope of services authorized for this project.

3.1 Considerations for Selection of a Replacement Structure

GRS-IBS is a cost-effective solution that often replaces conventional short-span bridges (and sometimes culverts). If cost and maintenance considerations are the same, we recommend using the three-sided box culvert. Table 1 lists specific items to consider when deciding between the two culvert replacement options.

Table 1. Selection Considerations

Item	Three-sided Box Culvert	GRS-IBS
Excavation	Excavation quantities for the culvert option will be approximately 30 percent lower. Excavation exposure along the South Fork Newaukum River will also be about 30 percent less.	Construction of the two abutments will increase excavation quantities and impacts to South Fork Newaukum Riverbank (approximately 30 percent larger impact). Deeper excavation, about 1.5 ft for RSF placement.
Labor skill set	No advantage—widely used product requiring basic earthwork methods and practices.	No advantage—newer product, but requires basic earthwork methods and practices.
Materials	Dependent on availability and delivery of precast concrete box culvert. Requires cranes for placement of culvert sections. Does not require special aggregate source.	Materials are generally available. Requires substantial quantity of processed, washed rock for abutments. Costs increase if GRS aggregate source is not nearby.
Settlement	No advantage—minimal settlement.	No advantage—minimal settlement.
Schedule	Potential advantage due to less earthwork activities.	No advantage.

ft = feet

GRS = geosynthetic reinforced soil

GRS-IBS = geosynthetic reinforced soil-integrated bridge system

RSF = reinforced soil foundation

3.2 Seismic Design Criteria

If a GRS-IBS is chosen as the replacement structure, external stability for seismic events will need to be checked. There are no seismic design requirements for internal stability of the GRS-IBS system (FHWA 2012a). The American Association of State Highway and Transportation Officials' (AASHTO's) bridge design parameters for seismic design category, site class, acceleration coefficient, and spectral acceleration coefficients are presented in Table 2. These parameters are in accordance with the Seventh Edition of the 2014 AASHTO LRFD Bridge Design Specifications (AASHTO 2014). This specification recommends a 7 percent probability of exceedance in 75 years (nominal 1,000-year earthquake) design event for development of a design spectrum for bridges.

Table 2. AASHTO Seismic Parameters

AASHTO Seismic Parameter	Recommended Value
Site Class	C
Effective peak ground acceleration coefficient $A_s = F_{pga}PGA = (1.070)(0.330)$	0.353
Design spectral acceleration coefficient at 0.2-second period $S_{DS} = F_a S_s = (1.102)(0.746)$	0.822
Design spectral acceleration coefficient at 1.0-second period $S_{D1} = F_v S_1 = (1.540)(0.260)$	0.400

AASHTO = American Association of State Highway and Transportation Officials
PGA = peak ground acceleration

The site is underlain by very dense soil and soft rock. On this basis, it is our opinion that there is a low risk for seismically induced soil liquefaction or lateral spreading to develop. Considering the location of the site in respect to the nearest known active crustal faults and the presence of a relatively thick layer of soft rock, it is our opinion that the risk of ground rupture due to surface faulting is low.

3.3 GRS-IBS Design Parameters

The following sections provide design parameters in general accordance with the U.S. Department of Transportation's Federal Highway Administration's Geosynthetic Reinforced Soil Integrated Bridge System Interim Implementation Guide (Design Manual; FHWA 2012a). The design parameters should be used in conjunction with the construction recommendations provided in Section 3.5 of this report.

3.3.1 GRS Abutment Design Assumptions

Because scour depths have not been evaluated for the site, LAI has assumed a maximum geosynthetic reinforced soil (GRS) abutment height of 13 ft for our calculations (and planning purposes). This height is based on a 12-ft difference in elevation between the existing roadway surface and the streambed at the confluence of Frase Creek and South Fork Newaukum River with 1 ft of assumed scour. LAI has assumed a minimum soil reinforcement length (abutment width) of 80 percent of the abutment

height (includes the embedded depth). Therefore, the GRS abutment should have a minimum width of 10.5 ft. This should be confirmed with a global stability check during final design.

The GRS abutment should be supported by a reinforced soil foundation (RSF). Based on the previously stated assumptions, the depth and width of the RSF should be 2.5 and 13 ft, respectively.

3.3.2 GRS Abutment Bearing Capacity and Settlement

We recommend a net allowable soil bearing pressure of 3,500 pounds per square foot (psf) for GRS abutment foundations and RSFs. The net allowable bearing pressure corresponds to the maximum pressure imposed on the soil at the foundation level and includes the weight of GRS abutment, bridge deck, and any surcharges. The recommended net allowable bearing pressure may be increased by one-third for transient wind or seismic loads. The allowable bearing pressure presented above includes a factor of safety (FS) of at least 3.0 on the calculated ultimate bearing capacity. The Design Manual requires a FS of at least 2.5 against bearing capacity failure.

We estimate less than 1 inch of total settlement for GRS abutments that are designed and constructed as recommended. We estimate that differential settlements will be ½ inch or less along 50 ft of continuous footing. We anticipate that settlement will occur as GRS abutment loads are applied during construction.

3.3.3 GRS Abutment Lateral Resistance and Earth Pressures

Lateral loads on GRS abutments can be resisted by friction acting on the base of abutment footings. Passive resistance should not be used for lateral resistance given the potential for scour at the face of the abutment. Section 4.3.6.1 of the Design Manual recommends an ultimate frictional resistance (μ) of 0.54 for the coefficient of base friction. The Design Manual recommends an FS against direct sliding greater than or equal to 1.5.

For the GRS abutments, it is assumed that the walls are in an active state and free to rotate (i.e., allowed to rotate at least 0.001 times wall height). We recommend an active earth pressure using an equivalent fluid density of 35 pounds per cubic foot (pcf). For seismic-loading conditions, a rectangular earth pressure equal to $7H$ psf, where H is the height of the wall, should be added to the active pressure provided above. This seismic earth pressure is based on the Mononobe-Okabe theory and assumes one-half of the peak ground surface acceleration for the site.

The lateral soil pressures provided above do not include traffic surcharges and assume level backslope and fully drained backfill conditions. For uniform surcharge pressures, a uniformly distributed lateral load of 0.28 times the vertical surcharge pressure should be added for GRS abutment walls.

3.3.4 GRS Abutment Drainage

It is anticipated that water from Frase Creek and/or groundwater may rise above the base of the GRS abutment. To prevent buildup of hydrostatic pressures, open-graded, free-draining backfill material should be used from the base of the GRS abutment to 1 ft above the 100-year (yr) flood elevation. The open-graded GRS abutment backfill should meet the requirements outlined in Section 3.3.1.2 of the Design Manual. At 1 ft above the 100-yr flood elevation and extending to the top of the GRS abutment, the backfill material should consist of Gravel Borrow for Structural Earth Wall, as defined in Section 9-03.14(4) of the Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT Standard Specifications; WSDOT 2016).

3.4 Culvert Design Parameters

The following sections provide specific design recommendations if the three-sided (open bottom) culvert option is chosen.

3.4.1 Culvert Design Assumptions

As with the GRS-IBS, the bottom of the foundation for a replacement culvert likely will be situated at about 13 ft bgs. The replacement culvert should be founded on a 1-ft-thick structural fill bearing pad to utilize the design recommendations provided below.

3.4.2 Culvert Bearing Capacity and Settlement

Spread footings used to support the proposed open-bottom culvert should have a minimum width of 24 inches. Culvert footings can be designed using a maximum allowable soil bearing pressure of 3,000 psf if established on mudstone or alpine outwash soil units or on structural fill extending to these units. The recommended allowable bearing pressure may be increased by one-third for transient wind or seismic loads. The term “allowable bearing pressure” refers to pressure that can be imposed on the soil at foundation level. The pressure results from the total of all dead and live loads, including the weight of any backfill placed above the culvert lid. The allowable bearing pressure includes an FS of 3.0 on ultimate values.

We estimate less than 1 inch of total settlement for culvert foundations that are designed and constructed as recommended. We estimate that differential settlements will be ½ inch or less along 50 ft of continuous footing. We anticipate that settlement will occur as loads are applied during construction.

3.4.3 Culvert Lateral Resistance and Earth Pressures

Resistance to lateral loads will be provided by friction acting along the base of the culvert footings and by passive lateral earth pressures acting against the sides of the footings. Passive resistance should be considered only for foundations embedded below the design scour depth. An allowable coefficient of sliding resistance of 0.35, applied to vertical dead loads only, may be used to compute frictional

resistance at the base of the footings. An allowable passive lateral earth pressure of 200 pcf may be used for the sides of footings. The allowable values provided for coefficient of sliding resistance and passive earth pressure have been reduced by a factor of 1.5 from ultimate values.

For this project, the culvert walls will be inherently stiff and restrained from rotation during backfilling. Therefore, the soil pressure exerted on the below grade walls of the replacement culvert will be at-rest soil pressure.

We recommend that non-yielding (restrained) walls be designed for lateral earth pressures representative of unsaturated conditions, provided the wall drainage recommendations in Section 3.4.4 of this report are followed. For unsaturated conditions, we recommend that culvert walls be designed to resist an equivalent fluid density of 56 pcf.

If the culvert walls are designed for seismic-loading conditions, a rectangular earth pressure equal to $17H$ psf, where H is the height of the wall, should be added to the at-rest pressures provided above. This seismic earth pressure is based on the Mononobe-Okabe theory and assumes full peak ground surface acceleration for the site.

The lateral soil pressures provided above do not include traffic surcharges and assume level backslope conditions. For uniform surcharge pressures, a uniformly distributed lateral load of 0.44 times the vertical surcharge pressure should be added for culvert walls.

3.4.4 Culvert Wall Drainage

Measuring from the back of the wall, a 3-ft zone of free-draining backfill should be included to reduce the risk of hydrostatic pressure buildup behind the culvert walls. The free-draining material should consist of Gravel Backfill for Walls as specified in Section 9-03.12(2) of the 2016 WSDOT Standard Specifications. In addition to free-draining backfill material, a perforated drain pipe should be placed 1 ft above the ordinary high water mark, adjacent to the back of wall, in the free-draining backfill material. The downstream side of the perforated drain pipe should be daylighted.

3.5 Construction Recommendations

The following sections provide construction recommendations to be used in conjunction with the design parameters provided above.

3.5.1 Subgrade Preparation

At the anticipated excavation depth for the replacement structure, mudstone and alpine outwash units are expected to be encountered. These materials will provide sufficient foundation support for the proposed structures as long as they stay in an undisturbed condition. Because the mudstone is a sedimentary rock and comprises significant amounts of silt and clay, rapid deterioration of the material should be expected if cuts are left open, exposed to moisture, and/or disturbed by

construction equipment or foot traffic. The alpine outwash can have a significant amount of fines and should be considered moisture sensitive.

A heavy-duty hydraulic excavator should be able to excavate to the planned depths. Because the underlying soils are sensitive to disturbance, we recommend that a smooth-bladed bucket is used to excavate to the final subgrade elevation. Although boulders were not encountered in our explorations, they are present in the adjacent streambed, and the contractor should be prepared to deal with oversize material.

To check for the presence of soft, loose, and/or disturbed areas, the prepared subgrade should be proof-rolled with a loaded dump truck, large vibrating roller, or equivalent equipment in the presence of a qualified geotechnical or civil engineer. Limited access areas can be evaluated using a probe rod. If any soft, loose, and/or disturbed areas are revealed during proof-rolling or probing, these areas should be overexcavated and replaced with structural fill. Overexcavation of unsuitable foundation soil should be performed in accordance with Section 2-03.3(14)E of the 2016 WSDOT Standard Specifications (WSDOT 2016).

3.5.2 Wet Weather Considerations

Site preparation activities as well as other earthwork-related construction will be influenced by weather conditions. The near surface soil at the site contains a significant amount of fine sand and silt and is expected to be moisture sensitive. Site grading activities using moisture-sensitive soil should take place during the relatively warm and dry period between mid-summer and early fall. Completing these activities outside of this construction window could lead to a significant increase in construction costs due to weather-related delays and repair of disturbed areas.

3.5.3 Construction Dewatering

The alpine outwash unit overlying the mudstone unit can be relatively permeable and have the potential to yield significant amounts of water if not properly dewatered. A stream bypass will be used as the primary dewatering method for construction of the replacement structure. We expect that any shallow or perched groundwater encountered during construction downstream of the bypass can be handled adequately with sumps, pumps, cutoff walls, and/or diversion ditches. Cutoff walls and diversions placed upstream should be more effective than pumps. Dewatering will be more difficult if construction takes place during the wet season between late fall and early spring when water levels in Frase Creek will typically be higher.

3.5.4 Temporary and Permanent Slopes

Excavations up to about 15 ft will be required for construction of the replacement structures. We recommend that temporary excavations be completed in accordance with Section 2-09 of the 2016 WSDOT Standard Specifications (WSDOT 2016). Actual excavation trench configurations and the maintenance of safe working conditions, including temporary excavation stability, are the

responsibilities of the contractor. Temporary excavations in excess of 4 ft should be shored or sloped in accordance with Safety Standards for Construction Work, Part N, found in Chapter 296-155 of the Washington Administrative Code. The bridge abutment excavations should be sloped no steeper than 1½ horizontal to 1 vertical.

Permanent cut-or-fill slopes constructed as recommended in this report should be sloped no steeper than 2 horizontal to 1 vertical. Permanent slopes should be provided with erosion protection and should be reseeded or revegetated as soon as is practical.

3.5.5 Structural Fill

Structural fill for culvert bearing pads or any overexcavations beneath foundations should consist of Class A Foundation Material that conforms to the requirements of Section 9-03.17 of the 2016 WSDOT Standard Specifications (WSDOT 2016). Foundation material should be placed in 6-inch loose lifts and compacted to 95 percent of the MDDs determined using ASTM International (ASTM) D1557 test method.

Structural fill for culvert backfill or roadway embankments should consist of Gravel Borrow that conforms to the requirements of Section 9-03.14(1) of the 2016 WSDOT Standard Specifications (WSDOT 2016). Structural fill material should be placed in 12-inch loose lifts and compacted to 95 percent of the maximum dry density (MDD) as determined using ASTM International (ASTM) D1557 test method. Hand-operated equipment and a minimum lift thickness of 6 inches should be used when within 3 ft of retaining walls; our compaction recommendations do not supersede specifications provided by the culvert manufacturer.

It is our opinion that onsite soils are not appropriate for reuse as structural fill. The onsite alluvium soil generally has a fines content of 30 percent or more and is considered highly moisture sensitive. The onsite alpine outwash also has a high fines content and a significant portion of oversize material that would need to be removed before use as structural fill.

3.5.6 GRS-IBS Materials

If GRS-IBS is chosen, all materials used should comply with the specifications in Federal Highway Administration's Sample Guide Specifications for Construction of Geosynthetic Reinforced Soil-Integrated Bridge System (FHWA Specifications; FHWA 2012b). The majority of import structural fill required by the FHWA Specifications for construction of the GRS abutments will need to meet the gradation requirements of AASHTO No. 89 material.

4.0 USE OF THIS REPORT

Landau Associates, Inc. (LAI) prepared this geotechnical engineering report for the exclusive use of Lewis County for specific application to the Frase Creek Culvert Replacement project near Onalaska, Washington. Use of this report by others or for another project is at the user's sole risk. Within the limitations of scope, schedule, and budget, our services have been conducted in accordance with generally accepted practices of the geotechnical engineering profession; no other warranty, express or implied, is made as to the professional advice included in this report.

The conclusions and recommendations contained in this report are based in part on the subsurface data obtained from the explorations completed for this study. There may be some variation in subsurface soil and groundwater conditions at the project sites, and the nature and extent of the variations may not become evident until construction. Accordingly, a contingency for unanticipated conditions should be included in the construction budget and schedule.

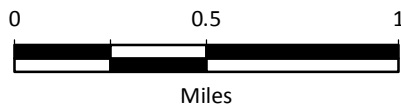
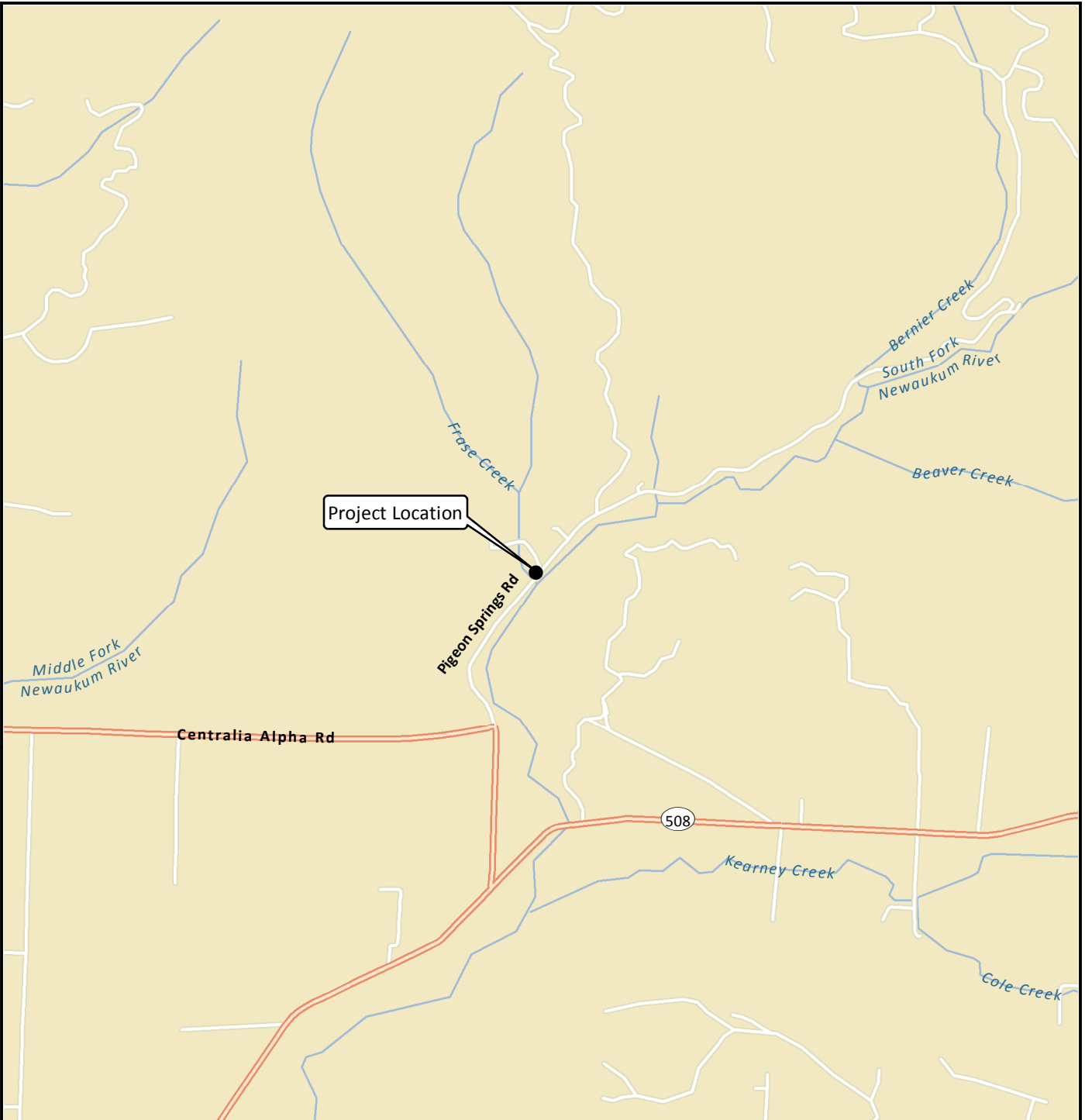
If variations in subsurface conditions are encountered during construction, LAI should be notified for review of the recommendations in this report and revision of such if necessary. If there is a substantial lapse of time between submission of this report and the start of construction or if conditions change due to construction operations at or adjacent to the project site, we recommend that we review this limited report to determine the applicability of the conclusions and recommendations contained herein.

We appreciate the opportunity to provide geotechnical services on this project and look forward to assisting you during the construction phase of the project. If you have any questions or comments regarding the information contained in this limited report or if we may be of further service, please contact us.

5.0 REFERENCES

- AASHTO. 2014. AASHTO LRFD Bridge Design Specifications. Publication LRFDUS-7. American Association of State and Transportation Officials. Washington, D.C.
- ASTM. 2003. D420-D5876: Annual Book of ASTM Standards. ASTM International.
- FHWA. 2012a. Publication No. FHWA-HRT-11-026: Geosynthetic Reinforced Soil Integrated Bridge System Interim Implementation Guide. McLean, VA: U.S. Department of Transportation Federal Highway Administration.
- FHWA. 2012b. Publication No. FHWA-HRT-12-051: Sample Guide Specifications for Construction of Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS). McLean, VA: U.S. Department of Transportation Federal Highway Administration.
- Schasse, H.W. 1987. Geologic Map of the Centralia 1:100,000 Quadrangle, Lewis County, Washington. Open File Report 1987-11. Washington Division of Geology and Earth Resources.
- WSDOT. 2016. M 41-10: Standard: Standard Specifications for Road, Bridge, and Municipal Construction 2016. Washington State Department of Transportation.

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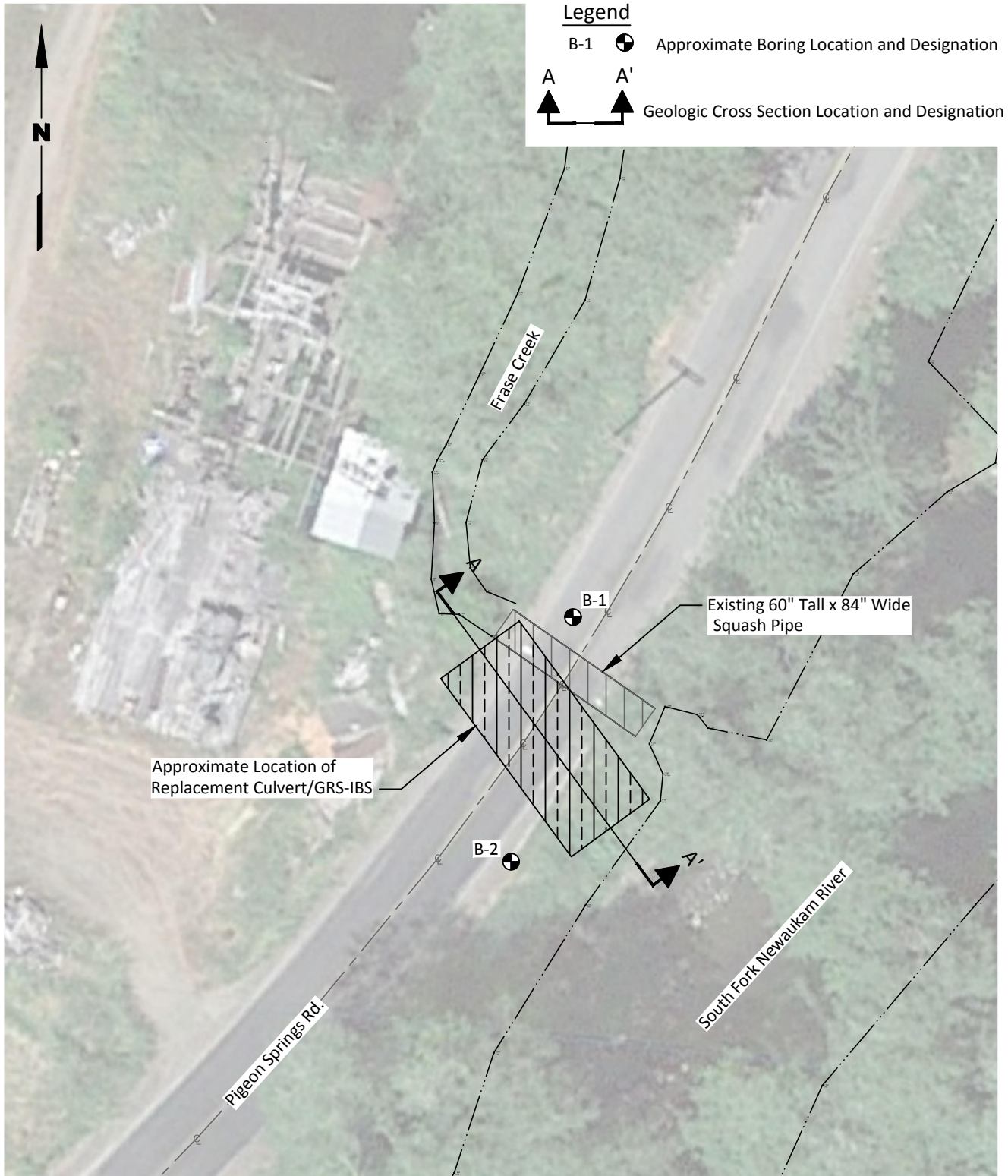
Lewis County
 Frase Creek Culvert
 Replacement
 Onalaska, Washington

Vicinity Map

Figure
1



LANDAU ASSOCIATES, INC. | C:\CAD\1647\001\1647001.010_BM.dwt "Figure 2" 12/30/2016



Scale in Feet

Image source: Google Earth Pro, 2016
Base map source: Lewis County, 2016

Note

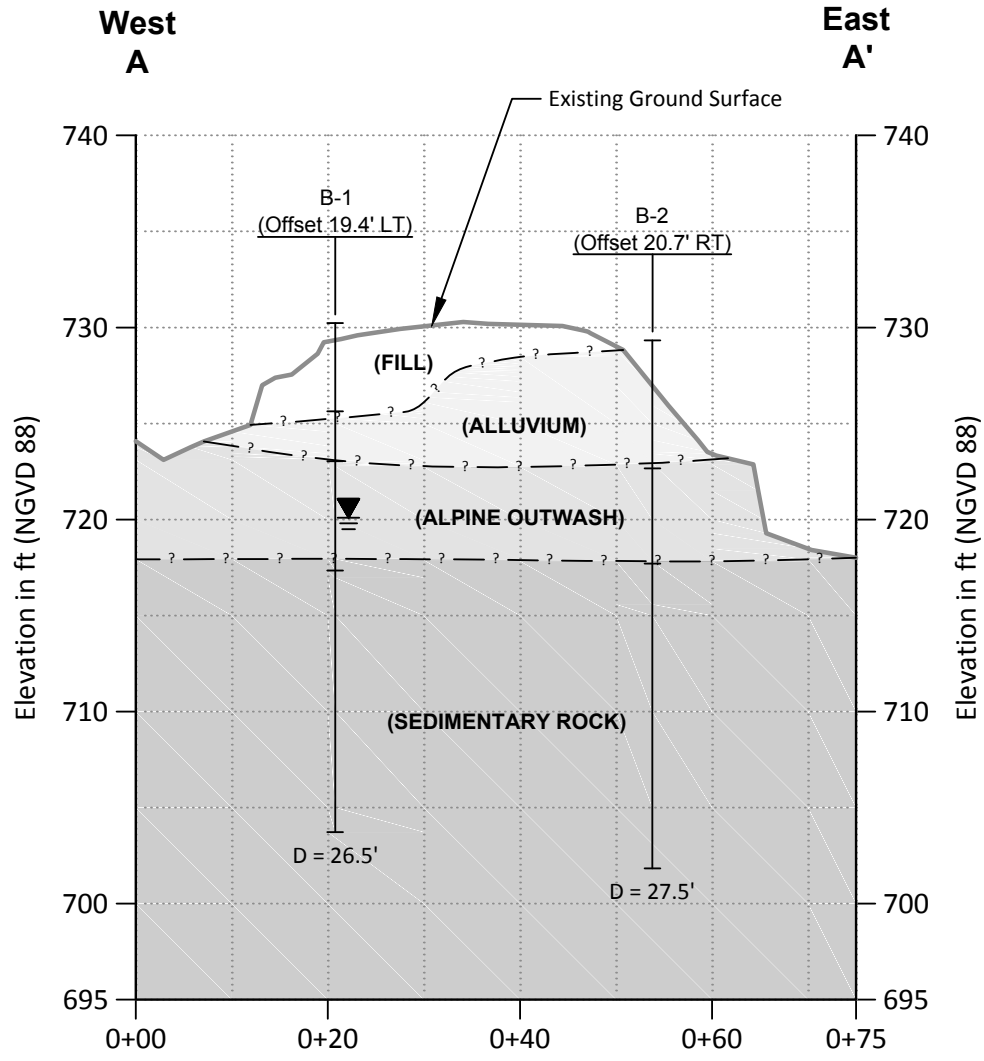
- 1) Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Lewis County
Frase Creek Culvert
Replacement
Onalaska, Washington

Site and Exploration Plan

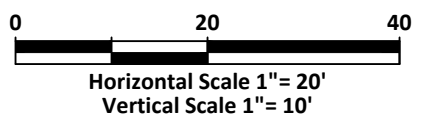
Figure
2



Legend

- B-1 — Project Exploration Designation
- (Offset 19.4' LT) — Offset Distance in Feet and Direction
- Top of Exploration
- Soil Type Contact
- Groundwater At Time of Drilling
- Inferred Geologic Contact
- Bottom of Exploration
- D = 26.5' — Depth of Exploration

- Notes**
- 1) Soil descriptions are generalized, based on interpretation of field and laboratory data. Stratigraphic contacts are interpolated between borings and based on topographic features; actual conditions may vary.
 - 2) See report text for descriptions of geologic units.
 - 3) For Cross Section location, see the Site and Exploration Plan, Figure 2.



Lewis County Frase Creek Culvert Replacement Onalaska, Washington	Geologic Cross Section	Figure 3
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Field Explorations

APPENDIX A

FIELD EXPLORATIONS

Subsurface conditions were explored on December 16, 2016. The exploration program consisted of advancing and sampling two hollow-stem auger borings (B-1 and B-2) at the approximate locations shown on Figure 2. A hollow-stem auger drilling technique was used to advance the exploratory borings between 26.5 and 27.5 feet (ft) below the existing ground surface. Holocene Drilling, Inc. of Puyallup, Washington advanced the borings under subcontract to Landau Associates, Inc. (LAI).

The field exploration program was coordinated and monitored by a LAI geotechnical engineer who also obtained representative soil samples, maintained a detailed record of the subsurface soil and groundwater conditions, and described the soil encountered by visual and textural examination. Each representative soil type observed in our exploratory borings was described using the soil classification system shown on Figure A-1 and A-2, in general accordance with ASTM International D2488, *Standard Recommended Practice for Description of Soils (Visual-Manual Procedure)*. Logs of the exploratory borings are presented on Figures A-3 and A-4. These logs represent our interpretation of subsurface conditions identified during the field exploration program. The stratigraphic contacts shown on the summary logs represent the approximate boundaries between soil types; actual transitions may be more gradual. The soil and groundwater conditions depicted are only for the specific date and locations reported and, therefore, are not necessarily representative of other locations and times. A further discussion of the soil and groundwater conditions observed is provided in the main text of this report.

Disturbed samples of the soil encountered during the borings were obtained at frequent intervals using a 1.5-inch, inside-diameter standard penetration test split-spoon sampler. The sampler was driven up to 18 inches (or a portion thereof) into the undisturbed soil ahead of the auger bit, with a 140-pound automatic hammer falling a distance of approximately 30 inches. The number of blows required to drive the sampler for the final 12 inches (or a portion thereof) of soil penetration is noted on the boring logs, adjacent to the appropriate sample notation. Soil samples collected in this manner were taken to our laboratory for further examination and testing. Upon completion of drilling and sampling, the boreholes were decommissioned in general accordance with the requirements of Washington Administrative Code 173-160.

Where noted on the boring logs, cobble inclusions are based on fractured pieces observed in samples collected in a 1.5-inch, inside-diameter split-spoon sampler and on the difficulty of drilling noted by the driller. The lack of cobbles, shown on the gradation analysis results in Appendix B of this report, is not intended for use in estimating cobble or boulder content.

Soil Classification System

	MAJOR DIVISIONS	CLEAN GRAVEL (Little or no fines)	GRAPHIC SYMBOL	LETTER SYMBOL ⁽¹⁾	TYPICAL DESCRIPTIONS ⁽²⁾⁽³⁾	
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines	
		GRAVEL WITH FINES (Appreciable amount of fines)		GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines	
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)	CLEAN SAND (Little or no fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
			GRAVEL WITH FINES (Appreciable amount of fines)		GC	Clayey gravel; gravel/sand/clay mixture(s)
		SAND WITH FINES (Appreciable amount of fines)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
			SAND WITH FINES (Appreciable amount of fines)		SP	Poorly graded sand; gravelly sand; little or no fines
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)	CLEAN SAND (Little or no fines)		SM	Silty sand; sand/silt mixture(s)	
		SAND WITH FINES (Appreciable amount of fines)		SC	Clayey sand; sand/clay mixture(s)	
		SILT AND CLAY (Liquid limit less than 50)		ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity	
	SILT AND CLAY (Liquid limit greater than 50)	SILT AND CLAY (Liquid limit greater than 50)		CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay	
		SILT AND CLAY (Liquid limit greater than 50)		OL	Organic silt; organic, silty clay of low plasticity	
		SILT AND CLAY (Liquid limit greater than 50)		MH	Inorganic silt; micaceous or diatomaceous fine sand	
	HIGHLY ORGANIC SOIL	SILT AND CLAY (Liquid limit greater than 50)		CH	Inorganic clay of high plasticity; fat clay	
		SILT AND CLAY (Liquid limit greater than 50)		OH	Organic clay of medium to high plasticity; organic silt	
				PT	Peat; humus; swamp soil with high organic content	


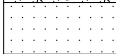


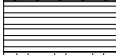
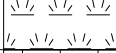
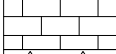




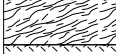
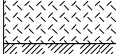

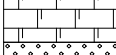


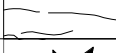

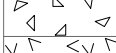
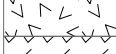

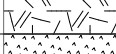




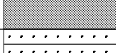
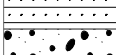
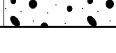
OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

- Notes:
- USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
 - Soil descriptions are based on the general approach presented in the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the Standard Test Method for Classification of Soils for Engineering Purposes, as outlined in ASTM D 2487.
 - Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:
 - Primary Constituent: > 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
 - Secondary Constituents: > 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
> 15% and ≤ 30% - "gravelly," "sandy," "silty," etc.
 - Additional Constituents: > 5% and ≤ 15% - "with gravel," "with sand," "with silt," etc.
≤ 5% - "with trace gravel," "with trace sand," "with trace silt," etc., or not noted.
 - Soil density or consistency descriptions are based on judgement using a combination of sampler penetration blow counts, drilling or excavating conditions, field tests, and laboratory tests, as appropriate.

Drilling and Sampling Key		Field and Lab Test Data
SAMPLER TYPE	SAMPLE NUMBER & INTERVAL	
Code	Description	Code
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon	PP = 1.0
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon	TV = 0.5
c	Shelby Tube	PID = 100
d	Grab Sample	W = 10
e	Single-Tube Core Barrel	D = 120
f	Double-Tube Core Barrel	-200 = 60
g	2.50-inch O.D., 2.00-inch I.D. WSDOT	GS
h	3.00-inch O.D., 2.375-inch I.D. Mod. California	AL
i	Other - See text if applicable	GT
1	300-lb Hammer, 30-inch Drop	CA
2	140-lb Hammer, 30-inch Drop	
3	Pushed	
4	Vibrocure (Rotasonic/Geoprobe)	
5	Other - See text if applicable	

Groundwater	
	Approximate water level at time of drilling (ATD)
	Approximate water level at time other than ATD

Rock Classification System

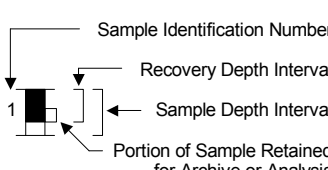
Primary Rock Types				
Sedimentary	Clastic		Conglomerate	
			Sandstone/ Sedimentary Quartzite	
			Siltstone/Graywacke	
			Claystone/Mudstone	
			Shale	
			Coal	
			Limestone/Dolomite	
	Crystalline		Gypsum/Halite/ Anhydrite	
			Chert	
			Gneiss/Schist	
Metamorphic	Foliated		Schist/Talc	
			Phyllite	
			Slate	
			Mylonite	
			Marble	
	Massive		Quartzite	
			Hornfels	
			Serpentine/Soapstone/ Greenstone	
	Igneous	Phaneritic <small>(Individual crystals distinguishable with unaided eye.)</small>		Granite
				Monzonite/ Quartz Monzonite
			Granodiorite/ Diorite Quartz Diorite	
			Gabbro	
			Diabase/Perioite	
Aphanitic <small>(Crystals not distinguishable or visible crystals in a fine-grained groundmass.)</small>		Rhyolite		
		Latite/Quartz Latite		
		Dacite/Andesite		
Glassy		Obsidian/ Pumice/Scoria		
		Pyroclastic		
			Agglomerate/ Breccia/Tuff	
			Bombs/Blocks/ Cinders/Ash	


Relative Hardness			
Term	Designation	Approx. Unconfined Compressive Strength	Field Identification
Extremely Soft	R0	< 100 psi	Moldable or friable with finger pressure.
Very Soft	R1	100 - 1,000 psi	Peeled by knife with ease. Crumbles under firm blows with point of a geology pick.
	R2	1,000 - 4,000 psi	Peeled by knife with difficulty. Shallow indentation made by firm blow of geology pick.
Medium Hard	R3	4,000 - 8,000 psi	Scratched by knife with ease. Fractured with a single firm blow of hammer/geology pick.
	R4	8,000 - 16,000 psi	Scratched by knife with difficulty. Several hard hammer blows required to fracture.
Very Hard	R5	> 16,000 psi	Cannot be scratched with knife. Many hard hammer blows required to fracture or chip.

Relative Weathering	
Fresh	Crystals are bright; no discoloration in rock fabric
Slightly Weathered	Some discoloration in rock fabric; decomposition extends up to 1 inch
Moderately Weathered	Rock mass is decomposed 50 % or less
Predominately Decomposed	Rock mass is more than 50 % decomposed; can be excavated with pick
Decomposed	Completely decomposed; can be reduced to soil with hand pressure

Structural Descriptions			
Spacing (in)	Bedding/Foliation	Joint/Shear/Fracture	Attitude and Angle
< 2	Very Thin	Very Close	Horizontal (0-5°)
2 - 12	Thin	Close	Shallow or Low Angle (5-35°)
12 - 36	Medium	Moderately Close	Moderately Dipping (35-55°)
36 - 120	Thick	Wide	Steep or High Angle (55-85°)
> 120	Very Thick	Very Wide	Vertical (85-90°)

Core Recovery and Rock Quality Designation	
$\text{Core Recovery} = \frac{\text{length of core recovered}}{\text{total length of core run}} \times 100$	
$\text{RQD} = \frac{\text{total length of all pieces 4 inches or greater}}{\text{total length of core run}} \times 100$	

Coring and Sampling Key																	
SAMPLE NUMBER & INTERVAL	SAMPLER TYPE																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>e</td> <td>Other - See text if applicable</td> </tr> <tr> <td>f</td> <td>Single Tube Core Barrel</td> </tr> <tr> <td>g</td> <td>Double Tube Core Barrel</td> </tr> <tr> <td>4</td> <td>Other - See text if applicable</td> </tr> <tr> <td>5</td> <td>Air Rotary</td> </tr> <tr> <td>6</td> <td>Wash Rotary</td> </tr> <tr> <td>7</td> <td>Rotosonic</td> </tr> </tbody> </table>	Code	Description	e	Other - See text if applicable	f	Single Tube Core Barrel	g	Double Tube Core Barrel	4	Other - See text if applicable	5	Air Rotary	6	Wash Rotary	7	Rotosonic
Code	Description																
e	Other - See text if applicable																
f	Single Tube Core Barrel																
g	Double Tube Core Barrel																
4	Other - See text if applicable																
5	Air Rotary																
6	Wash Rotary																
7	Rotosonic																

Field and Lab Test Data		Groundwater
Code W = 10 D = 120 CS = 1.0 TS = 0.5 GT CA	Description Moisture Content, % Dry Density, pcf Compressive Strength, tsf Tensile Strength, tsf Other Geotechnical Testing Chemical Analysis	 Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

B-1

LAI Project No: 1647001.010

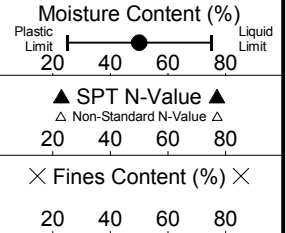
SAMPLE DATA

SOIL PROFILE

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Soil Description
0	730					AC GP- GM		5 inches of asphalt (ASPHALT) Brown, sandy, fine to coarse GRAVEL with cobbles and silt (dense, moist) (FILL)
5	725	S-1 S-2	b2	49 9	W = 54 GS		SM	Brown, silty, fine SAND (loose, moist) (ALLUVIUM) -water level rise to 6 ft bgs after drilling completed
10	720	S-3 S-4	b2 h2	51 12			SM	Brown, cobbly, silty, fine to coarse SAND with gravel (very dense, wet) (ALPINE OUTWASH) -grades to medium dense
15	715	S-5 S-6	h2 b2	92/ 2"	W = 50 GS		CLS	Dark gray MUDSTONE; extremely soft (R0); slightly weathered; includes gravel; (Northcraft Formation) (SEDIMENTARY ROCK) -grades to gray
20	710	S-7 S-8	b2	50/ 5"	W = 20 AL			-grades to reddish-gray
25	705	S-9	b2	85				

Groundwater

ATD, 11 ft 12/17/16



Boring Completed 12/16/16
Total Depth of Boring = 26.5 ft.

- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
 2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
 3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1647001.01 2/6/17 Y:\1647001.010\1647001.010.GPJ SOIL BORING LOG WITH GRAPH



Lewis County
Frase Creek Culvert
Replacement
Onalaska, Washington

Log of Boring B-1

Figure
A-3

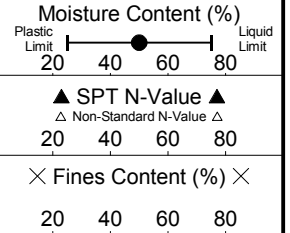
B-2

LAI Project No: 1647001.010

SAMPLE DATA

SOIL PROFILE

Groundwater



Drilling Method: Hollow-Stem Auger
 Ground Elevation (ft): 729.0
 Drilled By: Holocene Drilling Inc.
 Logged By: BJJ Date: 12/16/16

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
0								2 inches of sod over 18 inches of topsoil (TOPSOIL)
725		S-1	b2	2		ML	ML	Brown SILT with sand (loose, moist) (ALLUVIUM)
725		S-2	b2	3	W = 51 GS	SM	SM	Brown, very silty, fine SAND (loose, moist)
720		S-3	b2	22		GM	GM	Gray, cobbly, silty, fine to coarse GRAVEL with sand (medium dense, moist) (ALPINE OUTWASH)
720		S-4	b2	50/ 5"	W = 11 GS			-grades to with silt and very dense
715		S-5	b2	46	W = 25 AL	CLS	CLS	Reddish-gray MUDSTONE; extremely soft (R0); slightly weathered; includes gravel; (Northcraft Formation) (SEDIMENTARY ROCK)
715		S-6	b2	57				
710		S-7	b2	56				
705		S-8	b2	50/ 5.5"				-grades to gray

Groundwater Not Encountered

50/
5"

50/
5"

Boring Completed 12/16/16
 Total Depth of Boring = 27.5 ft.

- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
 2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
 3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1647001.01 2/6/17 Y:\1647001.01\1647001.010.GPJ SOIL BORING LOG WITH GRAPH



Lewis County
 Frase Creek Culvert
 Replacement
 Onalaska, Washington

Log of Boring B-2

Figure
A-4

Laboratory Soil Testing

APPENDIX B

LABORATORY SOIL TESTING

Natural moisture content determinations, grain size analyses, and Atterberg limit determinations were performed on selected samples to aid in soil classification. Laboratory testing was performed in general accordance with the ASTM International (ASTM) standard test methods, described below. The samples were checked against the field log descriptions and updated where appropriate in general accordance with ASTM D2487, *Standard Practice for Classification of Soils for Engineering Purposes*.

Natural Moisture Content

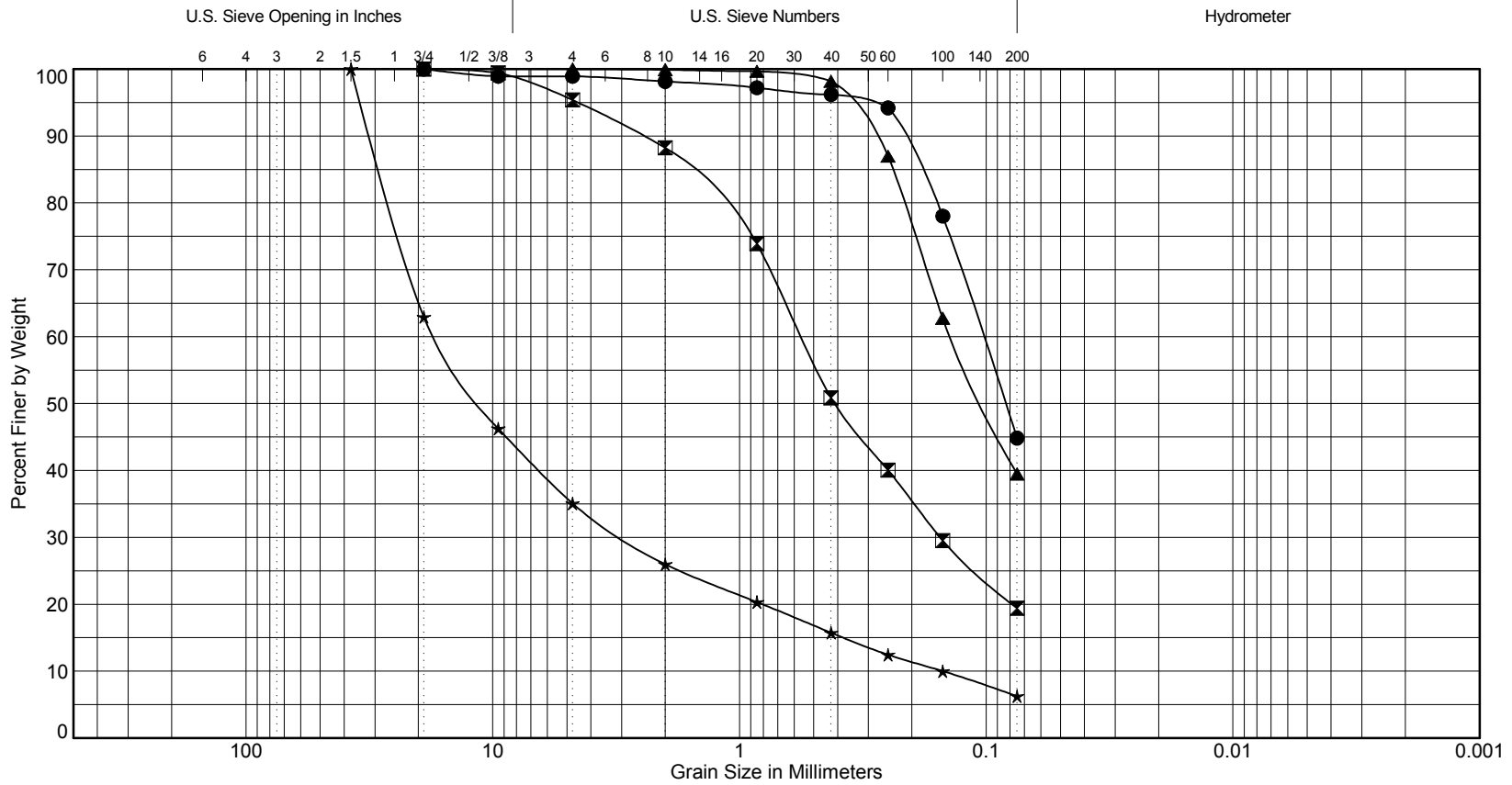
Natural moisture content determinations were performed on selected soil samples recovered from the borings in general accordance with ASTM test method D2216. The natural moisture content is shown as $W = xx$ (i.e., percent of dry weight) in the column labeled "Test Data" on the summary boring logs presented in Appendix A of this report.

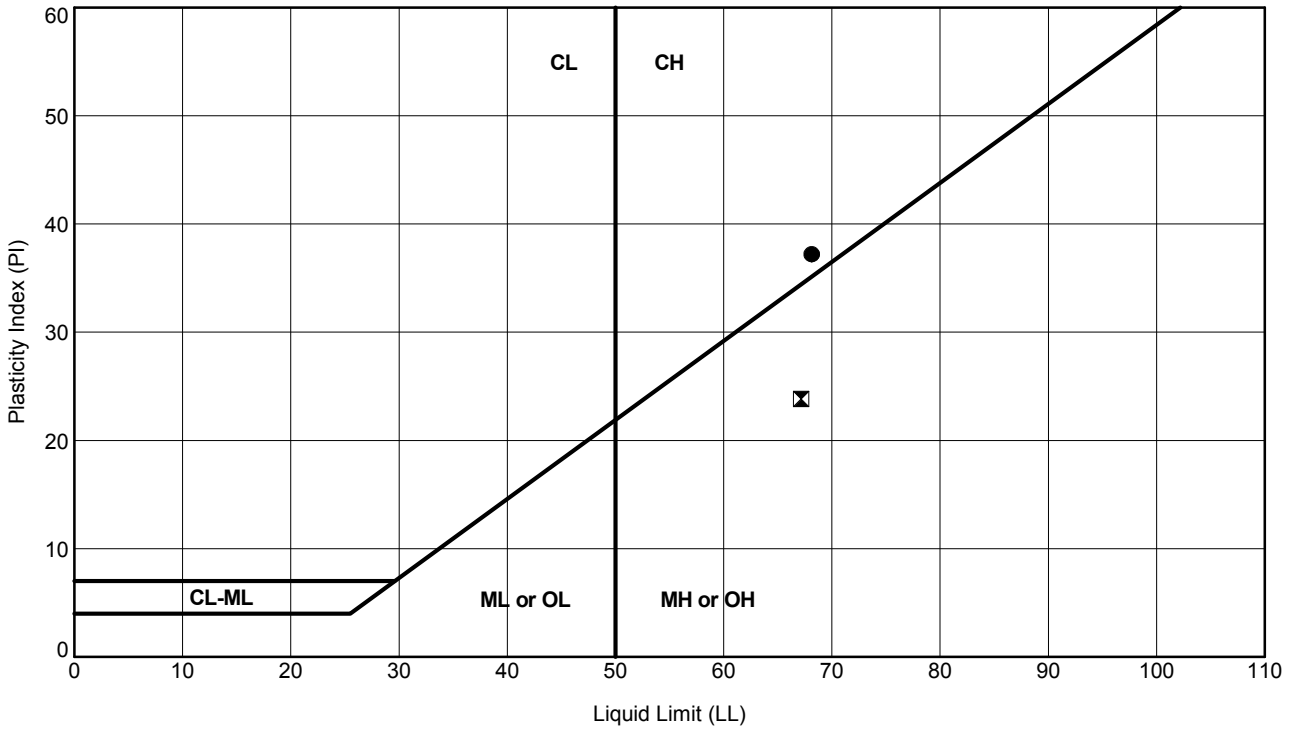
Grain Size Analyses

To provide an indication of the grain size distribution of the onsite soil, grain size analyses were conducted on representative soil samples obtained from the explorations in accordance with ASTM test method D422. Samples selected for grain size analyses are designated with a "GS" in the column labeled "Test Data" on the summary exploration logs in Appendix A of this report. The results of the grain size analyses are presented in the form of grain size distribution curves on Figure B-1 in this appendix.

Atterberg Limit Determination

To provide an indication of the plasticity of the fine-grained soils encountered, Atterberg limit tests were performed on representative soil samples obtained from the borings in accordance with ASTM test method D4318. Samples selected for Atterberg limit tests are designated with an "AL" in the column labeled "Test Data" on the summary exploration logs in Appendix A. The results of the Atterberg limit tests are presented in graphical form on Figure B-2 in this appendix.





ATTERBERG LIMIT TEST RESULTS

Symbol	Exploration Number	Sample Number	Depth (ft)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Natural Moisture (%)	Soil Description	Unified Soil Classification
●	B-1	S-8	20.0	68	31	37	20	MUDSTONE	CH
⊠	B-2	S-5	12.5	67	43	24	25	MUDSTONE	MH

ASTM D 4318 Test Method

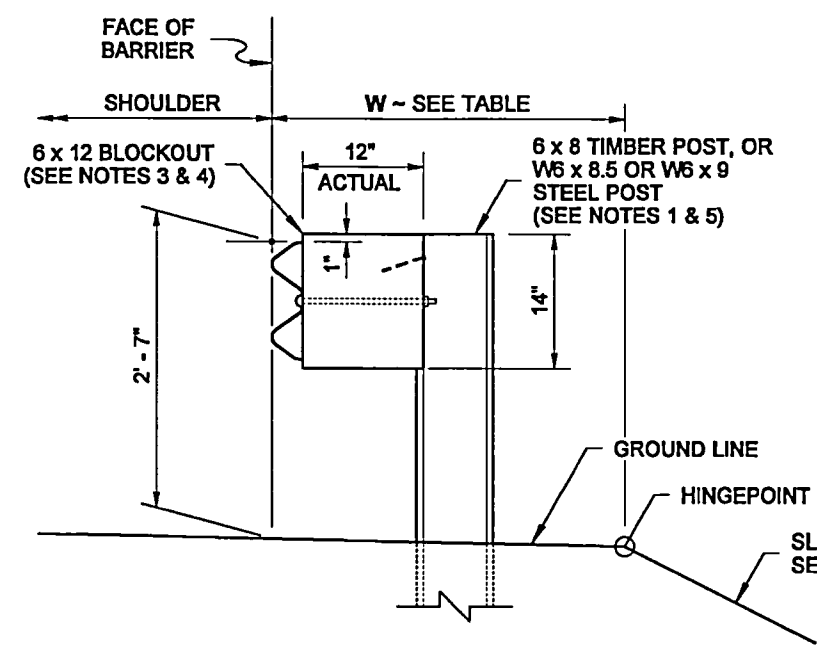
1647001.01 2/6/17 Y:\1647001.01\1647001.010.GPJ ATTERBERG LIMITS FIGURE

APPENDIX G

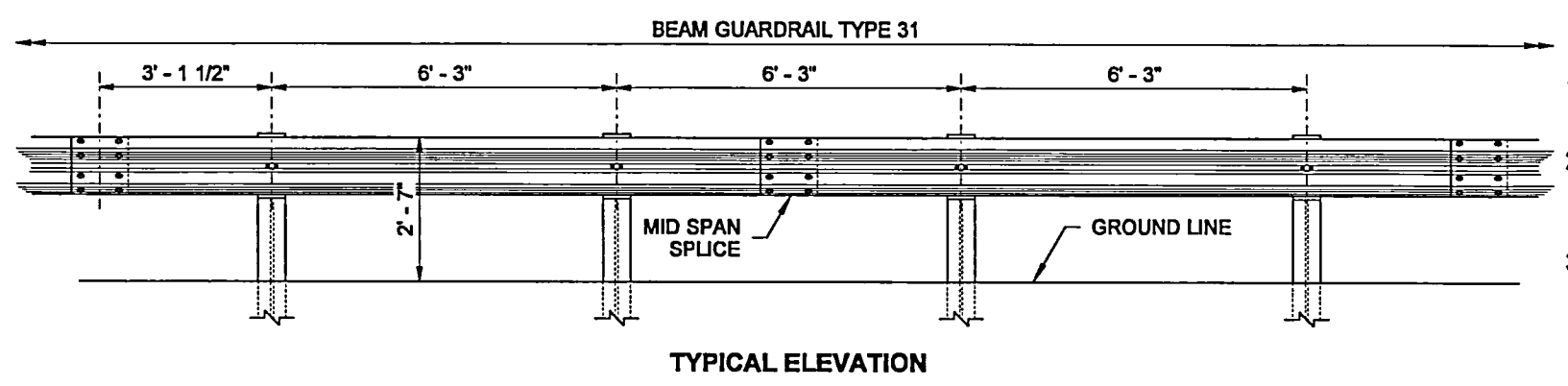
STANDARD PLANS

CONTRACT PLANS

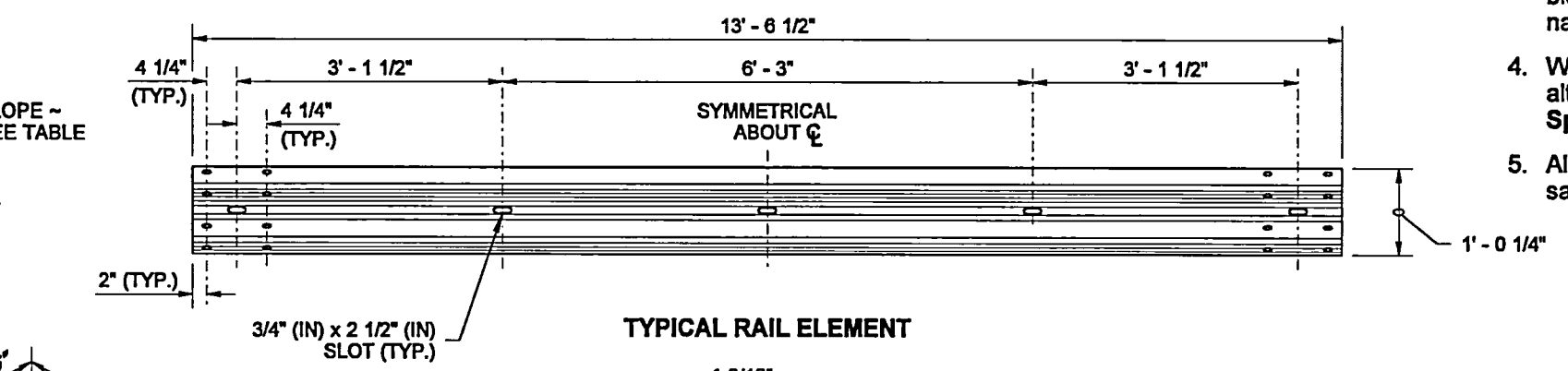
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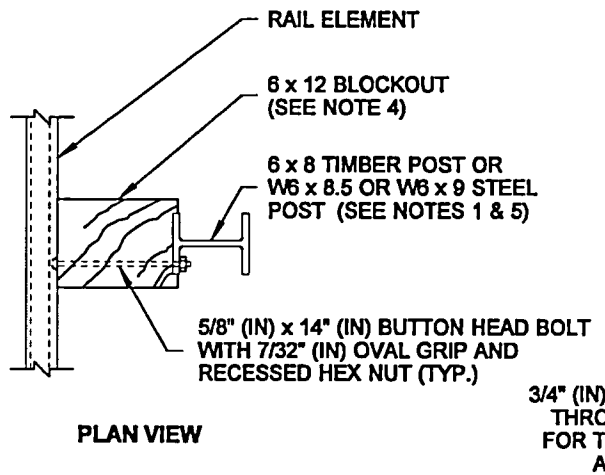
TYPICAL SECTION ~ WITHOUT CURB
(6' - 0" LONG POSTS)



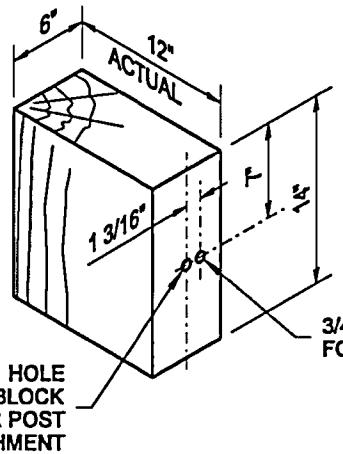
TYPICAL ELEVATION



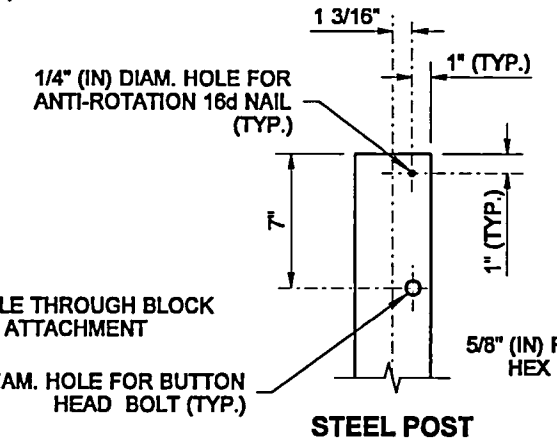
TYPICAL RAIL ELEMENT



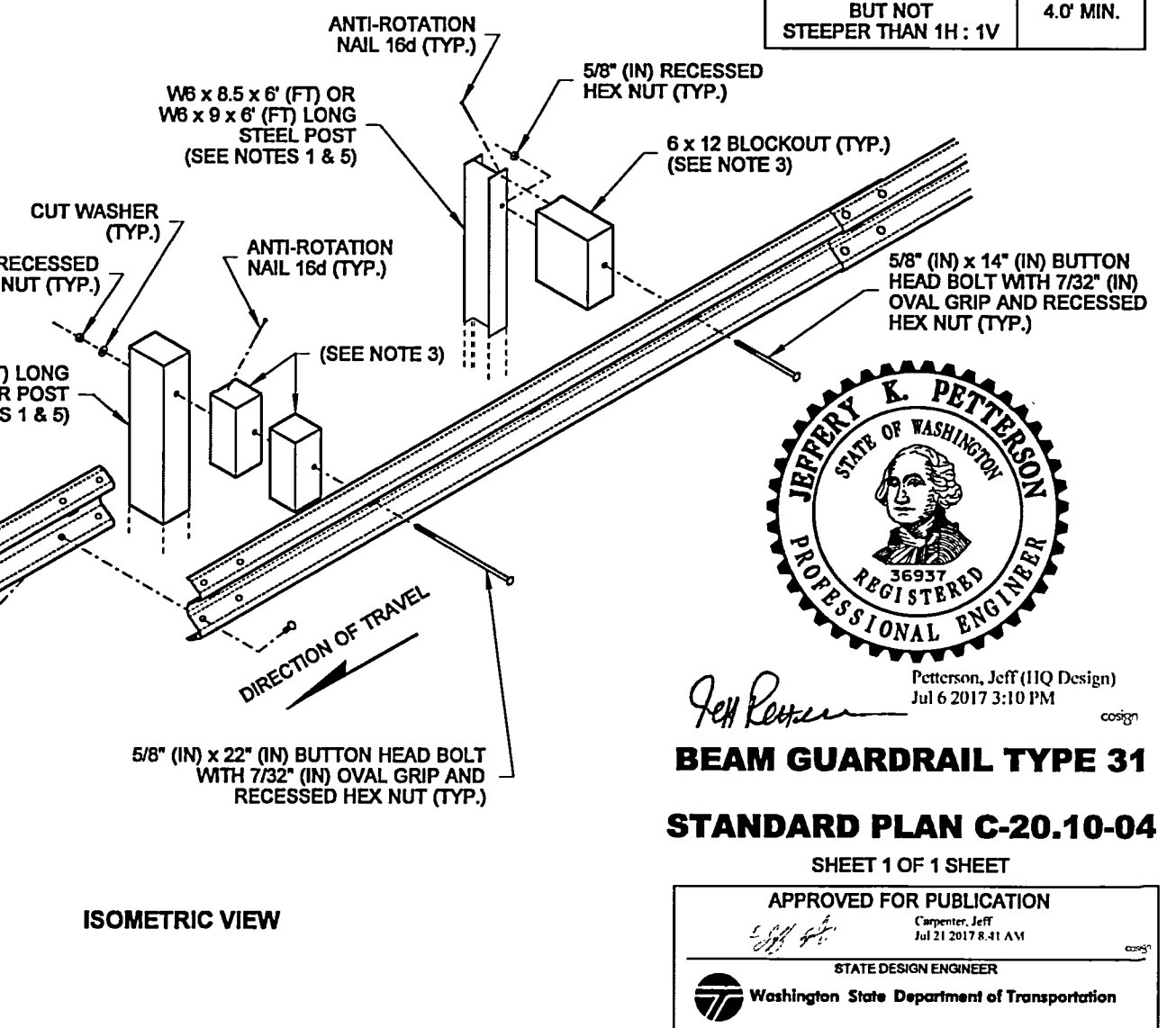
PLAN VIEW



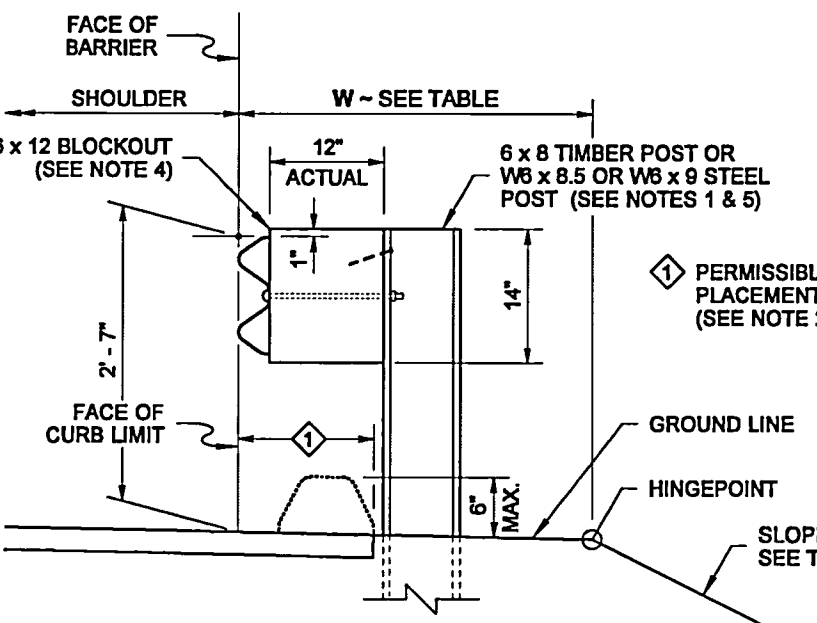
WOOD BLOCK



STEEL POST



ISOMETRIC VIEW



ELEVATION VIEW TYPICAL SECTION ~ WITH CURB
(6' - 0" LONG POSTS)

NOTES

1. Refer to **Standard Plan C-1b and C-20.11** for additional details not shown on this plan.
2. Extend shoulder pavement to provide a base for the extruded curb. See Contract Plans for exceptions to distances shown.
3. Use a single block or combination of blocks (no more than two (2) to achieve the actual 12" (in) offset. See **Standard Specification Section 9-16.3(2)**. Wood blocks shall be secured to the posts with anti-rotation nails. If combination blocks are used, the adjacent blocks shall be toenailed with two 16d galvanized nails to prevent block rotation.
4. Wood blocks are shown. Blocks of an approved alternative material may be used. See **Standard Specification Section 9-16.3(2)**.
5. All posts for any standard barrier run shall be of the same type: timber or steel.

SLOPE \ EMBANKMENT TABLE	
SLOPE	W (FT)
2H : 1V OR FLATTER	2.5' MIN.
STEEPER THAN 2H : 1V BUT NOT STEEPER THAN 1H : 1V	4.0' MIN.



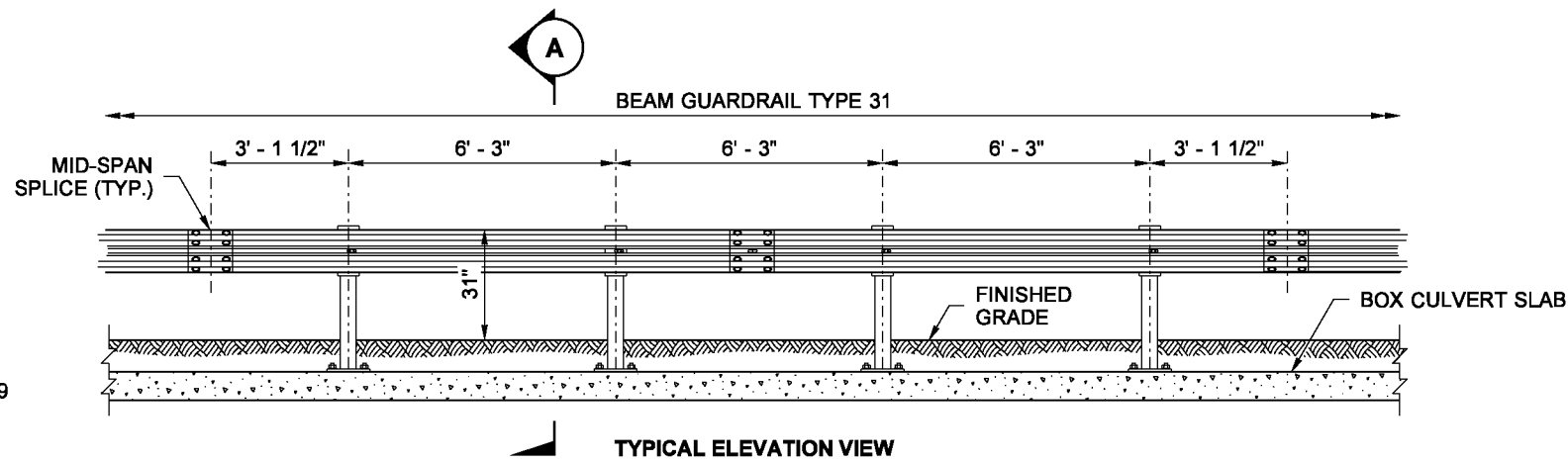
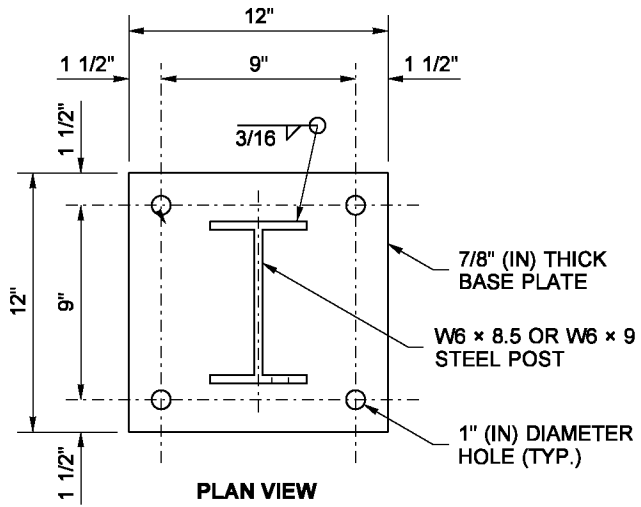
Peterson, Jeff (HQ Design)
Jul 6 2017 3:10 PM
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BEAM GUARDRAIL TYPE 31

STANDARD PLAN C-20.10-04

SHEET 1 OF 1 SHEET

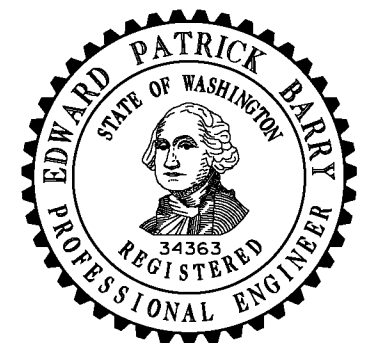
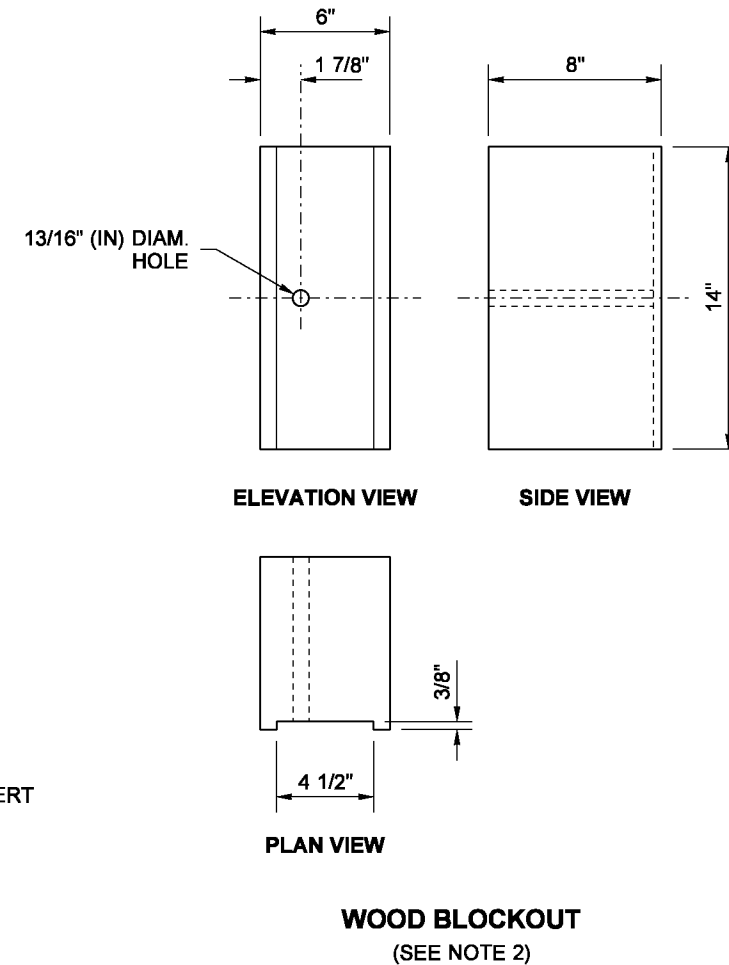
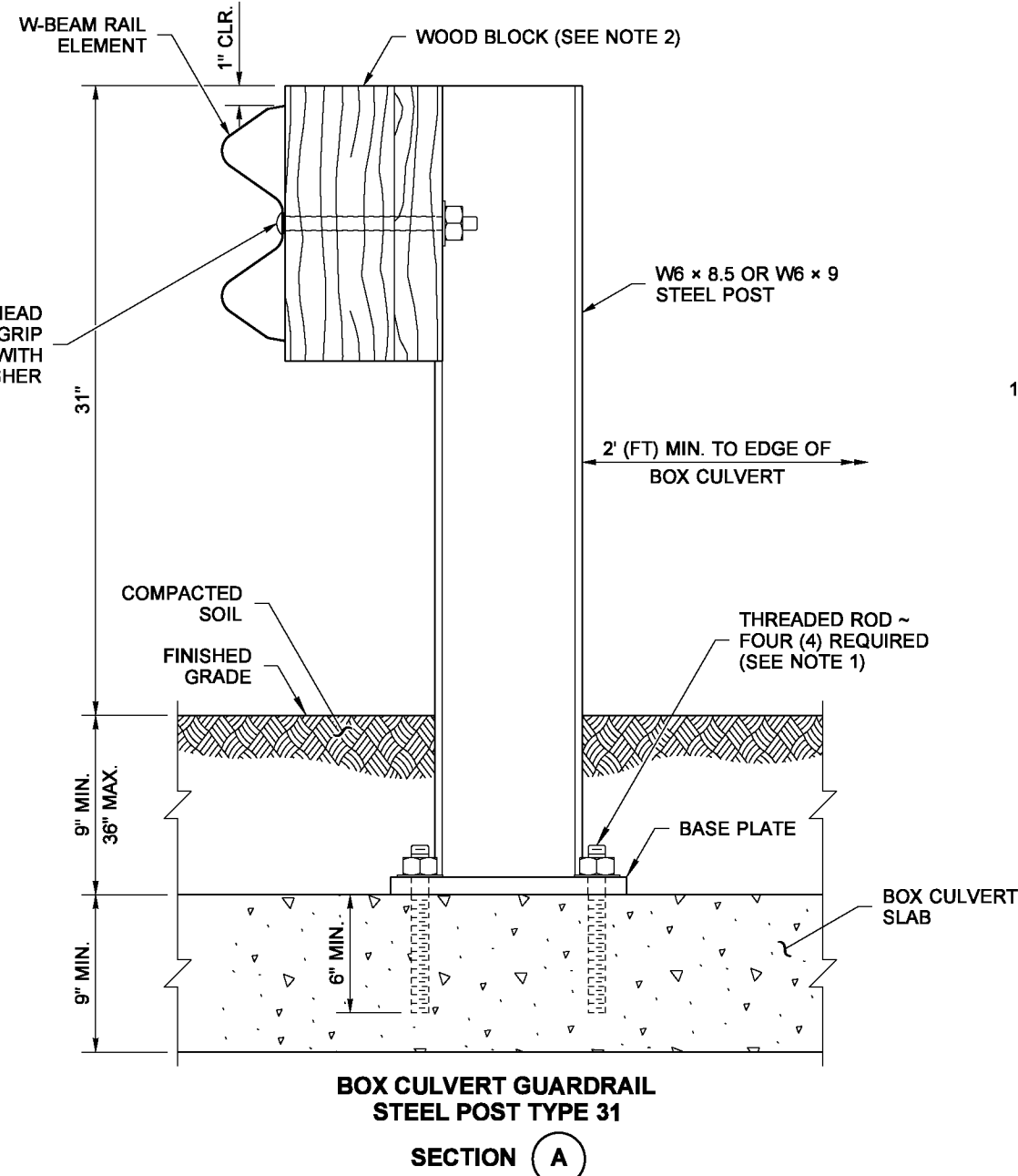
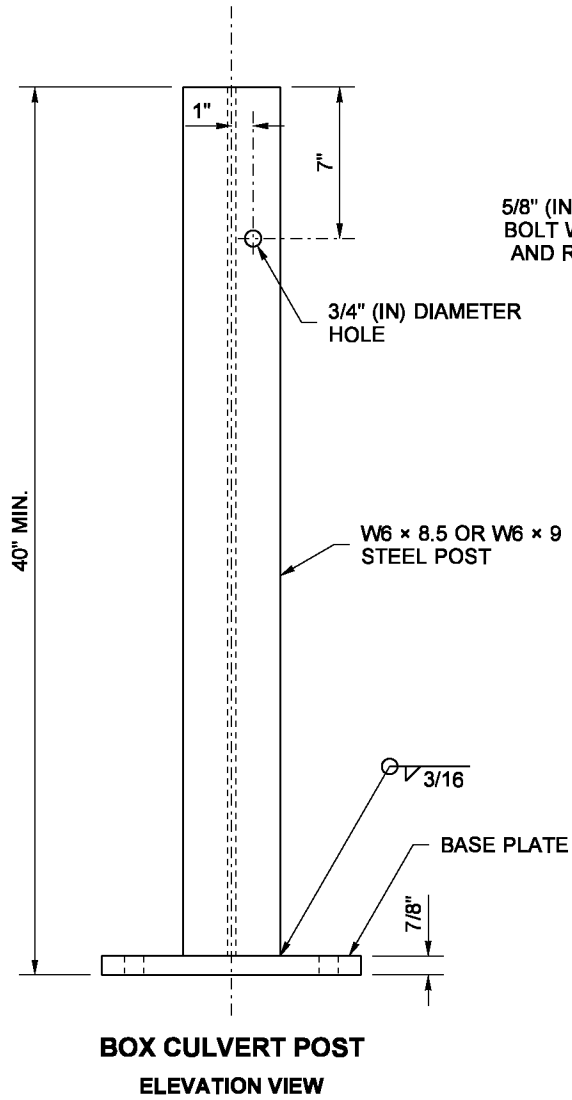
APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 21 2017 8:41 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation



NOTES

1. Attach Guardrail Post to Box Culvert with 7/8" (in) diameter high-strength threaded rods 8 1/2" (in) in length with resin-bonded anchors.
2. Wood blocks are shown. Blocks of an approved alternative may be used. See **Standard Specification 9-16.3(2)**.

DRAWN BY: FERN LIDDELL

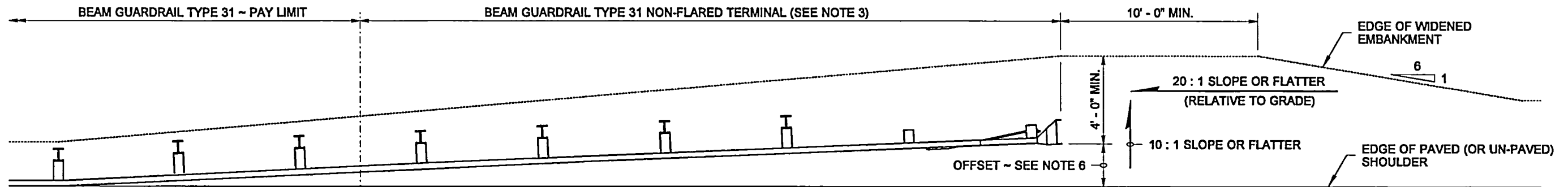


**BOX CULVERT
GUARDRAIL STEEL
POST ~ TYPE 31
STANDARD PLAN C-20.41-01**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

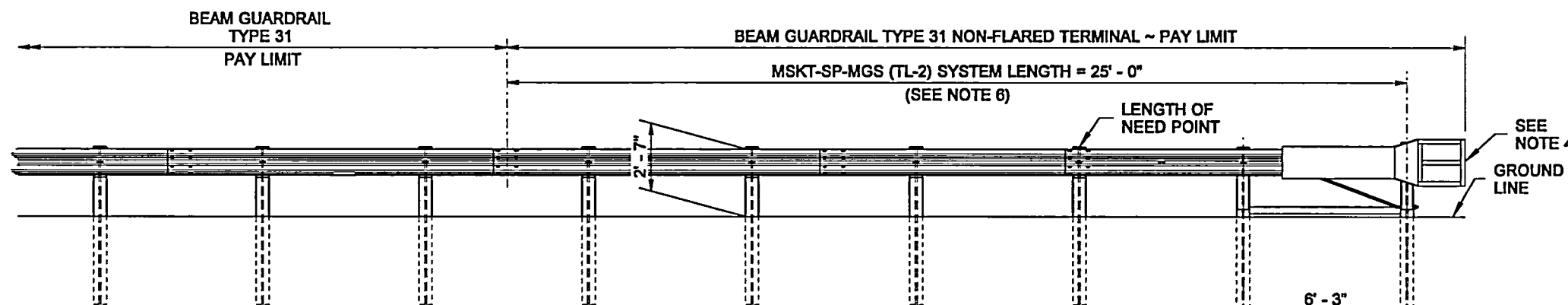
STATE DESIGN ENGINEER
Washington State Department of Transportation



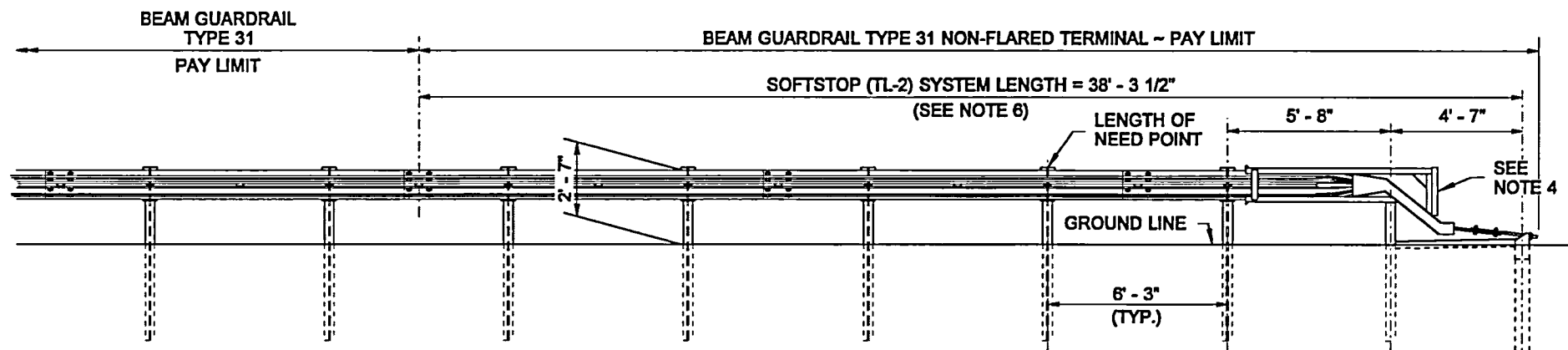
PLAN VIEW
(MSKT-SP-MGS (TL-2) SHOWN)

NOTES

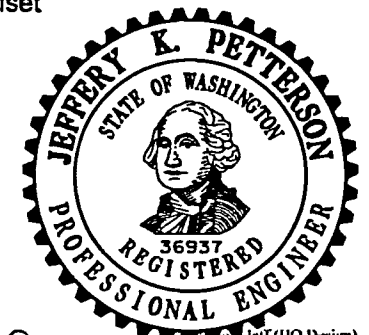
1. The Implementation of the Manual for Assessment of Safety Hardware (MASH) criteria may result in the acceptance of guardrail terminal systems currently not shown on this plan. Non-Flared terminals shall be selected from the WSDOT Qualified Products List (QPL) or approved through the WSDOT Request for Approval of Materials (RAM) process.
2. This terminal is MASH compliant at Test Level Two (TL-2) and may be used in applications with posted speeds of 45 mph or less.
3. An MSKT-SP-MGS (TL-2) as manufactured by Road Systems, Inc. or SOFTSTOP (TL-2) as manufactured by Trinity Highway Products, LLC shall be installed according to manufacturer's recommendations.
4. A reflectorized object marker shall be installed according to manufacturer's recommendations.
5. When snow load post washers and snow load rail washers are required by the Contract, the snow load rail washers shall not be installed within the terminal limits.
6. Terminal shall be installed at a widening, ensuring the end piece is entirely off the shoulder. While this terminal does not require an offset at the end, a flare is recommended. For the MSKT-SP-MGS (TL-2), a maximum flare of 25 : 1 or flatter over the length of the terminal is allowed with a maximum offset of 24" (in) over 50' (ft). For the SOFTSTOP (TL-2) a maximum flare of 38.29 : 1 or flatter is allowed over the system length of 38' - 3 1/2" with a maximum offset of 12" (in) at the anchor post.
7. For terminal details, see WSDOT approved manufacturer's drawings.
8. These terminals are supplied with steel posts only. They can be used with guardrail runs composed of steel or wood guardrail posts.



ELEVATION VIEW
MSKT-SP-MGS (TL-2)
(SEE NOTE 8)



ELEVATION VIEW
SOFTSTOP (TL-2)
(SEE NOTE 8)

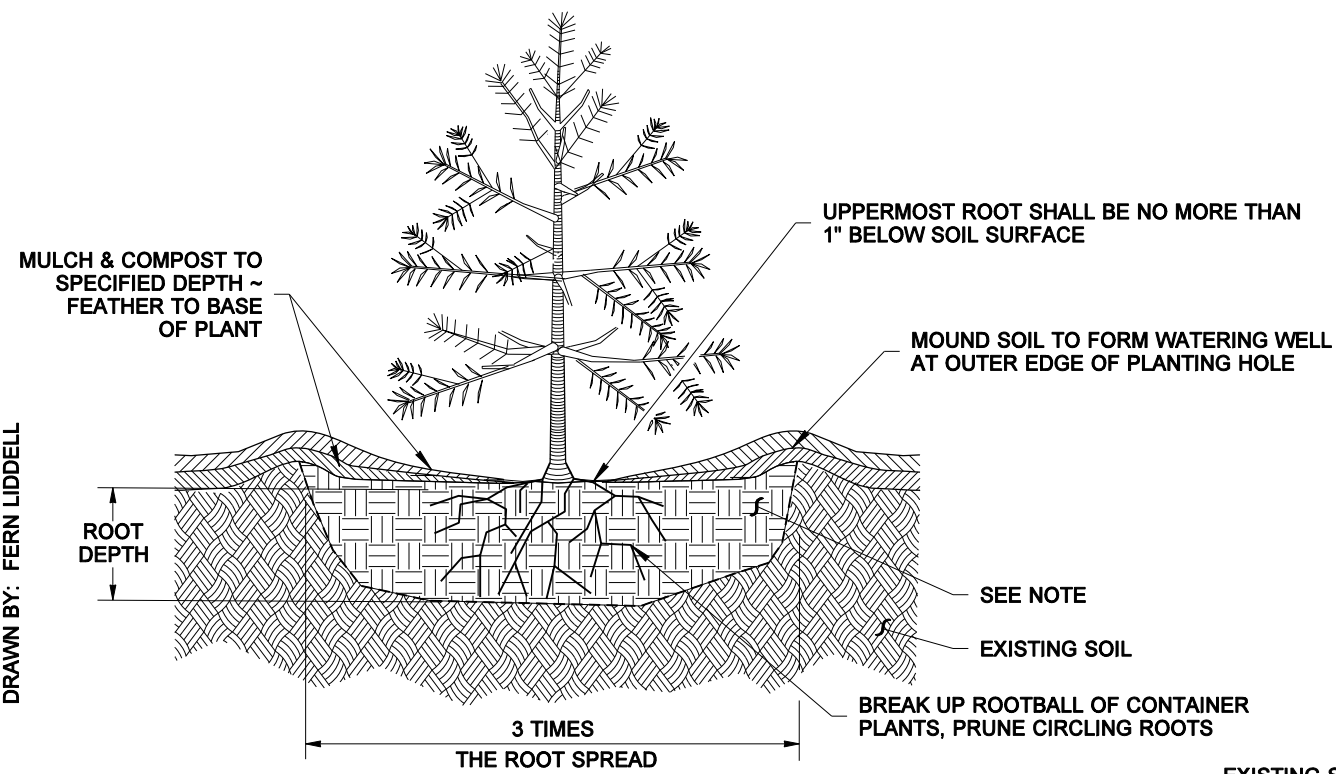


Jeff Petterson
**BEAM GUARDRAIL TYPE 31
 NON-FLARED TERMINAL
 (POSTED SPEED
 45 MPH AND BELOW)
 STANDARD PLAN C-22.45-03**

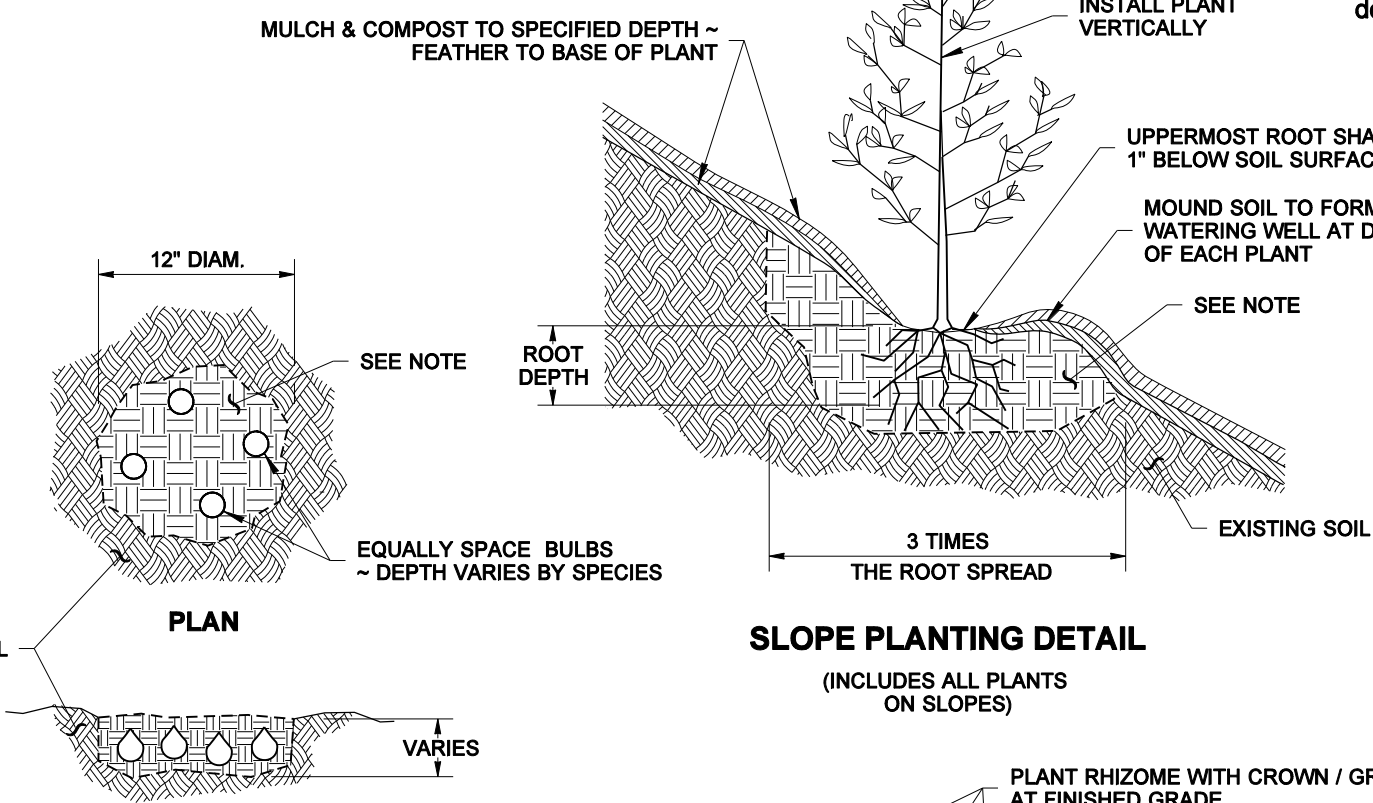
SHEET 1 OF 1 SHEET

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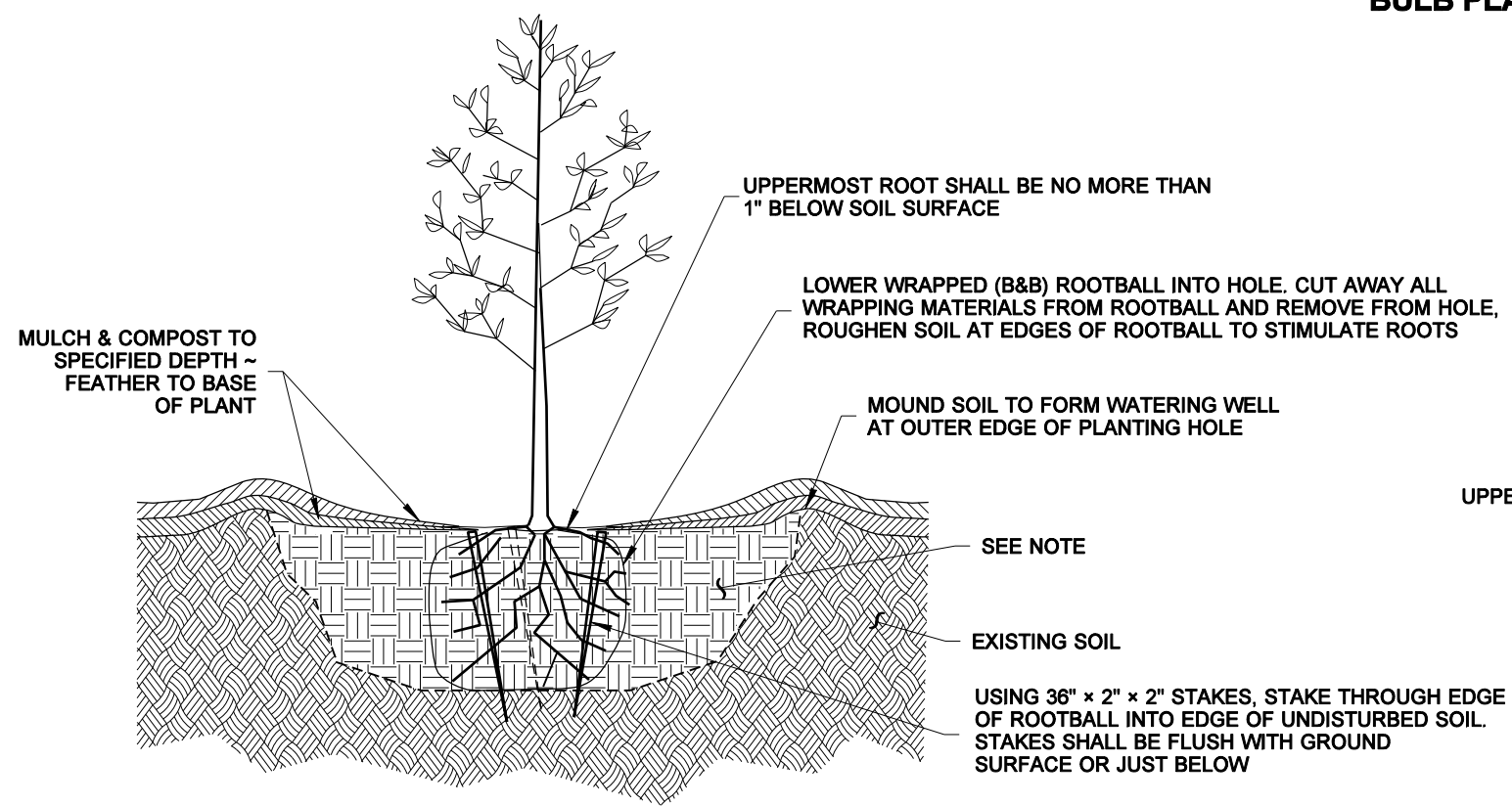


SHRUB, TREE AND GROUND COVER PLANTING DETAIL

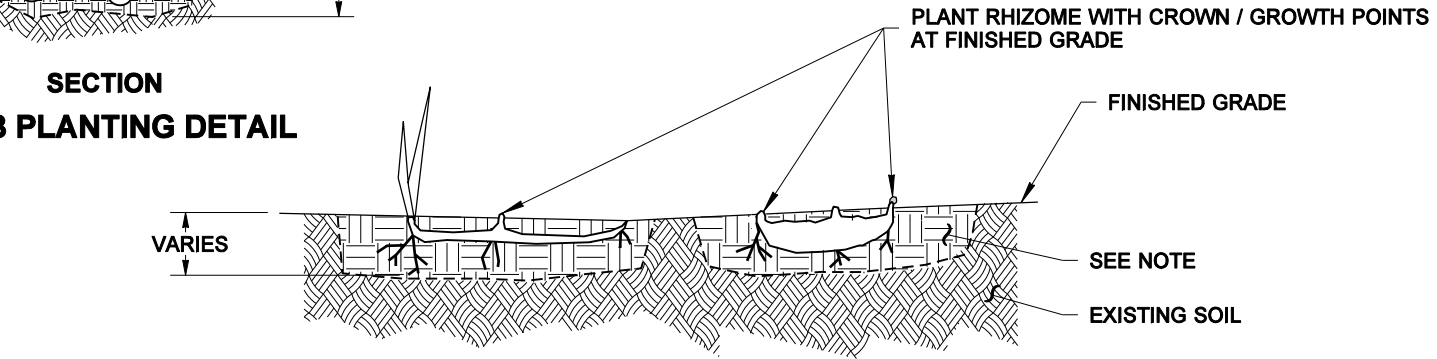


BULB PLANTING DETAIL

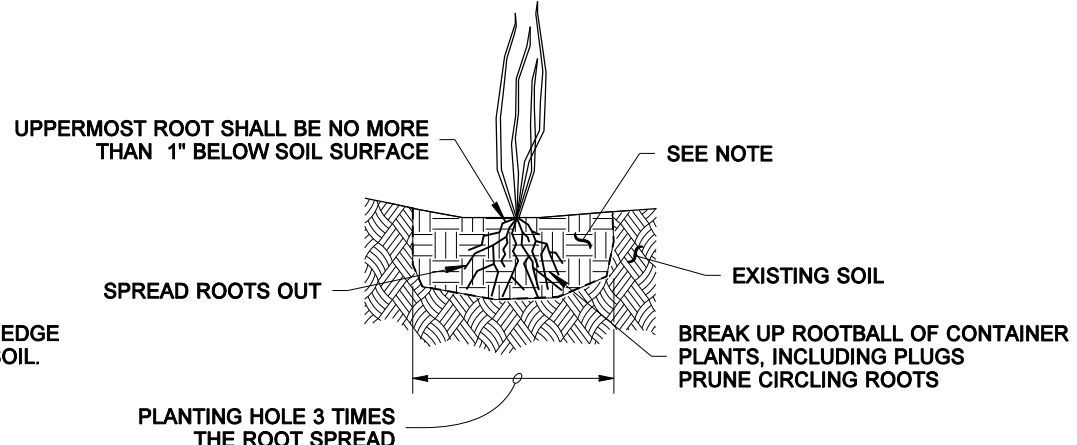
SLOPE PLANTING DETAIL
(INCLUDES ALL PLANTS ON SLOPES)



STREET TREE PLANTING AND STAKING DETAIL
(APPLIES TO CONTAINER, BALL AND BURLAPPED, (B&B) DECIDUOUS AND CONIFERS)



TUBER OR RHIZOME PLANTING DETAIL



EMERGENT PLANTING DETAIL

NOTE
Backfill with soil removed from hole
~ See planting area soil preparation detail or Special Provisions.

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT

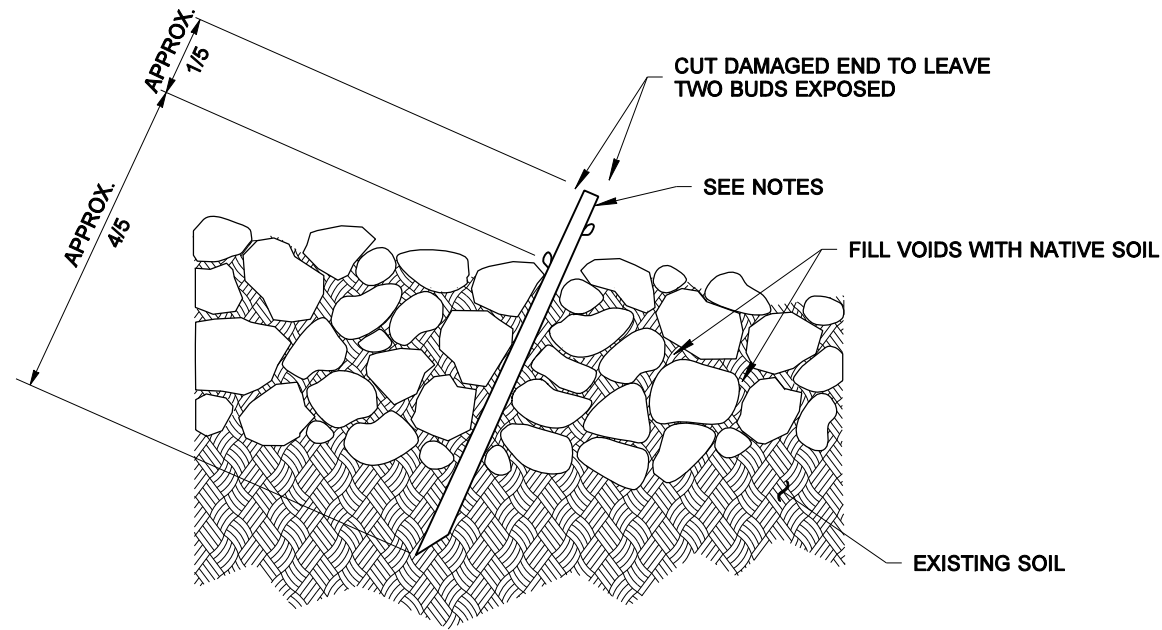
SALLY A. ANDERSON
CERTIFICATE NO. 000372

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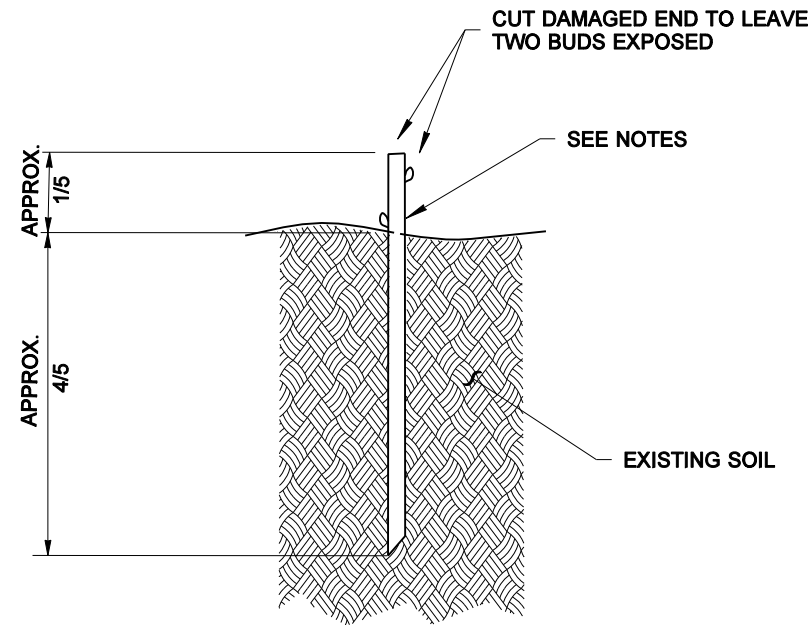
TREE AND SHRUB PLANTING DETAILS
STANDARD PLAN H-10.10-00
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 07-03-08
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



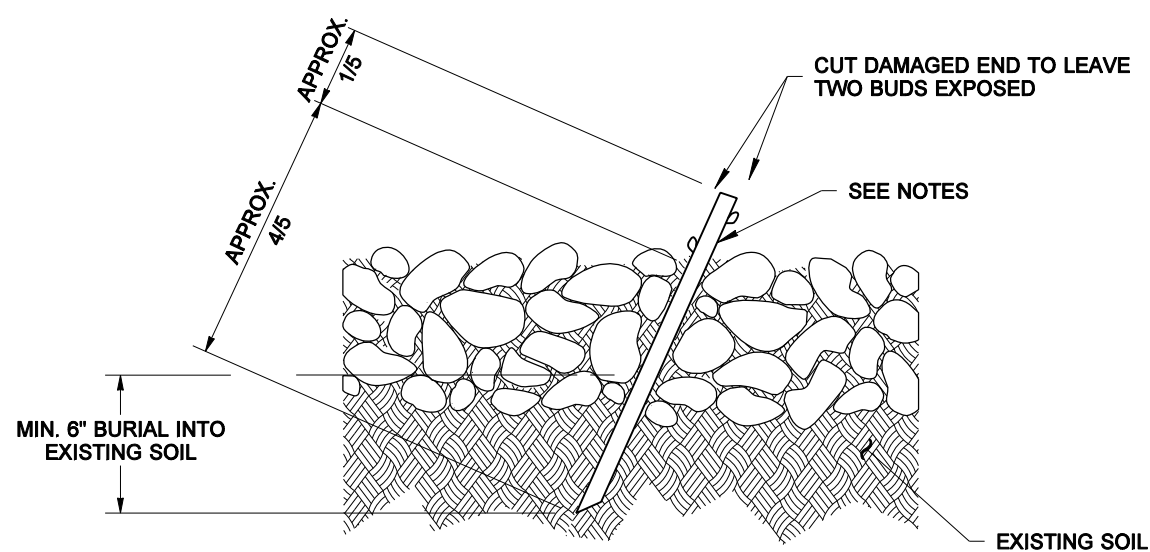
LIVE STAKE INSTALLATION IN RIPRAP



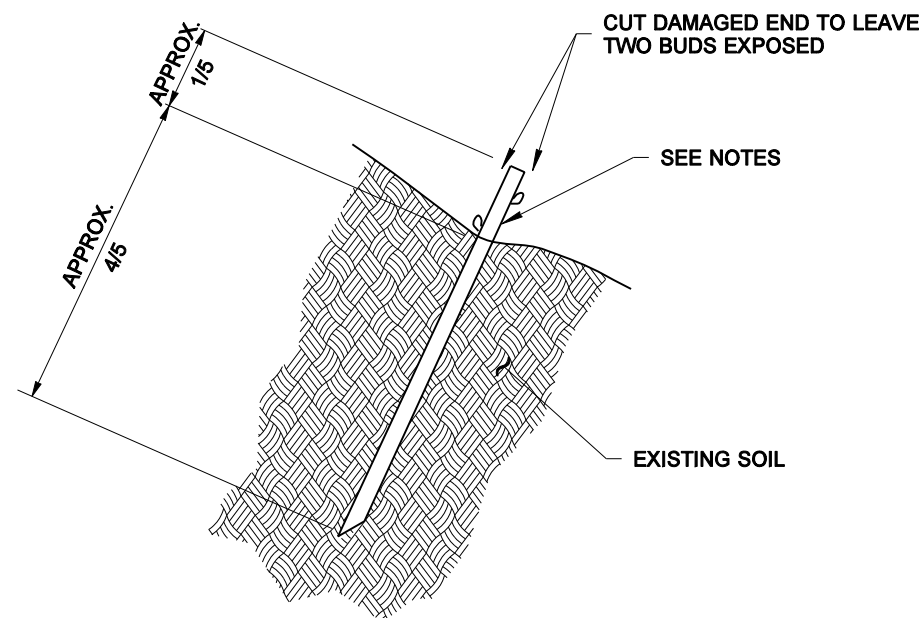
TYPICAL LIVE STAKE INSTALLATION

NOTES

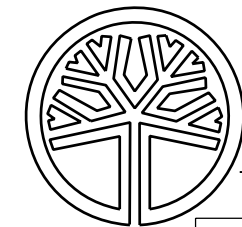
1. See Plant Material List for size and type of live stake.
2. Do not use axe or sledge for driving stakes.
3. In hard ground use an iron bar or star drill to prepare the holes for the stake.
4. Avoid stripping bark or bruising stakes during installation.
5. Fill void around cutting with soil.



LIVE STAKE INSTALLATION IN QUARRY SPALLS



LIVE STAKE INSTALLATION ON SLOPES



STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT

SALLY A. ANDERSON
CERTIFICATE NO. 000372

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LIVE STAKE INSTALLATIONS
STANDARD PLAN H-10.15-00

SHEET 1 OF 1 SHEET

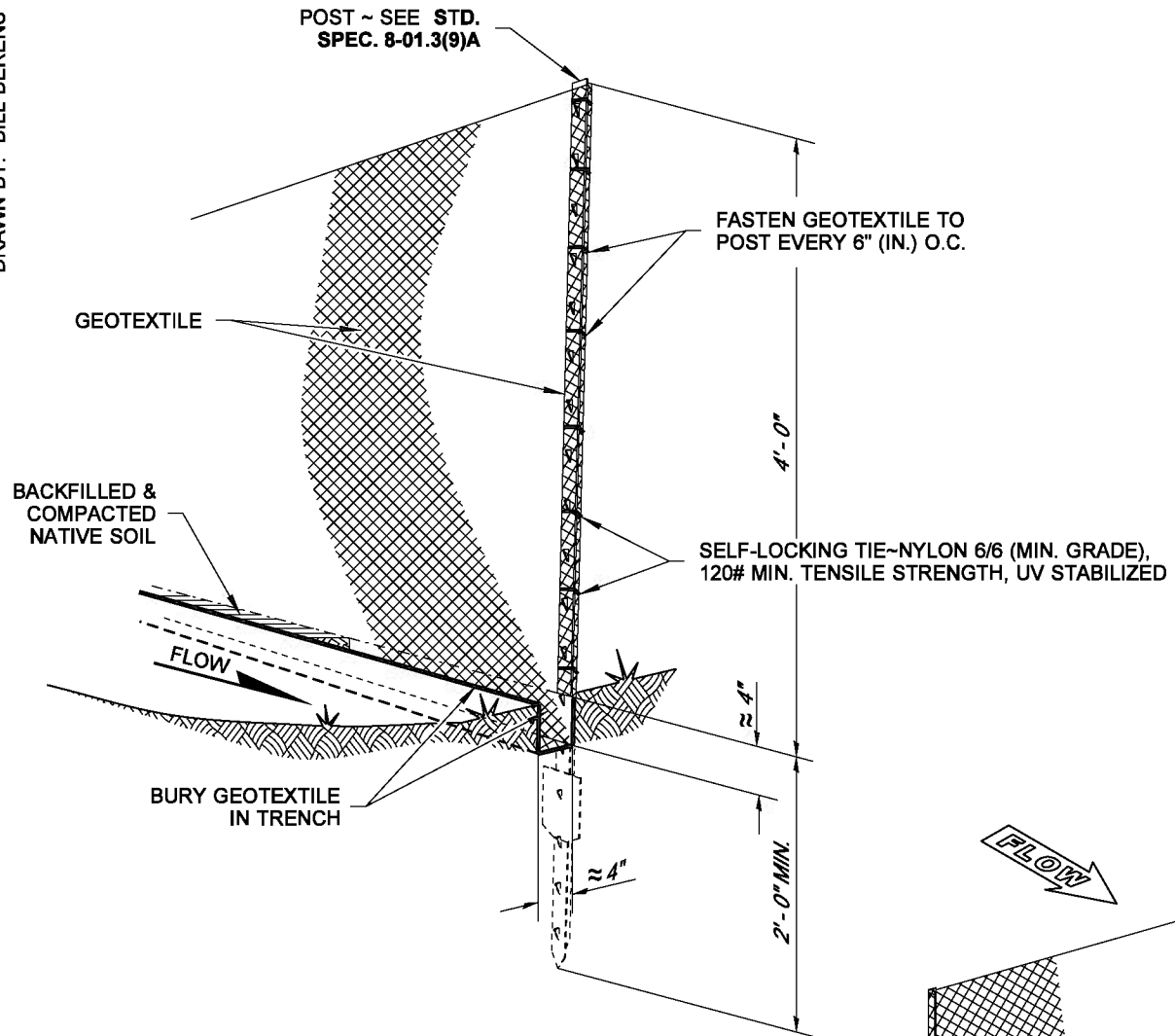
APPROVED FOR PUBLICATION

Pasco Bakotich III **07-03-08**
 STATE DESIGN ENGINEER DATE



DRAWN BY: BILL BERENS

POST ~ SEE STD. SPEC. 8-01.3(9)A



BACKFILLED & COMPACTED NATIVE SOIL

FASTEN GEOTEXTILE TO POST EVERY 6" (IN.) O.C.

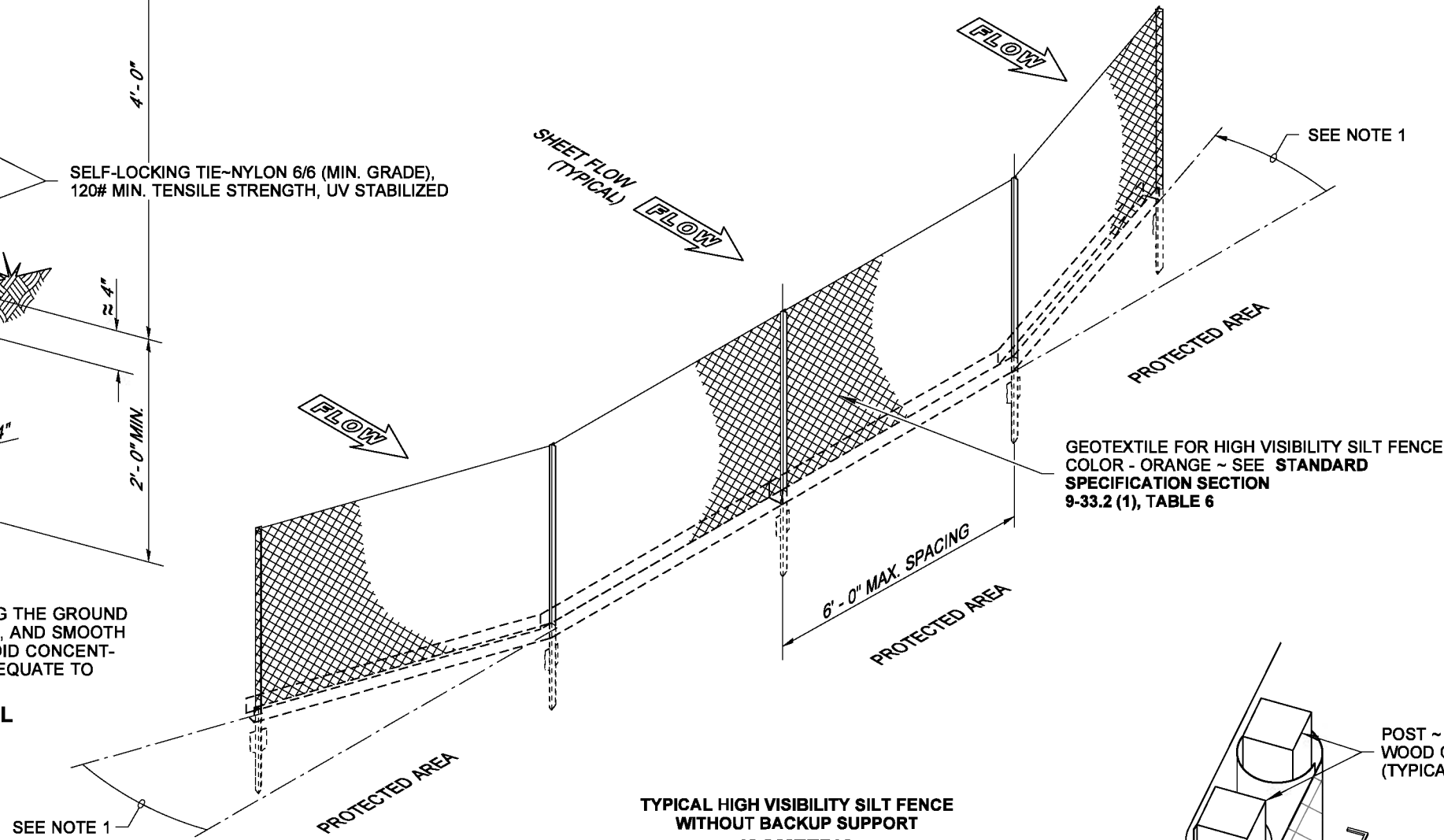
SELF-LOCKING TIE-NYLON 6/6 (MIN. GRADE), 120# MIN. TENSILE STRENGTH, UV STABILIZED

BURY GEOTEXTILE IN TRENCH

NOTE

DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)

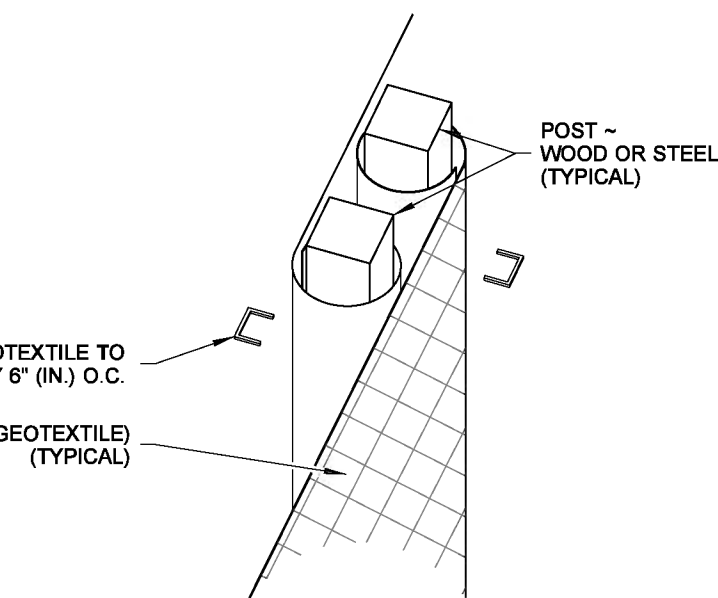


TYPICAL HIGH VISIBILITY SILT FENCE WITHOUT BACKUP SUPPORT ISOMETRIC
(STEEL POSTS SHOWN)

FASTEN GEOTEXTILE TO POST EVERY 6" (IN.) O.C.

FABRIC (GEOTEXTILE) (TYPICAL)

GEOTEXTILE FOR HIGH VISIBILITY SILT FENCE COLOR - ORANGE ~ SEE STANDARD SPECIFICATION SECTION 9-33.2 (1), TABLE 6

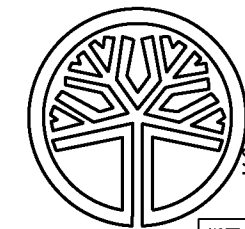


SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP. JOINING SECTIONS SHALL NOT BE PLACED IN LOW SPOTS OR IN SUMP LOCATIONS.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Install the ends of the high visibility silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.



STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT

SANDRA L. SALISBURY
CERTIFICATE NO. 000860

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HIGH VISIBILITY SILT FENCE

STANDARD PLAN I-30.17-00

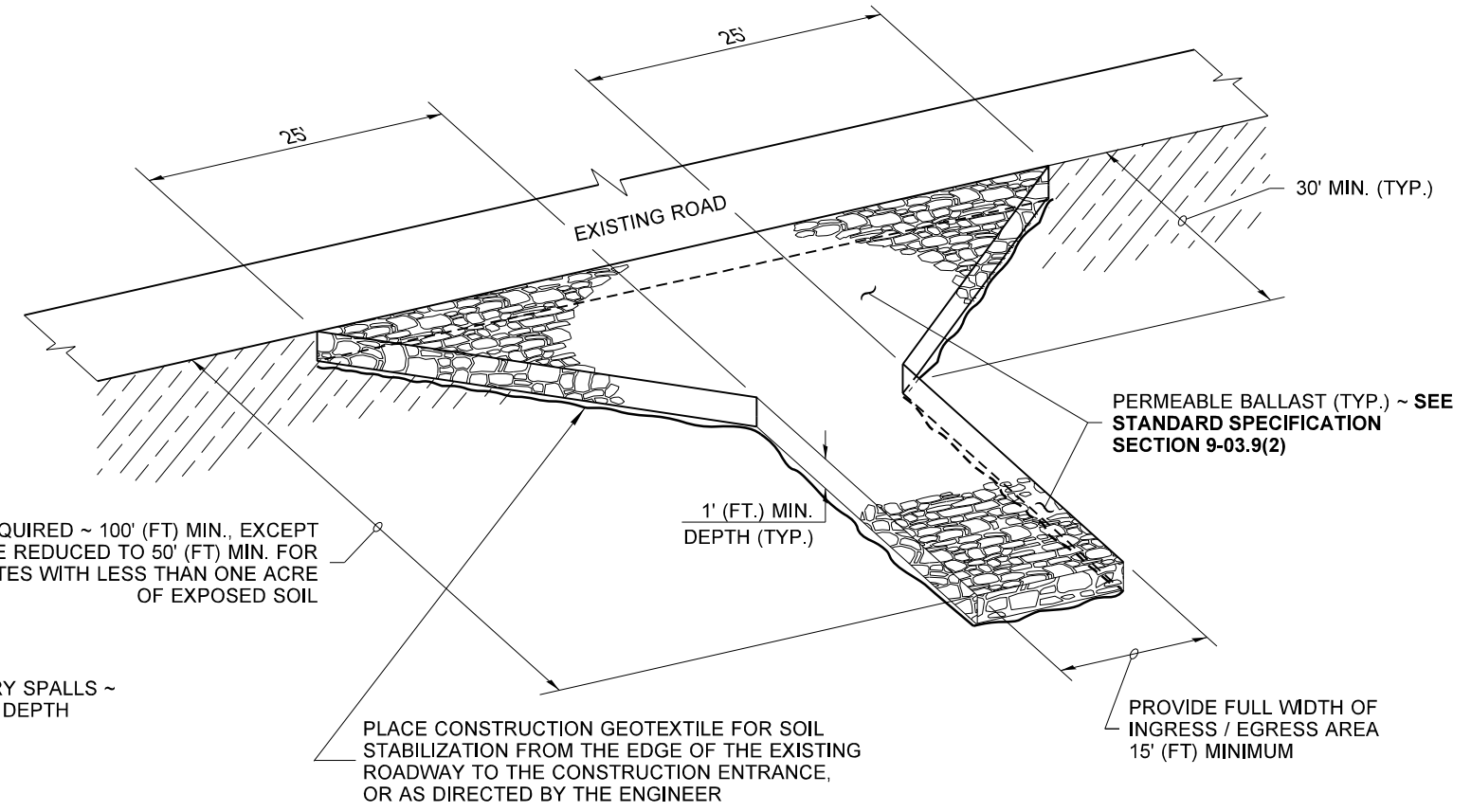
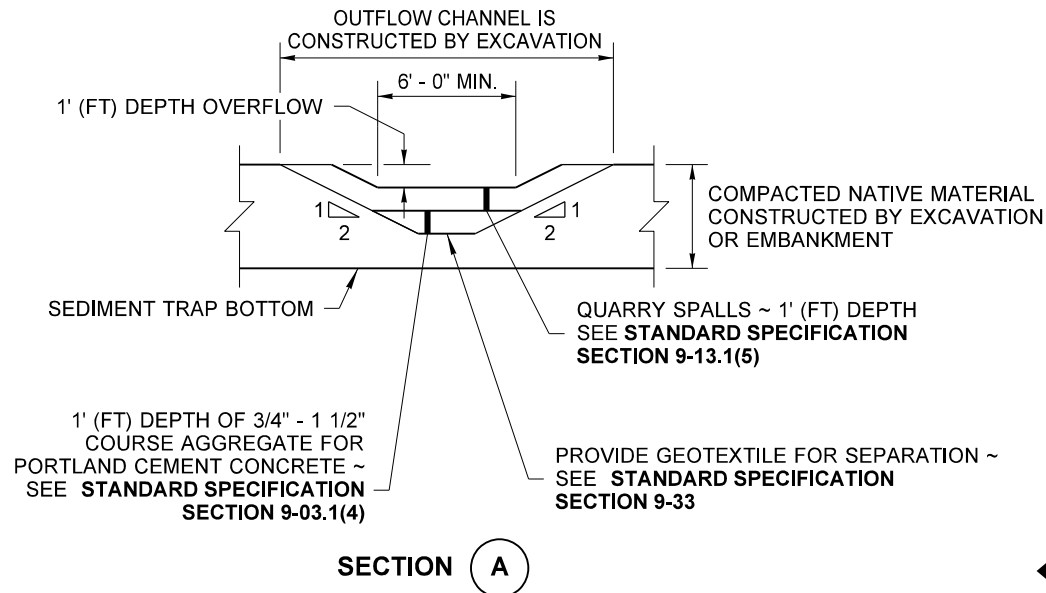
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 3/22/13
STATE DESIGN ENGINEER DATE

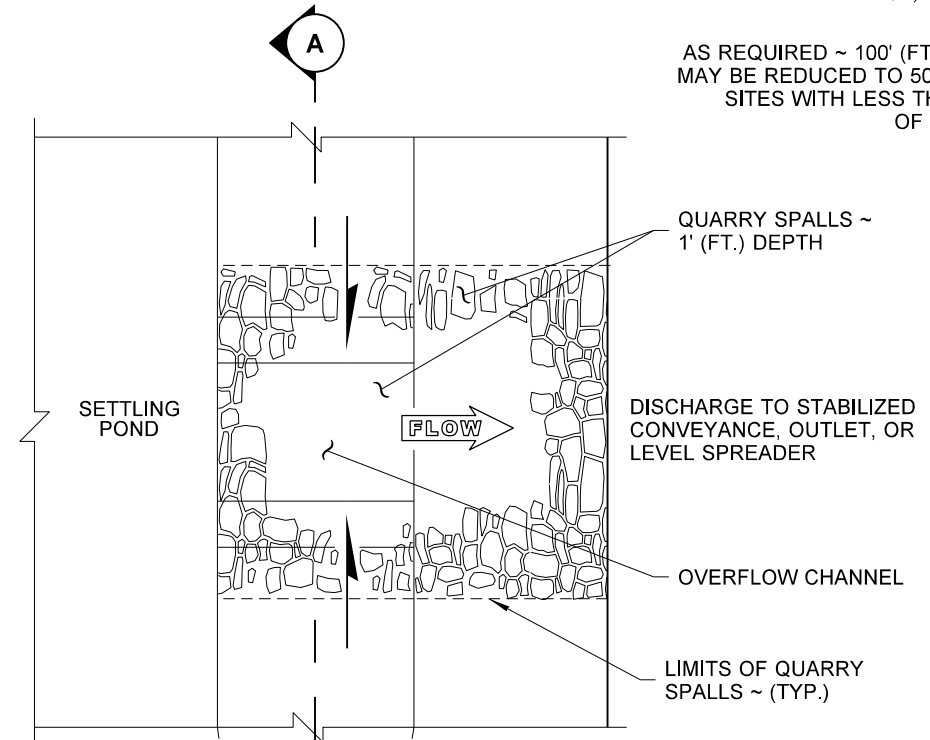


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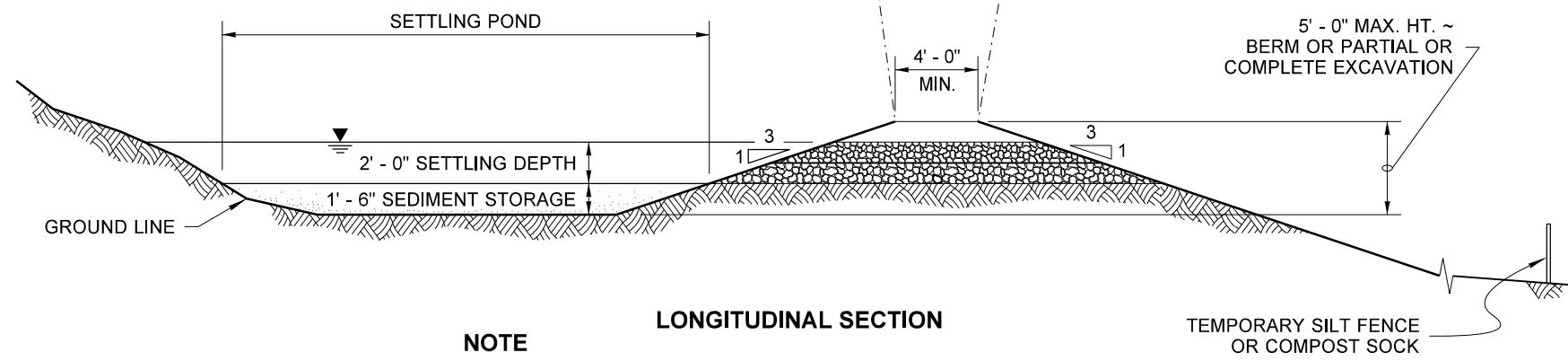


**ISOMETRIC VIEW
STABILIZED CONSTRUCTION ENTRANCE**

STABILIZED CONSTRUCTION ENTRANCE SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 8-01.3(7).



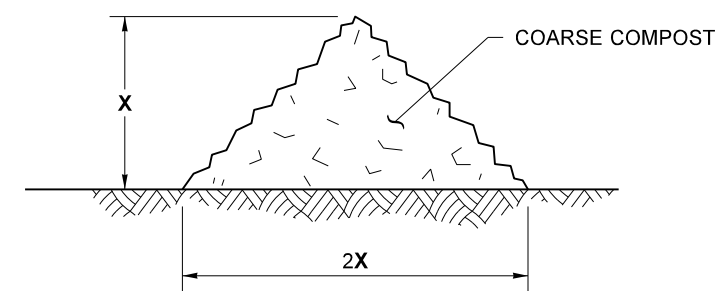
**PARTIAL PLAN VIEW OF BERM
SHOWN LARGER FOR CLARITY**



LONGITUDINAL SECTION

NOTE
PLACE GEOTEXTILE UNDER THE SPILLWAY AND SIDE SLOPES. PROVIDE A CONTINUOUS LAYER BETWEEN THE GRAVEL/ROCK AND THE NATIVE EARTHEN MATERIAL.

TEMPORARY SEDIMENT TRAP



X = 1' - 0" FOR SLOPES 4H:1V OR FLATTER
X = 1' - 6" FOR SLOPES STEEPER THAN 4H:1V

**TYPICAL SECTION
COMPOST BERM DETAIL**



STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

JULI DEE HARTWIG
LICENSE NO. 1422
DATE: 06-21-17

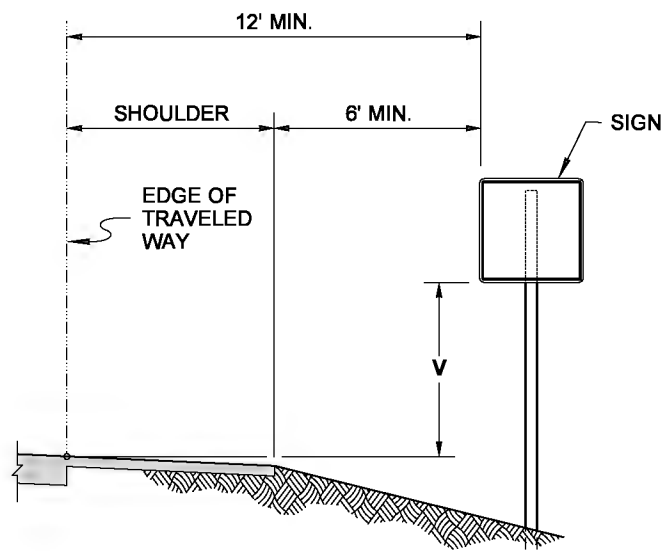
**MISCELLANEOUS
EROSION CONTROL DETAILS
STANDARD PLAN I-80.10-02**

SHEET 1 OF 1 SHEET

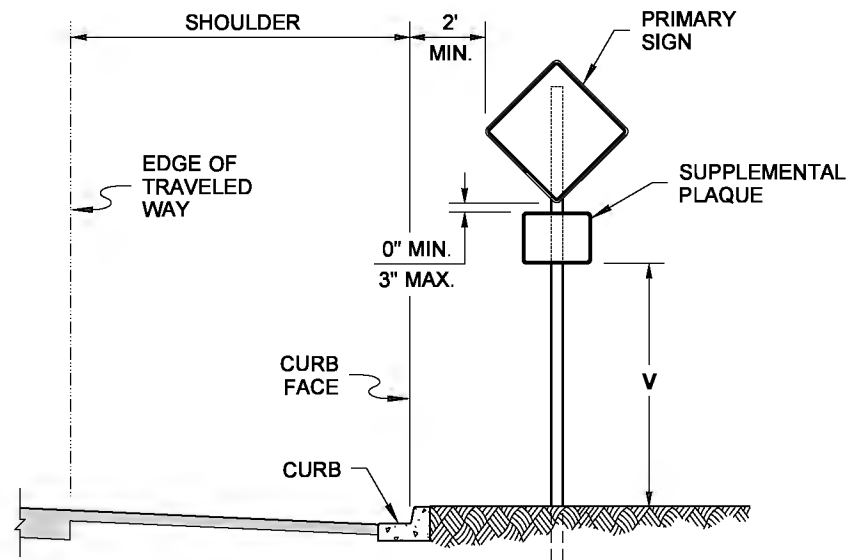
APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER
Washington State Department of Transportation

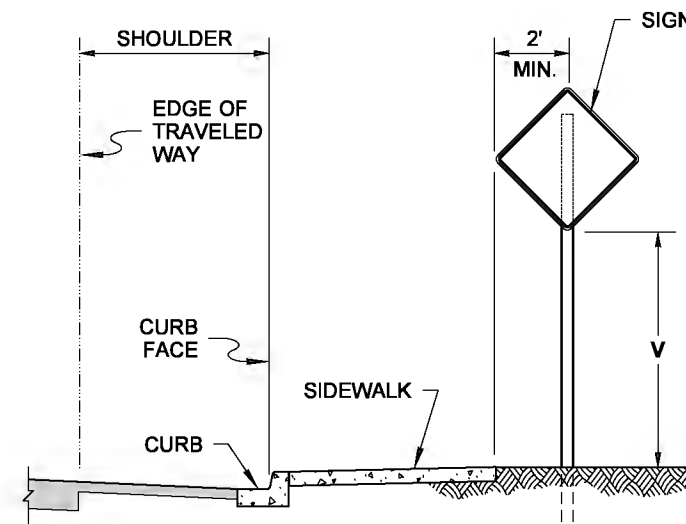
DRAWN BY: FERN LIDDELL



**SIGN INSTALLATION
(FILL SECTION)**



**SIGN INSTALLATION
(CURB SECTION)**

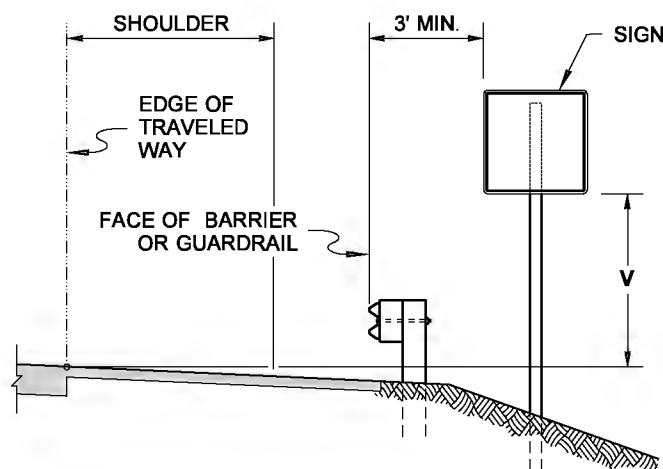


**SIGN INSTALLATION
(SIDEWALK AND CURB SECTION)**

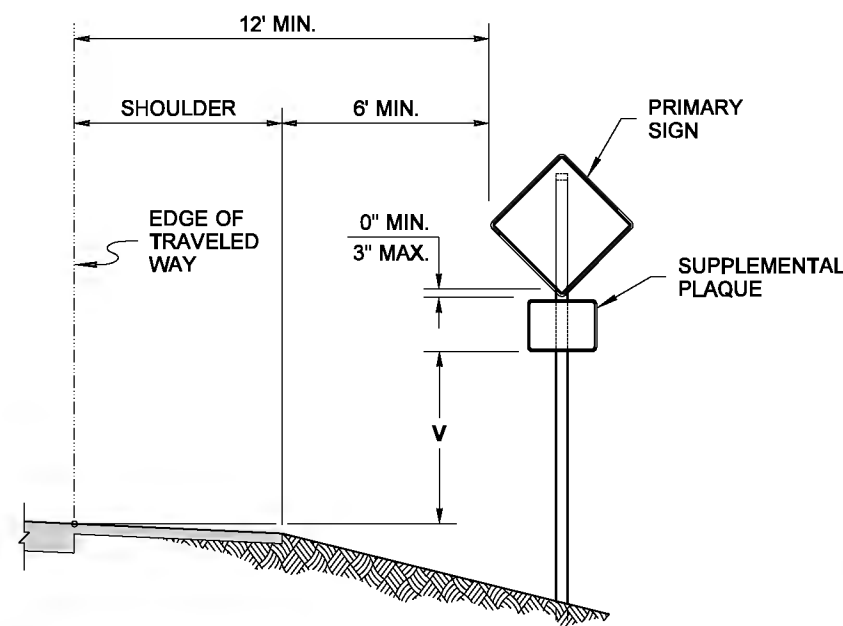
NOTES

1. For sign installation details, see **Standard Plan G - series**.
2. Where it is impractical to locate a sign with the lateral offset, a minimum of 2'(ft) offset may be used. A 1'(ft) lateral offset may be used in business, commercial or residential areas.
3. The "V" height for signs, with an area of more than 50 square feet and two or more sign supports, is 7 feet in both rural and urban areas.

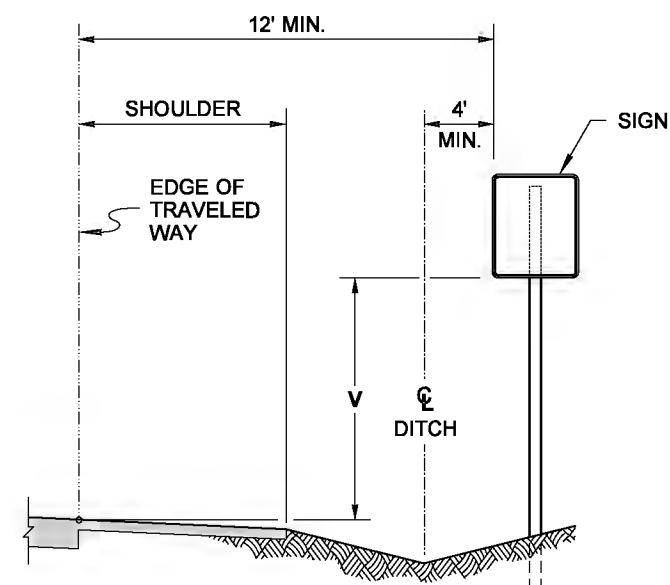
HEIGHT V		
	TO BOTTOM OF SIGN (NO SUPPLEMENTAL PLAQUE)	TO BOTTOM OF SUPPLEMENTAL PLAQUE (WHEN REQUIRED)
RURAL	5' MINIMUM	4' MINIMUM
URBAN	7' MINIMUM	6' MINIMUM



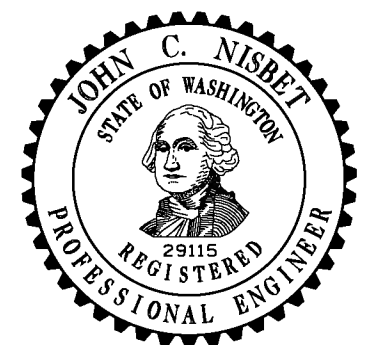
**SIGN INSTALLATION
(BEHIND TRAFFIC BARRIER)**



**SIGN WITH SUPPLEMENTAL
PLAQUE INSTALLATION
(FILL SECTION)**



**SIGN INSTALLATION
(DITCH SECTION)**



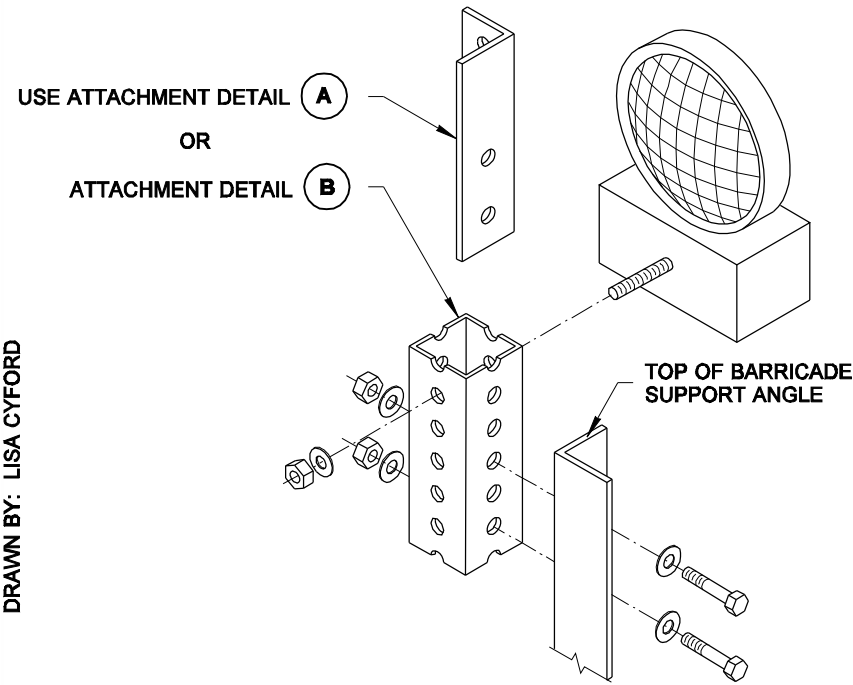
**CLASS A
CONSTRUCTION SIGNING
INSTALLATION
STANDARD PLAN K-80.10-01**

SHEET 1 OF 1 SHEET

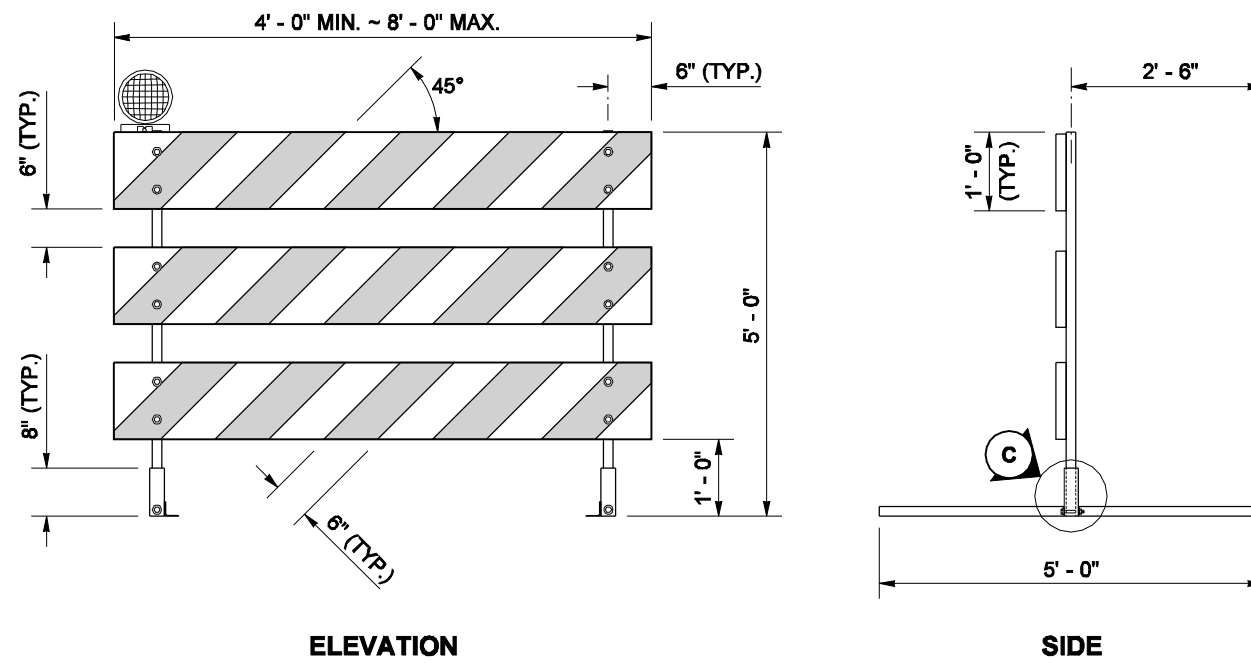
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STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



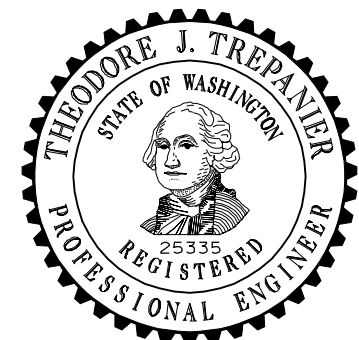
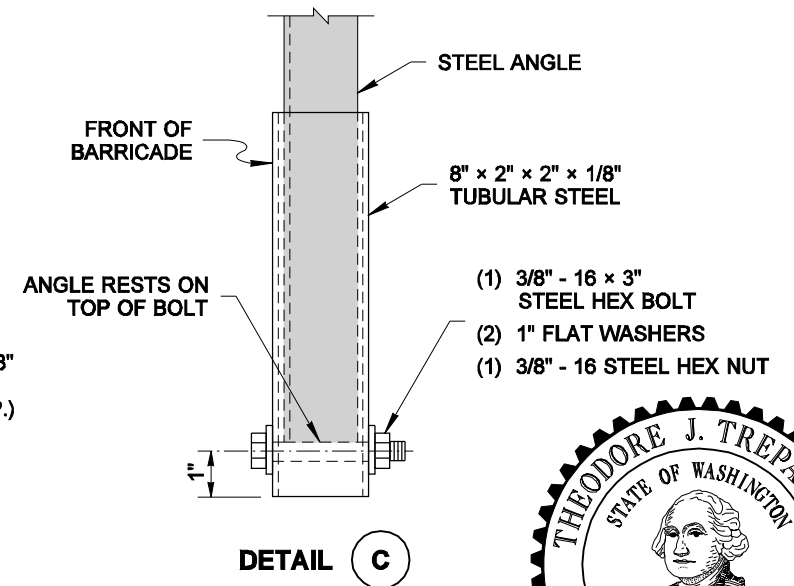
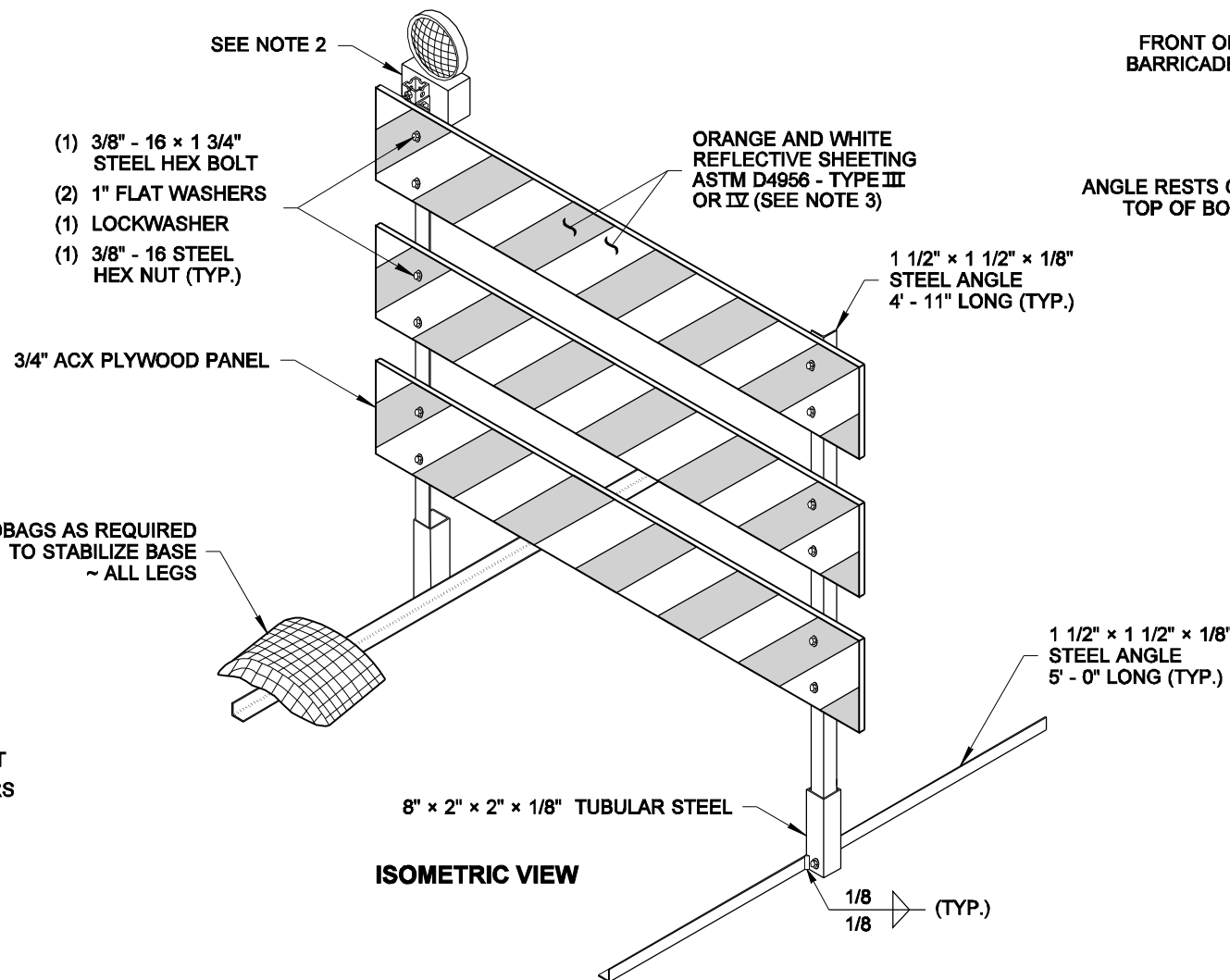
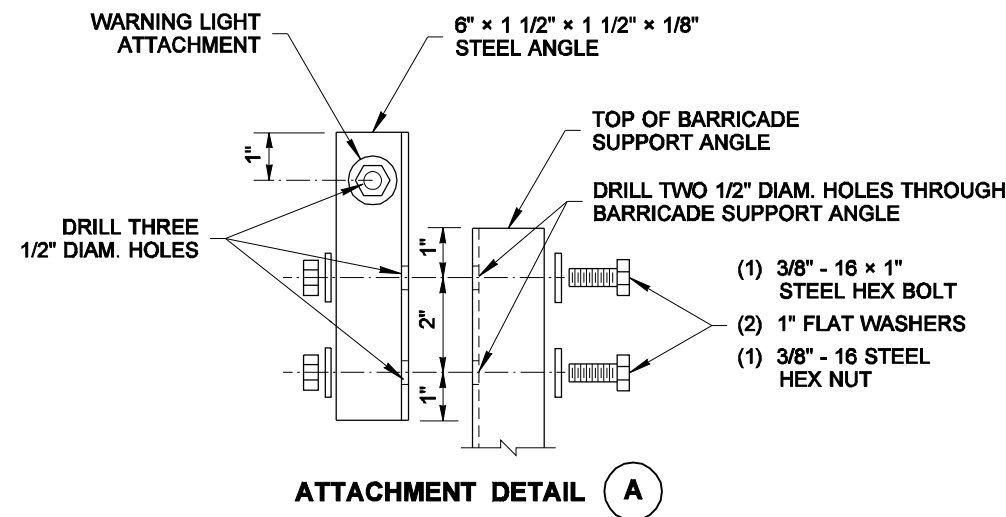
WARNING LIGHT ATTACHMENT DETAIL



TYPE 3 BARRICADE

NOTES

1. All fasteners may be zinc plated, galvanized or stainless steel. All steel angle and tubular steel shall be hot-rolled, high carbon steel, painted or galvanized.
2. Install one lightweight Type A Low-Intensity flashing warning light on the traffic side of the barricade. Install two Type A Low-Intensity flashing warning lights per barricade when the barricades are used to close a roadway. Attach the light to the barricade according to the light manufacturer's recommendations or use the details shown on this plan.
3. Stripes on barricade rails shall be alternating orange and white retroreflective stripes (sloping downward at an angle of 45 degrees in the direction traffic is to pass).
4. The Type 3 barricade design shown on this plan meets the crash test requirements of NCHRP 350. Alternative designs may be approved if they conform to the NCHRP 350 crash test criteria and the MUTCD.
5. When a sign is mounted on the barricade, it shall be securely bolted to at least two plywood panels. The top of the sign shall not be higher than the top panel of the barricade.
6. When sandbags are used in freezing weather, Urea fertilizer shall be mixed with the sand in a quantity to prevent the sand from freezing.

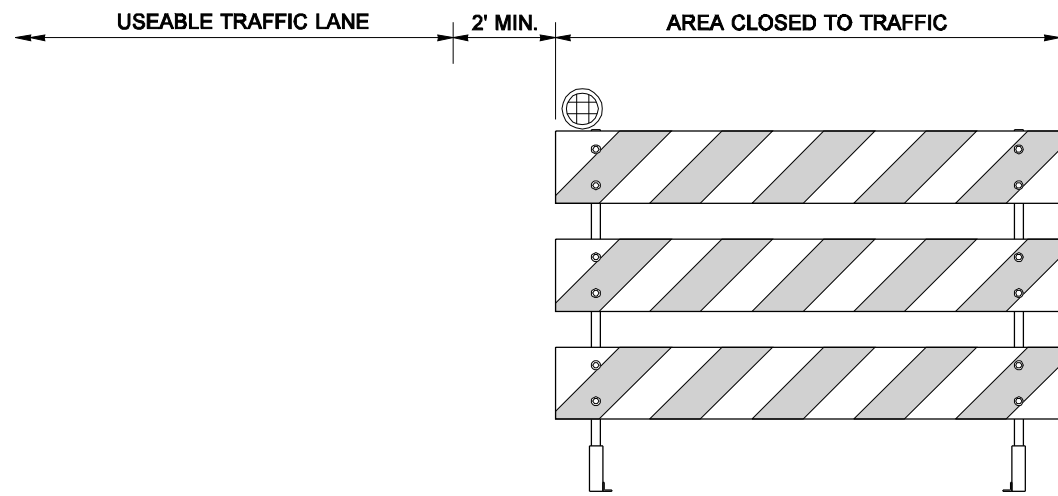


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TYPE 3 BARRICADE
STANDARD PLAN K-80.20-00
SHEET 1 OF 2 SHEETS

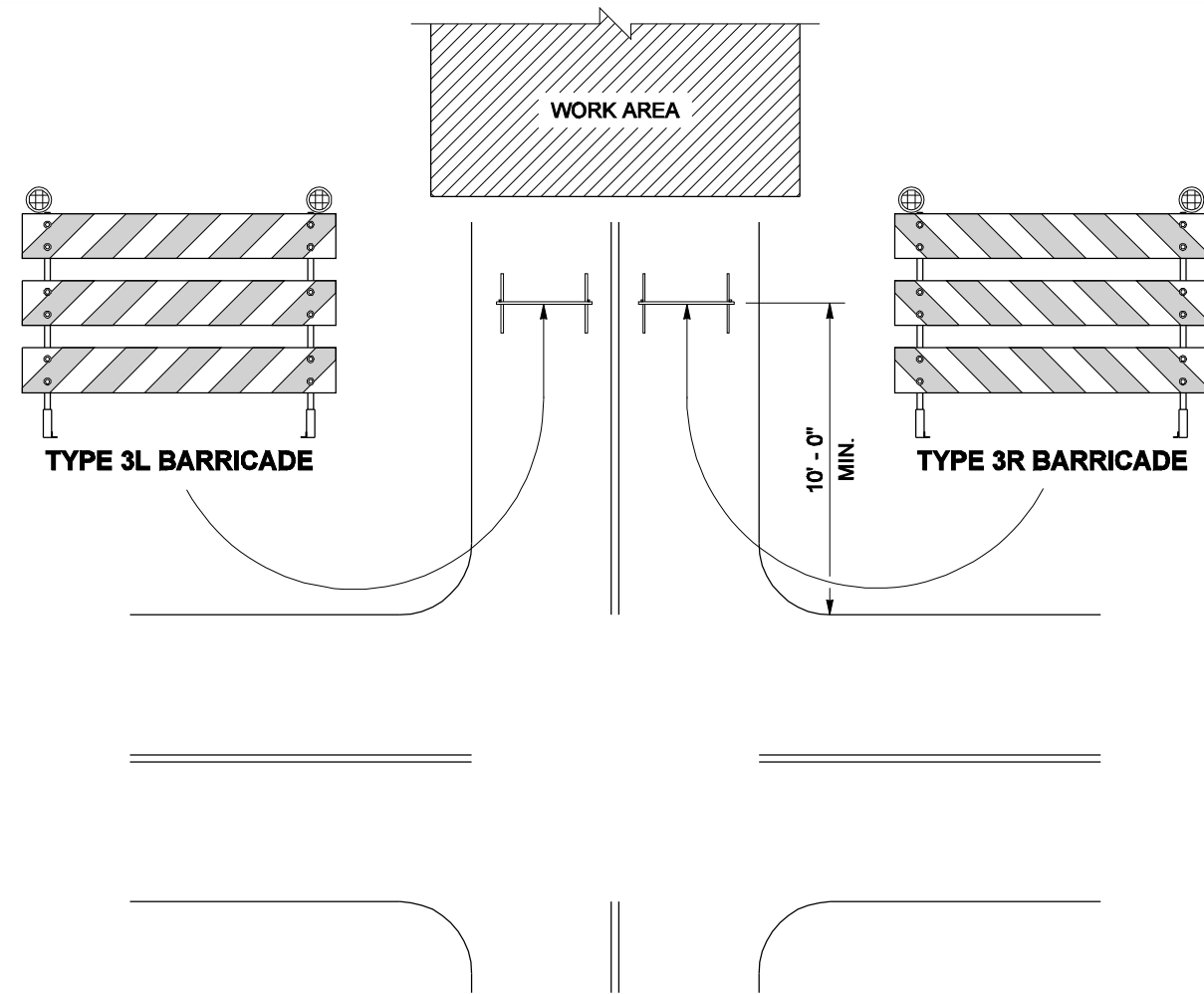
APPROVED FOR PUBLICATION
Kevin J. Dayton 12-20-06
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: LISA CYFORD

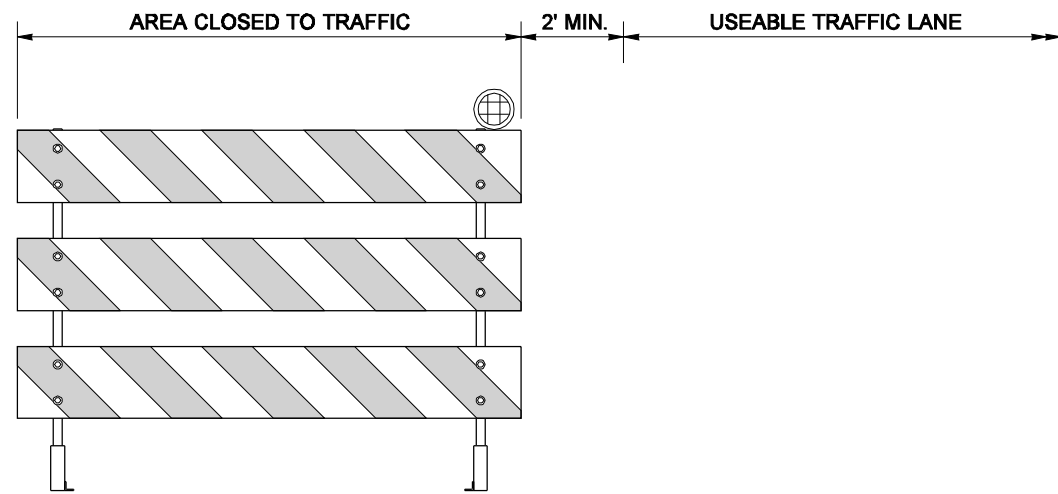


TYPE 3L BARRICADE

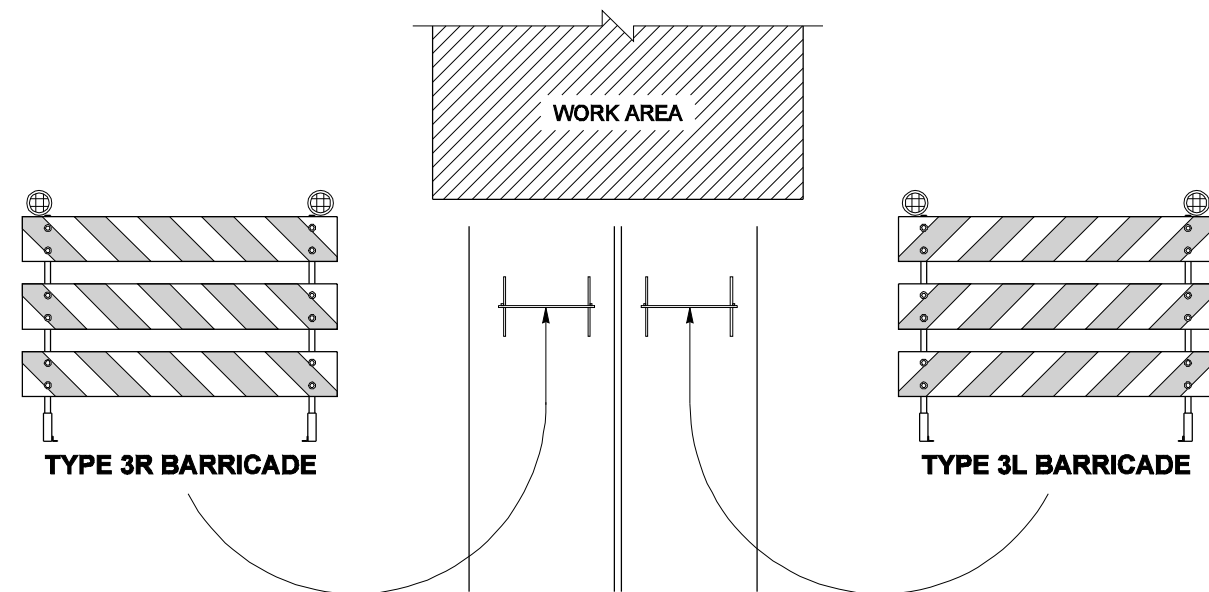
STRIPES ON THE BARRICADES SHALL SLOPE DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS



ROAD CLOSURE AT INTERSECTION

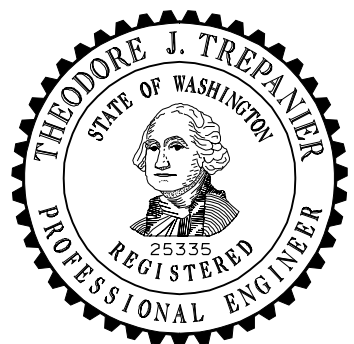


TYPE 3R BARRICADE



ROAD CLOSURE AT OTHER LOCATIONS

BARRICADE PLACEMENT



EXPIRES AUGUST 9, 2007

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TYPE 3 BARRICADE
STANDARD PLAN K-80.20-00

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Kevin J. Dayton 12-20-06

STATE DESIGN ENGINEER DATE



Washington State Department of Transportation

CONSTRUCTION PLAN NOTES:

- 1 INSTALL COFFERDAM PER DETAILS ON DWG D01 AS STAKED IN THE FIELD BY THE ENGINEER
- 2 INSTALL SPILL CONTAINED PUMP SYSTEM WITH WDFW APPROVED PUMP SCREENS AT INLET AND OUTLET
- 3 SAWCUT AND REMOVE HMA
- 4 REMOVE EXISTING 60" TALL BY 84" WIDE CORRUGATED METAL SQUASH PIPE CULVERT AND HEADWALLS
- 5 CLEAR AND GRUB LIMIT AS PER LANDOWNER NEGOTIATIONS
- 6 INSTALL 4' x 1-1/2" x 1/2" LATH WITH RAG TAPE, 10' O.C. (BY LEWIS COUNTY)
- 7 PROTECT EXISTING UTILITY POLE
- 8 EXISTING COMMUNICATION LINE AND PEDESTAL RELOCATED BY OTHERS. CONTRACTOR TO COORDINATE WITH UTILITY
- 9 INSTALL WDFW APPROVED FISH EXCLUSION SCREEN AT 45° ANGLE TO CHANNEL
- 10 REMOVE EXISTING GUARDRAIL
- 11 EXCAVATE TO SUBGRADE FOR PROPOSED BOX CULVERT AND WALL FOUNDATION
- 12 TEMPORARY ROAD BYPASS PER SECTION, DWG D01. REMOVE NON-HATCHED SECTION AFTER CONSTRUCTION

SURVEY CONTROL:

HORIZONTAL DATUM: WASHINGTON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE, NAD 1983/91, RTK METHOD

VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88)

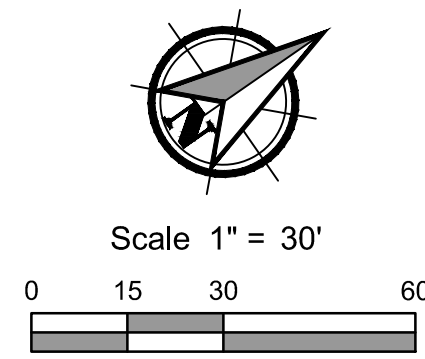
BASIS OF BEARING: WASHINGTON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE, NAD 1983/91

BASIS OF COORDINATES:

POINT DESIGNATION: 20
 LC REBAR APPROX 240 FEET SW OF EXIST CULVERT CROSSING ON S SIDE OF PIGEON SPRINGS RD.
 NORTHING: 477588.3206 (MEASURED)
 EASTING: 1104685.1669 (MEASURED)

- 13 STAGING AND STOCKPILING AREA
- 14 INSTALL TEMPORARY CULVERT (60 LF 36" DIA CORRUGATED POLYETHYLENE CULVERT PIPE)
- 15 REMOVE EXISTING TREE, PROTECT ALL OTHERS. SEE TABLE FOR TREE POINT NUMBERS TO REMAIN
- 16 INSTALL HIGH VISIBILITY SILT FENCE
- 17 INSTALL STABILIZED CONSTRUCTION ENTRANCE (AS NEEDED)
- 18 AREA OF POTENTIAL EFFECT
- 19 BYPASS PUMP LINE (APPROXIMATE LOCATION SHOWN - ADJUST TO SUIT CONSTRUCTION SEQUENCING)
- 20 TURBIDITY MONITORING POINT
- 21 FILL EXISTING CHANNEL PER DETAIL, DWG D03 (BURIED ROCK FOR EROSION AND SCOUR PROTECTION AT NEW/EXISTING CHANNEL INTERSECTION AS DIRECTED BY ENGINEER)
- 22 RELOCATE EXISTING MAILBOX

TREES TO REMAIN		
8070	8124	11416
8071	8125	11417
8072	8126	11418
8073	8127	11419
8074	8128	11420
8075	8130	11421
8076	8131	11423
8077	8132	11533
8078	8133	
8079	8134	
8080	8135	
8095	11412	
8097	11413	
8098	11414	
8099	11415	



- LEGEND**
- AREA OF TEMPORARY BYPASS ROAD TO REMAIN IN PLACE AFTER CONSTRUCTION
 - EXISTING STREAM CHANNEL FILL LIMITS
 - EXISTING GRAVEL TO REMAIN

S12, T13N, R1E

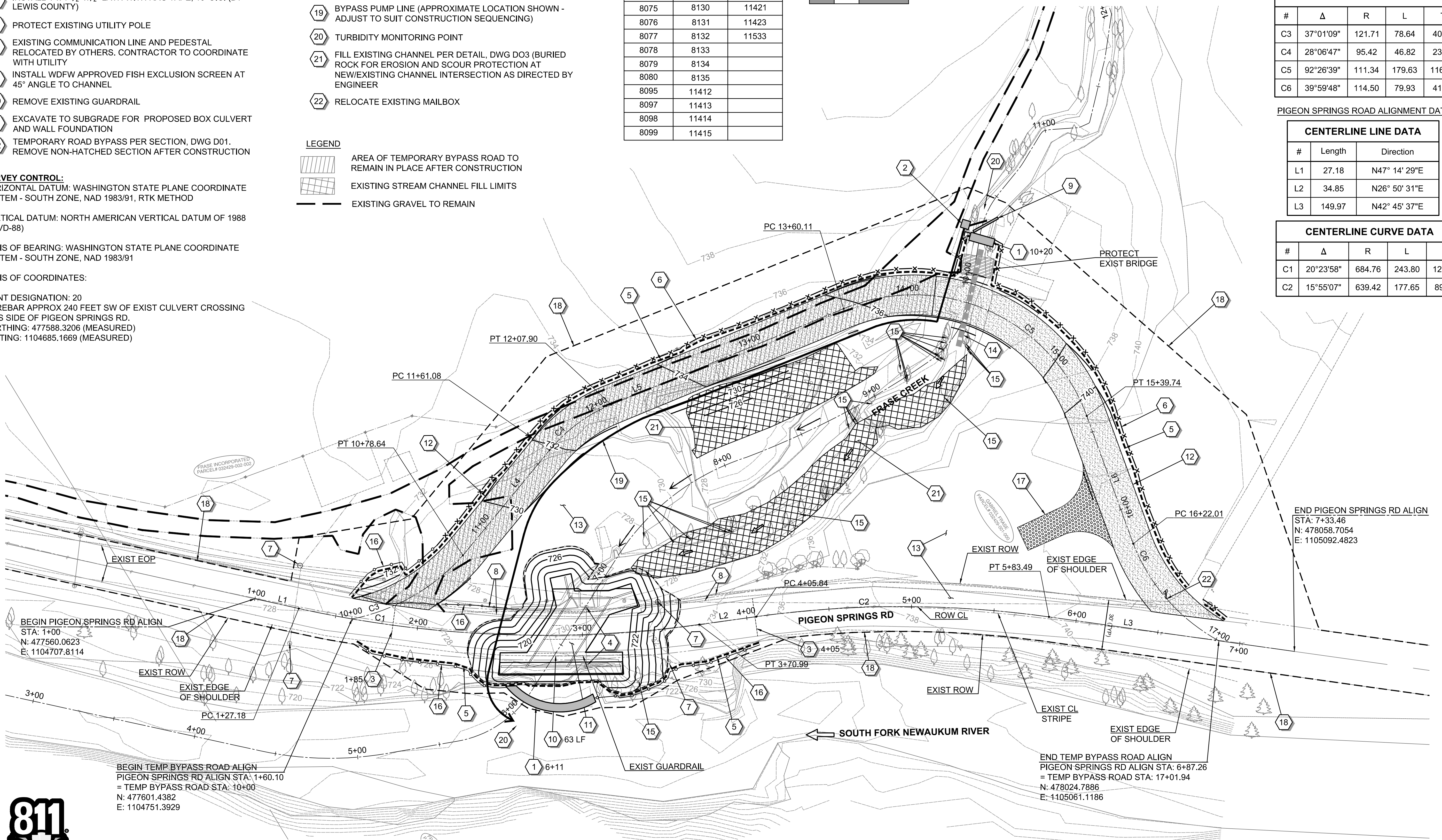
BYPASS ROAD ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L4	82.44	N15° 47' 20"W
L5	152.21	N12° 19' 28"E
L6	82.27	N75° 13' 54"W

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C3	37°01'09"	121.71	78.64	40.75
C4	28°06'47"	95.42	46.82	23.89
C5	92°26'39"	111.34	179.63	116.19
C6	39°59'48"	114.50	79.93	41.67

CENTERLINE LINE DATA		
#	Length	Direction
L1	27.18	N47° 14' 29"E
L2	34.85	N26° 50' 31"E
L3	149.97	N42° 45' 37"E

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C1	20°23'58"	684.76	243.80	123.21
C2	15°55'07"	639.42	177.65	89.40



END PIGEON SPRINGS RD ALIGN
 STA: 7+33.46
 N: 478058.7054
 E: 1105092.4823

END TEMP BYPASS ROAD ALIGN
 PIGEON SPRINGS RD ALIGN STA: 6+87.26
 = TEMP BYPASS ROAD STA: 17+01.94
 N: 478024.7886
 E: 1105061.1186

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PIGEON SPRINGS RD MP 0.5 (FRAISE CREEK) CULVERT REPLACEMENT
 NORTH OF CENTRALIA ALPHA RD ON PIGEON SPRINGS RD
 LEWIS COUNTY PUBLIC WORKS
SITE PREPARATION AND EROSION CONTROL PLAN

NO.	REVISION	BY	DATE	CHK

PROJECT: 75238.003
 DRAWN: DKE
 CHECKED: DAS
 DATE: 01-25-2019
 DWG NO. EC01 SHEET NO. 3 OF 15

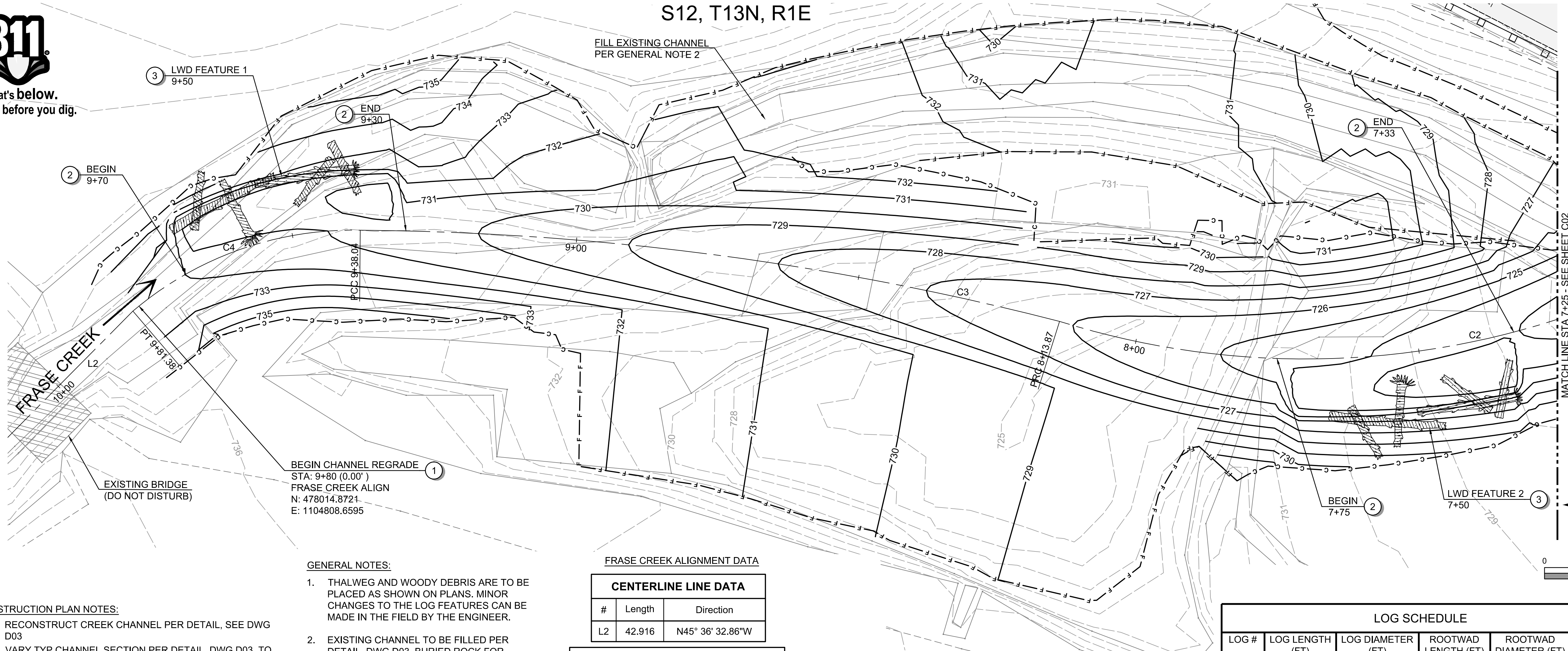


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Know what's below.
Call before you dig.

S12, T13N, R1E



3 LWD FEATURE 1
9+50

2 END
9+30

2 END
7+33

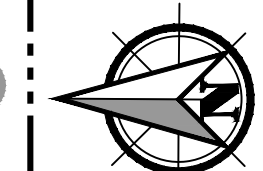
2 BEGIN
9+70

2 BEGIN
7+75

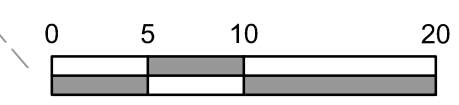
3 LWD FEATURE 2
7+50

BEGIN CHANNEL REGRADE
STA: 9+80 (0.00')
FRASE CREEK ALIGN
N: 478014.8721
E: 1104808.6595

FILL EXISTING CHANNEL
PER GENERAL NOTE 2



Scale 1" = 10'



GENERAL NOTES:

1. THALWEG AND WOODY DEBRIS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE LOG FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
2. EXISTING CHANNEL TO BE FILLED PER DETAIL, DWG D03. BURIED ROCK FOR EROSION AND SCOUR PROTECTION CLASS A AT NEW/EXISTING CHANNEL INTERSECTION AS DIRECTED BY THE ENGINEER.
3. SEE DWG P01 THRU P03 FOR PLANTING PLAN.

CONSTRUCTION PLAN NOTES:

- 1 RECONSTRUCT CREEK CHANNEL PER DETAIL, SEE DWG D03
- 2 VARY TYP CHANNEL SECTION PER DETAIL, DWG D03, TO CONSTRUCT 1-FT DEEP POOL BELOW CHANNEL FINAL GRADE LINE AS SHOWN ON PROFILE.
- 3 INSTALL LARGE WOODY DEBRIS FEATURE PER TABLES, DWG C01 AND DETAIL, DWG D03

FRASE CREEK ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L2	42.916	N45° 36' 32.86"W

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C2	41°11'27"	144.26	103.71	54.21
C3	13°55'51"	510.70	124.17	62.39
C4	41°40'09"	59.59	43.34	22.68

LARGE WOODY DEBRIS CONTROL TABLE

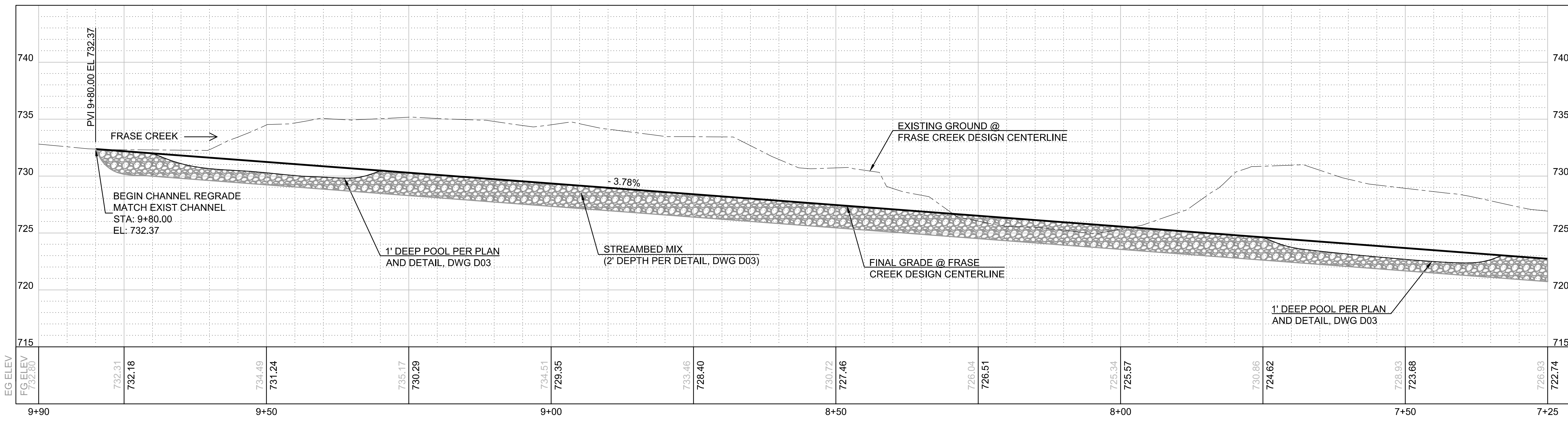
LWD FEATURE #	STATION	LOGS*	VOLUME (FT ³)
1	9+50	1,2,3,4,4,4	110
2	7+50	1,2,3,4,4,4	110

* SEE LOG SCHEDULE

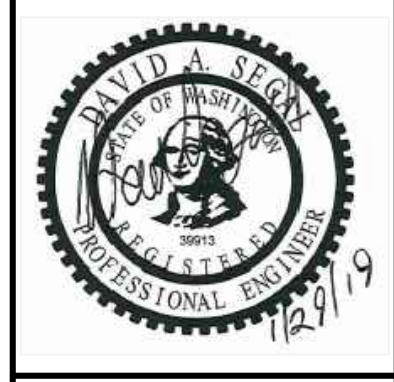
LOG SCHEDULE

LOG #	LOG LENGTH (FT)	LOG DIAMETER (FT)	ROOTWAD LENGTH (FT)	ROOTWAD DIAMETER (FT)	VOLUME (FT ³)
1*	18	1.5	2	3	40.3
2*	20	1.5	-	-	35.3
3	10	1	1.5	2	10.7
4	10	1	-	-	7.9

* KEY LOG (VOLUME > 35 FT³)



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PIGEON SPRINGS RD MP 0.5 (FRASE CREEK) CULVERT REPLACEMENT
NORTH OF CENTRALIA ALPHA RD ON PIGEON SPRINGS RD
LEWIS COUNTY PUBLIC WORKS

CREEK AND CULVERT PLAN AND PROFILE

CONSTRUCTION PLANS

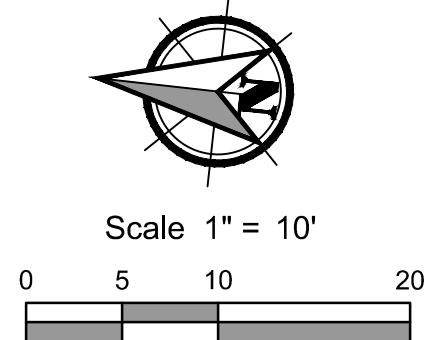
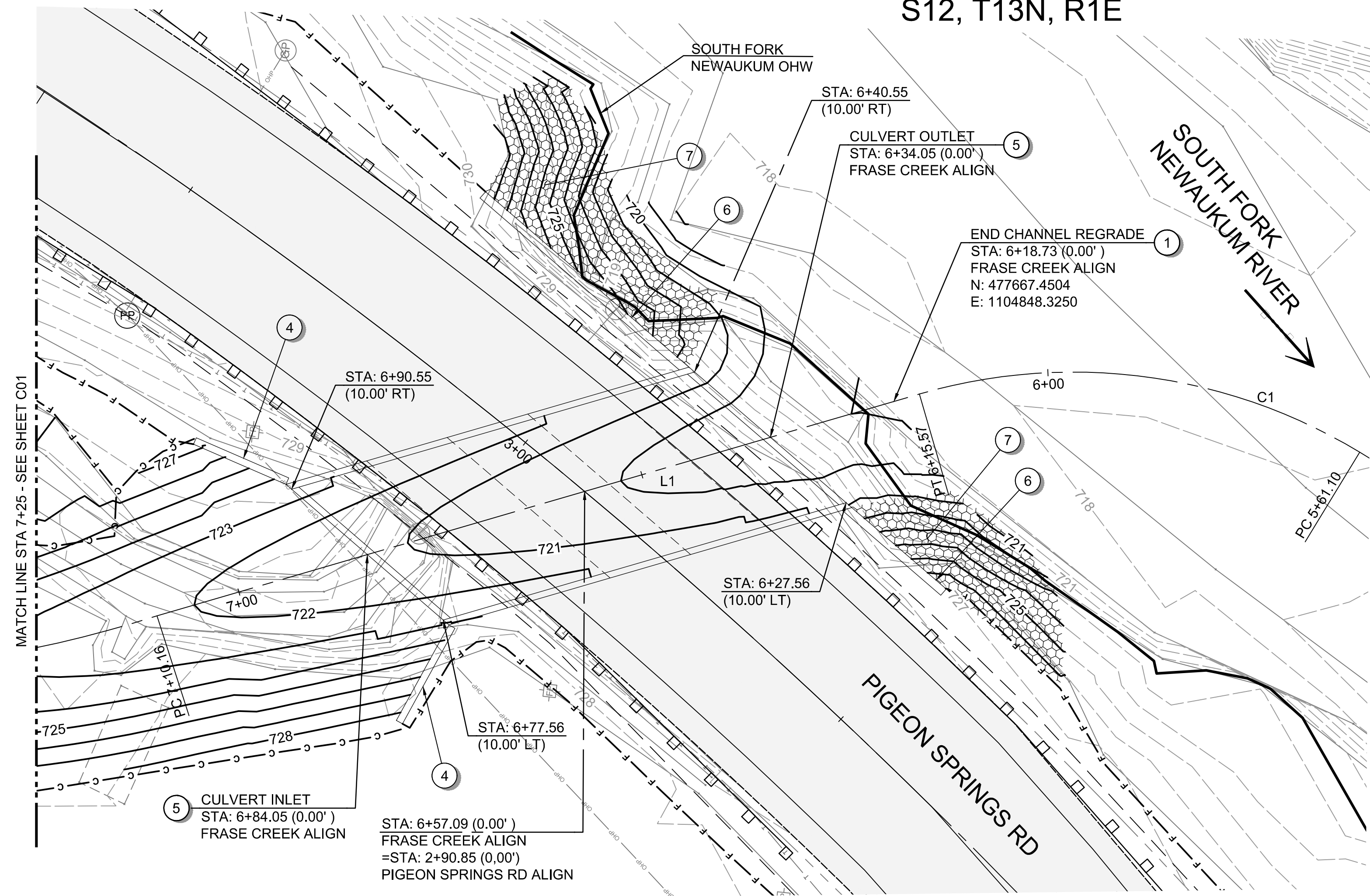
NO.	REVISION	BY	DATE	CHK

PROJECT: 75238.003
DRAWN: DKE
CHECKED: DAS
DATE: 01-25-2019

DWG NO.	SHEET NO.
C01	4
	OF
	15

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S12, T13N, R1E



CONSTRUCTION PLAN NOTES:

- ① RECONSTRUCT CREEK CHANNEL PER DETAIL, SEE DWG D03
- ④ INSTALL PRECAST CONCRETE WINGWALL PER ROADWAY PLAN DWG C03 AND DETAIL, DWG D02
- ⑤ INSTALL 50 LF 20-FT WATERWAY x 11-FT TALL PRECAST SPLIT BOX CULVERT. CULVERT SKEWED AT 33°. SEE DETAIL, DWG D02
- ⑥ INSTALL CAST-IN-PLACE STRUCTURAL RETAINING WALL PER DWG S100-S200
- ⑦ INSTALL BANK PROTECTION FOR CAST-IN-PLACE STRUCTURAL RETAINING WALL PER DETAIL, DWG D02. FOLLOW EXISTING SLOPE BELOW OHW. NO MORE THAN 1 CY PER LINEAR FOOT OF NET FILL BELOW OHW.

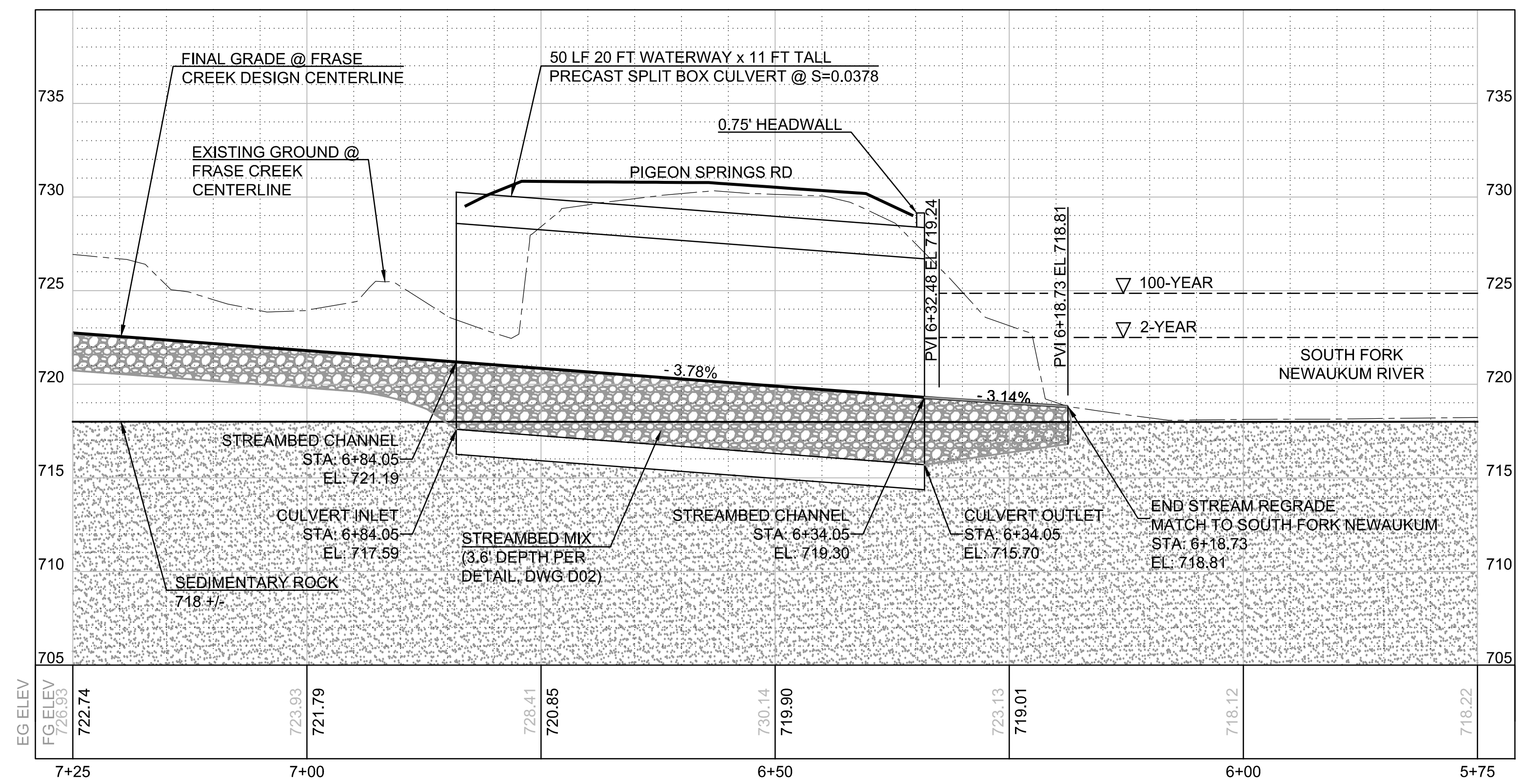
GENERAL NOTES:

- 1. THALWEG AND WOODY DEBRIS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE LOG FEATURES CAN BE MADE IN THE FIELD BY THE ENGINEER.
- 2. SEE DWG P01 THRU P03 FOR PLANTING PLAN.

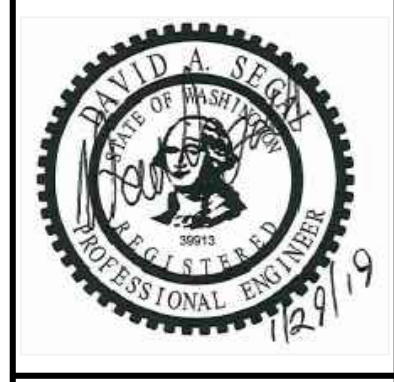
FRASE CREEK ALIGNMENT DATA

CENTERLINE LINE DATA		
#	Length	Direction
L1	94.591	N22° 35' 41.56"W

CENTERLINE CURVE DATA				
#	Δ	R	L	T
C1	47°30'20"	65.69	54.47	28.91



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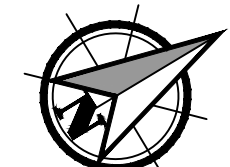
PIGEON SPRINGS RD MP 0.5 (FRASE CREEK) CULVERT REPLACEMENT
 NORTH OF CENTRALIA ALPHA RD ON PIGEON SPRINGS RD
 LEWIS COUNTY PUBLIC WORKS
CREEK AND CULVERT PLAN AND PROFILE

NO.	REVISION	BY	DATE	CHK
PROJECT: 75238.003				
DRAWN: DKE				
CHECKED: DAS				
DATE: 01-25-2019				
DWG NO. C02				SHEET NO. 5
				OF 15

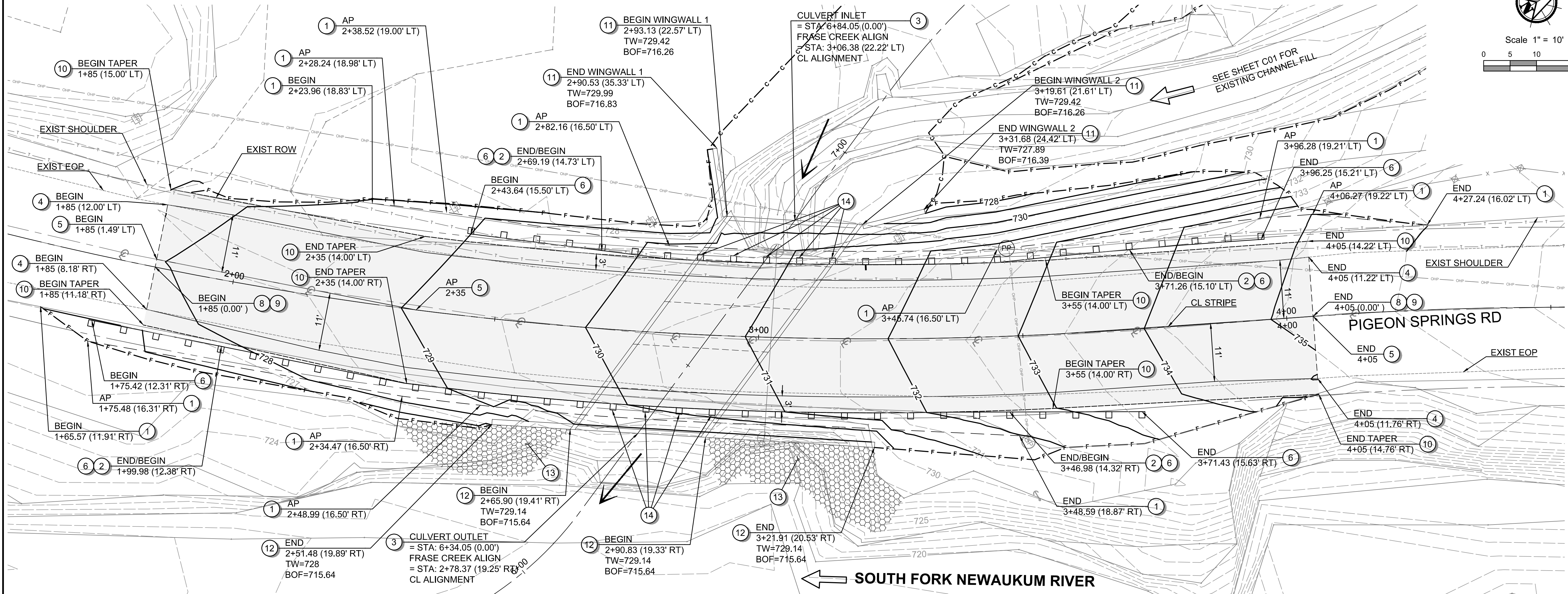
L:\Projects\6000\75238_LewisCountyWater\Drawings\75238.003_C02.dwg, Jan 23, 2019 11:08am, DregE



S12, T13N, R1E



Scale 1" = 10'
0 5 10 20



CONSTRUCTION PLAN NOTES:

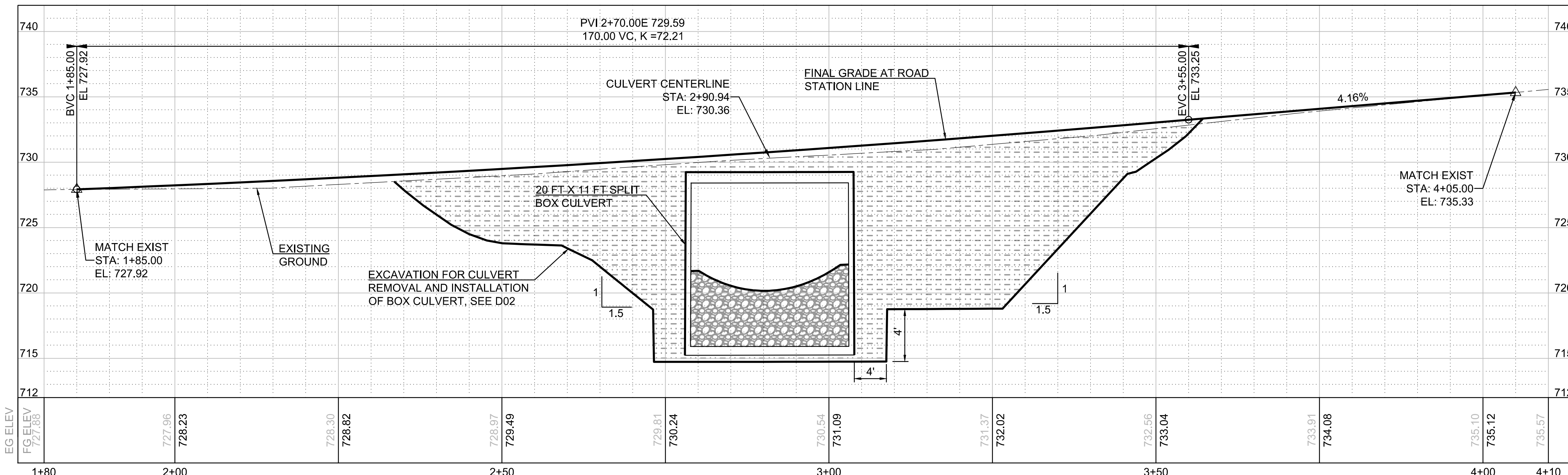
- ① SHOULDER WIDENING
- ② BEAM GUARDRAIL TYPE 31, PER WSDOT STD PLAN C-20.10-04 WITH 6' POSTS
- ③ 50-LF PRECAST SPLIT BOX CULVERT (SEE DETAIL, DWG D02)
- ④ PAINT LINE (WHITE)
- ⑤ PAINT LINE (DOUBLE CENTER YELLOW)
- ⑥ BEAM GUARDRAIL TYPE 31 SKT-SP-MGS (TL-2) NON-FLARED TERMINAL PER WSDOT STD PLAN C-22.45-03
- ⑧ HMA PAVEMENT (SEE SECTION DETAIL, DWG D01)
- ⑨ SAWCUT
- ⑩ HMA WIDENING
- ⑪ CONCRETE WINGWALL
- ⑫ STRUCTURAL RETAINING WALL (SEE S-100 AND S-200 FOR DESIGN)
- ⑬ BANK PROTECTION FOR STRUCTURAL RETAINING WALL PER DETAIL, DWG D02
- ⑭ BEAM GUARDRAIL TYPE 31 STEEL POST, PER WSDOT STD PLAN C-20.41-01.

GENERAL NOTES:

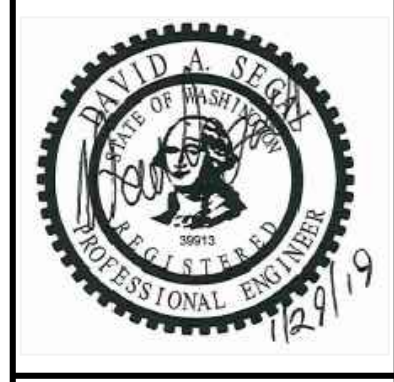
1. GUARDRAIL STATION OFFSET LOCATIONS ARE TO FACE OF GUARDRAIL W-BEAM.
2. GUARDRAIL POSTS ARE STEEL UNLESS OTHERWISE NOTED OR REQUIRED IN THE STANDARD PLANS.
3. SEE DWG D01 FOR TYPICAL ROAD SECTION.
4. FOR GUARDRAIL POST ABOVE CULVERT, DO NOT AFFECT STEEL REINFORCING WHEN DRILLING FOR ANCHORS.

WALL ABBREVIATIONS:

TW = TOP FACE OF WALL
BOF = BOTTOM OF FOOTING



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PIGEON SPRINGS RD MP 0.5 (FRASE CREEK) CULVERT REPLACEMENT
 NORTH OF CENTRALIA ALPHA RD ON PIGEON SPRINGS RD
 LEWIS COUNTY PUBLIC WORKS
ROADWAY DRAINAGE AND GRADING

CONSTRUCTION PLANS

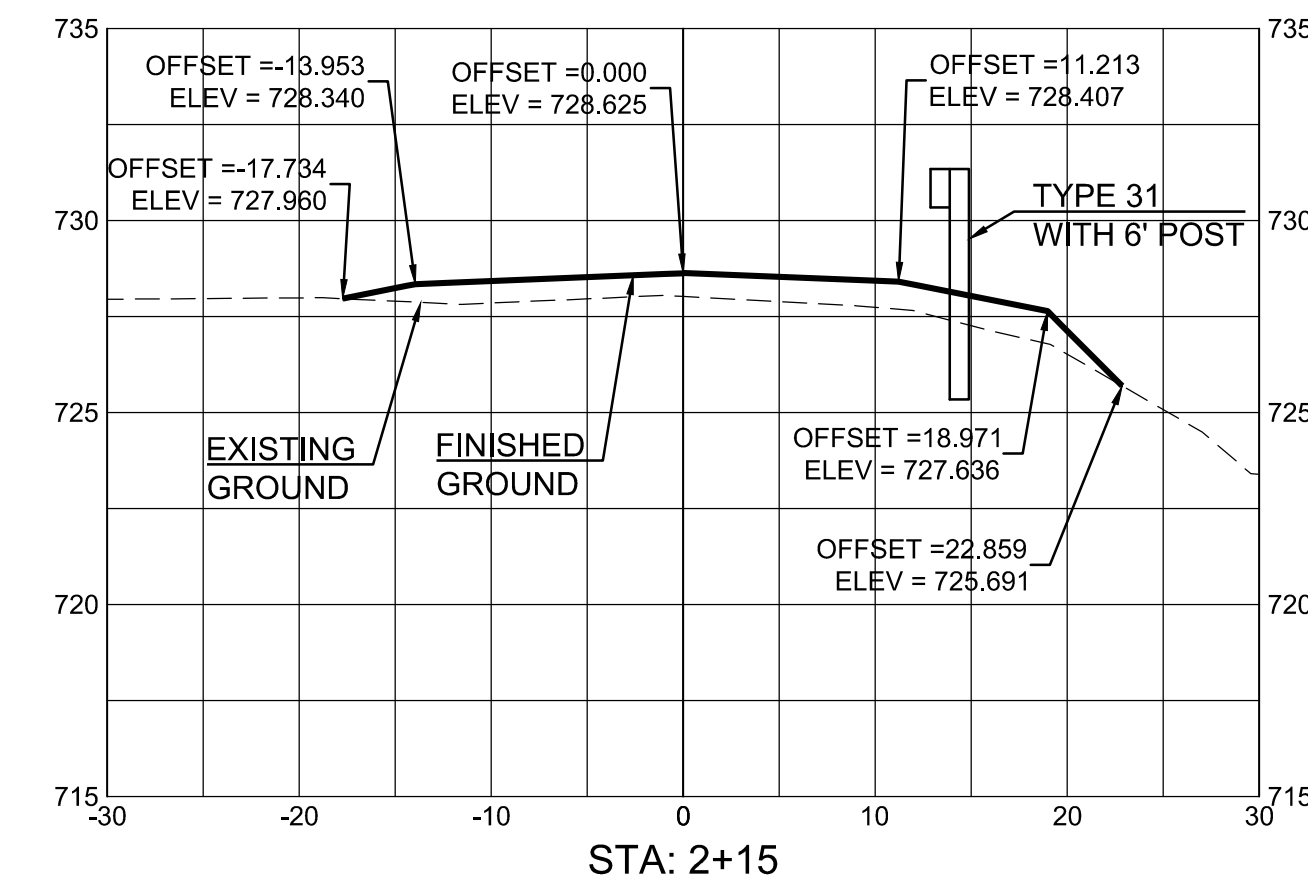
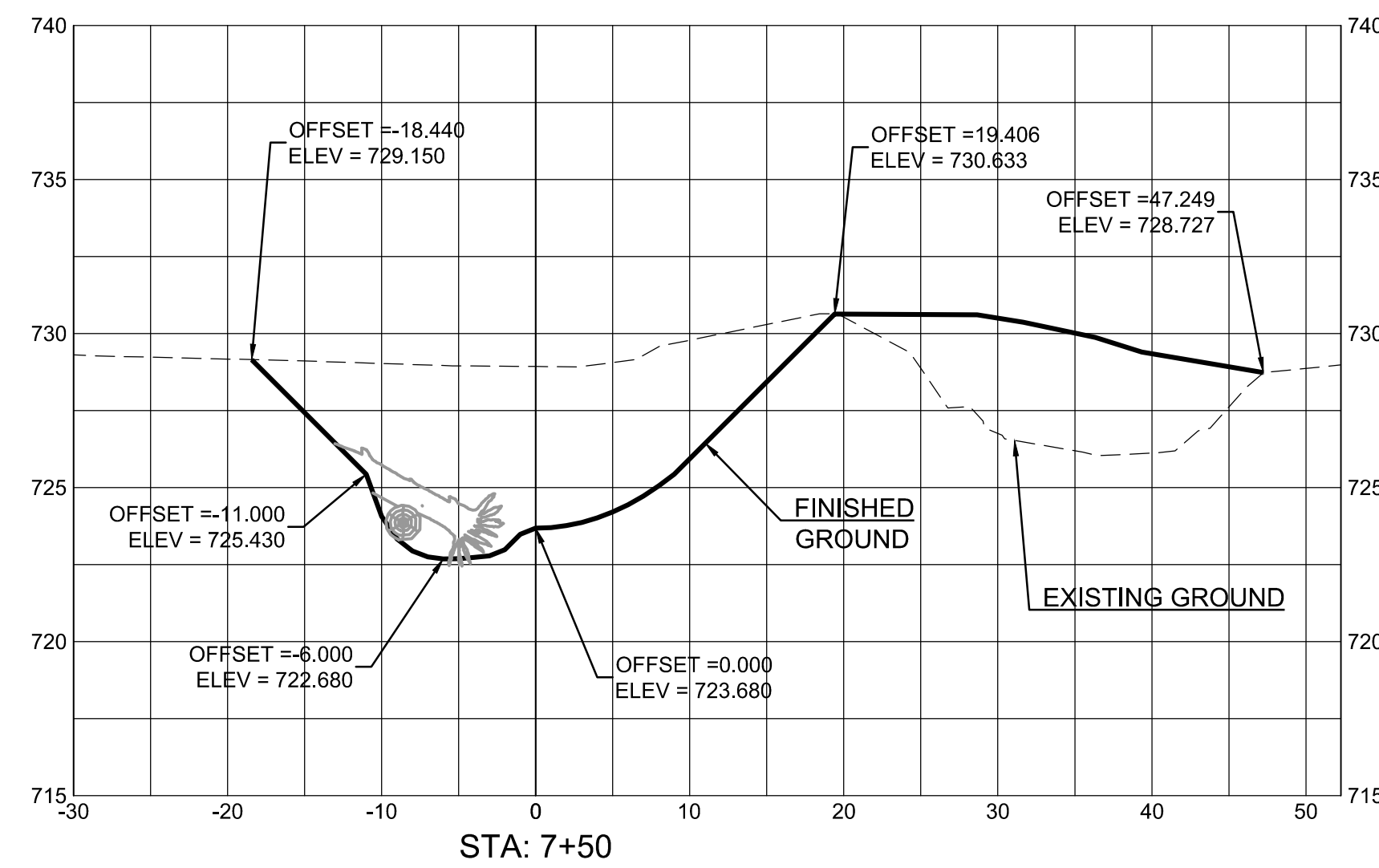
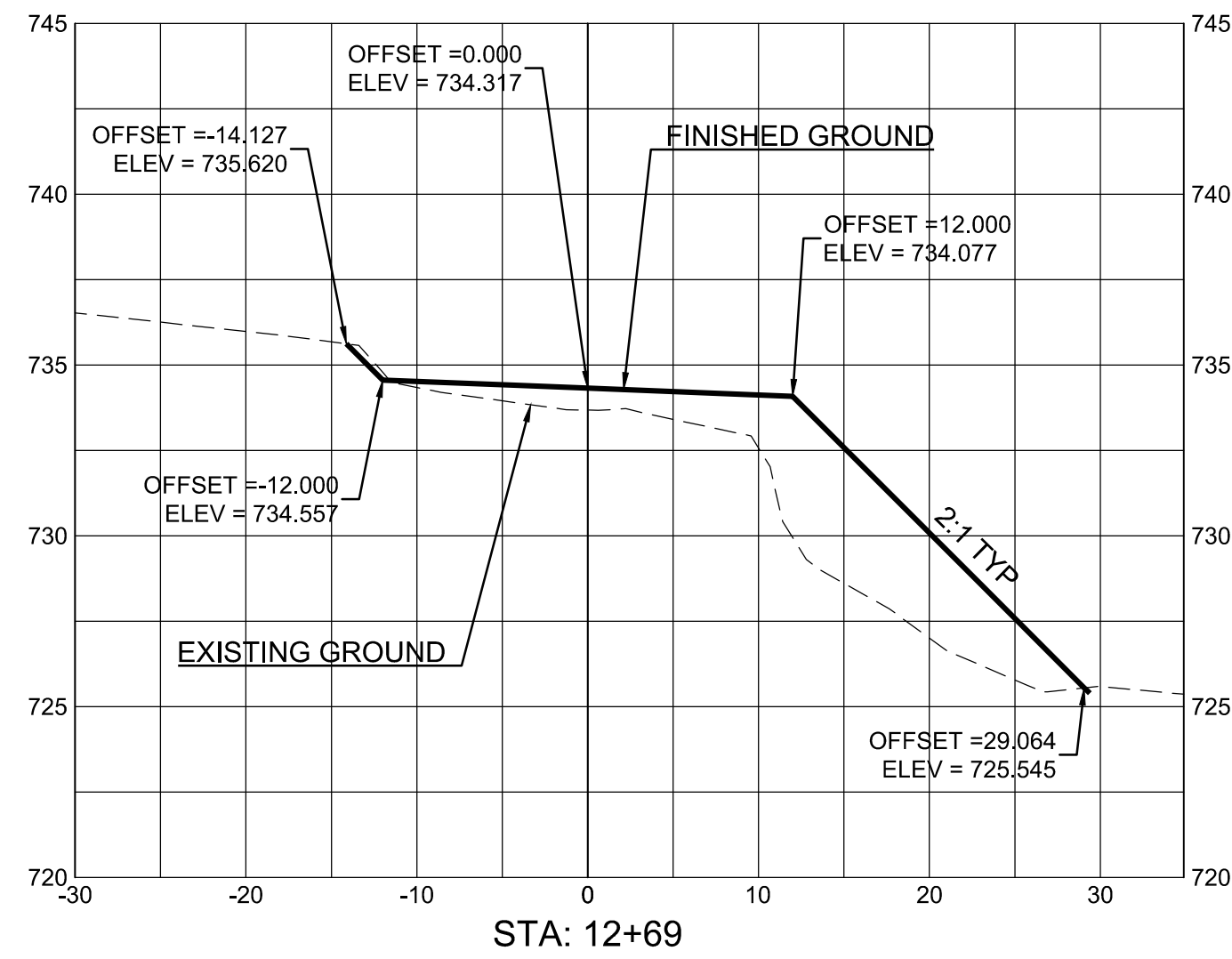
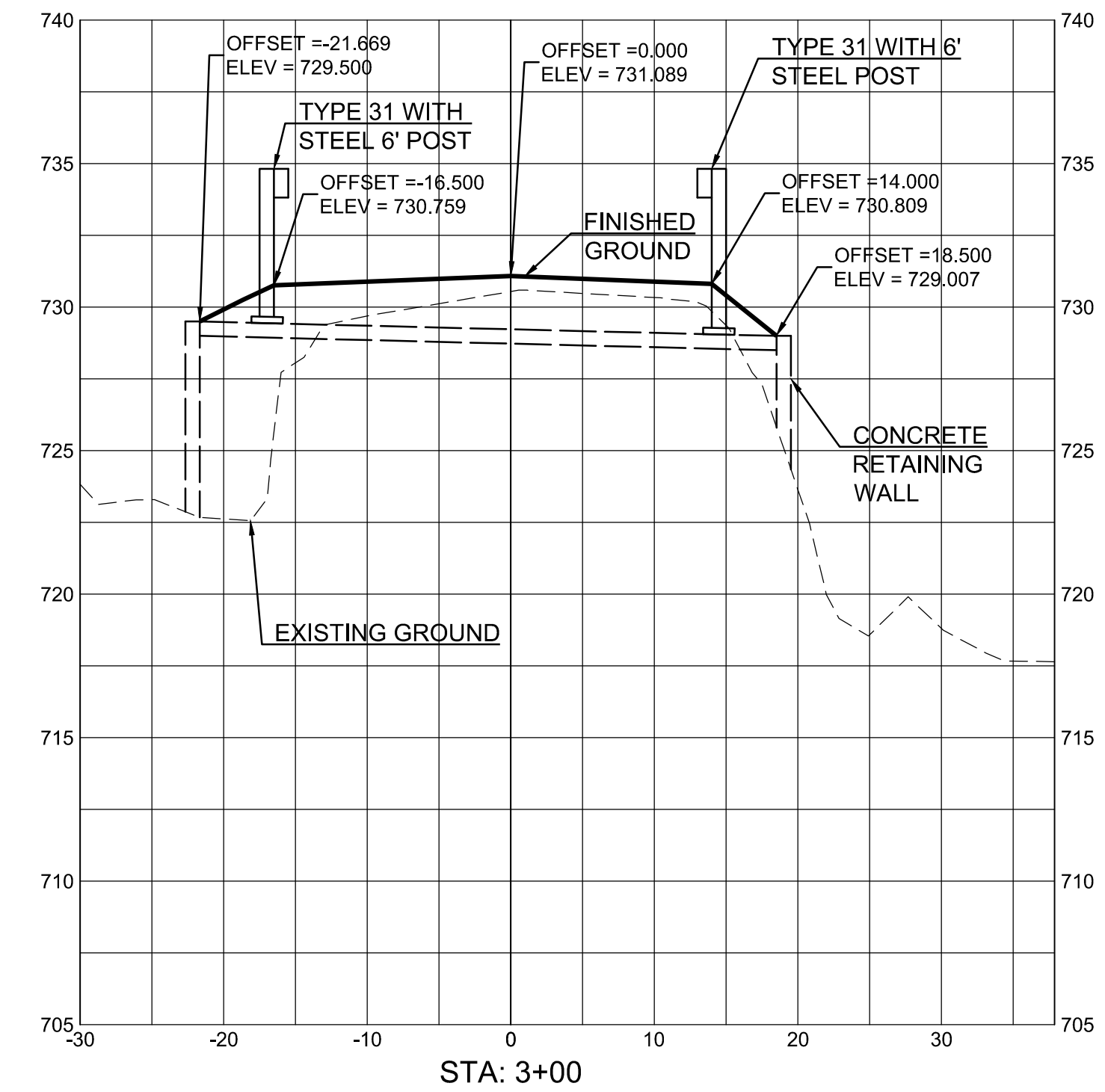
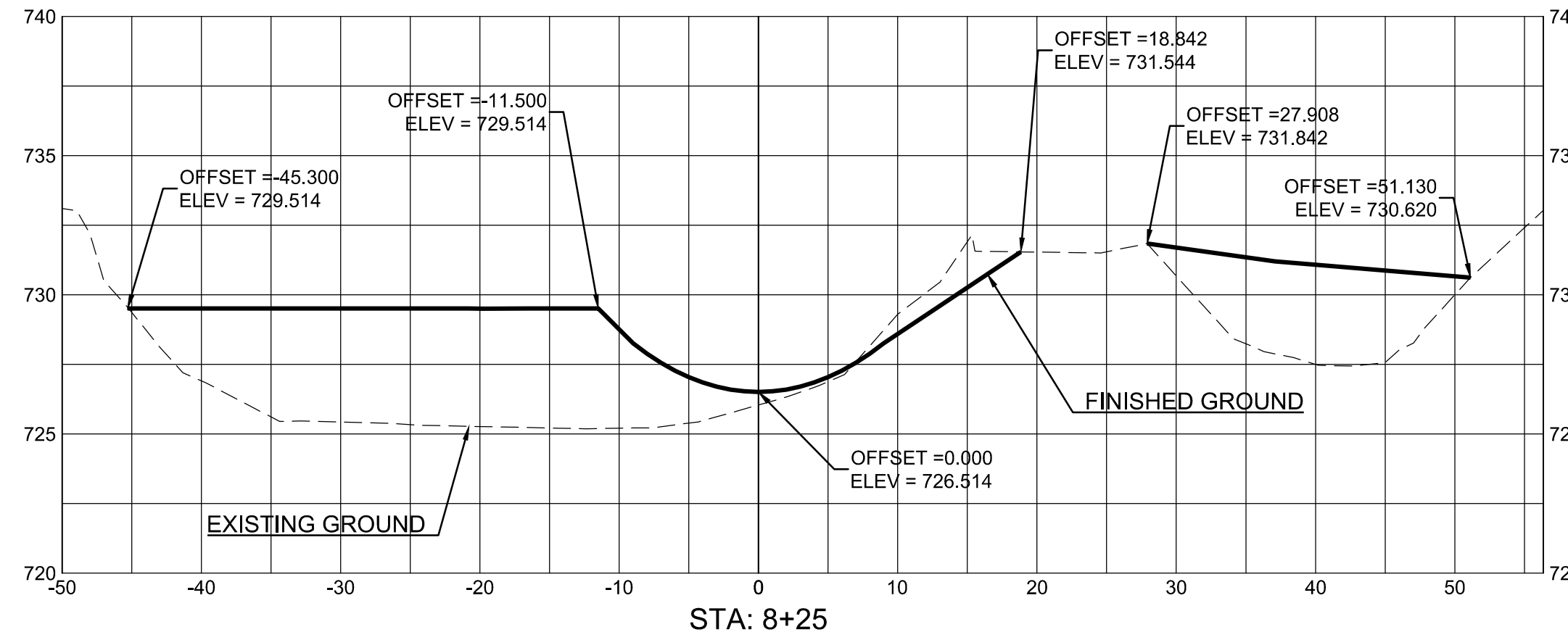
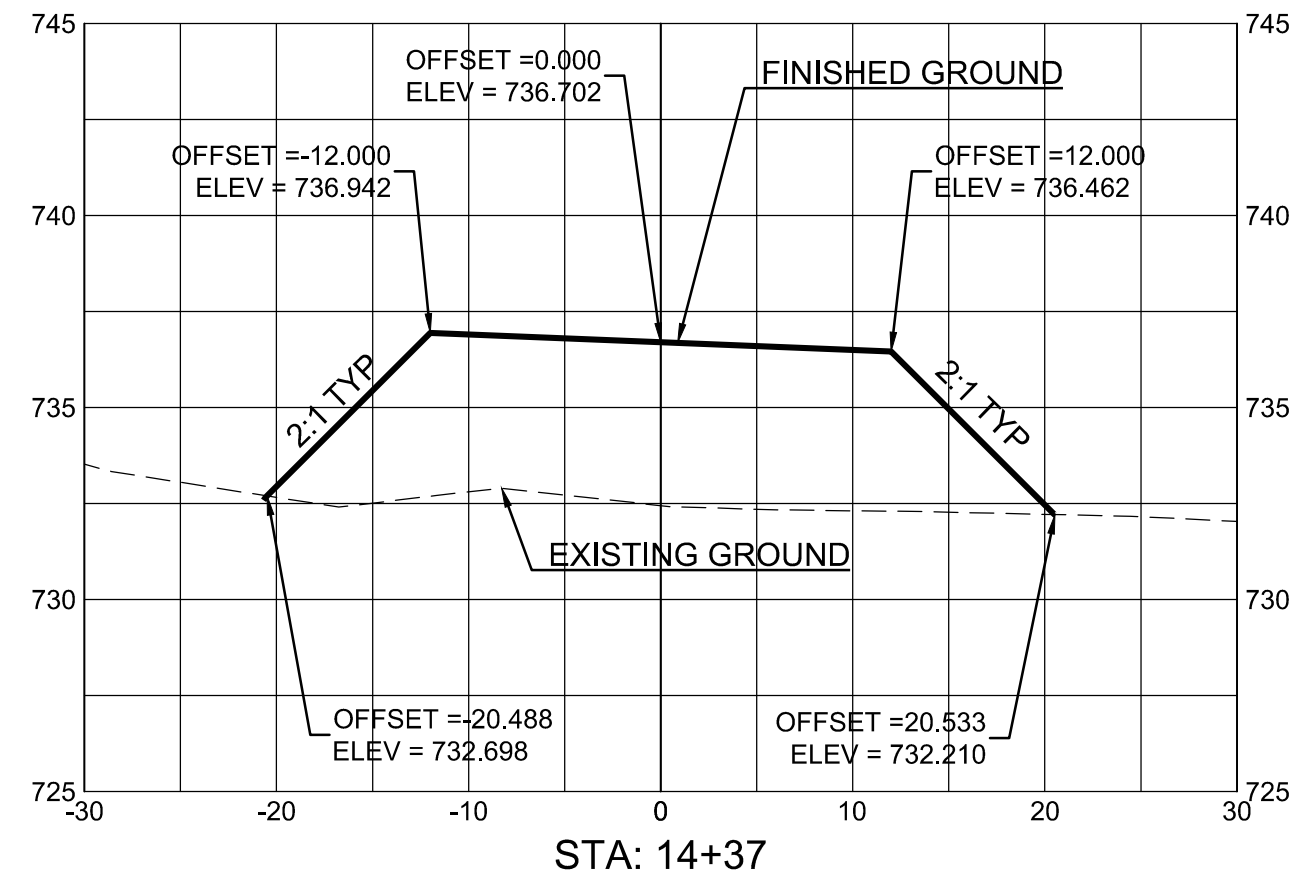
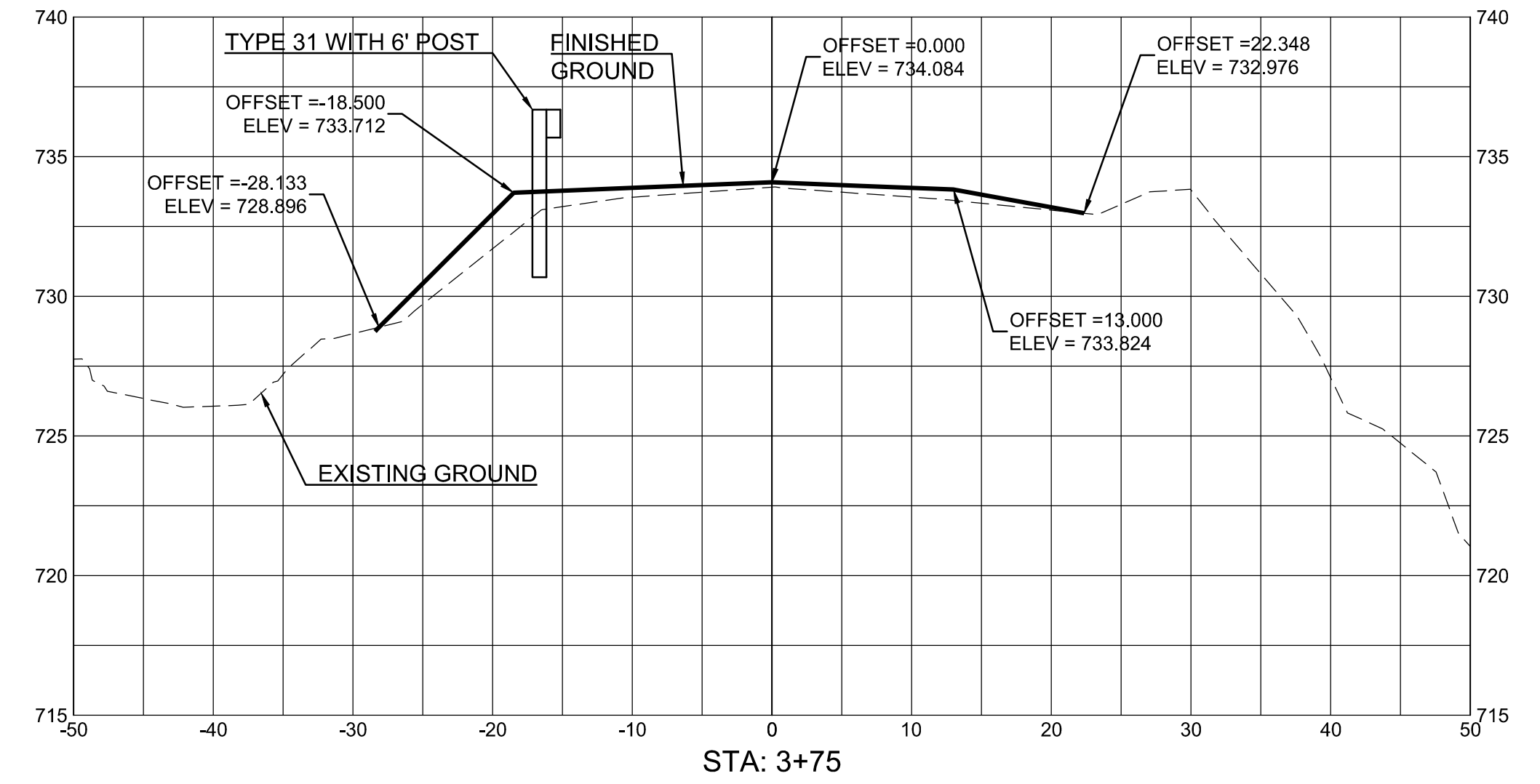
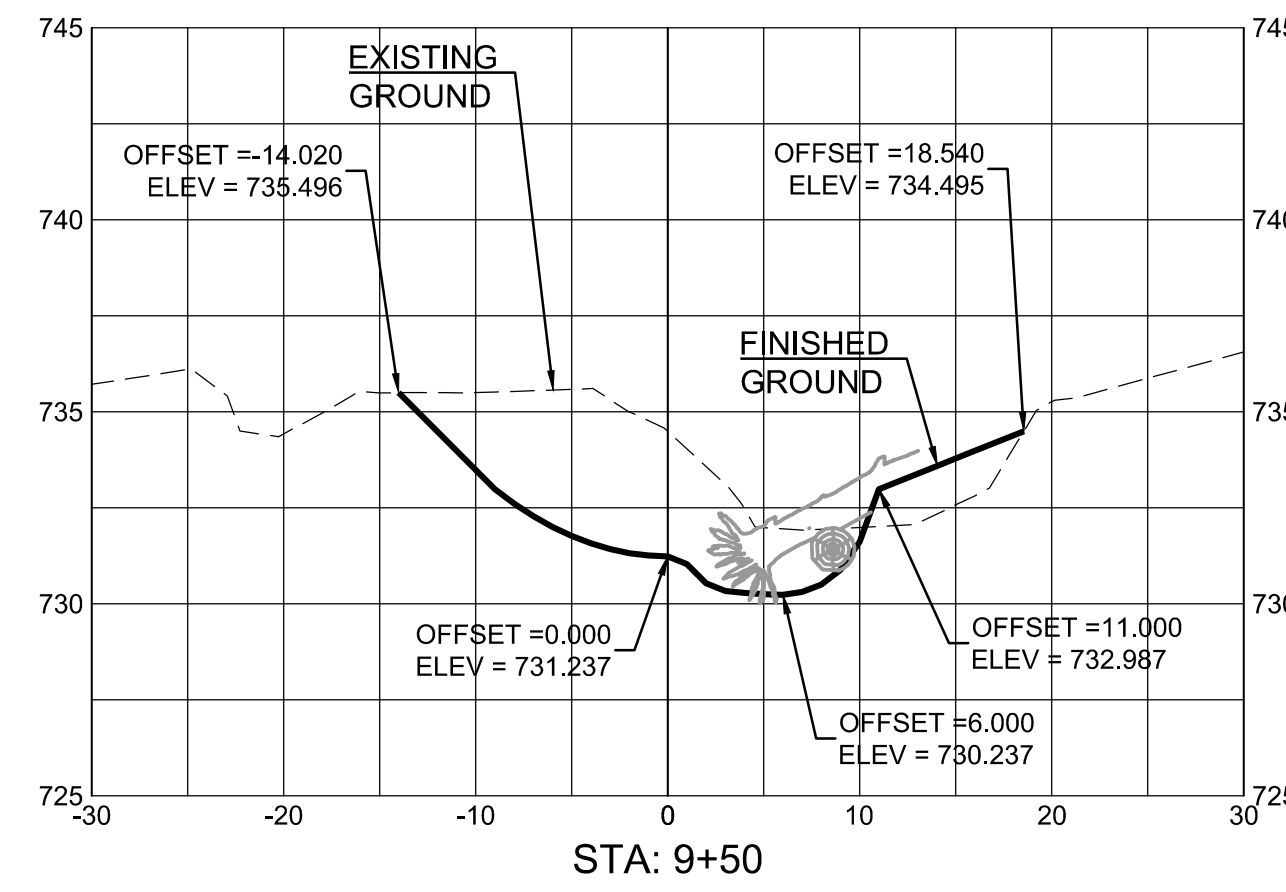
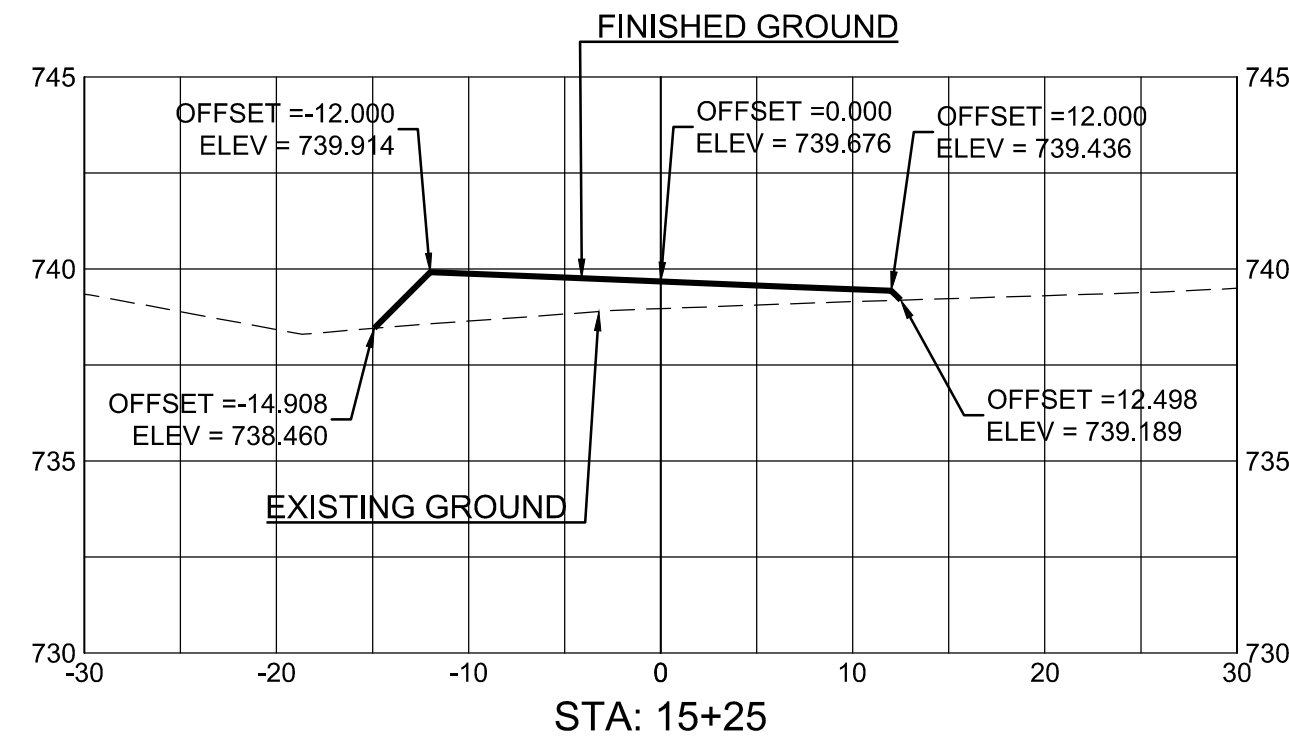
NO.	REVISION	BY	DATE	CHK

PROJECT:	75238.003
DRAWN:	DKE
CHECKED:	DAS
DATE:	01-25-2019
DWG NO.	C03
SHEET NO.	6 OF 15

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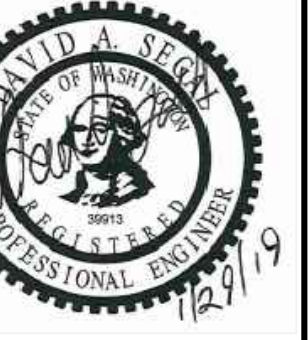
S12, T13N, R1E



1 BYPASS ROAD CROSS SECTIONS
NOT TO SCALE

2 FRASE CREEK CROSS SECTIONS
NOT TO SCALE

3 PIGEON SPRINGS ROAD CROSS SECTIONS
NOT TO SCALE



NO.	REVISION	BY	DATE	CHK

PROJECT:	75238.003
DRAWN:	DKE
CHECKED:	DAS
DATE:	01-25-2019
DWG NO.	C04
SHEET NO.	7 OF 15

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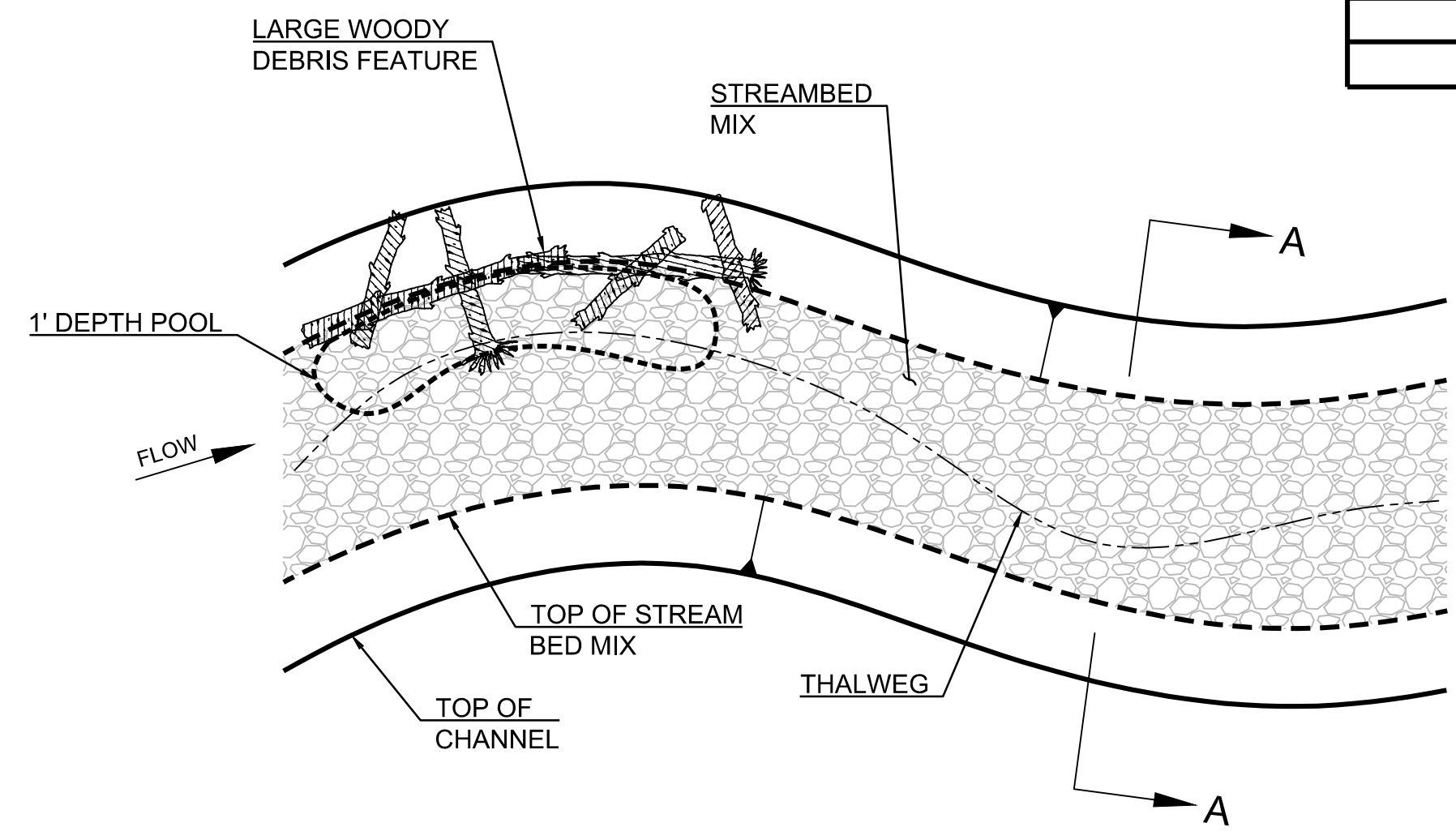


STREAMBED BOULDER SIZING	
ROCK SIZE	APPROXIMATE SIZE
ONE MAN	12"-18"

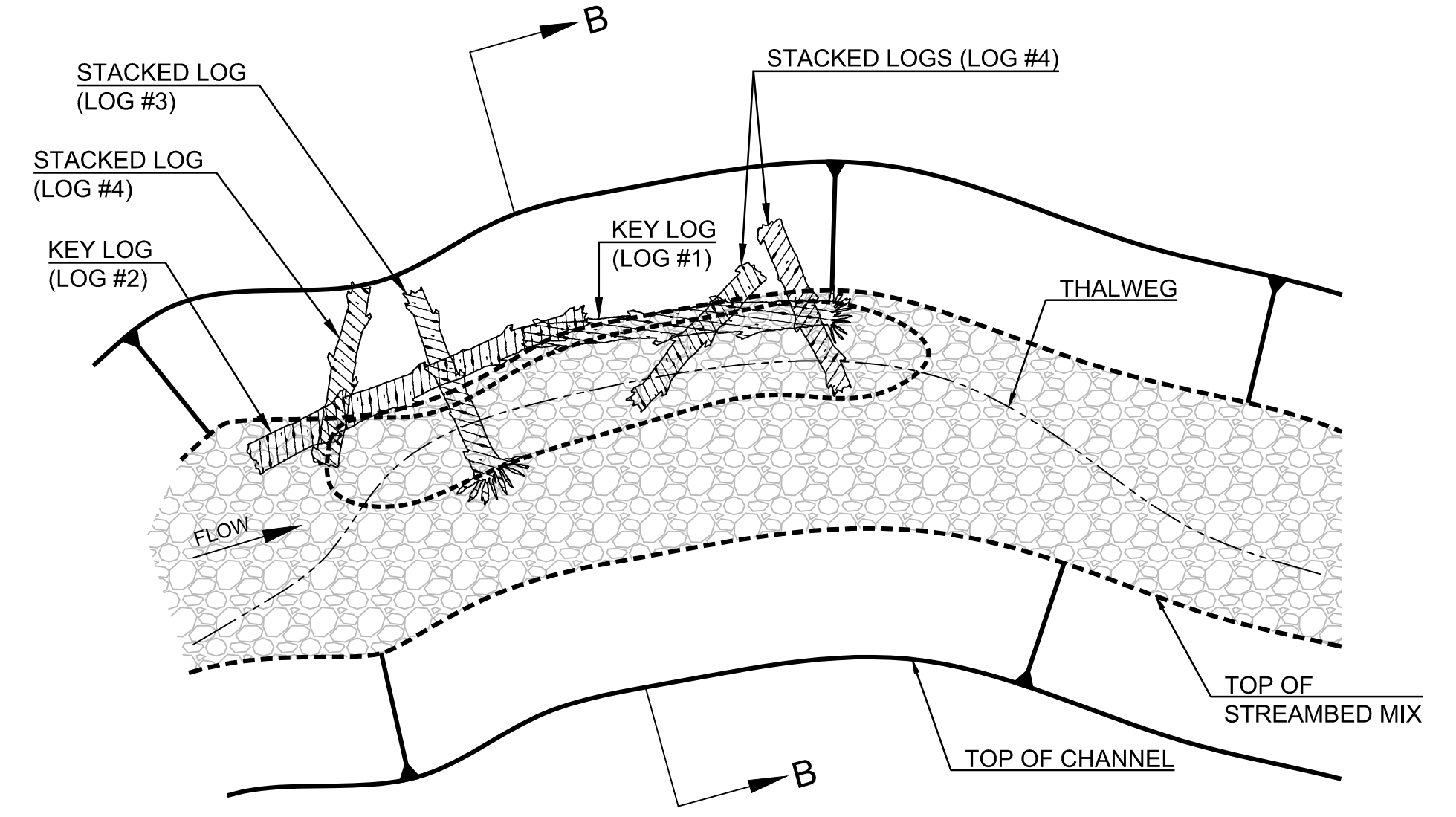
10" STREAMBED COBBLES GRADATION	
APPROXIMATE SIZE	% PASSING
10"	99 - 100
8"	70 - 90
4"	30 - 60
¾"	10 MAX

8" STREAMBED COBBLES GRADATION	
APPROXIMATE SIZE	% PASSING
8"	99 - 100
6"	70 - 90
3"	30 - 60
¾"	10 MAX

STREAMBED SEDIMENT GRADATION	
SIEVE SIZE	% PASSING
2.5"	99 - 100
2"	65 - 95
1"	50 - 85
U.S. NO. 4	26 - 44
U.S. NO. 40	16 MAX
U.S. NO. 200	5.0 - 9.0



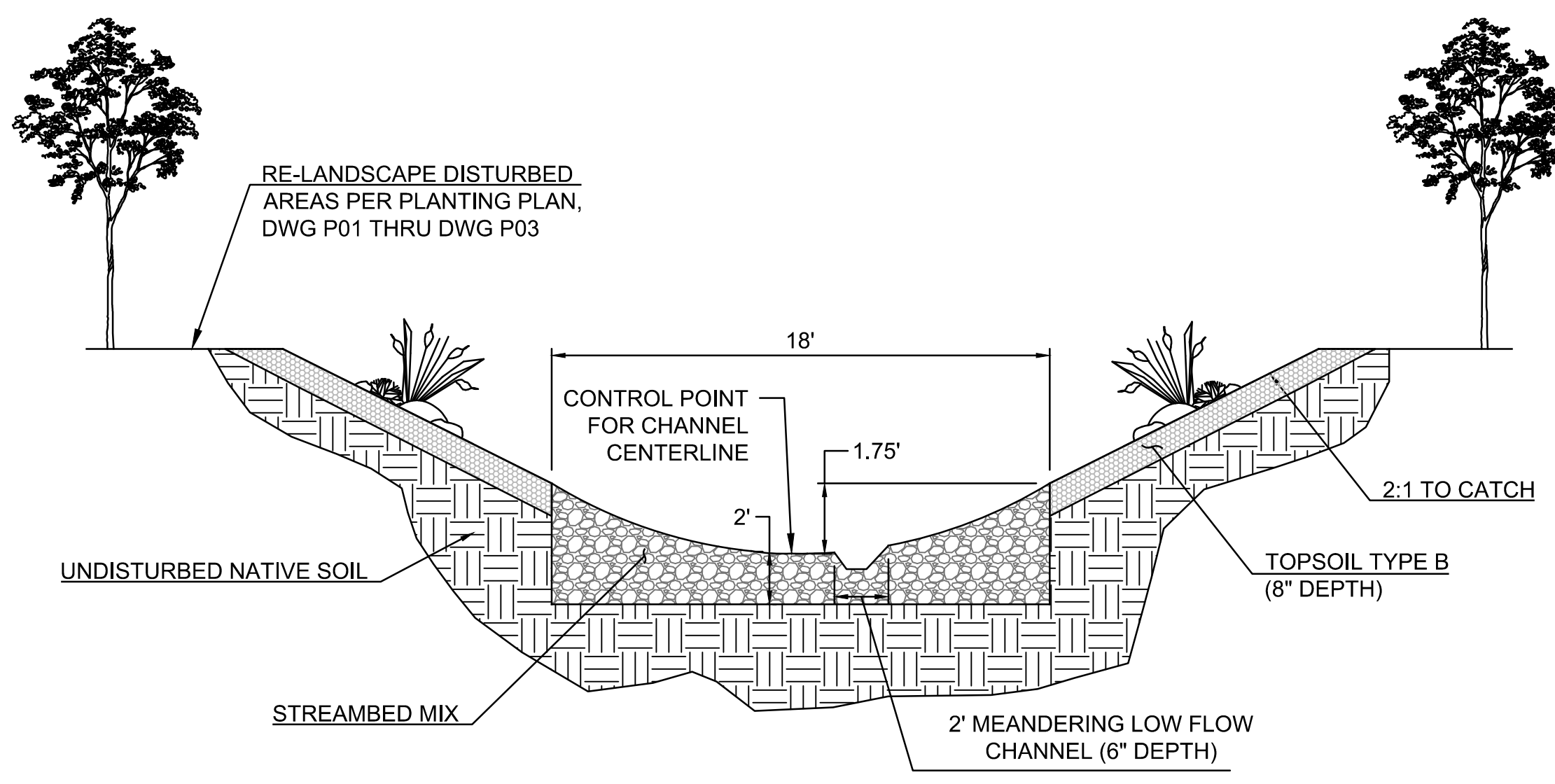
CHANNEL PLAN



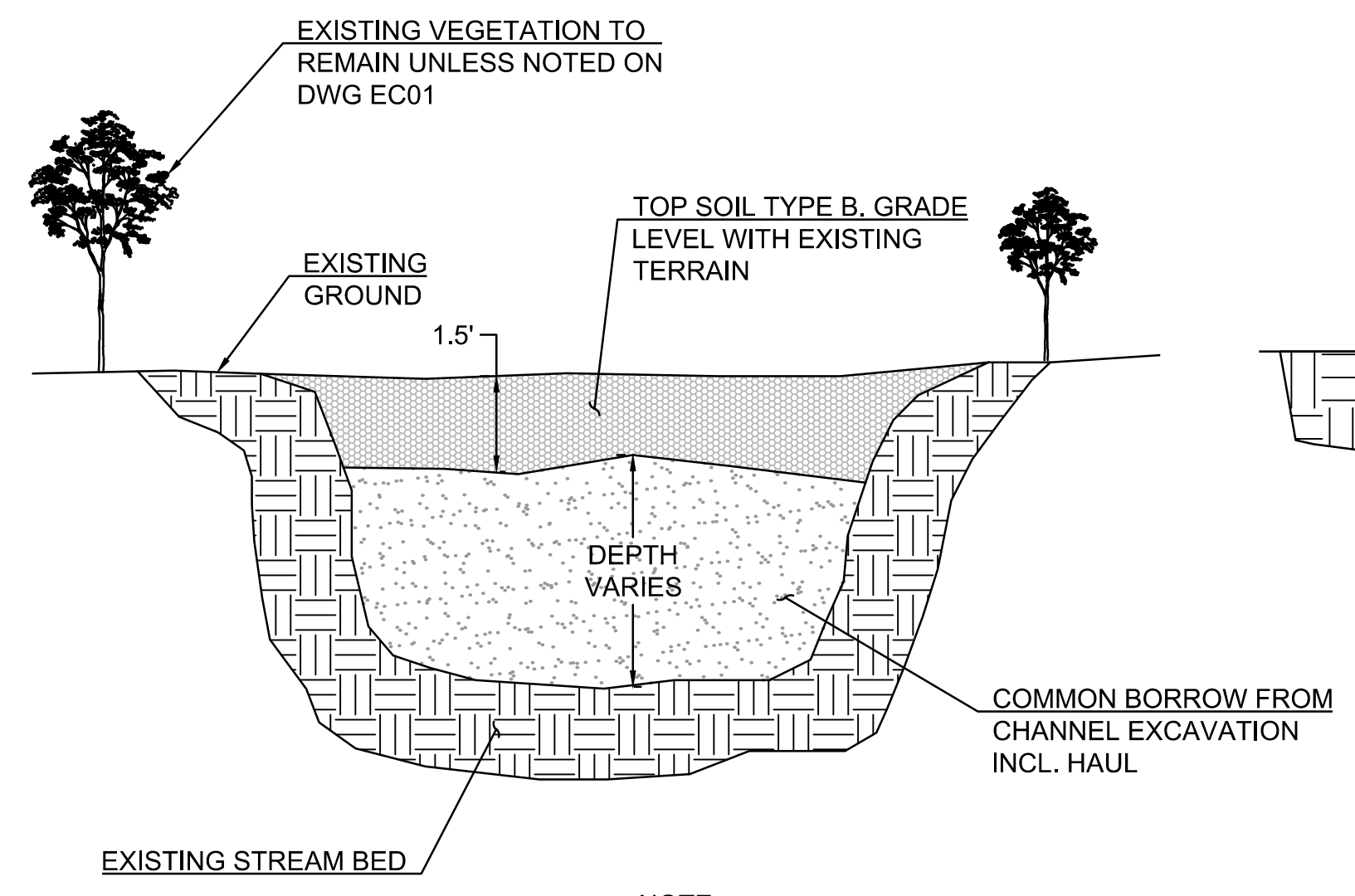
LARGE WOODY DEBRIS PLAN

GENERAL NOTES:

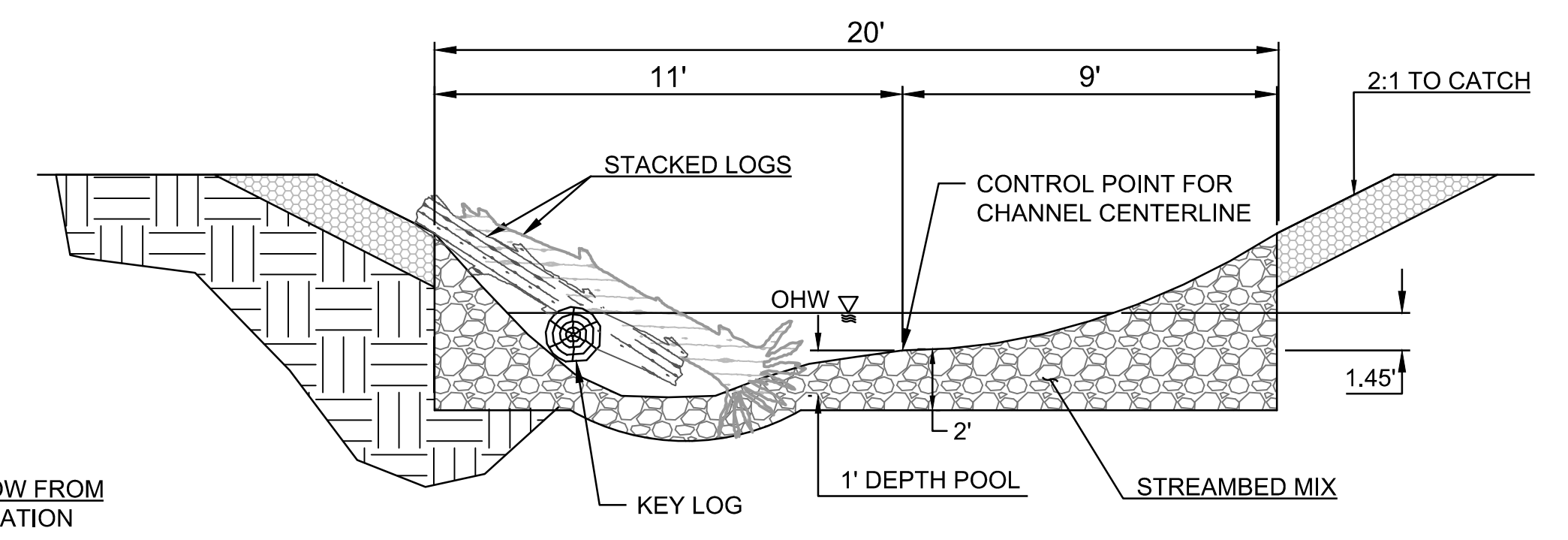
1. LARGE WOODY DEBRIS FEATURES AND THALWEG LOCATIONS ARE TO BE PLACED AS SHOWN ON PLANS. MINOR CHANGES TO THE WOOD FEATURES CAN BE MADE IN THE FIELD AS DIRECTED BY ENGINEER.
2. STREAMBED MIX: ONE PART 10" STREAMBED COBBLES SHALL BE MIXED THOROUGHLY WITH TWO PARTS 8" STREAMBED COBBLES, AND TWO PARTS STREAMBED SEDIMENT. ONE-MAN STREAMBED BOULDERS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
3. STREAMBED SEDIMENT IS TO PROVIDE STABILITY TO THE COBBLE MIX AND BE PLACED IN AREA OF VOIDS TO CREATE A UNIFORM, NON-POROUS BED.
4. SEE PLANTING PLANS ON DWG P01-P03 FOR FINAL STABILIZATION REQUIREMENTS.



CHANNEL SECTION A-A



EXISTING STREAM SECTION



LARGE WOODY DEBRIS SECTION B-B

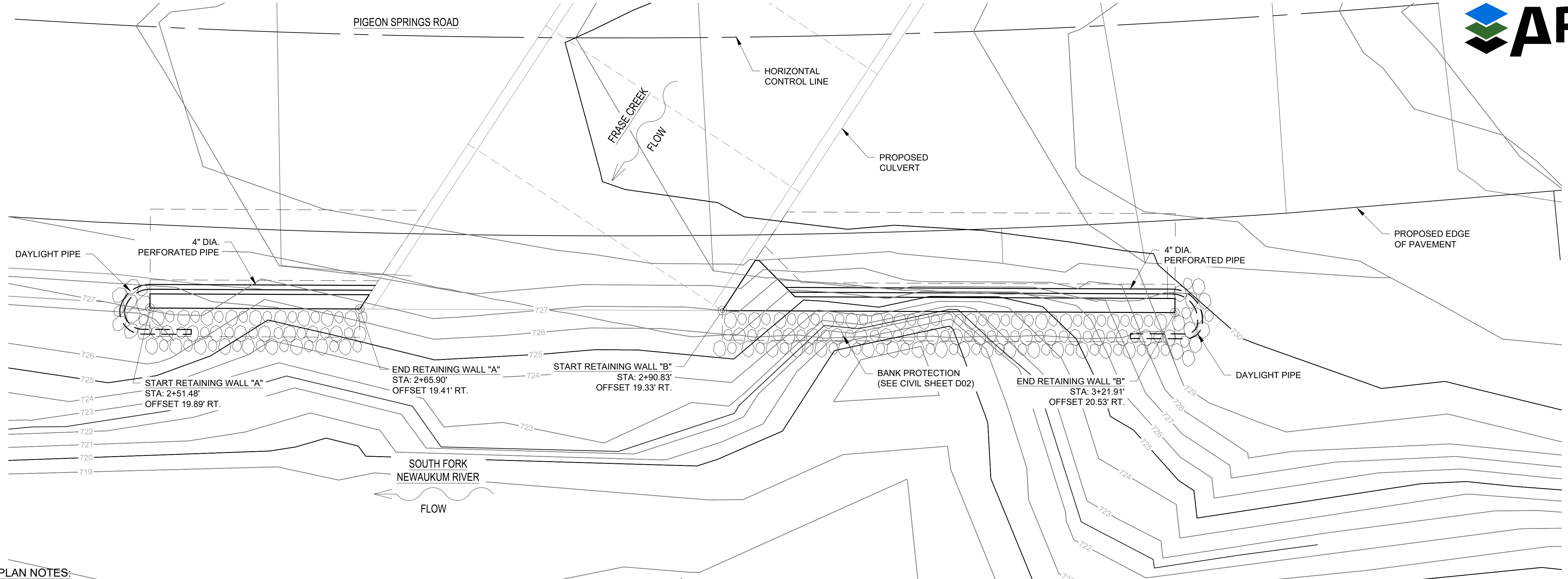
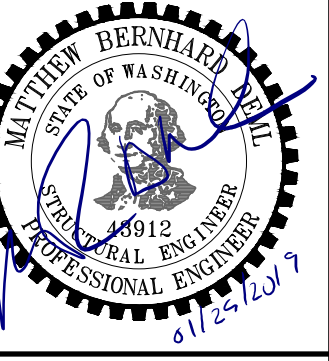
1 FRASE CREEK CHANNEL
NOT TO SCALE

3 LARGE WOODY DEBRIS FEATURE
NOT TO SCALE

NOTE:
 ROCK FOR EROSION AND SCOUR PROTECTION CLASS A TO BE BURIED AT NEW/EXISTING CHANNEL INTERSECTION AS DIRECTED BY THE ENGINEER

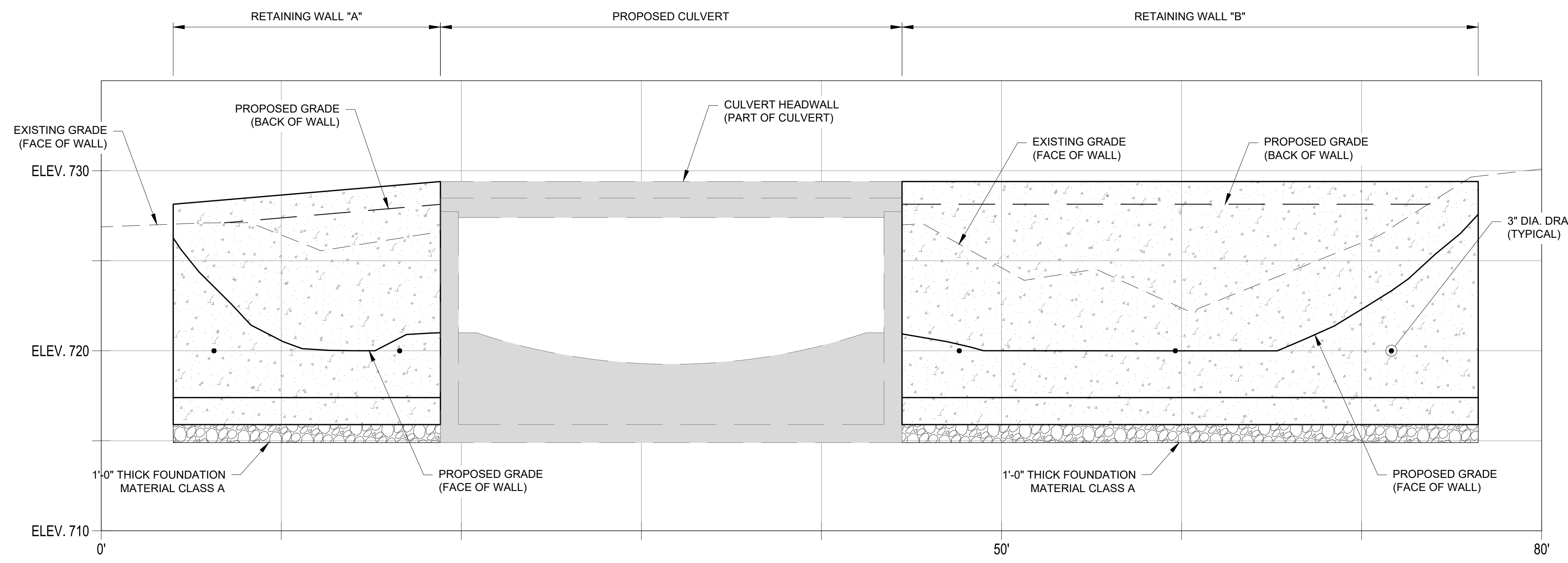
NO.	REVISION	BY	DATE	CHK
DRAWN:				DKE
CHECKED:				DAS
DATE:				01-25-2019
DWG NO.:				D03
SHEET NO.:				10 OF 15

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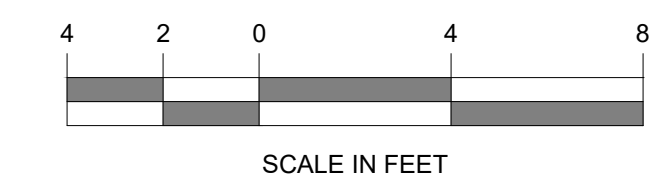
- PLAN NOTES:**
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2018 WSDOT STANDARD SPECIFICATIONS.
 2. SEE SHEET S-200 FOR MATERIAL AND CONSTRUCTION NOTES.

RETAINING WALLS - PLAN VIEW
 SEE BAR SCALE



- NOTE:**
1. BANK PROTECTION NOT SHOWN FOR CLARITY (SEE CIVIL).

RETAINING WALLS - ELEVATION VIEW
 SEE BAR SCALE



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 2 BUSINESS DAYS
 BEFORE YOU DIG
 1-800-424-5555
 "It's The Law"

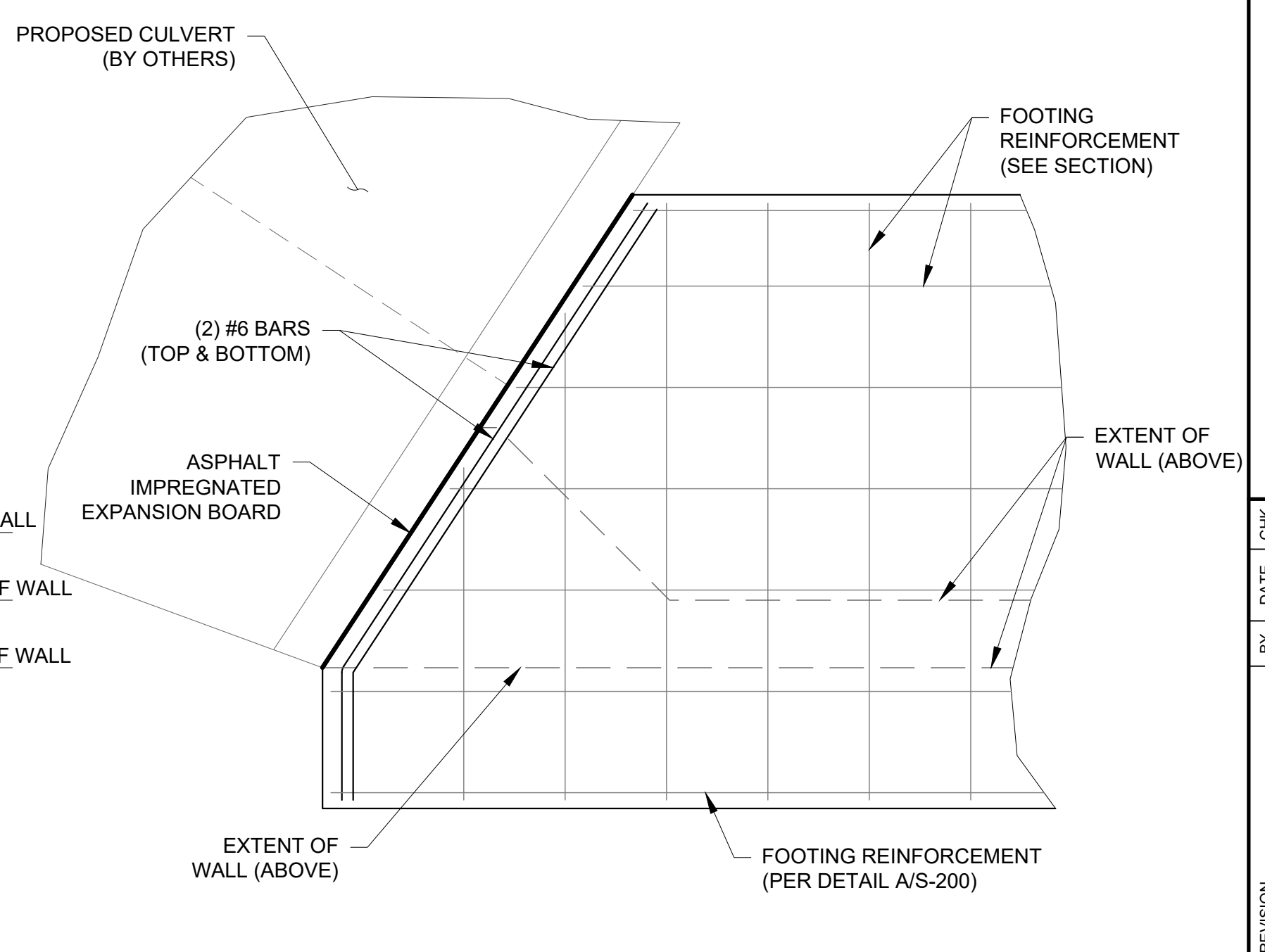
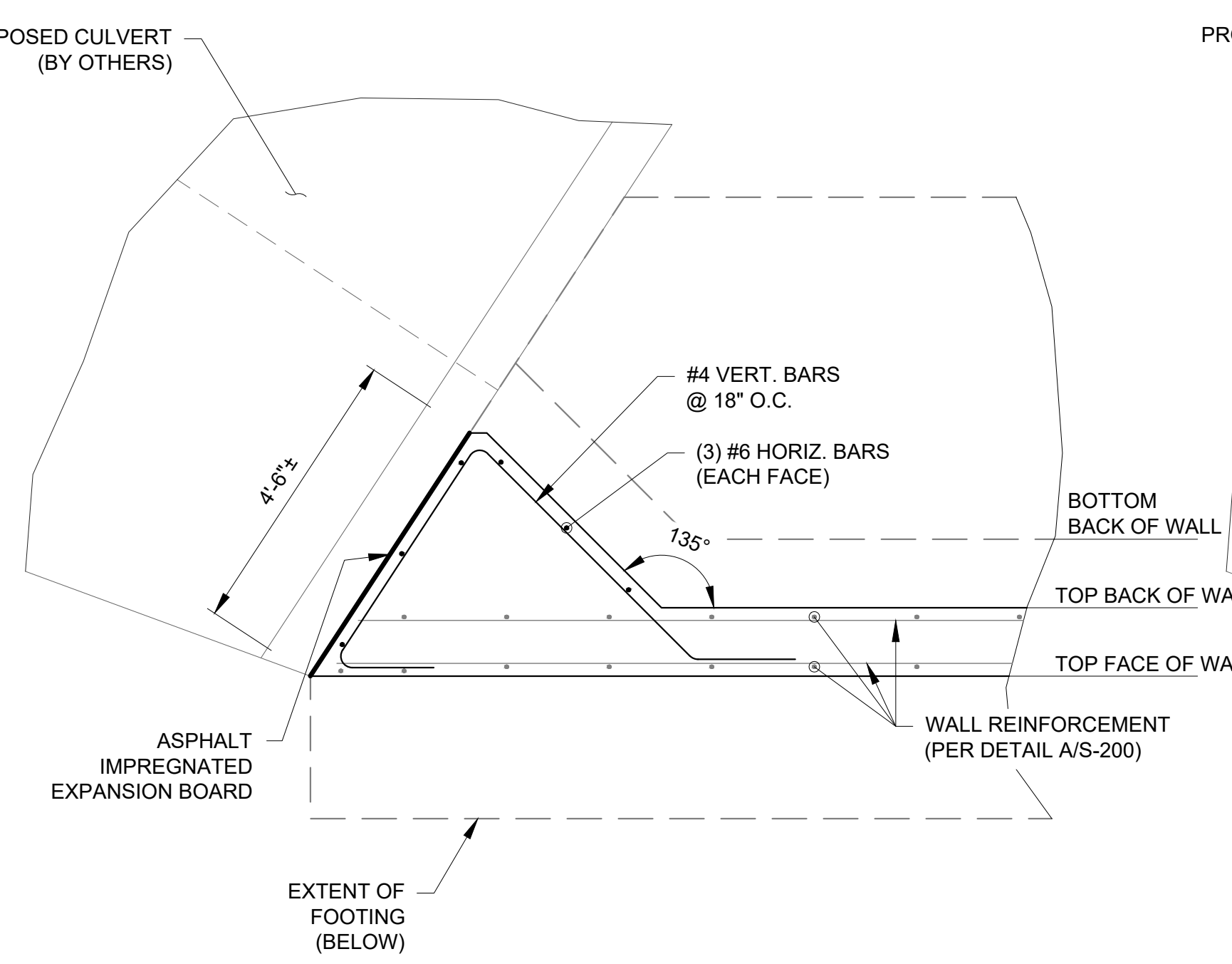
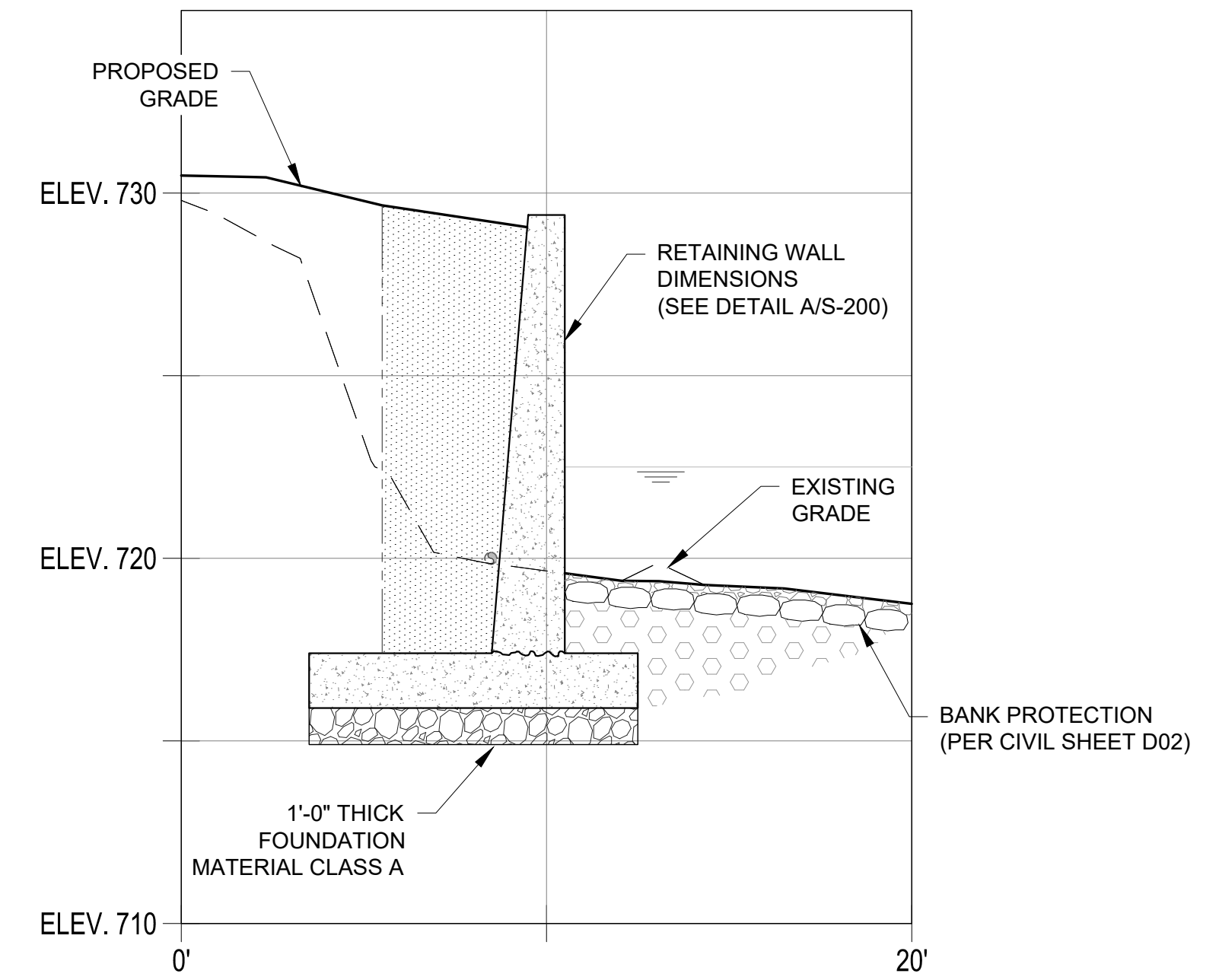
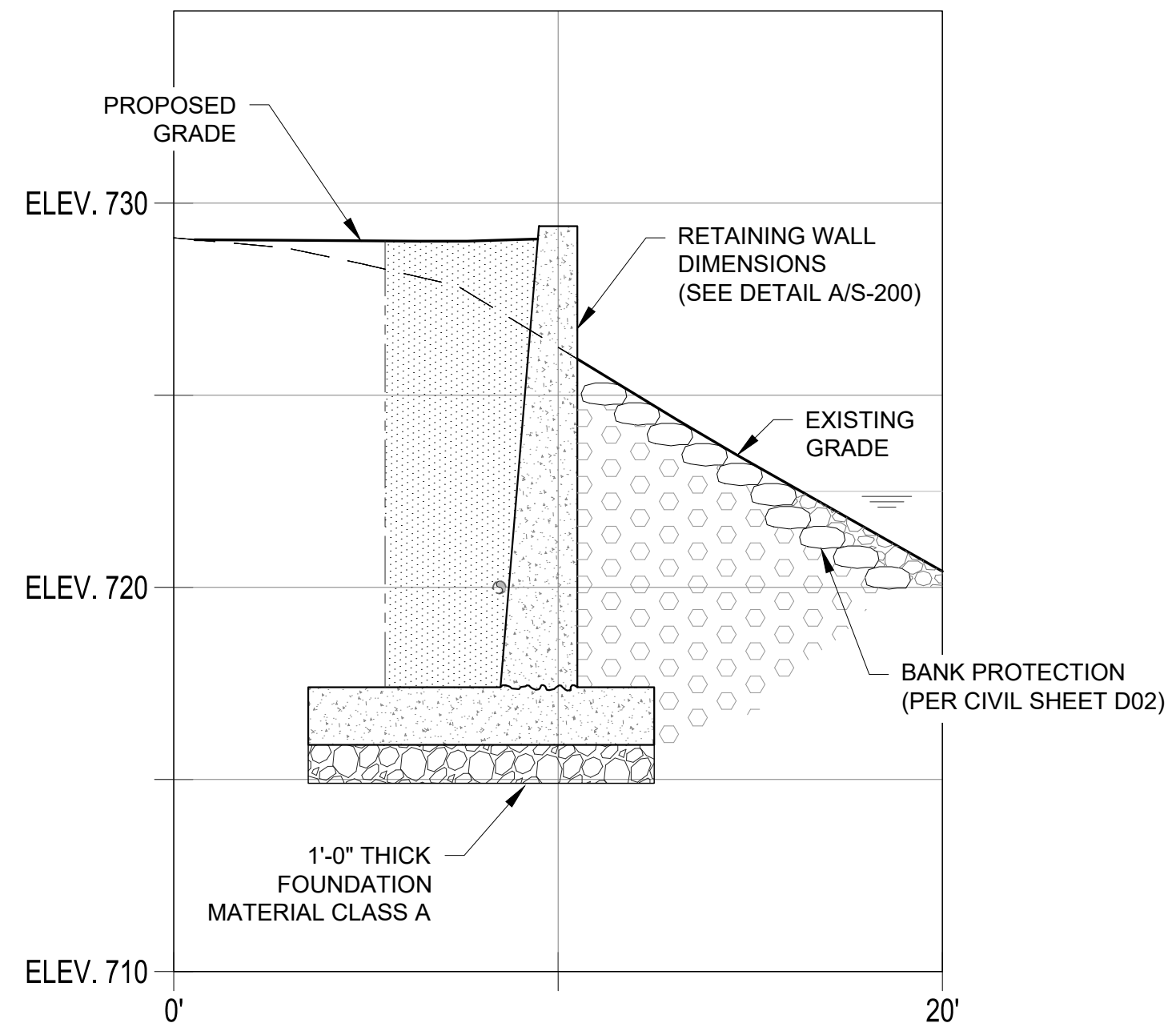
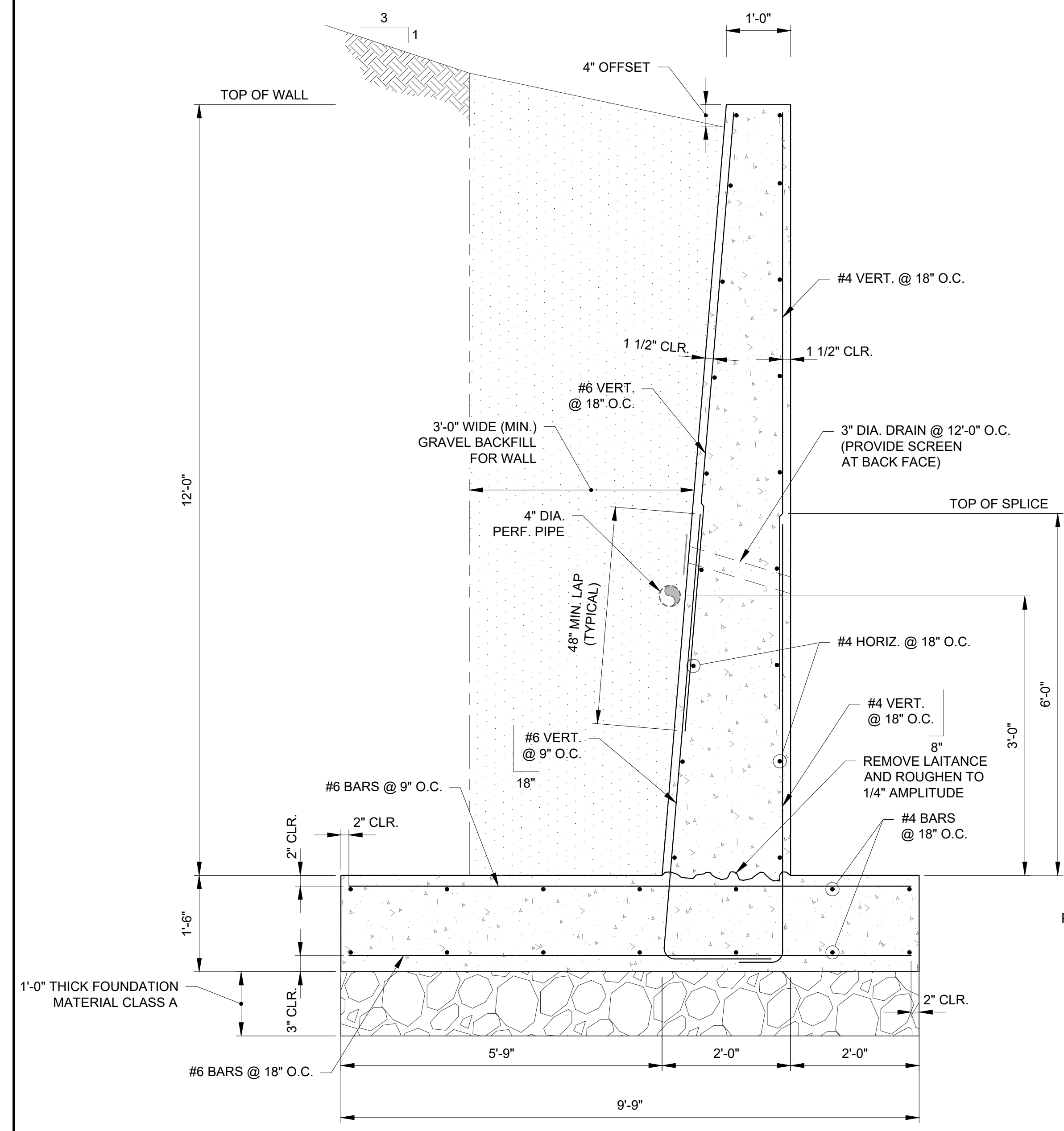
PIGEON SPRINGS RD MP 0.5 (FRASE CREEK) CULVERT REPLACEMENT
 NORTH OF CENTRALIA ALPHA RD ON PIGEON SPRINGS RD
 LEWIS COUNTY PUBLIC WORKS

**RETAINING WALLS
 PLAN & ELEVATION VIEWS**

NO.	REVISION	BY	DATE	CHK

PROJECT:	
DRAWN:	SLMc
CHECKED:	MBD
DATE:	01/24/2019
DWG NO.	S-100
SHEET NO.	14 OF 15

P:\0031-005_PBS_Frasa\04_CADD\Sheets\100 S-200 - WALL PLAN ELEVATION DETAILS REV 2019-01-29.dwg Jan 29, 2019 03:06pm Steven McDonald



NOTE:
1. FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY.

NOTE:
1. WALL REINFORCEMENT NOT SHOWN FOR CLARITY.

P:\031\055_PBS_Frasa\04_CADD\Sheet\05-100 S-200 - WALL PLAN ELEVATION DETAILS REV 2019-01-23.dwg Jan 28, 2019 09:12am Steven McDonald

NO.	REVISION	BY	DATE	CHK

PROJECT:	
DRAWN:	SLMc
CHECKED:	MBD
DATE:	01/24/2019
DWG NO.	S-100
SHEET NO.	15
	OF
	15