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**CITY OF LYNNWOOD
PROJECT MANUAL**

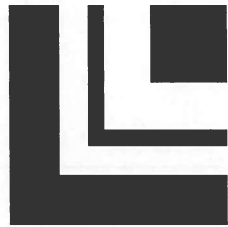
For

Pavement Preservation and Rehabilitation Program

2019 Overlay and Curb Ramp Project

Bid #3080

May 9, 2019



**LYNNWOOD
WASHINGTON**



CONTRACT DOCUMENTS
2019 Overlay and Curb Ramp Project
May 9, 2019

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SECTION 1

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INVITATION FOR BIDS

CITY OF LYNNWOOD
INVITATION FOR BIDS

SUBMITTAL OF SEALED BIDS:

Sealed bid proposals ("Bids") will be received by the Public Works Director, or the Public Works Director's representative, at Lynnwood City Hall, 19100 44th Avenue W., Lynnwood, Snohomish County, Washington, 98036 (or mailed to P.O. Box 5008, Lynnwood, WA 98046-5008), until 2:00 p.m., May 9, 2019, for the following project ("Project"):

2019 Overlay and Curb Ramp Project

Capitalized terms not defined in this Invitation for Bids shall have the meanings set forth in the Project Manual of which this Invitation for Bids is a part.

BID OPENING:

At the time and date above stated, the Bids will be publicly opened and read aloud ("Bid Opening"). Bids are to be submitted only on the bid proposal forms provided with the Project Manual. All Bids must be accompanied by a bid bond, cashier's check, certified check, or postal money order in an amount not less than five percent (5%) of the total amount of the Bid. Bids received after the time fixed for the Bid Opening will not be considered.

DESCRIPTION OF WORK:

This Contract provides for the improvement of various City of Lynnwood roadways by HMA for pavement repair, grind and overlay, curb ramps, pedestrian push buttons and pedestrian signals, raised pavement markers, paint line, plastic pavement markings, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

All Bids shall be based upon compliance with the Project Manual (including, without limitation, the Contract Plans and Specifications). The estimated cost range for this project is \$ 2,600,000 to 3,100,000. The project shall be Physically Completed within 60 working days of the Notice to Proceed.

OBTAINING BID DOCUMENTS:

The Project Manual for this Project (including the Contract Plans, Specifications and all other Contract Documents) may be examined at the Lynnwood City Hall. All questions regarding to this Project shall be addressed to Nicholas Barnett, P.E., Project Manager, at NBarnett@lynnwoodwa.gov, and shall be provided prior to 2:00 p.m., May 2, 2019, 1 week prior to bid opening.

The Project Manual, plans, specifications, addenda, bidders list, and plan holders list for this project are available through Builders Exchange at the City of Lynnwood's on-line plan room. Free of charge access is provided to Prime Bidders, Subcontractors, and Vendors by going to <http://www.bxwa.com> and clicking on "Posted Projects", "Public Works" and "City of Lynnwood". Bidders are encouraged to "Register" in order to receive automatic email notification

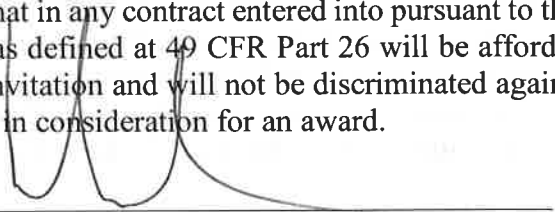
of future addenda and to be placed on the "Bidders List". This on-line plan room provides Bidders with fully usable on-line documents with the ability to download, print to your own printer, order full / partial plan sets from hundreds of reprographic sources (on-line print order form), and a free on-line digitizer / take-off tool. Contact Builders Exchange of Washington at 425-258-1303 should you require assistance.

A prebid walk-through of the Project will **not** be offered with the City before the bid opening.

The City of Lynnwood expressly reserves the right to reject any or all Bids, to waive irregularities, and to award the Project to the lowest responsive, responsible Bidder.

Bidder Proposals shall remain valid for forty-five (45) days after the actual date of Bid Opening.

The City of Lynnwood 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, national origin or sex in consideration for an award.



David Mach, P.E.
Engineering Manager

Published: Everett Herald – April 18, 2019, April 25, 2019

Daily Journal of Commerce - April 18, 2019, April 25, 2019

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SECTION 2

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BIDDER'S CHECKLIST

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INSTRUCTIONS TO BIDDERS

BIDDER'S CHECKLIST

This non-inclusive checklist is included here as a convenience to the Bidder to ensure that all items are properly addressed.

These items are related to the submittal of a Bid:

1. Have you included a unit or lump sum price for each bid item on the proposal?
2. Have you completed the Bid Security?
3. Has the Bid Bond or Bid Deposit (certified check) been enclosed with your Bid?
4. Is the amount of the bid guaranty at least 5% of the total amount of the Bid?
5. Has the proposal been properly signed?
6. Have you completed Statement of Bidder's Qualifications & Responsible Bidder Determination Form?
7. Have you certified receipt of addenda?
8. Have you listed all subcontractors as required by RCW 39.30.060?
9. Have you completed the Non-Collusion Affidavit?
10. Have you completed and signed, under penalty of perjury, the "Contractor Certification– Wage Law Compliance-Responsibility Criteria" document (DOT Form 272-009) in the Bid Proposal Package?
11. Have you filled out and signed the following affidavits?
 - a. Public Bidding Crimes
 - b. Liquidated Damages
 - c. Termination for Cause
 - d. Litigation

Within 48 hours of being apparent or second low bidder, submit the following:

1. Supplemental Bidder Responsibility criteria documentation for Bidder (Prime) as outlined in Section 2.22B of Instructions to Bidders.
2. Proposed subcontractors completed "Responsible Bidder Determination" form as outlined in Section 2.22C of Instructions to Bidders.

The following items are included in the Project Manual for informational purposes only and will be executed by the successful Bidder after award:

1. Contract
2. Performance Bond
3. Payment Bond
4. Certificate of Insurance
5. Contractor's Declaration of Option for Management of Statutory Retained Percentage

1 **CITY OF LYNNWOOD**

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3 **INSTRUCTIONS TO BIDDERS**

4 2.01 **SUBMISSION OF BIDS:**

5 To receive consideration, Bids must be received at the **City of Lynnwood, 19100 44th Ave.**
6 **West, Lynnwood, WA 98036 (physical), or P.O. Box 5008, Lynnwood WA 98046-5008**
7 **(mailing)**, prior to the specified date and time of the Bid Opening, in a sealed envelope,
8 clearly marked with the Bidder's company or firm name, address, telephone number,
9 Invitation for Bid number, Project name, and the date and time of the Bid Opening. Mailed
10 Bids must be actually **received** at the Public Works Deputy Director's office prior to the
11 date and time noted in the Invitation for Bid.

12 **Note:** Any deviations from the required Contract Plans, Specifications or other Contract
13 Documents shall be identified in writing by the Bidder, and the Invitation for Bid number
14 and company or firm name should appear on any technical data or other information
15 furnished by the Bidder with its Bid.

16 2.02 **SIGNATURE:**

17 Each Bid must be signed in longhand by the Bidder. Bids by general or limited partnerships
18 must be executed in the partnership name by at least one of the general partners, followed
19 by signature(s) and designation(s) of the signing partner(s). Bids by corporations, limited
20 liabilities companies and other legal entities must be executed in the legal name of the
21 entity, followed by the name of the State or Province of organization and by the signature
22 of the president, manager or other officer or person authorized to execute legal documents
23 on behalf of the entity. The typed or printed name of the person(s) signing the Bid shall
24 appear below each signature.

25 **Note:** If erasures or other changes appear on the Bid forms as submitted, each erasure or
26 change must be initialed by an authorized representative of the entity submitting the bid.

27 2.03 **BID FORM:**

28 Bids will not be considered unless submitted on the **Bid form** included in the Project
29 Manual.

30 2.04 **BID DEPOSIT:**

31 All Bids must be accompanied by cash, a bid bond, cashier's check or certified check on a
32 solvent bank, payable to **City of Lynnwood**, in the sum of five percent (5%) of the Bid
33 amount ("Deposit"). Said Deposit will be held as a guarantee that the successful Bidder
34 will, within ten days from the date of notification of award, enter into a Contract and furnish
35 approved Payment and Performance Bonds, on the forms enclosed in the Project Manual,
36 in amounts equal to one hundred percent (100%) of the amount of the Contract, including
37 state sales tax. Deposits of all other Bidders will be returned as soon as practicable after

award of the Contract. Should a Bidder fail to enter into a Contract within ten (10) days after notice of acceptance of its Bid, the Bidder's Deposit shall be forfeited to the City.

2.05 WITHDRAWAL OF BIDS:

Any Bidder may withdraw its Bid, either personally or by written request, at any time prior to the time set for the Bid Opening. However, after the Bid Opening, no Bid may be withdrawn for forty-five (45) days after the date of the actual Bid Opening.

2.06 MODIFICATION OF BIDS:

A Bid that is in the possession of the City of Lynnwood (City) may be modified, altered or amended by a letter or facsimile from and signed by an authorized representative of the Bidder, provided it is received prior to the time and date of the Bid Opening. No oral or telephonic modifications will be accepted.

2.07 EXCEPTIONS:

If awarded a Contract, the Bidder will be required to furnish the construction and services in strict accordance with the Project Manual, including, without limitation, all materials, equipment, tools, plant and other facilities and all management, superintendents, labor, and services, except as may be provided otherwise in the Project Manual, unless an exception, substitution or deviation, clearly noted and described in the Bid in the space provided, is approved by the City in awarding the Contract (collectively, the "Work").

2.08 TAXES:

Unless otherwise noted on the Proposal form, bids shall show prices as separate entries before Washington State Sales Tax. The City reserves the right to remit Sales Tax, at the Lynnwood rate, directly to Washington State Department of Revenue. See Section 1-07.2 of the Standard Specifications.

2.09 LATE BIDS AND MODIFICATIONS OF BIDS:

Any Bid or modification of a Bid will not be considered unless it was actually received at the Deputy Public Works Director's Office before the exact time set for the Bid Opening.

2.10 NON-COLLUSION AFFIDAVIT:

All Bidders must complete the attached non-collusion affidavit. Bids submitted without a completed affidavit will be considered non-responsive.

2.11 ADDENDA:

If Lynnwood issues Addenda to the Project Manual, bidders must acknowledge receipt of the addenda on the Bid Form. It is the Bidders responsibility to ensure that they have received all addenda. Lynnwood will make reasonable effort to provide addenda to all bidders by posting to the City's on-line plan room at Builders Exchange <http://www.bxwa.com>.

If receipt of Addenda (if any) is not indicated on the Bid Form, Lynnwood may assume the Bid considers all Addenda **OR** the bid may be rejected at the City's discretion.

2.12 NONRESPONSIVE BIDS:

Any Bid that is incomplete, does not comply with the Bid schedule or other instructions in the Project Manual, or is not properly signed, may be considered non-responsive. Any Bid which includes any exceptions, substitutions or deviations from any part of the Project Manual will be considered non-responsive.

2.13 REJECTION OF BIDS:

Any Bids that are non-responsive or deviate from the express requirements of the Project Manual may be rejected at the City's discretion.

2.14 INTERPRETATION OF CONTRACT DOCUMENTS:

The Bidder shall promptly notify the City of any discovered conflicts, ambiguities, or discrepancies in or between, or omissions from, the Contract Documents. No oral interpretations will be made to any Bidder as to the meaning of the Project Manual or any Contract Document; and any oral communications are not binding on the City. Requests for an interpretation must be made in writing and received by the Public Works Deputy Director at least four (4) days before the date specified for the Bid Opening. Any interpretation deemed necessary by the City will be in the form of an addendum to the Project Manual and when issued will be posted as promptly as is practical to the City's on-line plan room at Builders Exchange of Washington at <http://www.bxwa.com>. All such addenda shall become part of the Project Manual.

2.15 EXAMINATION OF SITE AND CONTRACT DOCUMENTS:

The submission of a Bid shall constitute an acknowledgment upon which the City may rely that the Bidder has thoroughly examined and is familiar with (a) the Project Manual (including Contract Plans, Specifications and all other Contract Documents) and all work sites identified in the Project Manual, and (b) has reviewed and inspected all applicable statutes, regulations, ordinances, and resolutions dealing with or related to the Work to be provided thereunder. The failure or neglect of a Bidder to examine the Project Manual, work site(s), or statutes, regulations, ordinances or resolutions shall in no way relieve the Bidder from any obligation with respect to the Bidder's Bid or the Contract. No claim for additional compensation will be allowed which is based upon a lack of knowledge of any

Contract Document, work site, statute, regulation, ordinance or resolution. The submittal of a Bid shall be deemed an offer by the Bidder to perform the Work in accordance with the Project Manual and the Bid. The furnishing by the City to a Bidder of a signed purchase order or contract shall result in a binding contract without further action by either party.

2.16 BID ERRORS:

.1 A Bidder who wishes to claim error after the Bids have been opened and read shall submit a notarized affidavit signed by the Bidder, accompanied by original worksheets used in the preparation of the Bid. The affidavit shall describe the specific error(s) and certify that the worksheets are the originals used in the preparation of the Bid.

.2 The affidavit and the worksheets must be received by the City before 5:00 p.m. local time on the next business day following the day of the Bid Opening or the claim of error will not be considered. The City will review the certified worksheets to determine the validity of the claimed error. If the claim of error is allowable under applicable law, the Bidder will be relieved of responsibility, and the Bid Deposit of the Bidder claiming error will be returned. Thereafter, at the discretion of the City, all Bids may be rejected or the Contract may be awarded to the next lowest responsive, responsible Bidder.

.3 All bidders shall be presumed to know the bid results that are opened and read by the City. The City has no affirmative duty to notify any bidder as to their bid order or rank.

2.17 ESTIMATED QUANTITIES:

Unit quantities shown in the Contract Documents are estimates and are stated only for Bid comparison purposes. The City does not warrant that the actual unit quantities will correspond with those estimates. The City reserves the right to increase or decrease any unit quantities shown in the Contract Documents by up to 25% without adjusting the unit contract prices. Payment will be made on the basis of the actual quantities of each item of Work satisfactorily completed in accordance with the requirements of the Contract Documents.

2.18 SUBMISSION OF SUBCONTRACTOR INFORMATION:

For contracts where the estimated cost of the project, including sales tax, is One Million Dollars (\$1,000,000) or more, the requirements of RCW 39.30.060, including any amendments, shall apply and each Bidder shall submit a list of proposed subcontractors with whom the Bidder, if awarded the contract, will subcontract for performance of the work of heating, ventilation and air conditioning, plumbing and electrical, or name itself for the work. The Bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternatives, in which case, the Bidder must indicate which subcontractor will be used for which alternative. This list must be submitted as part of the Bid, or within one hour after the published bid submittal time. Failure of the Bidder to submit as part of the bid the names of such subcontractors or to

1 name itself to perform the work or the naming of two or more subcontractors to perform
2 the same work shall render the Bidder's bid non-responsive and, therefore, void.
3 The requirement to name the Bidder's proposed heating, ventilation and air conditioning,
4 plumbing, and electrical subcontractors applies only to proposed heating, ventilation and
5 air conditioning, plumbing, and electrical subcontractors who will contract directly with the
6 general contractor submitting the bid.

7 2.19 BID PRICE:

8 A. The Bid price shall include everything necessary for the prosecution and completion
9 of the Work specified in the Contract Documents including, but not limited to,
10 furnishing all materials, equipment, tools, plant and other facilities and all management,
11 superintendents, labor, and services, except as may be provided otherwise in the
12 Contract Documents. The offer represented by the Bid shall remain in effect for forty-
13 five (45) days after the date of the Bid Opening. In the event of a discrepancy between
14 the unit price and the total price, the unit price will govern and the total price will be
15 adjusted accordingly. Bidders should indicate in their Bids the address to which
16 payment should be mailed, if such address is different from that shown for the Bidder.

17 B. In accordance with RCW 39.04.380, effective March 30, 2012, the City of Lynnwood is
18 enforcing a **Reciprocal Preference for Resident Contractors**. For any public works
19 bid received from a nonresident contractor from a state that provides an in-state
20 percentage bidding preference, a comparable percentage disadvantage must be applied
21 to the bid of that nonresident contractor.

22 A nonresident contractor from a state that provides a percentage bid preference means
23 a contractor that:

- 24 1. Is from a state that provides a percentage bid preference to its resident
25 contractors bidding on a public works contract.
- 26 2. At the time of bidding on a public works project, does not have a physical
27 office located in Washington.

28 The state of residence for a nonresident contractor is the state in which the contractor
29 was incorporated or, if not a corporation, the state where the contractor's business entity
30 was formed.

31 All nonresident contractors will be evaluated for out of state bidder's preference. If the
32 state of the nonresident contractor provides an in-state contractor's preference, a
33 comparable percentage disadvantage will be applied to their bid prior to contract award.

34 If a nonresident contractor is still the lowest responsive, responsible bidder after the
35 Nonresident Disadvantage Total is applied, then they will be awarded a contract in the
36 amount of their original bid (not including the disadvantage percentage amount).

This section does not apply to public works procured pursuant to RCW 39.04.155, 30.04.280, or any other procurement exempt from competitive bidding.

2.20 CONTRACT AWARD:

The Contract may be awarded to the lowest responsive, responsible Bidder complying with the Project Manual (including, without limitation, the Contract Plans and Specifications) and all applicable statutes, regulations, ordinances and resolutions, provided the Bid is reasonable and in the best interests of the City. The City reserves the right to award to the lowest responsive, responsible Bidder submitting the base bid, or base bid and any alternative selected by the City, as determined most advantageous to the City. The City reserves the right to reject any and all Bids, to reissue the Invitation for Bids, to revise or cancel the Project, or to waive any irregularities in the Bids received. The Contract is subject to final approval by the City and is of no effect, and no rights against the City arise, until executed by the City Mayor. The Contract is further subject to requirements of applicable federal and state agencies.

2.21 BID PROTESTS:

The City's Protest Policy may be found at the following link:

<http://www.lynnwoodwa.gov/City-Services/Bids-Proposals.htm>

2.22 QUALIFICATIONS OF BIDDERS

A **Responsible Bidder Determination at Time of Bid:** Pursuant to RCW 39.04.350, it is the intent of Owner to award a contract to the low responsible bidder. **At the time of bid**, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder shall be required by the Owner to submit documentation demonstrating compliance with the criteria.

1. **Mandatory Bidder Responsibility Criteria:**

a. **Criterion:** To be considered a responsible bidder, the bidder must:

- 1) Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
- 2) Have a current Washington Unified Business Identifier (UBI) number;
- 3) If applicable:
 - a) Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b) Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - c) Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

- 4) Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).
- 5) Not “willfully” violated state minimum wage laws within the last three-year period prior to bid opening date.

b. **Documentation:**

- 1) For items a.1) through a.4), above, Bidder shall complete the applicable portion of the “**Responsible Bidder Determination Form**” in Section 4 and submit with bid.
- 2) For item a.5), above, Bidder shall submit with bid a completed “**Contractor Certification–Wage Law Compliance-Responsibility Criteria**” document (DOT Form 272-009) included in the bid package.

2. **Supplemental Bidder Responsibility Criteria:**

a. Public Bidding Crimes

1. **Criterion:** The Bidder and any person with ownership interest in the Bidder shall not have been convicted of a crime involving bidding on a public works contract within five years from the bid submittal deadline.
2. **Documentation:** The Bidder shall sign a statement (on a form included at the end of Section 4) that the Bidder has not been convicted of a crime involving bidding on a public works contract in compliance with Section 2.22.A.2.a.1 and submit with bid. The Owner may also use independent sources of information that may be available to demonstrate whether the Bidder is in compliance with this criterion

b. Liquidated Damages

1. **Criterion:** The Bidder shall not have been assessed liquidated damages related to the performance of a public works contract by a government agency during the five year period immediately proceeding the bid submittal deadline for this project, unless there are extenuating circumstances acceptable to the Owner.
2. **Documentation:** The Bidder shall sign a statement (on a form included at the end of Section 4) that the Bidder has not been assessed liquidated damages related to the performance of a public works contract by a government agency during the five year period immediately proceeding the bid submittal deadline for this project and submit with bid. The Owner may also use independent sources of information that may be available to demonstrate whether the Bidder is in compliance with this criterion.

c. Termination for Cause

1. **Criterion:** The Bidder shall not have had any public works contract terminated for cause by a government agency during the

1 five year period immediately preceding the bid submittal
2 deadline for this project, unless there are extenuating
3 circumstances acceptable to the Owner.

- 4 2. **Documentation:** The Bidder shall sign a statement (on a form
5 included at the end of Section 4) that the Bidder has not had any
6 public works contract terminated for cause by a government
7 agency during the five year period immediately preceding the
8 bid submittal deadline for this project and submit with bid. The
9 Owner may also use independent sources of information that
10 may be available to demonstrate whether the Bidder is in
11 compliance with this criterion.
12

13 d. Litigation

- 14 1. **Criterion:** The Bidder shall not have been a party as a plaintiff
15 or defendant in any lawsuits in Washington State superior or
16 district court in the Puget Sound region (defined as King, Kitsap,
17 Pierce, Snohomish and Thurston Counties) or federal district
18 court for Western Washington in the last six years involving
19 performance or payment issues relating to a public works
20 contract which were resolved adversely to the Bidder through
21 judgment or settlement, unless there are extenuating
22 circumstances acceptable to the Owner.
23 2. **Documentation:** The Bidder shall sign a statement (on a form
24 included at the end of Section 4) that the Bidder has not been a
25 plaintiff or defendant in any lawsuits in Washington State
26 superior or district court in the Puget Sound region (defined as
27 King, Kitsap, Pierce, Snohomish and Thurston Counties) or
28 federal district court for Western Washington in the last six years
29 involving performance or payment issues relating to a public
30 works contract which were resolved adversely to the Bidder
31 through judgment or settlement and submit with bid. The Owner
32 may also use independent sources of information that may be
33 available to demonstrate whether the Bidder is in compliance
34 with this criterion.

- 35 B **Supplemental Bidder Responsibility Criteria – Post Bid:** In addition to the
36 mandatory bidder responsibility criteria referenced above, the bidder must also meet
37 the following relevant supplemental bidder responsibility criteria applicable to the
38 project and, as evidence that the bidder meets the supplemental bidder responsibility
39 criteria, **the apparent and second low bidders must submit the required**
40 **documentation to the Owner within 48 hours of the bid opening.** The Owner
41 reserves the right to request such documentation from other bidders:
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1. Delinquent State Taxes:

- a. **Criterion:** The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.
- b. **Documentation:** Apparent Low Bidder shall, upon request, submit a Washington State Department of Revenue letter “Request for Tax Status” to the Contracting Agency.

2. Federal Debarment

- a. **Criterion:** The Bidder shall not currently be debarred or suspended by the Federal government.
- b. **Documentation:** The Bidder shall not be listed as a current debarred or suspended bidder on the U.S. General Services Administration’s “System for Award Management” website: <http://www.sam.gov/>.

3. Business Status

- a. **Criterion:** The Bidder shall not be “inactive” or “not in good standing” with the Washington State Secretary of State’s Office, the Department of Revenue or the Department of Labor & Industries.
- b. **Documentation:** The Bidder shall provide documented information from the Washington State Secretary of State’s Office, the Department of Revenue or the Department of Labor & Industries providing the date of incorporation or formation, the state of incorporation or formation, that the Bidder is active and in good standing in the State of Washington, State of Washington tax reporting number, and the name and address of the registered agent, general partner or managing member.

4. Subcontractor Responsibility

- a. **Criterion:** The Bidder’s standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder’s subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also “responsible” subcontractors as defined by RCW 39.06.020.
- b. **Documentation:** The Bidder shall submit a copy of its standard subcontract form for review by the Owner, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

5. Claims Against Retainage and Bonds

- a. **Criterion:** The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects during the previous five years that demonstrate a lack of effective management

1 by the Bidder of making timely and appropriate payments to its
2 subcontractors, suppliers, and workers, unless there are extenuating
3 circumstances acceptable to the Owner.

- 4 b. **Documentation:** The Bidder shall submit a list of the public works
5 projects completed within the previous five years and include for each
6 project the following information:

- 7 1. The owner and contact information for the owner;
8 2. A list of claims filed against the retainage and/or payment bond
9 for any of the projects listed;
10 3. A written explanation of the circumstances surrounding each
11 claim and the ultimate resolution of the claim.

12 The Owner may contact previous owners to validate the information
13 provided by the Bidder
14

15 6. Completion of Similar Projects

- 16 a. **Criterion:** The Bidder shall have successfully completed projects of a
17 similar size and scope as required by the contract documents for this
18 project. In evaluating whether the projects were “successfully
19 completed,” the Owner may check owner references for the previous
20 projects and may evaluate the owner’s assessment of the Bidder
21 performance, including but not limited to the following areas:

- 22 1. Quality control;
23 2. Safety record;
24 3. Timeliness of performance;
25 4. Use of skilled personnel;
26 5. Management of subcontractors;
27 6. Availability of and use of appropriate equipment;
28 7. Compliance with contract documents;
29 8. Management of submittals process, change orders, and close-
30 out.

- 31 b. **Documentation:** The Bidder shall submit a list of projects of similar
32 size and scope to this project as described in the Invitation to Bid
33 completed within the last five (5) years. The information about each
34 project shall include the following:

- 35 1. Owner’s name and contact information for the owner’s
36 representative;
37 2. Awarded contract amount;
38 3. Final contract amount;
39 4. A description of the scope of the project and how the project is
40 similar to this project;
41 5. The Bidder’s assessment of its performance of each project,
42 including but not limited to the following:
43 a) Quality control;
44 b) Safety record;
45 c) Timeliness of performance;

- d) Use of skilled personnel;
- e) Management of subcontractors;
- f) Availability of and use of appropriate equipment;
- g) Compliance with contract documents;
- h) Management of submittals process and change orders.

7. Insurance

- a. **Criterion:** The Bidder shall be able to fully comply with the insurance requirements set forth in the Invitation to Bid and Project Manual.
- b. **Documentation:** The Successful Bidder shall provide the Owner with the types and amounts of insurance and related endorsements set forth in the Invitation to Bid and Project Manual.

C **Subcontractor Responsibility:** The successful Bidder shall include the language of this section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the successful Bidder shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.

- 1. **Criteria:** At the time of subcontract execution, the successful Bidder shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
 - a. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 - b. Have a current Washington Unified Business Identifier (UBI) number;
 - c. If applicable, have:
 - 1. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - 2. A Washington Employment Security Department number, as required in Title 50 RCW;
 - 3. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - 4. An electrical contractor license, if required by Chapter 19.28 RCW;
 - 5. An elevator contractor license, if required by Chapter 70.87 RCW.
 - 6. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

- 1 2. **Documentation:** The Bidder shall have all proposed subcontractors complete
2 the “Responsible Bidder Determination Form” at the end of Section 4 and
3 submit the form within 48 hours of bid opening.
4

- 5 D **References:** The Owner may conduct reference checks for the apparent low and second
6 low bidder whose bids are under consideration for award. In the event that information
7 obtained from the reference checks: (1) reveals that the bidder does not meet the
8 Supplemental Bidder Responsibility Criteria; or (2) indicates concerns about the
9 bidder’s performance on projects identified as meeting the Supplemental Bidder
10 Responsibility Criteria, which may include, but not be limited to the quality of
11 construction, the bidder’s management of subcontractors, timeliness of required
12 submittals, and safety record on the project; or (3) indicates other concerns about
13 the bidder’s ability to successfully perform the work, the owner shall have the right to
14 determine that the bidder is not a responsible bidder.
15

16 Prior to making such a determination that a bidder is not responsible based on
17 information received through reference checks, the Owner may discuss with the bidder
18 the information obtained from the references, and provide the bidder with the
19 opportunity to offer explanations that may help inform whether the Owner declares the
20 bidder not responsible.
21

22 In conducting reference checks, the Owner may include itself as a reference if the
23 bidder has performed work for the Owner, even if the bidder did not identify the Owner
24 as a reference.
25

26 If the Owner determines the bidder is not a responsible bidder, subject to following the
27 requirements of the appeal process (see below), the Owner may award the contract to
28 the next lowest bidder who meets the Supplemental Bidder Responsibility Criteria and
29 whose reference checks validate the ability of the bidder to successfully perform the
30 work.
31

- 32 E **Failure to Submit Documentation:** If a bidder fails to submit the documentation
33 required by the bidding documents to demonstrate compliance with the Mandatory and
34 Supplemental Bidder Responsibility Criteria within the time period specified in the
35 bidding documents, the Owner may: (1) find the bidder not responsible, or (2) find the
36 bidder responsible based upon any available information that demonstrates that the
37 bidder meets the Mandatory and Supplemental Bidder Responsibility Criteria.
38

- 39 F **Procedure to Request Modification of Supplemental Bidder Responsibility**
40 **Criteria.** During the bidding period, but not later than five (5) business days before the
41 bid submittal deadline, a potential bidder may request that the Owner modify the
42 supplemental bidder responsibility criteria. The Owner shall evaluate any such
43 requests, and if a decision is made by the Owner in its sole discretion to modify the
44 criteria, such modification shall be communicated to all bidders and plan holders via
45 the issuance of an addendum to the bidding documents. If the Owner determines not to

1 modify the supplemental criteria, the Owner shall notify the requesting bidder of its
2 decision in writing.
3

4 **G Appeal of Determination that Bidder does not Meet Responsibility Criteria:** If the
5 Owner determines that a bidder does not meet the bidder responsibility criteria set forth
6 in this section and is therefore not a responsible bidder, the Owner shall notify the
7 bidder in writing with the reasons for its determination. If the bidder disagrees with
8 this determination, it may appeal the determination within 24 hours of receipt of the
9 Owner's determination by presenting additional information in writing to the Owner.
10 The Owner will consider the additional information before issuing its final
11 determination in writing. If the final determination affirms that the bidder is not
12 responsible, the Owner will not execute a contract with any other bidder until two (2)
13 business days after the bidder determined to be not responsible has received written
14 notice of the final determination. For the purposes of this subsection, the date of the
15 Owner's transmission of the Owner's determination(s) by facsimile or electronic mail
16 to the bidder at the facsimile number or e-mail address provided by the bidder in its bid
17 shall constitute the date of receipt by the bidder of the written notices provided for
18 herein.
19

20 The Owner may make such investigations as it deems necessary to determine the ability
21 of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such
22 information and data for this purpose. A Contract will not be awarded until the Owner
23 has satisfied itself that the successful Bidder is familiar with this class of work, has
24 successfully completed similar projects, and has the necessary capital and tools to
25 satisfactorily perform the same. The right is specifically reserved by the Owner to
26 reject any or all Proposals, to accept the Proposal of the lowest responsible Bidder or
27 to re-advertise for new Proposals.
28

29 The Bidder's attention is hereby directed to that portion of the Contract Documents
30 which require that the Bidder furnish information concerning Bidder's experience with
31 work of a similar nature, equipment to be used on this project, and general background
32 information.
33

34 The Owner, in its discretion, may determine that a Bidder is not responsible and reject
35 Bidder's proposal for any of the following reasons or for any other reason deemed
36 proper.

- 37 1. More than one proposal on the same project from a Bidder under the same or
38 different names;
- 39 2. Evidence of collusion with any other Bidder or Bidders. Participants in such
40 collusion shall be disqualified from submitting bids on any further work;
- 41 3. If a Bidder is not qualified for the work involved or to the extent of this Bid;
- 42 4. Unsatisfactory performance record, judged from the standpoint of conduct of
43 work, workmanship, safety record, or progress, as shown by past or current
44 work;

- 1 5. Incompleted work, whether for the Owner or otherwise, which might hinder or
- 2 prevent the prompt completion of the work bid upon;
- 3 6. Failure to pay or settle bills for labor or materials on former or current contracts;
- 4 7. If the Bidder has previously defaulted in the performance of or failed to
- 5 complete a written public contract, or has been convicted of a crime arising
- 6 from a previous public contract;
- 7 8. Any other inability, financial or otherwise, to perform a previous public
- 8 contract;
- 9 9. A bidder not authorized to do business in the State of Washington.

10
11 The Owner reserves the right to approve all subcontractors on the basis of work record,
12 equipment, experience and ability.
13

1

SECTION 3

2

GENERAL PROVISIONS

GENERAL PROVISIONS

3.01 GENERAL:

All Work included in the Project shall be done for the price set forth in the Bid of the successful Bidder (the "Contract Sum"), in accordance with the Project Manual, including, without limitation, the Contract Plans and Specifications, and with the Standard Specifications for Road, Bridge and Municipal Construction (English version), 2018 edition, as issued by the Washington State Department of Transportation ("Standard Specifications"). "Consultant" as used herein refers to the City's Consulting Engineer and/or Architect. "Construction Manager" as used herein refers to the City's representative who administers the construction program for the City. "Resident Engineer" as used herein refers to the City's representative who manages a specific construction project. Director as used herein refers to the City's representative who acts as the head of the City Public Works Department.

3.02 AWARD OF CONTRACT:

A Contract will not be awarded until the City is satisfied that the successful Bidder is familiar with this type of Work and has the necessary capital and tools to satisfactorily complete the Project. The City specifically reserves the right to accept the Bid of the lowest responsive, responsible Bidder, to reject any and all Bids, to reissue the Invitation for Bids, to revise or cancel the Project, or to waive any irregularities in the Bids received.

3.03 CONTRACT DOCUMENTS:

.1 This Project Manual consists of the following Contract Documents and shall be a part of the Contract entered into by the City and the successful Bidder (the "Contractor"): Invitation for Bids, Instruction to Bidders, General Provisions, Bid Form, Contract, Payment and Performance Bonds, Prevailing Wage Rate, Local Agency General Special Provisions, Special Provisions, Contract Plans, Specifications, (Engineering Specifications, when the CSI format is used), and the Standard Specifications for Road, Bridge and Municipal Construction 2018 edition (English version) (the "Standard Specifications"), which are incorporated herein by this reference (provided that, as used in the Standard Specifications, "State" means City of Lynnwood;" "Department of Transportation" means "Department of Public Works;" "Secretary" means "Director of Public Works"). In the event there is any conflict, ambiguity, or inconsistency between any of the foregoing Contract Documents, the following order of documents governs so that the former prevails over the latter:

- (i) Addenda,
- (ii) Contract,
- (iii) Bid Form,
- (iv) Instructions to Bidders,

- (v) Special Provisions,
- (vi) Contract Plans,
- (vii) General Provisions,
- (viii) Amendments to the Standard Specifications,
- (ix) Standard Specifications,
- (x) Standard Plans, and
- (xi) Payment and Performance Bonds.

.2 In the event there exists a conflict, inconsistency, or ambiguity within the terms or conditions of one of the Contract Document categories set forth above that is not resolved under subsection 1, the more stringent or more costly requirements or greater quantity or quality shall be deemed to have been intended and to have been included in the original Contract Price.

3.04 FAILURE TO EXECUTE CONTRACT:

Failure to execute the Contract in compliance with this Project Manual shall result in forfeiture of the Bidder's Deposit. If this should occur, the City may then award the Contract to the next lowest responsive, responsible Bidder, reject any or all Bids, reissue the Invitation for Bids, or revise or cancel the Project.

3.05 ALTERATION OR MODIFICATION:

No alteration or modification of the Contract Documents will be binding unless set forth in writing signed by the City.

3.06 ADDITIONS OR DELETIONS:

The City reserves the right to add or delete Work from the Contract, subject to appropriate adjustments to the Contract Sum.

3.07 NOTICE TO PROCEED:

A Notice to Proceed will be given after the Contract has been executed by the City and the Contractor and, where applicable, by any State or Federal agencies responsible for funding any portion of the Project. The time allowed for Physical Completion of the Work shall begin as of the date specified in the Notice to Proceed, or if no date is specified, ten calendar days after the date of issuance of the Notice to Proceed, or the date work commences, whichever is earlier. The Contractor shall not commence the Work until the Notice to Proceed has been given by the City.

1 3.08 CONSTRUCTION SCHEDULE AND TIME LIMIT:

2 .1 Within ten (10) calendar days after issuance of the Notice to Proceed, the
3 Contractor shall submit a preliminary schedule for the orderly performance and completion
4 of all parts of the Work in accordance with the Contract and within the Contract Time
5 (“Construction Schedule”). The Construction Schedule shall be based upon a critical path
6 method analysis of construction activities and sequence of operations, in the form of a
7 precedence diagram and activity listing, shall be time scaled, and shall include the Notice
8 to Proceed date, the date(s) of Substantial and Physical Completion, and the date(s) of Final
9 Completion in accordance with the Contract Documents, along with clearly defined
10 milestone completion dates. The Construction Schedule will be provided both as a
11 document (network diagram) and electronically.

12 .2 The network diagram shall show in detail and in order the sequence of all
13 significant activities, their descriptions necessary to complete all parts of the Work, and
14 shall show the following information for each activity:

15 (i) description,

16 (ii) duration,

17 (iii) craft,

18 (iv) equipment,

19 (v) start and finish dates,

20 (vi) total float time and free float time, and

21 (vii) dates that work must be performed and completed by other contractors and
22 subcontractors to support the Work.

23 The electronic schedule shall be unmodified from the Contractor’s version and show all
24 input parameters including, but not limited to, logic ties, constraints, and assumptions.

25 .3 The Contractor shall perform the Work at all reasonable times so as to complete the
26 Work in accordance with the Construction Schedule, and shall discontinue the Work only
27 if delayed by inclement weather that could not have been reasonably anticipated at the time
28 the Contractor submitted its Bid. Except for delays due to unanticipated inclement weather,
29 the City shall be entitled to all float in the Construction Schedule and the Contractor shall
30 not be entitled to any adjustment in the Contract Time, the Construction Schedule or the
31 Contract Sum, or to any additional payment of any sort by reason of the loss or use of any
32 float time, including time between the Contractor’s anticipated completion date and the
33 end of the Contract Time, whether or not the float time is described as such on the
34 Construction Schedule.

35 .4 Should the Contractor fail to meet any scheduled date as shown on the current
36 Construction Schedule or if the sequence of the Work varies significantly from that shown

on the Construction Schedule, the Contractor shall, at the Contractor's own expense, submit an updated Construction Schedule within ten days after notice from the City. Should the Contractor fail to provide an updated Construction Schedule in the time required herein, the City may, in its sole discretion, withhold payment from Contractor until an updated Construction Schedule in compliance with subsection 3.08.2 is received. If the Contractor's progress indicates that the Work will not be Physically Completed within the Contract Time, upon notice from the City, the Contractor shall, at the Contractor's own expense, increase its work force and working hours to bring the actual completion dates of the activities into conformance with the Construction Schedule and Physical Completion within the Contract Time.

.5 The Contractor shall attain Physical Completion of the Work in accordance with the Contract within 60 calendar days after the date of Substantial Completion.

.6 During the period commencing with the issuance of Notice to Proceed and ending with the date of Physical Completion of the Work, the Contractor shall attend and participate in and ensure applicable Subcontractors of any tier and Suppliers attend and participate in:

(i) A Pre-contract Meeting;

(ii) A Pre-construction Meeting;

(iii) Regular weekly Project status meetings as scheduled by the City to review progress of the Work, to discuss the Contractor's progress reports, and to obtain necessary City approvals, and generally to keep the City informed and involved in the progress of the Project; and

(iv) Regular on-site meetings as scheduled by the City to review progress of the Work and other pertinent matters.

.7 In the event the Contractor fails to proceed with the Work for more than ten (10) working days, the Contractor shall be deemed to have abandoned the Project, and the City may, in its discretion, elect to terminate the Contract and thereafter proceed to complete the Project through its own forces or through an independent third party. In such event, the Contractor will be responsible for all expenses reasonably incurred by the City in completing the Work. The Contractor will also be responsible for all legal, engineering or other costs caused by the Contractor's abandonment of the Project, or the failure or refusal of the Contractor to complete the Work within the Contract Time.

3.09 DELAYS & EXTENSION OF TIME:

.1 The Contractor shall notify the City in writing of any event which could delay performance of any part of the Work, of the anticipated effect of the delay on the Construction Schedule, of the action being taken to correct the delay situation, and of any proposed changes in the Construction Schedule or the Contract Time. The Contractor shall not recover damages, a monetary adjustment or an increase in the Contract Sum from the City for any disruption or delay where (i) the actions or inactions of the City were not the

1 actual, substantial cause of the disruption or delay, or (ii) the Contractor could have
2 reasonably avoided the disruption or delay by the exercise of due diligence.

3 .2 If a disruption or delay is not actually and substantially caused by the City, in lieu
4 of damages, a monetary adjustment or an increase in the Contract Sum, the Contractor may
5 be granted equitable changes in the Construction Schedule and/or extensions of the
6 Contract Time under the following circumstances:

7 (i) If a disruption or delay is caused by a suit or other legal action against the
8 City, the Contractor will receive an equivalent extension of the Contract
9 Time, unless the period of such delay-exceeds ninety (90) calendar days.
10 When such period is exceeded, the City will, upon request of the Contractor,
11 in writing, either negotiate a termination of the Contract or grant a further
12 extension of the Contract Time, whichever may at the time be in the best
13 interests of the City.

14 (ii) If the disruption or delay is due to inclement weather which could not have
15 been anticipated by the Contractor or reasonably avoided by the exercise of
16 due diligence, subject to the approval of the City, the Contractor will receive
17 an extension of the Contract Time equivalent to the total time lost, whether
18 it be a single continuous period or the accumulated total of several periods.

19 (iii) Should a disruption or delay be caused by other unforeseen circumstances
20 beyond the reasonable control of the Contractor which could not be avoided
21 by the exercise of due diligence, or should performance of work under a
22 Change Order make the Work more complex or difficult than originally set
23 forth in the Contract Documents, and such work, in the Contractor's
24 opinion, requires more time to execute than allowed by the Contract, the
25 Contractor shall notify the City in writing prior to the performance of such
26 work, setting forth in detail its estimate of the additional time required for
27 such work. If such estimate is approved by the City, the Contractor will
28 receive an equitable extension of the Contract Time.

29 .3 In the event the Contractor (including any subcontractors or suppliers of any tier)
30 is held to be entitled to damages from the City for disruption or delay, it is agreed that the
31 total damages to the Contractor (including damages to any subcontractor or supplier of any
32 tier) shall be limited to the lesser of (i) the time and materials costs associated with the
33 impact of such disruption or delay, along with markups on the Contractor's own work and
34 on that of its subcontractors and suppliers at the rates specified in the Contract, or (ii) the
35 daily liquidated damages rate specified in the Contract. No damages will be allowed and
36 the Contractor waives any such damages or costs incurred for any time prior to ten (10)
37 calendar days before receipt of a written notice of disruption or delay.

38 .4 The Contractor will not in any event be entitled to damages, a monetary adjustment
39 or an increase in the Contract Sum arising out of any actual or alleged loss of efficiency;
40 morale, fatigue, attitude or labor rhythm; constructive acceleration; home office overhead;
41 expectant underrun; trade stacking; reassignment of workers; concurrent operations;

1 dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple;
2 season change; extended overhead; profit upon damages for delay; impact damages; or
3 similar damages or other form of economic loss.

4 3.10 EQUIPMENT AND MATERIALS SPECIFIED:

5 Within the Contract Documents, certain processes, materials or equipment are designated
6 by brand, style, trade name, or manufacturer in order to set forth a standard of quality,
7 and/or preference by the City. It is not the intent to exclude other processes, materials or
8 equipment of a type and quality equal to those designated. Whenever a manufacturer's
9 name, brand, style or item designation is given, it shall be understood that the words "or
10 equal" follow such name or designation whether in fact they do so or not; provided,
11 however, that the Contractor shall not substitute any alternative process, material or item
12 of equipment unless such has been approved in advance in writing by the City. No
13 additional compensation or extension of time will be allowed the Contractor for any
14 changes required to adopt a substitute process, material or item of equipment unless
15 approved in advance in writing by the City. Therefore, the Contractor's Bid (and the
16 Contract) shall include any proposed substitutions and all costs for any modifications to
17 the Work which may be necessary for approval and adaptation of the proposed
18 substitutions.

19 3.11 SAFETY MEASURES:

20 .1 All Work shall be performed in a safe manner, and the Contractor and all
21 subcontractors shall observe the Federal Occupational Safety and Health Act, the
22 Washington Industrial Safety and Health Act (WISHA), and all rules and regulations
23 promulgated thereunder, all rules, regulations and orders of the Washington State
24 Department of Labor and Industries and any other governmental authority, and all other
25 applicable safety standards. In case of conflict between any such requirements, the more
26 stringent regulation or requirement shall apply. There is no acceptable deviation from these
27 safety requirements, regardless of practice in the construction industry. Any violation of
28 OSHA, WISHA, or other safety requirements applicable to the work may, at the sole
29 discretion of the City, be considered a material breach of this Contract. The Contractor
30 shall be solely and completely responsible for conditions of the job site, including the safety
31 of all persons and property during performance of the Work. This requirement shall apply
32 continuously and not be limited to normal working hours.

33 .2 Review by the Resident Engineer of the Contractor's plan for the sequence,
34 schedule and performance of the Work is not intended to and will not include any review
35 or approval of the adequacy of the Contractor's safety measures in, on, or near the job site.
36 The Resident Engineer does not purport to be a safety expert, will not be so engaged in that
37 capacity with respect to the Project, and has neither the authority nor the responsibility to
38 enforce construction safety laws, rules, regulations or procedures, or to order a stoppage of
39 the Work for claimed violations thereof.

40 .3 The Contractor shall at all times exercise every precaution for the prevention of
41 accidents and the protection of persons (including, without limitation, employees of the

City, the Contractor and all subcontractors) and property (including, without limitation, property owned by the City or any third party). All exposed moving parts of equipment capable of inflicting injury by accidental contact shall be protected with sturdy removable guards in accordance with applicable safety regulations.

3.12 CHANGES IN THE WORK:

.1 The City may, at any time, without notice to the sureties, and without invalidating the Contract, by order designated or indicated to be a change order or directive, make any change, including modifications to, additions to or deletions from the Work within the general scope of the Contract ("Change"), including, but not limited to, changes:

- (i) In the Contract Plans and Specifications;
- (ii) In the quantities or performance of the Work;
- (iii) In any City-furnished facilities, equipment, materials, services or site; or
- (iv) Directing acceleration or suspension of the performance of the Work.

.2 If the Contractor intends to assert a Claim for any Change in the Work the Contractor shall, within 10 calendar days after receipt of a notice of a Change, submit to the City a written statement setting forth the general nature and monetary and other impact of such Change, unless this period is extended, in writing, by the City. All Claims must be made in strict accordance with the applicable provisions of the Contract Documents, including Paragraphs 3.31 - 3.33 hereto, or they will be waived.

.3 Change orders and directives will be prepared and executed in triplicate; two copies shall be retained by the City, and one copy shall be delivered to the Contractor.

.4 WSDOT Standard Specifications Section 1-04.4 remains in force.

3.13 INCREASED OR DECREASED QUANTITIES:

In the case of unit prices, when accepted quantities of Work vary from the original Bid quantities, payment will be at the unit contract price for accepted Work unless the total quantity of any contract item increases or decreases by more than 25% of the original Bid quantity.

1 3.14 GUARANTEE:

2 The Contractor hereby guarantees that all Work (including, without limitation, all labor,
3 materials and equipment) furnished by the Contractor under the Contract will meet fully
4 all requirements for quality of workmanship, materials, strength and any and all other
5 requirements set forth in the Contract Documents (including, without limitation, the
6 Contract Plans and Specifications).

7 3.15 PAYMENT AND PERFORMANCE BONDS:

8 The Contractor shall furnish both a Payment Bond and a Performance Bond, each in the
9 full amount of the Contract Sum, which shall guarantee the faithful performance of the
10 Contract and the payment of all labor, mechanics, subcontractors, material and taxes. The
11 Contractor shall maintain the Payment and Performance Bonds in full force and effect until
12 Completion of the Project and acceptance by the City, and thereafter for a minimum of two
13 (2) years with respect to the Performance Bond and for such period as the law allows for
14 the filing or enforcement of liens with respect to the Payment Bond. The Payment and
15 Performance Bonds shall be furnished by a corporate surety company or companies
16 authorized to do business in the State of Washington and acceptable to the City in its
17 discretion, in substantially the forms included in the Project Manual. Notwithstanding the
18 foregoing, on contracts of \$25,000 or less, at the option of the Contractor, the City may, in
19 lieu of Payment and Performance Bonds, retain 50% of the Contract Sum for (i) a period
20 of thirty (30) days after the City's final acceptance of the Project, or (ii) until receipt of all
21 necessary releases from the Washington Department of Revenue and Department of Labor
22 and Industries, and settlement of all liens filed against the Project, whichever is later.

23 3.16 LICENSES, PERMITS AND TAXES:

24 The Contractor shall procure, at Contractor's expense, all permits and licenses, pay all
25 charges, fees and taxes, and give all notices necessary and incidental to the due and lawful
26 prosecution of the Work.

27 3.17 HOLD HARMLESS:

28 .1 The Contractor agrees to indemnify, defend and hold harmless the City from and
29 against any and all claims, damages, losses, liabilities and expenses, including reasonable
30 attorney's and expert fees and costs, arising out of or relating to Contractor's performance
31 of this Contract, including, without limitation, any and all claims, damages and liabilities

32 (i) under workers' or workmen's compensation, disability benefit and other
33 similar employee benefit acts which are applicable to the Work;

34 (ii) because of bodily injury, occupational sickness or disease, or death of any
35 employee of the Contractor;

36 (iii) because of bodily injury, sickness or disease, or death of any person other
37 than the Contractor's employees;

- 1 (iv) sustained by a person as a result of a claim directly or indirectly related to
2 employment of such person by the Contractor, or by another person;
- 3 (v) because of injury to or destruction of tangible property, including loss of
4 use resulting therefrom;
- 5 (vi) because of bodily injury, death of a person or property damage arising out
6 of ownership, maintenance or use of a motor vehicle and/or mobile
7 equipment; or
- 8 (vii) involving contractual liability insurance applicable to the Contractor's
9 obligations hereunder. Contractor waives any right of contribution against
10 the City.

11 .2 For the purposes of RCW 4.24.115, the Contractor and City agree that the term
12 "damages" applies only to the finding in a judicial proceeding and is exclusive of third
13 party claims for damages preliminary thereto.

14 .3 It is mutually negotiated and agreed that in any claim against the City or any of its
15 agents or employees, by the Contractor, any subcontractor, anyone directly or indirectly
16 employed by any of them, or anyone for whose acts any of them may be liable, the
17 Contractor's indemnification obligation hereunder shall not be limited in any way by any
18 limitation on the amount or type of damages, compensation or benefits payable by or for
19 the Contractor or any subcontractor under Workman's Compensation Acts, disability
20 benefits acts or other employee's benefit acts. The City and the Contractor agree that all
21 third party claims for damages against the City of which the Contractor's insurance carrier
22 does not accept defense may be tendered by the City to the Contractor, who shall accept
23 and undertake to defend or settle the same. Notwithstanding the foregoing, the City retains
24 the right to approve claims investigations and legal counsel assigned to defend such claims.
25 All investigation and legal work product regarding such claims shall be performed under a
26 fiduciary relationship to the City. In the event that the City agrees or a court finds that any
27 claim for bodily injury to persons or damage to property arises from the sole negligence of
28 the City, or its agents or employees, this indemnification and duty to defend shall be void.
29 In the event that the City and the Contractor agree or a court finds that any claim for bodily
30 injury to persons or damage to property is caused by or resulting from the concurrent
31 negligence of the Contractor, or its agents, employees, or subcontractors, and the City, or
32 its agents or employees, the Contractor shall be responsible for all damages payable to the
33 claimant, and, in addition thereto, the Contractor shall defend and indemnify the City for
34 all damages paid or payable by the City, in an amount not to exceed the percentage of total
35 fault attributable to the Contractor, its agents, employees, or subcontractors. For example,
36 where the Contractor (or its agents, employees, or subcontractors) is 25% negligent, the
37 Contractor shall not be required to indemnify the City for any amount in excess of 25% of
38 the claimant's total damages, and shall only be responsible for 25% of the costs to defend
39 the claim. **Solely and expressly for the purpose of its duties to indemnify, defend, and**
40 **hold harmless the City, the Contractor specifically waives any immunity it may have**
41 **under the State Industrial Insurance Law, Title 51 RCW.**

1 3.18 WORKER'S BENEFITS.

2 .1 The Contractor shall make all payments required for unemployment compensation
3 under Title 50 RCW and for industrial insurance and medical aid required under Title 51
4 RCW. If any such payment is not made when due, the City may retain such amount from
5 any monies due the Contractor and may pay the same into the appropriate fund.

6 .2 The Contractor shall include in the various items in the Bid all costs for payment
7 of unemployment compensation and for providing all required insurance coverages. The
8 Contractor will not be entitled to any additional payment for: (i) failure to include such
9 costs, or (ii) determinations made by the U.S. Department of Labor or the Washington State
10 Department of Labor and Industries regarding such insurance coverages.

11 3.19 CONTRACTOR'S LIABILITY & PROPERTY DAMAGE INSURANCE:

12 .1 The Contractor shall not commence the Work until the Contractor has furnished the
13 City with an Acord 25 Insurance Certificate as evidence of the required policies, and upon
14 request by the City, with evidence (in duplicate copy) of all policies of insurance required
15 hereunder, and such insurance has been approved by the City; nor shall the Contractor
16 allow any subcontractor to commence Work on its subcontract until such subcontractor has
17 complied with such insurance requirements. Approval of any insurance by the City shall
18 not relieve or decrease the liability of the Contractor for any damages arising from or
19 related to the Contractor's performance of the Work. All insurance required shall be with
20 insurers with a financial rating from A.M. Best Company of A(-) VII or better.

21 .2 The Contractor shall procure and maintain, during the term of the Contract,
22 Commercial General Liability and Commercial Automobile Liability Insurance, as set
23 forth below. The insurance policies shall include the City, and others if required by the
24 Contract Documents, as Additional Insureds for both ongoing and completed operations.
25 Products and Completed Operations coverage shall be maintained for not less than three
26 years following completion of the project. There shall also be included contractual liability
27 coverage sufficiently broad to insure the provisions of Section 3.17 above.

28 Contractor insurance policies shall include Lynnwood as Additional Insured for both
29 ongoing and completed operations, using Insurance Services Office forms CG 2010 (07-
30 04) and CG2037(07-04) or the equivalent, on a Primary Basis and others if required by the
31 Contract documents and such insurance shall not include a cross-claims or similar
32 exclusion. .

33 The Contractor shall provide the Contracting Agency and all Additional Insureds with
34 written notice of any policy cancelation, within two business days of their receipt of such
35 notice.

36 A Certificate of Insurance including a copy of the Additional Insured Endorsement on
37 Forms CG 2010 (07-04) and CG 2037(07-04) shall be filed with Lynnwood after award,
38 but prior to execution of the contract, for a primary policy of Commercial General Liability
39 insurance and Commercial Automobile Liability insurance meeting the requirements
40 herein.

1 .3 The Commercial General Liability Insurance shall be written using Insurance
2 Services Office form CG0001(12-07) or the equivalent with limits of liability in no case
3 less than \$1,000,000 each occurrence and \$2,000,000 in the aggregate. Coverage shall
4 include:

- 5 (i) Premises & Operations;
- 6 (ii) Liability of the insured arising out of operations of subcontractors;
- 7 (iii) Products Liability, including Completed Operations Coverage; Products &
8 Completed Operations coverage shall be maintained for not less than three
9 years following completion of the project;
- 10 (iv) Contractual Liability;
- 11 (v) Broad Form Property Damage;
- 12 (vi) Employees as Additional Insured;
- 13 (vii) Explosion, Collapse & Underground Hazard;
- 14 (viii) Independent Contractors;
- 15 (ix) Personal Injury;
- 16 (x) Stop Gap or Employer's Liability; and
- 17 (xi) Cross Liability Clause or Separation of Insureds Clause.

18 .4 The Commercial Automobile Liability Insurance shall be written on Insurance
19 Services Office form CA0001(03-10) or the equivalent with limits of liability as required
20 by the Supplementary General Conditions but shall in no case be for limits less than
21 \$1,000,000 each accident. Coverage shall include:

- 22 (i) All owned automobiles, if any;
- 23 (ii) Non-owned automobiles;
- 24 (iii) Hired automobiles.

25 .5 The insurance coverages listed above shall protect the Contractor and the City from
26 claims for damages for bodily injury, including death resulting therefrom, as well as claims
27 for property damage, which may arise from operations under the Contract, whether such
28 operations be by the Contractor or by any subcontractor or by anyone directly employed
29 by any of them, it being understood that it is the Contractor's obligation to enforce the
30 requirements of this section in respect to any subcontractor employed for this Project.

31 .6 Any Umbrella Liability Insurance or Excess Liability Insurance shall be written to
32 provide limits in excess of the underlying Commercial General Liability, Commercial
33 Automobile Liability and Employer's Liability (Stop Gap) with limits of not less than

1 \$2,000,000 each occurrence and \$2,000,000 aggregate; HOWEVER, \$5,000,000 Umbrella
2 Liability insurance is required for contracts exceeding \$200,000 and/or with a stated
3 construction time for completion that is greater than 120 days, and/ or for contracts that
4 require roadway and/or trenching activity.

5 .7 Commercial General Liability Bodily Injury Liability Insurance shall be written on
6 an occurrence basis for bodily injury, sickness or disease, including death resulting
7 therefrom.

8 .8 Commercial General Liability Property Damage Liability Insurance shall be
9 written on an occurrence basis for damage to or destruction of property, including loss of
10 use thereof, and shall not exclude:

11 (“X”) Injury to or destruction of any property arising out of blasting or explosion;

12 (“C”) Injury to or destruction of any property arising out of the collapse or
13 structural injury to any building or structure due to:

14 (i) Excavation, including borrowing, filling or backfilling in
15 connection therewith, or tunneling, pile driving, cofferdam Work or
16 caisson Work, or

17 (ii) Moving, shoring, underpinning, raising or demolition of any
18 building or structure or removal or rebuilding of any structural
19 support thereof.

20 (“U”) (i) Injury to or destruction of wires, conduits, pipes, mains, sewers or
21 other similar property or any apparatus in connection therewith,
22 below the surface of the ground, if such injury or destruction is
23 caused by and occurs during the use of mechanical equipment for
24 the purpose of excavating or drilling, or

25 (ii) Injury to or destruction of property at any time resulting therefrom.

26 .9 Nothing contained in these insurance requirements is to be construed as limiting
27 the Contractor’s liability for damages resulting from its operations under the Contract.

28 .10 Prior to commencement of the Work, the Contractor shall furnish the City with
29 certified copies of all insurance policy or policies, including all endorsements, required
30 hereunder.

31 .11 The City and Contractor waive all rights against each other and any of their
32 subcontractors, sub-subcontractors, agents and employees for damages caused by fire or
33 other perils to the extent covered by property insurance agreement or other property
34 insurance applicable to the Work, except such rights as they have to proceeds of such
35 insurance.

1 .12 The Contractor shall require its first tier subcontractors and subcontractor of any
2 tier whose subcontract is for an amount greater than \$50,000 to provide the scope and
3 amount of insurance coverage and evidence of such coverage, including any requirements
4 to list and/or name the City or Contractor as additional insured, in accordance with the
5 requirements of the Contract.

6 3.20 CONTRACTOR'S BUILDER'S RISK INSURANCE:

7 .1 Prior to commencement of the Work, when required by the special provisions, the
8 Contractor shall submit written evidence that the Contractor has obtained and will maintain
9 until the Project is accepted by the City as complete, Course of Construction Completed
10 Value Insurance Coverage (including Earthquake, Flood, Landslide, Collapse and Damage
11 resulting from Faulty Workmanship, Material or Design) upon the entire Work which is
12 the subject of the Contract, and including completed Work and Work in progress. The
13 insurance policies shall include the City, and others if required by the Contract Documents,
14 as Additional Insureds. An Acord 24 Property Insurance Certificate shall be provided to
15 the City as evidence of this coverage.

16 .2 Such insurance may have a deductible clause, which shall not exceed \$5,000,
17 except that the deductible on Earthquake, Flood and Landslide may be in accordance with
18 underwriters' requirements. Builders' Risk "All-Risk" Insurance shall include provisions
19 for Flood and Earthquake, on a 100% completed value basis on the insurable portion of the
20 Project. The Contractor shall be responsible for all deductible amounts.

21 3.21 COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:

22 .1 The Contractor shall maintain Worker's Compensation Insurance as required by
23 State law for all of employees to be engaged in the Work. Should any Work be
24 subcontracted, the Contractor shall require the subcontractors similarly to provide
25 Worker's Compensation Insurance for all of the subcontractors' employees to be engaged
26 in such Work. The Contractor's Labor and Industries account number shall be provided in
27 the Bid in the space provided.

28 .2 In the event any class of employees engaged in Work on the Project is not covered
29 under the Worker's Compensation Insurance as required by the State law, the Contractor
30 shall provide, and shall cause each subcontractor to provide, Employer's Liability
31 Insurance with a private insurance company with limits of at least \$1,000,000 each
32 accident, \$1,000,000 each employee and shall furnish the City with satisfactory evidence
33 of the same prior to commencement of the Work.

34 3.22 CONTRACTOR RESPONSIBLE FOR WORK:

35 The Contractor warrants to the City that: (i) the materials and equipment furnished under
36 the Contract will be of good quality and new, unless otherwise required or permitted by the
37 Contract Documents; (ii) the Work will conform to the requirements of the Contract
38 Documents; and (iii) the Work will be free from defects in materials and workmanship for
39 a period of not less than two (2) years after the Work has been completed and accepted by
40 the City in writing, or such longer period as specified in the Contract Documents. Any

1 Work not conforming to these requirements, including substitutions or deviations not
2 properly approved by the City, will be considered defective and will be repaired or replaced
3 at the Contractor's sole expense. Deviations, alterations, variations, additions, or omissions
4 from the Contract requirements without prior written consent shall preclude Contractor
5 from bringing any Claim on the basis of an alleged defect or error in the Contract
6 Documents.

7 3.23 POSSESSION:

8 The City reserves the right to use and occupy any portion of the improvements which have
9 been completed sufficiently to permit use and occupancy; provided that such use and
10 occupancy shall not be construed as an acceptance of all or any portion of the Work. The
11 City shall not be deemed to have waived any claims it may have against the Contractor by
12 reason of such use and occupancy.

13 3.24 RISK OF LOSS:

14 The Contractor shall assume all risk of loss of materials, equipment or other supplies
15 through theft, fire, act of God, or any other cause until written acceptance of the Project by
16 the City, at which time risk of loss shall transfer to the City. No partial payment or advance
17 by the City shall change the foregoing allocation of risk of loss.

18 3.25 APPLICABLE LAW AND FORUM:

19 Except as specifically provided herein, the Contract shall be governed by and construed
20 according to the laws of the State of Washington. Any suit arising herefrom shall be
21 brought in Snohomish County (Washington) Superior Court, which shall have sole and
22 exclusive jurisdiction and venue.

23 3.26 THIS SECTION NOT USED.

24 3.27 WAGE RATES:

25 The Contractor and all subcontractors are required to abide by Section 1-07.9 of the
26 Standard Specifications and the State's Prevailing Wage Act, Chapter 39.12 RCW and
27 Chapter 49.28 RCW. A copy of the current prevailing wage rates is available from the
28 State of Washington, Department of Labor and Industries, Industrial Relations Division,
29 General Administration Building, Olympia, WA 98501, ATTN: Industrial Statistician, as
30 outlined in Section 7 of the Project Manual and shall be incorporated in and become a part
31 of the Contract. No worker shall be paid less than the specified hourly rate. The Contractor
32 and all subcontractors must submit a "Statement of Intent to Pay Prevailing Wages"
33 approved by the Department of Labor and Industries to the City prior to any payments
34 being made. All fees are the responsibility of the Contractor. The Contractor shall post a
35 "Statement of Intent to Pay Prevailing Wages" and a copy of the current prevailing wage
36 rates on the Project site.

37 It is the Contractor's responsibility to see that all subcontractors comply with the above.
38 Progress payments will not be released until all subcontractors have complied.

1 Following Physical Completion of the Project, the Contractor and each subcontractor shall
2 submit an "Affidavit of Wages Paid." The Completion date of the Contract will not be
3 established until all affidavits have been received.

4 3.28 PAYMENT:

5 Within seven (7) calendar days of the progress estimate cutoff date, the Contractor shall
6 submit to the Engineer three (3) copies of an itemized application for payment, supported
7 to the extent required by the Engineer by receipts or other vouchers showing payment for
8 materials and labors, payments to subcontractors, and other such evidence of the
9 Contractor's right to payment. The Contractor shall be entitled to monthly progress
10 payments corresponding to the stage of work.

11 Progress estimates will be prepared by the Engineer not later than thirty (30) calendar days
12 after commencing work, and every thirty (30) calendar days thereafter, if so entitled, for
13 the duration of construction. These shall be based upon an approximate estimate of
14 quantities or work completed and considered acceptable, as extended by the unit prices
15 established in the contract or as provided by the schedule of lump sum payments.

16 The City shall also deduct or withhold from each monthly progress payment for any
17 charges against the Contractor authorized by the Contract Documents.

18 Quantities used for progress estimates shall be considered only as approximate and
19 provisional and shall be subject to recalculations, adjustment and correction by the
20 Engineer, in its sole discretion, in subsequent progress estimates and in final estimates.
21 Any disputes by Contractor of any amount or estimate in a progress estimate must be made
22 in strict accordance with the applicable provisions of the Contract Documents, including
23 Paragraphs 3.31 through 3.33 hereto, or they will be waived. Inclusion of any quantities
24 in progress estimates, or failure to disapprove the work at the time of progress estimates,
25 shall not be construed as acceptance of corresponding work or materials.

26 3.29 RETAINAGE:

27 .1 Five percent (5%) of the Contract Sum shall be retained by the City, in accordance
28 with Chapter 60.28 RCW, for the protection and payment of the claims of any person
29 arising under the Contract and the State of Washington with respect to taxes imposed
30 pursuant to Title 82 RCW which may be due from the Contractor ("Retainage"). The
31 Contractor acknowledges that the City shall release the Retainage only in accordance with
32 Chapter 60.28 RCW, which requires, among other things, that the City receive from the
33 Washington State Department of Revenue a certificate that all taxes, increases and
34 penalties due from the Contractor and all taxes due and to become due with respect to the
35 Contract have been paid in full or that they are, in the opinion of the Department of
36 Revenue, readily collectible without recourse to the State's lien on the Retainage.

37 .2 The Contractor shall also comply, and shall cause all of the Contractor's
38 subcontractors to comply, with Chapter 60.28 RCW with respect to Retainage of amounts
39 earned by any subcontractor or sub-subcontractor or supplier contracted with to provide

labor, materials or equipment for the Project. Progress payments will not be released until the Contractor and all subcontractors have complied.

.3 If the Contractor wishes to set up an escrow account for the Retainage, an escrow agreement must be submitted to the City on a City provided form for review at least thirty (30) days prior to the first deposit.

.4 If the Contractor wishes to submit a bond for all or any portion of the Retainage, the form of bond and surety must be acceptable to the City in its reasonable discretion and must be submitted to the City for review at least thirty (30) days prior to the intended effective date.

3.30 LIQUIDATED DAMAGES:

Time is of the essence of the Contract, and the Contractor acknowledges that the City will suffer monetary and other damages in the event of an unexcused delay in Physical Completion of the Work. If the Contractor fails, without excuse under the Contract Documents, or otherwise refuses to complete the Work within the Contract Time, or any proper extension thereby granted by the City in writing, then the Contractor does hereby agree as part of the consideration for the awarding of the Contract, to pay to the City the amount specified in the Contract and as shown on the Bid, not as a penalty, but as liquidated damages for such breach of Contract, for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for Physical Completion of the Work.

3.31 CLAIMS:

.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the City and Contractor arising out of or relating to the Contract or the Work. Claims must be made in writing and include the information and substantiation required by the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. A notice of a potential or future Claim does not constitute a Claim.

.2 Any Claim of the Contractor against the City for damages, additional payment for any reason, or extension of time, whether under the Contract or otherwise, must be made pursuant to and in strict accordance with the applicable provisions of the Contract. No act, omission, or knowledge, actual or constructive, of the City or the Consultant shall in any way be deemed to be a waiver of the requirement for timely written notice and a timely written Claim unless the City provides the Contractor with an explicit, unequivocal written waiver.

.3 All Claims shall be addressed to:

Resident Engineer
City of Lynnwood

P.O. Box 5008
Lynnwood, WA 98046-5008

A copy should be submitted to the Construction Manager.

3.32 PROCEDURES AND PROTESTS BY THE CONTRACTOR:

.1 Waiver of Claims. The execution of a Change Order shall constitute a waiver of Claims by the Contractor arising out of the Work to be performed or deleted pursuant to the Change Order and related to all prior Work on the Project, except as specifically described in the Change Order. General reservations of rights will be deemed waived and void.

.2 Claim for Additional Costs. All Claims for additional cost must be made according to Paragraph 3.33 Dispute Resolution, or they will be waived. In the event that work is shown on the Drawings but not contained in Specifications, it will be assumed the work as shown shall be provided at no change in the Contract Sum or Time. The Contractor shall not be entitled to an increase in the Contract Sum or Time arising out of an error or conflict where the Contractor failed adequately to review the Contract Documents and timely to report the error or conflict to the Resident Engineer. In no event shall a Total Cost Method or a modified Total Cost Method be used by the Contractor to calculate any adjustments to the Contract Price.

.3 Claims for Additional Time.

(i) A timely, written Claim, as provided herein, shall be required for any Claim for an increase in the Contract Time. The Contractor's Claim shall include an estimate of cost and probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

(ii) If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

(iii) In no event shall the Contractor be allowed to bring a Claim based upon a cumulative impact.

.4 Injury or Damage to Person or Property. If the Contractor suffers injury or damage to person or property because of an act or omission of the City, of any of the City's employees or agents, or of others for whose acts the City is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the City within a reasonable time not exceeding 21 days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. This Subparagraph does not apply to Claims, damages for additional costs, acceleration, or delay.

1 .5 Timely Notice. Without timely written notice and protest as required by the
2 Contract Documents, the Contractor shall conclusively be deemed to have accepted any
3 order, direction, change, instruction, interpretation, determination or adjustment by the
4 City. The Contractor's disagreement shall in no way relieve the Contractor of its obligation
5 to comply promptly with any written notice issued by the Director or his/her designee.

6 Contractor acknowledges that the City is entitled to timely notice as set forth in the Contract
7 Documents so as to enable the City to exercise its rightful control over the Project budget
8 and schedule. Failure to properly provide such information shall constitute a complete
9 waiver of the Contractor's right to addition time or cost, or any other equitable adjustment
10 or requested relief.

11 .6 Requirements. If in disagreement with anything required in a Change Order,
12 another written order, or oral order (including directions, instructions, interpretations, and
13 determinations) by the City and where timely written notice has been made, Contractor
14 shall follow the protest requirements set forth in the Contract Documents and immediately
15 initiate and maintain detailed, accurate daily records of the effect on the Work, additional
16 labor, material or equipment required, all costs and/or delays. Upon request, the Contractor
17 shall submit to the City, in such form as the Resident Engineer may prescribe, an itemized
18 accounting together with supporting data and copies of the daily records being maintained.

19 If the act or event giving rise to the protest is continuing in nature, or the impacts are
20 continuing, the Contractor shall update its submittal not less often than every thirty (30)
21 days.

22 In order to facilitate checking of such quotations, all proposals, except those so minor that
23 their propriety can be seen by inspection, shall be accompanied by complete itemization of
24 costs, including labor, materials, and subcontract costs. Labor and materials shall be
25 itemized in the manner described in Subparagraph 3.32.9 below. When major cost items
26 arise from Subcontractors or Suppliers of any tier, these items shall also be itemized.
27 Approval may not be given without such itemization. Failure to provide data within 21
28 days of the Resident Engineer's request shall constitute waiver of any Claim for changes
29 in the Contract Time or Contract Sum.

30 The City shall have the right to audit the books and records of the Contractor and of any
31 Subcontractor or Supplier of any tier seeking a change in the Contract Sum. The total cost
32 of any change, including a Claim, shall be limited to the reasonable value, as determined
33 by the Resident Engineer (subject to appeal through the dispute resolution procedure of the
34 items in Subparagraph 3.32.9 below). Unless otherwise agreed in writing by the City, the
35 cost shall not exceed the lower of the prevailing cost for the work in the locality of the
36 Project or the cost of the work in the current edition of R.S. Means Company, Inc., Building
37 Construction Cost Data.

38 .7 Amounts Not in Dispute. Pending final determination of cost to the City, amounts
39 not in dispute may be included in Applications for Payment. The amount of credit to be
40 allowed by the Contractor to the City for a deletion or change which results in a net
41 decrease in the Contract Sum shall be actual net cost as confirmed by the Resident

1 Engineer. When both additions and credits covering related Work or substitutions are
2 involved in a change, the allowance for overhead and profit shall be figured on the basis of
3 net increase, if any, with respect to that change.

4 (i) If the City and Contractor do not agree with the adjustment in Contract Time
5 or the method for determining it, the adjustment or the method shall be
6 referred to the Resident Engineer for determination. Any adjustment in the
7 Contract Time arising from a Change or Claim shall be limited to the change
8 in the actual critical path of the Contractor's most recently updated and
9 accepted Construction Schedule directly caused thereby. The adjustment
10 shall be determined by the Resident Engineer on the basis of reasonable
11 expenditures and savings of those performing the Work attributable to the
12 change, in strict accordance with this Paragraph and other applicable
13 provisions of the Contract Documents.

14 (ii) When the City and Contractor agree with the determination made by the
15 Resident Engineer concerning the adjustments in the Contract Sum and
16 Contract Time, or otherwise reach agreement upon the adjustments, such
17 agreement shall be effective immediately and shall be recorded by
18 preparation and execution of an appropriate Change Order.

19 .8 Minor Changes in the Work. When provided for in the Contract Documents, and
20 with prior written consent of the Engineer, the Resident Engineer will have the authority
21 to order Minor Changes in the Work not involving extension of the Contract Time, and not
22 inconsistent with the intent of the Contract Documents, in accordance with Section 1-
23 04.4(1) of the Standard Specifications. Such changes shall be effected by written order
24 and shall be binding on the City and Contractor. The Contractor shall carry out such written
25 orders promptly. Any protest by the Contractor of any such written order must be made in
26 strict accordance with the applicable provisions of the Contract Documents, including
27 Paragraphs 3.31 through 3.33 hereto, or they will be waived.

28 .9 Pricing Components. The value of any Claim for an increase or decrease in the
29 Contract Sum shall be limited to the following components and Contractor shall
30 contemporaneously segregate and separately record at the time incurred all costs associated
31 with any Claim. Any work performed for which the Contractor intends to seek an
32 adjustment in Contract Price, Contract Time, and/or other alleged damages shall be
33 recorded on the same day the work is performed and kept separate so as to distinguish it
34 from Contract Work:

35 (i) Direct Labor Costs: These are labor costs determined by either the
36 estimated or actual number of additional craft hours and the hourly cost
37 necessary to perform the change in the Work or the unit labor costs applied
38 to the material quantities and extended, provided the unit labor costs are
39 developed from the above craft hour cost, whichever is applicable,
40 according to industry practice.

41 The hourly cost shall be based upon the following:

(a) Basic Wages: Current Washington Department of Labor & Industries prevailing hourly wage for laborers, apprentices, journeyman, and foreman performing and/or directly supervising the changed Work on the site. The premium portion of overtime wages is not included unless pre-approved by the City.

(b) Fringe Benefits: Fringe benefits paid by the Contractor as established by the Washington Department of Labor and Industries or contracted to labor trust funds as itemized fringe benefits, whichever is applicable.

(c) Worker's Insurance: Direct contributions to the State of Washington as industrial insurance; medical aid; and supplemental pension by class and rates established by the Washington Department of Labor and Industries.

(d) Federal Insurance: Direct contributions required by the Federal Insurance Compensation Act (FICA); Federal Unemployment Tax Act (FUTA); and State Unemployment Compensation Act (SUCA).

(ii) Direct Material Costs: This is an itemization of the quantity and cost of additional materials necessary to perform the change in the Work. These costs shall be by the unit cost applied to the quantity and extended. The unit cost shall be based upon the net cost after all discounts or rebates, freight costs, express charges, or special delivery costs, when applicable. No lump sum costs will be allowed except when approved in advance by the Resident Engineer.

(iii) Construction Equipment Usage Costs: This in an itemization of the actual length of time construction equipment appropriate for the Work will be used solely on the change in the Work at the site times the applicable rental cost as established by the lower of the prevailing rate published in The Rental Rate Blue Book by Data Quest, San Jose, California, or the actual rate paid as evidenced by rental receipts. Actual, reasonable mobilization costs are permitted if the equipment is brought to the Site solely for the change in the Work and if approved in writing in advance by the Resident Engineer.

If more than one rate is applicable, the lowest rate will be utilized. The rates in effect at the time of the performance of the Change work are the maximum rates allowable for equipment of modern design and in good working condition and include full compensation for furnishing all fuel, oil, lubricants, repairs, maintenance, and insurance. Equipment not of modern design and/or not in good working condition will have lower rates. Hourly, weekly, and/or monthly rates, as appropriate, will be applied to yield the lowest total cost. After eight (8) hours of equipment use in a twenty-four (24) hour period, and after forty (40) hours of equipment use in a week, the

1 equipment usage cost shall be fifty percent (50%) of the rate established
2 above.

3 The rate for equipment necessarily standing by for future use on the Work
4 shall be fifty percent (50%) of the rate established above. The total standby
5 hours per day will be a maximum of eight (8) hours less the operating hours
6 paid as a result of the change in the Work and less the hours that the item of
7 equipment was or could have been used on other changed or non-changed
8 Work and less any hours that the equipment was in a “non-operational”
9 condition, as determined and approved by the City. The total standby hours
10 per week will be a maximum of forty (40) hours less the operating hours
11 paid for the change in Work and less the hours that the item of equipment
12 was or could have been used on other changed or non-changed Work and
13 less any hours that the equipment was in a “non-operational” condition, as
14 determined and approved by the City.

15 If equipment is required for which a rental rate is not established by The
16 Rental Rate Blue Book an agreed rental rate shall be established for that
17 equipment, which rate and use must be approved by the Resident Engineer
18 prior to performing the work. Failure by the Contractor to obtain written
19 approval of any rental rate not established by The Rental Rate Blue Book
20 prior to performing the work shall be a waiver of all such costs.

21 (iv) Cost of Change in Insurance or Bond Premium: This is defined as:

22 (a) Contractor’s liability insurance: The costs (expressed as a
23 percentage) of any changes in the contractor’s liability insurance
24 arising directly from the changed Work; and

25 (b) Public Works bond: The cost (expressed as a percentage) of the
26 additional premium for the contractor’s bond arising directly from
27 the changed Work.

28 Upon request, the Contractor shall provide the City with supporting
29 documentation from its insurer or surety.

30 (v) Subcontractor Costs: These are payments the Contractor makes to
31 Subcontractors for changed Work performed by Subcontractors. The
32 Subcontractors’ cost of Work shall be determined in the same manner as
33 prescribed in this Subparagraph 3.32.9.

34 (vi) Fee: This is the allowance for all combined overhead, profit and other costs,
35 including all office, home office and site overhead (including contractor’s
36 project manager, project engineer, and superintendent’s time), and includes
37 delay and impact costs of any kind, added to the total cost to the City of any
38 Change Order, Construction Change Directive, Claim or any other claim of
39 any kind on this Project. It shall be limited in all cases to the following
40 schedule:

- (a) The Contractor shall receive 10% of the cost of any materials supplied or work performed by the Contractor's own forces.
- (b) The Contractor shall receive 8% of the amount owed directly to a Subcontractor or its Supplier for materials supplied or work performed by that Subcontractor or its Supplier.
- (c) Each Subcontractor (including lower tier subcontractors involved) shall receive 10% of the costs of any materials supplied or work performed by its own forces.
- (d) Each Subcontractor of any tier shall receive 8% of the amount it owes for materials supplied or work performed by its suppliers or subcontractors of any lower tier.
- (e) The cost to which this Fee is to be applied shall be determined in accordance with Subparagraph 3.32.9 (i) - (iv).

If a change in the Work involves both additive and deductive items, the appropriate Fee allowed will be added to the net difference of the items. If the net difference is negative, no Fee will be added to the negative figure as a further deduction.

The costs and allowances for overhead and profit as calculated in accordance with the paragraphs and the Contract Documents shall constitute the Contractor's full and sole entitlement to compensation or equitable adjustment for any changed work, Change Order, Construction Change Directive, Claim or any other claim of any kind on this Project, relating thereto, or resulting therefrom. No additional compensation shall be allowed for items including, but not limited to, direct, indirect or impact damages, costs of delay, acceleration inefficiency, and home office overhead.

3.33 DISPUTE RESOLUTION:

.1 All Claims, direct or indirect, arising out of, or relating to, the Work or the Contract Documents or the breach thereof shall be decided exclusively by the following dispute resolution procedure. Claims that have been waived under the terms of the Contract Documents are barred, including those waived due to Contractor's failure to timely comply with this Paragraph 3.33 or failure to comply with the timing and notice procedures set forth in the Contract Documents. As a condition precedent to submitting a Claim, the Contractor must comply with the requirements of Paragraph 3.32 above, WSDOT Standard Specifications Section 1-04.5, and all other timing and notice requirements set forth in the Contract Documents.

.2 The Contractor shall submit in writing to the Resident Engineer all Claims within ten (10) calendar days of the event giving rise to them, signed by the Contractor under penalty of perjury. The submission shall include a clear description of the Claim, the proposed change in the Contract Sum and/or Time of the Claim, or other relief sought by the Contractor, and provide sufficient data and information supporting the Claim to enable the City to conduct its own investigation of the event, including all information required in

Paragraph 3.32 above. The Claim shall be deemed to include all changes, direct and indirect, in cost and in time to which the Contractor (and Subcontractors and Suppliers of any tier) is or may be entitled. If the act or event is continuing in nature, or the impacts are continuing, the Claim shall so state and the Contractor shall update its claim not less often than every thirty (30) days.

The claims of a Subcontractor or Supplier of any tier may be brought only through the Contractor and only after the Contractor notifies the City in writing and signed by the Contractor under penalty of perjury that the Contractor has reviewed the Claim and believe it to meritorious.

(i) Level I. Within seven (7) days of receipt of the written notice and all required information and data, the senior site representative of the Contractor and the Resident Engineer shall meet, confer, and attempt to resolve the claim. The senior site representative of the Contractor shall have the authority to resolve and settle the claim. Either the Contractor or the City will be entitled to give the other written notice to delay the start of a properly requested Level I meeting for up to fourteen (14) days in order to review the supporting data or to assemble more accurate or complete data to support the Claim.

(ii) Level II. If the Claim is not resolved within seven (7) days of the close of the Level I meeting, the Contractor may require that an officer of the Contractor (who did not attend the Level I meeting), the Construction Manager, and the Resident Engineer meet, confer, and attempt to resolve the Claim within fourteen (14) days thereafter. Other City personnel may also attend the Level II meeting. Prior to being obligated to attend the Level II meeting, the City or its representatives shall have the right to audit and copy the Claim-related books and records of the Contractor and of any Subcontractor or Supplier of any tier making a Claim.

(iii) The terms of the resolution of any Claims concluded in Level I or Level II meetings shall be memorialized in writing and signed by each party.

.3 Mediation: If the Claim is not resolved in the dispute resolution procedure, neither the Contractor nor any Subcontractor or Supplier of any tier may bring a Claim against the City in litigation unless the Claim is first subject to nonbinding mediation before a single mediator under the Voluntary Construction Mediation Rules of the American Arbitration Association. Contractor waives all Claims by failing to provide written notice to the Resident Engineer of the Contractor's intent to mediate within twenty-one (21) days of the Level II meeting. This requirement cannot be waived except by an explicit written waiver signed by the City and the Contractor. An officer of the Contractor and the Director, both having full authority to settle the Claim, must attend the mediation session. To the extent there are other parties in interest, such as the Consultant, Subcontractors, or Suppliers of any tier, their representatives with full authority to settle the Claim, shall also attend the mediation session. Unless the City and the Contractor mutually agree in writing otherwise and only in the event Contractor provides timely notice of intent to mediate, all unresolved

1 Claims on the Project shall be considered at a single mediation session which shall occur
2 after Physical Completion, but prior to Final Acceptance by the City. The Contractor is
3 responsible for initiating the mediation procedure.

4 .4 Litigation. The Contractor may not initiate litigation on any Claim unless each such
5 Claim was properly and timely raised and considered in the Procedures of Subparagraphs
6 3.33.1 through 3.33.3 above. All unresolved Claims of the Contractor shall be waived and
7 released unless the Contractor has complied with the time limits of the Contract
8 Documents, and litigation is served and filed within the earlier of (a) 180 days after the
9 Date of Physical Completion designated in writing by the City (provided that a mediation
10 session has occurred) or (b) 60 days after Final Acceptance. This requirement cannot be
11 waived except by an explicit written waiver signed by the City.

12 .5 The Contractor agrees that the City may join the Contractor as a party to any
13 litigation/arbitration involving the alleged fault of the Contractor.

14 .6 The Contractor shall diligently carry on the Work and maintain the Contractor's
15 Construction Schedule during any dispute resolution proceedings, unless otherwise agreed
16 by it and the City in writing.

17 3.34 NONDISCRIMINATION AND AFFIRMATIVE ACTION:

18 .1 Unless the Contractor is exempt by Federal Executive Order 11246, as amended by
19 Executive Order 11375, the Contractor will not discriminate against any employee or
20 applicant for employment because of race, color, religion, sex, age or national origin. The
21 Contractor will take affirmative action to ensure that applicants are employed and that
22 employees are treated during employment without regard to their race, color, religion, sex,
23 age or national origin. Such action shall include, but not be limited to, the following:
24 employment; upgrading; demotion or transfer; recruitment or recruitment advertising;
25 layoff or termination; rates of pay or other forms of compensation; and selection for
26 training, including apprenticeship. The Contractor agrees to post in conspicuous places,
27 available to employees and applicants for employment, notices to be provided setting forth
28 the requirements of these nondiscrimination provisions.

29 .2 The Contractor further agrees to comply with all applicable non-discrimination
30 laws and affirmative action programs, including, without limitation, Sections 503 and 504
31 of the Vocational Rehabilitation Act of 1973 and Sections 2012 and 2014 of the Vietnam
32 Era Veterans Readjustment Act of 1984, and acknowledges that, should the Contractor be
33 in violation of this paragraph or any applicable laws or affirmative action programs, the
34 Contractor shall be barred forthwith from receiving award of any purchase order from the
35 City unless a satisfactory showing is made that such noncompliance or discriminatory
36 practices have terminated and that a recurrence of such acts is unlikely.

37 3.35 MINORITY AND WOMEN BUSINESS ENTERPRISE:

38 The Contractor agrees that the Contractor shall actively solicit the employment of minority
39 group members. The Contractor further agrees that the Contractor shall actively solicit
40 bids for the subcontracting of goods or services from qualified minority businesses. The

Contractor shall furnish evidence of the Contractor's compliance with these requirements of minority employment and solicitation. The Contractor further agrees to consider the grant of subcontracts to said minority bidders on the basis of substantially equal proposals in the light most favorable to said minority businesses. The Contractor shall be required to submit evidence of compliance with this paragraph as part of the Contract.

3.36 NOTICES:

Any notice or communication under the Contract will be effective only if in writing and delivered in person, by overnight courier service, by facsimile transmission, by electronic mail transmission, or mailed by registered or certified mail return receipt requested postage prepaid to the City at the address set forth in the Invitation for Bids or to the Contractor at the address set forth in the Bid, or to any other address the addressee may have notified the sender beforehand referring to the Contract. All notices and communications will be deemed given, made and received: (a) upon delivery, if personally delivered; (b) when sent by facsimile or electronic email transmission if confirmation is received; (c) one (1) business day after the deposit, if delivered by a nationally recognized courier service offering guaranteed overnight delivery; or (d) three (3) business days after deposit in the United States mail.

3.37 PATENT, PATENT ROYALTIES & PROCESS FEES

The Contractor shall furnish the City a license or licenses for the use of any equipment process or processes in connection with this Project that is the subject of any patent. The Contractor shall include in the unit prices bid any patent royalties or license fees for equipment installed or construction methods used. The Contractor shall provide at the request of the City a patent attorney's opinion letter acceptable to the City, advising that any process or equipment used by Contractor does not infringe on any patent.

3.38 LAWS AND REGULATIONS

All applicable State laws and municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the construction of the project, shall apply to the Contract throughout and they will be deemed to be included in the Contract the same as if written therein in full. This Contract is also subject to regulations for projects receiving Federal funding.

1
2
3

SECTION 4
BID PROPOSAL FORM

BID COVER SHEET

PROJECT NAME: _____

BID NUMBER: _____ **BID DATE:** _____

CONTRACTOR NAME: _____

ADDRESS: _____

PHONE: _____ **EMAIL:** _____

ADDENDA RECEIVED

Addenda No.	Date Received	Name of Recipient
_____	_____	_____
_____	_____	_____
_____	_____	_____

BIDDER NAME: _____
Printed

BIDDER SIGNATURE: _____

BID FOR PROJECT
2019 Overlay and Curb Ramp Project

To the Honorable
Mayor & Council
Lynnwood, Washington

The undersigned ("Bidder") certifies that the Bidder has examined the site, that it has taken steps reasonably necessary to ascertain the nature and location of the work, that it has investigated and satisfied itself as to the general local conditions which can affect the work or its costs, that it has examined Project Manual (including, without limitation, the Contract Plans and Specifications, and all applicable laws and ordinances with respect to the above-mentioned Project. The Bidder hereby offers to perform the required Work in accordance with the terms, provisions and requirements of the Project Manual at the following unit prices and/or lump sums.

As evidence of the Bidder's good faith, cash, a bid bond, cashier's check, or certified check in the amount of five percent (5%) of the total amount of the Bid, payable to the City Treasurer, City of Lynnwood ("Deposit"), is enclosed with this Bid, and using the **Bid Security Form** provided in this section. The Bidder understands and hereby agrees that, should this Bid be accepted, and the Bidder fail or refuse to enter into a Contract and furnish the required bonds or liability insurance, the Bidder will forfeit the Deposit to the City, as provided in the Project Manual.

The Bidder fully understands and agrees that the unit prices submitted in this Bid shall apply to the quantity actually used, regardless of its relation to the quantity shown in the Bid, as further specified herein. The Bidder further understands and agrees that where the City has estimated and include dollar amounts that are to be paid per force account, all such dollar amounts are to become part of the Bidder's total bid. However, the City does not warranty expressly or by implication that the actual amount of work or the cost of work will correspond with those estimates and that payment will be made on the solely basis of the amount of work actually authorized by the City in accordance with the Contract Documents.

The Bidder freely states that the Bidder is familiar with the provisions of the competitive bidding statutes of the State of Washington, specifically the provisions of Chapter 9.18 RCW, and certifies that with respect to this Bid, there has been no collusion or understanding with any other person or entity to prevent or eliminate full and unrestricted competition upon bidders on this public works project.

The Bidder further understands that the City reserves the right to award the Work based on bids received and available funding and, in addition, to reject any or all bids. The Bidder further understands that the City reserves the right to make award within forty-five (45) calendar days of the Bid Opening specified in the Invitation to Bid and that the Bidder guarantees the Bidder's Bid for said duration.

1 **Bid Schedule:**
2

Item No.	Spec. Sect.	Description	Est. Qty.	Unit	Unit Price	Amount
1.	1-04.4 SP	Unexpected Site Changes	30,000	EST	\$1.00	\$30,000
2.	1-05.4 SP	Roadway Surveying	1	LS	\$	\$
3.	1-05.4 SP	Licensed Surveying	1	LS	\$	\$
4.	1-05.18 SP	Record Drawings	1	LS	\$	\$
5.	1-07.13	Reimbursement for Third Party Damage (1%)	23,800	EST	\$1.00	\$23,800
6.	1-07.15	SPCC Plan	1	LS	\$	\$
7.	1-07.23 SP	Pedestrian Traffic Control	1	LS	\$	\$
8.	1-08.3	Type B Progress Schedule	1	LS	\$	\$
9.	1-09.7	Mobilization	1	LS	\$	\$
10.	1-10 SP	Portable Changeable Message Sign	12,290	HR	\$	\$
11.	1-10 SP	Project Temporary Traffic Control	1	LS	\$	\$
12.	1-10 SP	Traffic Control Supervisor	1	LS	\$	\$
13.	1-10 SP	Flaggers	2,400	HR	\$	\$
14.	1-10 SP	Off-Duty Uniformed Police Officer	256	HR	\$	\$
15.	2-02 SP	Saw Cutting Existing Pavement	13,880	LF	\$	\$
16.	2-02 SP	Removing Cement Conc. Curb and Gutter	830	LF	\$	\$
17.	2-02 SP	Removing Cement Conc. Sidewalk	560	SY	\$	\$
18.	2-03	Roadway Excavation Incl. Hauling	3,470	CY	\$	\$
19.	2-12	Construction Geotextile for Separation	6,590	SY	\$	\$
20.	4-04	Crushed Surfacing Top Course	1,470	TON	\$	\$
21.	5-04 SP	Pavement Repair Excavation Incl. Haul	130	SY	\$	\$
22.	5-04 SP	Asphalt Cost Price Adjustment	1	CALC	\$3,581	\$3,581

Item No.	Spec. Sect.	Description	Est. Qty.	Unit	Unit Price	Amount
23.	5-04 SP	HMA CL. ½ IN. PG 58H-22	7,280	TON	\$	\$
24.	5-04 SP	Planing Bituminous Pavement	11,090	SY	\$	\$
25.	5-04 SP	HMA for Pavement Repair CI. ½ IN. PG 58H-22	40	TON	\$	\$
26.	7-05 SP	Adjust Drainage Structure by Lowering	45	EA	\$	\$
27.	7-05 SP	Adjust Drainage Structure by Raising	45	EA	\$	\$
28.	7-05 SP	Adjust Manhole by Lowering	29	EA	\$	\$
29.	7-05 SP	Adjust Manhole by Raising	31	EA	\$	\$
30.	7-05 SP	Replace Existing Circular Frame and Grate with New Circular Frame and Locking Slotted Grate	1	EA	\$	\$
31.	7-05 SP	Replace Existing Rectangular Frame and Grate with New Rectangular Frame and Vaned Grate	36	EA	\$	\$
32.	7-05 SP	Replace Existing Open Curb Frame and Grate with New Open Curb Frame and Grate	1	EA	\$	\$
33.	7-05 SP	Replace Existing Storm Drain Manhole Ring and Cover with New Ring and Cover	6	EA	\$	\$
34.	7-05 SP	Replace Existing Sanitary Sewer Manhole Ring and Cover with New Ring and Cover	23	EA	\$	\$
35.	7-05 SP	Replace Existing Rectangular Frame and Cover with New Rectangular Frame and Solid Locking Cover	4	EA	\$	\$
36.	7-12 SP	Replace Water Valve Box Top Section and Cover	24	EA	\$	\$
37.	7-12 SP	Adjust Water Valve Box by Lowering	23	EA	\$	\$
38.	7-12 SP	Adjust Water Valve Box by Raising	24	EA	\$	\$
39.	8-01	Erosion/Water Pollution Control	1	LS	\$	\$
40.	8-01	Inlet Protection	48	EA	\$	\$
41.	8-01	Seeding and Fertilizing by Hand	80	SY	\$	\$

Item No.	Spec. Sect.	Description	Est. Qty.	Unit	Unit Price	Amount
42.	8-01	Wattle	470	LF	\$	\$
43.	8-01	High Visibility Silt Fence	220	LF	\$	\$
44.	8-02 SP	Property Restoration	6,000	EST	\$1.00	\$6,000
45.	8-02 SP	Topsoil Type A	15	CY	\$	\$
46.	8-04	Cement Conc. Traffic Curb and 12" Gutter	540	LF	\$	\$
47.	8-04	Cement Conc. Traffic Curb and 18" Gutter	290	LF	\$	\$
48.	8-04	Cement Conc. Traffic Curb	160	LF	\$	\$
49.	8-04	Cement Conc. Pedestrian Curb	460	LF	\$	\$
50.	8-04 SP	Cement Conc. Buffer Curb and Gutter	20	LF	\$	\$
51.	8-04 SP	Cement Conc. Valley Curb	20	LF	\$	\$
52.	8-05 SP	Adjust Gas Valve Box by Lowering	6	EA	\$	\$
53.	8-05 SP	Adjust Gas Valve Box by Raising	7	EA	\$	\$
54.	8-09 SP	Raised Pavement Marker Type 1	37	HUND	\$	\$
55.	8-09 SP	Raised Pavement Marker Type 2	8	HUND	\$	\$
56.	8-13 SP	Monument, Monument Case, and Cover	7	EA	\$	\$
57.	8-14 SP	Cement Conc. Sidewalk	155	SY	\$	\$
58.	8-14 SP	Cement Conc. Buffer Sidewalk	5	SY	\$	\$
59.	8-14 SP	Cement Conc. Curb Ramp Type Parallel A	100	SY	\$	\$
60.	8-14 SP	Cement Conc. Curb Ramp Type Perpendicular A	30	SY	\$	\$
61.	8-14 SP	Cement Conc. Curb Ramp Type Double Parallel	150	SY	\$	\$
62.	8-14 SP	Cement Conc. Curb Ramp Type Half Perpendicular	10	SY	\$	\$
63.	8-14 SP	Cement Conc. Curb Ramp Type Single Direction	40	SY	\$	\$
64.	8-14 SP	Cement Conc. Curb Ramp Type Combination	20	SY	\$	\$

Item No.	Spec. Sect.	Description	Est. Qty.	Unit	Unit Price	Amount
65.	8-20 SP	Traffic Signal System Modifications (188 th St SW and 52 nd Ave W)	1	LS	\$	\$
66.	8-20 SP	Traffic Signal System Modifications (68 th Ave W and 200 th St SW)	1	LS	\$	\$
67.	8-20 SP	Flashing Beacon (68 th Ave W Midblock Crossing)	1	LS	\$	\$
68.	8-20 SP	Flashing Beacon (68 th Ave W and 202 nd St SW)	1	LS	\$	\$
69.	8-21	Permanent Signing	1	LS	\$	\$
70.	8-22	Paint Line	210	LF	\$	\$
71.	8-22	Removing Plastic Crosswalk Line	100	SF	\$	\$
72.	8-22	Plastic Crosswalk Line	1,700	SF	\$	\$
73.	8-22	Plastic Bicycle Lane Symbol	48	EA	\$	\$
74.	8-22	Plastic Stop Line	280	LF	\$	\$
75.	8-22	Plastic Traffic Arrow	36	EA	\$	\$
76.	8-22	Painted Wide Lane Line	10,190	LF	\$	\$
77.	8-23 SP	Temporary Pavement Marking	21,620	LF	\$	\$

****Department of Revenue Rule 171 applies to this project****

TOTAL CONSTRUCTION COST \$ _____

1 ADDENDA RECEIVED

Addendum No.	Date Received	Name of Recipient
_____	_____	_____
_____	_____	_____
_____	_____	_____

2
3 ALTERNATES TO BID ITEMS

4 Bidders, at their option, shall use this page to submit proposals on alternate types of equipment or
5 materials. The City shall be the sole judge of any alternates to be selected or approved.
6

Alt. to Bid Item No.	Item	Manufacturer	Amount Bid
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

7
8 PROPOSED SUBCONTRACTORS

9 A subcontractor is defined herein as one who contracts with the Bidder to furnish materials and
10 labor for performance of the Work.

11 For contracts, the estimated cost of which is One Million Dollars (\$1,000,000) or more, in
12 accordance with the requirements of RCW 39.30.060 including any amendments, the Bidder shall
13 list those subcontractors that would perform work in the following categories, or name itself for
14 the work. The Bidder shall not list more than one subcontractor for each category of work
15 identified unless subcontractors vary with bid alternates, in which case the Bidder must indicate
16 which subcontractor will be used for which alternative.

17 HVAC: _____

18 Plumbing: _____

19 Electrical: _____

20 Failure of the Bidder to provide the required information will render the bid non-responsive and,
21 therefore, void.
22

23 WORK BY BIDDER'S ORGANIZATION

24 By signing the Proposal, the Bidder agrees that work performed by Bidder's organization shall
25 account for at least thirty (30) percent of the Awarded Contract price in compliance with Section
26 1-08.1 of the WSDOT Standard Specifications, current edition, as amended.
27

28 TIME FOR COMPLETION

29
30 The Bidder agrees to Physically Complete all the Work as specified for the Project within 60
31 working days after the indicated starting date appearing in an official "Notice to Proceed" issued
32 by the City.

1 LIQUIDATED DAMAGES

2
3 The Bidder fully understands and agrees to the provisions of the Project Manual, and herewith
4 further agrees that the liquidated damages shall be as calculated in accordance with Section 1-08.9
5 of the Standard Specifications for each and every working day required beyond the above stated
6 construction time allowed to complete the Work.
7
8

Dated: _____
(Name of Bidder)

Location or Place Executed:

By _____

(City, State)

(Print Name of Authorized Representative)

Title _____

9
10 BIDDER is a(n): ☐ Individual ☐ Partnership ☐ Joint Venture
11 ☐ Incorporated in the state of _____
12 ☐ Limited liability company formed in the State of _____
13

1 **NON-COLLUSION AFFIDAVIT**

2 (This Affidavit to be fully executed)

3
4 STATE OF)
5) ss.
6 COUNTY OF)
7

8 _____, affiant,

9
10 the _____

11 (President, Secretary, Manager, Firm City, or Representative)

12 of _____

13 (Name of Company or Corporation or Firm)

14 the person, corporation, company or firm who makes the accompanying Bid, having first been
15 duly sworn, deposes and says:

16 That such Bid is genuine, and not sham or collusive, nor made in the interest or behalf of
17 any person or entity not herein named; that the Bidder has not directly or indirectly induced or
18 solicited any other bidder to put in a sham bid, or any other person, firm, or corporation to refrain
19 from bidding; and that the Bidder has not in any manner sought by collusion to secure for the
20 Bidder an advantage over any other bidder.

Signature of President, Secretary, Manager,
City, or Authorized Representative
(Circle One)

21
22 Subscribed and sworn to before me on _____.

Print Name: _____

NOTARY PUBLIC for the state of Washington,
residing at _____

My appointment expires: _____

BID SECURITY

Bid Deposit: The undersigned Principal hereby deposits a Bid Deposit with the City of Lynnwood in the form of a cash deposit, certified or cashier's check, or postal money order in the amount of _____ dollars (\$_____).

Bid Bond: The undersigned, _____ (Principal), and _____ (Surety), are held and firmly bound unto the _____ City of Lynnwood (Owner) in the penal sum of _____ dollars (\$_____), which for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally. The liability of Surety under this Bid Bond shall be limited to the penal sum of this Bid Bond.

Conditions: The Bid Deposit or Bid Bond shall be an amount not less than five percent (5%) of the total bid, including sales tax and is submitted by Principal to Owner in connection with a Proposal for 2019 Overlay and Curb Ramp Project, City Project No. 3080, according to the terms of the Proposal and Bid Documents.

Now therefore,

- a. If the Proposal is rejected by Owner, or
- b. If the Proposal is accepted and Principal shall duly make and enter into an Agreement with Owner in accordance with the terms of the Proposal and shall furnish a bond for the faithful performance of said Project and for the payment of all persons performing labor or furnishing materials in connection therewith, with Surety or Sureties approved by Owner, and shall in all other respects perform the Contract created by the acceptance of said Proposal, then this Bid Security shall be released; otherwise it shall remain in full force and effect and Principal shall forfeit the Bid Deposit or Surety shall immediately pay and forfeit to Owner the amount of the Bid Bond, as penalty and liquidated damages.

The obligations of Surety and its Bid Bond shall be in no way impaired or affected by any extension of time within which Owner may accept bids; and Surety does hereby waive notice of any such extension.

Signed and dated this _____ day of _____, 20_____.

Principal

Surety

By

Signature of Authorized Official

Attorney in Fact (*Attach Power of Attorney*)

Title

Surety companies executing bonds must appear on the current Authorized Insurance List in the State of Washington per Section 1-02.7 of the Standard Specifications.

STATEMENT OF BIDDER'S QUALIFICATIONS

Name of Firm: _____

Address: _____

Telephone No: _____

Email Address: _____

Contact Person for this Project: _____

Number of years the Bidder has been engaged in the construction business under the present firm name, as indicated above: _____

List five major projects of a similar nature which have been completed by the Bidder within the last five years, and the gross dollar amount of each project:

Project Name	Amount	City	Phone #
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

List major pieces of equipment which are anticipated to be used on this Project by the Bidder and note which items are owned by the Bidder and which are to be leased or rented from others:

Has the Bidder changed bonding companies within the last three years? If yes, state reason (optional).

Has the Bidder ever been sued by the client, or has the Bidder ever sued the client on any public works contract for a special district, municipality, county, state, or tribal government? _____

For what reason? _____

Disposition of case _____

Does the Bidder have any outstanding payments due to the Department of Revenue? _____

Does the Bidder agree that the City shall retain the right to obtain any and all credit reports?

()

Yes Signature Title Date

RESPONSIBLE BIDDER DETERMINATION FORM

Attach additional sheets as necessary to fully provide the information required.

Name of BIDDER: _____

Address of BIDDER: _____

City: _____ State: _____ Zip: _____

Phone number of BIDDER: _____

Email address of BIDDER: _____

Dept. of Revenue Unified Business Identification (UBI) No: _____

Contractor's Washington State License No.: _____ Expiration Date: _____

Dept. of Labor & Industries Account Number: _____

Bond Account No: _____ Expiration Date: _____

Employment Security Dept. Account No.: _____

Taxpayer Identification Number (or SSN if applicable) _____

Contractor on L&I Infraction List? ☐ Yes ☐ No

www.lni.wa.gov/tradeslicensing/PrevWage/AwardingAgencies/violations/default.asp

Contractor on L&I "Contractor's Not Allowed to Bid" List? ☐ Yes ☐ No

www.lni.wa.gov/tradeslicensing/PrevWage/AwardingAgencies/DebarredContractors/default.asp

BIDDER is a(n): ☐ Individual ☐ Partnership ☐ Joint Venture

☐ Incorporated in the state of _____

☐ Limited liability company formed in the State of _____

List business names used by BIDDER during the past 5 years if different than above:

BIDDER has been in business continuously from (Year) _____

Bank Reference: _____ Account type: _____

Officer: _____ Officer's Phone No.: _____

Number of regular full-time employees: _____

Number of projects in the past 5 years completed:

_____ ahead of schedule _____ on schedule _____ behind schedule.

BIDDER has had experience in work comparable to that required for this Project.

As a Prime Contractor for _____ years.

As a Subcontractor for _____ years.

List the supervisory personnel to be employed by the BIDDER and available for work on this project (Project Manager, Principal Foreman, Superintendents, and Engineers):

<u>Name</u>	<u>Title</u>	<u>How long with BIDDER</u>
-------------	--------------	-----------------------------

List all those projects, of similar nature and size, completed by BIDDER within the past 5 years. **Include a reference for each.** Any attached preprinted project listing must include all this information.

<u>Project Name</u>	<u>Year Completed</u>	<u>Contract Amount</u>	<u>OWNER/ Reference Phone/Email</u>
---------------------	-----------------------	------------------------	-------------------------------------

List all projects completed in the last 5 years which have resulted in partial or final settlement of the Contract by arbitration, litigation, dispute review board, or mediation:

<u>Name of Client & Project</u>	<u>Contract Amount</u>	<u>Total Claims Arbitrated, Mediated or Litigated</u>	<u>Amount of Settlement of Claims</u>
-------------------------------------	------------------------	---	---------------------------------------

Has BIDDER, or any representative or partner thereof, ever failed to complete a Contract?

☐ No ☐ Yes If yes, give details:_____

Has BIDDER ever had any Payment/Performance Bonds called as a result of its work?

☐ No ☐ Yes If yes, please state:_____

<u>Project Name</u>	<u>Contracting Party</u>	<u>Bond Amount</u>
---------------------	--------------------------	--------------------

1 Has BIDDER ever been found guilty of violating any State, Tribal, or Federal employment laws?
2 ☐ No ☐ Yes If yes, please give details: _____
3 Has BIDDER, under current name or previous name(s), ever filed for protection under any
4 provision of the federal bankruptcy laws or state insolvency laws?
5 ☐ No ☐ Yes If yes, give details: _____
6
7 Has any adverse legal judgment been rendered against BIDDER in the past 5 years?
8 ☐ No ☐ Yes If yes, give details: _____
9 Has BIDDER or any of its employees filed any claims with Washington State Workman's
10 Compensation or other insurance company for accidents resulting in fatal injury or
11 dismemberment in the past 5 years?
12 ☐ No ☐ Yes If yes, please state: _____
13 Date Type of Injury Agency Receiving Claim
14 _____
15 _____
16 Printed Name of BIDDER: _____
17 Signature of BIDDER: _____
18 Title _____ Date _____
19
20



Contractor Certification
Wage Law Compliance - Responsibility Criteria
Washington State Public Works Contracts

**FAILURE TO RETURN THIS CERTIFICATION AS PART OF THE BID PROPOSAL PACKAGE WILL
MAKE THIS BID NONRESPONSIVE AND INELIGIBLE FOR AWARD**

I hereby certify, under penalty of perjury under the laws of the State of Washington, on behalf of the firm identified below that, to the best of my knowledge and belief, this firm has NOT been determined by a final and binding citation and notice of assessment issued by the Washington State Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of RCW chapters 49.46, 49.48, or 49.52 within three (3) years prior to the date of the Call for Bids.

Bidder Name: _____
Name of Contractor/Bidder - Print full legal entity name of firm

By: _____
Signature of authorized person Print Name of person making certifications for firm

Title: _____
Title of person signing certificate **Place:** _____
Print city and state where signed

Date: _____

1 **PUBLIC BIDDING CRIMES**

2
3 **Criterion:**

4 The Bidder and any person with an ownership interest in the Bidder shall not have been convicted
5 of a crime involving bidding on a public works contract within five years from the bid submittal
6 deadline.

7
8 **Documentation:**

9 *Has the Bidder or anyone with an ownership interest in the Bidder been convicted of a crime*
10 *involving bidding on a public works contract within five years from the bid submittal deadline?*

11 ☐ Yes ☐ No

12
13 Name of BIDDER or person/entity with an ownership interest in the BIDDER: _____

14 _____
15 Address of BIDDER: _____

16 City _____ State _____ Zip _____

17 Contractor's License No. _____

18 Signature of BIDDER _____

19 Title _____ Date _____

1 **TERMINATION FOR CAUSE**

2
3 **Criterion:**

4 The Bidder shall not have had any public works contract terminated for cause by a government
5 agency or tribal entity during the five-year period immediately preceding the bid submittal
6 deadline for this project, unless there are extenuating circumstances acceptable to the Owner.

7
8 **Documentation:**

9 *Has the Bidder had any public works contract terminated for cause by a government agency during*
10 *the five year period immediately preceding the bid submittal deadline for this project, unless there*
11 *are extenuating circumstances acceptable to the Owner?*

12 ☐ Yes ☐ No

13
14 Name of BIDDER: _____

15 Address of BIDDER: _____

16 City _____ State _____ Zip _____

17 Contractor's License No. _____

18 Signature of BIDDER _____

19 Title _____ Date _____

1 **LIQUIDATED DAMAGES**

2
3 **Criterion:**

4 The Bidder shall not have been assessed liquidated damages related to the performance of a public
5 works contract by a government agency or tribal entity during the five year period immediately
6 proceeding the bid submittal deadline for this project, unless there are extenuating circumstances
7 acceptable to the Owner.
8

9 **Documentation:**

10 *Has the Bidder been assessed liquidated damages related to the performance of a public works*
11 *contract by a government agency during the five year period immediately proceeding the bid*
12 *submittal deadline for this project, unless there are extenuating circumstances acceptable to the*
13 *Owner?*
14

15 ☐ Yes ☐ No
16
17
18

19 Name of BIDDER: _____

20 Address of BIDDER: _____

21 City _____ State _____ Zip _____

22 Contractor's License No. _____

23 Signature of BIDDER _____

24 Title _____ Date _____
25

1 **LITIGATION**

2
3 **Criterion:**

4 The Bidder shall not have been a party as a plaintiff or defendant in any lawsuit in Washington
5 State superior, district, or tribal court in the Puget Sound region (defined as King, Kitsap, Pierce,
6 Snohomish and Thurston counties) or federal district court for Western Washington in the last six
7 years involving performance or payment issues relating to a public works contract which were
8 resolved adversely to the Bidder through judgment or settlement, unless there are extenuating
9 circumstances acceptable to the Owner.

10
11 **Documentation:**

12 *Has the Bidder been a party as a plaintiff or defendant in any lawsuit in Washington State superior,*
13 *district, or tribal court in the Puget Sound region (defined as King, Kitsap, Pierce, Snohomish and*
14 *Thurston counties) or federal district court for Western Washington in the last six years involving*
15 *performance or payment issues relating to a public works contract which were resolved adversely*
16 *to the Bidder through judgment or settlement, unless there are extenuating circumstances*
17 *acceptable to the Owner?*

18
19 ☐ Yes ☐ No
20
21
22

23 Name of BIDDER: _____

24 Address of BIDDER: _____

25 City _____ State _____ Zip _____

26 Contractor's License No. _____

27 Signature of BIDDER _____

28 Title _____ Date _____
29

SECTION 5
CONTRACT

INFORMATION ONLY

**The following form must be executed and submitted by the successful Bidder
within ten (10) days following notice of award.**

1 **CITY OF LYNNWOOD**

2 **CONTRACT**

3 **THIS AGREEMENT** (“Contract”) is entered into this «Contr_Date_Day» day of
4 «Contract_Date_Month», «Contract_Date_Yr» by and between the City of Lynnwood (the
5 “City”), and «Contractor» (the “Contractor”).

6 **Recitals**

7 This Contract is for construction of the 2019 Overlay and Curb Ramp Project (the “Project”), as
8 described in more detail in the Invitation for Bids dated «Date_Of_Proj_Manual» and the related
9 Project Manual, the terms and conditions of which are incorporated herein by this reference (the
10 “Project Manual”). Capitalized terms not defined herein shall have the meanings set forth in the
11 Project Manual.

12 **Agreement**

13 The parties, in consideration of the terms and conditions contained herein, do hereby covenant and
14 agree as follows:

15
16 5.01 **COMPENSATION:**

17 The City promises and agrees to employ, and does employ, the Contractor to provide the
18 materials and to do and cause to be done the work provided for in this Contract and to
19 complete and finish the same according to the Project Manual (including, without
20 limitation, the Contract Plans and Specifications) and the terms and conditions contained
21 herein. The City agrees to pay the Contractor the sum of \$ «Contract_amount» which
22 includes any applicable sales or use tax, according to the payment schedule attached hereto.
23

24 5.02 **SCOPE OF WORK:**

25 The Contractor shall do all Work, obtain all permits and furnish all labor, materials, tools,
26 equipment, transportation, supplies and incidentals required for constructing and
27 completing the Project, in accordance with this Contract, the Project Manual and the
28 Standard Specifications for Road, Bridge and Municipal Construction (English version),
29 2018 edition, as issued by the Washington State Department of Transportation, the terms
30 and conditions of which are incorporated herein by this reference (collectively, the
31 “Standard Specifications”); provided that, as used in the Standard Specifications, “State”
32 means City of Lynnwood;” “Department of Transportation” means Department of Public
33 Works;” “Secretary” means “Director of Public Works.”
34

35 5.03 **DURATION:**

36 The Contractor shall commence the Work within ten (10) working days after the execution
37 of this Contract and the issuance by the City of a Notice to Proceed. The Work shall be
38 Physically Completed in 90 working days (“Contract Time”). If the Work is not Physically
39 Completed within the Contract Time, the Contractor agrees to pay the City as liquidated

1 damages the sum as calculated in accordance with Section 1-08.9 of the Standard
2 Specifications for each day the Project remains uncompleted after the expiration of the
3 Contract Time. Such liquidated damages are appropriate and are agreed upon by the parties
4 because of the impracticability and difficulty of ascertaining the actual damages the City
5 would sustain in the event of noncompletion within the Contract Time.
6

7 5.04 BONDS:

8 The Contractor agrees to obtain Payment and Performance Bonds in accordance with, and
9 using the forms provided in, the Project Manual; provided, that on contracts of twenty-five
10 thousand dollars or less, at the option of the Contractor, the City may, in lieu of such Bonds,
11 retain fifty (50) percent of the Contract Sum for a period of thirty (30) days after date of
12 final acceptance of the Project by the City, or until receipt by the City of all necessary
13 releases from the Washington State Department of Revenue and Department of Labor and
14 Industries, and settlement of any liens filed against the Project, whichever is later.
15

16 5.05 INSURANCE:

17 The parties agree that no liability shall be attached to the City by reason of entering into
18 this Contract, except as expressly provided herein. The Contractor specifically agrees to
19 maintain insurance coverages in accordance with the applicable provisions of the Project
20 Manual and Section 1-07.18 of the Standard Specifications. The Contractor agrees that all
21 insurance policies shall include the City, and others if required by the Contract Documents,
22 as Additional Named Insureds. All insurance policies shall be endorsed to provide that
23 such policies shall be primary to any insurance carried by the City and that no policy shall
24 be canceled, materially changed or reduced in coverage until after thirty (30) days prior
25 written notice has been delivered to the City.
26

27 5.06 LABOR AND WAGES:

28 Prevailing wages shall be paid. Contractor specifically agrees and shall have sole
29 responsibility to comply with the applicable provisions of the Project Manual and
30 Section 1-07.9 of the Standard Specifications, and to file all required forms, certificates,
31 and affidavits necessary to comply with Federal and State laws before final payment shall
32 be made by the City. Prior to commencement of the Work, the latest prevailing wage rate
33 information shall be obtained from the State of Washington, Department of Labor and
34 Industries, Industrial Relations Division, General Administration Building, Olympia, WA
35 98501, Attn: Industrial Statistician, and shall be incorporated in and become a part of this
36 Contract. Contractor shall bear any and all risk related to the classification and payment
37 of applicable prevailing wage.
38

39 5.07 RECOVERY FOR DISRUPTION OR DELAY:

40 In the event the Contractor (including any subcontractors or suppliers of any tier) is held
41 to be entitled to damages from the City for disruption or delay, it is agreed that the total
42 damages to the Contractor (including damages to any subcontractor or supplier of any tier)
43 shall be limited to the lesser of (i) the actual time and materials costs associated with the

1 impact of such disruption or delay, along with a markup of ten percent (10%) on the
2 Contractor's own work and a markup of eight percent (8 %) on that of its subcontractors
3 and suppliers, or (ii) the daily liquidated damages rate specified in Paragraph 5.03 above.
4 In no event shall the Contractor be entitled to recover costs incurred, nor shall any damages
5 will be allowed for, any time prior to ten (10) calendar days before receipt of a timely
6 written notice of a Claim for disruption or delay.
7

8 5.08 EXECUTION, CORRELATION AND INTENT:

9 By execution of this Contract, the Contractor represents and warrants that the Contractor:
10 (i) has carefully examined the Contract Documents and the Project site; (ii) has become
11 familiar with the local conditions under which the Work is to be performed and correlated
12 personal observations with requirements of the Contract Documents; (iii) is satisfied as to
13 (a) the nature, location, character, quality and quantity of the Work, (b) the labor, materials,
14 tools, equipment, transportation, supplies and incidentals to be furnished in the
15 performance of the Work, (c) the surface conditions and other matters that may be
16 encountered at the Project site or affect performance of the Work or the cost or difficulty
17 thereof, and (d) all other requirements of the Contract Documents; and (iv) agrees that the
18 Contract Time is adequate for the performance of the Work and the Contract Sum is
19 reasonable compensation for all the Work. The failure of the Contractor to adequately
20 investigate any such condition or matter shall not in any way relieve the Contractor from
21 the Contractor's obligation to perform the Work in accordance with the Contract
22 Documents within the Contract Time for the Contract Sum.

23 **IN WITNESS WHEREOF**, the parties hereto have caused this agreement to be executed
24 in triplicate as of the day and year first above written.

CITY OF LYNNWOOD:

CONTRACTOR:

By _____
Nicola Smith, Mayor

(Name of Contractor)

By _____

Its _____
(An Authorized Representative)

SECTION 6

PERFORMANCE AND INDEMNITY BOND

LABOR AND MATERIALS BOND

INSURANCE CERTIFICATE

**CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT
OF STATUTORY RETAINED PERCENTAGE**

INFORMATION ONLY

**The following form must be executed and submitted by the successful Bidder
within ten (10) days following notice of award.**

1 [NOTE: Name of Contractor must be identical to the Bidder]

2 [NOTE: Date of Bond must not be prior to date of Contract]

3 **CITY OF LYNNWOOD**

4 **PERFORMANCE BOND**

5 We, (**CONTRACTOR**), as the Contractor, and (**SURETY**), as the Surety, jointly and severally,
6 bind ourselves, our heirs, executors, administrators, successors and assigns, as set forth herein, to
7 the City of Lynnwood, Washington (the "City") for the performance of the following described
8 Contract, or for the payment of the sum of (**AMOUNT**) Dollars \$ (**AMOUNT**), in lawful money
9 of the United States. The City has awarded the Contractor a contract for the construction
10 ("Contract") of 2019 Overlay and Curb Ramp Project.

11 The condition of this Bond is such that if the Contractor shall in all things abide by and well and
12 truly keep and perform the covenants, and agreements in said Contract, at the time and in the
13 manner therein specified, and shall indemnify and save harmless the City, as specified in the
14 Contract, this Bond shall become null and void; otherwise, it shall be and remain in full force and
15 effect.

16 The Surety agrees that no change, extension of time, alteration, or addition to the terms of the
17 Contract, or the Work to be performed thereunder, shall in any way affect its obligation on this
18 bond, and the Surety does hereby waive notice thereof.

19 Whenever the Contractor shall be, and is declared by the City to be, in default under the Contract,
20 the Surety shall promptly remedy the default, or shall promptly:

- 21 1. Complete the Contract in accordance with its terms and conditions, or
- 22 2. Obtain a bid or bids for completing the Contract, from qualified contractors acceptable to
23 the City, in accordance with the terms and conditions of the Contract, and upon
24 determination by Surety of the lowest responsible bidder, or, if the City elects, upon
25 determination by the City and the Surety jointly of the lowest responsible bidder, arrange
26 for a contract between such bidder and the City, and make available as Work progresses
27 (even though there should be a default or a succession of defaults under the contract or
28 contracts of completion arranged under this paragraph) sufficient funds to pay the cost of
29 completion of the Project, including such costs and damages for which the Surety may be
30 liable hereunder, less the balance of the Contract Sum, but not exceeding the amount set
31 forth in the first paragraph hereof. The term "balance of the Contract Sum," as used in this
32 paragraph shall mean the total amount payable by City to Contractor under the Contract
33 and any amendments thereto less the amount properly paid by City to Contractor.

34 This performance bond shall remain in full force and effect until completion of the Project and
35 acceptance by the City, for a minimum of two (2) years after acceptance.

36 Any suit under this bond must be instituted before the expiration of two (2) years from the date on
37 which that payment under the Contract falls due.

1 No right of action shall accrue on this bond to or for the use of any person or corporation other
2 than the City named herein or the heirs, executors, administrators or successors of the City.

3 In the event that the City is obliged to employ legal counsel to enforce its rights under this bond
4 through negotiations or suit, the City shall be entitled to recover all attorney's fees and costs,
5 including expert costs, reasonably incurred.

6 Signed and sealed this ____ day of _____, 201_.

(Witness)

(Principal)

(Title)

(Witness)

(Surety)

(Title)

7
8

1 [NOTE: Name of Contractor must be identical to the Bidder]

2 [NOTE: Date of Bond must not be prior to date of Contract]

3 **PAYMENT BOND**

4 We, (**CONTRACTOR**), as the Contractor, and (**SURETY**), as the Surety, jointly and severally,
5 bind ourselves, our heirs, executors, administrators, successors, and assigns, as set forth herein, to
6 the City of Lynnwood (the "City") for payment of the sum of (**AMOUNT**) dollars (\$(**AMOUNT**))
7 in lawful money of the United States. The City has awarded the Contractor a contract ("Contract")
8 for the construction of 2019 Overlay and Curb Ramp Project (the "Project").

9 The condition of this Bond is such that if Contractor shall promptly make payment to all Claimants
10 (as hereafter defined) for all labor, professional services, materials or equipment used or
11 reasonably required for use in the performance of the Contract, then this Bond shall be void;
12 otherwise it shall remain in full force and effect.

13 1. A Claimant is defined as one having a contract with the Contractor or a subcontractor for
14 labor, professional services, materials, or equipment, used or reasonably required or used
15 in the construction of the Project and the performance of the Contract (which shall be
16 construed to include that part of all electricity, water, gas, oil, gasoline, telephone or other
17 utility service or rental of equipment directly applicable to the Contract).

18 2. The Contractor and Surety hereby jointly and severally agree with the City that every
19 Claimant, who has not been paid in full before the expiration of a period of sixty (60) days
20 after the date on which the last of such Claimant's labor, professional services, materials
21 or equipment were furnished by such Claimant in connection with the Project, may sue on
22 this Bond for the use of such Claimant, prosecute the suit to final judgment for such sum
23 or sums as may be justly due such Claimant, and have execution thereon. The City shall
24 not be liable for the payment of any costs or expenses of any such suit.

25 3. No suit or action shall be commenced hereunder by any Claimant unless such Claimant
26 shall have given such notice and taken such other actions as may be required by State law.

27 4. The amount of this Bond shall be reduced by and to the extent of any payment or payments
28 made in good faith hereunder inclusive of the payment by Surety of mechanics' liens which
29 may be filed of record against the Project, whether or not claim for the amount of such lien
30 be presented under and against this Bond.

31 Signed and sealed this ____ day of _____, 201__.

(Witness)

(Principal)

(Title)

(Witness)

(Surety)

(Title)

ATTENTION CONTRACTORS AND INSURANCE AGENTS

TIME IS OF THE ESSENCE

CERTIFICATES OF INSURANCE MUST BE COMPLETED AS INDICATED ON THE ATTACHED SAMPLE. INCOMPLETE OR ALTERED CERTIFICATES WILL BE RETURNED TO THE INSURANCE AGENT FOR COMPLIANCE.

IF THE CITY DOES NOT RECEIVE A PROPERLY COMPLETED AND SIGNED CERTIFICATE OF INSURANCE AND CG 2010 07 04 AND CG 2037 07 04 ADDITIONAL INSURED ENDORSEMENTS THE FOLLOWING NON-EXHAUSTIVE LIST OF CONSEQUENCES MAY RESULT:

- THE CITY CANNOT SIGN THE CONSTRUCTION CONTRACT
- WORK CANNOT BEGIN
- BREACH OF CONTRACT
- UNINSURED EXPOSURE TO CONTRACTOR
- INSURANCE AGENT WILL HAVE TO DO IT OVER

INSTRUCTIONS

1. Fax the attached sample certificate of insurance and requirements along with the insurance instructions, from the construction bid specifications, to your insurance agent for completion.
2. Have your agent return the completed and signed certificate and additional insured endorsement CG 2010 AND CG 2037 directly back to you so that you can return with your signed contracts and mail directly to:

City of Lynnwood
Public Works Department
Attention: Construction Manager
PO Box 5008
Lynnwood WA 98046-5008

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 10 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations

A. Section II – Who is an insured is amended to read as follows:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf

In the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the limitation allocated to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" resulting from:

1. All work, including materials, parts or equipment furnished in connection with such work, at the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in continuing operations for a principal as a part of the same project.

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY
CG 20 37 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".



CERTIFICATE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

If this certificate is being prepared for a party who has an insurable interest in the property, do not use this form. Use ACORD 27 or ACORD 28.

PRODUCER	CONTACT NAME:		
	PHONE (A/C, No, Ext):	FAX (A/C, No):	
INSURED	E-MAIL ADDRESS:		
	PRODUCER		
	CUSTOMER ID:		
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A :		
	INSURER B :		
	INSURER C :		
	INSURER D :		
INSURER E :			
INSURER F :			

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

LOCATION OF PREMISES / DESCRIPTION OF PROPERTY (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE		POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	COVERED PROPERTY	LIMITS
	<input type="checkbox"/> PROPERTY					BUILDING	\$
	CAUSES OF LOSS	DEDUCTIBLES				PERSONAL PROPERTY	\$
	<input type="checkbox"/> BASIC	BUILDING				BUSINESS INCOME	\$
	<input type="checkbox"/> BROAD	CONTENTS				EXTRA EXPENSE	\$
	<input type="checkbox"/> SPECIAL					RENTAL VALUE	\$
	<input type="checkbox"/> EARTHQUAKE					BLANKET BUILDING	\$
	<input type="checkbox"/> WIND					BLANKET PERS PROP	\$
	<input type="checkbox"/> FLOOD					BLANKET BLDG & PP	\$
							\$
							\$
	<input type="checkbox"/> INLAND MARINE		TYPE OF POLICY				\$
	CAUSES OF LOSS						\$
	<input type="checkbox"/> NAMED PERILS		POLICY NUMBER				\$
							\$
	<input type="checkbox"/> CRIME						\$
	TYPE OF POLICY						\$
							\$
	<input type="checkbox"/> BOILER & MACHINERY / EQUIPMENT BREAKDOWN						\$
							\$
							\$
							\$

SPECIAL CONDITIONS / OTHER COVERAGES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ACORD 24 (2009/09)

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City of Lynnwood
2019 Overlay and Curb Ramp Project

May 2019

**CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT OF
STATUTORY RETAINED PERCENTAGE**

1. ☐ I hereby elect to have the retained percentage of this contract held in a fund by the Contracting Agency until released in accordance with RCW 60.28 following final acceptance of the Work.

Date _____ Signed _____

2. ☐ I hereby elect to have the retained percentage placed in an interest-bearing account by the Contracting Agency with an approved financial institution until released in accordance with RCW 60.28 following final acceptance of the Work.

I hereby designate _____ as the repository for the said funds.

Date _____ Signed _____

3. ☐ I hereby elect to have the retained percentage placed in escrow by the Contracting Agency with a bank or trust company until released in accordance with RCW 60.28 following final acceptance of the Work. The Contracting Agency will provide an escrow form for this purpose.

I hereby designate _____ as the repository for the escrow of said funds.

I hereby further agree to be fully responsible for payment of all costs or fees incurred as a result of placing said retained percentage in escrow and investing it as authorized by statute, and I agree to assume all risks in connection with the investment of retained percentages. The Contracting Agency shall not be liable in any way for any costs or fees in connection therewith. This agreement is subject to all applicable provisions of RCW Chapter 60.28.

Date _____ Signed _____

4. ☐ I hereby elect to provide a bond for contract retainage using a form acceptable to the Contracting Agency from a surety licensed to conduct business in the state of Washington and acceptable to the Contracting Agency. Such bond shall remain in force until released in accordance with RCW 60.28 following final acceptance of the Work.

Date _____ Signed _____

1
2

SECTION 7
PREVAILING WAGE RATES

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: 4/16/2019

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
Snohomish	Asbestos Abatement Workers	Journey Level	\$46.57	<u>5D</u>	<u>1H</u>	
Snohomish	Boilermakers	Journey Level	\$66.54	<u>5N</u>	<u>1C</u>	
Snohomish	Brick Mason	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Brick Mason	Pointer-Caulker-Cleaner	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Building Service Employees	Janitor	\$12.00		<u>1</u>	
Snohomish	Building Service Employees	Shampooer	\$12.00		<u>1</u>	
Snohomish	Building Service Employees	Waxer	\$12.00		<u>1</u>	
Snohomish	Building Service Employees	Window Cleaner	\$13.48		<u>1</u>	
Snohomish	Cabinet Makers (In Shop)	Journey Level	\$25.16	<u>5C</u>	<u>2M</u>	
Snohomish	Carpenters	Acoustical Worker	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Bridge, Dock And Wharf Carpenters	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Carpenter	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Carpenters on Stationary Tools	\$60.17	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Creosoted Material	\$60.14	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Floor Finisher	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Floor Layer	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Carpenters	Scaffold Erector	\$60.04	<u>5D</u>	<u>4C</u>	
Snohomish	Cement Masons	Journey Level	\$60.07	<u>7A</u>	<u>4U</u>	
Snohomish	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$113.60	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Dive Supervisor/Master	\$76.33	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Diver	\$113.60	<u>5D</u>	<u>4C</u>	<u>8V</u>
Snohomish	Divers & Tenders	Diver On Standby	\$71.33	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Diver Tender	\$64.71	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Manifold Operator	\$64.71	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Manifold Operator Mixed Gas	\$69.71	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$64.71	<u>5D</u>	<u>4C</u>	
Snohomish	Divers & Tenders	Remote Operated Vehicle Tender	\$60.29	<u>5A</u>	<u>4C</u>	
Snohomish	Dredge Workers	Assistant Engineer	\$56.44	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Assistant Mate (Deckhand)	\$56.00	<u>5D</u>	<u>3F</u>	

Snohomish	Dredge Workers	Boatmen	\$56.44	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Engineer Welder	\$57.51	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Leverman, Hydraulic	\$58.67	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Mates	\$56.44	<u>5D</u>	<u>3F</u>	
Snohomish	Dredge Workers	Oiler	\$56.00	<u>5D</u>	<u>3F</u>	
Snohomish	Drywall Applicator	Journey Level	\$58.48	<u>5D</u>	<u>1H</u>	
Snohomish	Drywall Tapers	Journey Level	\$59.32	<u>5P</u>	<u>1E</u>	
Snohomish	Electrical Fixture Maintenance Workers	Journey Level	\$13.76		<u>1</u>	
Snohomish	Electricians - Inside	Cable Splicer	\$71.52	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Inside	Construction Stock Person	\$34.97	<u>7H</u>	<u>1D</u>	
Snohomish	Electricians - Inside	Journey Level	\$66.89	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Motor Shop	Craftsman	\$15.37		<u>1</u>	
Snohomish	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
Snohomish	Electricians - Powerline Construction	Cable Splicer	\$79.60	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Certified Line Welder	\$72.98	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Groundperson	\$47.94	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$72.98	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Journey Level Lineperson	\$72.98	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Line Equipment Operator	\$62.06	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Meter Installer	\$47.94	<u>5A</u>	<u>4D</u>	<u>8W</u>
Snohomish	Electricians - Powerline Construction	Pole Sprayer	\$72.98	<u>5A</u>	<u>4D</u>	
Snohomish	Electricians - Powerline Construction	Powderperson	\$54.55	<u>5A</u>	<u>4D</u>	
Snohomish	Electronic Technicians	Electronic Technicians Journey Level	\$43.70	<u>5B</u>	<u>1B</u>	
Snohomish	Elevator Constructors	Mechanic	\$94.22	<u>7D</u>	<u>4A</u>	
Snohomish	Elevator Constructors	Mechanic In Charge	\$101.73	<u>7D</u>	<u>4A</u>	
Snohomish	Fabricated Precast Concrete Products	Journey Level	\$13.50		<u>1</u>	
Snohomish	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$13.50		<u>1</u>	
Snohomish	Fence Erectors	Fence Erector	\$41.45	<u>7A</u>	<u>3I</u>	
Snohomish	Fence Erectors	Fence Laborer	\$41.45	<u>7A</u>	<u>3I</u>	
Snohomish	Flaggers	Journey Level	\$41.45	<u>7A</u>	<u>3I</u>	
Snohomish	Glaziers	Journey Level	\$64.56	<u>7L</u>	<u>1Y</u>	
Snohomish	Heat & Frost Insulators And Asbestos Workers	Journeyman	\$73.58	<u>5J</u>	<u>4H</u>	
Snohomish	Heating Equipment Mechanics	Journey Level	\$82.51	<u>7F</u>	<u>1E</u>	
Snohomish	Hod Carriers & Mason Tenders	Journey Level	\$50.42	<u>7A</u>	<u>3I</u>	
Snohomish	Industrial Power Vacuum Cleaner	Journey Level	\$12.00		<u>1</u>	
Snohomish	Inland Boatmen	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>	

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

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

Snohomish	Laborers	Pipe Wrapper	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Pot Tender	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Powderman	\$50.42	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Powderman's Helper	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Power Jacks	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Railroad Spike Puller - Power	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Raker - Asphalt	\$50.42	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Re-timberman	\$50.42	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Remote Equipment Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rigger/signal Person	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rip Rap Person	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rivet Buster	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Rodder	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Scaffold Erector	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Scale Person	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Sloper (over 20")	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Sloper Sprayer	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Spreader (concrete)	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Stake Hopper	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Stock Piler	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tamper (multiple & Self-propelled)	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Toolroom Person (at Jobsite)	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Topper	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Track Laborer	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Track Liner (power)	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Traffic Control Laborer	\$44.33	<u>7A</u>	<u>3I</u>	<u>8R</u>
Snohomish	Laborers	Traffic Control Supervisor	\$44.33	<u>7A</u>	<u>3I</u>	<u>8R</u>
Snohomish	Laborers	Truck Spotter	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tugger Operator	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$107.60	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$112.63	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$116.31	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$122.01	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$124.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$129.23	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$131.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air	\$133.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>

		Worker 70.01-72.00 psi				
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$135.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Guage and Lock Tender	\$50.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Miner	\$50.52	<u>7A</u>	<u>3I</u>	<u>8Q</u>
Snohomish	Laborers	Vibrator	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Vinyl Seamer	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Watchman	\$37.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Welder	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Well Point Laborer	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers	Window Washer/cleaner	\$37.67	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers - Underground Sewer & Water	General Laborer & Topman	\$48.90	<u>7A</u>	<u>3I</u>	
Snohomish	Laborers - Underground Sewer & Water	Pipe Layer	\$49.81	<u>7A</u>	<u>3I</u>	
Snohomish	Landscape Construction	Landscape Laborer	\$37.67	<u>7A</u>	<u>3I</u>	
Snohomish	Landscape Construction	Landscape Operator	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Landscape Maintenance	Groundskeeper	\$14.13		<u>1</u>	
Snohomish	Lathers	Journey Level	\$58.48	<u>5D</u>	<u>1H</u>	
Snohomish	Marble Setters	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Metal Fabrication (In Shop)	Fitter	\$15.38		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Laborer	\$12.00		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Machine Operator	\$12.00		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Painter	\$12.00		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Welder	\$15.38		<u>1</u>	
Snohomish	Millwright	Journey Level	\$61.54	<u>5D</u>	<u>4C</u>	
Snohomish	Modular Buildings	Journey Level	\$12.00		<u>1</u>	
Snohomish	Painters	Journey Level	\$42.50	<u>6Z</u>	<u>2B</u>	
Snohomish	Pile Driver	Crew Tender/Technician	\$64.71	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$74.87	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	\$79.87	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$83.87	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$88.87	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$91.37	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$96.37	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$98.37	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$100.37	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$102.37	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Journey Level	\$60.29	<u>5D</u>	<u>4C</u>	
Snohomish	Pile Driver	Manifold Operator (LST)	\$69.71	<u>5D</u>	<u>4C</u>	

Snohomish	Plasterers	Journey Level	\$56.54	<u>7Q</u>	<u>1R</u>	
Snohomish	Playground & Park Equipment Installers	Journey Level	\$12.00		<u>1</u>	
Snohomish	Plumbers & Pipefitters	Journey Level	\$71.42	<u>5A</u>	<u>1G</u>	
Snohomish	Power Equipment Operators	Asphalt Plant Operators	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Assistant Engineer	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Barrier Machine (zipper)	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Batch Plant Operator: concrete	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Bobcat	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Brooms	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Bump Cutter	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cableways	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Chipper	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Compressor	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Concrete Finish Machine - Laser Screed	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Conveyors	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes friction: 200 tons and over	\$66.80	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$66.80	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Crusher	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>

Snohomish	Power Equipment Operators	Deck Engineer/Deck Winches (power)	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Derricks, On Building Work	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Dozers D-9 & Under	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Drilling Machine	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Gradechecker/Stakeman	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Guardrail Punch	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Horizontal/Directional Drill Locator	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Horizontal/Directional Drill Operator	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Hydralifts/Boom Trucks, 10 Tons And Under	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Loaders, Plant Feed	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Loaders: Elevating Type Belt	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Locomotives, All	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Material Transfer Device	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Motor Patrol Graders	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Outside Hoists (Elevators And	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>

		Manlifts), Air Tuggers, Strato				
Snohomish	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Pavement Breaker	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Posthole Digger, Mechanical	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Power Plant	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Pumps - Water	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Rigger and Bellman	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Rollagon	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Roller, Other Than Plant Mix	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Roto-mill, Roto-grinder	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Saws - Concrete	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Scrapers - Concrete & Carry All	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Service Engineers - Equipment	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shotcrete/Gunite Equipment	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Slipform Pavers	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Spreader, Topsider & Screedman	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Subgrader Trimmer	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>

Snohomish	Power Equipment Operators	Tower Bucket Elevators	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$66.80	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Transporters, All Track Or Truck Type	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Trenching Machines	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Truck Crane Oiler/Driver Under 100 Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Truck Mount Portable Conveyor	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Welder	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Wheel Tractors, Farmall Type	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators	Yo Yo Pay Dozer	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Brooms	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Cableways	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Chipper	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Compressor	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine - Laser Screed	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-	Conveyors	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>

	Underground Sewer & Water					
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes friction: 200 tons and over	\$66.80	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$65.48	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$66.15	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$66.80	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$64.83	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$60.98	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$66.15	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$63.76	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Crusher	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Deck Engineer/Deck Winches (power)	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	\$64.83	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	\$63.76	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$63.76	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Drilling Machine	\$65.48	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$60.98	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$63.76	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$60.98	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Gradechecker/Stakeman	\$60.98	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Guardrail Punch	\$64.26	7A	3K	8X
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$64.83	7A	3K	8X

Snohomish	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Locator	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Operator	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Hydralifts/Boom Trucks Over 10 Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Hydralifts/Boom Trucks, 10 Tons And Under	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (Elevators And Manlifts), Air Tuggers, Strato	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Power Plant	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>

Snohomish	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Rollagon	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shotcrete/Gunite Equipment	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>

Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$65.48	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$66.15	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	\$66.80	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver Under 100 Tons	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Welder	\$64.83	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	\$60.98	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	\$64.26	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$49.96	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Spray Person	\$47.37	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$49.96	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer	\$44.57	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$33.60	<u>5A</u>	<u>4A</u>	
Snohomish	Refrigeration & Air Conditioning Mechanics	Journey Level	\$70.71	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Brick Mason	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Residential Carpenters	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Snohomish	Residential Cement Masons	Journey Level	\$60.07	<u>7A</u>	<u>4U</u>	
Snohomish	Residential Drywall Applicators	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Snohomish	Residential Drywall Tapers	Journey Level	\$45.19	<u>5P</u>	<u>1E</u>	
Snohomish	Residential Electricians	Journey Level	\$29.00	<u>5I</u>	<u>1E</u>	
Snohomish	Residential Glaziers	Journey Level	\$43.00	<u>7L</u>	<u>1H</u>	
Snohomish	Residential Insulation Applicators	Journey Level	\$45.05	<u>5D</u>	<u>4C</u>	
Snohomish	Residential Laborers	Journey Level	\$36.68	<u>7A</u>	<u>1H</u>	
Snohomish	Residential Marble Setters	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Residential Painters	Journey Level	\$42.50	<u>6Z</u>	<u>2B</u>	
Snohomish	Residential Plumbers & Pipefitters	Journey Level	\$44.34	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$41.01	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$50.01	<u>7F</u>	<u>1R</u>	
Snohomish	Residential Soft Floor Layers	Journey Level	\$49.43	<u>5A</u>	<u>3J</u>	

Snohomish	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$48.18	<u>5C</u>	<u>2R</u>	
Snohomish	Residential Stone Masons	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Residential Terrazzo Workers	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Snohomish	Residential Terrazzo/Tile Finishers	Journey Level	\$43.44	<u>5A</u>	<u>1B</u>	
Snohomish	Residential Tile Setters	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Snohomish	Roofers	Journey Level	\$51.52	<u>5A</u>	<u>3H</u>	
Snohomish	Roofers	Using Irritable Bituminous Materials	\$54.52	<u>5A</u>	<u>3H</u>	
Snohomish	Sheet Metal Workers	Journey Level (Field or Shop)	\$82.51	<u>7F</u>	<u>1E</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Boilermaker	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Carpenter	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Crane Operator	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Electrician	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$73.58	<u>5J</u>	<u>4H</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Laborer	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Machinist	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Operating Engineer	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Painter	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Pipefitter	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Rigger	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Sheet Metal	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Shipfitter	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	New Construction Welder / Burner	\$36.36	<u>7V</u>	<u>1</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Carpenter	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$44.06	<u>7Y</u>	<u>4K</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Electrician	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$73.58	<u>5J</u>	<u>4H</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Laborer	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Machinist	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$44.06	<u>7Y</u>	<u>4K</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Painter	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Rigger	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Shipwright	\$44.95	<u>7X</u>	<u>4J</u>	
Snohomish	Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$44.06	<u>7Y</u>	<u>4K</u>	
Snohomish	Sign Makers & Installers (Electrical)	Sign Installer	\$26.56		<u>1</u>	

Snohomish	Sign Makers & Installers (Electrical)	Sign Maker	\$20.50		1	
Snohomish	Sign Makers & Installers (Non-Electrical)	Sign Installer	\$22.56		1	
Snohomish	Sign Makers & Installers (Non-Electrical)	Sign Maker	\$20.50		1	
Snohomish	Soft Floor Layers	Journey Level	\$49.43	<u>5A</u>	<u>3J</u>	
Snohomish	Solar Controls For Windows	Journey Level	\$12.00		1	
Snohomish	Sprinkler Fitters (Fire Protection)	Journey Level	\$78.39	<u>5C</u>	<u>1X</u>	
Snohomish	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		1	
Snohomish	Stone Masons	Journey Level	\$57.32	<u>5A</u>	<u>1M</u>	
Snohomish	Street And Parking Lot Sweeper Workers	Journey Level	\$15.00		1	
Snohomish	Surveyors	Assistant Construction Site Surveyor	\$62.71	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Surveyors	Assistant Construction Site Surveyor	\$62.71	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Surveyors	Chainman	\$58.93	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Surveyors	Construction Site Surveyor	\$63.76	<u>7A</u>	<u>3K</u>	<u>8X</u>
Snohomish	Telecommunication Technicians	Telecom Technician Journey Level	\$43.70	<u>5B</u>	<u>1B</u>	
Snohomish	Telephone Line Construction - Outside	Cable Splicer	\$41.22	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$23.12	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Installer (Repairer)	\$39.53	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Special Aparatus Installer I	\$41.22	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Special Apparatus Installer II	\$40.41	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$41.22	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$38.36	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Telephone Lineperson	\$38.36	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Groundperson	\$21.92	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Lineperson/Installer	\$29.13	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television System Technician	\$34.68	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Television Technician	\$31.18	<u>5A</u>	<u>2B</u>	
Snohomish	Telephone Line Construction - Outside	Tree Trimmer	\$38.36	<u>5A</u>	<u>2B</u>	
Snohomish	Terrazzo Workers	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Snohomish	Tile Setters	Journey Level	\$52.61	<u>5A</u>	<u>1M</u>	
Snohomish	Tile, Marble & Terrazzo Finishers	Finisher	\$43.44	<u>5A</u>	<u>1B</u>	

Snohomish	Traffic Control Stripers	Journey Level	\$46.23	<u>7A</u>	<u>1K</u>	
Snohomish	Truck Drivers	Asphalt Mix Over 16 Yards	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Asphalt Mix To 16 Yards	\$53.46	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Dump Truck	\$53.46	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Dump Truck & Trailer	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Other Trucks	\$54.30	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers - Ready Mix	Journey Level	\$50.94	<u>6I</u>	<u>1B</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.05		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Oiler	\$13.93		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Well Driller	\$19.01		<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.]

Benefit Code Key – Effective 3/3/2019 thru 8/30/2019

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.
- K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

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.
- S. All hours worked on Saturdays and Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.
- T. The first two (2) hours of overtime for hours worked Monday-Friday 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 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. For work on Saturday which is scheduled prior to the end of shift on Friday, the first six (6) hours work shall be paid at one and one-half times the hourly rate of wage, and all hours over (6) shall be paid double the hourly rate of wage. For work on Saturday which was assigned following the close of shift on Friday, all work shall be paid at double the hourly rate of wage.
- U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

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).

Holiday Codes Continued

5. C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).
- I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- 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-

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Day On Christmas Eve Day. (9 1/2).

Holiday Codes Continued

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).
- I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).
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.

Holiday Codes Continued

7. H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- 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.

Holiday Codes Continued

7. 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.
- 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.

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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.
- 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.

Note Codes Continued

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.

- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

- X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

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SECTION 8
AMENDMENTS TO STANDARD SPECIFICATIONS

INTRODUCTION

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

AMENDMENTS TO THE STANDARD SPECIFICATIONS

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

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

Section 1-01, Definitions and Terms **August 6, 2018**

1-01.3 Definitions

The following new term and definition is inserted before the definition for "Shoulder":

Sensitive Area – Natural features, which may be previously altered by human activity, that are present on or adjacent to the project location and protected, managed, or regulated by local, tribal, state, or federal agencies.

The following new term and definition is inserted after the definition for "Working Drawings":

WSDOT Form – Forms developed and maintained by WSDOT that are required or available for use on a project. These forms can be downloaded from the forms catalogue at:

<http://wsdot.wa.gov/forms/pdfForms.html>

Section 1-02, Bid Procedures and Conditions **October 30, 2018**

1-02.4(1) General

This section is supplemented with the following:

Prospective Bidders are advised that the Contracting Agency may include a partially completed Washington State Department of Ecology (Ecology) Transfer of Coverage (Ecology Form ECY 020-87a) for the Construction Stormwater General Permit (CSWGP) as part of the Bid Documents. When the Contracting Agency requires the transfer of coverage of the CSWGP to the Contractor, an informational copy of the Transfer of Coverage and the associated CSWGP will be included in the appendices. As a condition of Section 1-03.3, the Contractor is required to complete sections I, III, and VIII of the Transfer of Coverage and return the form to the Contracting Agency.

The Contracting Agency is responsible for compliance with the CSWGP until the end of day that the Contract is executed. Beginning on the day after the Contract is executed, the Contractor shall assume complete legal responsibility for compliance with the CSWGP and full implementation of all conditions of the CSWGP as they apply to the Contract Work.

1
2 **1-02.5 Proposal Forms**

3 The first sentence of the first paragraph is revised to read:

4
5 At the request of a Bidder, the Contracting Agency will provide a physical Proposal Form
6 for any project on which the Bidder is eligible to Bid.
7

8 **1-02.6 Preparation of Proposal**

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

- 10
11 1. A unit price for each item (omitting digits more than two places to the right of the
12 decimal point),
13

14 In the third sentence of the fourth paragraph, "WSDOT Form 422-031" is revised to read
15 "WSDOT Form 422-031U".
16

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

18
19 The Bidder shall submit with their Bid a completed Contractor Certification Wage Law
20 Compliance form (WSDOT Form 272-009). Failure to return this certification as part of
21 the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A
22 Contractor Certification of Wage Law Compliance form is included in the Proposal
23 Forms.
24
25

26 **Section 1-03, Award and Execution of Contract**
27 **January 2, 2018**

28 **1-03.3 Execution of Contract**

29 The first paragraph is revised to read:

30
31 Within 20 calendar days after the Award date, the successful Bidder shall return the
32 signed Contracting Agency-prepared Contract, an insurance certification as required by
33 Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer
34 of Coverage form for the Construction Stormwater General Permit with sections I, III,
35 and VIII completed when provided, and shall be registered as a contractor in the state of
36 Washington.
37

38 **1-03.5 Failure to Execute Contract**

39 The first sentence is revised to read:

40
41 Failure to return the insurance certification and bond with the signed Contract as
42 required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's
43 Business Enterprise information if required in the Contract, or failure or refusal to sign
44 the Contract, or failure to register as a contractor in the state of Washington, or failure to
45 return the completed Transfer of Coverage for the Construction Stormwater General
46 Permit to the Contracting Agency when provided shall result in forfeiture of the proposal
47 bond or deposit of this Bidder.
48

Section 1-05, Control of Work

August 6, 2018

1-05.5 Vacant

This section, including title, is revised to read:

1-05.5 Tolerances

Geometrical tolerances shall be measured from the points, lines, and surfaces defined in Contract documents.

A plus (+) tolerance increases the amount or dimension to which it applies, or raises a deviation from level. A minus (-) tolerance decreases the amount or dimension to which it applies, or lowers a deviation from level. Where only one signed tolerance is specified (+ or -), there is no specified tolerance in the opposing direction.

Tolerances shall not be cumulative. The most restrictive tolerance shall control.

Tolerances shall not extend the Work beyond the Right of Way or other legal boundaries identified in the Contract documents. If application of tolerances causes the extension of the Work beyond the Right of Way or legal boundaries, the tolerance shall be reduced for that specific instance.

Tolerances shall not violate other Contract requirements. If application of tolerances causes the Work to violate other Contract requirements, the tolerance shall be reduced for that specific instance. If application of tolerances causes conflicts with other components or aspects of the Work, the tolerance shall be reduced for that specific instance.

1-05.9 Equipment

The following new paragraph is inserted before the first paragraph:

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

This section is supplemented with the following:

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

Section 1-06, Control of Material

January 7, 2019

1-06.1(3) Aggregate Source Approval (ASA) Database

This section is supplemented with the following:

Regardless of status of the source, whether listed or not listed in the ASA database the source owner may be asked to provide testing results for toxicity in accordance with Section 9-03.21(1).

1-06.2(2)D Quality Level Analysis

This section is supplemented with the following new subsection:

1-06.2(2)D5 Quality Level Calculation – HMA Compaction

The procedures for determining the quality level and pay factor for HMA compaction are as follows:

1. Determine the arithmetic mean, X_m , for compaction of the lot:

$$X_m = \frac{\sum x}{n}$$

Where:

x = individual compaction test values for each subplot in the lot.

$\sum x$ = summation of individual compaction test values

n = total number test values

2. Compute the sample standard deviation, "S", for each constituent:

$$S = \left[\frac{n \sum x^2 - (\sum x)^2}{n(n-1)} \right]^{\frac{1}{2}}$$

Where:

$\sum x^2$ = summation of the squares of individual compaction test values

$(\sum x)^2$ = summation of the individual compaction test values squared

3. Compute the lower quality index (Q_L):

$$Q_L = \frac{X_m - LSL}{S}$$

Where:

$LSL = 92.0$

4. Determine P_L (the percent within the lower Specification limit which corresponds to a given Q_L) from Table 1. For negative values of Q_L , P_L is equal to 100 minus the table P_L . If the value of Q_L does not correspond exactly to a figure in the table, use the next higher value.

5. Determine the quality level (the total percent within Specification limits):

Quality Level = P_L

6. Using the quality level from step 5, determine the composite pay factor (CPF) from Table 2.
7. If the CPF determined from step 6 is 1.00 or greater: use that CPF for the compaction lot; however, the maximum HMA compaction CPF using an $LSL = 92.0$ shall be 1.05.
8. If the CPF from step 6 is not 1.00 or greater: repeat steps 3 through 6 using an $LSL = 91.5$. The value thus determined shall be the HMA compaction CPF for

1 that lot; however, the maximum HMA compaction CPF using an LSL = 91.5
2 shall be 1.00.
3

4 **1-06.2(2)D1 Quality Level Analysis**

5 The following new sentence is inserted after the first sentence:
6

7 The quality level calculations for HMA compaction are completed using the formulas in
8 Section 1-06.2(2)D5.
9

10 **1-06.2(2)D4 Quality Level Calculation**

11 The first paragraph (excluding the numbered list) is revised to read:
12

13 The procedures for determining the quality level and pay factors for a material, other
14 than HMA compaction, are as follows:
15

16 **1-06.6 Recycled Materials**

17 The first three sentences of the second paragraph are revised to read:
18

19 The Contractor shall submit a Recycled Material Utilization Plan on WSDOT Form 350-
20 075A within 30 calendar days after the Contract is executed. The plan shall provide the
21 Contractor's anticipated usage of recycled concrete aggregates for meeting the
22 requirements of these Specifications. The quantity of recycled concrete aggregate will
23 be provided in tons and as a percentage of the Plan quantity for eligible material listed in
24 Section 9-03.21(1)E Table on Maximum Allowable percent (By Weight) of Recycled
25 Material.
26

27 The last paragraph is revised to read:
28

29 Within 30 calendar days after Physical Completion, the Contractor shall report the
30 quantity of recycled concrete aggregates that were utilized in the construction of the
31 project for each eligible item listed in Section 9-03.21(1)E. The Contractor's report shall
32 be provided on WSDOT Form 350-075A, Recycled Materials Reporting.
33

34 **1-06.6(1)A General**

35 Item 1(a) in the second paragraph is revised to read:
36

- 37 a. The estimated costs for the Work for each material with 25 percent recycled
38 concrete aggregate. The cost estimate shall include for each material a
39 documented price quote from the supplier with the lowest total cost for the Work.
40

41 **Section 1-07, Legal Relations and Responsibilities to the Public** 42 **April 1, 2019**

43 **1-07.5 Environmental Regulations**

44 This section is supplemented with the following new subsections:
45

46 **1-07.5(5) U.S. Army Corps of Engineers**

47 When temporary fills are permitted, the Contractor shall remove fills in their entirety and
48 the affected areas returned to pre-construction elevations.
49

50 If a U.S. Army Corps of Engineers permit is noted in Section 1-07.6 of the Special
51 Provisions, the Contractor shall retain a copy of the permit or the verification letter (in the

case of a Nationwide Permit) on the worksite for the life of the Contract. The Contractor shall provide copies of the permit or verification letter to all subcontractors involved with the authorized work prior to their commencement of any work in waters of the U.S.

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

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

1-07.5(1) General

The first sentence is deleted and replaced with the following:

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

The third paragraph is deleted.

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

This section is revised to read:

In doing the Work, the Contractor shall:

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

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

1
2 **1-07.5(3) State Department of Ecology**

3 This section is revised to read:

4
5 In doing the Work, the Contractor shall:

- 6
7 1. Comply with Washington State Water Quality Standards.
8
9 2. Perform Work in such a manner that all materials and substances not
10 specifically identified in the Contract documents to be placed in the water do
11 not enter waters of the State, including wetlands. These include, but are not
12 limited to, petroleum products, hydraulic fluid, fresh concrete, concrete
13 wastewater, process wastewater, slurry materials and waste from shaft drilling,
14 sediments, sediment-laden water, chemicals, paint, solvents, or other toxic or
15 deleterious materials.
16
17 3. Use equipment that is free of external petroleum-based products.
18
19 4. Remove accumulations of soil and debris from drive mechanisms (wheels,
20 tracks, tires) and undercarriage of equipment prior to using equipment below
21 the ordinary high water line.
22
23 5. Clean loose dirt and debris from all materials placed below the ordinary high
24 water line. No materials shall be placed below the ordinary high water line
25 without the Engineer's concurrence.
26
27 6. When a violation of the Construction Stormwater General Permit (CSWGP)
28 occurs, immediately notify the Engineer and fill out WSDOT Form 422-011,
29 Contractor ECAP Report, and submit the form to the Engineer within 48 hours
30 of the violation.
31
32 7. Once Physical Completion has been given, prepare a Notice of Termination
33 (Ecology Form ECY 020-87) and submit the Notice of Termination
34 electronically to the Engineer in a PDF format a minimum of 7 calendar days
35 prior to submitting the Notice of Termination to Ecology.
36
37 8. Transfer the CSWGP coverage to the Contracting Agency when Physical
38 Completion has been given and the Engineer has determined that the project
39 site is not stabilized from erosion.
40
41 9. Submit copies of all correspondence with Ecology electronically to the Engineer
42 in a PDF format within four calendar days.
43

44 **1-07.5(4) Air Quality**

45 This section is revised to read:

46
47 The Contractor shall comply with all regional clean air authority and/or State Department
48 of Ecology rules and regulations.
49

50 The air quality permit process may include additional State Environment Policy Act
51 (SEPA) requirements. Contractors shall contact the appropriate regional air pollution
52 control authority well in advance of beginning Work.
53

1 When the Work includes demolition or renovation of any existing facility or structure that
2 contains Asbestos Containing Material (ACM) and/or Presumed Asbestos-Containing
3 Material (PACM), the Contractor shall comply with the National Emission Standards for
4 Hazardous Air Pollutants (NESHAP).

5
6 Any requirements included in Federal and State regulations regarding air quality that
7 applies to the “owner or operator” shall be the responsibility of the Contractor.
8

9 **1-07.7(1) General**

10 The first sentence of the third paragraph is revised to read:
11

12 When the Contractor moves equipment or materials on or over Structures, culverts or
13 pipes, the Contractor may operate equipment with only the load-limit restrictions in
14 Section 1-07.7(2).
15

16 The first sentence of the last paragraph is revised to read:
17

18 Unit prices shall cover all costs for operating over Structures, culverts and pipes.
19

20 **1-07.9(1) General**

21 The last sentence of the sixth paragraph is revised to read:
22

23 Generally, the Contractor initiates the request by preparing standard form 1444 Request
24 for Authorization of Additional Classification and Rate, available at
25 <https://www.dol.gov/whd/recovery/dbsurvey/conformance.htm>, and submitting it to the
26 Engineer for further action.
27

28 **1-07.9(2) Posting Notices**

29 The second sentence of the first paragraph (up until the colon) is revised to read:
30

31 The Contractor shall ensure the most current edition of the following are posted:
32

33 The revision dates are deleted from all items in the numbered list.
34

35 The following new items are inserted after item number 1:
36

37 2. **Mandatory Supplement to EEOC P/E-1** published by US Department of Labor.
38 Post for projects with federal-aid funding.
39

40 3. **Pay Transparency Nondiscrimination Provision** published by US Department of
41 Labor. Post for projects with federal-aid funding.
42

43 Item number 2 through 12 are renumbered to 4 through 14, respectively.
44

45 **1-07.11(2) Contractual Requirements**

46 In this section, “creed” is revised to read “religion”.
47

48 Item numbers 1 through 9 are revised to read 2 through 10, respectively.
49

50 After the preceding Amendment is applied, the following new item number 1 is inserted:
51

1. The Contractor shall maintain a Work site that is free of harassment, humiliation, fear, hostility and intimidation at all times. Behaviors that violate this requirement include but are not limited to:
 - a. Persistent conduct that is offensive and unwelcome.
 - b. Conduct that is considered to be hazing.
 - c. Jokes about race, gender, or sexuality that are offensive.
 - d. Unwelcome, unwanted, rude or offensive conduct or advances of a sexual nature which interferes with a person's ability to perform their job or creates an intimidating, hostile, or offensive work environment.
 - e. Language or conduct that is offensive, threatening, intimidating or hostile based on race, gender, or sexual orientation.
 - f. Repeating rumors about individuals in the Work Site that are considered to be harassing or harmful to the individual's reputation.

1-07.11(5) Sanctions

This section is supplemented with the following:

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

1-07.11(6) Incorporation of Provisions

The first sentence is revised to read:

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

1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

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

An SPCC Plan template and guidance information is available at <http://www.wsdot.wa.gov/environment/technical/disciplines/hazardous-materials/spill-prevent-report>.

1-07.16(2)A Wetland and Sensitive Area Protection

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

Existing wetland and other sensitive areas, where shown in the Plans or designated by the Engineer, shall be saved and protected through the life of the Contract.

1-07.18 Public Liability and Property Damage Insurance

Item number 1 is supplemented with the following new sentence:

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

Section 1-08, Prosecution and Progress January 7, 2019

1-08.1 Subcontracting

The first sentence of the seventh paragraph is revised to read:

All Work that is not performed by the Contractor will be considered as subcontracting except: (1) purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready-mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants; or (2) delivery of these materials to the Work site in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies hired by those commercial plants.

The following new paragraph is inserted after the seventh paragraph:

The Contractor shall not use businesses (material suppliers, vendors, subcontractors, etc.) with federal purchasing exclusions. Businesses with exclusions are identified using the System for Award Management web page at www.SAM.gov.

1-08.5 Time for Completion

Item number 2 of the sixth paragraph is supplemented with the following:

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

1-08.7 Maintenance During Suspension

The fifth paragraph is revised to read:

The Contractor shall protect and maintain all other Work in areas not used by traffic. All costs associated with protecting and maintaining such Work shall be the responsibility of the Contractor.

Section 1-09, Measurement and Payment August 6, 2018

1-09.2(1) General Requirements for Weighing Equipment

The last paragraph is supplemented with the following:

When requested by the Engineer, the Contractor's representative shall collect the tickets throughout the day and provide them to the Engineer's designated receiver, not later than the end of shift, for reconciliation. Tickets for loads not verified as delivered will receive no pay.

1-09.2(2) Specific Requirements for Batching Scales

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

Batching scales used for concrete or hot mix asphalt shall not be used for batching other materials.

1-09.10 Payment for Surplus Processed Materials

The following sentence is inserted after the first sentence of the second paragraph:

For Hot Mix Asphalt, the Plan quantity and quantity used will be adjusted for the quantity of Asphalt and quantity of RAP or other materials incorporated into the mix.

Section 2-01, Clearing, Grubbing, and Roadside Cleanup April 1, 2019

2-01.2(3) Disposal Method No. 3 – Chipping

Item number 2 of the first paragraph is revised to read:

2. Chips shall be disposed outside of sensitive areas, and in areas that aren't in conflict with permanent Work.

Section 2-02, Removal of Structures and Obstructions April 2, 2018

2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters

In item number 3 of the first paragraph, the second sentence is revised to read:

For concrete pavement removal, a second vertical full depth relief saw cut offset 12 to 18 inches from and parallel to the initial saw cut is also required, unless the Engineer allows otherwise.

Section 2-03, Roadway Excavation and Embankment April 1, 2019

2-03.3(14)F Displacement of Unsuitable Foundation Materials

This section, including title, is revised to read:

2-03.3(14)F Vacant

Section 2-09, Structure Excavation April 1, 2019

2-09.2 Materials

In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:

Cement	9-01
Fine Aggregate for Concrete	9-03.1(2)

2-09.3(3)B Excavation Using Open Pits – Extra Excavation

The last two paragraphs are deleted and replaced with the following:

The excavation height (Ht) shall be calculated within a vertical plane as the difference between the lowest elevation in the excavation and the highest elevation of the ground surface immediately adjacent to the excavation. Pavement thickness and other surface

1 treatments existing at the time of the excavation shall be included in the height
2 calculation.

3 4 **Submittals and Design Requirements**

5 Excavations 4-feet and less in height do not require design and submittals. The
6 Contractor shall provide a safe work environment and shall execute the work in a
7 manner that does not damage adjacent pavements, utilities, or structures. If the
8 Engineer determines the Contractor's work may potentially affect adjacent traffic,
9 pavements, utilities, or structures, the Engineer may request a Type 1 Working Drawing
10 from the Contractor. The Contractor shall explain in the Type 1 Working Drawing how
11 the Engineer's concerns will be addressed, why infrastructure will not be damaged by
12 the work, and how worker safety will be preserved.

13
14 For excavations that have soil types and slope geometries defined in WAC 296-155 part
15 N and are between 4-feet and 20-feet in height, the Contractor shall submit Type 2
16 Working Drawings. Required submittal elements include, at a minimum, the following:

- 17
18 1. A plan view showing the limits of the excavation and its relationship to traffic,
19 structures, utilities and other pertinent project elements. If the stability of the
20 excavation requires no-load zones or equipment setback distances, those shall
21 be shown on the plan view.
- 22
23 2. A typical or controlling cross section showing the proposed excavation, original
24 ground line, and locations of traffic, existing structures, utilities, site constraints,
25 surcharge loads, or other conditions that could affect the stability of the slope. If
26 the stability of the excavation requires no-load zones or equipment setback
27 distances, those shall be shown in cross section.
- 28
29 3. A summary clearly describing subsurface conditions, soil type for WAC 296-
30 155 part N, and groundwater conditions, sequencing considerations, and
31 governing assumptions.

32
33 Where WAC 296-155 part N requires an engineer's design, the Contractor shall submit
34 Type 2E Working Drawings. Required submittal elements include, at a minimum, the
35 three items above and the following additional items:

- 36
37 4. Supporting calculations for the design of the excavation, the soil and material
38 properties selected for design, and the justification for the selection for those
39 properties, in accordance with the WSDOT *Geotechnical Design Manual* M 46-
40 03.
 - 41
42 5. Safety factors, or load and resistance factors used, and justification for their
43 selection, in accordance with the WSDOT *Geotechnical Design Manual* M 46-
44 03, and referenced AASHTO design manuals.
 - 45
46 6. A monitoring plan to evaluate the excavation performance throughout its
47 design life.
 - 48
49 7. Any supplemental subsurface explorations made by the Contractor to meet the
50 requirements for geotechnical design of excavation slopes, in accordance with
51 the WSDOT *Geotechnical Design Manual* M 46-03.
- 52

1 **2-09.3(3)D Shoring and Cofferdams**

2 The first sentence of the sixth paragraph is revised to read:

3
4 Structural shoring and cofferdams shall be designed for conditions stated in this Section
5 using methods shown in Division I Section 5 of the AASHTO *Standard Specifications for*
6 *Highway Bridges* Seventeenth Edition – 2002 for allowable stress design, or the
7 AASHTO *LRFD Bridge Design Specifications* for load and resistance factor design.
8

9 **Section 3-01, Production from Quarry and Pit Sites**
10 **April 2, 2018**

11 **3-01.1 Description**

12 The first paragraph is revised to read:

13
14 This Work shall consist of manufacturing and producing crushed and screened
15 aggregates including pit run aggregates of the kind, quality, and grading specified for
16 use in the construction of concrete, hot mix asphalt, crushed surfacing, maintenance
17 rock, ballast, gravel base, gravel backfill, gravel borrow, riprap, and bituminous surface
18 treatments of all descriptions.
19

20 **Section 4-04, Ballast and Crushed Surfacing**
21 **April 2, 2018**

22 **4-04.3(5) Shaping and Compaction**

23 This section is supplemented with the following new paragraph:

24
25 When using 100% Recycled Concrete Aggregate, the Contractor may submit a written
26 request to use a test point evaluation for compaction acceptance testing in lieu of
27 compacting to 95% of the standard density as determined by the requirements of
28 Section 2-03.3(14)D. The test point evaluation shall be performed in accordance with
29 SOP 738.
30

31 **Section 5-01, Cement Concrete Pavement Rehabilitation**
32 **January 7, 2019**

33 **5-01.2 Materials**

34 The reference for Concrete Patching Material is revised to read:

35
36 Concrete Patching Material, Grout, and Mortar 9-20.1
37

38 **5-01.3(1)A1 Concrete Patching Materials**

39 In this section, each reference to “9-20” is revised to read “9-20.1”.
40

41 **5-01.3(4) Replace Cement Concrete Panel**

42 This section’s content is deleted and replaced with the following new subsections:

43
44 **5-01.3(4)A General**

45 Curing, cold weather work, concrete pavement construction in adjacent lines, and
46 protection of pavement shall meet the requirements of Section 5-05.3(13) through
47 Section 5-05.3(15). The Contractor, at no cost to the Contracting Agency, shall repair
48 any damage to existing pavement caused by the Contractor’s operations.
49

5-01.3(4)B Sawing and Dimensional Requirements

Concrete slabs to be replaced as shown in the Plans or staked by the Engineer shall be at least 6.0 feet long and full width of an existing pavement panel. The portion of the panel to remain in place shall have a minimum dimension of 6 feet in length and full panel width; otherwise the entire panel shall be removed and replaced. There shall be no new joints closer than 3.0 feet to an existing transverse joint or crack. A vertical full depth saw cut is required along all longitudinal joints and at transverse locations and, unless the Engineer allows otherwise, an additional vertical full depth relief saw cut located 12 to 18 inches from and parallel to the initial longitudinal and transverse saw cut locations is also required. Removal of existing cement concrete pavement shall not cause damage to adjacent slabs that are to remain in place. In areas that will be ground, slab replacements shall be performed prior to pavement grinding.

Side forms shall meet the requirements of Section 5-05.3(7)B whenever a sawed full depth vertical face cannot be maintained.

5-01.3(4)C Dowel Bars and Tie Bars

For the half of a dowel bar or tie bar placed in fresh concrete, comply with the requirements of Section 5-05.

For the half of a dowel bar or tie bar placed in hardened concrete, comply with the Standard Plans and the following.

After drilling, secure dowel bars and tie bars into the existing pavement with either an epoxy bonding agent Type I or IV as specified in Section 9-26.1, or a grout Type 2 for non-shrink applications as specified in Section 9-20.3.

Dowel bars shall be placed at the mid depth of the concrete slab, centered over the transverse joint, and parallel to the centerline and to the roadway surface, within the tolerances in the table below. Dowel bars may be adjusted to avoid contact with existing dowel bars in the transverse joint at bridge approach slabs or existing panels provided the adjusted dowel bars meet the tolerances below.

Tie bars shall be placed at the mid depth of the concrete slab, centered over the joint, perpendicular to centerline, and parallel to the roadway surface, within the tolerances in the table below. The horizontal position of tie bars may be adjusted to avoid contact with existing tie bars in the longitudinal joint where panel replacement takes place, provided the adjusted tie bars meet the tolerances below.

Placement Tolerances		
	Dowel Bars	Tie Bars
Vertical: Center of Bar to Center of Slab Depth	± 1.00 inch max	± 1.00 inch max
Dowel Bar Centered Over the Transverse Joint	± 1.00 inch max	N/A
Tie Bar Centered Over the Longitudinal Joint	N/A	± 1.00 inch max
Parallel to Centerline Over the Length of the Dowel Bar	± 0.50 inch max	N/A
Perpendicular to Longitudinal Joint Over the Length of the Tie Bar	N/A	± 1.00 inch max
Parallel to Roadway Surface Over the Length of the Bar	± 0.50 inch max	± 1.00 inch max

1 Dowel bars and tie bars shall be placed according to the Standard Plan when multiple
2 panels are placed. Panels shall be cast separately from the bridge approach slab.
3

4 Dowel bars to be drilled into existing concrete or at a new transverse contraction joint
5 shall have a parting compound, such as curing compound, grease, or other Engineer
6 accepted equal, applied to them prior to placement.
7

8 Clean the drilled holes in accordance with the epoxy or grout manufacturer's
9 instructions. Holes shall be clean and dry at the time of placing the epoxy, or grout and
10 tie bars. Completely fill the void between the tie bar and the outer limits of the drilled
11 hole with epoxy or grout. Use retention rings to prevent leakage of the epoxy or grout
12 and support the tie bar to prevent movement until the epoxy or grout has cured the
13 minimum time recommended by the manufacturer.
14

15 **5-01.3(4)D Foundation Preparation**

16 The Contractor shall smooth the surfacing below the removed panel and compact it to
17 the satisfaction of the Engineer. Crushed surfacing base course, or hot mix asphalt may
18 be needed to bring the surfacing to grade prior to placing the new concrete.
19

20 If the material under the removed panel is uncompactable and the Engineer requires it,
21 the Contractor shall excavate the Subgrade 2 feet, place a soil stabilization construction
22 geotextile meeting the requirements of Section 9-33, and backfill with crushed surfacing
23 base course. This Work may include:
24

- 25 1. Furnishing and hauling crushed surfacing base course to the project site.
- 26 2. Excavating uncompactable material.
- 27 3. Furnishing and placing a soil stabilization construction geotextile.
- 28 4. Backfilling and compacting crushed surfacing base course.
- 29 5. Removing, hauling and restocking any unused crushed surfacing base course.
- 30
- 31
- 32
- 33
- 34

35 **5-01.3(4)E Concrete Finishing**

36 Grade control shall be the responsibility of the Contractor.
37

38 All panels shall be struck off level with the adjacent panels and floated to a smooth
39 surface.
40

41 Final finish texturing shall meet the requirements of Section 5-05.3(11).
42

43 In areas where the Plans do not require grinding, the surface smoothness will be
44 measured with a 10-foot straightedge by the Engineer in accordance with Section 5-
45 05.3(12). If the replacement panel is located in an area that will be ground as part of
46 concrete pavement grinding in accordance with Section 5-01.3(9), the surface
47 smoothness shall be measured, by the Contractor, in conjunction with the smoothness
48 measurement done in accordance with Section 5-01.3(10).
49

50 **5-01.3(4)F Joints**

51 All transverse and longitudinal joints shall be sawed and sealed in accordance with
52 Section 5-05.3(8). The Contractor may use a hand pushed single blade saw for sawing
53 joints.

5-01.3(4)G Cracked Panels

Replacement panels that crack shall be repaired as specified in Section 5-05.3(22) at no cost to the Contracting Agency. When repairing replacement panels that have cracked, epoxy-coated dowel bars meeting the requirements of Section 9-07.5(1) may be substituted for the corrosion resistant dowel bars specified.

5-01.3(4)H Opening to Traffic

Opening to traffic shall meet the requirements of Section 5-05.3(17).

5-01.3(5) Partial Depth Spall Repair

The second sentence of the third paragraph is revised to read:

All sandblasting residue shall be removed.

5-01.3(7) Sealing Existing Concrete Random Cracks

The second sentence of the second paragraph is revised to read:

Immediately prior to sealing, the cracks shall be clean.

5-01.3(8) Sealing Existing Longitudinal and Transverse Joint

The first sentence of the fifth paragraph is revised to read:

Immediately prior to sealing, the cracks shall be clean.

5-01.3(10) Pavement Smoothness

This section is revised to read:

Pavement surface smoothness for cement concrete pavement grinding on this project will include International Roughness Index (IRI) testing. Ride quality will be evaluated using the Mean Roughness Index (MRI) calculated by averaging the IRI data for the left and right wheel path within the section.

Smoothness Testing Equipment and Operator Certification

Use an inertial profiler and operator that meet the requirements of Section 5-05.3(3)E.

Surface Smoothness

Operate the inertial profiler in accordance with AASHTO R 57. Collect two longitudinal traces, one in each wheel path. Collect the control profile at locations designated in Table 2 prior to any pavement rehabilitation Work on the areas to be tested. Collect an acceptance profile at locations designated in Table 2 after completion of all cement concrete pavement grinding on the project. Profiles shall be collected in a continuous pass including areas excluded from pay adjustments. Provide notice to the Engineer a minimum of seven calendar days prior to testing.

Table 2 Locations Requiring MRI Testing	
Travel lanes where cement concrete grinding is shown in the plans	Control profile
Additional locations designated by the Engineer	Control profile

Travel lanes with completed cement concrete pavement grinding	Acceptance profile
Bridges, approach panels and 0.02 miles before and after bridges and approach panels and other excluded areas within lanes requiring testing	Control and acceptance profile
Ramps, Shoulders and Tapers	Do not test

Within 30 calendar days after the Contractor's testing, the Engineer may perform verification testing. If the verification testing shows a difference in MRI greater than the 10 percent, the following resolution process will be followed:

1. The profiles, equipment and procedures will be evaluated to determine the cause of the difference.
2. If the cause of the discrepancy cannot be resolved the pavement shall be retested with both profilers at a mutually agreed time. The two profilers will test the section within 30 minutes of each other. If the retest shows a difference in MRI equal or greater than the percentages shown in Table 2 of AASHTO R 54 the Engineer's test results will be used for pavement smoothness acceptance.

The Contractor shall evaluate profiles for acceptance or corrective action using the current version of ProVAL and provide the results including the profile data in unfiltered electronic Engineering Research Division (ERD) file format to the Engineer within 3 calendar days of completing each days profile testing. If the profile data files are created using an export option in the manufacturer's software where filter settings can be specified, use the filter settings that were used to create data files for certification.

Analyze the entire profile. Exclude areas listed in Table 3.

Table 3	
Areas Excluded from MRI Acceptance Requirements	
Location	Exclude
Beginning and end of grinding	Pavement within 0.02 mile
Bridges and approach slabs	The bridge and approach slab and 0.02 mile from the ends of the bridge or approach slab
Defects in the existing roadway identified by the Contractor that adversely affect the MRI such as dips, depressions and wheel path longitudinal joints. ¹	0.01-mile section containing the defect and the 0.01-mile section following the section with the defect.
¹ The presence of defects is subject to verification by the Engineer	

Report the MRI results in inches per mile for each 0.01-mile section and each 0.10-mile section. Do not truncate 0.10-mile sections for areas excluded from MRI acceptance requirements. MRI requirements will not apply to 0.10-mile sections with more than three 0.01 mile-sections excluded. MRI requirements for the individual 0.01-mile sections shall still apply. The Engineer will verify the analysis.

The MRI for each 0.10 mile of ground lane will comply with the following:

Control Profile MRI per 0.10 Mile	Maximum MRI of Acceptance Profile per 0.10 Mile
≤130 inches/mile	78 inches/mile
>130 inches/mile	0.6 x Control Profile MRI

The MRI for each 0.01 mile of the completed cement concrete grinding shall not exceed 160 inches/mile.

All Work is subject to parallel and transverse 10-foot straightedge requirements, corrective work and disincentive adjustments.

Surface smoothness of travel lanes including areas subject to MRI testing shall not vary more than 1/8 inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.

The smoothness perpendicular to the centerline will be measured with a 10-foot straightedge within the lanes. There shall be not vertical elevation difference of more than a 1/4 inch between lanes.

Pavement that does not meet these requirements will be subject to corrective Work. All corrective Work shall be completed at no additional expense, including traffic control, to the Contracting Agency. Pavement shall be repaired by one or more of the following methods:

1. Diamond grinding.
2. By other method accepted by the Engineer.

Repair areas shall be re-profiled to ensure they no longer require corrective Work. With concurrence of the Engineer, a 10-foot straight edge may be used in place of the inertial profiler.

If correction of the roadway as listed above either will not or does not produce satisfactory results as to smoothness or serviceability the Engineer may accept the completed pavement and a credit will be calculated in accordance with Section 5-01.5. Under these circumstances, the decision whether to accept the completed pavement or to require corrective work as described above shall be vested entirely in the Engineer.

5-01.5 Payment

This section is supplemented with the following:

“Grinding Smoothness Compliance Adjustment”, by calculation.
Grinding Smoothness Compliance Adjustments will be based on the requirements in Section 5-01.3(10) and the following calculations:

A smoothness compliance adjustment will be calculated in the sum of minus \$100 for each and every section of single traffic lane 0.01 mile in length and \$1,000 for each and every section of single traffic lane 0.10 mile in length that does not meet the requirements in Section 5-01.3(10) after corrective Work.

Section 5-02, Bituminous Surface Treatment

April 1, 2019

5-02.3(5) Application of Aggregates

The first sentence of the eleventh paragraph is revised to read:

The Contractor shall use a pickup broom in all curbed areas, on all bridges, within city limits, within sensitive areas, and where shown in the Plans both before the application of emulsified asphalt and during the final brooming operation.

Section 5-04, Hot Mix Asphalt

April 1, 2019

5-04.1 Description

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

The manufacture of HMA may include additives or processes that reduce the optimum mixing temperature (Warm Mix Asphalt) or serve as a compaction aid in accordance with these Specifications.

5-04.2 Materials

The reference to "Warm Mix Asphalt Additive" is revised to read "HMA Additive".

5-04.2(1) How to Get an HMA Mix Design on the QPL

The last bullet in the first paragraph is revised to read:

- Do not include HMA additives that reduce the optimum mixing temperature or serve as a compaction aid when developing a mix design or submitting a mix design for QPL evaluation. The use of HMA additives is not part of the process for obtaining approval for listing a mix design on the QPL. Refer to Section 5-04.2(2)B.

In the table, "WSDOT Standard Practice QC-8" is revised to read "WSDOT Standard Practice QC-8 located in the WSDOT Materials Manual M 46-01".

5-04.2(1)C Mix Design Resubmittal for QPL Approval

Item number 3 of the first paragraph is revised to read:

3. Changes in modifiers used in the asphalt binder.

5-04.2(2)B Using Warm Mix Asphalt Processes

This section, including title, is revised to read:

5-04.2(2)B Using HMA Additives

The Contractor may, at the Contractor's discretion, elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature in accordance with Section 5-04.3(6) in the production of High RAP/Any RAS mixtures.

- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3(3)A Mixing Plant

Item number 5 of the first paragraph is revised to read:

5. Provide HMA sampling equipment that complies with FOP for AASHTO T 168:

- Use a mechanical sampling device accepted by the Engineer, or
- Platforms or devices to enable sampling from the truck transport without entering the truck transport for sampling HMA.

5-04.3(4) Preparation of Existing Paved Surfaces

The first sentence of the fourth paragraph is revised to read:

Unless otherwise allowed by the Engineer, use cationic emulsified asphalt CSS-1, CSS-1h, or Performance Graded (PG) asphalt for tack coat.

5-04.3(6) Mixing

The first paragraph is revised to read:

The asphalt supplier shall introduce recycling agent and anti-stripping additive, in the amount designated on the QPL for the mix design, into the asphalt binder prior to shipment to the asphalt mixing plant.

The seventh paragraph is revised to read:

Upon discharge from the mixer, ensure that the temperature of the HMA does not exceed the optimum mixing temperature shown on the accepted Mix Design Report by more than 25°F, or as allowed by the Engineer. When an additive is included in the manufacture of HMA, do not heat the additive (at any stage of production including in binder storage tanks) to a temperature higher than the maximum recommended by the manufacturer of the additive.

5-04.3(7) Spreading and Finishing

The last row of the table is revised to read:

$\frac{3}{8}$ inch	0.25 feet	0.30 feet
--------------------	-----------	-----------

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

The following new paragraph is inserted after the first paragraph:

The Contracting Agency's combined aggregate bulk specific gravity (Gsb) blend as shown on the HMA Mix Design will be used for VMA calculations until the Contractor submits a written request for a Gsb test. The new Gsb will be used in the VMA calculations for HMA from the date the Engineer receives the written request for a Gsb retest. The Contractor may request aggregate specific gravity (Gsb) testing be performed by the Contracting Agency twice per project. The Gsb blend of the combined stockpiles will be used to calculate voids in mineral aggregate (VMA) of any HMA produced after the new Gsb is determined.

5-04.3(9)A1 Test Section – When Required, When to Stop

The following new row is inserted after the second row in Table 9:

VMA	Minimum PF _i of 0.95 based on the criteria in Section 5-04.3(9)B4 ²	None ⁴
-----	---	-------------------

5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section

In Table 9a, the test property “Gradation, Asphalt Binder, and V_a” is revised to read “Gradation, Asphalt Binder, VMA, and V_a”

In Table 9a, the first column of the third row is revised to read:

Aggregates: Sand Equivalent Uncompacted Void Content Fracture
--

5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing

In Table 11, “V_a” is revised to read “VMA and V_a”

5-04.3(9)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)

The following new row is inserted above the last row in Table 12:

Voids in Mineral Aggregate (VMA)	2
-------------------------------------	---

5-04.3(9)B7 Mixture Statistical Evaluation – Retests

The second to last sentence is revised to read:

The sample will be tested for a complete gradation analysis, asphalt binder content, VMA and V_a, and the results of the retest will be used for the acceptance of the HMA mixture in place of the original mixture subplot sample test results.

5-04.3(10)A HMA Compaction – General Compaction Requirements

The last paragraph is revised to read:

On bridge decks and on roadway approaches within five feet of a bridge/back of pavement seat, rollers shall not be operated in a vibratory mode, defined as a mode in which the drum vibrates vertically. However, unless otherwise noted on the plans, rollers may be operated in an oscillatory mode, defined as a mode in which the drum vibrates in the horizontal direction only.

5-04.3(10)C1 HMA Compaction Statistical Evaluation – Lots and Sublots

The bulleted item in the fourth paragraph is revised to read:

- For a compaction lot in progress with a compaction CPF less than 0.75 using an LSL = 91.5, a new compaction lot will begin at the Contractor’s request after the Engineer is satisfied that material conforming to the Specifications can be produced. See also Section 5-04.3(11)F.

5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing

In the table, “WSDOT FOP for AASHTO T 355” is revised to read “FOP for AASHTO T 355”.

5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments

In the first paragraph, “WSDOT FOP for AASHTO T 355” is revised to read “FOP for AASHTO T 355”.

The first sentence in the second paragraph is revised to read:

For each HMA compaction lot (that is accepted by Statistical Evaluation) which does not meet the criteria in the preceding paragraph, the compaction lot shall be evaluated in accordance with Section 1-06.2(2)D5 to determine the appropriate Composite Pay Factor (CPF).

The last two paragraphs are revised to read:

Determine the Compaction Price Adjustment (CPA) from the table below, selecting the equation for CPA that corresponds to the value of CPF determined above.

Calculating HMA Compaction Price Adjustment (CPA)	
Value of CPF	Equation for Calculating CPA
When CPF > 1.00	$CPA = [1.00 \times (CPF - 1.00)] \times Q \times UP$
When CPF = 1.00	CPA = \$0
When CPF < 1.0	$CPA = [0.60 \times (CPF - 1.00)] \times Q \times UP$

Where

CPA = Compaction Price Adjustment for the compaction lot (\$)

CPF = Composite Pay Factor for the compaction lot (maximum is 1.05)

Q = Quantity in the compaction lot (tons)

UP = Unit price of the HMA in the compaction lot (\$/ton)

5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting

The first sentence is revised to read:

For a compaction subplot that has been tested with a nuclear density gauge that did not meet the minimum of 91.5 percent of the theoretical maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core, taken at the same location as the nuclear density test, be used for determination of the relative density of the compaction subplot.

5-04.3(13) Surface Smoothness

The second to last paragraph is revised to read:

When concrete pavement is to be placed on HMA, the surface tolerance of the HMA shall be such that no surface elevation lies above the Plan grade minus the specified Plan depth of concrete pavement. Prior to placing the concrete pavement, bring any such irregularities to the required tolerance by grinding or other means allowed by the Engineer.

1 **5-04.5 Payment**

2 The paragraph following the Bid item "Crack Sealing-LF", per linear foot is revised to read:

3
4 The unit Contract price per linear foot for "Crack Sealing-LF" shall be full payment for all
5 costs incurred to perform the Work described in Section 5-04.3(4)A.
6

7 **Section 5-05, Cement Concrete Pavement**

8 **April 1, 2019**

9 **5-05.1 Description**

10 In the first paragraph, "portland cement concrete" is revised to read "cement concrete".
11

12 **5-05.2 Materials**

13 In the first paragraph, the reference to "Portland Cement" is revised to read:

14
15 Cement 9-01
16

17 In the first paragraph, the section reference for Concrete Patching Material is revised to read
18 "9-20.1".
19

20 The second paragraph is revised to read:

21
22 Cementitious materials are considered to be the following: portland cement, blended
23 hydraulic cement, fly ash, ground granulated blast furnace slag and microsilica fume.
24

25 **5-05.3(1) Concrete Mix Design for Paving**

26 The table title in item number 4 is revised to read **Concrete Batch Weights**.

27
28 In item 4a, "Portland Cement" is revised to read "Cement".
29

30 **5-05.3(3)E Smoothness Testing Equipment**

31 This section is revised to read:

32
33 Inertial profilers shall meet all requirements of AASHTO M 328 and be certified in
34 accordance with AASHTO R 56 within the preceding 12 months.
35

36 The inertial profiler operator shall be certified as required by AASHTO R 56 within three
37 years preceding profile measurement.
38

39 Equipment or operator certification by other states or a profiler certification facility will be
40 accepted provided the certification meets the requirements of AASHTO R 56.

41 Documentation verifying certification by another state shall be submitted to the Engineer
42 a minimum of 14 calendar days prior to profile measurement. Equipment certification
43 documentation shall include the information required by part 8.5 and 8.6 of AASHTO R
44 56. Operator documentation shall include a statement from the certifying state that
45 indicates the operator is certified to operate the inertial profiler to be used on the project.
46 The decision whether another state's certification meets the requirements of AASHTO R
47 56 shall be vested entirely in the Engineer.
48

49 **5-05.3(4) Measuring and Batching Materials**

50 Item number 2 is revised to read:
51

- 1 2. **Batching Materials** – On all projects requiring more than 2,500 cubic yards of
2 concrete for paving, the batching plant shall be equipped to proportion aggregates
3 and cement by weight by means of automatic and interlocked proportioning devices
4 of accepted type.
5

6 **5-05.3(4)A Acceptance of Portland Cement Concrete Pavement**

7 This section's title is revised to read:

8
9 **Acceptance of Portland Cement or Blended Hydraulic Cement Concrete Pavement**

10
11 The first sentence is revised to read:

12
13 Acceptance of portland cement or blended hydraulic cement concrete pavement shall be
14 as provided under statistical or nonstatistical acceptance.
15

16 **5-05.3(7) Placing, Spreading, and Compacting Concrete**

17 This section's content is deleted.
18

19 **5-05.3(10) Tie Bars and Corrosion Resistant Dowel Bars**

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

21
22 The tie bar holes shall be clean before grouting.
23

24 **5-05.3(12) Surface Smoothness**

25 This section is revised to read:

26
27 Pavement surface smoothness for this project will include International Roughness
28 Index (IRI) testing. The Contractor shall perform IRI testing on each through lane,
29 climbing lane, and passing lane, greater than 0.25 mile in length and these lanes will be
30 subject to incentive/disincentive adjustments. Ride quality will be evaluated using the
31 Mean Roughness Index (MRI) calculated by averaging the IRI data for the left and right
32 wheel path within the section.
33

34 Ramps, shoulders and tapers will not be included in MRI testing for pavement
35 smoothness and will not be subject to incentive adjustments. All Work is subject to
36 parallel and transverse 10-foot straightedge requirements, corrective work and
37 disincentive adjustments.
38

39 Operate the inertial profiler in accordance with AASHTO R 57. Collect two longitudinal
40 traces, one in each wheel path. Collect profile data after completion of all concrete
41 paving on the project in a continuous pass including areas excluded from pay
42 adjustments. Provide notice to the Engineer a minimum of seven calendar days prior to
43 testing.
44

45 Within 30 calendar days after the Contractor's testing, the Engineer may perform
46 verification testing. If the verification testing shows a difference in MRI greater than the
47 percentages shown in Table 2 of AASHTO R 54 the following resolution process will be
48 followed:
49

- 50 1. The profiles, equipment and procedures will be evaluated to determine the
51 cause of the difference.
52

2. If the cause of the discrepancy cannot be resolved the pavement shall be retested with both profilers at a mutually agreed time. The two profilers will test the section within 30 minutes of each other. If the retest shows a difference in MRI equal or greater than the percentages shown in Table 2 of AASHTO R 54 the Engineer's test results will be used to establish pay adjustments.

Surface smoothness of travel lanes not subject to MRI testing will be measured with a 10-foot straightedge no later than 5:00 p.m. of the day following the placing of the concrete. The completed surface of the wearing course shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.

Smoothness perpendicular to the centerline will be measured with a 10-foot straightedge across all lanes with the same cross slope, including shoulders when composed of cement concrete pavement. The overlapping 10-foot straightedge measurement shall be discontinued at a point 6 inches from the most extreme outside edge of the finished cement concrete pavement. The completed surface of the wearing course shall not vary more than $\frac{1}{4}$ inch from the lower edge of a 10-foot straightedge placed on the surface perpendicular to the centerline. Any deviations in excess of the above tolerances shall be corrected.

The Contractor shall evaluate profiles for acceptance, incentive payments, disincentive payments, or corrective action using the current version of ProVAL and provide the results including the profile data in unfiltered electronic Engineering Research Division (ERD) file format to the Engineer within 2 calendar days of completing testing each section of pavement. If the profile data files are created using an export option in the manufacturer's software where filter settings can be specified, use the filter settings that were used to create data files for certification. Analyze the entire profile. Exclude any areas specifically identified in the Contract. Exclude from the analysis the first 100 feet after the start of the paving operations and last 100 feet prior to the end of the paving operation, the first 100 feet on either side of bridge Structures and bridge approach slab. Report the MRI results in inches per mile for each 52.8 foot section and horizontal distance measurements in project stationing to the nearest foot. Include pay adjustments in the results. The Engineer will verify the analysis.

Corrective work for pavement smoothness may be taken by the Contractor prior to MRI testing. After completion of the MRI testing the Contractor shall measure the smoothness of each 52.8-foot section with an MRI greater than 125 inches per mile with a 10-foot straightedge within 14 calendar days or as allowed by the Engineer. The Contractor shall identify all locations that require corrective work and provide the straight edge measurements at each location that exceeds the allowable limit to the Engineer. If all measurements in a 52.8-foot section comply with smoothness requirements, the Contractor shall provide the maximum measurement to the Engineer and a statement that corrective work is not required. Unless allowed by the Engineer, corrective work shall be taken by the Contractor for pavement identified by the Contractor or Engineer that does not meet the following requirements:

1. The completed surface shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds.
2. The completed surface shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.

- 1 3. The completed surface shall vary not more than ¼ inch in 10 feet from the rate
2 of transverse slope shown in the Plans.
3

4 All corrective work shall be completed at no additional expense, including traffic control,
5 to the Contracting Agency. Corrective work shall not begin until the concrete has
6 reached its design strength unless allowed by the Engineer. Pavement shall be repaired
7 by one or more of the following methods:
8

- 9 1. Diamond grinding; repairs shall not reduce pavement thickness by more than ¼
10 inch less than the thickness shown in the Plans. When required by the
11 Engineer, the Contractor shall verify the thickness of the concrete pavement by
12 coring. Thickness reduction due to corrective work will not be included in
13 thickness measurements for calculating the Thickness Deficiency in Section 5-
14 05.5(1)A.
15
16 2. Removal and replacement of the cement concrete pavement.
17
18 3. By other method allowed by the Engineer.
19

20 For repairs following MRI testing the repaired area shall be checked by the Contractor
21 with a 10-foot straightedge to ensure it no longer requires corrective work. With
22 concurrence of the Engineer an inertial profiler may be used in place of the 10-foot
23 straight edge.
24

25 If correction of the roadway as listed above either will not or does not produce
26 satisfactory results as to smoothness or serviceability the Engineer may accept the
27 completed pavement and a credit will be calculated in accordance with Section 5-05.5.
28 The credit will be in addition to the price adjustment for MRI. Under these
29 circumstances, the decision whether to accept the completed pavement or to require
30 corrective work as described above shall be vested entirely in the Engineer.
31

32 **5-05.3(22) Repair of Defective Pavement Slabs**

33 The last sentence of the fourth paragraph is revised to read:
34

35 All sandblasting residue shall be removed.
36

37 **5-05.4 Measurement**

38 Item number 3 of the second paragraph is revised to read:
39

- 40 3. The depth shall be determined in accordance with Section 5-05.5(1). The depth
41 utilized to calculate the volume shall not exceed the Plan depth plus 0.04 feet.
42

43 The third paragraph is revised to read:
44

45 The volume of cement concrete pavement in each thickness lot shall equal the
46 measured length × width × thickness measurement.
47

48 The last paragraph is revised to read:
49

50 The calculation for cement concrete compliance adjustment is the volume of concrete
51 represented by the CPF and the Thickness deficiency adjustment.
52

5-05.5 Payment

The paragraph following the Bid item "Cement Conc. Pavement", per cubic yard is supplemented with the following:

All costs associated with performing the magnetic pulse induction thickness testing shall be included in the unit Contract price per cubic yard for "Cement Conc. Pavement".

The Bid item "Ride Smoothness Compliance Adjustment", by calculation, and the paragraph following this bid item are revised to read:

"Ride Smoothness Compliance Adjustment", by calculation.

Smoothness Compliance Adjustments will be based on the requirements in Section 5-05.3(12) and the following calculations:

1. Final MRI acceptance and incentive/disincentive payments for pavement smoothness will be calculated as the average of the ten 52.8-foot sections in each 528 feet in accordance with the price adjustment schedule.
 - a. For sections of a lane that are a minimum of 52.8 feet and less than 528 feet, the price adjustment will be calculated using the average of the 52.8 foot MRI values and the price adjustment prorated for the length of the section.
 - b. MRI values per 52.8-feet that were measured prior to corrective work will be included in the 528 foot price adjustment for sections with corrective work.
2. In addition to the price adjustment for MRI a smoothness compliance adjustment will be calculated in the sum of minus \$1000.00 for each and every section of single traffic lane 52.8 feet in length in that does not meet the 10-foot straight edge requirements in Section 5-05.3(12) after corrective Work.

Price Adjustment Schedule

MRI for each 528 ft. section	Pay Adjustment Schedule
in. / mi.	\$ / 0.10 mi.
< 30	2400
30	2400
31	2320
32	2240
33	2160
34	2080
35	2000
36	1920
37	1840
38	1760
39	1680
40	1600
41	1520
42	1440
43	1360

44	1280
45	1200
46	1120
47	1040
48	960
49	880
50	800
51	720
52	640
53	560
54	480
55	400
56	320
57	240
58	160
59	80
60	0
61	0
62	0
63	0
64	0
65	0
66	0
67	0
68	0
69	0
70	0
71	0
72	0
73	0
74	0
75	0
76	-80
77	-160
78	-240
79	-320
80	-400
81	-480
82	-560
83	-640
84	-720
85	-800
86	-880
87	-960
88	-1040
89	-1120
90	-1200
91	-1280
92	-1360
93	-1440
94	-1520

95	-1600
96	-1680
97	-1760
98	-1840
99	-1920
100	-2000
101	-2080
102	-2160
103	-2240
104	-2320
105	-2400
106	-2480
107	-2560
108	-2640
109	-2720
110	-2800
111	-2880
112	-2960
113	-3040
114	-3120
115	-3200
116	-3280
117	-3360
118	-3440
119	-3520
120	-3600
121	-3680
122	-3760
123	-3840
124	-3920
≥125	-4000

The bid item "Portland Cement Concrete Compliance Adjustment", by calculation, and the paragraph following this bid item are revised to read:

"Cement Concrete Compliance Adjustment", by calculation.

Payment for "Cement Concrete Compliance Adjustment" will be calculated by multiplying the unit Contract price for the cement concrete pavement, times the volume for adjustment, times the percent of adjustment determined from the calculated CPF and the Deficiency Adjustment listed in Section 5-05.5(1)A.

5-05.5(1) Pavement Thickness

This section is revised to read:

Cement concrete pavement shall be constructed in accordance with the thickness requirements in the Plans and Specifications. Tolerances allowed for Subgrade construction and other provisions, which may affect thickness, shall not be construed to modify such thickness requirements.

Thickness measurements in each lane paved shall comply with the following:

Thickness Testing of Cement Concrete Pavement	
Thickness Lot Size	15 panels maximum
Thickness test location determined by	Engineer will select testing locations in accordance with WSDOT TM 716 method B.
Sample method	AASHTO T 359
Sample preparation performed by	Contractor provides, places, and secures disks in the presence of the Engineer ¹
Measurement method	AASHTO T 359
Thickness measurement performed by	Contractor, in the presence of the Engineer ²
¹ Reflectors shall be located at within 0.5 feet of the center of the panel. The Contractor shall supply a sufficient number of 300 mm-diameter round reflectors meeting the requirements of AASHTO T 359 to accomplish the required testing.	
² The Contractor shall provide all equipment and materials needed to perform the testing.	

Thickness measurements shall be rounded to the nearest 0.01 foot.

Each thickness test location where the pavement thickness is deficient by more than 0.04 foot, shall be subject to price reduction or corrective action as shown in Table 2.

Table 2 Thickness Deficiency	
0.04' < Thickness Deficiency ≤ 0.06'	10
0.06' < Thickness deficiency ≤ 0.08'	25
Thickness deficiency > 0.08'	Remove and replace the panels or the panels may be accepted with no payment at the discretion of the Engineer.

The price reduction shall be computed by multiplying the percent price reduction in Table 2 by the unit Contract price by the volume of pavement represented by the thickness test lot.

Additional cores may be taken by the Contractor to determine the limits of an area that has a thickness deficiency greater than 0.04 feet. Cores shall be taken at the approximate center of the panel. Only the panels within the limits of the deficiency area as determined by the cores will be subject to a price reduction or corrective action. The cores shall be taken in the presence of the Engineer and delivered to the Engineer for measurement. All costs for the additional cores including filling the core holes with patching material meeting the requirements of Section 9-20 will be the responsibility of the Contractor.

5-05.5(1)A Thickness Deficiency of 0.05 Foot or Less

This section, including title, is revised to read:

5-05.5(1)A Vacant

5-05.5(1)B Thickness Deficiency of More Than 0.05 Foot

This section, including title, is revised to read:

5-05.5(1)B Vacant

1 **Section 6-01, General Requirements for Structures**
2 **January 7, 2019**

3 This section is supplemented with the following new subsections:

4
5 **6-01.16 Repair of Defective Work**

6 **6-01.16(1) General**

7 When using repair procedures that are described elsewhere in the Contract
8 Documents, the Working Drawing submittal requirements of this Section shall not
9 apply to those repairs unless noted otherwise.

10
11 Repair procedures for defective Work shall be submitted as Type 2 Working
12 Drawings. Type 2E Working Drawings shall be submitted when required by the
13 Engineer. As an alternative to submitting Type 2 or 2E Working Drawings, defective
14 Work within the limits of applicability of a pre-approved repair procedure may be
15 repaired using that procedure. Repairs using a pre-approved repair procedure shall
16 be submitted as a Type 1 Working Drawing.

17
18 Pre-approved repair procedures shall consist of the following:

- 19
20
 - The procedures listed in Section 6-01.16(2)
 - For precast concrete, repair procedures in the annual plant approval
21 process documents that have been approved for use by the Contracting
22 Agency.

23
24
25
26 All Working Drawings for repair procedures shall include:

- 27
28
 - A description of the defective Work including location, extent and pictures
 - Materials to be used in the repair. Repairs using manufactured products
29 shall include written manufacturer recommendations for intended uses of
30 the product, surface preparation, mixing, aggregate extension (if
31 applicable), ambient and surface temperature limits, placement methods,
32 finishing and curing.
 - Construction procedures
 - Plan details of the area to be repaired
 - Calculations for Type 2E Working Drawings

33
34
35
36
37
38
39
40
41
42 Material manufacturer's instructions and recommendations shall supersede any
43 conflicting requirements in pre-approved repair procedures.

44
45 The Engineer shall be notified prior to performing any repair procedure and shall be
46 given an opportunity to inspect the repair work being performed.

47
48 **6-01.16(2) Pre-Approved Repair Procedures**

49 **6-01.16(2)A Concrete Spalls and Poor Consolidation (Rock Pockets,**
50 **Honeycombs, Voids, etc.)**

51 This repair shall be limited to the following areas:
52

- Areas that are not on top Roadway surfaces (with or without an overlay) including but not limited to concrete bridge decks, bridge approach slabs or cement concrete pavement
- Areas that are not underwater
- Areas that are not on precast barrier, except for the bottom 4 inches (but not to exceed 1 inch above blockouts)
- Areas that do not affect structural adequacy as determined by the Engineer.

The repair procedure is as follows:

1. Remove all loose and unsound concrete. Impact breakers shall not exceed 15 pounds in weight when removing concrete adjacent to reinforcement or other embedments and shall not exceed 30 pounds in weight otherwise. Operate impact breakers at angles less than 45 degrees as measured from the surface of the concrete to the tool and moving away from the edge of the defective Work. Concrete shall be completely removed from exposed surfaces of existing steel reinforcing bars. If half or more of the circumference of any steel reinforcing bar is exposed, if the reinforcing bar is loose or if the bond to existing concrete is poor then concrete shall be removed at least $\frac{3}{4}$ inch behind the reinforcing bar. Do not damage any existing reinforcement. Stop work and allow the Engineer to inspect the repair area after removing all loose and unsound concrete. Submit a modified repair procedure when required by the Engineer.
2. Square the edges of the repair area by cutting an edge perpendicular to the concrete surface around the repair area. The geometry of the repair perimeter shall minimize the edge length and shall be rectangular with perpendicular edges, avoiding reentrant corners. The depth of the cut shall be a minimum of $\frac{3}{4}$ inch, but shall be reduced if necessary to avoid damaging any reinforcement. For repairs on vertical surfaces, the top edge shall slope up toward the front at a 1-vertical-to-3-horizontal slope.
3. Remove concrete within the repair area to a depth at least matching the cut depth at the edges. Large variations in the depth of removal within short distances shall be avoided. Roughen the concrete surface. The concrete surface should be roughened to at least Concrete Surface Profile (CSP) 5 in accordance with ICRI Guideline No. 310.2R, unless a different CSP is recommended by the patching material manufacturer.
4. Inspect the concrete repair surface for delaminations, debonding, microcracking and voids using hammer tapping or a chain drag. Remove any additional loose or unsound concrete in accordance with steps 1 through 3.
5. Select a patching material in accordance with Section 9-20.2 that is appropriate for the repair location and thickness. The concrete

1 patching material shall be pumpable or self-consolidating as required
2 for the type of placement that suits the repair. The patching material
3 shall have a minimum compressive strength at least equal to the
4 specified compressive strength of the concrete.
5

- 6 6. Prepare the concrete surface and reinforcing steel in accordance with
7 the patching material manufacturer's recommendations. At a
8 minimum, clean the concrete surfaces (including perimeter edges)
9 and reinforcing steel using oil-free abrasive blasting or high-pressure
10 (minimum 5,000 psi) water blasting. All dirt, dust, loose particles, rust,
11 laitance, oil, film, microcracked/bruised concrete or foreign material of
12 any sort shall be removed. Damage to the epoxy coating on steel
13 reinforcing bars shall be repaired in accordance with Section 6-
14 02.3(24)H.
15
16 7. Construct forms if necessary, such as for patching vertical or
17 overhead surfaces or where patching extends to the edge or corner of
18 a placement.
19
20 8. When recommended by the patching material manufacturer, saturate
21 the concrete in the repair area and remove any free water at the
22 concrete surface to obtain a saturated surface dry (SSD) substrate.
23 When recommended by the patching material manufacturer, apply a
24 primer, scrub coat or bonding agent to the existing surfaces. Epoxy
25 bonding agents, if used, shall be Type II or Type V in accordance with
26 Section 9-26.1.
27
28 9. Place and consolidate the patching material in accordance with the
29 manufacturer's recommendations. Work the material firmly into all
30 surfaces of the repair area with sufficient pressure to achieve proper
31 bond to the concrete.
32
33 10. The patching material shall be textured, cured and finished in
34 accordance with the patching material manufacturer's
35 recommendations and/or the requirements for the repaired
36 component. Protect the newly placed patch from vibration in
37 accordance with Section 6-02.3(6)D.
38
39 11. When the completed repair does not match the existing concrete color
40 and will be visible to the public, a sand and cement mixture that is
41 color matched to the existing concrete shall be rubbed, brushed, or
42 applied to the surface of the patching material and the concrete.
43

44 **6-01.10 Utilities Supported by or Attached to Bridges**

45 In the third paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".
46

47 **6-01.12 Final Cleanup**

48 The second sentence of the first paragraph is revised to read:
49

50 Structure decks shall be clean.
51

52 The second paragraph is deleted.
53

Section 6-02, Concrete Structures

April 1, 2019

6-02.1 Description

The first sentence is revised to read:

This Work consists of the construction of all Structures (and their parts) made of portland cement or blended hydraulic cement concrete with or without reinforcement, including bridge approach slabs.

6-02.2 Materials

In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:

Cement	9-01
Aggregates for Concrete	9-03.1

The reference to metakaolin is deleted.

6-02.3(2) Proportioning Materials

The second paragraph is revised to read:

Unless otherwise specified, the Contractor shall use Type I or II portland cement or blended hydraulic cement in all concrete as defined in Section 9-01.2(1).

The last sentence of the fifth paragraph is revised to read:

With the Engineer's written concurrence, microsilica fume may be used in all classifications of Class 4000, Class 3000, and commercial concrete and is limited to a maximum of 10 percent of the cementitious material.

6-02.3(2)A Contractor Mix Design

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

For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 7.5 percent for all concrete placed above the finished ground line unless noted otherwise.

6-02.3(2)A1 Contractor Mix Design for Concrete Class 4000D

Item number 5 of the first paragraph is deleted.

Item number 6 of the first paragraph (after the preceding Amendment is applied) is renumbered to 5.

6-02.3(2)B Commercial Concrete

The second paragraph is revised to read:

Where concrete Class 3000 is specified for items such as, culvert headwalls, plugging culverts, concrete pipe collars, pipe anchors, monument cases, Type PPB, PS, I, FB and RM signal standards, pedestals, cabinet bases, guardrail anchors, fence post footings, sidewalks, concrete curbs, curbs and gutters, and gutters, the Contractor may use commercial concrete. If commercial concrete is used for sidewalks, concrete curbs,

1 curbs and gutters, and gutters, it shall have a minimum cementitious material content of
2 564 pounds per cubic yard of concrete, shall be air entrained, and the tolerances of
3 Section 6-02.3(5)C shall apply.
4

5 **6-02.3(4) Ready-Mix Concrete**

6 The first sentence of the first paragraph is revised to read:
7

8 All concrete, except lean concrete, shall be batched in a prequalified manual, semi-
9 automatic, or automatic plant as described in Section 6-02.3(4)A.
10

11 **6-02.3(4)D Temperature and Time For Placement**

12 The following is inserted after the first sentence of the first paragraph:
13

14 The upper temperature limit for placement for Class 4000D concrete may be increased
15 to a maximum of 80°F if allowed by the Engineer.
16

17 **6-02.3(5)C Conformance to Mix Design**

18 Item number 1 of the second paragraph is revised to read:
19

- 20 1. Cement weight plus 5 percent or minus 1 percent of that specified in the mix design.
21

22 **6-02.3(6)A1 Hot Weather Protection**

23 The first paragraph is revised to read:
24

25 The Contractor shall provide concrete within the specified temperature limits. Cooling of
26 the coarse aggregate piles by sprinkling with water is permitted provided the moisture
27 content is monitored, the mixing water is adjusted for the free water in the aggregate and
28 the coarse aggregate is removed from at least 1 foot above the bottom of the pile.
29 Sprinkling of fine aggregate piles with water is not allowed. Refrigerating mixing water or
30 replacing all or part of the mixing water with crushed ice is permitted, provided the ice is
31 completely melted by placing time.
32

33 The second sentence of the second paragraph is revised to read:
34

35 These surfaces include forms, reinforcing steel, steel beam flanges, and any others that
36 touch the concrete.
37

38 **6-02.3(7) Vacant**

39 This section, including title, is revised to read:
40

41 **6-02.3(7) Tolerances**

42 Unless noted otherwise, concrete construction tolerances shall be in accordance with
43 this section. Tolerances in this section do not apply to cement concrete pavement.
44

45 Horizontal deviation of roadway crown points, cross-slope break points, and curb, barrier
46 or railing edges from alignment or work line: ± 1.0 inch
47

48 Deviation from plane: ± 0.5 inch in 10 feet
49

50 Deviation from plane for roadway surfaces: ± 0.25 inch in 10 feet
51

Deviation from plumb or specified batter: ± 0.5 inch in 10 feet, but not to exceed a total of ± 1.5 inches

Vertical deviation from profile grade for roadway surfaces: ± 1 inch

Vertical deviation of top surfaces (except roadway surfaces): ± 0.75 inch

Thickness of bridge decks and other structural slabs not at grade: ± 0.25 inch

Length, width and thickness of elements such as columns, beams, crossbeams, diaphragms, corbels, piers, abutments and walls, including dimensions to construction joints in initial placements: $+0.5$ inch, -0.25 inch

Length, width and thickness of spread footing foundations: $+2$ inches, -0.5 inch

Horizontal location of the as-placed edge of spread footing foundations: The greater of $\pm 2\%$ of the horizontal dimension of the foundation perpendicular to the edge and ± 0.5 inch. However, the tolerance shall not exceed ± 2 inches.

Location of opening, insert or embedded item at concrete surface: ± 0.5 inch

Cross-sectional dimensions of opening: ± 0.5 inch

Bridge deck, bridge approach slab, and bridge traffic barrier expansion joint gaps with a specified temperature range, measured at a stable temperature: ± 0.25 inch

Horizontal deviation of centerline of bearing pad, oak block or other bearing assembly: ± 0.125 inch

Horizontal deviation of centerline of supported element from centerline of bearing pad, oak block or other bearing assembly ± 0.25 inch

Vertical deviation of top of bearing pad, oak block or other bearing assembly: ± 0.125 inch

6-02.3(10)C Finishing Equipment

The first paragraph is revised to read:

The finishing machine shall be self-propelled and be capable of forward and reverse movement under positive control. The finishing machine shall be equipped with augers and a rotating cylindrical single or double drum screed. The finishing machine shall have the necessary adjustments to produce the required cross section, line, and grade. The finishing machine shall be capable of raising the screeds, augers, and any other parts of the finishing mechanical operation to clear the screeded surface, and returning to the specified grade under positive control. Unless otherwise allowed by the Engineer, a finishing machine manufacturer technical representative shall be on site to assist the first use of the machine on the Contract.

The first sentence of the second paragraph is revised to read:

For bridge deck widening of 20 feet or less, and for bridge approach slabs, or where jobsite conditions do not allow the use of the conventional configuration finishing machines, or modified conventional machines as described above; the Contractor may

1 submit a Type 2 Working Drawing proposing the use of a hand-operated motorized
2 power screed such as a "Texas" or "Bunyan" screed.

3
4 **6-02.3(10)D4 Monitoring Bridge Deck Concrete Temperature After Placement**

5 This section, including title, is revised to read:

6
7 **6-02.3(10)D4 Vacant**

8
9 **6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing**

10 In the third subparagraph of the first paragraph, the last sentence is revised to read:

11
12 The Contractor shall texture the bridge deck surface to within 3-inches minimum and 24-
13 inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and
14 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of
15 the perimeter of bridge drain assemblies.

16
17 **6-02.3(10)F Bridge Approach Slab Orientation and Anchors**

18 The second to last paragraph is revised to read:

19
20 The compression seal shall be a 2½ inch wide gland and shall conform to Section 9-
21 04.1(4).

22
23 The last paragraph is deleted.

24
25 **6-02.3(13)A Strip Seal Expansion Joint System**

26 In item number 3 of the third paragraph, "Federal Standard 595" is revised to read "SAE AMS
27 Standard 595".

28
29 **6-02.3(13)B Compression Seal Expansion Joint System**

30 The first paragraph is revised to read:

31
32 Compression seal glands shall conform to Section 9-04.1(4) and be sized as shown in
33 the Plans.

34
35 **6-02.3(14)C Pigmented Sealer for Concrete Surfaces**

36 This section is supplemented with the following new paragraph:

37
38 Pigmented Sealer Materials shall be a product listed in the current WSDOT Qualified
39 Products List (QPL). If the pigmented sealer material is not listed in the current WSDOT
40 QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for
41 evaluation and acceptance in accordance with Section 9-08.3.

42
43 **6-02.3(20) Grout for Anchor Bolts and Bridge Bearings**

44 The second, third and fourth paragraphs are revised to read:

45
46 Grout shall be a workable mix with a viscosity that is suitable for the intended
47 application. Grout shall not be placed outside of the manufacturer recommended range
48 of thickness. The Contractor shall receive concurrence from the Engineer before using
49 the grout.

Field grout cubes and cylinders shall be fabricated and tested in accordance with Section 9-20.3 when requested by the Engineer, but not less than once per bridge pier or once per day.

Before placing grout, the substrate on which it is to be placed shall be prepared as recommended by the manufacturer to ensure proper bonding. The grout shall be cured as recommended by the manufacturer. The grout may be loaded when a minimum of 4,000 psi compressive strength is attained.

The fifth paragraph is deleted.

6-02.3(23) Opening to Traffic

This section is supplemented with the following new paragraph:

After curing bridge approach slabs in accordance with Section 6-02.3(11), the bridge approach slabs may be opened to traffic when a minimum compressive strength of 2,500 psi is achieved.

6-02.3(24)C Placing and Fastening

This section is revised to read:

The Contractor shall position reinforcing steel as the Plans require and shall ensure that the steel is set within specified tolerances. Adjustments to reinforcing details outside of specified tolerances to avoid interferences and for other purposes are acceptable when approved by the Engineer.

When spacing between bars is 1 foot or more, they shall be tied at all intersections. When spacing is less than 1 foot, every other intersection shall be tied. If the Plans require bundled bars, they shall be tied together with wires at least every 6 feet. All epoxy-coated bars in the top mat of the bridge deck shall be tied at all intersections, however they may be tied at alternate intersections when spacing is less than 1 foot in each direction and they are supported by continuous supports meeting all other requirements of supports for epoxy-coated bars. Other epoxy-coated bars shall also be tied at all intersections, but shall be tied at alternate intersections when spacing is less than 1 foot in each direction. Wire used for tying epoxy-coated reinforcing steel shall be plastic coated. **Tack welding is not permitted on reinforcing steel.**

Abrupt bends in the steel are permitted only when one steel member bends around another. Vertical stirrups shall pass around main reinforcement or be firmly attached to it.

For slip-formed concrete, the reinforcing steel bars shall be tied at all intersections and cross braced to keep the cage from moving during concrete placement. Cross bracing shall be with additional reinforcing steel. Cross bracing shall be placed both longitudinally and transversely.

After reinforcing steel bars are placed in a traffic or pedestrian barrier and prior to slip-form concrete placement, the Contractor shall check clearances and reinforcing steel bar placement. This check shall be accomplished by using a template or by operating the slip-form machine over the entire length of the traffic or pedestrian barrier. All clearance and reinforcing steel bar placement deficiencies shall be corrected by the Contractor before slip-form concrete placement.

Precast concrete supports (or other accepted devices) shall be used to maintain the concrete coverage required by the Plans. The precast concrete supports shall:

1. Have a bearing surface measuring not greater than 2 inches in either dimension, and
2. Have a compressive strength equal to or greater than that of the concrete in which they are embedded.

In slabs, each precast concrete support shall have either: (1) a grooved top that will hold the reinforcing bar in place, or (2) an embedded wire that protrudes and is tied to the reinforcing steel. If this wire is used around epoxy-coated bars, it shall be coated with plastic.

Precast concrete supports may be accepted based on a Manufacturer's Certificate of Compliance.

In lieu of precast concrete supports, the Contractor may use metal or all-plastic supports to hold uncoated bars. Any surface of a metal support that will not be covered by at least ½ inch of concrete shall be one of the following:

1. Hot-dip galvanized after fabrication in keeping with AASHTO M232 Class D;
2. Coated with plastic firmly bonded to the metal. This plastic shall be at least 3/32 inch thick where it touches the form and shall not react chemically with the concrete when tested in the State Materials Laboratory. The plastic shall not shatter or crack at or above -5°F and shall not deform enough to expose the metal at or below 200°F; or
3. Stainless steel that meet the requirements of ASTM A493, Type 302. Stainless steel chair supports are not required to be galvanized or plastic coated.

In lieu of precast concrete supports, epoxy-coated reinforcing bars may be supported by one of the following:

1. Metal supports coated entirely with a dielectric material such as epoxy or plastic,
2. Other epoxy-coated reinforcing bars, or
3. All-plastic supports.

Damaged coatings on metal bar supports shall be repaired prior to placing concrete.

All-plastic supports shall be lightweight, non-porous, and chemically inert in concrete. All-plastic supports shall have rounded seatings, shall not deform under load during normal temperatures, and shall not shatter or crack under impact loading in cold weather. All-plastic supports shall be placed at spacings greater than 1 foot along the bar and shall have at least 25 percent of their gross place area perforated to compensate for the difference in the coefficient of thermal expansion between plastic and concrete. The shape and configuration of all-plastic supports shall permit complete concrete consolidation in and around the support.

1 A "mat" is two adjacent and perpendicular layers of reinforcing steel. In bridge decks, top
2 and bottom mats shall be supported adequately enough to hold both in their proper
3 positions. If bar supports directly support, or are directly supported on No. 4 bars, they
4 shall be spaced at not more than 3-foot intervals (or not more than 4-foot intervals for
5 bars No. 5 and larger). Wire ties to girder stirrups shall not be considered as supports.
6 To provide a rigid mat, the Contractor shall add other supports and tie wires to the top
7 mat as needed.

8
9 Unless noted otherwise, the minimum concrete cover for main reinforcing bars shall be:

10 3 inches to a concrete surface deposited against earth without intervening forms.

11
12 2½ inches to the top surface of a concrete bridge deck or bridge approach slab.

13
14 2 inches to a concrete surface when not specified otherwise in this section or in the
15 Contract documents.

16
17 1½ inches to a concrete barrier or curb surface.

18
19
20 Except for top cover in bridge decks and bridge approach slabs, minimum concrete
21 cover to ties and stirrups may be reduced by ½ inch but shall not be less than 1 inch.
22 Minimum concrete cover shall also be provided to the outermost part of mechanical
23 splices and headed steel reinforcing bars.

24
25 Reinforcing steel bar location, concrete cover and clearance shall not vary more than the
26 following tolerances from what is specified in the Contract documents:

27
28 Reinforcing bar location for members 12 inches or less in thickness: ±0.25 inch

29
30 Reinforcing bar location for members greater than 12 inches in thickness: ±0.375
31 inch

32
33 Reinforcing bar location for bars placed at equal spacing within a plane: the greater
34 of either ±1 inch or ±1 bar diameter within the plane. The total number of bars shall
35 not be fewer than that specified.

36
37 The clearance between reinforcement shall not be less than the greater of the bar
38 diameter or 1 inch for unbundled bars. For bundled bars, the clearance between
39 bundles shall not be less than the greater of 1 inch or a bar diameter derived from
40 the equivalent total area of all bars in the bundle.

41
42 Longitudinal location of bends and ends of bars: ±1 inch

43
44 Embedded length of bars and length of bar lap splices:

45
46 No. 3 through No. 11: -1 inch

47
48 No. 14 through No. 18: -2 inches

49
50 Concrete cover measured perpendicular to concrete surface (except for the top
51 surface of bridge decks, bridge approach slabs and other roadway surfaces): ±0.25
52 inch
53

Concrete cover measured perpendicular to concrete surface for the top surface of bridge decks, bridge approach slabs and other roadway surfaces: +0.25 inch, -0 inch

Before placing any concrete, the Contractor shall:

1. Clean all mortar from reinforcement, and
2. Obtain the Engineer's permission to place concrete after the Engineer has inspected the placement of the reinforcing steel. (Any concrete placed without the Engineer's permission shall be rejected and removed.)

6-02.3(25)H Finishing

The last paragraph is revised to read:

The Contractor may repair defects in prestressed concrete girders in accordance with Section 6-01.16.

6-02.3(25)I Fabrication Tolerances

Item number 12 of the first paragraph is revised to read:

12. Stirrup Projection from Top of Girder:

Wide flange thin deck and slab girders: $\pm \frac{1}{2}$ inch

All other girders: $\pm \frac{3}{4}$ inch

6-02.3(27) Concrete for Precast Units

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

Type III portland cement or blended hydraulic cement is permitted to be used in precast concrete units.

6-02.3(28)B Casting

In the second paragraph, the reference to Section 6-02.3(25)B is revised to read Section 6-02.3(25)C.

6-02.3(28)D Contractors Control Strength

In the first paragraph, "WSDOT FOP for AASHTO T 23" is revised to read "FOP for AASHTO T 23".

6-02.3(28)E Finishing

This section is supplemented with the following:

The Contractor may repair defects in precast panels in accordance with Section 6-01.16.

Section 6-03, Steel Structures

January 7, 2019

6-03.2 Materials

In the first paragraph, the material reference for Paints is revised to read:

6-03.3(25)A3 Ultrasonic Inspection

The first paragraph (up until the colon) is revised to read:

Complete penetration groove welds on plates 5/16 inch and thicker in the following welded assemblies or Structures shall be 100 percent ultrasonically inspected:

6-03.3(33) Bolted Connections

The first paragraph is supplemented with the following:

After final tightening of the fastener components, the threads of the bolts shall at a minimum be flush with the end of the nut.

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

When galvanized bolts are specified, tension-control galvanized bolts are not permitted.

Section 6-05, Piling

January 2, 2018

6-05.3(9)A Pile Driving Equipment Approval

The fourth sentence of the second paragraph is revised to read:

For prestressed concrete piles, the allowable driving stress in kips per square inch shall be $0.095 \cdot \sqrt{f'_c}$ plus prestress in tension, and $0.85f'_c$ minus prestress in compression, where f'_c is the concrete compressive strength in kips per square inch.

Section 6-07, Painting

January 7, 2019

6-07.1 Description

The first sentence is revised to read:

This work consists of containment, surface preparation, shielding adjacent areas from work, testing and disposing of debris, furnishing and applying paint, and cleaning up after painting is completed.

6-07.2 Materials

The material reference for Paint is revised to read:

Paint and Related Materials 9-08

6-07.3(1)A Work Force Qualifications for Shop Application of Paint

This section is supplemented with the following new sentence:

The work force may be accepted based on the approved facility.

6-07.3(1)B Work Force Qualifications for Field Application of Paint

The first two paragraphs are revised to read:

1 The Contractor preparing the surface and applying the paint shall be certified under
2 SSPC-QP 1 or NACE International Institute Contractor Accreditation Program (NIICAP)
3 AS 1.

4
5 The Contractor removing and otherwise disturbing existing paint containing lead and
6 other hazardous materials shall be certified under SSPC-QP 2, Category A or NIICAP
7 AS 2.

8
9 The third paragraph (up until the colon) is revised to read:

10
11 In lieu of the above SSPC or NIICAP certifications, the Contractor performing the
12 specified work shall complete both of the following actions:

13
14 Item number 2 of the third paragraph is revised to read:

- 15
16 2. The Contractor's quality control inspector(s) for the project shall be NACE-certified
17 CIP Level 3 or SSPC Protective Coating Inspector (PCI) Level 3.

18
19 **6-07.3(2) Submittals**

20 The first paragraph is supplemented with the following:

21
22 Each component of the plan shall identify the specification section it represents.

23
24 **6-07.3(2)B Contractor's Quality Control Program Submittal Component**

25 The numbered list in the first paragraph is revised to read:

- 26
27 1. Description of the inspection procedures, tools, techniques and the acceptance
28 criteria for all phases of work.
29
30 2. Procedure for implementation of corrective action for non-conformance work.
31
32 3. The paint system manufacturer's recommended methods of preventing defects.
33
34 4. The Contractor's frequency of quality control inspection for each phase of work.
35
36 5. Example of each completed form(s) of the daily quality control report used to
37 document the inspection work and tests performed by the Contractor's quality
38 control personnel.

39
40 **6-07.3(2)C Paint System Manufacturer and Paint System Information Submittal**
41 **Component**

42 Item number 1 is revised to read:

- 43
44 1. Product data sheets and Safety Data Sheets (SDS) on the paint materials, paint
45 preparation, and paint application, as specified by the paint manufacturer, including:
46
47 a. All application instructions, including the mixing and thinning directions.
48
49 b. Recommended spray nozzles and pressures.
50
51 c. Minimum and maximum drying time between coats.
52

- d. Restrictions on temperature and humidity.
- e. Repair procedures for shop and field applied coatings.
- f. Maximum dry film thickness for each coat.
- g. Minimum wet film thickness for each coat to achieve the specified minimum dry film thickness.

6-07.3(2)D Hazardous Waste Containment, Collection, Testing, and Disposal Submittal Component

The first paragraph (up until the colon) is revised to read:

The hazardous waste containment, collection, testing, and disposal shall meet all Federal and State requirements, and the submittal component of the painting plan shall include the following:

6-07.3(2)E Cleaning and Surface Preparation Submittal Component

Item 1(b) of the first paragraph is revised to read::

- b. Type, manufacturer, and brand of abrasive blast material and all associated additives, including Safety Data Sheets (SDS).

6-07.3(3)B Quality Control and Quality Assurance for Field Application of Paint

The last sentence of the first paragraph (excluding the numbered list) is revised to read:

The Contractor's quality control operations shall include a minimum monitoring and documenting the following for each working day:

Item number 1 in the fourth paragraph is revised to read:

1. Environmental conditions for painting in accordance with ASTM E 337.

Item number 4 in the fourth paragraph is revised to read:

4. Pictorial of surface preparation guides in accordance with SSPC-VIS 1, 3, 4, and 5.

Item number 5 in the fourth paragraph is revised to read:

5. Surface profile by Keanne-Tator comparator in accordance with ASTM D 4417 and SSPC PA17.

6-07.3(4) Paint System Manufacturer's Technical Representative

This section is revised to read:

The paint system manufacturer's representative shall be present at the jobsite for the pre-painting conference and for the first day of paint application, and shall be available to the Contractor and Contracting Agency for consultation for the full project duration.

6-07.3(5) Pre-Painting Conference

The second paragraph is revised to read:

1 If the Contractor's key personnel change between any work operations, an additional
2 conference shall be held if requested by the Engineer.

3 4 **6-07.3(6)A Paint Containers**

5 In item number 2 of the first paragraph, "Federal Standard 595" is revised to read "SAE AMS
6 Standard 595".

7 8 **6-07.3(6)B Paint Storage**

9 Item number 2 of the second paragraph is revised to read:

- 10
11 2. The Contractor shall monitor and document daily the paint material storage facility
12 with a high-low recording thermometer device.

13 14 **6-07.3(7) Paint Sampling and Testing**

15 The first two paragraphs are revised to read:

16
17 The Contractor shall provide the Engineer 1 quart of each paint representing each lot.
18 Samples shall be accompanied with a Safety Data Sheet.

19
20 If the quantity of paint required for each component of the paint system for the entire
21 project is 20 gallons or less, then the paint system components will be accepted as
22 specified in Section 9-08.1(7).

23 24 **6-07.3(8)A Paint Film Thickness Measurement Gages**

25 The first paragraph is revised to read:

26
27 Paint dry film thickness measurements shall be performed with either a Type 1 pull-off
28 gage or a Type 2 electronic gage as specified in SSPC Paint Application Specification
29 No. 2, Procedure for Determining Conformance to Dry Coating Thickness Requirements.

30 31 **6-07.3(9) Painting New Steel Structures**

32 The last sentence of the second paragraph is revised to read:

33
34 Welded shear connectors are not required to painted.

35
36 The last paragraph is revised to read:

37
38 Temporary attachments or supports for scaffolding, containment or forms shall not
39 damage the paint system.

40 41 **6-07.3(9)A Paint System**

42 The first paragraph is revised to read:

43
44 The paint system applied to new steel surfaces shall consist of the following:

45
46 Option 1 (component based paint system):

47	Primer Coat – Inorganic Zinc Rich	9-08.1(2)C
48	Intermediate Coat – Moisture Cured Polyurethane	9-08.1(2)G
49	Intermediate Stripe Coat – Moisture Cured Polyurethane	9-08.1(2)G
50	Top Coat – Moisture Cured Polyurethane	9-08.1(2)H

Option 2 (performance based paint system):

Primer Coat – Inorganic Zinc Rich	9-08.1(2)M
Intermediate Coat – Epoxy	9-08.1(2)M
Intermediate Stripe Coat – Epoxy	9-08.1(2)M
Top Coat – Polyurethane	9-08.1(2)M

The following new paragraph is inserted after the first paragraph:

Paints and related materials shall be products listed in the current WSDOT Qualified Products List (QPL). Component based paint systems shall be listed on the QPL in the applicable sections of Section 9-08. Performance based systems shall be listed on the current Northeast Protective Coatings Committee (NEPCOAT) Qualified Products List “A” as listed on the WSDOT QPL in Section 9-08.1(2)M. If the paint and related materials for the component based system is not listed in the current WSDOT QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for evaluation and acceptance in accordance with Section 9-08.

6-07.3(9)C Mixing and Thinning Paint

This section is revised to read:

The Contractor shall thoroughly mix paint in accordance with the manufacturer’s written recommendations and by mechanical means to ensure a uniform and lump free composition. Paint shall not be mixed by means of air stream bubbling or boxing. Paint shall be mixed in the original containers and mixing shall continue until all pigment or metallic powder is in suspension. Care shall be taken to ensure that the solid material that has settled to the bottom of the container is thoroughly dispersed. After mixing, the Contractor shall inspect the paint for uniformity and to ensure that no unmixed pigment or lumps are present.

Catalysts, curing agents, hardeners, initiators, or dry metallic powders that are packaged separately may be added to the base paint in accordance with the paint manufacturer’s written recommendations and only after the paint is thoroughly mixed to achieve a uniform mixture with all particles wetted. The Contractor shall then add the proper volume of curing agent to the correct volume of base and mix thoroughly. The mixture shall be used within the pot life specified by the manufacturer. Unused portions shall be discarded at the end of each work day. Accelerants are not permitted except as allowed by the Engineer.

The Contractor shall not add additional thinner at the application site except as allowed by the Engineer. The amount and type of thinner, if allowed, shall conform to the manufacturer’s specifications. If recommended by the manufacturer and allowed by the Engineer, a measuring cup shall be used for the addition of thinner to any paint with graduations in ounces. No un-measured addition of thinner to paint will be allowed. Any paint found to be thinned by unacceptable methods will be rejected.

When recommended by the manufacturer, the Contractor shall constantly agitate paint during application by use of paint pots equipped with mechanical agitators.

The Contractor shall strain all paint after mixing to remove undesirable matter, but without removing the pigment or metallic powder.

Paint shall be stored and mixed in a secure, contained location to eliminate the potential for spills into State waters and onto the ground and highway surfaces.

6-07.3(9)D Coating Thickness

This section is revised to read:

Dry film thickness shall be measured in accordance with SSPC Paint Application Specification No. 2, *Procedure for Determining Conformance to Dry Coating Thickness Requirements*.

The minimum dry film thickness of the primer coat shall not be less than 2.5 mils.

The minimum dry film thickness of each coat (combination of intermediate and intermediate stripe, and top) shall be not less than 3.0 mils.

The dry film thickness of each coat shall not be thicker than the paint manufacturer's recommended maximum thickness.

The minimum wet film thickness of each coat shall be specified by the paint manufacturer to achieve the minimum dry film thickness.

Film thickness, wet and dry, will be measured by gages conforming to Section 6-07.3(8)A.

Wet measurements will be taken immediately after the paint is applied in accordance with ASTM D4414. Dry measurements will be taken after the coating is dry and hard in accordance with SSPC Paint Application Specification No. 2.

Each painter shall be equipped with wet film thickness gages and shall be responsible for performing frequent checks of the paint film thickness throughout application.

Coating thickness measurements may be made by the Engineer after the application of each coat and before the application of the succeeding coat. In addition, the Engineer may inspect for uniform and complete coverage and appearance. One hundred percent of all thickness measurements shall meet or exceed the minimum wet film thickness. In areas where wet film thickness measurements are impractical, dry film thickness measurements may be made. If a question arises about an individual coat's thickness or coverage, it may be verified by the use of a Tooke gage in accordance with ASTM D4138.

If the specified number of coats does not produce a combined dry film thickness of at least the sum of the thicknesses required per coat, if an individual coat does not meet the minimum thickness, or if visual inspection shows incomplete coverage, the coating system will be rejected and the Contractor shall discontinue painting and surface preparation operations and shall submit a Type 2 Working Drawing of the repair proposal. The repair proposal shall include documentation demonstrating the cause of the less-than-minimum thickness, along with physical test results, as necessary, and modifications to Work methods to prevent similar results. The Contractor shall not resume painting or surface preparation operations until receiving the Engineer's acceptance of the completed repair.

6-07.3(9)E Surface Temperature Requirements Prior to Application of Paint

This section, including title, is revised to read:

1
2 **6-07.3(9)E Environmental Condition Requirements Prior to Application of Paint**

3 Paint shall be applied only during periods when:

- 4
5 1. Air and steel temperatures are in accordance with the paint manufacturer's
6 recommendations but in no case less than 35°F nor greater than 115°F.
7
8 2. Steel surface temperature is a minimum of 5°F above the dew point.
9
10 3. Steel surface is not wet.
11
12 4. Relative humidity is within the manufacturer's recommended range.
13
14 5. The anticipated ambient temperature will remain above 35°F or the
15 manufacturer's minimum temperature, whichever is greater, during the paint
16 drying and curing period.
17

18 Application will not be allowed if conditions are not favorable for proper application and
19 performance of the paint.
20

21 Paint shall not be applied when weather conditions are unfavorable to proper curing. If a
22 paint system manufacturer's recommendations allow for application of a paint under
23 environmental conditions other than those specified, the Contractor shall submit a Type
24 2 Working Drawing consisting of a letter from the paint manufacturer specifying the
25 environmental conditions under which the paint can be applied. Application of paint
26 under environmental conditions other than those specified in this section will not be
27 allowed without the Engineer's concurrence.
28
29

30 **6-07.3(9)F Shop Surface Cleaning and Preparation**

31 The last sentence is revised to read:
32

33 The entire steel surface to be painted, including surfaces specified in Section 6-07.3(9)G
34 to receive a mist coat of primer, shall be cleaned to a near white condition in accordance
35 with SSPC-SP 10, *Near-white Metal Blast Cleaning*, and shall be in this condition
36 immediately prior to paint application.
37

38 **6-07.3(9)G Application of Shop Primer Coat**

39 The first paragraph is supplemented with the following:
40

41 Repairs of the shop primer coat shall be prepared in accordance with the painting plan.
42 Shop primer coat repair paint shall be selected from the approved component based or
43 performance based paint system in accordance with Section 6-07.3(10)H.
44

45 **6-07.3(9)H Containment for Field Coating**

46 This section is revised to read:
47

48 The Contractor shall use a containment system in accordance with Section 6-07.3(10)A
49 for surface preparation and prime coating of all uncoated areas remaining, including
50 bolts, nuts, washers, and splice plates.
51

52 During painting operations of the intermediate, stripe and top coats the Contractor shall
53 furnish, install, and maintain drip tarps below the areas to be painted to contain all

1 spilled paint, buckets, brushes, and other deleterious material, and prevent such
2 materials from reaching the environment below or adjacent to the structure being
3 painted. Drip tarps shall be absorbent material and hung to minimize puddling. The
4 Contractor shall evaluate the project-specific conditions to determine the specific type
5 and extent of containment needed to control the paint emissions and shall submit a
6 containment plan in accordance with Section 6-07.3(2).

7 8 **6-07.3(9)I Application of Field Coatings**

9 This section is revised to read:

10
11 An on-site supervisor shall be present for each work shift at the bridge site.

12
13 Upon completion of erection Work, all uncoated or damaged areas remaining, including
14 bolts, nuts, washers, and splice plates, shall be prepared in accordance with Section 6-
15 07.3(9)F, followed by a field primer coat of a zinc-rich primer and final coats of paint
16 selected from the approved component or performance based paint system in
17 accordance with Section 6-07.3(10)H. . The intermediate, intermediate stripe, and top
18 coats shall be applied in accordance with the manufacturer's written recommendations.

19
20 Upon completion of erection Work, welds for steel column jackets may be prepared in
21 accordance with SSPC-SP 15, Commercial Grade Power Tool Cleaning.

22
23 The minimum drying time between coats shall be as shown in the product data sheets,
24 but not less than 12 hours. The Contractor shall determine whether the paint has cured
25 sufficiently for proper application of succeeding coats.

26
27 The maximum time between intermediate and top coats shall be in accordance with the
28 manufacturer's written recommendations. If the maximum time between coats is
29 exceeded, all newly coated surfaces shall be prepared to SSPC-SP 7, *Brush-off Blast*
30 *Cleaning*, and shall be repainted with the same paint that was cleaned, at no additional
31 cost to the Contracting Agency.

32
33 Each coat shall be applied in a uniform layer, completely covering the preceding coat.
34 The Contractor shall correct runs, sags, skips, or other deficiencies before application of
35 succeeding coats. Such corrective work may require re-cleaning, application of
36 additional paint, or other means as determined by the Engineer, at no additional cost to
37 the Contracting Agency.

38
39 Dry film thickness measurements will be made in accordance with Section 6-07.3(9)D.

40
41 All paint damage that occurs shall be repaired in accordance with the manufacturer's
42 written recommendations. On bare areas or areas of insufficient primer thickness, the
43 repair shall include field-applied zinc-rich primer and the final coats of paint selected
44 from the approved component or performance based paint system in accordance with
45 Section 6-07.3(10)H. On areas where the primer is at least equal to the minimum
46 required dry film thickness, the repair shall include the application of the final two coats
47 of the paint system. All paint repair operations shall be performed by the Contractor at
48 no additional cost or time to the Contracting Agency.

49 50 **6-07.3(10)A Containment**

51 The first sentence of the third paragraph is revised to read:
52

Emissions shall be assessed by Visible Emission Observations (Method A) in SSPC Technology Update No. 7, *Conducting Ambient Air, Soil, and Water Sampling of Surface Preparation and Paint Disturbance Activities*, Section 6.2 and shall be limited to the Level A Acceptance Criteria Option Level 0 Emissions standard.

6-07.3(10)D Surface Preparation Prior to Overcoat Painting

The first paragraph is revised to read:

The Contractor shall remove any visible oil, grease, and road tar in accordance with SSPC-SP 1, *Solvent Cleaning*.

The second paragraph is revised to read:

Following any preparation by SSPC-SP1, all steel surfaces to be painted shall be prepared in accordance with SSPC-SP 7, *Brush-off Blast Cleaning*. Surfaces inaccessible to brush-off blast shall be prepared in accordance with SSPC-SP 3, *Power Tool Cleaning*, as allowed by the Engineer.

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

Following brush-off blast cleaning, the Contractor shall perform spot abrasive blast cleaning in accordance with SSPC-SP 6, *Commercial Blast Cleaning*.

The second to last sentence of the third paragraph is revised to read:

For small areas, as allowed by the Engineer, the Contractor may substitute cleaning in accordance with SSPC-SP 15, *Commercial Grade Power Tool Cleaning*.

6-07.3(10)G Treatment of Pack and Rust Gaps

The second paragraph is revised to read:

Pack rust forming a gap between steel surfaces of $\frac{1}{16}$ to $\frac{1}{4}$ inch shall be cleaned to a depth of at least one half of the gap width. The gaps shall be cleaned and prepared in accordance with SSPC-SP6. The cleaned gap shall be treated with rust penetrating sealer, prime coated, and then caulked to form a watertight seal along the top edge and the two sides of the steel pieces involved, using the rust penetrating sealer and caulk as accepted by the Engineer. The bottom edge or lowest edge of the steel pieces involved shall not be caulked.

The third paragraph is supplemented with the following:

Caulk shall be a single-component urethane sealant conforming to Section 9-08.7.

The fifth paragraph is revised to read:

At locations where gaps between steel surfaces exceed $\frac{1}{4}$ inch, the Contractor shall clean and prepare the gap in accordance SSPC-SP6, apply the rust penetrating sealer, apply the prime coat, and then fill the gap with foam backer rod material as accepted by the Engineer. The foam backer rod material shall be of sufficient diameter to fill the crevice or gap. The Contractor shall apply caulk over the foam backer rod material to form a watertight seal.

This section is supplemented with the following new paragraph:

Caulk and backer rod, if needed, shall be placed prior to applying the top coat. The Contractor, with the concurrence of the Engineer, may apply the rust penetrating sealer after application of the prime coat provided the primer is removed in the areas to be sealed. The areas to be sealed shall be re-cleaned and re-prepared in accordance with SSPC-SP6.

6-07.3(10)H Paint System

The first paragraph is revised to read:

The paint system applied to existing steel surfaces shall consist of the following five-coat system:

Option 1 (component based system):

Primer Coat – Zinc-filled Moisture Cured Polyurethane	9-08.1(2)F
Primer Stripe Coat - Moisture Cured Polyurethane	9-08.1(2)F
Intermediate Coat - Moisture Cured Polyurethane	9-08.1(2)G
Intermediate Stripe Coat - Moisture Cured Polyurethane	9-08.1(2)G
Top Coat - Moisture Cured Polyurethane	9-08.1(2)H

Option 2 (performance based system):

Primer Coat – Zinc-rich Epoxy	9-08.1(2)N
Primer Stripe Coat – Epoxy	9-08.1(2)N
Intermediate Coat – Epoxy	9-08.1(2)N
Intermediate Stripe Coat – Epoxy	9-08.1(2)N
Top Coat – Polyurethane	9-08.1(2)N

The following new paragraph is inserted after the first paragraph:

Paints and related materials shall be a product listed in the current WSDOT Qualified Products List (QPL). Component based paint systems shall be listed on the QPL in the applicable sections of Section 9-08. Performance based systems shall be listed on the current Northeast Protective Coatings Committee (NEPCOAT) Qualified Products List "B" as listed on the WSDOT QPL in Section 9-08.1(2)N. If the paint and related material for the component based system is not listed in the current WSDOT QPL, a sample shall be submitted to the State Materials Laboratory in Tumwater for evaluation and acceptance in accordance with Section 9-08.

6-07.3(10)J Mixing and Thinning Paint

This section is revised to read:

Mixing and thinning paint shall be in accordance with Section 6-07.3(9)C.

6-07.3(10)K Coating Thickness

This section is revised to read:

Coating thickness shall be in accordance with Section 6-07.3(9)D except the minimum dry film thickness of each coat (combination of primer and primer stripe, combination of intermediate and intermediate stripe, and top) shall not be less than 3.0 mils.

1 **6-07.3(10)L Environmental Condition Requirements Prior to Application of**
2 **Paint**

3 This section is revised to read:

4
5 Environmental conditions shall be in accordance with Section 6-07.3(9)E.

6
7 **6-07.3(10)M Steel Surface Condition Requirements Prior to Application of Paint**

8 The third paragraph is revised to read:

9
10 Edges of existing paint shall be feathered in accordance with SSPC-PA 1, *Shop, Field,*
11 *and Maintenance Coating of Metals*, Note 15.20.

12
13 **6-07.3(10)N Field Coating Application Methods**

14 The third sentence is revised to read:

15
16 The Contractor may apply stripe coat paint using spray or brush but shall follow spray
17 application using a brush to ensure complete coverage around structural geometric
18 irregularities and to push the paint into gaps between existing steel surfaces and around
19 rivets and bolts.

20
21 **6-07.3(10)O Applying Field Coatings**

22 The second to last paragraph is revised to read:

23
24 Each application of primer, primer stripe, intermediate, intermediate stripe, and top coat
25 shall be considered as separately applied coats. The Contractor shall not use a
26 preceding or subsequent coat to remedy a deficiency in another coat. The Contractor
27 shall apply the top coat to at least the minimum specified top coat thickness, to provide a
28 uniform appearance and consistent finish coverage.

29
30 **6-07.3(10)P Field Coating Repair**

31 The second sentence is revised to read:

32
33 Repair areas shall be cleaned of all damaged paint and the system reapplied using all
34 coats typical to the paint system and shall meet the minimum coating thickness.

35
36 **6-07.3(11)A Painting of Galvanized Surfaces**

37 This section is revised to read:

38
39 All galvanized surfaces receiving paint shall be prepared for painting in accordance with
40 the ASTM D 6386. The method of preparation shall be brush-off in accordance with
41 SSPC-SP16 *Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel,*
42 *Stainless Steels, and Non-Ferrous Metals* or as otherwise allowed by the Engineer. The
43 Contractor shall not begin painting until receiving the Engineer's acceptance of the
44 prepared galvanized surface. For galvanized bolts used for replacement of deteriorated
45 existing rivets, the Contractor, with the concurrence of the Engineer and after successful
46 demonstration testing, may prepare galvanized surfaces in accordance with SSPC-SP1
47 followed by SSPC-SP2, *Hand Tool Cleaning* or SSPC-SP3, *Power Tool Cleaning*. The
48 demonstration testing shall include adhesion testing of the first coat of paint over
49 galvanized bolts, nuts, and washers or a representative galvanized surface. Adhesion
50 testing shall be performed in accordance with ASTM D 4541 for 600 psi minimum
51 adhesion. A minimum of 3 successful tests shall be performed on the galvanized surface

1 prepared and painted using the same methods and materials to be used on the
2 galvanized bolts, nuts and washers in the field.

3 4 **6-07.3(11)A2 Paint Coat Materials**

5 This section is revised to read:

6
7 The Contractor shall paint the dry surface as follows:

- 8
9 1. The first coat over a galvanized surface shall be an epoxy polyamide
10 conforming to Section 9-08.1(2)E . In the case of galvanized bolts used for
11 replacement of deteriorated existing rivets and for small surface areas less
12 than or equal to one square foot, an intermediate moisture cured polyurethane
13 conforming to Section 9-08.1(2)G may be used as a first coat. In both cases
14 the first coat shall be compatible with galvanizing and as recommended by the
15 top coat manufacturer.
- 16
17 2. The second coat shall be a top coat moisture cured aliphatic polyurethane
18 conforming to Section 9-08.1(2)H or a top coat polyurethane conforming to
19 Section 6-07.3(10)H Option 2 NEPCOAT performance based paint
20 specification compatible with the first coat as recommended by the
21 manufacturer.

22
23 Each coat shall be dry before the next coat is applied. All coats applied in the shop shall
24 be dried hard before shipment.

25 26 **6-07.3(11)B Powder Coating of Galvanized Surfaces**

27 This section is revised to read:

28
29 Powder coating of galvanized surfaces shall consist of the following coats:

- 30
31 1. The first coat shall be an epoxy powder primer coat conforming to Section 9-
32 08.2.
- 33
34 2. The second coat shall be a polyester finish coat conforming to Section 9-08.2.

35 36 **6-07.3(11)B3 Galvanized Surface Cleaning and Preparation**

37 The first three paragraphs are revised to read:

38
39 Galvanized surfaces receiving the powder coating shall be cleaned and prepared for
40 coating in accordance with ASTM D 7803, and the project-specific powder coating plan.

41
42 Assemblies conforming to the ASTM D 7803 definition for newly galvanized steel shall
43 receive surface smoothing and surface cleaning in accordance with ASTM D 7803,
44 Section 5, and surface preparation in accordance with ASTM D 7803, Section 5.1.3.

45
46 Assemblies conforming to the ASTM D 7803 definition for partially weathered galvanized
47 steel shall be checked and prepared in accordance with ASTM D 7803, Section 6,
48 before then receiving surface smoothing and surface cleaning in accordance with ASTM
49 D 7803, Section 5, and surface preparation in accordance with ASTM D 7803, Section
50 5.1.3.

51
52 The fourth paragraph (up until the colon) is revised to read:

Assemblies conforming to the ASTM D 7803 definition for weathered galvanized steel shall be prepared in accordance with ASTM D 7803, Section 7 before then receiving surface smoothing and surface cleaning in accordance with ASTM D 7803, Section 5, and surface preparation in accordance with ASTM D 7803, Section 5.3 except as follows:

6-07.3(11)B5 Testing

Item number 4 in the first paragraph is revised to read:

4. Adhesion testing in accordance with ASTM D 4541 for 600 psi minimum adhesion for the complete two-component system.

The second sentence of the fourth paragraph is revised to read:

Rejected assemblies shall be repaired or recoated by the Contractor, at no additional expense to the Contracting Agency, in accordance with the powder coating manufacturer's recommendation as detailed in the project-specific powder coating plan, until the assemblies satisfy the acceptance testing requirements.

6-07.3(12) Painting Ferry Terminal Structures

This section is revised to read:

Painting of ferry terminal Structures shall be in accordance with Section 6-07.3 as supplemented below.

This section is supplemented with the following new subsections:

6-07.3(12)A Painting New Steel Ferry Terminal Structures

Painting of new steel Structures shall be in accordance with Section 6-07.3(9) except that all coatings (primer, intermediate, intermediate stripe, and top) shall be applied in the shop with the following exceptions:

1. Steel surfaces to be field welded.
2. Steel surfaces to be greased.
3. The length of piles designated in the Plans not requiring painting.

The minimum drying time between coats shall be as shown in the product data sheets, but not less than 12 hours. The Contractor shall determine whether the paint has cured sufficiently for proper application of succeeding coats.

6-07.3(12)A1 Paint Systems

Paint systems for Structural Steel, which includes vehicle transfer spans and towers, pedestrian overhead loading structures and towers, upland structural steel and other elements as designated in the Special Provisions shall be as specified in Section 6-07.3(9)A.

Paint systems for Piling, Landing Aids and Life Ladders shall be as specified in the Special Provisions.

6-07.3(12)A2 Paint Color

Paint colors shall be as specified in the Special Provisions.

1
2 **6-07.3(12)A3 Coating Thickness**

3 Coating thicknesses shall be as specified in the Special Provisions.
4

5 **6-07.3(12)A4 Application of Field Coatings**

6 An on-site supervisor shall be present for each work shift at the project site.
7

8 Upon completion of erection Work, all uncoated or damaged areas remaining,
9 including bolts, nuts, washers, splice plates, and field welds shall be prepared in
10 accordance with SSPC-SP 1, Solvent Cleaning, followed by SSPC-SP 11, *Power*
11 *Tool Cleaning to Bare Metal*. Surface preparation shall be measured according to
12 SSPC-VIS 3. SSPC-SP 11 shall be performed for a minimum distance of 1 inch
13 from the uncoated or damaged area. In addition, intact shop-applied coating
14 surrounding the area shall be abraded or sanded for a distance of 6 inches out from
15 the properly prepared clean/bare metal areas to provide adequate roughness for
16 application of field coatings. All sanding dust and contamination shall be removed
17 prior to application of field coatings.
18

19 Field applied paint for Structural Steel shall conform to Section 6-07.3(10)H, as
20 applicable. Field applied paint for Piling, Landing Aids and Life Ladders shall be as
21 specified in the Special Provisions.
22

23 For areas above the tidal zone, the minimum drying time between coats shall be as
24 shown in the product data sheets, but not less than 12 hours. For areas within the
25 tidal zone, the minimum drying time between coats shall be as recommended by
26 the paint system manufacturer. The Contractor shall determine whether the paint
27 has cured sufficiently for proper application of succeeding coats.
28

29 The maximum time between intermediate and top coats shall be in accordance with
30 the manufacturer's written recommendations. If the maximum time between coats is
31 exceeded, all newly coated surfaces shall be prepared to SSPC-SP 3, *Power Tool*
32 *Cleaning*, and shall be repainted with the same paint that was cleaned, at no
33 additional cost to the Contracting Agency.
34

35 Each coat shall be applied in a uniform layer, completely covering the preceding
36 coat. The Contractor shall correct runs, sags, skips, or other deficiencies before
37 application of succeeding coats. Such corrective work may require re-cleaning,
38 application of additional paint, or other means as determined by the Engineer, at no
39 additional cost to the Contracting Agency.
40

41 Surface preparation for underwater locations shall consist of removing all dirt, oil,
42 grease, loose paint, loose rust, and marine growth from the area that is to be
43 repaired. The sound paint surrounding the damaged area shall be roughened to
44 meet the requirements of the manufacturer. Paint for underwater applications shall
45 be as specified in the Special Provisions and shall be applied in accordance with
46 the manufacturer's recommendations.
47

48 **6-07.3(12)B Painting Existing Steel Ferry Terminal Structures**

49 Painting of existing steel structures shall be in accordance with Section 6-07.3(10) as
50 supplemented by the following.
51

1 **6-07.3(12)B1 Containment**

2 Containment for full removal shall be in accordance with Section 6-07.3(10)A.
3 Containment for overcoat systems shall be in accordance with all applicable
4 Permits as required in the Special Provisions.

5
6 Prior to cleaning the Contractor shall enclose all exposed electrical and mechanical
7 equipment to seal out dust, water, and paint. Non-metallic surfaces shall not be
8 abrasive blasted or painted. Unless otherwise specified, the following metallic
9 surfaces shall not be painted and shall be protected from abrasive blasting and
10 painting:

- 11
12 1. Galvanized and stainless steel surfaces not previously painted,
13
14 2. Non-skid surfaces,
15
16 3. Unpainted intentionally greased surfaces,
17
18 4. Equipment labels, identification plates, tags, etc.,
19
20 5. Fire and emergency containers or boxes,
21
22 6. Mechanical hardware such as hoist sheaves, hydraulic cylinders, gear
23 boxes, wire rope, etc.

24
25 The Contractor shall submit a Type 2 Working Drawing consisting of materials and
26 equipment used to shield components specified to not be cleaned and painted.
27 The Contractor shall shut off the power prior to working around electrical
28 equipment. The Contractor shall follow the lock-out/tag-out safety provisions of the
29 WAC 296-803 and all other applicable safety standards.

30
31 **6-07.3(12)B2 Surface Preparation**

32 For applications above high water and within the tidal zone, surface preparation for
33 overcoat painting shall be in accordance with SSPC-SP 1, *Solvent Cleaning*,
34 followed by SSPC-SP 3, *Power Tool Cleaning*. Use of wire brushes is not allowed.
35 After SP 3 cleaning has been completed all surfaces exhibiting coating failure down
36 to the steel substrate, and those exhibiting visible corrosion, shall be prepared down
37 to clean bare steel in accordance with SSPC-SP 15, *Commercial Grade Power*
38 *Tool Cleaning*. Surface preparation shall be measured according to SSPC-VIS 3.
39 SSPC-SP 15 shall be performed for a minimum distance of 1 inch from the area
40 exhibiting failure or visible corrosion. In addition, intact shop-applied coating
41 surrounding the repair area shall be abraded or sanded for a distance of 6 inches
42 out from the properly prepared clean/bare metal areas to provide adequate
43 roughness for application of repair coatings. All sanding dust and contamination
44 shall be removed prior to application of repair coatings. Surface preparation for full
45 paint removal shall be in accordance with Section 6-07.3(10)E except SSPC-SP 11
46 will be permitted as detailed in the Contractor's painting plan and as allowed by the
47 Engineer.

48
49 Surface preparation for underwater locations shall consist of removing all dirt, oil,
50 grease, loose paint, loose rust, and marine growth from the area that is to be
51 repaired. The sound paint surrounding the damaged area shall be roughened as
52 required by the coating manufacturer.
53

1 Removed marine growth may be released to state waters provided the marine
2 growth is not mixed with contaminants (paint, oil, rust, etc.) and it shall not
3 accumulate on the sea bed. All marine growth containing contaminants shall be
4 collected for proper disposal.

5
6 Surface preparation for the underside of bridge decks (consisting of either a steel
7 grid system of main bars or tees and a light gauge metal form, in-filled with concrete
8 or a corrugated light gauge metal form, infilled with concrete) shall be in accordance
9 with SSPC-SP 2, *Hand Tool Cleaning* or SSPC-SP 3, *Power Tool Cleaning* with the
10 intent of not causing further damage to the light gauge metal form. Following
11 removal of any pack rust and corroded sections from the underside of the bridge
12 deck, cleaning and flushing to remove salts and prior to applying the primer coat,
13 the Contractor shall seal the entire underside of the deck system with rust-
14 penetrating sealer. Damage to galvanized metal forms and/or grids shall be
15 repaired in accordance with ASTM A 780, with the preferred method of repair using
16 paints containing zinc dust.

17 18 **6-07.3(12)B3 Paint Systems**

19 Paints systems for Structural Steel, which includes vehicle transfer spans and
20 towers, pedestrian overhead loading structures and towers, upland structural steel
21 and other elements as designated in the Special Provisions shall be as specified in
22 Section 6-07.3(10)H.

23
24 Paint systems for Piling, Landing Aids, Life Ladders, underside of vehicle transfer
25 span bridge decks, non-skid surface treated areas, and anti-graffiti coatings shall be
26 as specified in the Special Provisions.

27 28 **6-07.3(12)B4 Paint Color**

29 Paint colors shall be as specified in the Special Provisions.

30 31 **6-07.3(12)B5 Coating Thickness**

32 Coating thicknesses shall be as specified in the Special Provisions.

33 34 **6-07.3(12)B6 Application of Field Coatings**

35 Application of field coatings shall be in accordance with Section 6-07.3(10)O and
36 Section 6-07.3(12)A2 except for the following:

- 37
38 1. All coatings applied in the field shall be applied using a brush or roller.
39 Spray application methods may be used if allowed by the Engineer.
40
41 2. Applied coatings shall not be immersed until the coating has been cured
42 as required by the coating manufacturer.
43
44 3. Non-skid surface treatment products shall be applied in accordance with
45 the manufacturer's recommendations.
46
47 4. Anti-graffiti coatings shall be applied in one coat following application of
48 the top coat, where specified in the Plans.
49

50 **6-07.3(14)B Reference Standards**

51 The second standard reference (to SSPC CS 23.00), and its accompanying title, is revised to
52 read:
53

SSPC CS 23.00 Specification for the Application of Thermal Spray Coatings
(Metallizing) of Aluminum, Zinc, and Their Alloys and
Composites for the Corrosion Protection of Steel

Section 6-08, Bituminous Surfacing on Structure Decks January 7, 2019

6-08.3(7)A Concrete Deck Preparation

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

The Contractor, with the Engineer, shall inspect the exposed concrete deck to establish the extent of bridge deck repair in accordance with Section 6-09.3(6).

6-08.3(8)A Structure Deck Preparation

The second sentence of the last paragraph is revised to read:

Prior to applying the primer or sheet membrane, all dust and loose material shall be removed from the Structure Deck.

Section 6-09, Modified Concrete Overlays January 7, 2019

6-09.3 Construction Requirements

This section is supplemented with the following new subsection:

6-09.3(15) Sealing and Texturing Concrete Overlay

After the requirements for checking for bond have been met, all joints and visible cracks shall be filled and sealed with a high molecular weight methacrylate resin (HMWM). Cracks 1/16 inch and greater in width shall receive two applications of HMWM. Immediately following the application of HMWM, the wetted surface shall be coated with sand for abrasive finish.

After all cracks have been filled and sealed and the HMWM resin has cured, the concrete overlay surface shall receive a longitudinally sawn texture in accordance with Section 6-02.3(10)D5.

Traffic shall not be permitted on the finished concrete until it has reached a minimum compressive strength of 3,000 psi as verified by rebound number determined in accordance with ASTM C805 and the longitudinally sawn texture is completed.

6-09.3(1)B Rotary Milling Machines

This section is revised to read:

Rotary milling machines used to remove an upper layer of existing concrete overlay, when present, shall have a maximum operating weight of 50,000 pounds and conform to Section 6-08.3(5)B.

6-09.3(1)C Hydro-Demolition Machines

The first sentence of this section is revised to read:

Hydro-demolition machines shall consist of filtering and pumping units operating in conjunction with a remote-controlled robotic device, using high-velocity water jets to

remove sound concrete to the nominal scarification depth shown in the Plans with a single pass of the machine, and with the simultaneous removal of deteriorated concrete.

6-09.3(1)D Shot Blasting Machines

This section, including title, is revised to read:

6-09.3(1)D Vacant

6-09.3(1)E Air Compressor

This section is revised to read:

Air compressors shall be equipped with oil traps to eliminate oil from being blown onto the bridge deck.

6-09.3(1)J Finishing Machine

This section is revised to read:

The finishing machine shall meet the requirements of Section 6-02.3(10) and the following requirements:

The finishing machine shall be equipped with augers, followed by an oscillating, vibrating screed, vibrating roller tamper, or a vibrating pan, followed by a rotating cylindrical double drum screed. The vibrating screed, roller tamper or pan shall be of sufficient length and width to properly consolidate the mixture. The vibrating frequency of the vibrating screed, roller tamper or pan shall be variable with positive control.

6-09.3(2) Submittals

Item number 1 and 2 are revised to read:

1. A Type 1 Working Drawing consisting of catalog cuts and operating parameters of the hydro-demolition machine selected by the Contractor for use in this project to scarify concrete surfaces.
2. A Type 1 Working Drawing consisting of catalog cuts, operating parameters, axle loads, and axle spacing of the rotary milling machine (if used to remove an upper layer of existing concrete overlay when present).

The first sentence of item number 3 is revised to read:

A Type 2 Working Drawing of the Runoff Water Disposal Plan.

6-09.3(5)A General

The first sentence of the fourth paragraph is revised to read:

All areas of the deck that are inaccessible to the selected scarifying machine shall be scarified to remove the concrete surface matrix to a maximum nominal scarification depth shown in the Plans by a method acceptable to the Engineer.

This section is supplemented with the following:

Concrete process water generated by scarifying concrete surface and removing existing concrete overlay operations shall be contained, collected, and disposed of in accordance with Section 5-01.3(11) and Section 6-09.3(5)C, and the Section 6-09.3(2) Runoff Water Disposal Plan.

6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines

This section's title is revised to read:

Testing of Hydro-Demolition Machines

The second paragraph is revised to read:

In the "sound" area of concrete, the equipment shall be programmed to remove concrete to the nominal scarification depth shown in the Plans with a single pass of the machine.

6-09.3(5)D Shot Blasting

This section, including title, is revised to read:

6-09.3(5)D Vacant

6-09.3(5)E Rotomilling

This section, including title, is revised to read:

6-09.3(5)E Removing Existing Concrete Overlay Layer by Rotomilling

When the Contractor elects to remove the upper layer of existing concrete overlay, when present, by rotomilling prior to final scarifying, the entire concrete surface of the bridge deck shall be milled to remove the surface matrix to the depth specified in the Plans with a tolerance as specified in Section 6-08.3(5)B. The operating parameters of the rotary milling machine shall be monitored in order to prevent the unnecessary removal of concrete below the specified removal depth.

6-09.3(6) Further Deck Preparation

The first paragraph is revised to read::

Once the lane or strip being overlaid has been cleaned of debris from scarifying, the Contractor, with the Engineer, shall perform a visual inspection of the scarified surface. The Contractor shall mark those areas of the existing bridge deck that are authorized by the Engineer for further deck preparation by the Contractor.

Item number 4 of the second paragraph is deleted.

The first sentence of the third paragraph is deleted.

6-09.3(6)A Equipment for Further Deck Preparation

This section is revised to read:

Further deck preparation shall be performed using either power driven hand tools conforming to Section 6-09.3(1)A, or hydro-demolition machines conforming to Section 6-09.3(1)C.

6-09.3(6)B Deck Repair Preparation

The second paragraph is deleted.

1
2 The last sentence of the second paragraph (after the preceding Amendment is applied) is
3 revised to read:

4
5 In no case shall the depth of a sawn vertical cut exceed ¾ inch or to the top of the top
6 steel reinforcing bars, whichever is less.

7
8 The first sentence of the third to last paragraph is revised to read:

9
10 Where existing steel reinforcing bars inside deck repair areas show deterioration greater
11 than 20-percent section loss, the Contractor shall furnish and place steel reinforcing bars
12 alongside the deteriorated bars in accordance with the details shown in the Standard
13 Plans.

14
15 The last paragraph is deleted.

16 17 **6-09.3(7) Surface Preparation for Concrete Overlay**

18 The first seven paragraphs are deleted and replaced with the following:

19
20 Following the completion of any required further deck preparation the entire lane or strip
21 being overlaid shall be cleaned to be free from oil and grease, rust and other foreign
22 material that may still be present. These materials shall be removed by detergent-
23 cleaning or other method accepted by the Engineer followed by sandblasting.

24
25 After detergent cleaning and sandblasting is completed, the entire lane or strip being
26 overlaid shall be cleaned in final preparation for placing concrete.

27
28 Hand tool chipping, sandblasting and cleaning in areas adjacent to a lane or strip being
29 cleaned in final preparation for placing concrete shall be discontinued when final
30 preparation is begun. Scarifying and hand tool chipping shall remain suspended until the
31 concrete has been placed and the requirement for curing time has been satisfied.
32 Sandblasting and cleaning shall remain suspended for the first 24 hours of curing time
33 after the completion of concrete placing.

34
35 Scarification, and removal of the upper layer of concrete overlay when present, may
36 proceed during the final cleaning and overlay placement phases of the Work on adjacent
37 portions of the Structure so long as the scarification and concrete overlay removal
38 operations are confined to areas which are a minimum of 100 feet away from the defined
39 limits of the final cleaning or overlay placement in progress. If the scarification and
40 concrete overlay removal impedes or interferes in any way with the final cleaning or
41 overlay placement as determined by the Engineer, the scarification and concrete overlay
42 removal Work shall be terminated immediately and the scarification and concrete
43 overlay removal equipment removed sufficiently away from the area being prepared or
44 overlaid to eliminate the conflict. If the grade is such that water and contaminants from
45 the scarification and concrete overlay removal operation will flow into the area being
46 prepared or overlaid, the scarification and concrete overlay removal operation shall be
47 terminated and shall remain suspended for the first 24 hours of curing time after the
48 completion of concrete placement.

49 50 **6-09.3(11) Placing Concrete Overlay**

51 The first sentence of item number 3 in the fourth paragraph is revised to read:

Concrete shall not be placed when the temperature of the concrete surface is less than 45°F or greater than 75°F, and wind velocity at the construction site is in excess of 10 mph.

6-09.3(12) Finishing Concrete Overlay

The third paragraph is deleted.

The last paragraph is deleted.

6-09.3(13) Curing Concrete Overlay

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

As the finishing operation progresses, the concrete shall be immediately covered with a single layer of clean, new or used, wet burlap.

The last sentence of the second paragraph is deleted.

The following two new paragraphs are inserted after the second paragraph:

As an alternative to the application of burlap and fog spraying described above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. The Contractor shall submit a Type 2 Working Drawing consisting of details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained.

The wet curing regimen as described shall remain in place for a minimum of 42-hours.

The last paragraph is deleted.

6-09.3(14) Checking for Bond

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

After the requirements for curing have been met, the entire overlaid surface shall be sounded by the Contractor, in a manner accepted by and in the presence of the Engineer, to ensure total bond of the concrete to the bridge deck.

The last sentence of the first paragraph is deleted.

The second paragraph is deleted.

Section 6-10, Concrete Barrier

August 6, 2018

6-10.2 Materials

In the first paragraph, the reference to "Portland Cement" is revised to read:

Cement 9-01

6-10.3(6) Placing Concrete Barrier

The first two sentences of the first paragraph are revised to read:

Precast concrete barriers Type 2, Type 4, Type F, precast single slope barrier, and transitions shall rest on a paved foundation shaped to a uniform grade and section. The foundation surface for precast concrete barriers Type 2, Type 4, Type F, precast single slope barrier, and transitions shall meet this test for uniformity: When a 10-foot straightedge is placed on the surface parallel to the centerline for the barrier, the surface shall not vary more than ¼ inch from the lower edge of the straightedge.

Section 6-11, Reinforced Concrete Walls

April 2, 2018

6-11.2 Materials

In the first paragraph, the reference to “Aggregates for Portland Cement Concrete” is revised to read:

Aggregates for Concrete 9-03.1

Section 6-12, Noise Barrier Walls

August 6, 2018

6-12.2 Materials

In the first paragraph, the reference to “Aggregates for Portland Cement Concrete” is revised to read:

Aggregates for Concrete 9-03.1

The first paragraph is supplemented with the following new material reference:

Noise Barrier Wall Access Door 9-06.17

6-12.3(9) Access Doors and Concrete Landing Pads

The second paragraph is deleted and replaced with the following:

All frame and door surfaces, except stainless steel surfaces, shall be painted in accordance with Section 6-07.3(9). Primer shall be applied to all non-stainless steel surfaces. All primer coated exposed metal surfaces shall be field painted with the remaining Section 6-07.3(9)A paint system coats. The top coat, when dry, shall match the color specified in the Plans or Special Provisions.

This section is supplemented with the following:

Access door deadbolt locks shall be capable of accepting a Best CX series core. The Contractor shall furnish and install a spring-loaded construction core lock with each lock. The Engineer will furnish the permanent Best CX series core for the Contractor to install at the conclusion of the project.

Section 6-13, Structural Earth Walls

August 6, 2018

6-13.2 Materials

In the first paragraph, the reference to “Aggregates for Portland Cement Concrete” is revised to read:

Aggregates for Concrete 9-03.1

6-13.3(4) Precast Concrete Facing Panel and Concrete Block Fabrication

Item number 1 of the sixth paragraph is revised to read:

1. Vertical dimensions shall be $\pm \frac{1}{16}$ inch of the Plan dimension, and the rear height shall not exceed the front height.

Item number 3 of the sixth paragraph is revised to read:

3. All other dimensions shall be $\pm \frac{1}{4}$ inch of the Plan dimension.

Section 6-14, Geosynthetic Retaining Walls

April 2, 2018

6-14.2 Materials

In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:

Cement	9-01
Aggregates for Concrete	9-03.1

Section 6-15, Soil Nail Walls

January 7, 2019

6-15.3(7) Shotcrete Facing

The last paragraph is supplemented with the following:

After final tightening of the nut, the threads of the soil nail shall at a minimum be flush with the end of the nut.

Section 6-16, Soldier Pile and Soldier Pile Tieback Walls

April 2, 2018

6-16.2 Materials

In the first paragraph, the reference to "Aggregates for Portland Cement Concrete" is revised to read:

Aggregates for Concrete	9-03.1
-------------------------	--------

Section 6-18, Shotcrete Facing

April 1, 2019

6-18.2 Materials

The reference to metakaolin is deleted.

6-18.3(3) Testing

In the last sentence of the first paragraph, "AASHTO T 24" is revised to read "ASTM C1604".

6-18.3(3)B Production Testing

In the last sentence, "AASHTO T 24" is revised to read "ASTM C1604".

1 **6-18.3(4) Qualifications of Contractor's Personnel**

2 In the last sentence of the second paragraph, "AASHTO T 24" is revised to read "ASTM
3 C1604".
4

5 **Section 6-19, Shafts**

6 **January 7, 2019**

7 **6-19.2 Materials**

8 In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland
9 Cement Concrete" are revised to read:

10

11	Cement	9-01
12	Aggregates for Concrete	9-03.1

13

14 **6-19.3(1)A Shaft Construction Tolerances**

15 The last paragraph is supplemented with the following:

16
17 The elevation of the top of the reinforcing cage for drilled shafts shall be within +6 inches
18 and -3 inches from the elevation shown in the Plans.
19

20 **6-19.3(2)D Nondestructive QA Testing Organization and Personnel**

21 Item number 4 in the first paragraph is revised to read:

- 22
- 23 4. Personnel preparing test reports shall be a Professional Engineer, licensed under
24 Title 18 RCW, State of Washington, and shall seal the report in accordance with
25 WAC 196-23-020.
26

27 **6-19.3(3)C Conduct of Shaft Casing Installation and Removal and Shaft
28 Excavation Operations**

29 The first paragraph is supplemented with the following:

30
31 In no case shall shaft excavation and casing placement extend below the bottom of shaft
32 excavation as shown in the Plans.
33

34 **6-19.3(6)E Thermal Wire and Thermal Access Point (TAPS)**

35 The third sentence of the third paragraph is revised to read:

36
37 The thermal wire shall extend from the bottom of the reinforcement cage to the top of the
38 shaft, with a minimum of 5-feet of slack wire provided above the top of shaft.
39

40 The following new sentence is inserted after the third sentence of the third paragraph:

41
42 All thermal wires in a shaft shall be equal lengths.
43

44 **6-19.3(9)D Nondestructive QA Testing Results Submittal**

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

46
47 Results shall be a Type 2E Working Drawing presented in a written report.
48

Section 7-02, Culverts

April 2, 2018

7-02.2 Materials

In the first paragraph, the references to "Portland Cement" and "Aggregates for Portland Cement Concrete" are revised to read:

Cement	9-01
Aggregates for Concrete	9-03.1

7-02.3(6)A4 Excavation and Bedding Preparation

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

The bedding course shall be a 6-inch minimum thickness layer of culvert bedding material, defined as granular material either conforming to Section 9-03.12(3) or to AASHTO Grading No. 57 as specified in Section 9-03.1(4)C.

Section 7-05, Manholes, Inlets, Catch Basins, and Drywells

August 6, 2018

7-05.3 Construction Requirements

The fourth sentence of the third paragraph is deleted.

Section 7-08, General Pipe Installation Requirements

April 2, 2018

7-08.3(3) Backfilling

The fifth sentence of the fourth paragraph is revised to read:

All compaction shall be in accordance with the Compaction Control Test of Section 2-03.3(14)D except in the case that 100% Recycled Concrete Aggregate is used.

The following new sentences are inserted after the fifth sentence of the fourth paragraph:

When 100% Recycled Concrete Aggregate is used, the Contractor may submit a written request to use a test point evaluation for compaction acceptance. Test Point evaluation shall be performed in accordance with SOP 738.

Section 8-01, Erosion Control and Water Pollution Control

April 1, 2019

8-01.1 Description

This section is revised to read:

This Work consists of furnishing, installing, maintaining, removing and disposing of best management practices (BMPs), as defined in the Washington Administrative Code (WAC) 173-201A, to manage erosion and water quality in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

The Contracting Agency may have a National Pollution Discharge Elimination System Construction Stormwater General Permit (CSWGP) as identified in the Contract Special Provisions. The Contracting Agency may or may not transfer coverage of the CSWGP to

1 the Contractor when a CSWGP has been obtained. The Contracting Agency may not
2 have a CSWGP for the project but may have another water quality related permit as
3 identified in the Contract Special Provisions or the Contracting Agency may not have
4 water quality related permits but the project is subject to applicable laws for the Work.
5 Section 8-01 covers all of these conditions.
6

7 This section is supplemented with the following new subsection:
8

9 **8-01.1(1) Definitions**

10 **1. pH Affected Stormwater**

- 11
- 12 a. Stormwater contacting green concrete (concrete that has set/stiffen but is still
13 curing), recycled concrete, or engineered soils (as defined in the Construction
14 Stormwater General Permit (CSWGP)) as a natural process
15
- 16 b. pH monitoring shall be performed in accordance with the CSWGP, or Water
17 Quality Standards (WQS in accordance with WAC 173-201A (surface) or 173-
18 200C (ground)) when the CSWGP does not apply
19
- 20 c. May be neutralized and discharged to surface waters or infiltrated
21

22 **2. pH Affected Non-Stormwater**

- 23
- 24 a. Conditionally authorized in accordance with CSWGP Special Condition S.1.C.,
25 uncontaminated water contacting green concrete, recycled concrete, or
26 engineered soils (as defined in the CSWGP)
27
- 28 b. Shall not be categorized as cementitious wastewater/concrete wastewater, as
29 defined below
30
- 31 c. Shall be managed and treated in accordance with the CSWGP, or WQS when
32 the CSWGP does not apply
33
- 34 d. pH adjustment and dechlorination may be necessary, as specified in the
35 CSWGP or in accordance with WQS when the CSWGP does not apply
36
- 37 e. May be neutralized, treated, and discharged to surface waters in accordance
38 with the CSWGP, with the exception of water-only shaft drilling slurry. Water-
39 only shaft drilling slurry may be treated, neutralized, and infiltrated but not
40 discharged to surface waters (Refer to Special Conditions S1.C. Authorized
41 Discharges and S1.d Prohibited Discharges of the CSWGP)
42

43 **3. Cementitious Wastewater/Concrete Wastewater**

- 44
- 45 a. Any water that comes into contact with fine cementitious particles or slurry; any
46 water used in the production, placement and/or clean-up of cementitious
47 products; any water used to cut, grind, wash, or otherwise modify cementitious
48 products
49
- 50 b. When any water, including stormwater, commingles with cementitious
51 wastewater/concrete wastewater, the resulting water is considered
52 cementitious wastewater/concrete wastewater and shall be managed to
53 prevent discharge to waters of the State, including ground water

- 1
2 c. CSWGP Examples include: water used for or resulting from concrete
3 truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and
4 surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and
5 road surfacing)
6
7 d. Cannot be neutralized and discharged or infiltrated
8

9 **8-01.2 Materials**

10 The first paragraph is revised to read:

11
12 Materials shall meet the requirements of the following sections:

13
14

Corrugated Polyethylene Drain Pipe	9-05.1(6)
Quarry Spalls and Permeable Ballast	9-13
Erosion Control and Roadside Planting	9-14
Construction Geotextile	9-33

17
18

19 The second paragraph is deleted.
20

21 **8-01.3(1) General**

22 This section is revised to read:

23
24 Adaptive management shall be employed throughout the duration of the project for the
25 implementation of erosion and water pollution control permit requirements for the current
26 condition of the project site. The adaptive management includes the selection and
27 utilization of BMPs, scheduling of activities, prohibiting unacceptable practices,
28 implementing maintenance procedures, and other managerial practices that when used
29 singularly or in combination, prevent or reduce the release of pollutants to waters of the
30 State. The adaptive management shall use the means and methods identified in this
31 section and means and methods identified in the Washington State Department of
32 Transportation's Temporary Erosion and Sediment Control Manual or the Washington
33 State Department of Ecology's Stormwater Management Manuals for construction
34 stormwater.
35

36 The Contractor shall install a high visibility fence along the lines shown in the Plans or as
37 instructed by the Engineer.
38

39 Throughout the life of the project, the Contractor shall preserve and protect the
40 delineated preservation area, acting immediately to repair or restore any high visibility
41 fencing damaged or removed.
42

43 All discharges to surface waters shall comply with surface water quality standards as
44 defined in Washington Administrative Code (WAC) Chapter 173-201A. All discharges to
45 groundwater shall comply with groundwater quality standards WAC Chapter 173-200.
46 The Contractor shall comply with the CSWGP when the project is covered by the
47 CSWGP.
48

49 Work, at a minimum, shall include the implementation of:

- 50
51 1. Sediment control measures prior to ground disturbing activities to ensure all
52 discharges from construction areas receive treatment prior to discharging from
53 the site.

2. Flow control measures to prevent erosive flows from developing.
3. Water management strategies and pollution prevention measures to prevent contamination of waters that will be discharged to surface waters or the ground.
4. Erosion control measures to stabilize erodible earth not being worked.
5. Maintenance of BMPs to ensure continued compliant performance.
6. Immediate corrective action if evidence suggests construction activity is not in compliance. Evidence includes sampling data, olfactory or visual evidence such as the presence of suspended sediment, turbidity, discoloration, or oil sheen in discharges.

To the degree possible, the Contractor shall coordinate this Work with permanent drainage and roadside restoration Work the Contract requires.

Clearing, grubbing, excavation, borrow, or fill within the Right of Way shall never expose more erodible earth than as listed below:

Western Washington (West of the Cascade Mountain Crest)		Eastern Washington (East of the Cascade Mountain Crest)	
May 1 through September 30	17 Acres	April 1 through October 31	17 Acres
October 1 through April 30	5 Acres	November 1 through March 31	5 Acres

The Engineer may increase or decrease the limits based on project conditions.

Erodible earth is defined as any surface where soils, grindings, or other materials may be capable of being displaced and transported by rain, wind, or surface water runoff.

Erodible earth not being worked, whether at final grade or not, shall be covered within the specified time period (see the table below), using BMPs for erosion control.

Western Washington (West of the Cascade Mountain Crest)		Eastern Washington (East of the Cascade Mountain Crest)	
October 1 through April 30	2 days maximum	October 1 through June 30	5 days maximum
May 1 to September 30	7 days maximum	November 1 through March 31	10 days maximum

When applicable, the Contractor shall be responsible for all Work required for compliance with the CSWGP including annual permit fees.

If the Engineer, under Section 1-08.6, orders the Work suspended, the Contractor shall continue to comply with this division during the suspension.

1
2 **8-01.3(1)A Submittals**

3 This section's content is deleted.

4
5 This section is supplemented with the following new subsection:

6
7 **8-01.3(1)A1 Temporary Erosion and Sediment Control Plan**

8 Temporary Erosion and Sediment Control (TESC) Plans consist of a narrative section
9 and plan sheets that meets the Washington State Department of Ecology's Stormwater
10 Pollution Prevention Plan (SWPPP) requirement in the CSWGP. For projects that do not
11 require a CSWGP but have the potential to discharge to surface waters of the state, an
12 abbreviated TESC plan shall be used, which may consist of a narrative and/or plan
13 sheets and shall demonstrate compliance with applicable codes, ordinances and
14 regulations, including the water quality standards for surface waters; Chapter 173-201A
15 of the Washington Administrative Code (WAC) and water quality standards for
16 groundwaters in accordance with Chapter 173-200 WAC.

17
18 The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC
19 Plan. If the Contractor adopts the TESC Plan in scenarios in which the CSWGP is
20 transferred to the Contractor, the Contractor shall modify the TESC Plan to match the
21 Contractor's schedule, method of construction, and to include all areas that will be used
22 to directly support construction activity such as equipment staging yards, material
23 storage areas, or borrow areas. TESC Plans shall include all high visibility fence shown
24 in the Plans. All TESC Plans shall meet the requirements of the current edition of the
25 WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adaptively
26 managed throughout construction based on site inspections and required sampling to
27 maintain compliance with the CSWGP, or WQS when no CSWGP applies. The
28 Contractor shall develop a schedule for implementation of the TESC work and
29 incorporate it into the Contractor's progress schedule.

30
31 The Contractor shall submit their TESC Plan (either the adopted plan or new plan) as
32 Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be
33 submitted as Type 1 Working Drawings.

34
35 **8-01.3(1)B Erosion and Sediment Control (ESC) Lead**

36 This section is revised to read:

37
38 The Contractor shall identify the ESC Lead at the preconstruction discussions and in the
39 TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of
40 Training in Construction Site Erosion and Sediment Control from a course approved by
41 the Washington State Department of Ecology. The ESC Lead must be onsite or on call
42 at all times throughout construction. The ESC Lead shall be listed on the Emergency
43 Contact List required under Section 1-05.13(1).

44
45 The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not
46 limited to:

- 47
48 1. Installing, adaptively managing, and maintaining temporary erosion and
49 sediment control BMPs to assure continued performance of their intended
50 function. Damaged or inadequate BMPs shall be corrected immediately.
51
52 2. Updating the TESC Plan to reflect current field conditions.
53

3. Discharge sampling and submitting Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology in accordance with the CSWGP.
4. Develop and maintain the Site Log Book as defined in the CSWGP. When the Site Log Book or portion thereof is electronically developed, the electronic documentation must be accessible onsite. As a part of the Site Log Book, the Contractor shall develop and maintain a tracking table to show that identified TESC compliance issues are fully resolved within 10 calendar days. The table shall include the date an issue was identified, a description of how it was resolved, and the date the issue was fully resolved.

The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all stormwater discharge points at least once every calendar week and within 24-hours of runoff events in which stormwater discharges from the site. Inspections of temporarily stabilized, inactive sites may be reduced to once every calendar month. The Washington State Department of Ecology's Erosion and Sediment Control Site Inspection Form, located at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>, shall be completed for each inspection and a copy shall be submitted to the Engineer no later than the end of the next working day following the inspection.

8-01.3(1)C Water Management

This section is supplemented with the following new subsections:

8-01.3(1)C5 Water Management for In-Water Work Below Ordinary High Water Mark (OHWM)

Work over surface waters of the state (defined in WAC 173-201A-010) or below the OHWM (defined in RCW 90.58.030) shall comply with water quality standards for surface waters of the State of Washington.

8-01.3(1)C6 Environmentally Acceptable Hydraulic Fluid

All equipment containing hydraulic fluid that extends from a bridge deck over surface waters of the state or below the OHWM, shall be equipped with a biodegradable hydraulic fluid. The fluid shall achieve either a Pw1 Environmental Persistence Classification stated in ASTM D6046 (≥60% biodegradation in 28 days) or equivalent standard. Alternatively, hydraulic fluid that meets International Organization for Standardization (ISO 15380), the European Union Ecolabel, or equivalent certification will also be accepted.

The Contractor shall submit a Type 1 Working Drawing consisting of a manufacturer catalog cut of the hydraulic fluid used.

The designation of biodegradable hydraulic fluid does not mean fluid spills are acceptable. The Contractor shall respond to spills to land or water in accordance with the Contract, the associated SPCC Plan, and all applicable local, state, and federal regulations.

8-01.3(1)C7 Turbidity Curtain

All Work for the turbidity curtain shall be in accordance with the manufacturer's recommendations for the site conditions. Removal procedures shall be developed and used to minimize silt release and disturbance of silt. The Contractor shall submit a Type 2 Working Drawing, detailing product information, installation and removal procedures,

1 equipment and workforce needs, maintenance plans, and emergency
2 repair/replacement plans.

3
4 Turbidity curtain materials, installation, and maintenance shall be sufficient to comply
5 with water quality standards.

6
7 The Contractor shall notify the Engineer 10 days in advance of removing the turbidity
8 curtain. All components of the turbidity curtain shall be removed from the project.
9

10 **8-01.3(1)C1 Disposal of Dewatering Water**

11 This section is revised to read:

12
13 When uncontaminated groundwater is encountered in an excavation on a project it may
14 be infiltrated within vegetated areas of the right of way not designated as Sensitive
15 Areas or incorporated into an existing stormwater conveyance system at a rate that will
16 not cause erosion or flooding in any receiving surface water.

17
18 Alternatively, the Contractor may pursue independent disposal and treatment
19 alternatives that do not use the stormwater conveyance system provided it is in
20 compliance with the applicable WACs and permits.
21

22 **8-01.3(1)C2 Process Wastewater**

23 This section is revised to read:

24
25 Wastewater generated on-site as a byproduct of a construction process shall not be
26 discharged to surface waters of the State. Some sources of process wastewater may be
27 infiltrated in accordance with the CSWGP. Some sources of process wastewater may be
28 disposed via independent disposal and treatment alternatives in compliance with the
29 applicable WACs and permits.
30

31 **8-01.3(1)C3 Shaft Drilling Slurry Wastewater**

32 This section is revised to read:

33
34 Wastewater generated on-site during shaft drilling activity shall be managed and
35 disposed of in accordance with the requirements below. No shaft drilling slurry
36 wastewater shall be discharged to surface waters of the State. Neither the sediment nor
37 liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable
38 by visible or olfactory indication (e.g., chemical sheen or smell).
39

- 40 1. Water-only shaft drilling slurry or water slurry with accepted flocculants may be
41 infiltrated on-site. Flocculants used shall meet the requirements of Section 9-
42 14.5(1) or shall be chitosan products listed as General Use Level Designation
43 (GULD) on the Washington State Department of Ecology's stormwater
44 treatment technologies webpage for construction treatment. Infiltration is
45 permitted if the following requirements are met:
46
 - 47 a. Wastewater shall have a pH of 6.5 – 8.5 prior to discharge.
 - 48 b. The amount of flocculant added to the slurry shall be kept to the minimum
49 needed to adequately settle out solids. The flocculant shall be thoroughly
50 mixed into the slurry.
51
52

- c. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.
- d. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground shall fully infiltrate and discharges shall stop before the end of each work day.
- e. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.
- f. Infiltration locations shall be in upland areas at least 150 feet away from surface waters, wells, on-site sewage systems, aquifer sensitive recharge areas, sole source aquifers, well head protection areas, and shall be marked on the plan sheets before the infiltration activity begins.
- g. Prior to infiltration, the Contractor shall submit a Shaft Drilling Slurry Wastewater Management and Infiltration Plan as a Type 2 Working Drawing. This Plan shall be kept on-site, adapted if needed to meet the construction requirements, and updated to reflect what is being done in the field. The Working Drawing shall include, at a minimum, the following information:
 - i. Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.
 - ii. The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).
 - iii. The source of the water used to produce the slurry.
 - iv. The estimated total volume of wastewater to be infiltrated.
 - v. The accepted flocculant to be used (if any).
 - vi. The controls or methods used to prevent surface wastewater runoff from leaving the infiltration location.
 - vii. The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.
 - viii. The strategy for monitoring infiltration activity and adapting methods to ensure compliance.
 - ix. A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.

- x. The strategy for cleaning up the infiltration location after the infiltration activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.
2. Shaft drilling mineral slurry, synthetic slurry, or slurry with polymer additives not allowed for infiltration shall be contained and disposed of by the Contractor at an accepted disposal facility in accordance with Section 2-03.3(7)C. Spoils that have come into contact with mineral slurry shall be disposed of in accordance with Section 6-19.3(4)F.

8-01.3(1)C4 Management of Off-Site Water

This section is revised to read:

Prior to clearing and grubbing, the Contractor shall intercept all sources of off-site surface water and overland flow that will run-on to the project. Off-site surface water run-on shall be diverted through or around the project in a way that does not introduce construction related pollution. It shall be diverted to its preconstruction discharge location in a manner that does not increase preconstruction flow rate and velocity and protects contiguous properties and waterways from erosion. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

8-01.3(1)E Detention/Retention Pond Construction

This section is revised to read:

Permanent or temporary ponds shall be constructed before beginning other grading and excavation Work in the area that drains into that pond. Detention/retention ponds may be constructed concurrently with grading and excavation when allowed by the Engineer. Temporary conveyances shall be installed concurrently with grading in accordance with the TESC Plan so that newly graded areas drain to the pond as they are exposed.

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

This section's title is revised to read:

8-01.3(2) Temporary Seeding and Mulching

8-01.3(2)A Preparation for Application

This section is revised to read:

A cleated roller, crawler tractor, or similar equipment, which forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded. The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

8-01.3(2)A1 Seeding

This section is deleted in its entirety.

8-01.3(2)A2 Temporary Seeding

This section is deleted in its entirety.

1
2 **8-01.3(2)B Seeding and Fertilizing**

3 This section, including title, is revised to read:

4
5 **8-01.3(2)B Temporary Seeding**

6 Temporary grass seed shall be a commercially prepared mix, made up of low growing
7 grass species that will grow without irrigation at the project location, and accepted by the
8 Engineer. The application rate shall be two pounds per 1000 square feet.

9
10 The Contractor shall notify the Engineer not less than 24 hours in advance of any
11 seeding operation and shall not begin the Work until areas prepared or designated for
12 seeding have been accepted. Following the Engineer's acceptance, seeding of the
13 accepted slopes shall begin immediately.

14
15 Temporary seeding may be sown at any time allowed by the Engineer. Temporary
16 seeding shall be sown by one of the following methods:

- 17
18 1. A hydro seeder that utilizes water as the carrying agent, and maintains
19 continuous agitation through paddle blades. It shall have an operating capacity
20 sufficient to agitate, suspend, and mix into a homogeneous slurry the specified
21 amount of seed and water or other material. Distribution and discharge lines
22 shall be large enough to prevent stoppage and shall be equipped with a set of
23 hydraulic discharge spray nozzles that will provide a uniform distribution of the
24 slurry.
25
26 2. Blower equipment with an adjustable disseminating device capable of
27 maintaining a constant, measured rate of material discharge that will ensure an
28 even distribution of seed at the rates specified.
29
30 3. Power-drawn drills or seeders.
31
32 4. Areas in which the above methods are impractical may be seeded by hand
33 methods.

34
35 When seeding by hand, the seed shall be incorporated into the top ¼ inch of soil by
36 hand raking or other method that is allowed by the Engineer.

37
38 Seed applied using a hydroseeder shall have a tracer added to visibly aid uniform
39 application. This tracer shall not be harmful to plant, aquatic, or animal life. If Short-Term
40 Mulch is used as a tracer, the application rate shall not exceed 250 pounds per acre.

41
42 Seed and fertilizer may be applied in one application provided that the fertilizer is placed
43 in the hydroseeder tank no more than 1 hour prior to application.

44
45 **8-01.3(2)D Mulching**

46 This section, including title, is revised to read:

47
48 **8-01.3(2)D Temporary Mulching**

49 Temporary mulch shall be straw, wood strand, or HECF mulch and shall be used for the
50 purpose of erosion control by protecting bare soil surface from particle displacement.

51 Mulch shall not be applied below the anticipated water level of ditch slopes, pond
52 bottoms, and stream banks. HECF mulch shall not be used within the Ordinary High
53 Water Mark. Non-HECF mulches applied below the anticipated water level shall be

removed or anchored down so that it cannot move or float, at no additional expense to the Contracting Agency.

Straw or wood strand mulch shall be applied at a rate to achieve at least 95 percent visual blockage of the soil surface.

Short Term Mulch shall be hydraulically applied at the rate of 2500 pounds per acre and may be applied in one lift.

Moderate Term Mulch and Long Term Mulch shall be hydraulically applied at the rate of 3500 pounds per acre with no more than 2000 pounds applied in any single lift.

Mulch sprayed on signs or sign Structures shall be removed the same day.

Areas not accessible by mulching equipment shall be mulched by accepted hand methods.

8-01.3(2)F Dates for Application of Final Seed, Fertilizer, and Mulch

This section is deleted in its entirety.

8-01.3(2)G Protection and Care of Seeded Areas

This section is deleted in its entirety.

8-01.3(2)H Inspection

This section is deleted in its entirety.

8-01.3(2)I Mowing

This section is deleted in its entirety.

8-01.3(3) Placing Biodegradable Erosion Control Blanket

This section's title is revised to read:

8-01.3(3) Placing Erosion Control Blanket

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

Erosion Control Blankets are used as an erosion prevention device and to enhance the establishment of vegetation.

The second paragraph is revised to read:

When used to enhance the establishment of seeded areas, seeding and fertilizing shall be done prior to blanket installation.

8-01.3(4) Placing Compost Blanket

This section is revised to read:

Compost blankets are used for erosion control. Compost blanket shall be only be placed on ground surfaces that are steeper than 3-foot horizontal and 1-foot vertical though steeper slopes shall be broken by wattles or compost socks placed according to the Standard Plans. Compost shall be placed to a depth of 3 inches over bare soil. An organic tackifier shall be placed over the entire composted area when dry or windy

conditions are present or expected. The tackifier shall be applied immediately after the application of compost to prevent compost from leaving the composted area.

Medium compost shall be used for the compost blanket. Compost may serve the purpose of soil amendment as specified in Section 8-02.3(6).

8-01.3(5) Plastic Covering

The first paragraph is revised to read:

Erosion Control – Plastic coverings used to temporarily cover stockpiled materials, slopes or bare soils shall be installed and maintained in a way that prevents water from intruding under the plastic and prevents the plastic cover from being damaged by wind. Plastic coverings shall be placed with at least a 12-inch overlap of all seams and be a minimum of 6 mils thick. Use soil stabilization and energy dissipation BMPs to minimize the erosive energy flows coming off sloped areas of plastic (e.g., toe of slope). When feasible, prevent the clean runoff from plastic from hitting bare soil. Direct flows from plastic to stabilized outlet areas.

8-01.3(7) Stabilized Construction Entrance

The first paragraph is revised to read:

Temporary stabilized construction entrance shall be constructed in accordance with the *Standard Plans*, prior to construction vehicles entering the roadway from locations that generate sediment track out on the roadway. Material used for stabilized construction entrance shall be free of extraneous materials that may cause or contribute to track out.

8-01.3(8) Street Cleaning

This section is revised to read:

Self-propelled pickup street sweepers shall be used to remove and collect dirt and other debris from the Roadway. The street sweeper shall effectively collect these materials and prevent them from being washed or blown off the Roadway or into waters of the State. Street sweepers shall not generate fugitive dust and shall be designed and operated in compliance with applicable air quality standards. Material collected by the street sweeper shall be disposed of in accordance with Section 2-03.3(7)C.

When allowed by the Engineer, power broom sweepers may be used in non-sensitive areas. The broom sweeper shall sweep dirt and other debris from the roadway into the work area. The swept material shall be prevented from entering or washing into waters of the State.

Street washing with water will require the concurrence of the Engineer.

8-01.3(12) Compost Socks

The first two sentences of the first paragraph are revised to read:

Compost socks are used to disperse flow and sediment. Compost socks shall be installed as soon as construction will allow but before flow conditions create erosive flows or discharges from the site. Compost socks shall be installed prior to any mulching or compost placement.

8-01.3(13) Temporary Curb

The last two sentences of the second paragraph are revised to read:

Temporary curbs shall be a minimum of 4 inches in height. Temporary curb shall be installed so that ponding does not occur in the adjacent roadway.

8-01.3(14) Temporary Pipe Slope Drain

The third and fourth paragraphs are revised to read:

The pipe fittings shall be water tight and the pipe secured to the slope with metal posts, wood stakes, or sand bags.

The water shall be discharged to a stabilized conveyance, sediment trap, stormwater pond, rock splash pad, or vegetated strip, in a manner to prevent erosion and maintain water quality compliance.

The last paragraph is deleted.

8-01.3(15) Maintenance

This section is revised to read:

Erosion and sediment control BMPs shall be maintained or adaptively managed as required by the CSWGP until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified, the deficiencies shall be rectified immediately.

The BMPs shall be inspected on the schedule outlined in Section 8-01.3(1)B for damage and sediment deposits. Damage to or undercutting of BMPs shall be repaired immediately.

In areas where the Contractor's activities have compromised the erosion control functions of the existing grasses, the Contractor shall overseed at no additional cost to the Contracting Agency.

The quarry spalls of construction entrances shall be refreshed, replaced, or screened to maintain voids between the spalls for collecting mud and dirt.

Unless otherwise specified, when the depth of accumulated sediment and debris reaches approximately $\frac{1}{3}$ the height of the BMP the deposits shall be removed. Debris or contaminated sediment shall be disposed of in accordance with Section 2-03.3(7)C. Clean sediments may be stabilized on-site using BMPs as allowed by the Engineer.

8-01.3(16) Removal

This section is revised to read:

The Contractor shall remove all temporary BMPs, all associated hardware and associated accumulated sediment deposition from the project limits prior to Physical Completion unless otherwise allowed by the Engineer. When the temporary BMP materials are made of natural plant fibers unaltered by synthetic materials the Engineer may allow leaving the BMP in place.

1 The Contractor shall remove BMPs and associated hardware in a way that minimizes
2 soil disturbance. The Contractor shall permanently stabilize all bare and disturbed soil
3 after removal of BMPs. If the installation and use of the erosion control BMPs have
4 compacted or otherwise rendered the soil inhospitable to plant growth, such as
5 construction entrances, the Contractor shall take measures to rehabilitate the soil to
6 facilitate plant growth. This may include, but is not limited to, ripping the soil,
7 incorporating soil amendments, or seeding with the specified seed.

8
9 At the request of the Contractor and at the sole discretion of the Engineer the CSWGP
10 may be transferred back to the Contracting Agency. Approval of the Transfer of
11 Coverage request will require the following:

- 12
13 1. All other Work required for Contract Completion has been completed.
- 14
15 2. All Work required for compliance with the CSWGP has been completed to the
16 maximum extent possible. This includes removal of BMPs that are no longer
17 needed and the site has undergone all Stabilization identified for meeting the
18 requirements of Final Stabilization in the CSWGP.
- 19
20 3. An Equitable Adjustment change order for the cost of Work that has not been
21 completed by the Contractor.
- 22
23 4. Submittal of the Washington State Department of Ecology Transfer of
24 Coverage form (Ecology form ECY 020-87a) to the Engineer.

25
26 If the Engineer approves the transfer of coverage back to the Contracting Agency, the
27 requirement in Section 1-07.5(3) for the Contractor's submittal of the Notice of
28 Termination form to the Washington State Department of Ecology will not apply.

29 30 **8-01.4 Measurement**

31 This section's content is deleted and replaced with the following new subsections:

32 33 **8-01.4(1) Lump Sum Bid for Project (No Unit Items)**

34 When the Bid Proposal contains the item "Erosion Control and Water Pollution
35 Prevention" there will be no measurement of unit or force account items for Work
36 defined in Section 8-01 except as described in Sections 8-01.4(3) and 8-01.4(4). Also,
37 except as described in Section 8-01.4(3), all of Sections 8-01.4(2) and 8-01.5(2) are
38 deleted.

39 40 **8-01.4(2) Item Bids**

41 When the Proposal does not contain the items "Erosion Control and Water Pollution
42 Prevention", Section 8-01.4(1) and 8-01.5(1) are deleted and the Bid Proposal will
43 contain some or all of the following items measured as noted.

44
45 ESC lead will be measured per day for each day that an inspection is made and a
46 report is filed.

47
48 Erosion control blanket and plastic covering will be measured by the square yard
49 along the ground slope line of surface area covered and accepted.

50
51 Turbidity curtains will be measured by the linear foot along the ground line of the
52 installed curtain.

1 Check dams will be measured per linear foot one time only along the ground line of
2 the completed check dam. No additional measurement will be made for check dams
3 that are required to be rehabilitated or replaced due to wear.
4

5 Stabilized construction entrances will be measured by the square yard by ground
6 slope measurement for each entrance constructed.
7

8 Tire wash facilities will be measured per each for each tire wash installed.
9

10 Street cleaning will be measured by the hour for the actual time spent cleaning
11 pavement, refilling with water, dumping and transport to and from cleaning locations
12 within the project limits, as authorized by the Engineer. Time to mobilize the
13 equipment to or from the project limits on which street cleaning is required will not
14 be measured.
15

16 Inlet protections will be measured per each for each initial installation at a
17 drainage structure.
18

19 Silt fence, gravel filter, compost berms, and wood chip berms will be measured by
20 the linear foot along the ground line of the completed barrier.
21

22 Wattles and compost socks will be measured by the linear foot.
23

24 Temporary curbs will be measured by the linear foot along the ground line of the
25 completed installation.
26

27 Temporary pipe slope drains will be measured by the linear foot along the flow line
28 of the pipe.
29

30 Coir logs will be measured by the linear foot along the ground line of the completed
31 installation.
32

33 Outlet protections will be measured per each initial installation at an outlet location.
34

35 Temporary seeding, temporary mulching, and tackifiers will be measured by the
36 acre by ground slope measurement.
37

38 Compost blanket will be measured by the square yard by ground slope surface area
39 covered and accepted.
40

41 **8-01.4(3) Reinstating Unit Items with Lump Sum Erosion Control and Water** 42 **Pollution Prevention**

43 The Contract Provisions may establish the project as lump sum, in accordance with
44 Section 8-01.4(1) and also include one or more of the items included above in Section 8-
45 01.4(2). When that occurs, the corresponding measurement provision in Section 8-
46 01.4(2) is not deleted and the Work under that item will be measured as specified.
47

48 **8-01.4(4) Items not included with Lump Sum Erosion Control and Water Pollution** 49 **Prevention**

50 Compost blanket will be measured by the square yard by ground slope surface area
51 covered and accepted.
52

1 Temporary mulch will be measured by the acre by ground slope surface area covered
2 and accepted.

3
4 High visibility fence will be measured by the linear foot along the ground line of the
5 completed fence.
6

7 **8-01.5 Payment**

8 This section's content is deleted and replaced with the following new subsections:
9

10 **8-01.5(1) Lump Sum Bid for Project (No Unit Items)**

11 Payment will be made for the following Bid item when it is included in the Proposal:
12

13 "Erosion Control and Water Pollution Prevention", lump sum.
14

15 The lump sum Contract price for "Erosion Control and Water Pollution Prevention"
16 shall be full pay to perform the Work as described in Section 8-01 except for costs
17 compensated by Bid Proposal items inserted through Contract Provisions as
18 described in Section 8-01.4(2). Progress payments for the lump sum item "Erosion
19 Control and Water Pollution Prevention" will be made as follows:
20

- 21 1. The Contracting Agency will pay 15 percent of the bid amount for the initial
22 set up for the item. Initial set up includes the following:
23
 - 24 a. Acceptance of the TESC Plan provided by the Contracting Agency or
25 submittal of a new TESC Plan,
26
 - 27 b. Submittal of a schedule for the installation of the BMPs, and
28
 - 29 c. Identifying water quality sampling locations.
30
- 31 2. 70 percent of the bid amount will be paid in accordance with Section 1-
32 09.9.
33
- 34 3. Once the project is physically complete and copies of the all reports
35 submitted to the Washington State Department of Ecology have been
36 submitted to the Engineer, and, if applicable, transference of the CSWGP
37 back to the Contracting Agency is complete, the remaining 15 percent of
38 the bid amount shall be paid in accordance with Section 1-09.9.
39

40 **8-01.5(2) Item Bids**

41 "ESC Lead", per day.
42

43 "Turbidity Curtain", per linear foot.
44

45 "Erosion Control Blanket", per square yard.
46

47 "Plastic Covering", per square yard.
48

49 "Check Dam", per linear foot.
50

51 "Inlet Protection", per each.
52

53 "Gravel Filter Berm", per linear foot.

1
2 “Stabilized Construction Entrance”, per square yard.

3
4 “Street Cleaning”, per hour.

5
6 “Silt Fence”, per linear foot.

7
8 “Wood Chip Berm”, per linear foot.

9
10 “Compost Berm”, per linear foot.

11
12 “Wattle”, per linear foot.

13
14 “Compost Sock”, per linear foot.

15
16 “Coir Log”, per linear foot.

17
18 “Temporary Curb”, per linear foot.

19
20 “Temporary Pipe Slope Drain”, per linear foot.

21
22 “Temporary Seeding”, per acre.

23
24 “Temporary Mulching”, per acre.

25
26 “Compost Blanket”, per square yard.

27
28 “Outlet Protection”, per each.

29
30 “Tackifier”, per acre.

31
32 “Erosion/Water Pollution Control”, by force account as provided in Section 1-09.6.

33
34 Maintenance and removal of erosion and water pollution control devices including
35 removal and disposal of sediment, stabilization and rehabilitation of soil disturbed
36 by these activities, and any additional Work deemed necessary by the Engineer to
37 control erosion and water pollution will be paid by force account in accordance with
38 Section 1-09.6.

39
40 To provide a common Proposal for all Bidders, the Contracting Agency has entered an
41 amount in the Proposal to become a part of the Contractor’s total Bid.

42
43 **8-01.5(3) Reinstating Unit Items with Lump Sum Erosion Control and Water**
44 **Pollution Prevention**

45 The Contract may establish the project as lump sum, in accordance with Section 8-
46 01.4(1) and also reinstate the measurement of one or more of the items described in
47 Section 8-01.4(2), except for Erosion/Water Pollution Control, by force account. When
48 that occurs, the corresponding payment provision in Section 8-01.5(2) is not deleted and
49 the Work under that item will be paid as specified.

50
51 **8-01.5(4) Items not included with Lump Sum Erosion Control and Water Pollution**
52 **Prevention**

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

“High Visibility Fence”, per linear foot.

Section 8-02, Roadside Restoration

April 1, 2019

This section, including all subsections, is revised to read:

8-02.1 Description

This Work consists of preserving, maintaining, establishing and augmenting vegetation on the roadsides and within mitigation or sundry site areas. It includes vegetation preservation, weed and pest control, furnishing and placing topsoil, compost, and soil amendments, and furnishing and planting seed, sod and plants of all forms and container types. It includes performing plant establishment activities and soil bioengineering. Work shall be performed in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

Trees, whips, shrubs, ground covers, cuttings, live stakes, live poles, live branches, rhizomes, tubers, rootstock, and seedlings will hereinafter be referred to collectively as “plants” or “plant material”. Grass, wildflowers, and other plant materials installed in seed form will hereinafter be referred to collectively as “seed”.

8-02.2 Materials

Materials shall meet the requirements of the following sections:

Erosion Control and Roadside Planting	9-14
Water	9-25.2

Botanical identification and nomenclature of plant materials shall be based on descriptions by Hitchcock and Cronquist in “Flora of the Pacific Northwest”. Botanical identification and nomenclature of plant material not found in “Flora” shall be based on Bailey in “Hortus Third” or superseding editions and amendments or as referenced in the Plans.

8-02.3 Construction Requirements

8-02.3(1) Responsibility During Construction

The Contractor shall prepare, install, and ensure adequate and proper care of all roadside seeded, planted, and lawn areas on the project until all plant establishment periods required by the Contract are complete or until Physical Completion of the project, whichever is last.

Adequate and proper care shall include, but is not limited to, keeping all plant material in a healthy, growing condition by watering, pruning, and other actions deemed necessary for plant health. This Work shall include keeping the project area free from insect infestation, weeds or unwanted vegetation, litter, and other debris along with retaining the finished grades and mulch in a neat uniform condition.

Existing desirable vegetation shall be saved and protected unless removal is required by the Contract or allowed by the Engineer.

The Contractor shall have sole responsibility for the maintenance and appearance of the roadside restoration.

1
2 **8-02.3(2) Work Plans**

3 Three Work Plan submittals exist under this Section:
4

- 5 1. Roadside Work Plan: This plan is required when Work will disturb the
6 roadside beyond 20 feet from the pavement or where trees or native
7 vegetation will be removed, the Contractor shall submit a Type 2 Working
8 Drawing.
9
- 10 2. Weed and Pest Control Plan: This plan is required when the proposal
11 contains the item "Weed and Pest Control," and prior to application of any
12 chemicals or weed control activities, the Contractor shall submit a Type 2
13 Working Drawing.
14
- 15 3. Plant Establishment Plan: This plan is required when the proposal
16 contains the item "PSIPE__", and prior to completion of Initial Planting, the
17 Contractor shall submit a Type 2 Working Drawing.
18

19 **8-02.3(2)A Roadside Work Plan**

20 The Roadside Work Plan shall define the expected impacts to the roadside and
21 restoration resulting from Work necessary to meet all Contract requirements.
22 The Contractor shall define how the roadside restoration Work included in the
23 Contract will be phased and coordinated with project Work such as earthwork,
24 staging, access, erosion and water pollution control, irrigation, etc. The
25 Roadside Work Plan shall include the following:
26

- 27 1. Limiting impacts to roadsides:
28
29 a. Limits of Work including locations of staging or parking.
30
31 b. Means and methods for vegetation protection (in accordance with
32 Section 1-07.16(2)).
33
34 c. Locations outside of clearing limits where vegetation shall be
35 removed to provide access routes or other needs to accomplish
36 the Work.
37
38 d. Plans for removal, preservation and stockpile of topsoil or other
39 native materials, if outside of clearing and grubbing limits and
40 within the project limits.
41
- 42 2. Roadside Restoration:
43
44 a. Plan for propagation and procurement of plants, ground
45 preparation for planting, and installation of plants.
46
47 b. Means and methods to limit soil compaction where seeding and
48 planting are to occur, such as steel plates, hog fuel access roads,
49 wood mats for sensitive areas (including removal) and
50 decompaction for unavoidable impacts.
51
52 c. Plan and timing to incorporate or remove erosion control items.
53

1 3. Lawn Installation:

- 2
- 3 a. Schedule for lawn installation work.
- 4
- 5 b. Establishment and maintenance of lawns.
- 6

7 **8-02.3(2)B Weed and Pest Control Plan**

8 The Weed and Pest Control Plan shall describe all weed and pest control

9 needs for the project.

10

11 The plan shall be prepared and signed by a licensed Commercial Pest Control

12 Operator or Consultant. The plan for control of weeds and pests on the

13 Contract in accordance with Section 8-02.3(3) shall include the following:

14

- 15 1. Names of plan preparer and pesticide operators, including contact
- 16 information. The Contractor shall furnish the Engineer evidence that
- 17 all operators are licensed with appropriate endorsements, and that the
- 18 pesticide used is registered for use by the Washington State
- 19 Department of Agriculture.
- 20
- 21 2. Means and methods of weed control, including mechanical and/or
- 22 chemical.
- 23
- 24 3. Schedule for weed control including re-entry times for pesticide
- 25 application by pesticide type.
- 26
- 27 4. Proposed pesticide use in accordance with Section 8-02.3(3)A: name,
- 28 application rate, and Safety Data Sheets of all proposed pesticides.
- 29 Include a copy of the current product label for each pesticide to be
- 30 used.
- 31
- 32 5. Plan to ensure worker safety until pesticide re-entry periods are met.
- 33

34 **8-02.3(2)C Plant Establishment Plan**

35 The Plant Establishment Plan shall describe activities necessary to ensure

36 continued health and vigor of planted and seeded areas in accordance with the

37 requirements of Sections 8-02.3(12) and 8-02.3(13). Should the plan become

38 unworkable at any time during the first-year plant establishment, the Contractor

39 shall submit a revised plan prior to proceeding with further Work. The Plant

40 Establishment Plan shall include:

41

- 42 1. Proposed scheduling of joint inspection meetings, activities, materials,
- 43 equipment to be utilized for the first-year plant establishment.
- 44
- 45 2. Proposed adaptive management activities to ensure successful
- 46 establishment of seeded, sodded, and planted areas.
- 47
- 48 3. A contact person.
- 49
- 50 4. Management of the irrigation system, when applicable.
- 51

1 **8-02.3(3) Weed and Pest Control**

2 The Contractor shall control weed and pest species within the project limits using
3 integrated pest management principles consisting of mechanical, biological, and
4 chemical controls that are outlined in the Weed and Pest Control Plan or as
5 designated by the Engineer. Controlling weeds consists of killing and removing
6 weeds by chemical, mechanical, and hand methods.
7

8 **8-02.3(3)A Chemical Pesticides**

9 Chemical pesticides include, but are not restricted to, any substance or mixture
10 of substances intended for preventing, destroying, repelling or mitigating any
11 pest, including but not limited to, insecticides, herbicides, fungicides, adjuvants,
12 and additives, including plant regulators, defoliants and desiccants. The
13 Contractor shall apply chemical pesticides in accordance with the label
14 recommendations, the Washington State Department of Ecology, local
15 sensitive area ordinances, and Washington State Department of Agriculture
16 laws and regulations. Only those pesticides listed in the table Herbicides
17 Approved for Use on WSDOT Rights of Way and accepted as part of the Weed
18 and Pest Control Plan or by written authorization from the Engineer may be
19 used (www.wsdot.wa.gov/maintenance/roadside/herbicide_use.htm).
20

21 The applicator shall be licensed by the State of Washington as a Commercial
22 Applicator or Commercial Operator, with additional endorsements as required
23 by the Special Provisions or the proposed weed control plan. All chemical
24 pesticides shall be delivered to the job site in the original containers, or if pre-
25 mixed off-site, a certification of the components and formulation from the
26 supplier is required. The licensed applicator or operator shall complete WSDOT
27 Form 540-509, Commercial Pesticide Application Record, each day the
28 pesticide is applied and furnish a copy to the Engineer by the following
29 business day.
30

31 The Contractor shall ensure confinement of the chemicals within the
32 designated areas. The use of spray chemical pesticides shall require the use of
33 anti-drift and activating agents and a spray pattern indicator unless otherwise
34 allowed by the Engineer.
35

36 The Contractor shall assume all responsibility for rendering any area
37 unsatisfactory for planting by reason of chemical application. Damage to
38 adjacent areas, either on or off the Highway Right of Way, shall be repaired to
39 the satisfaction of the Engineer or the property owner at no additional cost to
40 the Contracting Agency.
41

42 **8-02.3(3)B Planting and Lawn Area Weed Control**

43 Planting and lawn area weed control consists of controlling weeds and pests in
44 planted and lawn areas shown in the Plans. This Work is included in the bid
45 items for planting and lawn installation.
46

47 All planting and lawn areas shall be prepared so that they are weed and debris
48 free at the time of planting and until completion of the project. The planting
49 areas shall include the entire ground surface, regardless of cover, areas
50 around plants, and those areas shown in the Plans.
51

1 Within planting or lawn areas, all species that are not shown in the Plans are
2 unwanted and shall be controlled unless specifically allowed by the Engineer to
3 remain.

4
5 Grass growing within the mulch ring of a plant, including grass applied in
6 accordance with Sections 8-01.3(2)A1, 8-02.3(9) or 8-02.3(10), shall be
7 considered a weed and shall be controlled on the project in accordance with
8 the weed and pest control plan.

9
10 All applications of post-emergent herbicides shall be made while green and
11 growing tissue is present. Residual herbicides shall not be used where
12 rhizomatous species or perennial species are indicated.

13
14 Should unwanted vegetation reach the flowering and seed stage in violation of
15 these Specifications, the Contractor shall physically remove and bag the seed
16 heads prior to seed dispersion. All physically removed vegetation and seed
17 heads shall be disposed of off-site at no cost to the Contracting Agency.

18
19 **8-02.3(3)C Project Area Weed and Pest Control**

20 The Contractor shall control weeds not otherwise covered in accordance with
21 Section 8-02.3(3)B, in all areas within the project limits, including erosion
22 control seeding areas and vegetation preservation areas, as designated by the
23 Engineer.

24
25 When the Bid Item "Project Area Weed and Pest Control" is included in the
26 Contract, the Contractor shall also control all weeds specified as noxious by the
27 Washington State Department of Agriculture, the local Weed District, or the
28 County Noxious Weed Control Board outside of planting areas within the
29 project limits.

30
31 **8-02.3(4) Topsoil**

32 Topsoil shall not be worked or placed when the ground or topsoil is frozen, or
33 excessively wet.

34
35 The Contractor shall protect topsoil stockpiled for project use to prevent erosion and
36 weed growth. Weed growth on topsoil stockpile sites shall be immediately
37 eliminated in accordance with the accepted Weed and Pest Control Plan and
38 Section 8-02.3(3)C.

39
40 The subsoil where topsoil is to be placed shall be tilled to a depth of 1 foot or as
41 specified in the Special Provisions or the Plans. Topsoil of the type specified shall
42 be evenly spread over the specified areas to the depth shown in the Plans or as
43 otherwise ordered by the Engineer. Topsoil depths greater than 6 inches shall be
44 placed in lifts no more than 6 inches in depth. The first lift of topsoil shall be
45 incorporated with sub-soil to a depth of 8 inches and subsequent lifts placed and
46 lightly tamped between lifts. After the topsoil has been spread, all large clods, hard
47 lumps, and rocks 2 inches in diameter and larger, and litter shall be raked up,
48 removed, and disposed.

49
50 **8-02.3(4)A Topsoil Type A**

51 Topsoil Type A shall be as specified in the Special Provisions. The Contractor
52 shall submit a certification by the supplier that the contents of the Topsoil meet
53 the requirements in the Special Provisions.

1
2 **8-02.3(4)B Topsoil Type B**

3 Topsoil Type B shall be naturally occurring topsoil taken from within the project
4 limits and shall meet the requirements of Section 9-14.1(2). Topsoil Type B
5 shall be taken from areas shown in the Plans to the designated depth and
6 stockpiled at locations that will not interfere with the construction of the project,
7 and outside of sensitive areas, as allowed by the Engineer. A minimum of two
8 weeks prior to excavation of Topsoil Type B, the Contractor shall pre-treat the
9 vegetation on the designated Topsoil Type B areas according to the Weed and
10 Pest Control Plan. Areas beyond the slope stakes shall be disturbed as little as
11 possible in the above operations and under no circumstances shall Topsoil
12 Type B be stockpiled within 10 feet of any existing tree or vegetation area
13 designated to be saved and protected. The Contractor shall protect topsoil
14 stockpile from weed infestation.

15
16 The Contractor shall set aside sufficient material to satisfy the needs of the
17 project.

18
19 Upon completion of topsoil placement, the Contractor shall dispose of
20 remaining stockpiled Topsoil Type B not required for use on the project at no
21 additional expense to the Contracting Agency in accordance with Section 2-
22 03.3(7)C.

23
24 Should a shortage of Topsoil Type B occur, and the Contractor has wasted or
25 otherwise disposed of topsoil material, the Contractor shall furnish Topsoil
26 Type A or C at no additional expense to the Contracting Agency.

27
28 **8-02.3(4)C Topsoil Type C**

29 Topsoil Type C shall be naturally occurring topsoil obtained from a source
30 provided by the Contractor outside of the Contracting Agency-owned Right of
31 Way. Topsoil Type C shall meet the requirements of Sections 8-02.3(4)B and
32 9-14.1(3). The Contractor shall not begin removal of Topsoil Type C from the
33 proposed source until the material has been allowed for use by the Engineer.

34
35 **8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation**

36 This Work includes preparing worked areas for the installation of all types of
37 permanent erosion control planting. Work shall be conducted so the flow lines in
38 drainage channels are maintained. Material displaced by the Contractor's
39 operations that interferes with drainage shall be removed from the channel and
40 disposed of as allowed by the Engineer.

41
42 **8-02.3(5)A Seeding Area Preparation**

43 The Contractor shall prepare roadside seeding areas as follows:

- 44
45 1. Remove all excess material, debris, stumps, and rocks greater than 3
46 inches in diameter from areas to be seeded. Dispose of removed
47 materials offsite.
48
49 2. Prepare roadside seeding area to a weed free and bare condition.
50
51 3. Bring area to uniform grade and install topsoil, soil amendments, or
52 compost as specified. Any slopes 3(H) to 1(V) or steeper shall not be
53 tilled unless otherwise specified.

4. Compact to provide a reasonably firm but friable seedbed; tractor walk to uniformly cover the surface with longitudinal depressions at least 2 inches deep formed perpendicular to the natural flow of water on the slope. Condition the soil with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.
5. Seed and mulch within 2 days of preparation.

8-02.3(5)B Lawn Area Preparation

The Contractor shall prepare lawn areas as follows:

1. Prepare lawn area to a weed free and bare condition in accordance with Section 8-02.3(3)B.
2. Remove excess material, stumps, wood or rocks over 3 inches in diameter and remove from site.
3. Bring area to uniform grade and install topsoil or soil amendments in accordance with Section 8-02.3(4) and 8-02.3(6).
4. Till to an 8-inch depth, rake to a smooth even grade without low areas that trap water, and compact with a 50-pound roller. The finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways, and other Structures.
5. Seed or sod the area within two days of preparation.

8-02.3(5)C Planting Area Preparation

The Contractor shall prepare planting areas as follows:

1. Prepare planting area to a weed free and bare condition in accordance with Section 8-02.3(3)B.
2. Decompact soil to a depth of 18 inches where construction activities have taken place or where native soils are compacted.
3. Return soil to uniform grade even with surrounding areas, leaving no holes or mounds over 3 inches in depth or height.
4. Remove excess material, stumps, wood or rocks over 3 inches in diameter and remove from site.
5. Apply compost or other amendments as indicated in the plans and in accordance with Section 8-02.3(6).
6. Cultivate amendments to a depth of 12 inches to provide a reasonably firm but friable planting area. Do not till any slopes 3(H) to 1(V) or steeper.
7. Return soil to a uniform finished grade, 1 inch, or the specified depth of mulch plus 1 inch, below walks, curbs, junction and valve boxes, catch basins, and driveways, unless otherwise specified.

- 1
2 8. Begin planting and mulching the area within two days of final
3 preparation.
4

5 **8-02.3(6) Soil Amendments**

6 The Contractor shall place soil amendments of the type, quality, and quantities
7 specified where shown in the Plans or as specified in the Special Provisions. Areas
8 receiving soil amendments shall be bare soil or vegetation free prior to application.
9 All soil amendments shall be installed as shown in the Plans within 30 calendar
10 days after delivery to the project site.
11

12 **8-02.3(6)A Compost**

13 Compost used for soil amendments shall be Fine Compost unless otherwise
14 designated in the Plans. When compost blanket is used for temporary erosion
15 control, the compost blanket may be incorporated into the soil immediately prior
16 to planting when used as compost soil amendment. The area shall be prepared
17 in accordance with Section 8-02.3(5) prior to placing compost.
18

19 **8-02.3(6)B Fertilizers**

20 The Contractor shall apply fertilizer in the form, mixture, and rate specified in
21 the Special Provisions or as directed by the Engineer. Application procedures
22 shall be in accordance with the manufacturer's recommendations unless
23 otherwise specified in the Special Provisions.
24

25 The Contractor shall submit a guaranteed fertilizer analysis label for the
26 selected product a minimum of one week prior to application for acceptance.
27 Following the Engineer's acceptance, fertilizing of the accepted ground or
28 vegetated surfaces shall begin immediately.
29

30 In seeding and lawn areas to be fertilized, the fertilizer shall be applied
31 concurrently with the seed. When fertilizer is hydraulically applied, the fertilizer
32 shall be suitable for application with seeding as specified in Section 8-02.3(9)C.
33 If hydroseeding, the fertilizer shall be placed in the hydroseeder tank no more
34 than 1 hour prior to application.
35

36 Fertilizers for planting areas shall be applied concurrently with compost and
37 applied prior to incorporation, unless tablet form fertilizer is specified. Where
38 tablet form fertilizer is specified, fertilizer shall be applied concurrently with
39 plant installation.
40

41 Fertilizer sprayed on signs or sign structures shall be removed the same day.
42

43 Areas not accessible by fertilizing equipment shall be fertilized by allowed
44 hand methods.
45

46 Second Application: A second application of fertilizer shall be applied as
47 specified in the Special Provisions at the locations designated in the Plans. The
48 fertilizer shall be applied during the months of March, April, or May of the
49 following year after the initial seeding, planting, or lawn installation. The
50 fertilizer shall be dry granular pellets or pearls and applied in accordance with
51 the manufacturer's recommendations or as specified in the Special Provisions.
52

1 **8-02.3(7) Layout of Planting, Lawn and Seeding Areas**

2 The Contractor shall lay out and prepare planting and lawn areas and receive the
3 Engineer's acceptance of layout and preparation prior to any installation activities.
4 The Contractor shall stake the location of all trees larger than 1-inch caliper and the
5 perimeter of all planting areas for acceptance by the Engineer prior to any
6 installation activities.

7
8 The Contractor shall locate all trees to be planted in mowable grass areas a
9 minimum of 10 feet from the edge of planting areas, other trees, fence lines, and
10 bottom of ditches unless otherwise specified.

11
12 Tree locations shown in the Plans shall be considered approximate unless shown
13 with stationing and offset distance. In irrigated areas, trees shall be located so their
14 trunk is a minimum of 1/3 of the spray radius away from the nearest sprinkler head.

15
16 Unless otherwise shown, planting areas located adjacent to Roadways shall begin 6
17 feet from the edge of shoulder on roadway fills and begin 5 feet up on the back
18 slope from the bottom on roadway cut sections. Plants within planting areas shall be
19 located such that mature branching pattern will not block sight distance, signs, or
20 other traffic-related devices. No trees shall be placed where the mature canopy will
21 grow to within 10 feet of existing power lines. Where roadside ditches are present,
22 planting areas shall begin 5 feet from the centerline of the ditch unless shown
23 otherwise in the Plans.

24
25 **8-02.3(8) Planting**

26 **8-02.3(8)A Dates and Conditions for Planting**

27 No plant material shall be planted until it has been inspected and accepted for
28 planting by the Engineer. Rejected material shall be removed from the project
29 site immediately. All plants for the project or a sufficient quantity to plant 1-acre
30 of the site, whichever is less, shall be received on site prior to the Engineer
31 beginning inspection of the plants.

32
33 Under no circumstances will planting be permitted during unsuitable soil or
34 weather conditions as determined by the Engineer. Unsuitable conditions may
35 include frozen soil, freezing weather, saturated soil, standing water, high winds,
36 heavy rains, and high water levels. The ground shall be moist at the time of
37 planting. All planting shall be accomplished during the following periods:

- 38
39 1. Non-Irrigated Plant Material
40 Western Washington (West of the Cascade Mountain Crest) –
41 October 1 to March 1.
42 Eastern Washington (East of the Cascade Mountain Crest) – October
43 1 to November 15.

44
45 2. Irrigated Plant Material

46
47 In irrigated areas, plant material shall not be installed until the irrigation
48 system is fully operational and accepted by the Engineer. Trees and
49 shrubs may be planted in irrigated areas during the non-irrigated planting
50 window before the irrigation system is functional with the written
51 concurrence of the Engineer only if the irrigation system is guaranteed to
52 be operational prior to the end of the non-irrigated planting window.
53

1 **8-02.3(8)B Plant Installation**

2 The Contractor shall handle plant material in the following manner:

- 3
- 4 1. Root systems shall be kept covered and damp at all times. Plant
- 5 material shall be kept in containers until the time of planting.
- 6
- 7 2. Roots shall not be bunched, curled, twisted, or unreasonably bent
- 8 when placed in the planting hole. Bare root plant material shall be
- 9 dormant at the time of harvesting and planting. The root systems of all
- 10 bare root plant material shall be dipped in a slurry immediately prior to
- 11 planting.
- 12
- 13 3. Plant material supplied in wrapped balls shall not be removed from
- 14 the wrapping until the time of planting at the planting location. The
- 15 root system of balled plant material shall be moist at the time of
- 16 planting. Root balls shall be loosened prior to planting. All burlap,
- 17 baskets, string, wire and other such materials shall be removed from
- 18 the hole when planting balled plants.
- 19
- 20 4. Plant cutting material shall be dormant at the time of cutting and
- 21 planting. All cuttings shall be installed immediately if buds begin to
- 22 swell.
- 23
- 24 5. Plants shall be placed with the crown at the finished grade. In their
- 25 final position, plants shall have their top true root (not adventitious
- 26 root) no more than 1 inch below the soil surface, no matter where that
- 27 root was located in the original root ball or container. The backfill
- 28 material, including container and root ball soil, shall be thoroughly
- 29 watered on the same day that planting occurs regardless of season.
- 30

31 When installing plants, the Contractor shall dig planting holes three times the

32 diameter of the container or root ball size. Any glazed surface of the planting

33 hole shall be roughened prior to planting.

34

35 **8-02.3(8)C Pruning, Staking, Guying, and Wrapping**

36 Plants shall be pruned at the time of planting, only to remove minor broken or

37 damaged twigs, branches or roots. Pruning shall be performed with a sharp

38 tool and shall be done in such a manner as to retain or to encourage natural

39 growth characteristics of the plants. All other pruning shall be performed only

40 after the plants have been in the ground at least 1 year and when plants are

41 dormant.

42

43 Trees shall only be staked when so noted in the Plans. Each tree shall be

44 staked or guyed before completion of the backfilling in accordance with the

45 details shown in the Plans.

46

47 Trees shall be wrapped when so noted in the Plans.

48

49 **8-02.3(9) Seeding, Fertilizing, and Mulching**

50 For all seed, the Contractor shall furnish the following documentation to the

51 Engineer:

52

- 53 1. The state or provincial seed dealer license and endorsements.

- 1
2
3
4
5
6
7
8
9
2. Copies of Washington State Department of Agriculture (WSDA) test results on each lot of seed. Test results shall be within six months prior to the date of application.

8-02.3(9)A Dates for Application of Seed

Unless otherwise allowed by the Engineer, the Contractor shall apply seed for permanent erosion control during the following periods:

Western Washington¹ (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15 September 1 through October 1	October 1 through November 15
¹ Seeding may be allowed outside these dates when allowed by the Engineer.	

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All roadway excavation and embankment ground surfaces that are completed to final grades shall be prepared and seeded during the first available seeding window. When environmental conditions are not conducive to satisfactory results, the Engineer may suspend the seeding Work until such time that the desired results are likely to be obtained. If seeding is suspended, temporary erosion control methods according to Section 8-01 shall be used to protect the bare soil until seeding conditions improve.

8-02.3(9)B Seeding and Fertilizing

The Contractor shall prepare the seeding area in accordance with Section 8-02.3(5)A and apply seed at the rate and mix specified in the Special Provisions. The Contractor shall notify the Engineer within 5 days in advance of any seeding operation and shall not begin the Work until areas prepared or designated for seeding have been accepted. Following the Engineer's acceptance, seeding of the accepted ground surfaces shall begin immediately.

Seeding shall not be done during windy weather or when the ground is frozen, or excessively wet.

When seeding by hand, the seed shall be incorporated into the top ¼ inch of soil by hand raking or other method that is allowed by the Engineer.

Seed applied as a separate operation using a hydroseeder shall have a tracer added to visibly aid uniform application. The tracer shall be HECF Short-Term Mulch applied at a rate of 200 to 250 pounds per acre and the tracer shall carry the measured specified seeding rate.

8-02.3(9)C Seeding with Fertilizers and Mulches

When the Proposal includes any variation of seeding, fertilizing, and without mulching, the seed and fertilizer shall be applied in one application followed by mulching. West of the Cascade Mountains, seed, fertilizer, and mulch may be completely applied in one application. East of the Cascades, seeding, fertilizing, and mulching shall not be applied as a single application unless allowed by the Engineer in writing prior to application. The fertilizing and mulching shall meet the requirements of Sections 8-02.3(6) and 8-02.3(11).

1 **8-02.3(9)D Inspection**

2 Seeded areas will be inspected upon completion of seeding, fertilizing, and
3 mulching. The Work in any area will not be measured for payment until a
4 uniform distribution of the materials is accomplished at the specified rate. Areas
5 that have not received a uniform application of seed, fertilizer, and mulch at the
6 specified rate, as determined by the Engineer, shall be re-seeded, re-fertilized,
7 or re-mulched prior to payment for seeding within a designated area.
8

9 **8-02.3(9)E Protection and Care of Seeded Areas**

10 The Contractor shall install and establish a stable and weed free stand of grass
11 as specified within all designated permanent seeding areas. A stable stand of
12 grass shall meet the following requirements:
13

- 14 1. A dense and uniform canopy cover, 70% for Western Washington and
15 50% for Eastern Washington, of specified species covers all seeded
16 areas after 3 months of active growth following germination during the
17 growing season. Canopy cover is defined as the cover of living and
18 vigorous grass blades, leaves, and shoots of specified species.
19 Volunteer species, weeds, woody plants, or other undesirable
20 vegetation shall not factor into the canopy cover. Growth and
21 establishment may require supplemental irrigation to meet cover
22 requirements.
23
- 24 2. Stand health is evident by vigorously growing planted species having
25 a uniform rich-green appearance and with no dead patches or major
26 gaps of growth. A stand of grass that displays rusting, wilting, stunted
27 growth, disease, yellowing or browning of leaves, or bare patches
28 does not meet the stand health requirement.
29
- 30 3. The Contractor shall establish a stable stand of grass free of all
31 weeds, non-specified grasses, and other undesirable vegetation.
32 Weed control shall be in accordance with the Weed and Pest Control
33 Plan and occur on a monthly basis during the establishment period
34 and through the life of the Contract.
35
- 36 4. Remove all trash, rocks, construction debris, and other obstructions
37 that may be detrimental to the continued establishment of future
38 seeding.
39

40 In addition to the requirements of Section 1-07.13(1), restoration of eroded
41 areas including clean up, removal, and proper disposal of eroded material,
42 filling and raking of eroded areas with Topsoil Type A or fine compost, and re-
43 application of the specified seed, fertilizer, and mulch shall occur at no
44 additional cost to the Contracting Agency.
45

46 **8-02.3(10) Lawn Installation**

47 **8-02.3(10)A Dates and Conditions for Lawn Installation**

48 In irrigated areas, lawn installation shall not begin until the irrigation system
49 is fully operational.
50

51 Unless otherwise allowed by the Engineer, seeded lawn installation shall be
52 performed during the following time periods at the location shown:
53

Western Washington (West of the Cascade Mountain Crest)	Eastern Washington (East of the Cascade Mountain Crest)
March 1 through May 15 September 1 through October 1	October 1 through November 15
When irrigation system is operational March 1 through October 1	When irrigation system is operational March 1 through November 1

8-02.3(10)B Lawn Seeding and Sodding

The Contractor shall prepare the lawn area in accordance with Section 8-02.3(5) and apply seed at the mix and rate of application as specified in the Special Provisions.

The Contractor shall have the option of sodding in lieu of seeding for lawn installation at no additional expense to the Contracting Agency. Seeding in lieu of sodding will not be allowed.

Seed placed by hand shall be raked into the soil. Following raking, the seeded soil shall be rolled with a smooth 50-pound roller. Sod strips shall be placed within 48 hours of being cut. Placement shall be without voids and have the end joints staggered. Following placement, the sod shall be rolled with a smooth roller to establish contact with the soil.

Barriers shall be erected, with warning signs where necessary, to preclude pedestrian traffic access to the newly placed lawn during the establishment period.

8-02.3(10)C Lawn Establishment

Lawn establishment shall consist of caring for all new lawn areas within the limits of the project.

The lawn establishment period shall begin immediately after the lawn seeding or sodding has been accepted by the Engineer and shall extend to the end of four mowings or 20 working days whichever is longer. The mowings shall be done in accordance with Section 8-02.3(10)D.

During the lawn establishment period, the Contractor shall ensure the continuing healthy growth of the turf. This care shall include keeping the project in a presentable condition including, but not limited to, removal of litter, mowing, trimming, removal of grass clippings, edging, fertilization, insecticide and fungicide applications, weed control, watering, repairing the irrigation system, and repair and reseeding all damaged areas.

Temporary barriers shall be removed only when directed by the Engineer.

All Work performed under lawn establishment shall comply with established turf management practices.

Acceptance of lawn planting as specified will be based on a uniform stand of grass and a uniform grade at the time of final inspection. The Contractor shall recultivate, re-grade, reseed, and refertilize areas that are bare or have a poor stand of grass or not having a uniform grade through any cause before final inspection at no additional cost to the Contracting Agency.

1
2 **8-02.3(10)D Lawn Mowing**

3 Lawn mowing shall begin immediately after the lawn establishment period has
4 been accepted by the Engineer and shall extend to the end of the Contract or
5 the first-year plant establishment, whichever is last.
6

7 The Contractor shall accomplish the following minimum requirements:
8

- 9
- 10 1. Mow, trim, and edge as often as conditions dictate, at a minimum,
11 once per week between April and September. Maximum height of
12 lawn shall not exceed 3 inches. The cutting height shall be 2 inches.
13 Cuttings, trimmings, and edgings shall be disposed of off the project
14 site. When the Engineer allows the use of a mulching mower,
15 trimmings may be left in place.
 - 16 2. Water as often as conditions dictate depending on weather and soil
17 conditions.
18
 - 19 3. Provide fertilizer, weed control, water, and other measures as
20 necessary to establish and maintain a healthy stand of grass.
21

22 **8-02.3(11) Mulch**

23 Mulches associated with seeding and planting shall be of the type specified in the
24 Special Provisions or as indicated in the Plans. The Contractor shall evenly apply
25 mulch at the rates indicated in the Plans. Mulches shall not be placed below the
26 anticipated water level of ditch slopes, pond bank slopes, and stream banks, or in
27 areas of standing or flowing water.
28

29 **8-02.3(11)A Mulch for Seeding Areas**

30 The Contractor shall furnish and evenly apply Hydraulically Applied Erosion
31 Control Product (HECP) Long Term Mulch at the rates indicated and in
32 accordance with the Manufacturer's specifications unless otherwise specified.
33

34 HECP Long Term Mulch shall be hydraulically applied at the rate of 3500
35 pounds per acre with no more than 2000 pounds applied in any single lift.
36 HECP mulch shall not be used within the Ordinary High Water Mark.
37

38 Mulch sprayed on signs or sign Structures shall be removed the same day.
39

40 Areas not accessible by mulching equipment shall be mulched by accepted
41 hand methods.
42

43 HECP Long Term Mulch may be applied with seed and fertilizer west of the
44 summit of the Cascade Range. East of the summit of the Cascade Range,
45 seed and fertilizer shall be applied in a single application followed by the
46 application of mulch.
47

48 **8-02.3(11)B Bark or Woodchip Mulch**

49 The Contractor shall apply bark or wood chip mulch of the type and depth
50 specified where shown in the Plans or as specified in the Special Provisions.
51

52 The Contractor shall complete final grading and placement/incorporation of soil
53 amendments within the planting area prior to placement of mulch. Areas

1 receiving bark mulch shall be bare soil or vegetation free before application,
2 except where trees and other plants are specifically identified in the Plans or
3 designated by the Engineer to be saved and protected.
4

5 Bark or wood chip mulch shall be placed to a uniform non-compacted depth of
6 3 inches over all planting areas unless otherwise specified. Mulch shall be
7 feathered to the base of the plant and 1 inch below the top of junction and
8 valve boxes, curbs, and pavement edges.
9

10 Any contamination of the mulch due to the Contractor's operations shall be
11 corrected to its former condition at no additional cost to the Contracting
12 Agency. Mulch placed to a thickness greater than specified shall be at no
13 additional cost to the Contracting Agency.
14

15 The Contractor shall keep plant material crowns, runners, and branches free of
16 mulch at all times.
17

18 **8-02.3(11)C Bark or Woodchip Mulch Rings**

19 The Contractor shall apply mulch rings around plants installed within existing
20 vegetation areas or within seeded areas as shown in the Plans. Bark or wood
21 chip mulch rings shall be applied to the surface of vegetation free amended soil
22 in the isolated plant locations where shown in the Plans or as specified in the
23 Special Provisions. Bark or wood chip mulch shall be placed to a uniform non-
24 compacted depth of 3 inches to a radius of 2 feet around all plants within
25 interplanted plant locations.
26

27 **8-02.3(12) Completion of Initial Planting**

28 Upon completion of the initial planting within a designated area, the Engineer will
29 make an inspection of all planting areas. The Engineer will notify the Contractor, in
30 writing, of any replacements or corrective action necessary to meet the plant
31 installation requirements. The Contractor shall replace all plants and associated
32 materials rejected or missing and correct unsatisfactory conditions.
33

34 Completion of the initial planting within a designated area includes the following
35 conditions:
36

- 37 1. 100 percent of each of the plant material categories are installed as shown
38 in the Plans.
39
- 40 2. Planting Area is cleaned up.
41
- 42 3. Repairs are completed, including but not limited to, full operation of the
43 irrigation system.
44
- 45 4. Mulch coverage is complete.
46
- 47 5. All weeds are controlled.
48

49 **8-02.3(13) Plant Establishment**

50 Plant establishment consists of caring for all plants and planting areas within the
51 project limits. The provisions of Sections 1-07.13(2) and 1-07.13(3) do not apply to
52 this Section.
53

1 When the Proposal includes the bid item PSIFE_____ (Plant Selection Including
2 Plant Establishment), that bid item includes one year of plant establishment Work.
3 The first year of plant establishment shall begin immediately upon written
4 notification from the Engineer of the completion of initial planting for the project. The
5 first-year plant establishment period shall be a minimum of one calendar year. The
6 one calendar year shall be extended an amount equal to any periods where the
7 Contractor does not comply with the plant establishment requirements and plan.
8

9 During the first-year plant establishment period, the Contractor shall perform all
10 Work necessary to ensure the resumption and continued growth of the transplanted
11 material. This Work shall include, but is not limited to, applying water, removing
12 foreign, dead, or rejected plant material, maintaining all planting areas in a weed-
13 free condition, and replacing all unsatisfactory plant material planted under the
14 Contract. If plants are stolen or damaged by the acts of others, the Contracting
15 Agency will pay invoice cost only for the replacement plants with no mark-up and
16 the Contractor will be responsible for the labor to install the replacement plants.
17 Other weed control within the project limits but outside of planting, lawn, or seeding
18 areas shall be as specified in Section 8-02.3(3)C.
19

20 During the first year of plant establishment, the Contractor shall meet monthly or at
21 an agreed upon schedule with the Engineer for the purpose of joint inspection of the
22 planting material. The Contractor shall correct all unsatisfactory conditions
23 identified by the Engineer within a 10-day period immediately following the
24 inspection. If plant replacement is required, the Contractor shall, within the 10-day
25 period, submit a plan and schedule for the plant procurement and replacement to
26 occur during the planting period as designated in Section 8-02.3(8). At the end of
27 the plant establishment period, plants that do not show normal growth shall be
28 replaced and all staking and guying that remain on the project shall be removed
29 unless otherwise allowed by the Engineer.
30

31 All automatic irrigation systems shall be operated fully automatic during the plant
32 establishment period and until final acceptance of the Contract. Payment for water
33 used to water in plants, or hand watering of plant material or lawn areas unless
34 otherwise specified, is the responsibility of the Contractor during the first-year plant
35 establishment period.
36

37 Subsequent year plant establishment periods shall begin immediately at the
38 completion of the preceding year's plant establishment period. Each subsequent
39 plant establishment period shall be one full calendar year in duration.
40

41 During the plant establishment period(s) after the first year plant establishment, the
42 Work necessary for the continued healthy and vigorous growth of all plants material
43 shall be performed as directed by the Engineer.
44

45 Payment for water used to water plants during the subsequent year(s) of plant
46 establishment will be paid under the plant establishment item.
47

48 **8-02.3(14) Plant Replacement**

49 The Contractor shall be responsible for growing or arrange to provide sufficient
50 plants for replacement of all plant material rejected through first-year plant
51 establishment. All replacement plant material shall be inspected and accepted by
52 the Engineer prior to installation. All rejected plant material shall be replaced with

1 acceptable plants meeting the specifications and installed according to the
2 requirements of this Section at dates allowed by the Engineer.

3
4 All replacement plants shall be of the same species as the plants they replace and
5 meet the requirements of Section 9-14.8 unless otherwise allowed by the Engineer.
6 Plants may vary in size reflecting one season of growth should the Contractor elect
7 to hold plant material under nursery conditions for an additional year to serve as
8 replacement plants. Replacement plant material larger than specified in the Plans
9 shall meet the applicable section requirements of the ASNS for container class, ball
10 size, spread, and branching characteristics.

11 12 **8-02.3(15) Bioengineering**

13 Bioengineering consists of using plant materials for the purpose of streambank or
14 earthen slope construction and surface stabilization. This Work may include
15 installing woody plant cuttings in various forms as well as part of streambank or
16 earthen slope construction.

17 18 **8-02.3(15)A Fascines**

19 Live fascines shall be constructed of live and dead cuttings bundled together
20 with a diameter of 8 to 18 inches. Live cuttings shall be the species shown in
21 the Plans. Dead branches may be cuttings from any woody, non-invasive plant
22 native to the project area. Dead branches may be placed within the live fascine
23 and on the side exposed to the air. Live branches shall be placed in contact
24 with the soil along their entire length. Each live fascine must contain a minimum
25 of eight live branches. Dead branches shall constitute no more than 40 percent
26 of the total fascine content.

27
28 The total length of each live fascine shall be a minimum of 5 feet. Branches
29 shall be bundled into log-like forms and bound with biodegradable twine
30 spaced at 1-foot intervals along the entire length of the live fascine. Live
31 fascines shall be installed horizontally in a trench whose depth shall be $\frac{1}{2}$ the
32 diameter of the live fascine. Secure the live fascine with live stakes 3 feet in
33 length and $\frac{3}{4}$ inch in diameter placed at 18-inch intervals. A minimum of three
34 live stakes shall be used per fascine. The live stakes shall be driven through
35 the live fascine vertically into the slope. The ends of live fascines shall be
36 woven together so that no gap remains between the two sections of the
37 live fascine.

38
39 Prior to being covered with soil, the fascine shall be thoroughly watered. Once
40 the fascine is covered with 6 inches of soil, the soil covering the fascine shall
41 be thoroughly watered.

42
43 When used to remedy erosion areas, live fascines shall extend a minimum of
44 two feet beyond the visible area of erosion and soil disturbance. The locations
45 for live fascines and live stake rows shall be identified in the field for review and
46 acceptance by the Engineer. The Engineer may require adjustment of fascine
47 locations prior to installation in order to best accomplish the intended functions.

48
49 Plant replacement during plant establishment for "PSIPE Live Fascine" will be
50 required for any section void of live shoots for a length of 3 feet or more.
51 Replacement shall consist of installing live stakes, spaced 1 foot apart above
52 the fascine within the area void of live shoots. Live stakes shall be of the same
53 species as the live fascine and shall have a minimum length of 3 feet and a

1 minimum diameter of ¾ inch. The requirements of Section 8-02.3(8) apply to
2 PSIFE Live Fascine.

3
4 **8-02.3(15)B Brush Mattress**

5 Live brush mattress shall be constructed of live branch cuttings, live poles, jute
6 rope and topsoil. The live cuttings and live poles shall be from the plant species
7 designated in the Plans. Live branch cuttings shall be placed with the cut ends
8 oriented down slope as shown in the Plans. Cuttings shall overlap from side to
9 side and from top to bottom as each layer is constructed. The live branches in
10 each succeeding upper layer shall overlap the adjacent lower layer by a
11 minimum of 6 inches. A maximum of 20 percent of the branches may be dead
12 branches, but the live branches shall be distributed evenly to provide even
13 rooting and growth over the entire area of the brush mattress.

14
15 The Contractor shall anchor the live brush mattress to the slope using stakes
16 and jute rope as shown in the Plans. Initially, the stakes shall be installed to
17 protrude above the live brush mattress. The Contractor shall attach the jute
18 rope to the stakes and tighten the rope by tamping the stakes further into the
19 bank, pulling the live brush mattress tight against the soil surface. The
20 Contractor shall cover the live brush mattress with sufficient stockpiled topsoil
21 to ensure good soil contact with the live plant material.

22
23 Plant replacement during plant establishment for "PSIFE Live Brush Mattress"
24 will be required for any section void of live shoots for an area of 25 square feet
25 or more. Replacement shall consist of installing live stakes, spaced 3 feet
26 apart in a triangular pattern within the area void of live shoots. Live stakes
27 shall be of the same species as the live brush mattress and shall have a
28 minimum length of 3 feet and a minimum diameter of ¾ inch. The requirements
29 of Section 8-02.3(8) apply to PSIFE Brush Mattress.

30
31 **8-02.3(15)C Brush Layer**

32 Brush layers shall be constructed of live branch cuttings, randomly mixed, from
33 the plant species listed under the brush layer heading in the Plans. The
34 number of branches required will vary depending on the average branch
35 diameter and layer thickness.

36
37 Brush layers shall be placed in a trench dug at a 45 degree incline into the
38 slope or stream bank. Two-thirds to three-fourths of the length of the live
39 branches shall be buried. Soil shall be firmly tamped in place. Succeeding
40 layers shall be spaced as detailed in the Plans. Brush layer placed in stream
41 banks shall be angled downstream.

42
43 Brush layers may include plant establishment when designated as PSIFE
44 Brush Layer. Plant replacement for PSIFE Brush Layer will be required for
45 each section void of live shoots for a continuous distance of 3 feet or more. The
46 requirements of Section 8-02.3(8) apply to PSIFE Brush Layer.

47
48 **8-02.3(16) Roadside Maintenance Under Construction**

49 When the Contract includes the item, Roadside Maintenance Under Construction,
50 this Work includes roadside mowing and ditch maintenance, and noxious weed
51 control outside of planting areas according to Section 8-02.3(3)C.
52

8-02.3(16)A Roadside Mowing

The Contractor shall mow designated roadside grass areas to the limits designated by the Engineer. Roadside mowing is limited to slopes not steeper than 3(H) to 1(V).

The Contractor shall mow according to the following requirements:

1. Trim around traffic equipment, structures, planting areas, or other features extending above ground preceding or simultaneously with each mowing.
2. Maintain grass between 4 and 12 inches in height.
3. Operate mowing equipment with suitable guards to prevent throwing rocks or debris onto the traveled way or off of the Contracting Agency property. Power driven equipment shall not cause ruts, deformation, and compaction of the vegetated soil.
4. Removing clippings is required on the traveled way, shoulders, walkways, or Structures.
5. Restore soil rutting to a smooth and even grade at the direction of the Engineer.

8-02.3(16)B Ditch Maintenance

The Contractor shall maintain drainage for the duration of the Contract according to the following requirements:

1. Maintain flow lines in drainage channels and roadside ditches.
2. Cutting or trimming vegetation within drainage channels to maintain positive flow.
3. Remove dirt and debris from inside of culverts or any drainage area where runoff has allowed accumulations and re-seed for erosion control.
4. Restore channels to previous operational condition.

8-02.4 Measurement

Topsoil, bark or woodchip mulch and soil amendments will be measured by the acre or the square yard along the grade and slope of the area covered immediately after placement. Weed control pre-treatment of topsoil areas, excavation, and stockpiling are included in the bid item "Topsoil Type ____.

Bark or woodchip mulch rings will be measured per each.

Compost will be measured by the acre or the square yard along the grade and slope of the area covered immediately after application.

Seeding, fertilizing, and mulching will be measured by the acre or the square yard by ground slope measurement or through the use of design data.

1 Seeding and fertilizing by hand will be measured by the square yard. No adjustment in
2 area size will be made for the vegetation free zone around each plant.

3
4 Seeded lawn, sod installation, and lawn mowing will be measured along the ground
5 slope and computed in square yards of actual lawn completed, established, and
6 accepted.

7
8 Plant selection will be measured per each.

9
10 PSIFE __ (Plant Selection Including Plant Establishment) will be measured per each.

11
12 Live Pole will be measured per each.

13
14 Live Stake Row will be measured by the linear foot along the ground slope line.

15
16 The pay quantities for plant materials will be determined by count of the number of
17 satisfactory plants in each category accepted by the Engineer.

18
19 Fascine and PSIFE live fascine will be measured by the linear foot along the ground
20 slope line.

21
22 Brush mattress and PSIFE live brush mattress will be measured by the surface square
23 yard along the ground slope line.

24
25 Brush layer and PSIFE brush layer will be measured by the linear foot along the ground
26 slope line.

27
28 Water will be measured in accordance with Section 2-07.4. Measurement will be made
29 of only that water hauled in tank trucks or similar equipment.

30 31 **8-02.5 Payment**

32 Payment will be made for each of the following listed Bid items that are included in the
33 Proposal:

34
35 "Project Area Weed and Pest Control" will be paid in accordance with Section 1-
36 09.6.

37 For the purpose of providing a common Proposal for all Bidders, the Contracting
38 Agency entered an amount for "Project Area Weed and Pest Control" in the
39 Proposal to become a part of the total Bid by the Contractor. Payment under this
40 item will be made only when the Work is not already covered by other items.

41
42 "Topsoil Type _____", per acre.

43 The unit Contract price per acre for "Topsoil Type _____" shall be full payment for all
44 costs for the specified Work.

45
46 "Fine Compost ", per acre or per square yard.

47 "Medium Compost", per acre or per square yard.

48 "Coarse Compost", per acre or per square yard.

49 The unit Contract price per acre for "Fine Compost", "Medium Compost" or "Coarse
50 Compost" shall be full pay for furnishing and spreading the compost onto the
51 existing soil.

52
53 "Soil Amendment", per acre.

1 The unit Contract price per acre for "Soil Amendment" shall be full pay for furnishing
2 and incorporating the soil amendment into the existing soil.

3
4 "Plant Selection ____", per each.

5 The unit Contract price for "Plant Selection ____", per each shall be full pay for all
6 Work to perform the work as specified within the planting area prior to planting for
7 weed control, planting area preparation and installation of plants with initial
8 watering.

9
10 As the plants that do not include plant establishment are obtained, propagated, and
11 grown, partial payments will be made as follows:

12
13 Payment of 15 percent of the unit Contract price per each when the plant
14 materials have been contracted, propagated, and are growing under nursery
15 conditions. The Contractor shall provide the Engineer with certification that the
16 plant material has been procured or contracted for delivery to the project for
17 planting within the time limits of the project. The certification shall state the
18 location, quantity, and size of all material.

19
20 Payment will be increased to 100 percent of the unit Contract price per each for
21 contracted plant material at the completion of the initial planting.

22
23 All partial payments shall be limited to the actual number of healthy vigorous
24 plants that meet the stage requirements, limited to plan quantity. Previous
25 partial payments made for materials rejected or missing will be deducted from
26 future payments due the Contractor.

27
28 "PSIPE ____", per each.

29 The unit Contract price for "PSIPE ____", per each, shall be full pay for all Work
30 necessary to perform as specified within the planting area for weed control and
31 planting area preparation, planting, cleanup, and water necessary to complete
32 planting operations as specified to the end of first year plant establishment.

33
34 As the plants that include plant establishment are obtained, propagated, and grown,
35 partial payments will be made as follows after inspection by the Engineer:

36
37 Payment of 5 percent of the unit Contract price, per each, when the plant
38 materials have been contracted, propagated, and are growing under nursery
39 conditions. The Contractor shall provide the Engineer with certification that the
40 plant material has been procured or contracted for delivery to the project for
41 planting within the time limits of the project. The certification shall state the
42 location, quantity, and size of all material.

43
44 Payment will be increased to 15 percent of the unit Contract price, per each,
45 upon completion of the initial weed control and planting area preparation Work.

46
47 Payment will be increased to 60 percent of the unit Contract price per each for
48 the contracted plant material in a designated unit area when planted.

49
50 Payment will be increased to 70 percent of the unit Contract price per each for
51 contracted plant material at the completion of the initial planting.

Payment will be increased to the appropriate percentage upon reaching the following plant establishment milestones:

June 30th	80 percent
September 30th	90 percent
Completion of first-year plant establishment or after all replacement plants have been installed, whichever is later.	100 percent

Plant establishment milestones are achieved when planting areas meet conditions described in Section 8-02.3(13).

“Seeding, Fertilizing and Mulching”, per acre.

“Seeding and Fertilizing”, per acre or per square yard.

“Seeding and Fertilizing by Hand”, per square yard.

“Second Application of Fertilizer”, per acre.

“Seeding and Mulching”, per acre.

“Seeded Lawn Installation”, per square yard.

“Sod Installation”, per square yard.

“Lawn Mowing”, per square yard.

The unit Contract price per square yard for “Seeded Lawn Installation” or “Sod Installation” shall be full pay for all costs necessary to prepare the area, plant or sod the lawn, erect barriers, control weeds, and establish lawn areas and for furnishing all labor, tools, equipment, and materials necessary to complete the Work as specified and shall be paid in the following sequence for healthy, vigorous lawn:

Completion of Lawn Planting	60 percent of individual areas
Mid Lawn Establishment (after two mowings)	85 percent of individual areas
Completion of Lawn Establishment (after four mowings)	100 percent of individual areas

“Plant Establishment Year ____” will be paid in accordance with Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency entered an amount for “Plant Establishment - ____ Year” in the Proposal to become a part of the total Bid by the Contractor.

“Live Pole”, per each.

“Live Stake Row”, per linear foot.

“Bark or Wood Chip Mulch”, per acre.

“Bark or Wood Chip Mulch Rings”, per each.

The unit Contract price per acre for "Bark or Wood Chip Mulch" shall be full pay for furnishing and spreading the mulch onto the existing soil.

"Fascine" and "PSIPE Live Fascine", per linear foot.

"Brush Mattress" and "PSIPE Live Brush Mattress", per square yard.

"Brush Layer" and "PSIPE Brush Layer", per linear foot.

When PSIPE is included with Fascine, Brush Mattress, or Brush Layer, the payment schedule for PSIPE ____ will apply.

"Roadside Maintenance under Construction" will be paid in accordance with Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount for "Roadside Maintenance Under Construction" in the Proposal to become a part of the total Bid by the Contractor.

"Water", per M Gal.

Section 8-04, Curbs, Gutters, and Spillways

April 2, 2018

8-04.2 Materials

In the first paragraph, the reference to "Portland Cement" is revised to read:

Cement	9-01
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8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways

The first paragraph is supplemented with the following:

Roundabout truck apron cement concrete curb and gutter shall be constructed with air entrained concrete Class 4000 conforming to the requirements of Section 6-02.

Section 8-06, Cement Concrete Driveway Entrances

April 2, 2018

8-06.2 Materials

In the first paragraph, the reference to "Portland Cement" is revised to read:

Cement	9-01
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8-06.3 Construction Requirements

The first paragraph is revised to read:

Cement concrete driveway approaches shall be constructed with air entrained concrete Class 4000 conforming to the requirements of Section 6-02 or Portland Cement or Blended Hydraulic Cement Concrete Pavement conforming to the requirements of Section 5-05.

Section 8-07, Precast Traffic Curb
April 2, 2018

8-07.3(1) Installing Curbs

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

The curb shall be firmly bedded for its entire length and breadth on a mortar bed conforming to Section 9-20.4(3) composed of one part Portland cement or blended hydraulic cement and two parts sand.

The fourth paragraph is revised to read:

All joints between adjacent pieces of curb except joints for expansion and/or drainage as designated by the Engineer shall be filled with mortar composed of one part Portland cement or blended hydraulic cement and two parts sand.

Section 8-09, Raised Pavement Markers
April 1, 2019

8-09.5 Payment

The last paragraph is revised to read:

The unit Contract price per hundred for "Raised Pavement Marker Type 1", "Raised Pavement Marker Type 2", "Raised Pavement Marker Type 3 _____ In.", and "Recessed Pavement Marker" shall be full pay for furnishing and installing the markers in accordance with these Specifications.

Section 8-11, Guardrail
April 1, 2019

8-11.3(1)A Erection of Posts

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

Posts shall be set to the true line and grade of the Highway after the grade is in place and compaction is completed.

8-11.3(1)C Terminal and Anchor Installation

The first paragraph is revised to read:

All excavation and backfilling required for installation of anchors shall be performed in accordance with Section 2-09, except that the costs thereof shall be included in the unit Contract price for the anchor installed.

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

Assembly and installation of Beam Guardrail Non-flared Terminals for Type 31 guardrail shall be supervised at all times by a manufacturer's representative, or an installer who has been trained and certified by the manufacturer.

The last paragraph is revised to read:

Beam Guardrail Non-flared Terminals for Type 31 guardrail shall meet the crash test and evaluation criteria in the Manual for Assessing Safety Hardware (MASH).

8-11.4 Measurement

The third paragraph is revised to read:

Measurement of beam guardrail _____ terminal will be per each for the completed terminal.

The fourth paragraph is revised to read:

Measurement of beam guardrail Type 31 buried terminal Type 2 will be per linear foot for the completed terminal.

The sixth paragraph is revised to read:

Measurement of beam guardrail anchor Type 10 will be per each for the completed anchor, including the attachment of the anchor to the guardrail.

8-11.5 Payment

The Bid item "Beam Guardrail Anchor Type ____", per each is revised to read "Beam Guardrail Anchor Type 10", per each.

The Bid item "Beam Guardrail Buried Terminal Type 1", per each is deleted from this section.

The Bid item "Beam Guardrail Buried Terminal Type 2", per linear foot and the following paragraph are revised to read:

"Beam Guardrail Type 31 Buried Terminal Type 2", per linear foot.

The unit Contract price per linear foot for "Beam Guardrail Type 31 Buried Terminal Type 2" shall be full payment for all costs to obtain and provide materials and perform the Work as described in Section 8-11.3(1)C.

Section 8-14, Cement Concrete Sidewalks April 2, 2018

8-14.2 Materials

In the first paragraph, the reference to "Portland Cement" is revised to read:

Cement 9-01

In the second paragraph, each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

Section 8-16, Concrete Slope Protection April 2, 2018

8-16.2 Materials

In the first paragraph, the last two material references are revised to read:

Poured Portland Cement or Blended Hydraulic Cement
Concrete Slope Protection 9-13.5(2)
Pneumatically Placed Portland Cement or Blended
Hydraulic Cement Concrete Slope Protection 9-13.5(3)

Section 8-17, Impact Attenuator Systems January 7, 2019

8-17.3 Construction Requirements

This section is supplemented with the following:

Permanent impact attenuators shall meet the crash test and evaluation criteria of the Manual for Assessing Safety Hardware (MASH), except as otherwise noted in the Plans or Special Provisions.

Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical August 6, 2018

8-20.1(1) Regulations and Code

The last paragraph is revised to read:

Persons performing electrical Work shall be certified in accordance with and supervised as required by RCW 19.28.161. Proof of certification shall be worn at all times in accordance with WAC 296-46B-942. Persons failing to meet these certification requirements may not perform any electrical work, and shall stop any active electrical work, until their certification is provided and worn in accordance with this Section.

8-20.2(2) Equipment List and Drawings

This section is renumbered:

8-20.2(1) Equipment List and Drawings

8-20.3(4) Foundations

The second sentence of the first paragraph is revised to read:

Concrete for Type II, III, IV, V, and CCTV signal standards and light standard foundations shall be Class 4000P and does not require air entrainment.

8-20.3(5)A General

The last two sentences of the last paragraph is deleted.

This section is supplemented with the following:

All conduits shall include a pull tape with the equipment grounding conductor. The pull tape shall be attached to the conduit near the end bell or grounded end bushing, or to duct plugs or caps if present, at both ends of the conduit.

8-20.3(8) Wiring

The seventeenth paragraph is supplemented with the following:

Pulling tape shall meet the requirements of Section 9-29.1(10). Pull string may not be used.

8-20.3(14)C Induction Loop Vehicle Detectors

Item number 2 is deleted.

Item numbers 3 through 12 are renumbered to 2 through 11, respectively.

Section 8-21, Permanent Signing January 7 2019

8-21.3(5) Sign Relocation

The second sentence of the first paragraph is revised to read:

Where the existing sign Structure is mounted on concrete pedestals, the Contractor shall remove the pedestal to a minimum of 2 feet below finished grade and backfill the remaining hole with material similar to that surrounding the hole.

8-21.3(9)F Foundations

Item number 3 of the twelfth paragraph is supplemented with the following new sentence:

Class 4000P concrete for roadside sign structures does not require air entrainment.

Section 8-22, Pavement Marking January 7, 2019

8-22.3(2) Preparation of Roadway Surfaces

The second paragraph is revised to read:

Remove all other contaminants from pavement surfaces that may adversely affect the installation of new pavement marking.

8-22.3(3)F Application Thickness

The second to last sentence of the last paragraph is revised to read:

After grinding, clean the groove.

Section 9-00, Definitions and Tests January 7, 2019

9-00.4 Sieves for Testing Purposes

This section is revised to read:

Test sieves shall be made of either: (1) woven wire cloth conforming to ASTM E11, or (2) square-hole, perforated plates conforming to ASTM E323.

9-00.7 Galvanized Hardware, AASHTO M 232

The first sentence is revised to read:

An acceptable alternate to hot-dip galvanizing in accordance with AASHTO M 232 will be zinc coatings mechanically deposited in accordance with ASTM B695, providing the

minimum thickness of zinc coating is not less than that specified in AASHTO M 232, and the process will not produce hydrogen embrittlement in the base metal.

Section 9-02, Bituminous Materials

January 7, 2019

9-02.1 Asphalt Material, General

The second paragraph is revised to read:

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

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

This section's title is revised to read:

Performance Graded (PG) Asphalt Binder

The first paragraph is revised to read:

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

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

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

		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 @ 3.2 kPa	AASHTO T 350 ¹			30% Min.	20% Min.	25% Min.	30% Min.
¹ Specimen conditioned in accordance with AASHTO T 240 – RTFO.							

The third paragraph is revised to read:

1 The RTFO J_{ndiff} and the PAV direct tension specifications of AASHTO M 332 are not
2 required.

3 4 5 **9-02.1(6) Cationic Emulsified Asphalt**

6 This section is revised to read:

7
8 Cationic Emulsified Asphalt meeting the requirements of AASHTO M 208 Table 1 of the
9 grades specified in the Contract shall be used.

10 11 **9-02.5 Warm Mix Asphalt (WMA) Additive**

12 This section, including title, is revised to read:

13 14 **9-02.5 HMA Additive**

15 Additives for HMA shall be accepted by the Engineer.

16 17 **Section 9-03, Aggregates**

18 **January 7, 2019**

19 **9-03.1 Aggregates for Portland Cement Concrete**

20 This section's title is revised to read:

21 22 **Aggregates for Concrete**

23 24 **9-03.1(1) General Requirements**

25 The first two sentences of the first paragraph are revised to read:

26
27 Concrete aggregates shall be manufactured from ledge rock, talus, or sand and gravel in
28 accordance with the provisions of Section 3-01. Reclaimed aggregate may be used if it
29 complies with the specifications for concrete.

30
31 The second paragraph (up until the colon) is revised to read:

32
33 Aggregates for concrete shall meet the following test requirements:

34
35 The second sentence of the second to last paragraph is revised to read:

36
37 The Contractor shall submit test results according to ASTM C1567 through the Engineer
38 to the State Materials Laboratory that demonstrate that the proposed fly ash when used
39 with the proposed aggregates and cement will control the potential expansion to 0.20
40 percent or less before the fly ash and aggregate sources may be used in concrete.

41 42 **9-03.1(2) Fine Aggregate for Portland Cement Concrete**

43 This section's title is revised to read:

44 45 **Fine Aggregate for Concrete**

46 47 **9-03.1(4) Coarse Aggregate for Portland Cement Concrete**

48 This section's title is revised to read:

49 50 **Coarse Aggregate for Concrete**

9-03.1(4)C Grading

The first paragraph (up until the colon) is revised to read:

Coarse aggregate for concrete when separated by means of laboratory sieves shall conform to one or more of the following gradings as called for elsewhere in these Specifications, Special Provisions, or in the Plans:

9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section's title is revised to read:

Combined Aggregate Gradation for Concrete

9-03.1(5)B Grading

In the last paragraph, "WSDOT FOP for WAQTC/AASHTO T 27/T 11" is revised to read "FOP for WAQTC/AASHTO T 27/T 11".

9-03.2 Aggregate for Job-Mixed Portland Cement Mortar

This section's title is revised to read:

Aggregate for Job-Mixed Portland Cement or Blended Hydraulic Cement Mortar

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

Fine aggregate for portland cement or blended hydraulic cement mortar shall consist of sand or other inert materials, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating.

9-03.4(1) General Requirements

The first paragraph (up until the colon) is revised to read:

Aggregate for bituminous surface treatment shall be manufactured from ledge rock, talus, or gravel, in accordance with Section 3-01. Aggregates for Bituminous Surface Treatment shall meet the following test requirements:

9-03.8(1) General Requirements

The first paragraph (up until the colon) is revised to read:

Aggregates for Hot Mix Asphalt shall meet the following test requirements:

9-03.8(2) HMA Test Requirements

The two tables in the second paragraph are replaced with the following three tables:

Mix Criteria	HMA Class							
	3/8 inch		1/2 inch		3/4 inch		1 inch	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Voids in Mineral Aggregate (VMA), %	15.0		14.0		13.0		12.0	
Voids Filled With Asphalt (VFA), %								
ESAL's (millions)	VFA							
< 0.3	70	80	70	80	70	80	67	80
0.3 to < 3	65	78	65	78	65	78	65	78
≥ 3	73	76	65	75	65	75	65	75

Dust/Asphalt Ratio	0.6	1.6	0.6	1.6	0.6	1.6	0.6	1.6
--------------------	-----	-----	-----	-----	-----	-----	-----	-----

Test Method	ESAL's (millions)	Number of Passes
Hamburg Wheel-Track Testing, FOP for AASHTO T 324 Minimum Number of Passes with no Stripping Inflection Point and Maximum Rut Depth of 10mm	< 0.3	10,000
	0.3 to < 3	12,500
	≥ 3	15,000
Indirect Tensile (IDT) Strength (psi) of Bituminous Materials FOP for ASTM D6931		175 Maximum

	ESAL's (millions)	N initial	N design	N maximum
% Gmm	< 0.3	≤ 91.5	96.0	≤ 98.0
	0.3 to < 3	≤ 90.5	96.0	≤ 98.0
	≥ 3	≤ 89.0	96.0	≤ 98.0
Gyratory Compaction (number of gyrations)	< 0.3	6	50	75
	0.3 to < 3	7	75	115
	> 3	8	100	160

9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the fifth row is revised to read:

Asphalt binder	-0.4% to 0.5%		±0.7%
----------------	---------------	--	-------

In the table in item number 1, the following new row is inserted before the last row:

Voids in Mineral Aggregate, VMA	-1.0%		
---------------------------------	-------	--	--

9-03.9(1) Ballast

The second paragraph (up until the colon) is revised to read:

Aggregates for ballast shall meet the following test requirements:

9-03.14(4) Gravel Borrow for Structural Earth Wall

The second sentence of the first paragraph is revised to read:

The material shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, concrete rubble, or asphaltic concrete rubble.

9-03.21(1)B Recycled Concrete Aggregate Approval and Acceptance

The first sentence of the second paragraph is revised to read:

Recycled concrete aggregate may be used as coarse aggregate or blended with coarse aggregate for Commercial Concrete, Class 3000 concrete, or Cement Concrete Pavement.

Item number 4 of the second paragraph is revised to read:

- 1 4. For Cement Concrete Pavement mix designs using recycled concrete aggregates,
2 the Contractor shall submit evidence that ASR mitigating measures control
3 expansion in accordance with Section 9-03.1(1).
4

5 This section is supplemented with the following new subsection:
6

7 **9-03.21(1)B1 Recycled Concrete Aggregate Approval and Acceptance**

8 Recycled concrete aggregate may be approved through a three tiered system that
9 consists of the following:
10

Tier 1	
Approval Requirements	Approval of the Reclamation Facility is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1). Field acceptance testing in accordance with Section 3-04.
Approved to provide the following Aggregate Materials:	
9-03.10 Aggregate for Gravel Base 9-03.12(1)B Gravel Backfill for Foundations Class B 9-03.12(2) Gravel Backfill for Walls 9-03.12(3) Gravel Backfill for Pipe Zone Bedding 9-03.14(1) Gravel Borrow 9-03.14(2) Select Borrow 9-03.14(2) Select Borrow (greater than 3 feet below subgrade and side slope) 9-03.14(3) Common Borrow 9-03.14(3) Common Borrow (greater than 3 feet below subgrade and side slope) 9-03.17 Foundation Material Class A and Class B 9-03.18 Foundation Material Class C 9-03.19 Bank Run Gravel for Trench Backfill	

Tier 2	
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 9 "Standard Practice for Approval of Reclamation Facilities of WSDOT Recycled Concrete and Returned Concrete". The Reclamation Facility's QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance. Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is not required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1), required if requested. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 9 for every lot. A lot shall be no larger than 10,000 tons.
Approved to provide the following Aggregate Materials:	
Tier 1 aggregate materials 9-03.1 Coarse Aggregate for Commercial Concrete or Concrete class 3000 9-03.9(1) Ballast	

9-03.9(2) Permeable Ballast
 9-03.9(3) Crushed Surfacing
 9-03.12(1)A Gravel Backfill for Foundations Class A

Tier 3	
Approval Requirements	The Reclamation Facility shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 10 "Standard Practice for Approval of Reclamation Facilities of Recycled Concrete Aggregates from Stockpiles of Unknown Sources". The Reclamation Facility's QCP shall be submitted and approved by the WSDOT State Materials Laboratory. Once accepted, any changes to the QCP will require a new QCP to be submitted for acceptance. Evaluation of aggregate source properties (LA Wear and Degradation) for the recycled concrete aggregate is required.
Acceptance Requirements	Certification of toxicity characteristics in accordance with Section 9-03.21(1) is required. Field acceptance testing in accordance with Section 3-04 is required. Provide certification in accordance with WSDOT QC 10 for every lot. A lot shall be no larger than 10,000 tons
Approved to provide the following Aggregate Materials:	
Tier 1 aggregate materials 9-03.1 Coarse Aggregate for Commercial Concrete or Concrete class 3000 9-03.9(1) Ballast 9-03.9(2) Permeable Ballast 9-03.9(3) Crushed Surfacing 9-03.12(1)A Gravel Backfill for Foundations Class A	

For Reclamation Facilities that do not participate in Tier 2 and Tier 3, approval of recycled concrete aggregate will be in accordance with Section 9-03.21(1), and acceptance will be in accordance with Section 3-04.

9-03.21(1)E Table on Maximum Allowable percent (By Weight) of Recycled Material

"Portland Cement" is deleted from the first two rows in the table.

The following new row is inserted after the second row:

Coarse Aggregate for Concrete Pavement	9-03.1(4)	0	100	0	0
--	-----------	---	-----	---	---

The first column of the fourth row (after the preceding Amendment is applied) is revised to read:

Coarse Aggregate for Commercial Concrete and Class 3000 Concrete

9
Section 9-04, Joint and Crack Sealing Materials
January 7, 2019

This section's title is revised to read:

Joint Sealing Materials

9-04.1(2) Premolded Joint Filler for Expansion Joints

In this section, each reference to "AASHTO T 42" is revised to read "ASTM D 545".

9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement

This section is supplemented with the following:

Hot poured sealant for cement concrete pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.

9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement

This section is supplemented with the following:

Hot poured sealant for bituminous pavement is acceptable for installations in joints where cement concrete pavement abuts a bituminous pavement.

9-04.2(1)B Sand Slurry for Bituminous Pavement

Item number 2 of the first paragraph is revised to read:

2. Two percent portland cement or blended hydraulic cement, and

9-04.3 Joint Mortar

The first paragraph is revised to read:

Mortar for hand mortared joints shall conform to Section 9-20.4(3) and consist of one part portland cement or blended hydraulic cement, three parts fine sand, and sufficient water to allow proper workability.

9-04.5 Flexible Plastic Gaskets

In the table, the Test Method value for **Specific Gravity at 77°F** is revised to read "ASTM D71".

In the table, the Test Method value for **Flash Point COC, F** is revised to read "ASTM D93 REV A".

In the table, the Test Method value for **Volatile Matter** is revised to read "ASTM D6".

Section 9-05, Drainage Structures and Culverts
January 7, 2019

9-05.3(1)A End Design and Joints

The second sentence of the first paragraph is revised to read:

The joints and gasket material shall meet the requirements of ASTM C990.

1 **9-05.3(1)C Age at Shipment**

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

3
4 Unless it is tested and accepted at an earlier age, it shall not be considered ready for
5 shipment sooner than 28 days after manufacture when made with Type II portland
6 cement or blended hydraulic cement, nor sooner than 7 days when made with Type III
7 portland cement.
8

9 **9-05.7(3) Concrete Storm Sewer Pipe Joints**

10 The second sentence is revised to read:

11
12 The joints and gasket material shall meet the requirements of ASTM C990.
13

14 **9-05.7(4)A Hydrostatic Pressure on Pipes in Straight Alignment**

15 The first sentence is revised to read:

16
17 Hydrostatic pressure tests on pipes in straight alignment shall be made in accordance
18 with the procedure outlined in Section 10 of ASTM C990, except that they shall be
19 performed on an assembly consisting of not less than three nor more than five pipe
20 sections selected from stock by the Engineer and assembled in accordance with
21 standard installation instructions issued by the manufacturer.
22

23 **9-05.24(1) Polypropylene Culvert Pipe and Storm Sewer Pipe**

24 This section is revised to read:

25
26 Polypropylene culvert and storm sewer pipe shall conform to the following requirements:

- 27
28 1. For dual wall pipe sizes up to 60 inches: ASTM F2881 or AASHTO M 330,
29 Type S or Type D.
30
31 2. For double or triple wall pipe sizes up to 60 inches: ASTM F2764.
32
33 3. Fittings shall be factory welded, injection molded, or PVC.
34

35 **9-05.24(2) Polypropylene Sanitary Sewer Pipe**

36 This section is revised to read:

37
38 Polypropylene sanitary sewer pipe shall conform to the following requirements:

- 39
40 1. For pipe sizes up to 60 inches: ASTM F2764.
41
42 2. Fittings shall be factory welded, injection molded, or PVC.
43

44 **Section 9-06, Structural Steel and Related Materials**
45 **January 7, 2019**

46 **9-06.5 Bolts**

47 This section's title is revised to read:

48
49 **Bolts and Rods**
50

1 **9-06.5(4) Anchor Bolts**

2 This section, including title, is revised to read:

3
4 **9-06.5(4) Anchor Bolts and Anchor Rods**

5 Anchor bolts and anchor rods shall meet the requirements of ASTM F1554 and, unless
6 otherwise specified, shall be Grade 105 and shall conform to Supplemental
7 Requirements S2, S3, and S4.

8
9 Nuts for ASTM F1554 Grade 105 black anchor bolts and anchor rods shall conform to
10 ASTM A563, Grade D or DH. Nuts for ASTM F1554 Grade 105 galvanized anchor bolts
11 and anchor rods shall conform to either ASTM A563, Grade DH, or AASHTO M292,
12 Grade 2H, and shall conform to the overtapping, lubrication, and rotational testing
13 requirements in Section 9-06.5(3). Nuts for ASTM F1554 Grade 36 or 55 black or
14 galvanized anchor bolts and anchor rods shall conform to ASTM A563, Grade A or DH.
15 Washers shall conform to ASTM F436.

16
17 The bolts and rods shall be tested by the manufacturer in accordance with the
18 requirements of the pertinent Specification and as specified in these Specifications.
19 Anchor bolts, anchor rods, nuts, and washers shall be inspected prior to shipping to the
20 project site. The Contractor shall submit to the Engineer for acceptance a
21 Manufacturer's Certificate of Compliance for the anchor bolts, anchor rods, nuts, and
22 washers, as defined in Section 1-06.3. If the Engineer deems it appropriate, the
23 Contractor shall provide a sample of the anchor bolt, anchor rod, nut, and washer for
24 testing.

25
26 All bolts, rods, nuts, and washers shall be marked and identified as required in the
27 pertinent Specification.

28
29 **9-06.15 Welded Shear Connectors**

30 The third paragraph is revised to read:

31
32 Mechanical properties shall be determined in accordance with AASHTO T 244.

33
34 **9-06.17 Vacant**

35 This section, including title, is revised to read:

36
37 **9-06.17 Noise Barrier Wall Access Door**

38 Access door frames shall be formed of 14-gauge steel to the size and dimensions
39 shown in the Plans. The access door frame head and jamb members shall be mitered,
40 securely welded, and ground smooth. Each head shall have two anchors and each jamb
41 shall have three anchors. The hinges shall be reinforced with ¼-inch by 12-inch plate,
42 width equal to the full inside width of the frame.

43
44 Access doors shall be full flush 1-¾-inch thick seamless doors with a polystyrene core.
45 Door faces shall be constructed with smooth seamless 14-gauge roller-levered, cold-
46 rolled steel sheet conforming to ASTM A 792 Type SS, Grade 33 minimum, Coating
47 Designation AZ55 minimum. The vertical edges shall be neat interlocked hemmed edge
48 seam. The top and bottom of the door shall be enclosed with 14-gauge channels.
49 Mortise and reinforcement for locks and hinges shall be 10-gauge steel. Welded top cap
50 shall be ground and filled for exterior applications. The bottom channel shall have weep
51 holes.
52

Each access door shall have three hinges. Access door hinges shall be ASTM A 276 Type 316 stainless steel, 4-½-inches square, with stainless steel ball bearing and non-removable pins.

Each access door shall have two pull plates. The pull plates shall be ASTM A 240 Type 316 stainless steel, with a grip handle of one-inch diameter and 8 to 10-inches in length.

The door assembly shall be fabricated and assembled as a complete unit including all hardware specified prior to shipment.

9-06.18 Metal Bridge Railing

The second sentence of the first paragraph is revised to read:

Steel used for metal railings, when galvanized after fabrication in accordance with AASHTO M111, shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

Section 9-07, Reinforcing Steel

January 7, 2019

9-07.5(1) Epoxy-Coated Dowel Bars (for Cement Concrete Rehabilitation)

This section (including title) is revised to read:

9-07.5(1) Dowel Bars for Cement Concrete Pavement Rehabilitation

Dowel bars for Cement Concrete Pavement Rehabilitation shall be 1½ inch outside diameter plain round steel bars or tubular bars 18 inches in length and meet the requirements of one of the following dowel bar types:

1. Epoxy-coated dowel bars shall be round plain steel bars of the dimensions shown in the Standard Plans. They shall conform to AASHTO M31, Grade 60 or ASTM A615, Grade 60 and shall be coated in accordance with ASTM A1078 Type 2 coating, except that the bars may be cut to length after being coated. Cut ends shall be coated in accordance with ASTM A1078 with a patching material that is compatible with the coating, inert in concrete and recommended by the coating manufacturer. The thickness of the epoxy coating shall be 10 mils plus or minus 2 mils. The Contractor shall furnish a written certification that properly identifies the coating material, the number of each batch of coating material used, quantity represented, date of manufacture, name and address of manufacturer, and a statement that the supplied coating material meets the requirements of ASTM A1078 Type 2 coating. Patching material, compatible with the coating material and inert in concrete and recommended by the manufacturer shall be supplied with each shipment for field repairs by the Contractor.
2. ASTM A513 steel tubes made from Grade 60 Carbon Steel Tube with a 1.625 inch outside diameter and a 0.120 inch wall thickness. Both the inside and outside of the tube shall be zinc coated with G40 galvanizing in accordance with ASTM A653. Following zinc coating the tubes shall be coated in accordance with Section 9-07.5(1) item 1. The ends of the tube shall be capped to prevent intrusion of concrete or other materials.

9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement and Cement Concrete Pavement Rehabilitation)

The first paragraph (up until the colon) is revised to read:

Corrosion resistant dowel bars shall be 1½ inch outside diameter plain round steel bars or tubular bars 18 inches in length and meet the requirements of one of the following:

Item number 4 and 5 of the first paragraph are revised to read:

4. Corrosion-resistant, low-carbon, chromium plain steel bars for concrete reinforcement meeting all the requirements of ASTM A 1035 Alloy Type CS Grade 100 or Alloy Type CS Grade 120.
5. Zinc Clad dowel bars shall be 1½ inch solid bars or 1.625 inch outside diameter by 0.120 inch wall tubular bars meeting the chemical and physical properties of AASHTO M 31, Grade 60, or AASHTO M 255, Grade 60. The bars shall have a minimum of 0.035 inches A710 Zinc alloy clad to the plain steel inner bar or tube. A710 Zinc shall be composed of: zinc: 99.5 percent, by weight, minimum; copper: 0.1-0.25 percent, by weight; and iron: 0.0020 percent, by weight, maximum. Each end of tubular bars shall be plugged using a snug-fitting insert to prohibit any intrusion of concrete or other materials.

The numbered list in the first paragraph is supplemented with the following:

6. Multicoated fusion bonded epoxy bars shall consist of an ASTM A615 bar with alternating layers of ASTM A934 coating and an abrasion resistant overcoat (ARO). The ASTM A934 coating shall form the base and there shall be two layers of each coating material. The minimum thickness of the combined layers of the ASTM A934 coating and ARO coating shall be 20 mils. The ARO shall meet the following requirements:

Test	Method	Specification
Gouge Resistance	NACE TM0215, 30 kg wt., LS-1 bit @ 25°C	< 0.22 mm
Gouge Resistance	NACE TM0215, 50 kg wt., LS-1 bit @ 25°C	< 0.44 mm

7. ASTM A513 steel tubes made from Grade 60 Carbon Steel Tube with a 1.625 inch outside diameter and a 0.120 inch wall thickness. Both the inside and outside of the tube shall be zinc coated with G90 galvanizing in accordance with ASTM A653. Following zinc coating the tubes shall be coated in accordance with Section 9-07.5(1) item 1. The ends of the tube shall be capped to prevent intrusion of concrete or other materials.

The last paragraph is revised to read:

Stainless Steel Clad and Stainless Steel Tube Dowel bar ends shall be sealed with a patching material (primer and finish coat) used for patching epoxy-coated reinforcing steel as required in Section 9-07.3, item 6.

9-07.7 Wire Mesh

This section is supplemented with the following:

1 Welded wire manufacturers shall participate in the NTPEP Audit Program for Reinforcing
2 Steel (rebar) Manufacturers and shall be listed on the NTPEP audit program website
3 displaying that they are NTPEP compliant.
4

5 **Section 9-08, Paints and Related Materials** 6 **January 7, 2019**

7 **9-08.1(1) Description**

8 The first sentence is revised to read:
9

10 Paint used for highway and bridge structure applications shall be made from materials
11 meeting the requirements of the applicable Federal and State Paint Specifications,
12 Department of Defense (DOD), American Society of Testing of Materials (ASTM), and
13 The Society for Protective Coatings (SSPC) specifications in effect at time of
14 manufacture.
15

16 **9-08.1(2) Paint Types**

17 This section is supplemented with the following new subsections:
18

19 **9-08.1(2)M NEPCOAT Qualified Products List A**

20 Qualified products used shall be part of a NEPCOAT system supplied by the same
21 manufacturer.
22

23 **9-08.1(2)N NEPCOAT Qualified Products List B**

24 Qualified products used shall be part of a NEPCOAT system supplied by the same
25 manufacturer.
26

27 **9-08.1(2)D Organic Zinc-Rich Primer**

28 This section, including title, is revised to read:
29

30 **Vacant**
31

32 **9-08.1(2)E Epoxy Polyamide**

33 This section is revised to read:
34

35 Epoxy polyamide shall be a two-component system conforming to MIL-DTL-24441 or
36 SSPC Coating Standard No. 42.
37

38 **9-08.1(2)H Top Coat, Single-Component, Moisture-Cured Polyurethane**

39 This section is revised to read:
40

41 Vehicle Type: Moisture-cured aliphatic polyurethane.
42

43 Color and Gloss: Meet the SAE AMS Standard 595 Color as specified in the table
44 below.
45

46 The Top Coat shall meet the following requirements:
47

48 The resin shall be an aliphatic urethane.
49

50 Minimum-volume solids 50 percent.
51

The top coat shall be semi-gloss.

Color	Semi-Gloss
Washington Gray	26357
Mt. Baker Gray	26134
Mt. St. Helens Gray	26306
Cascade Green	24158

9-08.1(2)I Rust-Penetrating Sealer

This section is revised to read:

Rust-penetrating sealer shall be a two-component, chemically-cured, 100 percent solids epoxy.

9-08.1(2)J Black Enamel

This section is revised to read:

The enamel shall conform to Federal Specification MIL PRF 24635E Type II Class 2.

9-08.1(2)K Orange Equipment Enamel

The first paragraph is revised to read:

The enamel shall be an alkyd gloss enamel conforming to Federal Specification MIL-PRF-24635E Type II Class 1. The color, when dry, shall match that of SAE AMS Standard 595, color number 12246.

9-08.1(2)L Exterior Acrylic Latex Paint-White

The first paragraph is revised to read:

This paint shall conform to Federal Specification MIL-PRF-24635E Type II Class 1, 2 or 3.

9-08.1(7) Acceptance

This section is revised to read:

For projects with moisture-cured polyurethane quantities less than 20 gallons, acceptance will be by the Manufacturer's Certificate of Compliance.

For projects with moisture-cured polyurethane quantities greater than 20 gallons, the product shall be listed in the current WSDOT Qualified Products List (QPL). If the lot number is listed on the QPL, it may be accepted without additional testing. If the lot number is not listed on the QPL, a 1 quart sample shall be submitted to the State Materials Laboratory for testing and acceptance.

For all other paint types, acceptance will be based on visual inspection.

9-08.1(8) Standard Colors

In the first paragraph, the reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

The second paragraph is revised to read:

1 Unless otherwise specified, all top or finish coats shall be semi-gloss, with the paint
2 falling within the range of 35 to 70 on the 60-degree gloss meter.
3

4 **9-08.2 Powder Coating Materials for Coating Galvanized Surfaces**

5 The last paragraph is revised to read:
6

7 Repair materials shall be as recommended by the powder coating manufacturer and as
8 specified in the Contractor's powder coating plan as accepted by the Engineer.
9

10 **9-08.3 Pigmented Sealer Materials for Coating of Concrete Surfaces**

11 This section, including title, is revised to read:
12

13 **9-08.3 Concrete Surface Treatments**

14 **9-08.3(1) Pigmented Sealer Materials**

15 The pigmented sealer shall be a semi-opaque, colored toner containing only methyl
16 methacrylate-ethyl acrylate copolymer resins, toning pigments suspended in
17 solution at all times by a chemical suspension agent, and solvent. Toning pigments
18 shall be laminar silicates, titanium dioxide, and inorganic oxides only. There shall be
19 no settling or color variation. Tinting shall occur at the factory at the time of
20 manufacture and placement in containers, prior to initial shipment. Use of vegetable
21 or marine oils, paraffin materials, stearates, or organic pigments in any part of
22 coating formulation will not be permitted. The color of pigmented sealer shall be as
23 specified by the Contracting Agency. The Contractor shall submit a 1-quart wet
24 sample, a drawdown color sample, and spectrophotometer or colorimeter readings
25 taken in accordance with ASTM D2244, for each batch and corresponding
26 standard color card. The calculated Delta E shall not exceed 1.5 from the
27 Commission Internationale de l'Eclairage (CIELAB) when measured at 10 degrees
28 Standard Observer and Illuminant D 65.
29

30 The 1-quart wet sample shall be submitted in the manufacturer's labeled container
31 with product number, batch number, and size of batch. The companion drawdown
32 color sample shall be labeled with the product number, batch number, and size of
33 batch. The Contractor shall submit the specified samples and readings to the
34 Engineer at least 14 calendar days prior to the scheduled application of the sealer.
35 The Contractor shall not begin applying pigmented sealer until receiving the
36 Engineer's written approval of the pigmented sealer color samples.
37

38 **9-08.3(2) Exposed Aggregate Concrete Coatings and Sealers**

39 **9-08.3(2)A Retardant Coating**

40 Retardant coating shall exhibit the following properties:
41

- 42 1. Retards the set of the surface mortar of the concrete without
43 preventing the concrete to reach the specified 28 day compressive
44 strength.
45
- 46 2. Leaves the aggregate with its original color and luster, and firmly
47 embedded in the concrete matrix.
48
- 49 3. Allows the removal of the surface mortar in accordance with the
50 methods specified in Section 6-02.3(14)E without the use of acidic
51 washing compounds.
52
- 53 4. Allows for uniform removal of the surface mortar.

1
2 If the Contractor proposes use of a retardant coating that is not listed in the
3 current WSDOT QPL, the Contractor shall submit a Type 2 Working Drawing
4 consisting of a one quart product sample from a current lot along with
5 supporting product information, Safety Data Sheet, and a Manufacturer's
6 Certificate of Compliance stating that the product conforms to the above
7 performance requirements.

8
9 **9-08.3(2)B Clear Sealer**

10 The sealer for concrete surfaces with exposed aggregate finish shall be a clear,
11 non-gloss, penetrating sealer of either a silane, siloxane, or silicone based
12 formulation.

13
14 **9-08.3(3) Permeon Treatment**

15 Permeon treatment shall be a product of known consistent performance in
16 producing the SAE AMS Standard 595 Color No. 30219 target color hue
17 established by WSDOT, either selected from the WSDOT Qualified Products List
18 (QPL), or an equivalent product accepted by the Engineer. For acceptance of
19 products not listed in the current WSDOT QPL, the Contractor shall submit Type 3
20 Working Drawings consisting of a one quart product sample from a current lot,
21 supporting product information and a Safety Data Sheet.

22
23 **Section 9-13, Riprap, Quarry Spalls, Slope Protection, and Rock for Erosion**
24 **and Scour Protection and Rock Walls**
25 **April 2, 2018**

26 **9-13.1(1) General**

27 The last paragraph is revised to read:

28
29 Riprap and quarry spalls shall be free from segregation, seams, cracks, and other
30 defects tending to destroy its resistance to weather and shall meet the following test
31 requirements:

32
33 **9-13.5 Concrete Slope Protection**

34 This section is revised to read:

35
36 Concrete slope protection shall consist of reinforced portland cement or blended
37 hydraulic cement concrete poured or pneumatically placed upon the slope with a
38 rustication joint pattern or semi-open concrete masonry units placed upon the slope
39 closely adjoining each other.

40
41 **9-13.5(2) Poured Portland Cement Concrete Slope Protection**

42 This section's title is revised to read:

43
44 **Poured Portland Cement or Blended Hydraulic Cement Concrete Slope Protection**

45
46 **9-13.5(3) Pneumatically Placed Portland Cement Concrete Slope Protection**

47 This section's title is revised to read:

48
49 **Pneumatically Placed Portland Cement or Blended Hydraulic Cement Concrete**
50 **Slope Protection**
51

The first paragraph is revised to read:

Cement – This material shall be portland cement or blended hydraulic cement as specified in Section 9-01.

9-13.7(1) Rock for Rock Walls and Chinking Material

The first paragraph (up until the colon) is revised to read:

Rock for rock walls and chinking material shall be hard, sound and durable material, free from seams, cracks, and other defects tending to destroy its resistance to weather, and shall meet the following test requirements:

Section 9-14, Erosion Control and Roadside Planting **August 6, 2018**

9-14.4(2) Hydraulically Applied Erosion Control Products (HECPs)

In Table 1, the last four rows are deleted.

9-14.4(2)A Long-Term Mulch

The first paragraph is supplemented with the following:

Products containing cellulose fiber produced from paper or paper components will not be accepted.

Table 2 is supplemented with the following new rows:

Water Holding Capacity	ASTM D 7367	800 percent minimum
Organic Matter Content	AASHTO T 267	90 percent minimum
Seed Germination Enhancement	ASTM D 7322	Long Term 420 percent minimum

9-14.4(2)B Moderate-Term Mulch

This section is revised to read:

Within 48 hours of application, the Moderate-Term Mulch shall bond with the soil surface to create a continuous, absorbent, flexible, erosion-resistant blanket. Moderate-Term Mulch shall effectively perform the intended erosion control function in accordance with Section 8-01.3(1) for a minimum of 3 months, or until temporary vegetation has been established, whichever comes first.

Moderate-Term Mulch shall not be used in conjunction with permanent seeding.

9-14.4(2)C Short-Term Mulch

This section is revised to read:

Short-Term Mulch shall effectively perform the intended erosion control function in accordance with Section 8-01.3(1) for a minimum of 2 months, or until temporary vegetation has been established, whichever comes first. Short-Term Mulch shall not be used in conjunction with permanent seeding.

Section 9-16, Fence and Guardrail
August 6, 2018

9-16.3(1) Rail Element

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

All rail elements shall be formed from 12-gage steel except for thrie beam reducer sections, reduced length thrie beam rail elements, thrie beams used for bridge rail retrofits, and Design F end sections, which shall be formed from 10-gage steel.

9-16.3(5) Anchors

The last paragraph is revised to read:

Cement grout shall conform to Section 9-20.3(4) and consist of one part portland cement or blended hydraulic cement and two parts sand.

Section 9-18, Precast Traffic Curb
April 2, 2018

9-18.1(1) Aggregates and Proportioning

Item number 1 of the first paragraph is revised to read:

1. Portland cement or blended hydraulic cement shall conform to the requirements of Section 9-01 except that it may be Type I portland cement conforming to AASHTO M 85.

Section 9-20, Concrete Patching Material, Grout, and Mortar
April 1, 2019

9-20.1 Patching Material

This section, including title, is revised to read:

9-20.1 Patching Material for Cement Concrete Pavement

Concrete patching material shall be prepackaged mortar extended with aggregate. The amount of aggregate for extension shall conform to the manufacturer's recommendation.

Patching mortar and patching mortar extended with aggregate shall contain cementitious material and conform to Sections 9-20.1(1) and 9-20.1(2). The Manufacturer shall use the services of a laboratory that has an equipment calibration verification system and a technician training and evaluation process in accordance with AASHTO R 18 to perform all tests specified in Section 9-20.1.

9-20.1(1) Patching Mortar

Patching mortar shall conform to the following requirements:

Compressive Strength	ASTM Test Method	Specification
at 3 hours	C 39	Minimum 3,000 psi
at 24 hours	C 39	Minimum 5,000 psi
Length Change		
at 28 days	C 157	0.15 percent maximum
Total Chloride Ion Content	C 1218	1 lb/yd ³ maximum
Bond Strength		

at 24 hours	C 882 (As modified by C 928, Section 9.5)	Minimum 1,000 psi
Scaling Resistance (at 25 cycles of freezing and thawing)	C 672 (As modified by C 928, Section 9.4)	1 lb/ft ² maximum

9-20.1(2) Patching Mortar Extended with Aggregate

Patching mortar extended with aggregate shall meet the following requirements:

Compressive Strength	ASTM Test Method	Specification
at 3 hours	C 39	Minimum 3,000 psi
at 24 hours	C 39	Minimum 5,000 psi
Length Change		
at 28 days	C 157	0.15 percent maximum
Bond Strength		
at 24 hours	C 882 (As modified by ASTM C928, Section 9.5)	Minimum 1,000 psi
Scaling Resistance (at 25 cycles of freezing and thawing)	C 672	2 Maximum Visual Rating
Freeze thaw	C 666	Maximum expansion 0.10% Minimum durability 90.0%

9-20.1(3) Aggregate

Aggregate used to extend the patching mortar shall conform to Section 9-03.1(4) and be AASHTO Grading No. 8. A Manufacturer's Certificate of Compliance shall be submitted showing the aggregate source and the gradation. Mitigation for Alkali Silica Reaction (ASR) will not be required for the extender aggregate used for concrete patching material.

9-20.1(4) Water

Water shall meet the requirements of Section 9-25.1. The quantity of water shall be within the limits recommended by the repair material manufacturer.

9-20.2 Specifications

This section, including title, is revised to read:

9-20.2 Patching Material for Concrete Structure Repair

Concrete patching material shall be a prepackaged mixture of portland or blended hydraulic cement, aggregate, and admixtures. Fly ash, ground granulated blast furnace slag and microsilica fume may be used. The concrete patching material may be shrinkage compensated. The concrete patching material shall also meet the following requirements:

- Compressive strength of 6000 psi or higher at 28 days in accordance with AASHTO T 22 (ASTM C 39), unless noted otherwise
- Bond strength of 250 psi or higher at 28 days or less in accordance with ASTM C 1583 or ICRI 210.3R
- Shrinkage shall be 0.05 percent (500 microstrain) or lower at 28 days in accordance with AASHTO T 160 (ASTM C 157) as modified by ICRI 320.3R

- Permeability shall be 2,000 coulombs or lower at 28 days in accordance with AASHTO T 277 (ASTM C 1202)
- Freeze-thaw resistance shall have a durability factor of 90 percent or higher after a minimum of 300 cycles in accordance with AASHTO T 161 Procedure A (ASTM C 666)
- Soluble chloride ion limits in Section 6-02.3(2) shall be satisfied

9-20.2(1) Patching Mortar

This section, including title, is deleted in its entirety.

9-20.2(2) Patching Mortar Extended with Aggregate

This section, including title, is deleted in its entirety.

9-20.3(3) Grout Type 3 for Unconfined Bearing Pad Applications

This section's title is revised to read:

Grout Type 3 for Unconfined Applications

This section is revised to read:

Grout Type 3 shall be a prepackaged material that does not include expansive admixtures meeting the following requirements:

- Compressive strength shall be 4000 psi or higher at 28 days in accordance with AASHTO T 22 (ASTM C 39) for grout extended with coarse aggregate or AASHTO T 106 (ASTM C109) otherwise.
- Bond strength shall meet one of the following:
 - 250 psi or higher at 28 days or less in accordance with ASTM C1583.
 - 2000 psi or higher at 28 days or less in accordance with ASTM C882. The following modification to ASTM C882 is acceptable: use Type 3 Grout in lieu of epoxy resin base bonding system and freshly mixed portland-cement mortar in the procedure for testing Type II and V systems.
- Drying shrinkage shall be 0.08 percent (800 microstrain) or lower at 28 days in accordance with AASHTO T 160 (ASTM C157). The following modification to AASHTO T 160 is acceptable: use a standard specimen size of 3 x 3 x 11-¼ inches.

9-20.5 Bridge Deck Repair Material

Item number 3 of the first paragraph is revised to read:

3. Permeability of less than 2,000 coulombs at 28-days or more in accordance with AASHTO T 277.

Section 9-21, Raised Pavement Markers (RPM)
January 2, 2018

9-21.2 Raised Pavement Markers Type 2

This section's content is deleted.

9-21.2(1) Physical Properties

This section, including title, is revised to read:

9-21.2(1) Standard Raised Pavement Markers Type 2

The marker housing shall contain reflective faces as shown in the Plans to reflect incident light from either a single or opposite directions and meet the requirements of ASTM D 4280 including Flexural strength requirements.

9-21.2(2) Optical Requirements

This section, including title, is revised to read:

9-21.2(2) Abrasion Resistant Raised Markers Type 2

Abrasion Resistant Raised Markers Type 2 shall comply with Section 9-21.2(1) and meet the requirements of ASTM D 4280 with the following additional requirement: The coefficient of luminous intensity of the markers shall be measured after subjecting the entire lens surface to the test described in ASTM D 4280 Section 9.5 using a sand drop apparatus. After the exposure described above, retroreflected values shall not be less than 0.5 times a nominal unblemished sample.

9-21.2(3) Strength Requirements

This section is deleted in its entirety.

Section 9-23, Concrete Curing Materials and Admixtures
April 1, 2019

9-23.12 Natural Pozzolan

This section is revised to read:

Natural Pozzolans shall be ground Pumice and shall conform to the requirements of AASHTO M295 Class N, including supplementary optional chemical requirements as set forth in Table 2.

9-23.13 Blended Supplementary Cementitious Material

The second sentence is revised to read:

Blended SCMs shall be limited to binary or ternary blends of fly ash, ground granulated blast furnace slag and microsilica fume.

The second to last sentence is deleted.

Section 9-26, Epoxy Resins
January 7, 2019

9-26.1(1) General

The following new sentence is inserted after the first sentence of the first paragraph:

1 For pre-packaged cartridge kits, the epoxy bonding agent shall meet the requirements of
2 ASTM C881 when mixed according to manufacturer instructions, utilizing the
3 manufacturer's mixing nozzle.
4

5 **9-26.1(2) Packaging and Marking**

6 The first sentence of the first paragraph is revised to read:
7

8 The components of the epoxy system furnished under these Specifications shall be
9 supplied in separate containers or pre-packaged cartridge kits that are non-reactive with
10 the materials contained.
11

12 The second paragraph is revised to read:
13

14 Separate containers shall be marked by permanent marking that identify the formulator,
15 "Component A" (contains the Epoxy Resin) and "Component B" (Contains the Curing
16 Agent), type, grade, class, lot or batch number, mixing instructions and the quantity
17 contained in pounds or gallons as defined by these Specifications.
18

19 The following new paragraph is inserted after the second paragraph:
20

21 Pre-packaged cartridge kits shall be marked by permanent marking that identify the
22 formulator, type, grade, class, lot or batch number, mixing instructions and the quantity
23 contained in ounces or milliliters as defined by these Specifications.
24

25 **Section 9-28, Signing Materials and Fabrication**

26 **April 1, 2019**

27 **9-28.2 Manufacturer's Identification and Date**

28 The second sentence is revised to read:
29

30 In addition, the width and height dimension, in inches, the Contract number, and the
31 number of the sign as it appears in the Plans shall be placed using 3-inch series C black
32 letters on the back of destination, distance, and large special signs.
33

34 **9-28.10 Vacant**

35 This section, including title, is revised to read:
36

37 **9-28.10 Digital Printing**

38 Transparent and opaque durable inks used in digital printed sign messages shall be as
39 recommended by the manufacturer. When properly applied, digital printed colors shall
40 have a warranty life of the base retroreflective sign sheeting. Digital applied colors shall
41 present a smooth surface, free from foreign material, and all messages and borders
42 shall be clear and sharp. Digital printed signs shall conform to 70% of the retroreflective
43 minimum values established for its type and color. Digitally printed signs shall meet the
44 daytime color and luminance, and nighttime color requirements of ASTM D 4956. No
45 variations in color or overlapping of colors will be permitted. Digital printed permanent
46 traffic signs shall have an integrated engineered match component clear protective
47 overlay recommended by the sheeting manufacturer applied to the entire face of the
48 sign. On Temporary construction/maintenance signs printed with black ink only, the
49 protective overlay film is optional, as long as the finished sign has a warranty of a
50 minimum of three years from sign sheeting manufacturer.
51

1 All digital printed traffic control signs shall be an integrated engineered match
2 component system. The integrated engineered match component system shall consist of
3 retroreflective sheeting, durable ink(s), and clear overlay film all from the same
4 manufacturer applied to aluminum substrate conforming to Section 9-28.8.

5
6 The sign fabricator shall use an approved integrated engineered match component
7 system as listed on the Qualified Products List (QPL). Each approved digital printer shall
8 only use the compatible retroreflective sign sheeting manufacturer's engineered match
9 component system products.

10
11 Each retroreflective sign sheeting manufacturer/integrated engineered match component
12 system listed on the QPL shall certify a department approved sign fabricator is approved
13 to operate their compatible digital printer. The sign fabricator shall re-certify annually
14 with the retroreflective sign manufacturer to ensure their digital printer is still meeting
15 manufacturer's specifications for traffic control signs. Documentation of each re-
16 certification shall be submitted to the QPL Engineer annually.

17 18 **9-28.11 Hardware**

19 The last paragraph is revised to read:

20
21 All steel parts shall be galvanized in accordance with AASHTO M111. Steel bolts and
22 related connecting hardware shall be galvanized in accordance with ASTM F 2329.

23 24 **9-28.14(2) Steel Structures and Posts**

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

26
27 Anchor rods for sign bridge and cantilever sign structure foundations shall conform to
28 Section 9-06.5(4), including Supplemental Requirement S4 tested at -20°F.

29
30 In the second sentence of the fourth paragraph, "AASHTO M232" is revised to read "ASTM F
31 2329".

32
33 The first sentence of the fifth paragraph is revised to read:

34
35 Except as otherwise noted, steel used for sign structures and posts shall have a
36 controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

37
38 The last sentence of the last paragraph is revised to read:

39
40 If such modifications are contemplated, the Contractor shall submit a Type 2 Working
41 Drawing of the proposed modifications.

42 43 9 44 **Section 9-29, Illumination, Signal, Electrical** 45 **April 1, 2019**

46 **9-29.1 Conduit, Innerduct, and Outerduct**

47 This section is supplemented with the following new subsections:
48

1 **9-29.1(10) Pull Tape**

2 Pull tape shall be pre-lubricated polyester pulling tape. The pull tape shall have a
3 minimum width of ½-inch and a minimum tensile strength of 500 pounds. Pull tape may
4 have measurement marks.

5
6 **9-29.1(11) Foam Conduit Sealant**

7 Foam conduit sealant shall be self-expanding waterproof foam designed to prevent both
8 water and pest intrusion. The foam shall be designed for use in and around electrical
9 equipment, including both insulated and bare conductors.

10
11 **9-29.2(1) Junction Boxes**

12 The first paragraph is revised to read:

13
14 For the purposes of this Specification concrete is defined as portland cement or blended
15 hydraulic cement concrete and non-concrete is all others.

16
17 **9-29.2(1)A2 Non-Concrete Junction Boxes**

18 The first paragraph is revised to read:

19
20 Material for the non-concrete junction boxes shall be of a quality that will provide for a
21 similar life expectancy as portland cement or blended hydraulic cement concrete in a
22 direct burial application.

23
24 **9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes**

25 In the table in the last paragraph, the fourth, fifth and sixth rows are revised to read:

26

Slip Resistant Lid	ASTM A36 steel
Frame	ASTM A36 steel
Slip Resistant Frame	ASTM A36 steel

27
28 **9-29.3(2)A1 Single Conductor Current Carrying**

29 This second sentence is revised to read:

30
31 Insulation shall be XLP (cross-linked polyethylene) or EPR (Ethylene Propylene
32 Rubber), Type USE (Underground Service Entrance) or USE-2, and rated for 600-volts
33 or higher.

34
35 **9-29.6 Light and Signal Standards**

36 In the first sentence of the third paragraph, "AASHTO M232" is revised to read "ASTM F
37 2329".

38
39 Item number 2 of the last paragraph is revised to read:

- 40
41 2. The steel light and signal standard fabricator's shop drawing submittal, including
42 supporting design calculations, submitted as a Type 2E Working Drawing in
43 accordance with Section 8-20.2(1) and the Special Provisions.

44
45 **9-29.6(1) Steel Light and Signal Standards**

46 In the second paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

47
48 The first sentence of the last paragraph is revised to read:

Steel used for light and signal standards shall have a controlled silicon content of either 0.00 to 0.06 percent or 0.15 to 0.25 percent.

9-29.6(5) Foundation Hardware

In the last paragraph, "AASHTO M232" is revised to read "ASTM F 2329".

9-29.10(1) Conventional Roadway Luminaires

This section is revised to read:

All conventional roadway luminaires shall meet 3G vibration requirements as described in ANSI C136.31.

All luminaires shall have housings fabricated from aluminum. The housing shall be painted flat gray, SAE AMS Standard 595 color chip No. 26280, unless otherwise specified in the Contract. Painted housings shall withstand a 1,000 hour salt spray test as specified in ASTM B117.

Each housing shall include a four bolt slip-fitter mount capable of accepting a nominal 2" tenon and adjustable within +/- 5 degrees of the axis of the tenon. The clamping bracket(s) and the cap screws shall not bottom out on the housing bosses when adjusted within the +/- 5 degree range. No part of the slipfitter mounting brackets on the luminaires shall develop a permanent set in excess of 0.2 inch when the cap screws used for mounting are tightened to a torque of 32 foot-pounds. Each luminaire shall include leveling reference points for both transverse and longitudinal adjustment.

All luminaires shall include shorting caps when shipped. The caps shall be removed and provided to the Contracting Agency when an alternate control device is required to be installed in the photocell socket. House side shields shall be included when required by the Contract. Order codes shall be modified to the minimum extent necessary to include the option for house side shields.

This section is supplemented with the following new subsections:

9-29.10(1)A High Pressure Sodium (HPS) Conventional Roadway Luminaires

HPS conventional roadway luminaires shall meet the following requirements:

1. General shape shall be "cobrahead" style, with flat glass lens and full cutoff optics.
2. Light pattern distribution shall be IES Type III.
3. The reflector of all luminaires shall be of a snap-in design or secured with screws. The reflector shall be polished aluminum or prismatic borosilicate glass.
4. Flat lenses shall be formed from heat resistant, high-impact, molded borosilicate or tempered glass.
5. The lens shall be mounted in a doorframe assembly, which shall be hinged to the luminaire and secured in the closed position to the luminaire by means of an automatic latch. The lens and doorframe assembly, when closed, shall exert pressure against a gasket seat. The lens shall not allow any light output above

90 degrees nadir. Gaskets shall be composed of material capable of withstanding the temperatures involved and shall be securely held in place.

6. The ballast shall be mounted on a separate exterior door, which shall be hinged to the luminaire and secured in the closed position to the luminaire housing by means of an automatic type of latch (a combination hex/slot stainless steel screw fastener may supplement the automatic-type latch).
7. Each luminaire shall be capable of accepting a 150, 200, 250, 310, or 400 watt lamp complete and associated ballast. Lamps shall mount horizontally.

9-29.10(1)B Light Emitting Diode (LED) Conventional Roadway luminaires

LED Conventional Roadway luminaires are divided into classes based on their equivalent High Pressure Sodium (HPS) luminaires. Current classes are 200W, 250W, 310W, and 400W. LED luminaires are required to be pre-approved in order to verify their photometric output. To be considered for pre-approval, LED luminaires must meet the requirements of this section.

LED luminaires shall include a removable access door, with tool-less entry, for access to electronic components and the terminal block. The access door shall be removable, but include positive retention such that it can hang freely without disconnecting from the luminaire housing. LED drivers may be mounted either to the interior of the luminaire housing or to the removable door itself.

LED drivers shall be removable for user replacement. All internal modular components shall be connected by means of mechanical plug and socket type quick disconnects. Wire nuts may not be used for any purpose. All external electrical connections to the luminaire shall be made through the terminal block.

LED luminaires shall include a 7-pin NEMA photocell receptacle. The LED driver(s) shall be dimmable from ten volts to zero volts. LED output shall have a Correlated Color Temperature (CCT) of 4000K nominal (4000-4300K) and a Color Rendering Index (CRI) of 70 or greater. LED output shall be a minimum of 85% at 75,000 hours at 25 degrees Celsius.

LED luminaires shall be available for 120V, 240V, and 480V supply voltages. Voltages refer to the supply voltages to the luminaires present in the field. LED power usage shall not exceed the following maximum values for the applicable wattage class:

Class	Max. Wattage
200W	110W
250W	165W
310W	210W
400W	275W

Only one brand of LED conventional roadway luminaire may be used on a Contract. They do not necessarily have to be the same brand as any high-mast, underdeck, or wall-mount luminaires when those types of luminaires are specified in the Contract. LED luminaires shall include a standard 10 year manufacturer warranty.

The list of pre-approved LED Conventional Roadway luminaires is available at <http://www.wsdot.wa.gov/Design/Traffic/ledluminaires.htm>.

1 **9-29.10(2) Decorative Luminaires**

2 This section, including title, is revised to read:

3
4 **9-29.10(2) Vacant**

5
6 **9-29.12 Electrical Splice Materials**

7 This section is supplemented with the following new subsections:

8
9 **9-29.12(3) Splice Enclosures**

10 **9-29.12(3)A Heat Shrink Splice Enclosure**

11 Heat shrink splice enclosures shall be medium or heavy wall cross-linked polyolefin,
12 meeting the requirements of AMS-DTL-23053/15, with thermoplastic adhesive
13 sealant. Heat shrink splices used for “wye” connections require rubber electrical
14 mastic tape.

15
16 **9-29.12(3)B Molded Splice Enclosure**

17 Molded splice enclosures shall use epoxy resin in a clear rigid plastic mold. The
18 material used shall be compatible with the insulation material of the insulated
19 conductor or cable. The component materials of the resin insulation shall be
20 packaged ready for convenient mixing without removing from the package.

21
22 **9-29.12(4) Re-Enterable Splice Enclosure**

23 Re-enterable splice enclosures shall use either dielectric grease or a flexible resin
24 contained in a two-piece plastic mold. The mold shall either snap together or use
25 stainless steel hose clamps.

26
27 **9-29.12(5) Vinyl Electrical Tape for Splices**

28 Vinyl electrical tape in splicing applications shall meet the requirements of MIL-I-
29 24391C.

30
31 **9-29.12(1) Illumination Circuit Splices**

32 This section is revised to read:

33
34 Underground illumination circuit splices shall be solderless crimped connections capable
35 of securely joining the wires, both mechanically and electrically, as defined in Section 8-
36 20.3(8). Aerial illumination splices shall be solderless crimp connectors or split bolt vice-
37 type connectors.

38
39 **9-29.12(1)A Heat Shrink Splice Enclosure**

40 This section is deleted in its entirety.

41
42 **9-29.12(1)B Molded Splice Enclosure**

43 This section is deleted in its entirety.

44
45 **9-29.12(2) Traffic Signal Splice Material**

46 This section is revised to read:

47
48 Induction loop splices and magnetometer splices shall use an uninsulated barrel-type
49 crimped connector capable of being soldered.

50
51 **9-29.13(10)D Cabinets for Type 170E and 2070 Controllers**

52 The first sentence of item number 4 is revised to read:

1
2 A disposable paper filter element with dimensions of 12" × 16" × 1" shall be provided in
3 lieu of a metal filter.
4

5 Item number 6 is revised to read:
6

- 7 6. LED light strips shall be provided for cabinet lighting, powered from the Equipment
8 breaker on the Power Distribution Assembly. Each LED light strip shall be
9 approximately 12 inches long, have a minimum output of 320 lumens, and have a
10 color temperature of 4100K (cool white) or higher. There shall be three light strips
11 for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted
12 lighting is not permitted. Light strips shall be installed in the locations shown in the
13 Standard Plans. Lighting shall not interfere with the proper operation of any other
14 ceiling mounted equipment. All lighting fixtures above a rack shall energize
15 automatically when either door to that respective rack is opened. Each door switch
16 shall be labeled "Light".
17

18 Item number 7 is revised to read:
19

- 20 7. Rack mounted equipment shall be as shown in the Standard Plans. The cabinet
21 shall use PDA #2LX and Output File #1LX. Where an Auxiliary Output File is
22 required, Output File #2LX shall also be included.
23

24 This section is supplemented with the following new item:
25

- 26 9. The PCB connectors for Field Terminal Blocks FT1 through FT6 on Output Files
27 #1LX and #2LX shall be capable of accepting minimum 14 AWG field wiring, have a
28 pitch of 5.08 mm, and use screw flange type locking to secure the plug and socket
29 connection. The sockets on the Field Terminal Panel shall be secured to the panel
30 such that unplugging a connector will not result in the socket moving or separating
31 from the panel.
32

33 **9-29.13(11) Traffic Data Accumulator and Ramp Meters**

34 Item number 2 is revised to read:
35

- 36 2. Rack mounted equipment shall be as shown in the Standard Plans.
37

38 Item number 3 is revised to read:
39

- 40 3. PDA #3LX shall be furnished with three Model 200 Load Switches installed. PDA
41 #3LX shall be modified to include a second Model 430 transfer relay, mounted on
42 the rear of the PDA and wired as shown in the Standard Plans.
43

44 **9-29.13(12) ITS Cabinet**

45 This section's title is revised to read:
46

47 **Type 331L ITS Cabinet**

48
49 The first paragraph (excluding the numbered list) is revised to read:
50

51 Basic ITS cabinets shall be Model 331L Cabinets, unless otherwise specified in the
52 Contract. Type 331L Cabinets shall be constructed in accordance with the TEES, with
53 the following modifications:

Item number 6 of the first paragraph is revised to read:

6. LED light strips shall be provided for cabinet lighting, powered from the Equipment breaker on the Power Distribution Assembly. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4100K (cool white) or higher. There shall be three light strips for each rack within the cabinet. Lighting shall be ceiling mounted – rack mounted lighting is not permitted. Light strips shall be installed in the locations shown in the Standard Plans. Lighting shall not interfere with the proper operation of any other ceiling mounted equipment. All lighting fixtures above a rack shall energize automatically when either door to that respective rack is opened. Each door switch shall be labeled “Light”.

9-29.16(2)E Painting Signal Heads

In the first sentence, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-29.17 Signal Head Mounting Brackets and Fittings

In the first paragraph, item number 2 under **Stainless Steel** is revised to read:

2. Bands or cables for Type N mount.

9-29.20 Pedestrian Signals

In item 2C of the second paragraph, “Federal Standard 595” is revised to read “SAE AMS Standard 595”.

9-29.24 Service Cabinets

The third sentence of item number 6 is revised to read:

The dead front cover shall have cutouts for the entire breaker array, with blank covers where no circuit breakers are installed.

Item number 8 is revised to read:

8. Lighting contactors shall meet the requirements of Section 9-29.24(2).

The last sentence of item number 10 is revised to read:

Dead front panels shall prevent access to any exposed, live components, and shall cover all equipment except for circuit breakers (including blank covers), the photocell test/bypass switch, and the GFCI receptacle.

9-29.24(2) Electrical Circuit Breakers and Contactors

This section is revised to read:

All circuit breakers shall be bolt-on type, with the RMS-symmetrical interrupting capacity described in this Section. Circuit breakers for 120/240/277 volt circuits shall be rated at 240 or 277 volts, as applicable, with an interrupting capacity of not less than 10,000 amperes. Circuit breakers for 480 volt circuits shall be rated at 480 volts, and shall have an interrupting capacity of not less than 14,000 amperes.

Lighting contactors shall be rated for tungsten or ballasted (such as sodium vapor, mercury vapor, metal halide, and fluorescent) lamp loads. Contactors for 120/240/277 volt circuits shall be rated at 240 volts maximum line to line voltage, or 277 volts maximum line to neutral voltage, as applicable. Contactors for 480 volt circuits shall be rated at 480 volt maximum line to line voltage.

Section 9-33, Construction Geosynthetic August 6, 2018

9-33.4(1) Geosynthetic Material Approval

The second sentence of the first paragraph is revised to read:

If the geosynthetics material is not listed in the current WSDOT QPL, a Manufacturer's Certificate of Compliance including Certified Test Reports of each proposed geosynthetic shall be submitted to the State Materials Laboratory in Tumwater for evaluation.

The last paragraph is revised to read:

Geosynthetics used as reinforcement in permanent geosynthetic retaining walls, reinforced slopes, reinforced embankments, and other geosynthetic reinforcement applications require proof of compliance with the National Transportation Product Evaluation Program (NTPEP) in accordance with AASHTO Standard Practice R 69, Standard Practice for Determination of Long-Term Strength for Geosynthetic Reinforcement.

Section 9-34, Pavement Marking Material January 7, 2019

9-34.2(2) Color

The first sentence is revised to read:

Paint draw-downs shall be prepared according to ASTM D823.

Each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

9-34.2(3) Prohibited Materials

This section is revised to read:

Traffic paint shall not contain mercury, lead, chromium, diarylide pigments, toluene, chlorinated solvents, hydrolysable chlorine derivatives, ethylene-based glycol ethers and their acetates, nor any other EPA hazardous waste material over the regulatory levels in accordance with CFR 40 Part 261.24.

9-34.2(5) Low VOC Waterborne Paint

The heading "Standard Waterborne Paint" is supplemented with "Type 1 and 2".

The heading "High-Build Waterborne Paint" is supplemented with "Type 4".

The heading "Cold Weather Waterborne Paint" is supplemented with "Type 5".

In the row beginning with "° @90°F", each minimum value is revised to read "60".

In the row beginning with “Fineness of Grind, (Hegman Scale)”, each minimum value is revised to read “3”.

The last four rows are replaced with the following:

Vehicle Composition	ASTM D 2621	100% acrylic emulsion	100% cross-linking acrylic ⁴	100% acrylic emulsion
Freeze-Thaw Stability, KU	ASTM D 2243 and D 562	@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU	@ 3 cycles show no coagulation or change in viscosity greater than ± 10 KU
Heat Stability	ASTM D 562 ²	± 10 KU from the initial viscosity	± 10 KU from the initial viscosity	± 10 KU from the initial Viscosity
Low Temperature Film Formation	ASTM D 2805 ³	No Cracks*		No Cracks
Cold Flexibility ⁵	ASTM D522	Pass at 0.5 in mandrel*		
Test Deck Durability ⁶	ASTM D913	$\geq 70\%$ paint retention in wheel track*		
Mud Cracking	(See note 7)	No Cracks	No Cracks	

After the preceding Amendments are applied, the following new column is inserted after the “Standard Waterborne Paint Type 1 and 2” column:

Semi-Durable Waterborne Paint Type 3			
White		Yellow	
Min.	Max.	Min.	Max.
Within ± 0.3 of qualification sample			
80	95	80	95
60		60	
77		77	
	65		65
43		43	
	1.25		1.25
3		3	
0.98		0.96	
88		50	
100°		100°	
9.5		9.5	
	10		10
100% acrylic emulsion			
@ 5 cycles show no coagulation or change in viscosity greater than ± 10 KU			
± 10 KU from the initial viscosity			
No Cracks			
Pass at 0.25 in mandrel			
$\geq 70\%$ paint retention in wheel track			
No Cracks			

The footnotes are supplemented with the following:

⁴Cross-linking acrylic shall meet the requirements of federal specification TT-P-1952F Section 3.1.1.

⁵Cold Flexibility: The paint shall be applied to an aluminum panel at a wet film thickness of 15 mils and allowed to dry under ambient conditions (50±10% RH and 72±5 °F) for 24 hours. A cylindrical mandrel apparatus (in accordance with ASTM D522 method B) shall be put in a 40°F refrigerator when the paint is drawn down. After 24 hours, the aluminum panel with dry paint shall be put in the 40°F refrigerator with the mandrel apparatus for 2 hours. After 2 hours, the panel and test apparatus shall be removed and immediately tested to according to ASTM D522 to evaluate cold flexibility. Paint must show no evidence of cracking, chipping or flaking when bent 180 degrees over a mandrel bar of specified diameter.

⁶NTPEP test deck, or a test deck conforming to ASTM D713, shall be conducted for a minimum of six months with the following additional requirements: it shall be applied at 15 wet mils to a test deck that is located at 40N latitude or higher with at least 10,000 ADT and which was applied during the months of September through November.

⁷Paint is applied to an approximately 4"x12" aluminum panel using a drawdown bar with a 50 mil gap. The coated panel is allowed to dry under ambient conditions (50±10% RH and 72±5 °F) for 24 hours. Visual evaluation of the dry film shall reveal no cracks.

9-34.3 Plastic

In the first sentence of the last paragraph, "Federal Standard 595" is revised to read "SAE AMS Standard 595".

9-34.3(2) Type B – Pre-Formed Fused Thermoplastic

In the last two paragraphs, each reference to "Federal Standard 595" is revised to read "SAE AMS Standard 595".

9-34.3(4) Type D – Liquid Cold Applied Methyl Methacrylate

The Test Method value for **Adhesion to PCC or HMA, psi** is revised to read "ASTM D4541¹".

9-34.4 Glass Beads for Pavement Marking Materials

In the Test Method column of the table titled Metal Concentration Limits, "EPA 3052 SW-846 6010C" is revised to read "EPA 3052 SW-846 6010D".

9-34.5(1) Temporary Pavement Marking Tape – Short Duration

This section, including title, is revised to read:

9-34.5(1) Temporary Pavement Marking Tape – Short Duration (Removable)

Temporary pavement marking tape for short duration (usage is for up to two months) shall conform to ASTM D4592 Type I except that black tape, black mask tape and the black portion of the contrast removable tape, shall be non-reflective.

9-34.5(2) Temporary Pavement Marking Tape – Long Duration

This section's title is revised to read:

Temporary Pavement Marking Tape – Long Duration (Non-Removable)

The first sentence is revised to read:

1
2 Temporary pavement marking tape for long duration (usage is for greater than two
3 months and less than one year) shall conform to ASTM D4592 Type II.
4

5 ASTM E2176 is deleted from the second sentence.
6

7 **9-34.7(1) Requirements**

8 The first paragraph is revised to read:
9

10 Field performance evaluation is required for low VOC solvent-based paint per Section 9-
11 34.2(4), Type A – liquid hot applied thermoplastic per Section 9-34.3(1), Type B –
12 preformed fused thermoplastic per Section 9-34.3(2), Type C – cold applied preformed
13 tape per Section 9-34.3(3), and Type D – liquid applied methyl methacrylate per Section
14 9-34.3(4).
15

16 The last paragraph is deleted.
17

18 **9-34.7(1)C Auto No-Track Time**

19 The first paragraph is revised to read:
20

21 Auto No-Track Time will only be required for low VOC solvent-based paint in accordance
22 with Section 9-34.2(4).
23

24 The second and third sentences of the second paragraph are deleted.
25

1
2
3

SECTION 9
SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS

(August 14, 2013 APWA GSP)

The Work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2018 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

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

(March 8, 2013 APWA GSP)

(April 1, 2013 WSDOT GSP)

(May 1, 2013 Lynnwood GSP)

Also incorporated into the Contract Documents by reference are:

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

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

Division 1
General Requirements

DESCRIPTION OF WORK

(March 13, 1995 WSDOT GSP)

This Contract provides for the improvement of various City of Lynnwood roadways by HMA for pavement repair, grind and overlay, curb ramps, pedestrian push buttons and pedestrian signals, raised pavement markers, paint line, plastic pavement markings and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01 Definition and Terms

1-01.3 Definitions

(January 4, 2016 APWA GSP)

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

Dates

Bid Opening Date

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

Award Date

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

Contract Execution Date

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

Notice to Proceed Date

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

Substantial Completion Date

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

Physical Completion Date

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

Completion Date

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

Final Acceptance Date

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

1 Supplement this Section with the following:

2
3 All references in the Standard Specifications, Amendments, or WSDOT General Special
4 Provisions, to the terms "Department of Transportation", "Washington State
5 Transportation Commission", "Commission", "Secretary of Transportation", "Secretary",
6 "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".
7

8 All references to the terms "State" or "state" shall be revised to read "Contracting Agency"
9 unless the reference is to an administrative agency of the State of Washington, a State
10 statute or regulation, or the context reasonably indicates otherwise.
11

12 All references to "State Materials Laboratory" shall be revised to read "Contracting
13 Agency designated location".
14

15 All references to "final Contract voucher certification" shall be interpreted to mean the
16 Contracting Agency form(s) by which final payment is authorized, and final completion
17 and acceptance granted.
18

19 **Additive**

20 A supplemental unit of Work or group of Bid items, identified separately in the Bid
21 Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition
22 to the Base Bid.
23

24 **Alternate**

25 One of two or more units of Work or groups of Bid items, identified separately in the Bid
26 Proposal, from which the Contracting Agency may make a choice between different
27 methods or material of construction for performing the same Work.
28

29 **Business Day**

30 A business day is any day from Monday through Friday except holidays as listed in
31 Section 1-08.5.
32

33 **Contract Bond**

34 The definition in the Standard Specifications for "Contract Bond" applies to whatever
35 bond form(s) are required by the Contract Documents, which may be a combination of a
36 Payment Bond and a Performance Bond.
37

38 **Contract Documents**

39 See definition for "Contract".
40

41 **Contract Time**

42 The period of time established by the terms and conditions of the Contract within which
43 the Work must be physically completed.
44

45 **Notice of Award**

46 The written notice from the Contracting Agency to the successful Bidder signifying the
47 Contracting Agency's acceptance of the Bid Proposal.
48

49 **Notice to Proceed**

50 The written notice from the Contracting Agency or Engineer to the Contractor authorizing
51 and directing the Contractor to proceed with the Work and establishing the date on which
52 the Contract time begins.
53

Traffic

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

1-02 Bid Procedures and Conditions

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

(January 24, 2011 APWA GSP)

Before Award of a Public Works Contract, a Bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible Bidder and qualified to be awarded a Public Works project.

1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this Section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Advertisement for Bids) for the Work.

After Award of the Contract, Plans and Specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced Plans (11" x 17")	2	Furnished automatically upon Award.
Contract Provisions	2	Furnished automatically upon Award.
Large Plans (e.g., 22" x 34")	2	Furnished only upon request.

Additional Plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

1-02.4(2) Subsurface Information

(March 8, 2013 APWA GSP)

The second sentence in the first paragraph is revised to read:

The Summary of Geotechnical Conditions and the boring logs, if and when included as an appendix to the Special Provisions, shall be considered as part of the Contract.

1-02.6 Preparation of Proposal

Supplement the second paragraph with the following:

4. If a minimum Bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

1 Delete the fourth paragraph:

2
3 Delete the last paragraph, and replace it with the following:

4
5 The Bidder shall make no stipulation on the Bid Form, nor qualify the Bid in any manner.

6
7 A Bid by a corporation shall be executed in the corporate name, by the president or a
8 vice president (or other corporate officer accompanied by evidence of authority to sign).

9
10 A Bid by a partnership shall be executed in the partnership name, and signed by a
11 partner.

12
13 A Bid by a joint venture shall be executed in the joint venture name and signed by a
14 member of the joint venture.

15
16 *(August 2, 2004 WSDOT GSP)*

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

18
19 Section 1-02.6 is supplemented with the following:

20
21 *(August 28, 2017 WSDOT GSP)*

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

26 27 **1-02.13 Irregular Proposals**

28 *(June 20, 2017 APWA GSP)*

29 Delete this Section and replace it with the following:

- 30
31 1. A Proposal will be considered irregular and will be rejected if:
- 32 a. The Bidder is not prequalified when so required;
 - 33 b. The authorized Proposal form furnished by the Contracting Agency is not used
34 or is altered;
 - 35 c. The completed Proposal form contains any unauthorized additions, deletions,
36 alternate Bids, or conditions;
 - 37 d. The Bidder adds provisions reserving the right to reject or accept the Award,
38 or enter into the Contract;
 - 39 e. A price per unit cannot be determined from the Bid Proposal;
 - 40 f. The Proposal form is not properly executed;
 - 41 g. The Bidder fails to submit or properly complete a Subcontractor list, if
42 applicable, as required in Section 1-02.6;
 - 43 h. The Bidder fails to submit or properly complete an Underutilized
44 Disadvantaged Business Enterprise Certification, if applicable, as required in
45 Section 1-02.6;
 - 46 i. The Bidder fails to submit written confirmation from each UDBE firm listed on
47 the Bidder's completed UDBE Utilization Certification that they are in
48 agreement with the bidder's UDBE participation commitment, if applicable, as
49 required in Section 1-02.6, or if the written confirmation that is submitted fails
50 to meet the requirements of the Special Provisions;
 - 51 j. The Bidder fails to submit UDBE Good Faith Effort documentation, if
52 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

(May 17, 2018 APWA GSP, Option A)

Delete this Section and replace it with the following:

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

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

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

1-02.15 Pre-Award Information

(August 14, 2013 APWA GSP)

Revise this Section to read:

Before awarding any Contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible Bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,

3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the Work,
4. A breakdown of costs assigned to any Bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the Work is located.
7. Any other information or action taken that is deemed necessary to ensure that the Bidder is the lowest responsible Bidder.

1-03 Award and Execution of Contract

1-03.1 Consideration of Bids

(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

After opening and reading Proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any Bid item, the price per unit will control. If a minimum Bid amount has been established for any item and the Bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for Award purposes and to fix the Awarded Contract Price amount and the amount of the Contract bond.

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this Section to read:

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

Within ten (10) calendar days after the Award Date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful Bidder shall provide any pre-Award information the Contracting Agency may require under Section 1-02.15.

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

If the Bidder experiences circumstances beyond their control that prevents return of the Contract Documents within the calendar days after the Award Date stated above, the Contracting Agency may grant up to a maximum of ten (10) additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

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

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

1-04 Scope of the Work

1-04.4 Changes

1-04.4(1) Minor Changes

(March 22, 2018, Lynnwood GSP)

Section 1-04.4(1) is supplemented as follows:

1-04.4(1) Unexpected Site Changes

Payments for changes amounting to \$25,000 or less may be made under the Bid item "Unexpected Site Changes". At the discretion of the Contracting Agency, this procedure for Unexpected Site Changes may be used in lieu of the more formal procedure as outlined in Section 1-04.4, Changes.

The Contractor will be provided a copy of the completed order for Unexpected Site Changes. The agreement for the Unexpected Site Changes will be documented by

signature of the Contractor, or notation of verbal agreement. If the Contractor is in disagreement with anything required by the order for Unexpected Site Changes, the Contractor may protest the order as provided in Section 1-04.5.

Payments will be determined in accordance with Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount for "Unexpected Site Changes" in the Proposal to become a part of the total Bid by the Contractor.

1-04.6 Variation in Estimated Quantities

(July 23, 2015 APWA GSP, Option B)

Revise the first paragraph to read:

Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original Proposal quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of any Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original Proposal quantity, and if the total extended Bid price for that item at time of Award is equal to or greater than 10 percent of the total Contract price at time of Award. In that case, payment for Contract Work may be adjusted as described herein:

The last paragraph of Section 1-04.6 is deleted and replaced with the following:

The Contractor and the Contracting Agency agree that there will be no cost adjustment for increases or decreases if the Contracting Agency has entered a quantity or amount for the item in the proposal form only to provide a common Proposal for Bidders.

1-05.4 Conformity With And Deviations From Plans And Stakes

(August 7, 2017 WSDOT GSP)

Contractor Surveying - Roadway

Copies of the Contracting Agency provided primary survey control data are available for the bidder's inspection at the office of the Engineer.

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

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

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

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

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

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.
2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.
3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.
4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor
5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.
6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.
7. Establish intermediate elevation benchmarks as needed to check work throughout the project.
8. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.
9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

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

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

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide the Contractor with primary survey control information consisting of descriptions of two primary control points used for the horizontal and vertical control, and descriptions of two additional primary control points for every additional three miles of project length. Primary control points will be described by reference to the project alignment and the coordinate system and elevation datum utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for the beginning and ending points and for each Point of Intersection (PI) on each alignment included in the project.

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

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

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

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

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

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

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

Payment

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

"Roadway Surveying", lump sum.

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

(April 4, 2011 WSDOT GSP)

Licensed Surveyors

The Contractor shall be responsible for reestablishing or locating legal survey markers such as GLO monuments or property corner monuments, conduct boundary surveys to determine Contracting Agency Right-of-Way locations, and obtain, review and analyze deeds and records as necessary to determine these boundaries. The Contracting Agency will provide "rights of entry" as needed by the Contractor to perform the Work.

The Contractor shall brush out or clear and stake or mark the Right-of-Way lines as designated by the Engineer.

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

When required, the Contractor shall prepare and file a Record of Survey map in accordance with RCW 58.09 and provide a recorded copy to the Contracting Agency. The Contracting Agency will provide all existing base maps, existing horizontal and vertical control, and other material available with Washington State Plane Coordinate information to the Contractor. The Contracting Agency will also provide maps, plan sheets, and/or aerial photographs clearly identifying the limits of the areas to be surveyed. The Contractor shall establish Washington State Plane Coordinates on all points required in the Record of Survey and other points designated in the Contract Documents.

Existing Right-of-Way documentation, existing base maps, existing horizontal and vertical control descriptions, maps, plan sheets, aerial photographs and all other available material may be viewed by prospective Bidders at the office of the Engineer.

The Contractor shall perform all of the necessary calculations for the contracted survey Work and shall provide copies of these calculations to the Contracting Agency. Electronic files of all survey data shall be provided and in a format acceptable to the Contracting Agency.

1 All survey Work performed by the Contractor shall conform to all applicable sections of
2 the Revised Code of Washington and the Washington Administrative Code.

3
4 The Contractor shall provide all traffic control, signing, and temporary traffic control
5 devices in order to provide a safe Work zone.
6

7 **Payment**

8 Payment will be made in accordance with Section 1-09.6 for the following Bid item when
9 included in the Proposal:

10
11 "Licensed Surveying", Force Account.

12 For the purpose of providing a common Proposal for all Bidders, the Contracting
13 Agency has entered an amount for the item "Licensed Surveying" in the Bid
14 Proposal to become a part of the total Bid by the Contractor.
15

16 **1-05.7 Removal of Defective and Unauthorized Work**

17 *(October 1, 2005 APWA GSP)*

18 Supplement this Section with the following:
19

20 If the Contractor fails to remedy defective or unauthorized Work within the time specified
21 in a written notice from the Engineer, or fails to perform any part of the Work required by
22 the Contract Documents, the Engineer may correct and remedy such Work as may be
23 identified in the written notice, with Contracting Agency forces or by such other means as
24 the Contracting Agency may deem necessary.
25

26 If the Contractor fails to comply with a written order to remedy what the Engineer
27 determines to be an emergency situation, the Engineer may have the defective and
28 unauthorized Work corrected immediately, have the rejected Work removed and replaced,
29 or have Work the Contractor refuses to perform completed by using Contracting Agency
30 or other forces. An emergency situation is any situation when, in the opinion of the
31 Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of
32 loss or damage to the public.
33

34 Direct or indirect costs incurred by the Contracting Agency attributable to correcting and
35 remedying defective or unauthorized Work, or Work the Contractor failed or refused to
36 perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from
37 monies due, or to become due, the Contractor. Such direct and indirect costs shall include
38 in particular, but without limitation, compensation for additional professional services
39 required, and costs for repair and replacement of Work of others destroyed or damaged
40 by correction, removal, or replacement of the Contractor's unauthorized Work.
41

42 No adjustment in Contract time or compensation will be allowed because of the delay in
43 the performance of the Work attributable to the exercise of the Contracting Agency's rights
44 provided by this Section.
45

46 The rights exercised under the provisions of this Section shall not diminish the Contracting
47 Agency's right to pursue any other avenue for additional remedy or damages with respect
48 to the Contractor's failure to perform the Work as required.
49

50 Add the following new Section:

51 **1-05.8 Notifications (New Section)**

52 *(January 22, 2018, Lynnwood GSP)*

1
2 The Contractor shall notify the Lynnwood Fire Department, Police Department and Resident
3 Engineer in writing at least 48 hours prior to:

- 4 1. Implementation of any detours or lane closures;
- 5 2. Commencing work on any water systems shut downs, inoperable fire hydrants; or
- 6 3. Shutdowns affecting traffic signals and pre-emption equipment.

7 Notice shall be provided to these departments so that they may reroute their emergency
8 vehicles around or within the construction zone. If rerouting is not possible as determined by
9 the Lynnwood Fire and/or Police Departments, the Contractor shall provide access through
10 the construction zone at all times with no reduction in emergency service response times.

11 The following are the minimum requirements associated with any Contractor notification to the
12 Fire Marshall that includes proposing changes to the traffic control plans included in the Bid
13 Documents. The Contractor shall exhibit in its request notice how the proposed revised traffic
14 control plans:

- 15 1. Meets the requirements identified in the Plans and Specifications, and
- 16 2. Provides continuous emergency access to structures and buildings within and
17 adjacent to the project area during construction.

18 The Contractor's proposed revisions to the traffic control plans shall be approved by the Fire
19 Marshall or designee at least forty-eight (48) hours prior to start of construction. The contractor
20 shall have on hand and readily available steel plates or other means capable of handling
21 emergency vehicle traffic and personnel to provide for a reasonable response time through the
22 construction zone and/or into the construction area in emergency situations.

23 If the Contractor can demonstrate through use of the submitted project schedule that access
24 approval by the Fire Marshall or designee requiring greater than forty-eight (48) hours has
25 delayed the critical path of the schedule, the Contractor will not be assessed working days for
26 the same delayed period.

27 If affected, the Contractor shall notify the U. S. Postal Service, Edmonds School District #15,
28 Edmonds Community College and Community Transit at least forty-eight (48) hours prior to
29 traffic disruptions or route detours.

30 The Contractor shall notify all residents and/or business adjacent to or within 300 feet of the
31 construction zone prior to construction to insure parked vehicles are moved and that citizens
32 are aware that access and/or services may be temporarily impeded. Notification shall be as
33 follows:

- 34 A. Initial notification shall be provided to residents and businesses providing the
35 Contractor's intended construction schedule and potential traffic delays or property
36 access and/or service disruptions. This notification shall precede the work a
37 minimum of seven (7) days. Wording of the initial notice shall be approved by the
38 Contracting Agency prior to it being distributed.
- 39 B. Final notification shall be provided to residents and businesses providing the
40 Contractor's exact construction schedule and nature of the disruption. This
41 notification shall be provided a minimum of twenty-four (24) hours prior to the first day
42 residents/businesses will be requested to clear vehicles from the construction area
43 and/or any disruption to property access or services.

44 45 46 **1-05.11 Final Inspection**

47 Delete this Section and replace it with the following:

48 49 **1-05.11 Final Inspections and Operational Testing** 50 *(October 1, 2005 APWA GSP)*

1
2 **1-05.11(1) Substantial Completion Date**
3

4 When the Contractor considers the Work to be Substantially Complete, the Contractor
5 shall so notify the Engineer and request the Engineer establish the Substantial Completion
6 Date. The Contractor's request shall list the specific items of Work that remain to be
7 completed in order to reach Physical Completion. The Engineer will schedule an
8 inspection of the Work with the Contractor to determine the status of completion. The
9 Engineer may also establish the Substantial Completion Date unilaterally.

10
11 If, after this inspection, the Engineer concurs with the Contractor that the Work is
12 Substantially Complete and ready for its intended use, the Engineer, by written notice to
13 the Contractor, will set the Substantial Completion Date. If, after this inspection the
14 Engineer does not consider the Work Substantially Complete and ready for its intended
15 use, the Engineer will, by written notice, so notify the Contractor giving the reasons
16 therefor.

17
18 Upon receipt of written notice concurring in or denying Substantial Completion, whichever
19 is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized
20 interruption, the Work necessary to reach Substantial and Physical Completion. The
21 Contractor shall provide the Engineer with a revised schedule indicating when the
22 Contractor expects to reach Substantial and Physical Completion of the Work.

23
24 The above process shall be repeated until the Engineer establishes the Substantial
25 Completion Date and the Contractor considers the Work Physically Complete and ready
26 for final inspection.

27
28
29
30 **1-05.11(2) Final Inspection and Physical Completion Date**
31

32 When the Contractor considers the Work Physically Complete and ready for final
33 inspection, the Contractor by written notice, shall request the Engineer to schedule a final
34 inspection. The Engineer will set a date for final inspection. The Engineer and the
35 Contractor will then make a final inspection and the Engineer will notify the Contractor in
36 writing of all particulars in which the final inspection reveals the Work incomplete or
37 unacceptable. The Contractor shall immediately take such corrective measures as are
38 necessary to remedy the listed deficiencies. Corrective Work shall be pursued vigorously,
39 diligently, and without interruption until Physical Completion of the listed deficiencies. This
40 process will continue until the Engineer is satisfied the listed deficiencies have been
41 corrected.

42
43 If action to correct the listed deficiencies is not initiated within 7 days after receipt of the
44 written notice listing the deficiencies, the Engineer may, upon written notice to the
45 Contractor, take whatever steps are necessary to correct those deficiencies pursuant to
46 Section 1-05.7.

47
48 The Contractor will not be allowed an extension of Contract time because of a delay in the
49 performance of the Work attributable to the exercise of the Engineer's right hereunder.

50
51 Upon correction of all deficiencies, the Engineer will notify the Contractor and the
52 Contracting Agency, in writing, of the date upon which the Work was considered Physically
53 Complete. That date shall constitute the Physical Completion Date of the Contract, but

1 shall not imply acceptance of the Work or that all the obligations of the Contractor under
2 the Contract have been fulfilled.

3
4 **1-05.11(3) Operational Testing**

5
6 It is the intent of the Contracting Agency to have at the Physical Completion Date a
7 complete and operable system. Therefore when the Work involves the installation of
8 machinery or other mechanical equipment; street lighting, electrical distribution or signal
9 systems; irrigation systems; buildings; or other similar Work it may be desirable for the
10 Engineer to have the Contractor operate and test the Work for a period of time after final
11 inspection but prior to the Physical Completion Date. Whenever items of Work are listed
12 in the Contract Provisions for operational testing they shall be fully tested under operating
13 conditions for the time period specified to ensure their acceptability prior to the Physical
14 Completion Date. During and following the test period, the Contractor shall correct any
15 items of workmanship, materials, or equipment which prove faulty, or that are not in first
16 class operating condition. Equipment, electrical controls, meters, or other devices and
17 equipment to be tested during this period shall be tested under the observation of the
18 Engineer, so that the Engineer may determine their suitability for the purpose for which
19 they were installed. The Physical Completion Date cannot be established until testing and
20 corrections have been completed to the satisfaction of the Engineer.

21
22 The costs for power, gas, labor, material, supplies, and everything else needed to
23 successfully complete operational testing, shall be included in the unit Contract prices
24 related to the system being tested, unless specifically set forth otherwise in the Proposal.

25
26 Operational and test periods, when required by the Engineer, shall not affect a
27 manufacturer's guaranties or warranties furnished under the terms of the Contract.

28
29
30 **1-05.13 Superintendents, Labor and Equipment of Contractor**

31 *(August 14, 2013 APWA GSP)*

32 Delete the sixth and seventh paragraphs of this Section.

33
34 Add the following new Section:

35
36 **1-05.16 Water and Power**

37 *(October 1, 2005 APWA GSP)*

38
39 The Contractor shall make necessary arrangements, and shall bear the costs for power
40 and water necessary for the performance of the Work, unless the Contract includes power
41 and water as a pay item.

42
43 Add the following new section:

44
45 **1-05.18 Record Drawings**

46 *(March 8, 2013 APWA GSP)*

47
48 The Contractor shall maintain one set of full size plans for Record Drawings, updated
49 with clear and accurate red-lined field revisions on a daily basis, and within 2 business
50 days after receipt of information that a change in Work has occurred. The Contractor
51 shall not conceal any work until the required information is recorded.
52

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor's field office, and shall be available for review by the Contracting Agency at all times. The Contractor shall bring the Record Drawings to each progress meeting for review.

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity, and completeness, is to be adequate to allow the Contracting Agency to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

The Record Drawing markups shall document all changes in the Work, both concealed and visible. Items that must be shown on the markups include but are not limited to:

- Actual dimensions, arrangement, and materials used when different than shown in the Plans.
- Changes made by Change Order or Field Order.
- Changes made by the Contractor.
- Accurate locations of storm sewer, sanitary sewer, water mains and other water appurtenances, structures, conduits, light standards, vaults, width of roadways, sidewalks, landscaping areas, building footprints, channelization and pavement markings, etc. Include pipe invert elevations, top of castings (manholes, inlets, etc.).

If the Contract calls for the Contracting Agency to do all surveying and staking, the Contracting Agency will provide the elevations at the tolerances the Contracting Agency requires for the Record Drawings.

When the Contract calls for the Contractor to do the surveying/staking, the applicable tolerance limits include, but are not limited to the following:

	Vertical	Horizontal
As-built sanitary & storm invert and grate elevations	± 0.01 foot	± 0.01 foot
As-built monumentation	± 0.001 foot	± 0.001 foot
As-built waterlines, inverts, valves, hydrants	± 0.10 foot	± 0.10 foot
As-built ponds/swales/water features	± 0.10 foot	± 0.10 foot
As-built buildings (fin. Floor elev.)	± 0.01 foot	± 0.10 foot
As-built gas lines, power, TV, Tel, Com	± 0.10 foot	± 0.10 foot
As-built signs, signals, etc.	N/A	± 0.10 foot

Making Entries on the Record Drawings:

- Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:
- Additions - Red
- Deletions - Green
- Comments - Blue

- Dimensions- Graphite
- Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.
- Date all entries.
- Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

Payment will be made for the following bid item:

Record Drawings (Minimum Bid \$ \$200\$)	Lump Sum
---	----------

Payment for this item will be made on a prorated monthly basis for work completed in accordance with this section up to 75% of the lump sum bid. The final 25% of the lump sum item will be paid upon submittal and approval of the completed Record Drawings set prepared in conformance with these Special Provisions.

A minimum bid amount has been entered in the Bid Proposal for this item. The Contractor must bid at least that amount.

1-06 Control of Material

1-06.1 Approval of Materials Prior to Use

1-06.1(3) Aggregate Source Approval (ASA) Database

Section 1-06.1(3) is supplemented with the following:

If the Contractor elects to use aggregate materials not approved for use in the ASA database, all preliminary testing by the Contracting Agency needed to approve the source and material for use prior to incorporation in Work shall be at the Contractor's expense. Costs for preliminary testing of material not approved in the ASA database shall be taken in the form of a progress pay estimate deduction.

At the expense of the Contracting Agency, sampling and testing to approve for use the following materials will be performed for a maximum of two (2) aggregate sources for each material. Approval of more than two sources for the same material at the request of the Contractor will be performed at the Contractor's expense and taken in the form of a progress pay estimate deduction.

Gravel Borrow
Select Borrow
CSTC
CSBC
Hot Mixed Asphalt

Portland Cement Concrete
Quarry Spalls
Pipe Bedding
All Types of Backfill Material

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

Delete this Section, including its subsections, and replace it with the following:

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

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

1-07 Legal Relations and Responsibilities to the Public

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this Section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to Work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the Work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1
2 **1-07.2 State Taxes**

3 Delete this Section, including its sub-sections, in its entirety and replace it with the following:
4

5 **1-07.2 State Sales Tax**

6 *(June 27, 2011 APWA GSP)*
7

8 The Washington State Department of Revenue has issued special rules on the State sales
9 tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor
10 should contact the Washington State Department of Revenue for answers to questions in
11 this area. The Contracting Agency will not adjust its payment if the Contractor bases a
12 Bid on a misunderstood tax liability.
13

14 The Contractor shall include all Contractor-paid taxes in the unit Bid prices or other
15 Contract amounts. In some cases, however, State retail sales tax will not be included.
16 Section 1-07.2(2) describes this exception.
17

18 The Contracting Agency will pay the retained percentage (or release the Contract Bond if
19 a FHWA-funded project) only if the Contractor has obtained from the Washington State
20 Department of Revenue a certificate showing that all Contract-related taxes have been
21 paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the
22 Contractor any amount the Contractor may owe the Washington State Department of
23 Revenue, whether the amount owed relates to this Contract or not. Any amount so
24 deducted will be paid into the proper State fund.
25

26 **1-07.2(1) State Sales Tax — Rule 171**
27

28 WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets,
29 roads, etc., which are owned by a municipal corporation, or political subdivision of the
30 State, or by the United States, and which are used primarily for foot or vehicular traffic.
31 This includes storm or combined sewer systems within and included as a part of the street
32 or road drainage system and power lines when such are part of the Roadway lighting
33 system. For Work performed in such cases, the Contractor shall include Washington State
34 Retail Sales Taxes in the various unit Bid item prices, or other Contract amounts, including
35 those that the Contractor pays on the purchase of the materials, equipment, or supplies
36 used or consumed in doing the Work.
37

38 **1-07.2(2) State Sales Tax — Rule 170**
39

40 WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or
41 existing buildings, or other Structures, upon real property. This includes, but is not limited
42 to, the construction of streets, roads, Highways, etc., owned by the State of Washington;
43 water mains and their appurtenances; sanitary sewers and sewage disposal systems
44 unless such sewers and disposal systems are within, and a part of, a street or road
45 drainage system; telephone, telegraph, electrical power distribution lines, or other
46 conduits or lines in or above streets or roads, unless such power lines become a part of a
47 street or road lighting system; and installing or attaching of any article of tangible personal
48 property in or to real property, whether or not such personal property becomes a part of
49 the realty by virtue of installation.
50

51 For Work performed in such cases, the Contractor shall collect from the Contracting
52 Agency, retail sales tax on the full Contract price. The Contracting Agency will

1 automatically add this sales tax to each payment to the Contractor. For this reason, the
2 Contractor shall not include the retail sales tax in the unit Bid item prices, or in any other
3 Contract amount subject to Rule 170, with the following exception.
4

5 Exception: The Contracting Agency will not add in sales tax for a payment the Contractor
6 or a Subcontractor makes on the purchase or rental of tools, machinery, equipment, or
7 consumable supplies not integrated into the project. Such sales taxes shall be included
8 in the unit Bid item prices or in any other Contract amount.
9

10 **1-07.2(3) Services**

11
12 The Contractor shall not collect retail sales tax from the Contracting Agency on any
13 Contract wholly for professional or other services (as defined in Washington State
14 Department of Revenue Rules 138 and 244).
15

16 **1-07.6(1) Local Permits and Licenses**

17 (April 8, 2019, Lynnwood GSP)
18

19 Section 1-07.6(1) is added as follows:
20

21 The Contracting Agency has applied and paid for the following permits in conjunction with
22 this project. The Contractor shall be responsible for picking up these permits at the
23 Lynnwood Permit Center, 20816 44th Ave W, Suite 230. A Washington State Contractors
24 license and City of Lynnwood Business License are required before local permits will be
25 issued by City of Lynnwood.
26

27 Grading Permit – City of Lynnwood
28

29 It is the Contractor's responsibility to apply and pay for the following permits which have
30 been identified as required for this project. The Contractor shall also be responsible to
31 apply and pay for any other unidentified permits which may be required. All costs to obtain
32 and comply with these permits shall be included in the applicable Bid items for the work
33 involved.
34

35 Electrical Permit – City of Lynnwood
36

36 **1-07.7 Load Limits**

37 Section 1-07.7 is supplemented with the following:
38

39 *(March 13, 1995 WSDOT GSP)*

40 If the sources of materials provided by the Contractor necessitates hauling over roads
41 other than State Highways, the Contractor shall, at the Contractor's expense, make all
42 arrangements for the use of the haul routes.
43

44 **1-07.15 Temporary Water Pollution/Erosion Control**

45 **1-0-7.15(1) Spill Prevention, Control, and Countermeasures Plan**

46 *(December 6, 2018, Lynnwood GSP)*
47

48
49 The last sentence of the first paragraph of Section 1-07.15(1) is deleted and replaced with:
50

51 The Contractor shall use the City of Lynnwood SPCC Plan template, available on the
52 City's website at <http://www.lynnwoodwa.gov/City-Services/Environmental--Surface->

Water-and-Storm-Water/Environmental-Documents-and-Reports.htm, in lieu of the WSDOT template.

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

(April 2, 2007 WSDOT GSP)

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

The following addresses and telephone numbers of utility companies or their Contractors that will be adjusting, relocating, replacing or constructing utilities within the project limits are supplied for the Contractor's use:

City of Lynnwood Water & Sewer Paul McIntyre 425-670-5241	Snohomish County PUD, Electric Erin Burke 425-783-4745
Alderwood Water and Wastewater Pat Peck 425-743-8913	Wave Broadband Jeremy Anderson 425-319-0216
Puget Sound Energy, Gas Eric Liaw 425-495-3297	Comcast Joe Fordon 425-263-5348
Frontier Adam Diaz 425-261-0134	Zayo Jason Accuardi 206-456-3969
CenturyLink Daniel Beach 253-851-1259	Edmonds School District #15 Nick Chou 425-431-7275
Waste Management Rich Rinehart 425-420-1717	Republic Services Courtney Crouch 425-646-2449
South Snohomish County Fire & Rescue Aaron Huckstep, Lynnwood Deputy Fire Marshall 425-670-5330	Lynnwood Police Department 425-670-5600
Lynnwood Post Office Matthew Patton 425-774-6357	Community Transit Construction.supervisor@commtrans.org 425-348-7191

1-07.23 Public Convenience and Safety

Section 1-07.23 is supplemented with the following:

When directed by the Engineer, the Contractor shall provide additional elements of public convenience and safety as a result of Contracting Agency public events that could affect

the public convenience of safety or local business or residential concerns not otherwise indicated in the Plans or within these Specifications. These elements include, but may not be limited to, sign installation or removal, pedestrian safeguards or pathways, and access to local businesses. Such additional work, if required, shall be paid for as set forth in section 1-04.4(1) Unexpected Site Changes of these Special Provisions.

1-07.23(1) Construction Under Traffic

(May 2, 2017 APWA GSP)

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

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

(January 2, 2012 WSDOT GSP)

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

(January 5, 2015 WSDOT GSP)

Lane closures are subject to the following restrictions:

The Contractor shall follow the requirements as shown in the plans for traffic control sequencing. In addition to sequencing requirements, the work is subject to the following requirements.

- Contractor shall verify that all businesses have alternate access points that can be used while access point within work area is blocked. If no separate access area exists, Contractor shall coordinate with the business owner for the short-term closure of their access during construction activities.
- Emergency vehicles will be provided access at all times.
- Maintain local access at all times, **including for driveway accesses**.
- In addition to maintaining access, work for temporary closures as noted in the Plans, Sheet TC1-TC5, shall be incidental to other items.
- Night Work will be acceptable only for Work on 68th Ave. W., and specifically prohibited on the other project sites. The Contractor will be required to submit a Traffic Control Plan to the Engineer for review and approval detailing the Work performed, and required traffic control measures for the Work, the planned hours of work including traffic control set up and breakdown, 5 working days prior to the planned night of Work. ***

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane closures are not allowed on any of the following:

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

1-07.23(3) Pedestrian Control and Protection

Section 1-07.23(3) is added as follows:

If no alternative is proposed within the Contract Plans, all existing pedestrian routes and access points within the project limits, including sidewalks, paths, and crosswalks, shall remain open and clear at all times. In the event Work interferes with an existing pedestrian route, an alternate accessible route shall be provided by the Contractor. The Contractor shall submit to the Engineer for approval a Pedestrian Traffic Control Plan (PTCP) that complies with the MUTCD, ADA requirements, and these Special Provisions. Contractor proposed PTCPs detailing the alternative accessible pedestrian route shall be approved by the Engineer prior to implementation. The Engineer will have a 5-working day review period. Each

1 time the plan is returned for correction, an additional 5-working day review period
2 may be necessary.
3

4 When the Engineer allows Work areas to encroach upon a sidewalk or crosswalk
5 area, and minimum clear width of 48-inches cannot be maintained for pedestrian
6 use, an alternative accessible pedestrian route shall be provided. Separation of
7 pedestrians from the Work area and vehicular traffic is required.
8

9 Protective barricades, fencing, and bridges, together with warning and guidance
10 devices and signs, shall be utilized so that the passageway for pedestrians is safe,
11 well defined and accessible. Whenever pedestrian walkways are provided across
12 excavations, they shall be provided with suitable handrails. Foot bridges shall be
13 safe, strong, and free of bounce and sway, have a slip resistant coating, and be free
14 of cracks, holes and irregularities that could cause tripping. Ramps, with a
15 maximum slope of 8.3%, shall be provided at the entrance and exit of all raised
16 footbridges. The maximum cross slope shall be 2.0%. When the existing facility is
17 illuminated or PTCP's requires illumination, illumination shall be provided during the
18 hours of darkness. Retroreflective delineation shall be provided during hours of
19 darkness.
20

21 Where the Engineer allows accessible pedestrian routes to be closed during
22 construction, an alternate accessible pedestrian route shall be provided that
23 complies with the MUTCD, ADA requirements and these Provisions. The alternate
24 accessible pedestrian route shall not have abrupt changes in grade or terrain.
25 Barriers and channelizing devices shall be detectable to pedestrians who have
26 visual disabilities. Where it is necessary to divert pedestrians into the Roadway,
27 barricading or channelizing devices shall be provided to separate the pedestrian
28 route from the adjacent vehicular traffic lane, as detailed in the Plans. Barricading or
29 channelizing devices used to separate pedestrian and vehicular traffic shall be
30 crashworthy and, when struck by vehicles, present a minimum threat to
31 pedestrians, workers, and occupants of impacting vehicles. At no time shall
32 pedestrians be diverted into a portion of the street used concurrently by moving
33 vehicular traffic.
34

35 Revisions to traffic control or pedestrian control Plans shall be in accordance with 1-
36 10.2.
37

38 In addition, the PTCPs shall address the following:
39

- 40 • All pedestrians, including persons with disabilities, shall be provided with
41 a safe and accessible route.
42
- 43 • The width of the existing pedestrian facility shall be maintained if possible.
44 When it is not possible to maintain a minimum width of 60-inches
45 throughout the entire length of the pedestrian route, a minimum width of
46 48-inches shall be provided with 60-inch x 60-inch passing zones spaced
47 at maximum intervals of 200-feet to allow individuals in wheelchairs to
48 pass.
49
- 50 • Traffic control devices and other construction materials and features shall
51 not intrude into the usable width of the sidewalk, alternate accessible
52 pedestrian route, or other pedestrian facility.
53

- Signs and other devices mounted lower than 84-inches above the temporary accessible pedestrian route shall not project more than 4-inches into the accessible pedestrian route.
- A smooth, continuous hard surface shall be provided throughout the entire length and width of the pedestrian route throughout construction. There shall be no curbs or vertical elevation changes greater than ½-inch in grade or terrain that could cause tripping or be a barrier to wheelchair use. Vertical elevation differences between ¼-inch and ½-inch shall be beveled at a maximum 2:1 slope.
- When channelization is used to delineate a pedestrian pathway, a continuous detectable edging shall be provided throughout the length of the facility such that pedestrians using a cane can follow it. Edging shall protrude at least 6-inches above the surface of the sidewalk or pathway with the bottom of the edging a maximum of 2-1/2 inches above the surface.
- Temporary ramps shall be provided when an alternate accessible pedestrian route crosses a curb and no permanent curb ramps are in place. The width of the curb ramp shall be a minimum of 48-inches and the maximum slope of the ramp shall be 8.3%. The maximum cross slope shall be 2.0%. The bottom of the curb ramp shall be flush with the Roadway. Temporary detectable warning mats shall be installed at street crossings.
- When possible, an alternate accessible pedestrian route shall be provided on the same side of the street as the disrupted route. When it is not possible, the alternate route shall be clearly identified at the nearest intersection crossing prior to the closure area.
- Information regarding closed pedestrian routes, alternate crossings, and sign and signal information shall be communicated to pedestrians with visual disabilities by providing devices such as audible information devices, accessible pedestrian signals, or barriers and channelizing devices that are detectable to the pedestrians traveling with the aid of a cane or who have low vision.
- It is desirable that pedestrians cross to the opposite side of the Roadway at intersections rather than mid-block. Appropriate signing shall be placed at the intersections prior to any pedestrian route closure.
- At locations where adjacent alternate walkways cannot be provided, appropriate signs shall be posted at the limits of construction and in advance of the closure at the nearest crosswalk or intersection, to divert pedestrians across the street. Physical barricades shall be installed to prevent visually impaired people from inadvertently entering a closed area.

Measurement

No specific unit of measurement will apply to the lump sum item for Pedestrian Traffic Control.

Payment

Payment will be made for the following Bid item when included in the Proposal:

“Pedestrian Traffic Control”, lump sum.

The lump sum Contract payment for “Pedestrian Traffic Control” shall be full compensation for all Work necessary to provide pedestrian control and protection as specified including installation, maintenance and removal of temporary pedestrian routes, protective barricades, fencing, detours, signs and bridges, warning and guidance devices, and temporary pavement surfacing as needed to perform Work.

1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this Section and replace it with the following:

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

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

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

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

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

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the Work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this Contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has

1 been granted to use the property and all necessary permits have been obtained or, in the
2 case of a release, that the restoration of the property has been satisfactorily accomplished.
3 The statement shall include the parcel number, address, and date of signature. Written
4 releases must be filed with the Engineer before the Completion Date will be established.
5
6

7 **1-08 Prosecution and Progress**

8 Add the following new Section:
9

10 **1-08.0 Preliminary Matters**

11 *(May 25, 2006 APWA GSP)*
12

13 Add the following new Section:
14

15 **1-08.0(1) Preconstruction Conference**

16 *(October 10, 2008 APWA GSP)*
17

18 Prior to the Contractor beginning the Work, a Preconstruction Conference will be
19 held between the Contractor, the Engineer and such other interested parties as may
20 be invited. The purpose of the Preconstruction Conference will be:

- 21 1. To review the initial progress schedule;
- 22 2. To establish a working understanding among the various parties associated
23 or affected by the Work;
- 24 3. To establish and review procedures for progress payment, notifications,
25 approvals, submittals, etc.;
- 26 4. To establish normal working hours for the Work;
- 27 5. To review safety standards and traffic control; and
- 28 6. To discuss such other related items as may be pertinent to the Work.
29

30 The Contractor shall prepare and submit at the Preconstruction Conference the
31 following:

- 32 1. A breakdown of all lump sum items;
- 33 2. A preliminary schedule of Working Drawing submittals; and
- 34 3. A list of material sources for approval if applicable.
35

36 Add the following new Section:
37

38 **1-08.0(2) Hours of Work**

39 *(December 8, 2014 APWA GSP)*
40

41 Except in the case of emergency or unless otherwise approved by the Engineer, the
42 normal working hours for the Contract shall be any consecutive 8-hour period
43 between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch
44 break. If the Contractor desires different than the normal working hours stated
45 above, the request must be submitted in writing prior to the Preconstruction
46 Conference, subject to the provisions below. The working hours for the Contract
47 shall be established at or prior to the Preconstruction Conference.
48

49 All working hours and days are also subject to local permit and ordinance conditions
50 (such as noise ordinances).
51

1 If the Contractor wishes to deviate from the established working hours, the
2 Contractor shall submit a written request to the Engineer for consideration. This
3 request shall state what hours are being requested, and why. Requests shall be
4 submitted for review no later than 14 days prior to the day(s) the Contractor is
5 requesting to change the hours.
6

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

- 9 1. On non-Federal aid projects, requiring the Contractor to reimburse the
10 Contracting Agency for the costs in excess of straight-time costs for
11 Contracting Agency representatives who worked during such times. (The
12 Engineer may require designated representatives to be present during the
13 Work. Representatives who may be deemed necessary by the Engineer
14 include, but are not limited to: survey crews; personnel from the Contracting
15 Agency's material testing lab; Inspectors; and other Contracting Agency
16 employees or third party consultants when, in the opinion of the Engineer,
17 such Work necessitates their presence.)
- 18 2. Considering the Work performed on Saturdays, Sundays, and holidays as
19 working days with regard to the Contract time.
- 20 3. Considering multiple Work shifts as multiple working days with respect to
21 Contract time even though the multiple shifts occur in a single 24-hour period.
- 22 4. If a 4-10 Work schedule is requested and approved the non-working day for
23 the week will be charged as a working day.
- 24 5. If Davis Bacon wage rates apply to this Contract, all requirements must be
25 met and recorded properly on certified payroll.
26

27 **1-08.1 Subcontracting**

28 Section 1-08.1 is supplemented with the following:
29 (October 12, 1998 WSDOT GSP)
30

31 Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall
32 submit to the Engineer a certification (WSDOT Form 420-004 EF) that a written agreement
33 between the Contractor and the subcontractor or between the subcontractor and any
34 lower tier subcontractor has been executed. This certification shall also guarantee that
35 these subcontract agreements include all the documents required by the Special Provision
36 **Federal Agency Inspection.**
37

38 A Subcontractor or lower tier Subcontractor will not be permitted to perform any work
39 under the contract until the following documents have been completed and submitted to
40 the Engineer:
41

- 42 1. Request to Sublet Work (Form 421-012 EF), and
- 43 2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for
44 Federal-aid Projects (Form 420-004 EF).
45

46 The Contractor's records pertaining to the requirements of this Special Provision shall be
47 open to inspection or audit by representatives of the Contracting Agency during the life of
48 the contract and for a period of not less than three years after the date of acceptance of
49 the contract. The Contractor shall retain these records for that period. The Contractor
50 shall also guarantee that these records of all Subcontractors and lower tier Subcontractors
51 shall be available and open to similar inspection or audit for the same time period.
52

1 **1-08.1 Subcontracting**

2 *(November 30, 2018 APWA GSP, Option B)*

3
4 Delete the eighth paragraph.

5
6 **1-08.3 Progress Schedule**

7
8 **1-08.3(2) Progress Schedule Types**

9
10 **1-08.3(2)B Type B Progress Schedule**

11 *(March 13, 2012 APWA GSP)*

12
13 Revise the first paragraph to read:

14
15 The Contractor shall submit a preliminary Type B Progress Schedule at or prior to
16 the preconstruction conference. The preliminary Type B Progress Schedule shall
17 comply with all of these requirements and the requirements of Section 1-08.3(1),
18 except that it may be limited to only those activities occurring within the first 60-
19 working days of the project.

20
21 Revise the first sentence of the second paragraph to read:

22
23 The Contractor shall submit 10 copies of a Type B Progress Schedule depicting the
24 entire project no later than 21-calendar days after the preconstruction conference.

25
26 **1-08.4 Prosecution of Work**

27 Delete this Section and replace it with the following:

28
29 **1-08.4 Notice to Proceed and Prosecution of Work**

30 *(July 23, 2015 APWA GSP)*

31
32 Notice to Proceed will be given after the Contract has been executed and the Contract
33 bond and evidence of insurance have been approved and filed by the Contracting Agency.
34 The Contractor shall not commence with the Work until the Notice to Proceed has been
35 given by the Engineer. The Contractor shall commence construction activities on the
36 project site within ten days of the Notice to Proceed Date, unless otherwise approved in
37 writing. The Contractor shall diligently pursue the Work to the Physical Completion Date
38 within the time specified in the Contract. Voluntary shutdown or slowing of operations by
39 the Contractor shall not relieve the Contractor of the responsibility to complete the Work
40 within the time(s) specified in the Contract.

41
42 When shown in the Plans, the first order of Work shall be the installation of high visibility
43 fencing to delineate all areas for protection or restoration, as described in the Contract.
44 Installation of high visibility fencing adjacent to the Roadway shall occur after the
45 placement of all necessary signs and traffic control devices in accordance with Section 1-
46 10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to
47 inspect the fence. No other Work shall be performed on the site until the Contracting
48 Agency has accepted the installation of high visibility fencing, as described in the Contract.

49
50 Section 1-08.4 is supplemented with the following:

51
52 **ORDER OF WORK**

The Contractor shall complete all paving, curb ramp and signal Work on 68th Avenue W by September 13, 2019. The Contractor shall complete all paving and curb ramp on all sites by September 30, 2019. The Contractor shall remain responsible for the details of performing the Work, and the limits of each portion of the Work.

The general order of Work is as follows:

- Installation of TESC measures
- Installation of construction signing

Prior to planing bituminous pavement and overlay Work, the following elements of Work shall be completed:

- Removal and installation of pedestrian signal systems
- Lowering of existing utility surface Structures (i.e., manhole lids, catch basin lids, monument covers, gas valve covers, water valve covers, etc.)

All pavement repair Work, with the exception of the final paving, shall be completed prior to the final lift of HMA.

Following the completion of the final lift of HMA, the following elements of Work shall be completed:

- Raising of existing utility surface Structures (i.e., manhole lids, catch basin lids, monument covers, gas valve covers, water valve covers, etc.)

The following areas of Work may be completed at any time:

- Installation of signs

1-08.5 Time for Completion

(March 13, 1995 WSDOT GSP)

Section 1-08.5 is supplemented with the following:

This project shall be physically completed within *** 60 *** working days.

(November 30, 2018 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the tenth calendar day after the Notice to Proceed date. If the Contractor starts work on the project at an earlier date, then contract time shall begin on the first working day when onsite work begins.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the

basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day, then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

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

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (per Section 1-07.9(5)).
 - b. Material Acceptance Certification Documents
 - c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
 - d. Final Contract Voucher Certification
 - e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
 - f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
 - g. Property owner releases per Section 1-07.24

Section 1-08.5 is supplemented with the following:

City of Lynnwood Recognized Holidays

Holiday	Date Observed
New Year's Day	First day of January
Martin Luther King Day	Third Monday in January
President's Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th
Labor Day	First Monday in September
Veteran's Day	November 11th
Thanksgiving Day	Fourth Thursday in November
Day After Thanksgiving	When observed
Christmas Day	December 25th

Holiday Falls on Saturday or Sunday: If any holiday mentioned above falls on a Saturday, the preceding Friday shall be given as a holiday. If the holiday falls on a Sunday, the following Monday shall be given as a holiday.

1-08.6 Suspension of Work

Section 1-08.6 is supplemented with the following:

(January 2, 2018 WSDOT GSP)

Contract time may be suspended for procurement of critical materials (Procurement Suspension). In order to receive a Procurement Suspension, the Contractor shall within 21 calendar days after execution by the Contracting Agency, place purchase orders for all materials deemed critical by the Contracting Agency for Physical Completion of the Contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated delivery dates for such critical material.

The Contractor shall show procurement of the materials listed below as activities in the Progress Schedule. If the approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then Contract time will be suspended upon Physical Completion of all critical Work except that Work dependent upon the below listed critical materials:

*** Permanent Signing

Traffic Signal System Modifications (188th St SW and 52nd Ave W)

Traffic Signal System Modifications (68th Ave W and 200th St SW)

Charging of Contract time will resume upon delivery of the critical materials to the Contractor or 120 calendar days after execution by the Contracting Agency, whichever occurs first.

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

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

1-09 Measurement and Payment

1-09.2(1) General Requirements for Weighing Equipment

(July 23, 2015 APWA GSP, Option 2)

Revise item 4 of the fifth paragraph to read:

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

1-09.2(5) Measurement

(May 2, 2017 APWA GSP)

Revise the first paragraph to read:

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

1-09.6 Force Account

(October 10, 2008 APWA GSP)

Supplement this Section with the following:

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

1-09.9 Payments

(March 13, 2012 APWA GSP)

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

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

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

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

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

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

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

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

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

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

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction

(November 30, 2018 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 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to 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

(November 30, 2018 APWA GSP)

Revise the third paragraph to read:

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

1-10 Temporary Traffic Control

1-10.2 Traffic Control Management

1-10.2(1) General

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

(January 3, 2017 WSDOT GSP)

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

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

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778

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

1-10.2(1)A Traffic Control Management

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

A Traffic Control Supervisor shall be onsite for the duration of all Work on this project.

1 When a Contractor assigned Traffic Control Manager or Supervisor becomes
2 aware or is notified by the Engineer, through verbal or written communication,
3 that an element of an approved Traffic Control Plan (TCP) is not properly
4 installed, the Contractor shall correct any TCP discrepancies within 45 minutes
5 of the notice. It is the responsibility of the Contractor to ensure that a Traffic
6 Control Manager or Supervisor contact is available at all times during Work, or
7 make known to the Engineer a delegated individual to contact should a TCP
8 correction becomes necessary.
9

10 If the Contractor proceeds with Work that impacts vehicular traffic or pedestrian
11 access that is not covered by an approved TCP in accordance with Section 1-
12 10.2(2), the Contractor shall stop Work immediately and return the Work area
13 to a safe condition. Work shall not resume until a TCP is approved by the
14 Engineer. All costs to provide temporary detours, repairs to the Work area and
15 their subsequent removals as a result of the stoppage shall be borne by the
16 Contractor.
17

18 The Contractor shall take note of existing construction signage related to other
19 nearby projects to ensure that the intent/message of proposed TCP signage on
20 this project does not conflict with other existing signage/messaging.
21

22 The Contracting Agency also reserves the right to address safety hazards not
23 addressed by the Contractor within the time specified, without notice to the
24 Contractor or the Surety, and deduct actual costs of equipment and personnel
25 or the amount below, whichever is greater, from the Contract amount.
26

27 Contracting Agency provided Traffic Control - \$50 per hour for each of the
28 following traffic control elements used:
29

- 30 1) Vehicles
- 31 2) Personnel
- 32 3) PCMS
- 33

34 Contracting Agency provided traffic control devices or signs - \$50 per day per
35 sign or traffic control device.
36

37 **1-10.2(2) Traffic Control Plans**

38 Section 1-10.2(2) is supplemented with the following:
39

40 A Traffic Control Plan (TCP) shall be submitted for approval five (5) days in
41 advance of all Roadway Work. A TCP shall be submitted for each type of Work
42 listed below. A revised or additional TCP shall be submitted for approval 5 days
43 prior to each time an adjustment to a previously approved TCP becomes
44 necessary.
45

- 46 1) TCP (Construction Access) – Any construction activity that requires the
47 Contractor to enter and exit the construction site using a public road. This Plan
48 shall address routes for hauling and delivery of project materials to and from
49 the project site, and designated entrances and exits for personnel or
50 construction vehicles for normal daily use. This Plan shall be submitted 10
51 days after Contract Award.
52

- 2) TCP (Temporary Traffic Lane/Shoulder Closures) – Any activity requiring closures or adjustments to lanes or Shoulders; driveway or pedestrian access; or entire Roadway.
- 3) PTCP (Pedestrian Traffic Control) – Any Work that may impede or impact directly or indirectly any existing pedestrian route not related to 2) above. Attention is also directed to Section 1-07.23(3) of the Special Provisions for Pedestrian Control and Safety for PTCP requirements for pedestrian access routes.
- 4) TCP (Work near state routes) – Any construction activity that may impact SR 524 (196th Street SW) or SR 99.

The Contractor shall also submit for approval to the Engineer a Lane Closure/Detour Notice on the Wednesday preceding the week of the planned Work requiring the implementation of a TCP. The notice shall include planned closures or detours for the week period with the following information:

- 1) Date of closure
- 2) Limits of closure
- 3) Type of Work
- 4) Start and end times of closure
- 5) Approved TCP number
- 6) Detour routes, as applicable
- 7) Other pertinent information describing the closure

In addition to the previous requirements, the Contractor's TCP's shall adhere to the following requirements:

- PCMS boards shall be installed along 188th Street SW and 68th Avenue W, and approaching side streets, as detailed in plans 48 hours prior to paving work beginning on associated streets.
 - Approaching side streets to have PCMS include:
 - 196th Street SW both east and west of 68th Avenue W
 - 200th Street SW, east of 68th Avenue W
 - SR 99, both north and south of 188th Street SW
 - 52nd Avenue W, both north and south of 188th Street SW
 - PCMS boards are NOT required for curb ramp, pedestrian signal, or channelization work.
 - PCMS Messages shall be as follows: "ROAD WORK **X/X/XX**. EXPECT DELAYS".
- Four flaggers may be used in lieu of a Uniformed Police Officer if one is not available.

(April 1, 2016 Lynnwood GSP)

The second paragraph of section 1-10.2(2) is supplemented with the following:

When the Contractor chooses to modify, supplement or replace a traffic control plan from the Contract documents, the following information shall, as a minimum, be included on the Contractor's submittal, where applicable:

- Project name and contract number

- Street names
- Posted speed limit(s)
- Intersecting street(s)
- Address or address range on street if no intersecting street(s) is included
- North arrow
- Direction of vehicle, bike, and pedestrian flow
- Traffic control device description and spacing
- Taper, tangent, and buffer dimensions
- Location of work zone
- Sign size(s)
- MUTCD alpha numeric sign designation
- Sign color and retroreflectivity
- Orientation of sign faces to traffic flow
- Location(s) of flagger(s) and/or uniformed police officer(s)
- Relevant existing lane channelization and features like c-curbing, medians, and bulb-outs
- Presence/absence of bicycle lanes and/or sidewalks
- Provisions for night work when it is proposed

1-10.3 Traffic Control Labor, Procedures and Devices

1-10.3(1) Traffic Control Labor

1-10.3(1)B Other Traffic Control Labor

(June 1, 2018 Lynnwood GSP)

Section 1-10.3(1)B is supplemented with the following:

Uniformed Police Officer

The Contractor shall arrange for off-duty uniformed police officers to be present for the following:

1. For all activities within 250 feet of signalized intersections where the operation of the signal will be adversely affected.
2. Countermanding a traffic signal indication at a signalized intersection.
3. Directing vehicle and pedestrian traffic when a traffic signal indication is turned off or is inoperative.
4. For all other conditions where the Engineer deems it necessary for safety, including work during hours of darkness.

The Contractor shall use City of Lynnwood police enforcement at \$70.00 per hour for daytime work (until 6:00 PM) and \$75.00 per hour for night time work (after 6:00 PM) unless it is unable to respond to a request for assistance. Off-duty police officers must be paid a minimum of four (4) hours for any shift worked. Coordinate off-duty police assignments through the City of Lynnwood Off-duty Police Officer Coordinator at jwoldstad@lynnwoodwa.gov. Requests must be made at least 48 hours prior to the desired time. The off-duty police officer shall be in addition to all other personnel required for flagging according to the approved traffic control plan.

The Contractor must obtain prior approval for use of uniformed police officers through their Approved Traffic Control Plan and approved amendments to the Plan.

1 A Uniformed Police Officer shall be provided in the event of accidental power outages
2 or disruption of a signalized intersection as a result of Contractor's Work. The
3 Uniformed Police Officer shall be provided at Contractor's expense and remain in place
4 until the intersection becomes satisfactorily operational as determined by City of
5 Lynnwood Traffic Engineer or his/her representative.
6

7 **1-10.3(3) Traffic Control Devices**

8 **1-10.3(3)A Construction Signs**

9 Section 1-10.3(3)A is supplemented with the following:
10
11

12 Class B signs may remain longer than 3-days provided they do not impede
13 pedestrian routes (unless designed to), conflict with vehicular traffic
14 movements, or have a restricted view.
15

16 **1-10.4 Measurement**

17 Section 1-10.4 is supplemented with the following:
18

19 Section 1-04.6 shall not apply to temporary traffic control Bid items.
20

21 **1-10.4(2) Item Bids With Lump Sum for Incidentals**

22 *(April 1, 2016 Lynnwood GSP)*
23

24 Section 1-10.4(2) is supplemented with the following:
25

26 "Uniformed Police Officer" will be measured by the hour with a minimum of four hours
27 per shift. Hours will be measured for each Uniformed Police Officer directing or
28 monitoring traffic, as shown on an approved Traffic Control Plan, during specific traffic
29 detours at the locations shown in the Contract Plans, or as directed by the Engineer
30 and in accordance with Section 1-10.3(1)B of these Special provisions.
31

32 **1-10.4(3) Reinstating Unit Items With Lump Sum Traffic Control**

33 Section 1-10.4(3) is supplemented with the following:
34

35 *(August 2, 2004 WSDOT GSP)*

36 The Bid Proposal contains the item "Project Temporary Traffic Control," lump sum
37 and the additional temporary traffic control items listed below. The provisions of
38 Section 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.
39

40 ***

41 Traffic Control Supervisor, per lump sum
42 Flaggers, per hour
43 Portable Changeable Message Sign, per hour
44 Uniformed Police Officer, per hour ***
45

46 **1-10.5 Payment**

47 Section 1-10.5(2) is supplemented with the following:
48

49 **1-10.5(2) Item Bids with Lump Sum for Incidentals**

50 *(April 1, 2016 Lynnwood GSP)*
51

52 Section 1-10.5(2) is supplemented with the following:

1
2 "Uniformed Police Officer", per hour

3 The unit contract price for "Uniformed Police Officer", when applied to the number of units
4 measured for this item in accordance with Section 1-10.4(2), shall be full compensation for
5 all costs incurred by the Contractor in performing the Contract Work defined in Section 1-
6 10.3(1)B of these Special Provisions.
7
8
9

10
11 **END DIVISION 1**

1 **Division 2**
2 **Earthwork**

3
4
5 **2-02 Removal of Structures and Obstructions**

6
7 **2-02.3 Construction Requirements**

8
9 **2-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters**

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

11
12 All full-depth saw cuts shall be continuous, and shall be made with saws specifically
13 equipped for the purpose. No skip cutting or jack hammering will be allowed unless
14 specifically approved otherwise in writing by the Engineer. The location of all
15 pavement cuts shall be where shown in the Plans or as approved by the Engineer
16 in the field before cutting commences.

17
18 The approximate thickness of the asphalt concrete pavement is

19
20 *** 188th St. SW - 4" - 5"
21 51st Pl. W - 3"-4"
22 68th Ave. W - 3"-5"***.

23
24 All saw cutting performed in the Contract shall provide for and include removal and
25 disposal of slurry created from water cooling/lubrication, in accordance with the
26 Washington State Department of Ecology regulations. Waste material (slurry) shall
27 not be allowed to enter drainage systems, ditches, or streams.

28
29 **Removal of Cement Concrete Curb, Gutter and Sidewalk**

30 The Contractor shall use a saw cut to delineate the curb, gutter and sidewalk to be
31 removed from curb, gutter and sidewalk to remain. The Contractor shall take care
32 to avoid damaging adjacent curb, gutter and sidewalk to remain. Any damage
33 caused to the curb, gutter and sidewalk to remain, as a result of the Contractor's
34 operations, shall be repaired to the satisfaction of the Engineer at no additional cost
35 to the Contracting Agency.

36
37 **Removal of Asphalt Concrete Pavement Sidewalk**

38 The approximate thickness of the pavement sidewalk is 2.0 inches to 6.0 inches.
39 The Contractor shall use a saw cut to delineate the pavement sidewalk from
40 adjacent curb, gutter and sidewalk to remain. The Contractor shall take care to
41 avoid damaging adjacent curb, gutter and sidewalk to remain. Any damage caused
42 to the curb, gutter and sidewalk to remain, as a result of the Contractor's
43 operations, shall be repaired to the satisfaction of the Engineer at no additional cost
44 to the Contracting Agency.

45
46 **Pulverizing Existing Pavement**

47 The existing asphalt concrete pavement within the limits shown in the Plans shall be
48 pulverized in place by an asphalt pulverizing machine capable of producing material
49 3 inches or less in size. Existing pavement shall be saw cut full-depth at locations
50 shown in plans prior to pulverizing. Pavement cores indicate the approximate
51 thickness of the asphalt concrete pavement is 3 to 6 inches (although greater
52 depths may be encountered). See Appendix A for geotechnical findings. The

Contractor shall pulverize and blend the existing pavement with the existing upper embankment materials for use as subgrade beneath proposed HMA per the section shown in the Plans. The Contractor shall adjust the rate of progress of the machine to accomplish the desired grading in the final product. Areas pulverized but not meeting the gradation goals shall not be measured for payment. Existing materials not reused shall be removed from the site and disposed of at the Contractor's expense.

2-02.4 Measurement

Section 2-02.4 is supplemented with the following:

Removing curb and gutter will be measured by the linear foot along the line and slope of the existing curb and gutter prior to removal.

Concrete sidewalk removal will be measured by the square yard, exclusive of adjacent curbs and gutters and/or asphalt.

Removal of asphalt concrete pavement sidewalk will be measured by the square yard prior to removal.

Saw cutting existing pavement will be measured by the linear foot along the surface being cut, regardless of the depth of the material, or the material of the surface being cut. Section 1-04.6 shall not apply to saw cutting.

Section 1-04.6 shall not apply to temporary traffic control Bid items.

Pulverizing existing pavement will be measured by the square yard.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

"Removing Cement Conc. Curb and Gutter", per linear foot.

The unit Contract price per linear foot for "Removing Cement Conc. Curb and Gutter" shall be full compensation for performing the Work as specified, including saw cutting and disposal.

"Removing Cement Conc. Sidewalk", per square yard.

The unit Contract price per linear foot for "Removing Cement Conc. Sidewalk" shall be full compensation for performing the Work as specified, including saw cutting and disposal.

"Removing Asphalt Conc. Pavement Sidewalk", per square yard.

The unit Contract price per square yard for "Removing Asphalt Conc. Pavement Sidewalk" shall be full pay for performing the Work as specified, including sawcutting and disposal.

"Saw Cutting Existing Pavement", per linear foot.

The unit Contract price per linear foot for "Saw Cutting Existing Pavement" shall be full pay for all costs necessary to complete the Work as specified regardless of the depth encountered or the material to be cut, including collection, removal, and disposal of slurry.

"Pulverizing Existing Pavement", per square yard.

The unit Contract price per square yard for "Pulverizing Existing Pavement" shall be full pay for the Work as specified including sawcutting.

END DIVISION 2

Division 5
Surface Treatments and Pavements

5-04 Hot Mix Asphalt

(July 18, 2018 APWA GSP)

Delete Section 5-04 and amendments, Hot Mix Asphalt and replace it with the following:

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications. WMA processes include organic additives, chemical additives, and foaming.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Portland Cement	9-01
Sand	9-03.1(2)
(As noted in 5-04.3(5)C for crack sealing)	
Joint Sealant	9-04.2
Foam Backer Rod	9-04.2(3)A

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

The Contractor may choose to utilize recycled asphalt pavement (RAP) in the production of HMA. The RAP may be from pavements removed under the Contract, if any, or pavement material from an existing stockpile.

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP. The RAP shall be sampled and tested at a frequency of one sample for every 1,000 tons produced and not less than ten samples per project. The asphalt content and gradation test data shall be reported to the Contracting Agency when submitting the mix design for approval on the QPL. The Contractor shall include the RAP as part of the mix design as defined in these Specifications.

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall submit to the Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

Production of aggregates shall comply with the requirements of Section 3-01. Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(1) How to Get an HMA Mix Design on the QPL

If the contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A Vacant

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

No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, 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. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

The mix design shall 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 resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Approval of a mix design for "Commercial Evaluation" will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.

5-04.2(2)B Using Warm Mix Asphalt Processes

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer's approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified below, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55°F	45°F
0.10 to .20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic

When the Roadway being paved is open to traffic, the requirements of this Section shall apply.

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

Before closing an intersection, advance warning signs shall be placed and signs shall also be placed marking the detour or alternate route.

During paving operations, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

All costs in connection with performing the Work in accordance with these requirements, except the cost of temporary pavement markings, shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Plants used for the preparation of HMA shall conform to the following requirements:

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in

the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.

4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:
 - a. A mechanical sampling device attached to the HMA plant.
 - b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F or when time from loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer,

1 further improvement to the line, grade, cross-section, and smoothness can best be
2 achieved without the use of the reference line, a mat referencing device may be
3 substituted for the reference line. Substitution of the device will be subject to the
4 continued approval of the Engineer. A joint matcher may be used subject to the approval
5 of the Engineer. The reference line may be removed after the completion of the first
6 course of HMA when approved by the Engineer. Whenever the Engineer determines that
7 any of these methods are failing to provide the necessary vertical control, the reference
8 lines will be reinstalled by the Contractor.

9
10 The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and
11 accessories necessary for satisfactory operation of the automatic control equipment.

12
13 If the paving machine in use is not providing the required finish, the Engineer may
14 suspend Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled
15 on the pavement shall be thoroughly removed before paving proceeds.

16
17 **5-04.3(3)D Material Transfer Device or Material Transfer Vehicle**

18 A Material Transfer Device/Vehicle (MTD/V) shall only be used with the Engineer's
19 approval, unless other-wise required by the contract.

20
21 Where an MTD/V is required by the contract, the Engineer may approve paving without
22 an MTD/V, at the request of the Contractor. The Engineer will determine if an equitable
23 adjustment in cost or time is due.

24
25 When used, the MTD/V shall mix the HMA after delivery by the hauling equipment and
26 prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a
27 uniform temperature throughout the mixture. If a windrow elevator is used, the length of
28 the windrow may be limited in urban areas or through intersections, at the discretion of
29 the Engineer.

30
31 To be approved for use, an MTV:

- 32
33 1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
34 2. Shall not be connected to the hauling vehicle or paver.
35 3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
36 4. Shall mix the HMA after delivery by the hauling equipment and prior to
37 placement into the paving machine.
38 5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the
39 mixture.

40
41 To be approved for use, an MTD:

- 42
43 1. Shall be positively connected to the paver.
44 2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
45 3. Shall mix the HMA after delivery by the hauling equipment and prior to
46 placement into the paving machine.
47 4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the
48 mixture.

49
50 **5-04.3(3)E Rollers**

51 Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good
52 condition and capable of reversing without backlash. Operation of the roller shall be in
53 accordance with the manufacturer's recommendations. When ordered by the Engineer

1 for any roller planned for use on the project, the Contractor shall provide a copy of the
2 manufacturer's recommendation for the use of that roller for compaction of HMA. The
3 number and weight of rollers shall be sufficient to compact the mixture in compliance with
4 the requirements of Section 5-04.3(10). The use of equipment that results in crushing of
5 the aggregate will not be permitted. Rollers producing pickup, washboard, uneven
6 compaction of the surface, displacement of the mixture or other undesirable results shall
7 not be used.

8 9 **5-04.3(4) Preparation of Existing Paved Surfaces**

10 When the surface of the existing pavement or old base is irregular, the Contractor shall
11 bring it to a uniform grade and cross-section as shown on the Plans or approved by the
12 Engineer.

13
14 Preleveling of uneven or broken surfaces over which HMA is to be placed may be
15 accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as
16 approved by the Engineer.

17
18 Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may
19 require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to
20 avoid bridging across preleveled areas by the compaction equipment. Equipment used
21 for the compaction of preleveling HMA shall be approved by the Engineer.

22
23 Before construction of HMA on an existing paved surface, the entire surface of the
24 pavement shall be clean. All fatty asphalt patches, grease drippings, and other
25 objectionable matter shall be entirely removed from the existing pavement. All pavements
26 or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and
27 other foreign matter. All holes and small depressions shall be filled with an appropriate
28 class of HMA. The surface of the patched area shall be leveled and compacted
29 thoroughly. Prior to the application of tack coat, or paving, the condition of the surface
30 shall be approved by the Engineer.

31
32 A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA
33 is to be placed or abutted; except that tack coat may be omitted from clean, newly paved
34 surfaces at the discretion of the Engineer. Tack coat shall be uniformly applied to cover
35 the existing pavement with a thin film of residual asphalt free of streaks and bare spots at
36 a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of
37 application shall be approved by the Engineer. A heavy application of tack coat shall be
38 applied to all joints. For Roadways open to traffic, the application of tack coat shall be
39 limited to surfaces that will be paved during the same working shift. The spreading
40 equipment shall be equipped with a thermometer to indicate the temperature of the tack
41 coat material.

42
43 Equipment shall not operate on tacked surfaces until the tack has broken and cured. If
44 the Contractor's operation damages the tack coat it shall be repaired prior to placement
45 of the HMA.

46
47 The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h
48 emulsified asphalt may be diluted once with water at a rate not to exceed one part water
49 to one part emulsified asphalt. The tack coat shall have sufficient temperature such that it
50 may be applied uniformly at the specified rate of application and shall not exceed the
51 maximum temperature recommended by the emulsified asphalt manufacturer.

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

When the Proposal includes a pay item for crack sealing, seal all cracks ¼ inch in width and greater.

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

Sand Slurry: For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 cationic emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the cracks. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

In areas where HMA will be placed, use sand slurry to fill the cracks.

In areas where HMA will not be placed, fill the cracks as follows:

1. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2. Cracks greater than 1 inch in width – fill with sand slurry.

Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

5-04.3(4)A2 Crack Sealing Areas Prior to Paving

In areas where HMA will be placed, use sand slurry to fill the cracks.

5-04.3(4)A3 Crack Sealing Areas Not to be Paved

In areas where HMA will not be placed, fill the cracks as follows:

- 1 A. Cracks ¼ inch to 1 inch in width - fill with hot poured sealant.
2 B. Cracks greater than 1 inch in width – fill with sand slurry.
3

4 **5-04.3(4)B Vacant**
5

6 **5-04.3(4)C Pavement Repair**

7 The Contractor shall excavate pavement repair areas and shall backfill these with HMA in
8 accordance with the details shown in the Plans and as marked in the field. The
9 Contractor shall conduct the excavation operations in a manner that will protect the
10 pavement that is to remain. Pavement not designated to be removed that is damaged as
11 a result of the Contractor's operations shall be repaired by the Contractor to the
12 satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall
13 excavate only within one lane at a time unless approved otherwise by the Engineer. The
14 Contractor shall not excavate more area than can be completely finished during the same
15 shift, unless approved by the Engineer.
16

17 Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth
18 of 1.0 feet. The Engineer will make the final determination of the excavation depth
19 required. The minimum width of any pavement repair area shall be 40 inches unless
20 shown otherwise in the Plans. Before any excavation, the existing pavement shall be
21 sawcut or shall be removed by a pavement grinder. Excavated materials will become the
22 property of the Contractor and shall be disposed of in a Contractor-provided site off the
23 Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.
24

25 Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy
26 application of tack coat shall be applied to all surfaces of existing pavement in the
27 pavement repair area.
28

29 Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot
30 compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished
31 with the approval of the Engineer. Each lift shall be thoroughly compacted by a
32 mechanical tamper or a roller.
33

34 **(*****)**

35 APWA GSP 5-04.3(4)C shall be supplemented with the following:
36

37 Pavement repair areas, including full depth pavement removal and repair areas,
38 shall be reviewed in the field by the Engineer, prior to beginning Work. Contractor
39 may request a walk-through of areas prior to beginning the Work.
40

41 Placement of the HMA backfill for the purposes of Pavement Repair is considered
42 separate from the HMA overlay and shall be backfilled to the depth of the adjacent
43 planed surface. HMA overlay shall be continuous over the pavement repair areas
44 and measured as HMA Cl. 1/2 In. PG 58H-22.
45

46 Unless otherwise approved or directed by the Engineer, all pavement removed
47 resulting from excavation activities in existing streets and roads shall be restored in
48 accordance with the details in the Plans.
49

50 Pavement areas that have been removed by construction activities must be
51 restored to a paved surface by the Contractor at the end of each working period
52 prior to use by vehicular traffic. In addition, where pavement is removed adjacent to
53 driveways, when the driveway entrance is more than 1 inch above the roadway

grade during construction activities, the Contractor shall provide a temporary wedge constructed on a 20H:1V slope.

Temporary pavement restoration measures shall be a hard, non-gravel surface such as CDF, steel trench plating, sacrificial HMA, or cold mix asphalt per section 5-06 of these Special Provisions and may be used at Contractor expense. Unless allowed by the Engineer, temporary measures shall not be in place longer than five (5) calendar days. A temporary pavement restoration measure shall be defined as pavement restoration not in conformance with details in the Plans and shall be incidental to the cost of other items.

Extra Excavation

If suitable compaction of subgrade cannot be obtained in structural patch areas, at the approval of the Engineer, extra excavation and backfill with quarry spalls, geogrid, geotextile, perforated pipe (if necessary) and clean gravel (if necessary) per the detail in the Plans shall be installed. These items will be paid for as force account under Unexpected Site Changes and all the materials required to complete the work shall meet the Standard Specifications and these Special Provisions.

5-04.3(5) Producing/Stockpiling Aggregates and RAP

Aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(5)A Vacant

5-04.3(6) Mixing

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class $\frac{3}{4}$ " and HMA Class $\frac{1}{2}$ "	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class $\frac{3}{8}$ "	0.15 feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

For HMA accepted by nonstatistical evaluation the aggregate properties of sand equivalent, uncompacted void content and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

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

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

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

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

HMA Tolerances and Adjustments

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

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

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

For Aggregates in the mixture:

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

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/- 6%	+/- 8%
No. 8 Sieve	+/- 6%	+/- 8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.
2. **Job Mix Formula Adjustments** – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.
 - a. **Aggregates** – 2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
 - b. **Asphalt Binder Content** – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be

1 equal to one day's production or 800 tons, whichever is less except that the final subplot
2 will be a minimum of 400 tons and may be increased to 1200 tons.

3
4 All of the test results obtained from the acceptance samples from a given lot shall be
5 evaluated collectively. If the Contractor requests a change to the JMF that is approved,
6 the material produced after the change will be evaluated on the basis of the new JMF for
7 the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in
8 progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after
9 the Engineer is satisfied that material conforming to the Specifications can be produced.

10
11 Sampling and testing for evaluation shall be performed on the frequency of one sample
12 per subplot.

13 14 **5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling**

15 Samples for acceptance testing shall be obtained by the Contractor when ordered by the
16 Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer
17 and in accordance with AASH-TO T 168. A minimum of three samples should be taken
18 for each class of HMA placed on a project. If used in a structural application, at least one
19 of the three samples shall to be tested.

20
21 Sampling and testing HMA in a Structural application where quantities are less than 400
22 tons is at the discretion of the Engineer.

23
24 For HMA used in a structural application and with a total project quantity less than 800
25 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all
26 cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of
27 one of the three samples will be tested for conformance to the JMF:

- 28
29 • If the test results are found to be within specification requirements, additional
30 testing will be at the Engineer's discretion.
- 31 • If test results are found not to be within specification requirements, additional
32 testing of the remaining samples to determine a Composite Pay Factor (CPF) shall
33 be performed.

34 35 **5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing**

36 Testing of HMA for compliance of Va will at the option of the Contracting Agency. If
37 tested, compliance of Va will use WSDOT SOP 731.

38
39 Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T
40 308.

41
42 Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

43 44 **5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors**

45 For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting
46 Agency will determine a Composite Pay Factor (CPF) using the following price
47 adjustment factors:
48
49
50
51
52

Table of Price Adjustment Factors	
Constituent	Factor “F”
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (Va) (where applicable)	20

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

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments

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

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

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests

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

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the

1 maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the
2 existing sublots or samples from the street shall be tested to provide a minimum of three
3 sets of results for evaluation.
4

5 For each lot of HMA mix produced and tested under Commercial Evaluation when the
6 calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be
7 determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by
8 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product
9 of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of
10 mix.
11

12 If a constituent is not measured in accordance with these Specifications, its individual pay
13 factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).
14

15 **5-04.3(10) HMA Compaction Acceptance**

16 HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including
17 lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a
18 specified compacted course thickness greater than 0.10-foot, shall be compacted to a
19 specified level of relative density. The specified level of relative density shall be a
20 Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with
21 Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density).
22 The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The
23 specified level of density attained will be determined by the evaluation of the density of
24 the pavement. The density of the pavement shall be determined in accordance with
25 WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of
26 the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using
27 cores to determine density.
28

29 Tests for the determination of the pavement density will be taken in accordance with the
30 required procedures for measurement by a nuclear density gauge or roadway cores after
31 completion of the finish rolling.
32

33 If the Contracting Agency uses a nuclear density gauge to determine density the test
34 procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the
35 mix is placed and prior to opening to traffic.
36

37 Roadway cores for density may be obtained by either the Contracting Agency or the
38 Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches
39 minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by
40 the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.
41

42 If the Contract includes the Bid item "Roadway Core" the cores shall be obtained by the
43 Contractor in the presence of the Engineer on the same day the mix is placed and at
44 locations designated by the Engineer. If the Contract does not include the Bid item
45 "Roadway Core" the Contracting Agency will obtain the cores.
46

47 For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's
48 request after the Engineer is satisfied that material conforming to the Specifications can
49 be produced.
50

51 HMA mixture accepted by commercial evaluation and HMA constructed under conditions
52 other than those listed above shall be compacted on the basis of a test point evaluation
53 of the compaction train. The test point evaluation shall be performed in accordance with

1 instructions from the Engineer. The number of passes with an approved compaction train,
2 required to attain the maximum test point density, shall be used on all subsequent
3 paving.
4

5 HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling
6 wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved
7 by the Engineer.
8

9 **Test Results**

10 For a subplot that has been tested with a nuclear density gauge that did not meet the
11 minimum of 92 percent of the reference maximum density in a compaction lot with a CPF
12 below 1.00 and thus subject to a price reduction or rejection, the Contractor may request
13 that a core be used for determination of the relative density of the subplot. The relative
14 density of the core will replace the relative density determined by the nuclear density
15 gauge for the subplot and will be used for calculation of the CPF and acceptance of HMA
16 compaction lot.
17

18 When cores are taken by the Contracting Agency at the request of the Contractor, they
19 shall be requested by noon of the next workday after the test results for the subplot have
20 been provided or made available to the Contractor. Core locations shall be outside of
21 wheel paths and as determined by the Engineer. Traffic control shall be provided by the
22 Contractor as requested by the Engineer. Failure by the Contractor to provide the
23 requested traffic control will result in forfeiture of the request for cores. When the CPF for
24 the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will
25 be deducted from any monies due or that may become due the Contractor under the
26 Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the
27 traffic control.
28

29 **5-04.3(10)A HMA Compaction – General Compaction Requirements**

30 Compaction shall take place when the mixture is in the proper condition so that no undue
31 displacement, cracking, or shoving occurs. Areas inaccessible to large compaction
32 equipment shall be compacted by other mechanical means. Any HMA that becomes
33 loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way
34 defective, shall be removed and replaced with new hot mix that shall be immediately
35 compacted to conform to the surrounding area.
36

37 The type of rollers to be used and their relative position in the compaction sequence shall
38 generally be the Contractor's option, provided the specified densities are attained. Unless
39 the Engineer has approved otherwise, rollers shall only be operated in the static mode
40 when the internal temperature of the mix is less than 175°F. Regardless of mix
41 temperature, a roller shall not be operated in a mode that results in checking or cracking
42 of the mat. Rollers shall only be operated in static mode on bridge decks.
43

44 **5-04.3(10)B HMA Compaction – Cyclic Density**

45 Low cyclic density areas are defined as spots or streaks in the pavement that are less
46 than 90 percent of the theoretical maximum density. At the Engineer's discretion, the
47 Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will
48 follow WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for
49 any 500-foot section with two or more density readings below 90 percent of the
50 theoretical maximum density.
51

52 **5-04.3(10)C Vacant**

53

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction – Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92% a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal subplot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire subplot that is suspected of being defective may be rejected. When a subplot is rejected a minimum of two additional random samples from this subplot will be obtained. These additional samples and the original subplot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the Composite Pay Factor (CPF) of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PFI for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint seals to be placed at the bridge ends, and at interior joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.

1 Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application
2 procedure.
3

4 Construct the bridge paving joint seal as specified ion the Plans and in accordance with
5 the detail shown in the Standard Plans. Construct the sawcut in accordance with the
6 detail shown in the Standard Plan. Con-struct the sawcut in accordance with Section 5-
7 05.3(8)B and the manufacturer's application procedure.
8

9 **5-04.3(12)B2 Paved Panel Joint Seal**

10 Construct the paved panel joint seal in accordance with the requirements specified in
11 section 5-04.3(12)B1 and the following requirement:
12

- 13 1. Clean and seal the existing joint between concrete panels in accordance with
14 Section 5-01.3(8) and the details shown in the Standard Plans.
15

16 **5-04.3(13) Surface Smoothness**

17 The completed surface of all courses shall be of uniform texture, smooth, uniform as to
18 crown and grade, and free from defects of all kinds. The completed surface of the
19 wearing course shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot
20 straightedge placed on the surface parallel to the centerline. The transverse slope of the
21 completed surface of the wearing course shall vary not more than $\frac{1}{4}$ inch in 10 feet from
22 the rate of transverse slope shown in the Plans.
23

24 When deviations in excess of the above tolerances are found that result from a high place
25 in the HMA, the pavement surface shall be corrected by one of the following methods:
26

- 27 1. Removal of material from high places by grinding with an approved grinding
28 machine, or
- 29 2. Removal and replacement of the wearing course of HMA, or
- 30 3. By other method approved by the Engineer.
31

32 Correction of defects shall be carried out until there are no deviations anywhere greater
33 than the allowable tolerances.
34

35 Deviations in excess of the above tolerances that result from a low place in the HMA and
36 deviations resulting from a high place where corrective action, in the opinion of the
37 Engineer, will not produce satisfactory results will be accepted with a price adjustment.
38 The Engineer shall deduct from monies due or that may become due to the Contractor
39 the sum of \$500.00 for each and every section of single traffic lane 100 feet in length in
40 which any excessive deviations described above are found.
41

42 When utility appurtenances such as manhole covers and valve boxes are located in the
43 traveled way, the utility appurtenances shall be adjusted to the finished grade prior to
44 paving. This requirement may be waived when requested by the Contractor, at the
45 discretion of the Engineer or when the adjustment details provided in the project plan or
46 specifications call for utility appurtenance adjustments after the completion of paving.
47

48 Utility appurtenance adjustment discussions will be included in the Pre-Paving planning
49 (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior
50 to the start of paving.
51
52
53

1 **5-04.3(14) Planing (Milling) Bituminous Pavement**

2 The planing plan must be approved by the Engineer and a pre planing meeting must be
3 held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing
4 submittals.

5
6 Locations of existing surfacing to be planed are as shown in the Drawings.

7
8 Where planing an existing pavement is specified in the Contract, the Contractor must
9 remove existing surfacing material and to reshape the surface to remove irregularities.
10 The finished product must be a prepared surface acceptable for receiving an HMA
11 overlay.

12
13 Use the cold milling method for planing unless otherwise specified in the Contract. Do not
14 use the planer on the final wearing course of new HMA.

15
16 Conduct planing operations in a manner that does not tear, break, burn, or otherwise
17 damage the surface which is to remain. The finished planed surface must be slightly
18 grooved or roughened and must be free from gouges, deep grooves, ridges, or other
19 imperfections. The Contractor must repair any damage to the sur-face by the Contractor's
20 planing equipment, using an Engineer approved method.

21
22 Repair or replace any metal castings and other surface improvements damaged by
23 planing, as deter-mined by the Engineer.

24
25 A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a
26 minimum of 4 inches of curb reveal after placement and compaction of the final wearing
27 course. The dimensions of the wedge must be as shown on the Drawings or as specified
28 by the Engineer.

29
30 A tapered wedge cut must also be made at transitions to adjoining pavement surfaces
31 (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line
32 with vertical faces 2 inches or more in height, producing a smooth transition to the
33 existing adjoining pavement.

34
35 After planing is complete, planed surfaces must be swept, cleaned, and if required by the
36 Contract, patched and preleveled.

37
38 The Engineer may direct additional depth planing. Before performing this additional depth
39 planing, the Contractor must conduct a hidden metal in pavement detection survey as
40 specified in Section 5-04.3(14)A.

41
42 (*****)

43 APWA GSP Section 5-04.3(14) is supplemented with the following:

44 The Contractor shall perform the planing operations no more than *** 7 *** calendar days
45 ahead of the time the planed area is to be paved with HMA, unless otherwise allowed by
46 the Engineer in writing.

47
48 **5-04.3(14)A Pre-Planing Metal Detection Check**

49 Before starting planing of pavements, and before any additional depth planing required
50 by the Engineer, the Contractor must conduct a physical survey of existing pavement to
51 be planed with equipment that can iden-tify hidden metal objects.

52
53 Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
 - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).
 - b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
 - c. Should closure of the intersection in its entirety be necessary, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
 - d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.
 - e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.
2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals – Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of

1 operation and sufficient detail of traffic beyond the area of operation where detour traffic
2 may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be
3 changed if the Engineer agrees sufficient detail is shown.
4

5 The planing operation and the paving operation include, but are not limited to, metal
6 detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying,
7 staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at
8 the briefing.
9

10 When intersections will be partially or totally blocked, provide adequately sized and
11 noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in
12 advance. The traffic control plan must show where peace officers will be stationed when
13 signalization is or may be, countermanded, and show ar-eas where flaggers are
14 proposed.
15

16 At a minimum, the planing and the paving plan must include:
17

- 18 1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each
19 day's traffic control as it relates to the specific requirements of that day's planing
20 and paving. Briefly describe the se-quencing of traffic control consistent with the
21 proposed planing and paving sequence, and scheduling of placement of
22 temporary pavement markings and channelizing devices after each day's planing,
23 and paving.
- 24 2. A copy of each intersection's traffic control plan.
- 25 3. Haul routes from Supplier facilities, and locations of temporary parking and
26 staging areas, including return routes. Describe the complete round trip as it
27 relates to the sequencing of paving operations.
- 28 4. Names and locations of HMA Supplier facilities to be used.
- 29 5. List of all equipment to be used for paving.
- 30 6. List of personnel and associated job classification assigned to each piece of
31 paving equipment.
- 32 7. Description (geometric or narrative) of the scheduled sequence of planing and of
33 paving, and intended area of planing and of paving for each day's work, must
34 include the directions of proposed planing and of proposed paving, sequence of
35 adjacent lane paving, sequence of skipped lane paving, intersection planing and
36 paving scheduling and sequencing, and proposed notifications and coordinations
37 to be timely made. The plan must show HMA joints relative to the final pavement
38 marking lane lines.
- 39 8. Names, job titles, and contact information for field, office, and plant supervisory
40 personnel.
- 41 9. A copy of the approved Mix Designs.
- 42 10. Tonnage of HMA to be placed each day.
- 43 11. Approximate times and days for starting and ending daily operations.
44

45 **5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing**

46 At least 2 Working Days before the first paving operation and the first planing operation,
47 or as scheduled by the Engineer for future paving and planing operations to ensure the
48 Contractor has adequately prepared for notifying and coordinating as required in the
49 Contract, the Contractor must be prepared to discuss that day's operations as they relate
50 to other entities and to public safety and convenience, including driveway and business
51 access, garbage truck operations, Metro transit operations and working around energized
52 overhead wires, school and nursing home and hospital and other accesses, other
53 contractors who may be operating in the area, pedestrian and bicycle traffic, and

1 emergency services. The Contractor, and Subcontractors that may be part of that day's
2 operations, must meet with the Engineer and discuss the proposed operation as it relates
3 to the submitted planing plan and paving plan, approved traffic control plan, and public
4 convenience and safety. Such discussion includes, but is not limited to:

- 5
6 1. General for both Paving Plan and for Planing Plan:
 - 7 a. The actual times of starting and ending daily operations.
 - 8 b. In intersections, how to break up the intersection, and address traffic control and
9 signalization for that operation, including use of peace officers.
 - 10 c. The sequencing and scheduling of paving operations and of planing operations,
11 as applicable, as it relates to traffic control, to public convenience and safety,
12 and to other contractors who may operate in the Project Site.
 - 13 d. Notifications required of Contractor activities, and coordinating with other
14 entities and the public as necessary.
 - 15 e. Description of the sequencing of installation and types of temporary pavement
16 markings as it relates to planning and to paving.
 - 17 f. Description of the sequencing of installation of, and the removal of, temporary
18 pavement patch material around exposed castings and as may be needed
 - 19 g. Description of procedures and equipment to identify hidden metal in the
20 pavement, such as survey monumentation, monitoring wells, street car rail, and
21 castings, before planning, see Section 5-04.3(14)B2.
 - 22 h. Description of how flaggers will be coordinated with the planing, paving, and
23 related operations.
 - 24 i. Description of sequencing of traffic controls for the process of rigid pavement
25 base repairs.
 - 26 j. Other items the Engineer deems necessary to address.
- 27 2. Paving – additional topics:
 - 28 a. When to start applying tack and coordinating with paving.
 - 29 b. Types of equipment and numbers of each type equipment to be used. If more
30 pieces of equipment than personnel are proposed, describe the sequencing of
31 the personnel operating the types of equipment. Discuss the continuance of
32 operator personnel for each type equipment as it relates to meeting
33 Specification requirements.
 - 34 c. Number of JMFs to be placed, and if more than one JMF how the Contractor
35 will ensure different JMFs are distinguished, how pavers and MTVs are
36 distinguished if more than one JMF is being placed at the time, and how pavers
37 and MTVs are cleaned so that one JMF does not adversely influence the other
38 JMF.
 - 39 d. Description of contingency plans for that day's operations such as equipment
40 breakdown, rain out, and Supplier shutdown of operations.
 - 41 e. Number of sublots to be placed, sequencing of density testing, and other
42 sampling and testing.

43 44 **5-04.3(15) Sealing Pavement Surfaces**

45 Apply a fog seal where shown in the plans. Construct the fog seal in accordance with
46 Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to
47 opening to traffic.

48 49 **5-04.3(16) HMA Road Approaches**

50 HMA approaches shall be constructed at the locations shown in the Plans or where
51 staked by the Engineer. The Work shall be performed in accordance with Section 5-04.
52
53

5-04.4 Measurement

HMA Cl. ____ PG ____, HMA for ____ Cl. ____ PG ____, and Commercial HMA will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

Roadway cores will be measured per each for the number of cores taken.

Preparation of untreated roadway will be measured by the mile once along the centerline of the main line Roadway. No additional measurement will be made for ramps, Auxiliary Lanes, service roads, Frontage Roads, or Shoulders. Measurement will be to the nearest 0.01 mile.

Soil residual herbicide will be measured by the mile for the stated width to the nearest 0.01 mile or by the square yard, whichever is designated in the Proposal.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Asphalt for prime coat will be measured by the ton in accordance with Section 1-09.2.

Prime coat aggregate will be measured by the cubic yard, truck measure, or by the ton, whichever is designated in the Proposal.

Asphalt for fog seal will be measured by the ton, as provided in Section 5-02.4.

Longitudinal joint seals between the HMA and cement concrete pavement will be measured by the linear foot along the line and slope of the completed joint seal.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

Water will be measured by the M gallon as provided in Section 2-07.4.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

"HMA Cl. ____ PG ____", per ton.

"HMA for Approach Cl. ____ PG ____", per ton.

"HMA for Preleveling Cl. ____ PG ____", per ton.

"HMA for Pavement Repair Cl. ____ PG ____", per ton.

"Commercial HMA", per ton.

The unit Contract price per ton for "HMA Cl. ____ PG ____", "HMA for Approach Cl. ____ PG ____", "HMA for Preleveling Cl. ____ PG ____", "HMA for Pavement Repair Cl. ____ PG ____",

1 and "Commercial HMA" shall be full compensation for all costs, including anti-stripping
2 additive, incurred to carry out the requirements of Section 5-04 except for those costs
3 included in other items which are included in this Subsection and which are included in
4 the Proposal.

5
6 "Preparation of Untreated Roadway", per mile.

7
8 The unit Contract price per mile for "Preparation of Untreated Roadway" shall be full pay
9 for all Work described under 5-04.3(4) , with the exception, however, that all costs
10 involved in patching the Roadway prior to placement of HMA shall be included in the unit
11 Contract price per ton for "HMA Cl. ____ PG ____" which was used for patching. If the
12 Proposal does not include a Bid item for "Preparation of Untreated Roadway", the
13 Roadway shall be prepared as specified, but the Work shall be included in the Contract
14 prices of the other items of Work.

15
16 "Preparation of Existing Paved Surfaces", per mile.

17
18 The unit Contract Price for "Preparation of Existing Paved Surfaces" shall be full pay for
19 all Work described under Section 5-04.3(4) with the exception, however, that all costs
20 involved in patching the Roadway prior to placement of HMA shall be included in the unit
21 Contract price per ton for "HMA Cl. ____ PG ____" which was used for patching. If the
22 Proposal does not include a Bid item for "Preparation of Untreated Roadway", the
23 Roadway shall be prepared as specified, but the Work shall be included in the Contract
24 prices of the other items of Work.

25
26 "Crack Sealing", by force account.

27
28 "Crack Sealing" will be paid for by force account as specified in Section 1-09.6. For the
29 purpose of providing a common Proposal for all Bidders, the Contracting Agency has
30 entered an amount in the Proposal to become a part of the total Bid by the Contractor.

31
32 "Pavement Repair Excavation Incl. Haul", per square yard.

33
34 The unit Contract price per square yard for "Pavement Repair Excavation Incl. Haul" shall
35 be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)
36 with the exception, however, that all costs involved in the placement of HMA shall be
37 included in the unit Contract price per ton for "HMA for Pavement Repair Cl. ____ PG
38 ____", per ton.

39
40 "Asphalt for Prime Coat", per ton.

41
42 The unit Contract price per ton for "Asphalt for Prime Coat" shall be full payment for all
43 costs incurred to obtain, provide and install the material in accordance with Section 5-
44 04.3(4).

45
46 "Prime Coat Agg.", per cubic yard, or per ton.

47
48 The unit Contract price per cubic yard or per ton for "Prime Coat Agg." shall be full pay for
49 furnishing, loading, and hauling aggregate to the place of deposit and spreading the
50 aggregate in the quantities required by the Engineer.

51
52 "Asphalt for Fog Seal", per ton.

1 Payment for "Asphalt for Fog Seal" is described in Section 5-02.5.

2
3 "Longitudinal Joint Seal", per linear foot.

4
5 The unit Contract price per linear foot for "Longitudinal Joint Seal" shall be full payment
6 for all costs incurred to perform the Work described in Section 5-04.3(12).

7
8 "Planing Bituminous Pavement", per square yard.

9
10 The unit Contract price per square yard for "Planing Bituminous Pavement" shall be full
11 payment for all costs incurred to perform the Work described in Section 5-04.3(14).

12
13 "Temporary Pavement Marking", per linear foot.

14
15 Payment for "Temporary Pavement Marking" is described in Section 8-23.5.

16
17 "Water", per M gallon.

18
19 Payment for "Water" is described in Section 2-07.5.

20
21 "Job Mix Compliance Price Adjustment", by calculation.

22
23 "Job Mix Compliance Price Adjustment" will be calculated and paid for as described in
24 Section 5-04.3(9)C6.

25
26 "Compaction Price Adjustment", by calculation.

27
28 "Compaction Price Adjustment" will be calculated and paid for as described in Section 5-
29 04..3(10)D3.

30
31 "Roadway Core", per each.

32
33 The Contractor's costs for all other Work associated with the coring (e.g., traffic control)
34 shall be incidental and included within the unit Bid price per each and no additional
35 payments will be made.

36
37 "Cyclic Density Price Adjustment", by calculation.

38
39 "Cyclic Density Price Adjustment" will be calculated and paid for as described in Section
40 5-04.3

41
42 APWA GSP Section 5-04.5 is supplemented with the following:

43
44 **(*****)**

45 All costs necessary to construct Asphalt Thickened Edge shall be included in the Unit
46 Contract price for "HMA Cl. ____ PG ____", per ton.

47
48 **(January 2, 2018 WSDOT GSP)**
49 **Asphalt Cost Price Adjustment**

50 The Contracting Agency will make an Asphalt Cost Price Adjustment, either a credit or a
51 payment, for qualifying changes in the reference cost of asphalt binder. The adjustment
52 will be applied to partial payments made according to Section 1-09.9 for the following Bid
53 items when they are included in the Proposal:

1
2 "HMA Cl. ____ PG ____"
3 "HMA for Approach Cl. ____ PG ____"
4 "HMA for Preleveling Cl. ____ PG ____"
5 "HMA for Pavement Repair Cl. ____ PG ____"
6 "Commercial HMA"
7

8 The adjustment is not a guarantee of full compensation for changes in the cost of asphalt
9 binder. The Contracting Agency does not guarantee that asphalt binder will be available
10 at the reference cost.

11
12 The Contracting Agency will establish the asphalt binder reference cost twice each month
13 and post the information on the Agency website at:

14
15 <http://www.wsdot.wa.gov/Business/Construction/EscalationClauses.htm>

16 The reference cost will be determined using posted prices furnished by Poten & Partners,
17 Inc. If the selected price source ceases to be available for any reason, then the
18 Contracting Agency will select a substitute price source to establish the reference cost.

19
20 The base cost established for this Contract is the reference cost posted on the Agency
21 website with an effective date immediately preceding the Bid Opening Date.

22
23 Adjustments will be based on the most current reference cost for Western Washington or
24 Eastern Washington as posted on the Agency website, depending on where the Work is
25 performed. For Work completed after all authorized working days are used, the
26 adjustment will be based on the posted reference cost during which Contract time was
27 exhausted. The adjustment will be calculated as follows:

28
29 No adjustment will be made if the reference cost is within 5% of the base cost.

30
31 If the reference cost is greater than or equal to 105% of the base cost, then
32 Adjustment = (Current Reference Cost – (1.05 x Base Cost)) x (Q x 0.056).

33
34 If the reference cost is less than or equal to 95% of the base cost, then
35 Adjustment = (Current Reference Cost – (0.95 x Base Cost)) x (Q x 0.056).

36
37 Where Q = total tons of all classes of HMA paid in the current month's progress payment.

38
39 "Asphalt Cost Price Adjustment", by calculation.

40
41 "Asphalt Cost Price Adjustment" will be calculated and paid for as described in this
42 Section. For the purpose of providing a common Proposal for all Bidders, the Contracting
43 Agency has entered an amount in the Proposal to become a part of the total Bid by the
44 Contractor.

45 46 47 **5-06 Temporary Pavement**

48 Section 5-06 is added as follows:

49 50 **5-06.1 Description**

51 The Contractor may use temporary pavement (cold mix asphalt) to allow vehicular traffic to
52 travel over the construction areas, and to construct the temporary wedge to existing
53 driveways. Cold mix asphalt shall also be placed around trench plates or other devices used

1 to cover construction activities in a manner that provides a smooth transition between the
2 surfaces, as approved by the Engineer.

3 4 **5-06.2 Materials**

5 Materials shall meet the requirements of Section 9-03.8.

6
7 The composition of other components of the temporary asphalt pavement shall be
8 determined by the Contractor to provide a product suitable for the intended application. The
9 Contractor shall not use materials that are a safety or health hazard.

10
11 Temporary pavement material that does not form a consolidated surface after compaction
12 shall be considered unsuitable and be removed from the site. Unsuitable temporary
13 pavement shall be disposed of off-site.

14 15 **5-06.3 Construction Requirements**

16 The Roadway subsurface shall be prepared for the temporary pavement as defined in
17 Section 2-06. Placement of temporary pavement over compacted Gravel Borrow or suitable
18 native material backfill shall be allowed, in accordance with Specifications herein. Pavement
19 areas greater than ten square feet shall be roller compacted to consolidate the temporary
20 pavement. The completed pavement shall be free from ridges, ruts, bumps, depressions,
21 objectionable marks, or other irregularities.

22
23 The Contractor shall immediately repair, patch, or remove any temporary pavement that does
24 not provide a flat transition between existing pavement areas.

25
26 All temporary asphalt pavement to the depth of the final paving shall be removed from the
27 site by the end of the project and shall not be used as permanent asphalt pavement or its
28 Subgrade material.

29 30 **5-06.5 Payment**

31 All cold mix asphalt used shall be incidental to other Bid items in the Contract.

32
33
34
35
36
37
38 **END DIVISION 5**

1 **Division 7**
2 **Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains, and Conduits**
3
4

5 **7-05 Manholes, Inlets, Catch Basins, and Drywells**
6

7 **7-05.2 Materials**

8 Section 7-05.2 is supplemented with the following:
9

10 **General**

11 New Circular Frames and Locking Slotted Grates shall be EJIW brand, Product Number
12 00371506, or approved equal.
13

14 **7-05.3 Construction Requirements**
15

16 **7-05.3(1) Adjusting Catch Basins and Manholes to Grade**

17 Section 7-05.3(1) is supplemented with the following:
18

19 All manholes and catch basins shall be adjusted to finished grade after paving
20 operations are complete. The Contractor shall adjust the structure using concrete brick
21 or adjustment rings, or by other necessary means approved by the Engineer, in
22 accordance with Contracting Agency standards, to the satisfaction of the Engineer.
23

24 Where shown in the Plans, manholes and catch basins shall be lowered prior to
25 pavement repair operations.
26

27 After the catch basin or manhole has been lowered, the Contractor shall patch the
28 resultant void with cold mix asphalt.
29

30 All catch basins and manholes for storm sewers shall be grouted water tight, including
31 under frames, rims, manhole barrel, riser sections, and pipe collars
32

33 **7-05.3(5) Adjusting Catch Basins and Manholes to Grade**

34 Section 7-05.3(5) is added as follows:
35

36 **Replace Existing Rectangular Frame and Grate with New Rectangular Frame and**
37 **Vaned Grate**

38 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
39 and dispose of existing frames and grates, and replace them with new frames and
40 grates in accordance with City of Lynnwood standard drawings 4-5 (frames) and 4-8
41 (vaned grates).
42

43 **Replace Existing Open Curb Frame and Grate with New Open Curb Frame and**
44 **Grate**

45 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
46 and dispose of existing open curb frames and grates, and replace them with new open
47 curb frames and grates in accordance with City of Lynnwood standard drawing 4-11.
48
49

1 **Replace Existing Storm Drain Manhole Ring and Cover with New Ring and Cover**

2 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
3 and dispose of existing stormwater manhole rings and covers, and replace them with
4 new stormwater manhole rings and covers in accordance with City of Lynnwood
5 standard drawings 6-6.

6
7 **Replace Existing Sanitary Sewer Manhole Ring and Cover with New Ring and**
8 **Cover**

9 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
10 and dispose of existing sanitary sewer manhole rings and covers, and replace them
11 with new sanitary sewer manhole rings and solid locking covers in accordance with
12 City of Lynnwood standard drawings 6-7.

13
14 **Replace Existing Rectangular Frame and Cover with New Rectangular Frame**
15 **and Solid Locking Cover**

16 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
17 and dispose of existing rectangular frames and covers, and replace them with new
18 rectangular frame solid locking covers in accordance with WSDOT standard plans B-
19 30.10-03 (frames) and B-30.20-04 (solid metal covers).

20
21 **Replace Existing Circular Frame and Grate with New Circular Frame and Locking**
22 **Slotted Grate**

23 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove
24 and dispose of existing circular frames and grates, and replace them with new circular
25 frames and slotted grates in accordance with Special Provision 7-05.2.

26
27 **7-05.4 Measurement**

28 The third paragraph of Section 7-05.4 is revised to read as follows:

29
30 Adjustment of manholes, catch basins, and inlets will be made separately per each
31 drainage Structure lowered prior to pavement repair, and then again after raising to finished
32 grade.

33
34 Replacement of existing casting with new 20" x 24" frame and vaned grate will be measured
35 per each replacement.

36
37 Replacement of existing open curb frame and grate with new open curb frame and grate will
38 be measured per each replacement.

39
40 Replacement of existing storm drain manhole ring and cover with new ring and cover will be
41 measured per each replacement.

42
43 Replacement of existing sanitary sewer manhole ring and cover with new ring and cover will
44 be measured per each replacement.

45
46 Replacement of existing rectangular frame and cover with new rectangular frame and solid
47 locking cover will be measured per each replacement.

48
49 Replacement of existing circular frame and grate with new circular frame and locking slotted
50 grate will be measured per each replacement.

7-05.5 Payment

Section 7-05.5 is supplemented with the following:

“Adjust Drainage Structure by Lowering”, per each.

The unit Contract price per each for “Adjust Drainage Structure by Lowering” shall be full pay for all costs necessary to make the lowering adjustment, including cold mix asphalt. For the purpose of this pay item, the term “Drainage Structure” is intended to include storm sewer catch basins, and manholes.

“Adjust Drainage Structure by Raising”, per each.

The unit Contract price per each for “Adjust Drainage Structure by Raising” shall be full pay for all costs necessary make the raising adjustment, including restoration of adjacent areas, in a manner acceptable to the Engineer, including removal and replacement of existing risers; including, but not limited to existing concrete or brick risers. For the purpose of this pay item, the term “Drainage Structure” is intended to include storm sewer catch basins, manholes, and sanitary sewer manholes.

“Adjust Manhole by Lowering”, per each.

The unit Contract price per each for “Adjust Manhole by Lowering” shall be full pay for all costs necessary to make the lowering adjustment, including cold mix asphalt. For the purpose of this pay item, the term “Manhole” is intended to include sanitary sewer and telecom manholes.

“Adjust Manhole by Raising”, per each.

The unit Contract price per each for “Adjust Manhole by Raising” shall be full pay for all costs necessary make the raising adjustment, including restoration of adjacent areas, in a manner acceptable to the Engineer, including removal and replacement of existing risers; including, but not limited to existing concrete or brick risers. For the purpose of this pay item, the term “Manhole” is intended to include sanitary sewer and telecom manholes.

“Replace Existing Rectangular Frame and Grate with New Rectangular Frame and Vaned Grate”, per each.

The unit Contract price per each for “Replace Existing Rectangular Frame and Grate with New Rectangular Frame and Vaned Grate” shall be full pay for all costs necessary to remove existing frames and grates and replace them with new 20” x 24” frames and grates.

“Replace Existing Open Curb Frame and Grate with New Open Curb Frame and Grate”, per each.

The unit Contract price per each for “Replace Existing Open Curb Frame and Grate with New Open Curb Frame and Grate” shall be full pay for all costs necessary to remove existing open curb frames and grates and replace them with new open curb frames and grates.

“Replace Existing Storm Drain Manhole Ring and Cover with New Ring and Cover”, per each.

The unit Contract price per each for “Replace Existing Storm Drain Manhole Ring and Cover with New Ring and Cover” shall be full pay for all costs necessary to remove existing frames and covers and replace them with new rings and covers, and disposal of removed materials.

“Replace Existing Sanitary Sewer Manhole Ring and Cover with New Ring and Cover”, per each.

1 The unit Contract price per each for "Replace Existing Sanitary Sewer Manhole Ring and
2 Cover with New Ring and Cover" shall be full pay for all costs necessary to remove existing
3 frames and covers and replace them with new rings and covers, and disposal of removed
4 materials.

5
6 "Replace Existing Rectangular Frame and Cover with New Rectangular and Solid Locking
7 Cover", per each.

8 The unit Contract price per each for "Replace Existing Rectangular Frame and Cover with
9 New Rectangular and Solid Locking Cover" shall be full pay for all costs necessary to remove
10 existing frames and covers and replace them with new frames and covers, including disposal
11 of removed materials.

12
13 "Replace Existing Circular Frame and Grate with New Circular Frame and Locking Slotted
14 Grate", per each.

15 The unit Contract price per each for "Replace Existing Circular Frame and Grate with New
16 Circular Frame and Locking Slotted Grate" shall be full pay for all costs necessary to remove
17 existing frames and grates and replace them with new frames and grates, including disposal
18 of removed materials.

19 20 **7-12 Valves for Water Mains**

21 22 **7-12.3 Construction Requirements**

23 Section 7-12.3 is supplemented with the following:

24 25 **Replace Water Valve Box Top Section**

26 Where shown in the Plans or as directed by the Engineer, the Contractor shall remove and
27 replace existing water valve box top sections and covers with new top sections and covers
28 per City of Lynnwood Standard Drawing No. STD5-4A. Installation of the new valve box top
29 sections and covers shall occur during the adjustment Work of the water valve boxes that
30 occurs with the pavement planing and paving operations. The Contractor shall remove and
31 dispose of existing asphalt pavement and surrounding high early strength Class 3000 cement
32 concrete a distance of 12 inches beyond the valve box, and construct an HMA patch following
33 the replacement Work. All parts of the water valve assembly damaged as a result of the
34 Contractor's operations shall be replaced at no expense to the Contracting Agency or utility
35 owner.

36
37 Section 7-12.3(2) is added as follows:

38 39 **7-12.3(2) Adjust Water Valve Box**

40 The Contractor shall submit an adjustment plan to the Engineer for lowering or raising
41 water valve box top sections and lids or water valve box assemblies. The Contractor shall
42 not perform adjustment Work until receiving adjustment plan approval. Adjustment
43 operations shall be conducted to prevent damage to the valve, water valve box top section
44 and lid, or water valve box assembly. All parts or materials damaged as a result of the
45 Contractor's operations shall be replaced at no expense to the Contracting Agency or utility
46 owner.

1 Where shown in the Plans, the Contractor shall raise water valve boxes to final grade in
2 one of the following manners:

- 3
- 4 • Raise existing water valve box top section and lid
- 5 • Remove existing water valve box top section and lid, and raise with new
- 6 water valve box top section and lid
- 7 • Remove existing water valve box assembly, and raise with new water valve
- 8 box assembly
- 9

10 See City of Lynnwood Standard Drawing No. STD5-4A.

11

12 **7-12.4 Measurement**

13 Section 7-12.4 is supplemented with the following:

14

15 Replacement of water valve box top section and cover will be made per each top section and

16 cover replaced.

17

18 Adjustment of water valve boxes will be made separately per each water valve box lowered

19 prior to planing or raised to final grade.

20

21 **7-12.5 Payment**

22 Section 7-12.5 is supplemented with the following:

23

24 “Replace Water Valve Box Top Section and Cover”, per each.

25 The unit Contract price per each for “Replace Water Valve Box Top Section and Cover” shall

26 be full pay to furnish and install the new top section and cover of water valve boxes, including

27 disposal of the existing valve box top section and lid.

28

29

30 “Adjust Water Valve Box by Lowering”, per each.

31 The unit Contract price per each for “Adjust Water Valve Box by Lowering” shall be full pay

32 for all costs necessary to make the lowering adjustment, including including cold mix

33 asphalt.

34

35 “Adjust Water Valve Box by Raising”, per each.

36 The unit Contract price per each for “Adjust Water Valve Box by Raising” shall be full pay

37 for all costs necessary to make the raising adjustment of the water valve box top section

38 and lid, including the preparation of adjustment plans.

39

40

41

42

43

44 **END DIVISION 7**

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Division 8
Miscellaneous Construction

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8-01 Erosion Control and Water Pollution Control

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8-01.3 Construction Requirements

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8-01.3(1) A Submittals General

(April 1, 2016, Lynnwood GSP)

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45

The first paragraph of Section 8-01.3(1)A is supplemented with the following:

If the TESC Plan in the contract documents is adopted by the Contractor, the Contracting Agency shall be so notified prior to the Preconstruction Conference. If the Contractor modifies the TESC Plan in the contract documents, the revised TESC Plan shall be submitted for approval prior to the Preconstruction Conference.

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

Prior to the Preconstruction Conference, and prior to beginning work at the site and/or incorporation of materials and equipment into the project, the Contractor shall prepare, submit, and/or obtain approval from the Contracting Agency for the following:

1. Spill Prevention, Control & Countermeasures (SPCC) Plan – Per Section 1-07.15(1);
2. Storm Water Pollution Prevention Plan (SWPPP) – Per Section 8-01.3(1)A.

The Contractor shall develop the SWPPP in accordance with City of Lynnwood and WSDOE guidelines. A City approved template is available and more information can be found on the City's website at <http://www.lynnwoodwa.gov/City-Services/Environmental--Surface-Water-and-Storm-Water/Environmental-Documents-and-Reports.htm>

Section 8-01.5 Payment

(April 1, 2016, Lynnwood GSP)

Section 8-01.5 is supplemented with the following:

All costs associated with the preparation, approval and implementation of the SWPPP shall be considered incidental to the other bid items. No additional payment will be made.

8-02 Roadside Restoration

8-02.3 Construction Requirements

1 **8-02.3(17) Property Restoration**

2 Section 8-02.3(17) is added as follows:

3
4 The Contractor shall blend the new construction into developed private property
5 adjacent to the project using similar materials to those existing, (e.g. seeding and
6 fertilizing shall be used to match into lawn areas; bark shall be used to match into
7 planting areas; topsoil shall be used to match into garden areas; seeding, fertilizing,
8 and mulching; irrigation system repair and/or restoration, etc.).

9
10 If the items used for the restoration have pay items in the Contract, they will be paid
11 under those items.

12
13 If restoration of adjacent property requires use of materials that have no pay items,
14 payment will be by force account under the item "Property Restoration".

15
16 **8-02.4 Measurement**

17 Section 8-02.4 is supplemented with the following:

18
19 No specific unit of measurement will apply to the force account item of "Property
20 Restoration."

21
22 Topsoil will be measured by the cubic yard. Measurement will be made in the hauling
23 conveyance at the point of delivery.

24
25 **8-02.5 Payment**

26 Section 8-02.5 is supplemented with the following:

27
28 "Property Restoration", by force account.

29
30 Payment for "Property Restoration" shall be by force account as described in Section 1-
31 09.6 of the Standard Specifications and no other compensation will be allowed.

32
33 For the purpose of providing a common Bid Proposal for all Bidders and for that purpose
34 only, the estimated cost of this Bid item has been arbitrarily entered in the Proposal to
35 become part of the total Bid by the Contractor.

36
37 "Topsoil Type ____", per cubic yard.

38 The unit Contract price per cubic yard for "Topsoil Type ____" shall be full payment for all
39 costs for the specified Work.

40
41
42 **8-04 Curbs, Gutters, and Spillways**

43
44 **8-04.3 Construction Requirements**

45 Section 8-04.3 is supplemented with the following:

46
47 Cement Conc. Buffer Curb and Gutter and Valley Curb shall be constructed in accordance
48 with the details shown in the Plans.

For curb and gutter replacements where the Plans do not include curb return information, the Contractor shall be responsible to record existing gutter line information (radius and elevation), and replace with new curb and gutter in the same location.

8-04.4 Measurement

Section 8-04.4 is supplemented with the following:

Cement Conc. Buffer Curb and Gutter will be measured by the linear foot.

Cement Conc. Valley Curb and Gutter will be measured by the linear foot.

8-04.5 Payment

Section 8-04.5 is supplemented with the following:

"Cement Conc. Buffer Curb and Gutter", per linear foot.

"Cement Conc. Valley Curb", per linear foot.

The unit Contract price per linear foot for "Cement Conc. Buffer Curb and Gutter" and "Cement Conc. Valley Curb" shall be full pay for all labor, equipment, materials, forms, and incidentals necessary to perform the Work.

8-05 Adjustment of Gas Valve Box

Section 8-05, including title, is replaced with the following:

8-05.1 Description

This Work consists of adjusting existing gas valve box top section, ring and cover by lowering prior to planning operations and by raising to finished grade following paving operations in accordance with the Plans and these Specifications at the locations shown in the Plans.

8-05.2 Vacant

8-05.3 Construction Requirements

Adjustment operations shall be conducted to prevent damage to the valve, valve box top section, ring or cover. All parts or materials damaged as a result of the Contractor's operations shall be replaced at no expense to the Contracting Agency or utility owner.

Per the pipeline safety regulations contained in WAC 480-93, valves must be maintained during construction and the corrosion protection for steel gas piping must be periodically monitored. It is essential to coordinate the adjustment of valve boxes and cathodic protection test lead boxes. PSE (Gas) requires a representative/Inspector on-site when any Work is being performed where PSE gas facilities are known to exist.

8-05.4 Measurement

Adjusting gas valve boxes by lowering will be measured per each for each gas valve box top section, ring, and cover lowered prior to planing operations.

Adjusting gas valve boxes by raising will be measured per each for each gas valve box top section, ring, and cover adjusted to finished grade after final paving.

8-05.5 Payment

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

“Adjust Gas Valve Box By Lowering”, per each.

“Adjust Gas Valve Box By Raising”, per each.

The unit Contract price per each for “Adjust Gas Valve Box By _____” shall be full pay for all costs necessary to make lowering or raising adjustments, including cold mix asphalt required during lowering.

8-09 Raised Pavement Markers

8-09.1 Description

Section 8-09.1 is supplemented with the following:

This Work shall also consist of removing existing raised pavement markers.

8-09.3 Construction Requirements

Section 8-09.3 is supplemented with the following:

Raised pavement markers are to be removed by the Contractor and replaced as detailed herein. Existing RPMs shall be removed prior to pavement repair and/or overlay Work. Contractor shall sufficiently reference locations of existing RPMs so that they can be placed back in the same locations.

8-09.5 Payment

Section 8-09.5 is supplemented with the following:

“Raised Pavement Marker Type _____”, per hundred.

The unit Contract price per hundred for “Raised Pavement Marker Type _____” shall include all work associated with removal of existing raised pavement markers required for restriping, as well as installation of new raised pavement markers.

8-13 Monument Cases

8-13.1 Description

Section 8-13 is deleted and replaced with the following:

8-13.1 Description

This Work shall consist of furnishing and placing survey monuments and monument cases with covers. This Work will also include adjusting survey monument cases to grade in accordance with City of Lynnwood Standard Drawing No. 317 and these Special Provisions. Providing survey Work to set and maintain reference points is also included.

8-13.2 Materials

Materials shall be as specified in City of Lynnwood Standard Drawing No. 317. The pipe monument shall include a brass cap.

8-13.3 Construction Requirements

8-13.3(1) Survey Monuments

The Contractor shall reference all monuments within the project limits in advance of construction, and will set reference points. **The Contractor must file for and obtain a Monument Destruction Permit with the Washington State Department of Natural Resources in accordance with WAC 332-120.** Whenever a survey monument not shown in the Plans is discovered, the Contractor shall immediately bring it to the attention of the Engineer and shall take all precautions necessary to avoid damaging it.

Whenever an existing monument is disturbed, or when a new monument is set, the Contractor shall coordinate with the Contracting Agency to obtain and complete required monument permit documentation. The Contracting Agency contact person is Nick Barnett at (425) 670-5211.

Survey monuments shall be furnished and set by the Contractor at positions determined by a licensed Professional Land Surveyor provided by the Contractor. This Work could include resetting existing monuments that are destroyed by the construction or setting new survey monuments as part of the Project, in accordance with City of Lynnwood Standard Drawing No. 317.

All survey monument Work shall be done by a Professional Land Surveyor licensed in the State of Washington under the provisions of RCW 18.43.020. All survey monument Work done by the Contractor shall conform to the requirements of RCW 58.09.120 and 58.09.130. Removal and replacement of GLO or Geodetic Control monuments shall conform to the requirements of WAC 332-120.

The Contractor shall complete the requirements for referencing monuments to the NAD 83-91 horizontal datum by completing a control survey which references the Contracting Agency's NAD 83-91 survey control monuments. This control survey procedure and reference monument selection must be approved by the Engineer prior to beginning this Work. Also, all survey field notes for the control survey must be recorded in a Contracting Agency supplied field book and returned to the Engineer at the completion of the Work. The surveyor must punch the original monument position stamp with its surveyor's license number as required in RCW 58.09.120 on the brass cap of each monument set. The surveyor shall also stamp the Contracting Agency supplied monument number on each monument set. All monument survey Work shall be coordinated with and approved by the Engineer before final payment is made to the Contractor. **After installation of the monument, a Completion Report must be filed with the Washington State Department of Natural Resources as required in WAC 332-120-060.**

The surveyor shall provide at least four reference points in the vicinity of the monuments that are likely to be impacted by construction. The location of these reference points will be outside the construction Work and shall be coordinated with the Contractor and approved by the Engineer prior to surveying. These reference points shall be set by the Contractor's Professional Land Surveyor in advance of construction for the purpose of resetting the

monuments, including the monument case and cover, at the completion of the construction Work.

The Contractor shall carefully protect all reference points to the monuments and shall avoid destruction of the points. Any survey Work required to reset destroyed or lost reference points shall be paid for by the Contractor at no additional cost to the Contracting Agency.

8-13.4 Measurement

Monument, monument case, and cover will be measured by the unit for each monument, monument case, and cover furnished and set.

8-13.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

“Monument, Monument Case, and Cover”, per each.

The unit Contract price for “Monument, Monument Case, and Cover” shall be full pay for all costs, including, but not limited to, labor, Equipment, and materials to apply for and obtain a Monument Destruction Permit, file a Completion Report, set and maintain reference points, set monuments, monument cases, and covers, and adjust monument cases and covers, and any other elements of Work associated with maintaining control points, removal of existing monuments, and providing new monuments.

8-14 Cement Concrete Sidewalks

8-14.1 Description

Section 8-14.1 is revised to read:

(April 3, 2017 WSDOT GSP)

This Work consists of constructing cement concrete sidewalks, curb ramps, bus stop shelter foundations, masonry sidewalks, and ramp grinding in accordance with details shown in the Plans, Standard Plans, these Specifications, and in conformity to the lines and grades shown in the Plans, Standard Plans, and as established by the Engineer.

8-14.3 Construction Requirements

Section 8-14.3 is supplemented with the following:

The Contractor shall construct Cement Conc. Buffer Sidewalk in accordance with the details shown in the plans.

(April 3, 2017 WSDOT GSP)

The Contractor shall request a pre-construction meeting with the Engineer to be held two to five working days before any Work can start on cement concrete sidewalks, curb ramps or other pedestrian access routes to discuss construction requirements. Those attending shall include:

1. The Contractor and Subcontractor in charge of constructing forms, and placing, and finishing the cement concrete.

2. Engineer (or representative) and Project Inspectors for the cement concrete sidewalk, curb ramp or pedestrian access route Work.

Items to be discussed in this meeting shall include, at a minimum, the following:

1. Slopes shown on the Plans
2. Inspection
3. Traffic control
4. Pedestrian control, access routes and delineation
5. Accommodating utilities
6. Formwork
7. Installation of detectable warning surfaces
8. Contractor ADA survey and ADA Feature as-built requirements
9. Cold Weather Protection

(January 7, 2019 WSDOT GSP)

Timing Restrictions

Curb ramps shall be constructed on one leg of the intersection at a time. The curb ramps shall be completed and open to traffic within five calendar days before construction can begin on another leg of the intersection unless otherwise allowed by the Engineer. Unless otherwise allowed by the Engineer, the five calendar day time restriction begins when an existing curb ramp for the quadrant or traffic island/median is closed to pedestrian use and ends when the quadrant or traffic island/median is fully functional and open for pedestrian access.

(January 7, 2019 WSDOT GSP)

Layout and Conformance to Grades

Using the information provided in the Contract documents, the Contractor shall lay out, grade, and form each new curb ramp, sidewalk, and curb and gutter.

8-14.3(3) Placing and Finishing Concrete

Section 8-14.3(3) is supplemented with the following:

Sidewalk and curb and gutter shall not be poured monolithically. A full depth expansion joint will be required when concrete sidewalk is placed adjacent to other hard surfaces (such as driveways or vertical curbs), or as directed by the Engineer.

8-14.4 Measurement

Section 8-14.4 is supplemented with the following:

Cement concrete curb ramps of all types will be measured by the square yard of completed curb ramp installed and includes the installation of the detectable warning surface.

Cement Conc. Buffer Sidewalk will be measured by the square yard of completed sidewalk installed, exclusive of adjacent traffic curbs and/or curb and gutter.

8-14.5 Payment

Section 8-14.5 is supplemented with the following:

“Cement Conc. Curb Ramp Type ____”, per square yard.

The unit Contract price per square yard for “Cement Conc. Curb Ramp Type ____” shall be full compensation for installing the curb ramp as specified, including the “Detectable Warning Surface”.

“Cement Conc. Buffer Sidewalk”, per square yard.

The unit Contract price per square yard for “Cement Conc. Buffer Sidewalk” shall be full pay for all labor, equipment, materials, forms, and incidentals necessary to perform the Work.

Payment for “Cement Conc. Sidewalk”, “Cement Conc. Buffer Sidewalk”, and “Cement Conc. Curb Ramp Type ____” as specified, shall be contingent upon finished concrete meeting all slopes, lines and grades in compliance with the Contract documents. All Work not in compliance with the Contract documents shall be considered defective and shall be removed and replaced solely at the Contractor’s expense. At the discretion of the Engineer, any damage done to existing sidewalk or curb ramps noted to remain as a result of the Contractor’s Work, shall be repaired to the satisfaction of the Engineer, at no additional expense to the Contracting Agency.

8-20 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical

8-20.1 Description

8-20.1(1) Regulations and Code

The first sentence of the first paragraph of Section 8-20.1(1) is deleted and replaced with the following:

All electrical equipment shall conform to the standards of the National Electrical Manufacturers Association (NEMA), FHWA IP-78-16, the Radio Manufacturers Association, the American Society for Testing and Materials (ASTM), the American Association of State Highway and Transportation Officials (AASHTO), the American National Standards Institute (ANSI), the National Electrical Safety Code (NESC), the International Municipal Signal Association (IMSA), whichever is applicable, and to other codes listed herein.

The last paragraph Section 8-20.1(1) is deleted and replaced with the following:

Unless otherwise noted, the location of signals, controllers, standards, conduit, CCTV, DMS and all related appurtenances shown in the Plans are approximate and shall be verified with the Engineer in the field prior to installation.

1 **8-20.1(2) Industry Codes and Standards**

2 The following is added at the end of the first paragraph of Section 8-20.1(2):

3
4 National Electrical Safety Code (NESC)
5 Secretary NESC, NESC Committee, IEEE
6 Post Office Box 1331
7 445 Hoes Lane
8 Piscataway, NJ 08855-1331
9

10 This Section is supplemented with the following new subsection:

11
12 **8-20.1(3) Permitting and Inspections**

13 Electrical installations are subject to electrical inspection in accordance with RCW 19.28.101.
14 Electrical inspections may only be performed by an electrical Inspector meeting the
15 requirements of RCW 19.28.321. Electrical installations will not be accepted until they have
16 been inspected and approved by an electrical Inspector as required by this Section. This
17 inspection is required even if there is no new electrical service or new electrical meter being
18 installed in the Contract.

19 Installations within WSDOT Right of Way are subject to a minimum of a final inspection by a
20 WSDOT certified electrical Inspector as allowed by RCW 19.28.141. A separate permit is
21 not required for electrical installations within WSDOT Right of Way. Additional inspections
22 may be required at the discretion of the Engineer.

23
24 Installations outside of WSDOT Right of Way are subject to permitting and inspection by the
25 Washington State Department of Labor and Industries (L&I) or a local jurisdiction approved
26 for that location by L&I. Approved local jurisdictions and their contacts may be found on the
27 L&I website at
28 <http://www.lni.wa.gov/TradesLicensing/Electrical/FeePermlInsp/CityInspectors/>.

29
30 **8-20.1(4) Warranties**

31 Section 8-20.1(4) is added as follows:

32
33 The Contractor shall provide a warranty for all material to be furnished under this Bid
34 for the greater of two (2) years or the warranty time period as provided by equipment
35 manufacturers, from the date of actual system turn-on (unless otherwise specified
36 here-in). The warranty shall apply to all material including those items not
37 manufactured by the Contractor and shall provide that all material at the time of
38 delivery shall be free from defects in material and workmanship and shall be fit for the
39 uses set forth in these Specifications.

40
41 The warranty shall assign responsibility to the Contractor for all costs of replacement
42 or repair of defective materials except those materials supplied by the Contracting
43 Agency. Replacement or repair shall be made within five (5) working days following
44 notification of a discrepancy.
45

46 **8-20.2 Materials**

47 Section 8-20.2 is supplemented with the following:
48

1 **8-20.2(1) Equipment List and Drawings**

2 Section 8-20.2(1) is revised to read as follows:

3
4 Within thirty (30) calendar days following execution of the Contract, the Contractor
5 shall provide all documentation pertaining to the materials and method of execution
6 proposed to satisfy the requirements of this Section. The Engineer's approval is
7 required prior to the committing of any materials or the commencement of any Work.

8
9 The Engineer shall either approve or disapprove each submitted item within twenty-
10 one (21) calendar days of submittal subject to the completeness of the Contractor's
11 submittal. Actual elapsed time for the Engineer's review is dependent upon the
12 completeness and appropriateness of the documentation being submitted. Any
13 deficiencies in the Contractor's submittals shall require additional time for approval.
14 Any delays caused by such deficiencies shall not be grounds for extension of project
15 consideration dates. The Contractor shall anticipate review intervals and schedule
16 submittals accordingly to ensure project progress in accordance with Section 1-08.3.

17
18 The Engineer's approval of any submitted documentation shall in no way relieve the
19 Contractor from compliance with the safety and performance requirements as specified
20 herein.

21
22 Submittals required by this item shall include, but not be limited to, the following:

- 23
24 1. A material staging plan, should the Contractor propose Contracting Agency-
25 owned property as a staging area.
26
27 2. Proposed material Specifications for all traffic signal, ITS and communication
28 system components. This shall include, but not be limited to, poles, junction
29 boxes, conduit, cabling, splice materials, signal heads, push buttons, luminaries,
30 all signal and communication system hardware, including cabinets and cabinet-
31 contained hardware.
32
33 3. Submittals shall be neat, legible, and orderly, submitted with an index or
34 transmittal form listing all submittal contents. Submittals without an index or
35 transmittal form listing all contents will be rejected. Neatly organize each package
36 of submittal data and separate by hardware item. Where catalogue sheets are
37 copied listed multiple items, all items proposed for use on this project shall be
38 highlighted to distinguish from items not proposed for use on the project.
39

40 **8-20.3 Construction Requirements**

41
42 **8-20.3(5) Conduit**

43 Section 8-20.3(5) is supplemented with the following:

44
45 The following is added at the end of this Section:

46
47 Installation of conduit shall conform to appropriate articles of the Code and these
48 Specifications.
49

1 The ends of all conduits, metallic and non-metallic shall be reamed to remove burrs
2 and rough edges. Field cuts shall be made square and true. Slip joints or running
3 threads will not be permitted for coupling metallic conduit; however, running threads
4 will be permitted in traffic signal head spiders and RGS outerduct. When installing rigid
5 galvanized steel conduit and standard coupling cannot be used, an approved 3-piece
6 coupling shall be used. The threads on all conduit shall be rust-free, clean. All
7 couplings shall be tightened so that a good electrical connection will be made
8 throughout the entire length of the conduit run. If the conduit has been moved after
9 assembly, it shall be given a final tightening from the ends prior to backfilling. Non-
10 metallic conduit shall be assembled using the solvent cement specified in Section 9-
11 29.1. With the exception of connections to HDPE conduit, PVC conduit shall be
12 connected with medium grade gray cement solvent applied per the manufacturer's
13 recommendations. Where the coating on galvanized conduit has been damaged in
14 handling or installing, such damaged areas shall be thoroughly painted with
15 galvanizing repair paint, Formula A-9-73. All conduit including spare conduits shall be
16 installed with bushings. Rigid galvanized steel conduit shall be installed with insulated
17 grounding bushings which have standard threading that extends around the entire
18 circumference of the bushing. PVC conduit shall be installed with molded one-piece
19 end bell bushings. All conduit including spare conduits shall be installed with plugs,
20 which shall not be removed until installation of conductors or pull string. Upon
21 installation of wiring all conduits entering pad mounted cabinets, all conduit entering
22 ITS hubs, and all ITS conduit 2 inches in diameter or larger, shall be sealed with an
23 approved mechanical plug at both ends of the conduit run. Upon installation of wiring
24 at other locations, conduit shall be sealed with duct seal. Upon installation of the pull
25 string, spare conduit shall be plugged.

26
27 Nonmetallic conduit bends, where allowed, shall conform to Article 352.24 of the Code.
28 Eighteen-inch radius elbows shall be used for PVC conduit of 2-inch nominal diameter
29 or less. Standard sweep elbows shall be used for PVC conduit with greater than 2-inch
30 nominal diameter unless otherwise specified in the Plans. In nonmetallic conduit less
31 than 2-inch nominal diameter, pull ropes for wire installation shall be not less than ¼
32 inch diameter. In nonmetallic conduit of 2-inch nominal diameter or larger, pull ropes
33 for wire installation shall be not less than ½ inch diameter.

34
35 Conduit shall be laid so that the top of the conduit is a minimum depth of:

- 36
37 1. 24-inches below the bottom of curb in the sidewalk area
38 2. 24-inches below the top of the Roadway base.
39 3. 24-inches below the finish grade in all other areas.
40

41 Where nonmetallic conduit is installed, care shall be used in excavating, installing, and
42 backfilling, so that no rocks, wood, or other foreign material will be left in a position to
43 cause possible damage.
44

45 Metallic and nonmetallic conduit installation shall include equipment grounding
46 conductor and shall conform to requirements noted in the Standard Plans.
47

48 Conduit entering through the bottom of a junction box shall be located near the end
49 walls to leave the major portion of the box clear. At all outlets, conduit shall enter from

the direction of the run, terminating six (6) to eight (8) inches below the junction box lid and within three (3) inches of the box wall nearest its entry location.

All covered underground conduit shall be cleaned with an approved sized mandrel and blown out with compressed air prior to pulling wire.

Conduit runs shown in the Plans are for Bidding purposes only and may be changed, with approval of the Engineer, to avoid obstructions.

8-20.3(8) Wiring

Section 8-20.3(8) is supplemented with the following:

Field Wiring Chart

501	AC+ Input	516-520 Railroad Pre-empt
502	AC- Input	5A1-5D5 Emergency Pre-empt
503-510	Control-Display	541-580 Coordination
511-515	Sign Lights	581-599 Spare

Movement Number	1	2	3	4	5	6	7	8	9
Vehicle Head									
Red	611	621	631	641	651	661	671	681	691
Yellow	612	622	632	642	652	662	672	682	692
Green	613	623	633	643	653	663	673	683	693
Spare	614	624	634	644	654	664	674	684	694
Spare	615	625	635	645	655	665	675	685	695
AC-	616	626	636	646	656	666	676	686	696
Red Auxiliary	617	627	637	647	657	667	677	687	697
Yellow Auxiliary	618	628	638	648	658	668	678	688	698
Green Auxiliary	619	629	639	649	659	669	679	689	699
Pedestrian Heads & Dets.									
Hand	711	721	731	741	751	761	771	781	791
Man	712	722	732	742	752	762	772	782	792
AC-	713	723	733	743	753	763	773	783	793
Detection	714	724	734	744	754	764	774	784	794
Common-Detection	715	725	735	745	755	765	775	785	795
Spare	716	726	736	746	756	766	776	786	796
Spare	717	727	737	747	757	767	777	787	797
Spare	718	728	738	748	758	768	778	788	798
Spare	719	729	739	749	759	769	779	789	799
Detection									
AC+	811	821	831	841	851	861	871	881	891
AC-	812	822	832	842	852	862	872	882	892
Common-Detection	813	823	833	843	853	863	873	883	893
Detection A	814	824	834	844	854	864	874	884	894
Detection B	815	825	835	845	855	865	875	885	895
Loop 1 Out	816	826	836	846	856	866	876	886	896
Loop 1 In	817	827	837	847	857	867	877	887	897

1	Loop 2 Out	818	828	838	848	858	868	878	888	898
2	Loop 2 In	819	829	839	849	859	869	879	889	899
3	Supplemental Detection									
4	Loop 3 Out	911	921	931	941	951	961	971	981	991
5	Loop 3 In	912	922	932	942	952	962	972	982	992
6	Loop 4 Out	913	923	933	943	953	963	973	983	993
7	Loop 4 In	914	924	934	944	954	964	974	984	994
8	Loop 5 Out	915	925	935	945	955	965	975	985	995
9	Loop 5 In	916	926	936	946	956	966	976	986	996
10	Loop 6 Out	917	927	937	947	957	967	977	987	997
11	Loop 6 In	918	928	938	948	958	968	978	988	998
12	Spare	919	929	939	949	959	969	979	989	999

8-20.3(14) Signal Systems

8-20.3(14)G Pedestrian Pushbutton Assemblies

Section 8-20.3(14)G is added as follows:

The Contractor shall provide and install the pedestrian push buttons on the signal pole. All mountings shall be securely fastened and approved by the Engineer. The position of the pedestrian push buttons shall be located generally so that the button is parallel to the crosswalk for which the button is intended to serve; however, final positioning for the optimum effectiveness shall be approved by the Engineer.

8-20.3(17) "As Built" Plans

Section 8-20.3(17) is deleted in its entirety and replaced with the following:

Upon completion of the construction and prior to the turn-on of any traffic control equipment, the Contractor shall furnish an "as-built" plan of each intersection showing all signal heads, pole locations, detectors, junction boxes, miscellaneous equipment, conductors, cable wires up to the signal controller cabinet, and with a special symbol identifying those items that have been changed from the original Contract Plans. All items shown in the Contract Plans shall be located within one (1) foot horizontal distance and six (6) inches vertical distance above, below or at the surface.

8-20.5 Payment

Section 8-20.5 is supplemented with the following:

"Flashing Beacon (Location)", per lump sum.

The lump sum Contract price for "Flashing Beacon (Location)" shall include all labor, equipment, methods, and materials necessary to install the flashing beacon in accordance with the manufacturer's recommendations and all applicable details and Special Provisions of the Contract Documents and the Standard Specifications. Work includes but is not limited to any required excavation and backfill, wiring and conduit, junction boxes, electrical grounding, concrete foundation, support pole and pole base, relocation of existing poles to new foundations, flashing lights and brackets, solar panel(s), battery backup, wireless transmitters and receivers, and all necessary anchors and fasteners in accordance with the details and Special Provisions of the Contract Documents and all applicable Standard

Specifications. New or relocated signing mounted to the pole with the flashing beacon shall not be included in this unit Contract price.

“Traffic Signal System Modifications (Location)”, per lump sum.

The lump sum Contract price for “Traffic Signal System Modifications (Location)” shall include the cost of accessible pedestrian systems as shown in the Plans, including removal of existing foundations, wiring, posts, pushbutton assemblies, salvage of designated pushbutton assemblies and miscellaneous signal equipment, new foundations, posts, pushbutton assemblies, wiring, and testing. The lump sum Contract price shall also include adjusting the elevation of the junction boxes or pull boxes as shown in the Plans, installation of premolded joint filler, slip resistance treatment, installation or replacement of the gravel pad and the adjustment of conduit placement within the junction box or pull box. All Work shall conform to the requirements of Standard Plans J-40.20-03, J-40.10-04 and J-40.30-04.

When the replacement or modification of electrical or communication system cables, wiring or conductors or other associated Work, not identified as Work in the Contract Plans, is required as a result of the adjustment of existing junction boxes or pull boxes, all costs associated with those modifications shall be paid in accordance with Section 1-04.4.

8-23 Temporary Pavement Markings

8-23.1 Description

Section 8-23.1 is supplemented with the following:

This work also consists of furnishing, placing, and maintaining temporary flexible raised pavement markers and removing temporary pavement marker protective plastic covers.

Temporary Pavement Marking shall provide full lane delineation at all intersections and all marked lane lines within the project area. Pavement markings are anticipated to be restored in same locations as existing so temporary markings shall provide all needed reference to place permanent pavement markings back in the same locations.

8-23.2 Materials

Section 8-23.2 is supplemented with the following:

When temporary flexible raised pavement markers are used for bituminous surface treatment operations, the markers shall be supplied with two protective covers made of clear polyvinyl chloride. The first shall be removed after chip seal work is complete, the second shall be removed after fog seal work is complete.

8-23.3 Construction Requirements

Section 8-23.3 is supplemented with the following:

The Contractor shall be responsible for referencing existing lines and pavement markings and re-establishing lines and markings on new BST pavement.

On the day that the BST is constructed, the Contractor shall remove one plastic cover from the first, third, and fifth flexible raised pavement marker in centerline areas, and all plastic covers at intersection areas for stop lines and wide lines.

1 On the day that the fog seal is constructed on the BST, the Contractor shall remove all of the
2 remaining plastic covers on the flexible raised pavement markers.

3
4 Should traffic destroy the flexible raised pavement markers prior to the sealing operation, the
5 Contractor shall replace them before continuing with construction operations. All delineation
6 that is reapplied due to traffic will be paid for under "Temporary Pavement Markings", per
7 linear foot.

8
9 **8-23.4 Measurement**

10 Section 8-23.4 is supplemented with the following:

11
12 Temporary pavement markings will be measured by the linear foot of each installed line or
13 grouping of markers, with no deductions for gaps in the line or markers.

14
15 **8-23.5 Payment**

16 Section 8-23.5 is supplemented with the following:

17
18 "Temporary Pavement Marking", per linear foot, shall include all costs for application, or
19 reapplication, uncovering temporary flexible raised pavement markers, and disposal of
20 plastic covers.

21
22
23
24 **END DIVISION 8**
25

**Division 9
Materials**

9-29 Illumination, Signal, Electrical

9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable

Section 9-29.3 is supplemented with the following:

Circuit conductors shall be standard copper wire in all conduit runs with size specified in the Plans.

Cable entering cabinets shall be neatly bundled and wrapped. Each wire shall bear the circuit number and be thoroughly tested before being connected to the appropriate terminal.

The Contractor shall provide all materials required for the installation and splicing of the specified communications cables, power cables and associated interface devices.

At the request of the Engineer, the Contractor shall submit a three (3) foot sample cable section to the Engineer for approval for each type of cable to be utilized.

9-29.6 Light and Signal Standards

Section 9-29.6 is supplemented with the following:

Traffic Signal Standards

Traffic signal standards shall be furnished and installed in accordance with the methods and materials noted in the applicable Standard Plans, pre-approved plans, or special design plans.

All welds shall comply with the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. Welding inspection shall comply with Section 6-03.3(25)A Welding Inspection.

Hardened washers shall be used with all signal arm connecting bolts instead of lockwashers. All signal arm ASTM F 3125 Grade A325 connecting bolts tightening shall comply with Section 6-03.3(33).

Traffic signal standard types and applicable characteristics are as follows:

Type PPB	Pedestrian push button posts shall conform to Standard Plan J-20.10 or to one of the following pre-approved plans:
----------	--

<u>Fabricator</u>	<u>Drawing No.</u>
Northwest Signal Supply Inc.	NWS 3565

Valmont Ind. Inc.	DB01165 Rev. A Sheet's 1, 2, 3 & 4 of 4
Ameron Pole Prod. Div.	WA10TR-1 Rev. F and WAPPBPBA Rev. B
Union Metal Corp.	TA-10035 Rev. R8 Sht. 1
West Coast Engineering Group	WSDOT-PP-01 Rev. 1
KW Industries	10-200-PED-1 Rev. 9, Sheets 1, 2 and 3

9-29.19 Pedestrian Push Buttons

Section 9-29.19 is supplemented with the following:

Accessible Pedestrian Signal (APS) Pushbuttons

When required in the Contract, APS Pushbuttons shall be provided. Each accessible pedestrian signal (APS) shall be a complete APS pushbutton system at each pedestrian pushbutton location shown in the Plans. Equipment shall be:

Campbell Company Advisor Guide Accessible Pedestrian Station (AGPS)

Each pushbutton station shall include the following:

1. Flat black colored housing.
2. Pushbutton arrow on a white background. Pushbutton arrow shall be silver.
3. Integral 9" x 15" R10-3e sign. Braille shall not be included. Adaptor plates shall be included if required to accommodate the sign.
4. Appropriate interface unit for installation in associated pedestrian display:
Campbell: Signal Power Interface (SPI) Unit
5. Percussive tone / rapid tick walk indication.
6. Voice messages, where specified in the Plans, pre-installed. Voice shall be male.
7. Interconnect cable for installation between pushbutton station and pedestrian display interface unit. Unless otherwise specified in the Contract, cable shall be provided by the pushbutton manufacturer. Cable may be standard four conductor cable meeting the requirements of Standard Specification 9-29.3(2)B if it meets the pushbutton manufacturers requirements.

The following shall be provided at each intersection:

1. One USB flash drive with copies of all voice message audio files for that intersection, placed in the traffic signal cabinet drawer or drawing envelope. A separate flash drive is required for each intersection.
2. One USB cable of the appropriate type (A to A, A to B, male/female, etc.), placed in the traffic signal cabinet drawer or drawing envelope.

Any other equipment or software required by the manufacturer for setup, operation, and maintenance of the pushbutton stations shall be provided.

Dual button adaptor brackets are required for all installations with two APS pushbuttons on the same Type PPB, Type PS, or Type I Signal Standard. Where dual button adaptor brackets or extension brackets are required, they shall be obtained from the same manufacturer as the pushbutton station. Brackets and extensions from other manufacturers shall not be used. Brackets shall be Campbell Company part numbers 503-0200 and 503-0175. Brackets shall be flat black and match the pedestrian push button housing.

APS Speech Messages

Where shown in the Plans, speech messages shall be provided in the following format:

- "Wait."
- "Walk sign is on to cross [Street Name]."

Order forms shall be completed by the Contractor using the information presented above.

9-29.22 Vacant

Section 9-29.22, including title, is deleted and replaced with the following:

9-29.22 Flashing Beacon

General

The Flashing Beacon (RRFB) shall consist of pole (new or relocated, as shown in the Plans), push button, flashing beacon indications, solar-panel(s), wireless transmitter, control unit, and any associated wiring and mountings.

The flashing beacon shall be solar-powered.

The flashing beacon shall remain dark until initiated by activation of the pedestrian push button. Each flashing beacon unit shall be activated by push button and relayed as a system to operate all flashing beacon units simultaneously when any one push button is activated. The flashing beacon units shall simultaneously cease operation after a predetermined time limit per the Engineer. Agency Engineer will provide assistance to the Contractor for setting the activation time duration.

Pedestrian Push Button

1. One pedestrian push button shall be mounted on poles identified per the Plans. Push button will activate the flashing beacon system.
2. Push buttons shall be ADA compliant and meet the requirements in Section 9-29.19 and as modified below.
3. Pedestrian push buttons used at flashing beacon locations shall not have the vibro-tactile feature. Pedestrian push buttons used at flashing beacon locations shall not have the red indication light. The pedestrian push button housing shall be black in color.
4. Pedestrian push buttons shall include MUTCD compliant sign R10-25 with the message "Press Button To Turn On Warning Lights" with a hand symbol (black text and symbols on white background). The sign shall be 9" by 12". Each push button assembly shall have one sign and the push button signing shall be identical to one another. The sign shall be mounted on the same housing as the push button and shall be oriented in the same direction as the push button.
5. The pedestrian push button shall be Campbell Company AGPS.

Poles, Base, and Foundation

The flashing beacons shall be installed on a pole as shown in the Plans.

Pedestal poles shall be 4-inch schedule 40 aluminum pipe with one threaded end for mounting to the base. The overall height of the shaft excluding the base shall be as shown on the Plans. Pedestal base shall be of cast aluminum with angled sides with the approximate dimensions of 13.75-inches by 13.75-inches by 15-inches tall. Bases for pedestals shall be threaded, square, aluminum and equipped with an aluminum access door for wiring. A 13.5-inch diameter bolt circle size shall be used. The base shall have a grounding lug inside which is accessible from the handhole. The base shall be aluminum in color.

Foundations and bases shall be per the Plans.

Anchor bolts for Type I or Type PS poles shall meet the requirements for Anchor Bolts per the Standard Specifications and any modifications included herein.

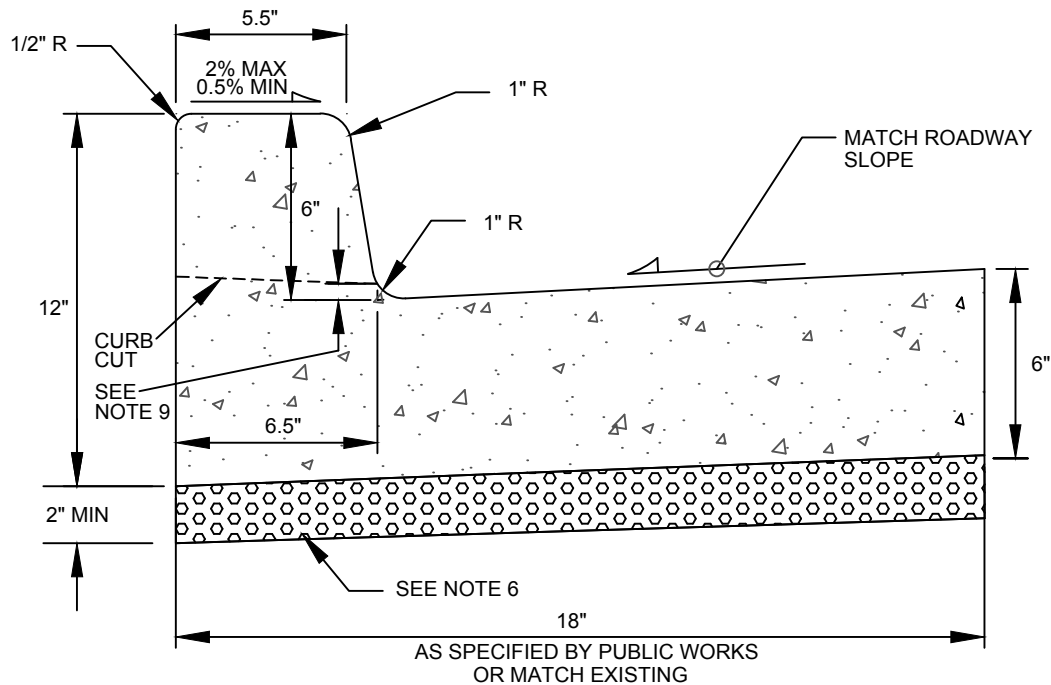
Anchor bolts for Pedestal poles shall be J-shaped and be 5/8-inches diameter by 20-inches long by 4-inches. Anchor bolts shall be hot dipped galvanized, full length, per ASTM A307. The top 6-inches shall be threaded. Anchor bolts shall conform to the requirements of ASTM F1554, grade 55. Nuts shall meet the requirements of ASTM A563, grade A. Washers shall meet the requirements of ASTM F844 or F436.

The approved product is the JSF Technologies AB-2412 series with 12-inch indications with AGPS modification.

END DIVISION 9

1
2

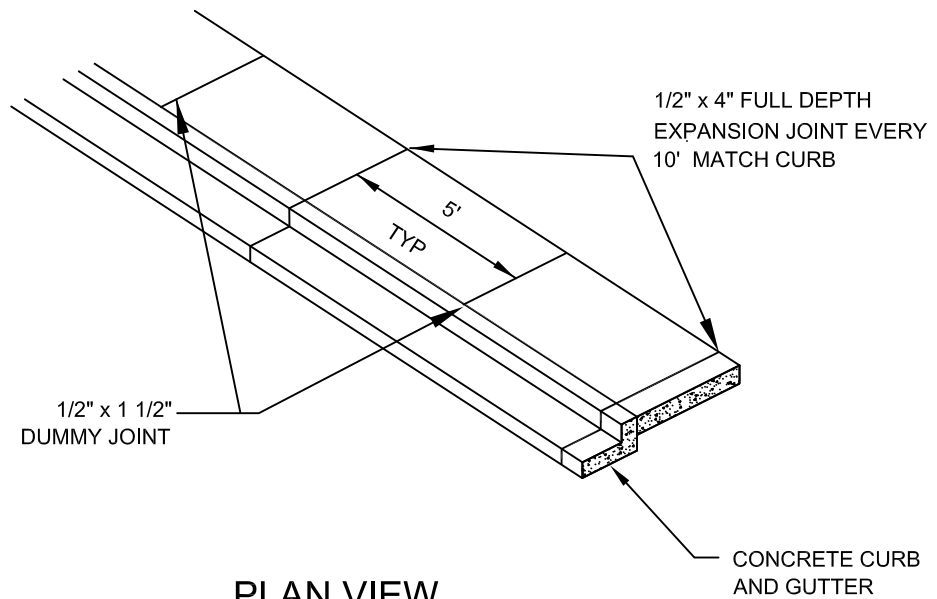
SECTION 10
STANDARD PLANS



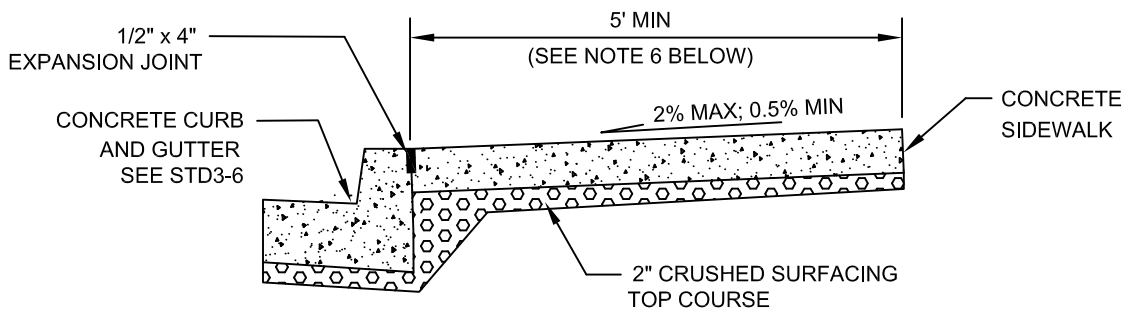
TYPICAL SECTION

NOTES

1. FINISHING, CURING, FORM WORK, PLACEMENT AND MATERIALS SHALL CONFORM TO WSDOT SPECS.
2. EXPANSION JOINTS SHALL BE PLACED ON 10 FOOT CENTERS.
3. EXPANSION JOINTS SHALL BE PLACED ADJACENT TO CATCH BASINS, INLETS AND AT POINTS OF TANGENCY ON STREETS, ALLEYS, AND DRIVEWAY RETURNS.
4. ALL JOINTS SHALL BE CLEAN AND EDGED.
5. FINISH SHALL BE LIGHT BROOM FINISH.
6. ALL CURB AND GUTTER SHALL BE PLACED ON A MIN. OF 2" OF CRUSHED SURFACING TOP COURSE COMPACTED AS SPECIFIED IN WSDOT STANDARDS AND SPECS.
7. FULL EXPANSION JOINT BETWEEN CURB AND GUTTER AND THE SIDEWALK.
8. SEE 4-10 OPEN CURB FACE FRAME & GRATE INSTALLATION FOR 4' OF THICKENED CURB AT CATCH BASIN.
9. 1/4" MAX LIP IN DRIVEWAY CUTS
NO LIP (FLUSH) IN CURB RAMP CUTS.



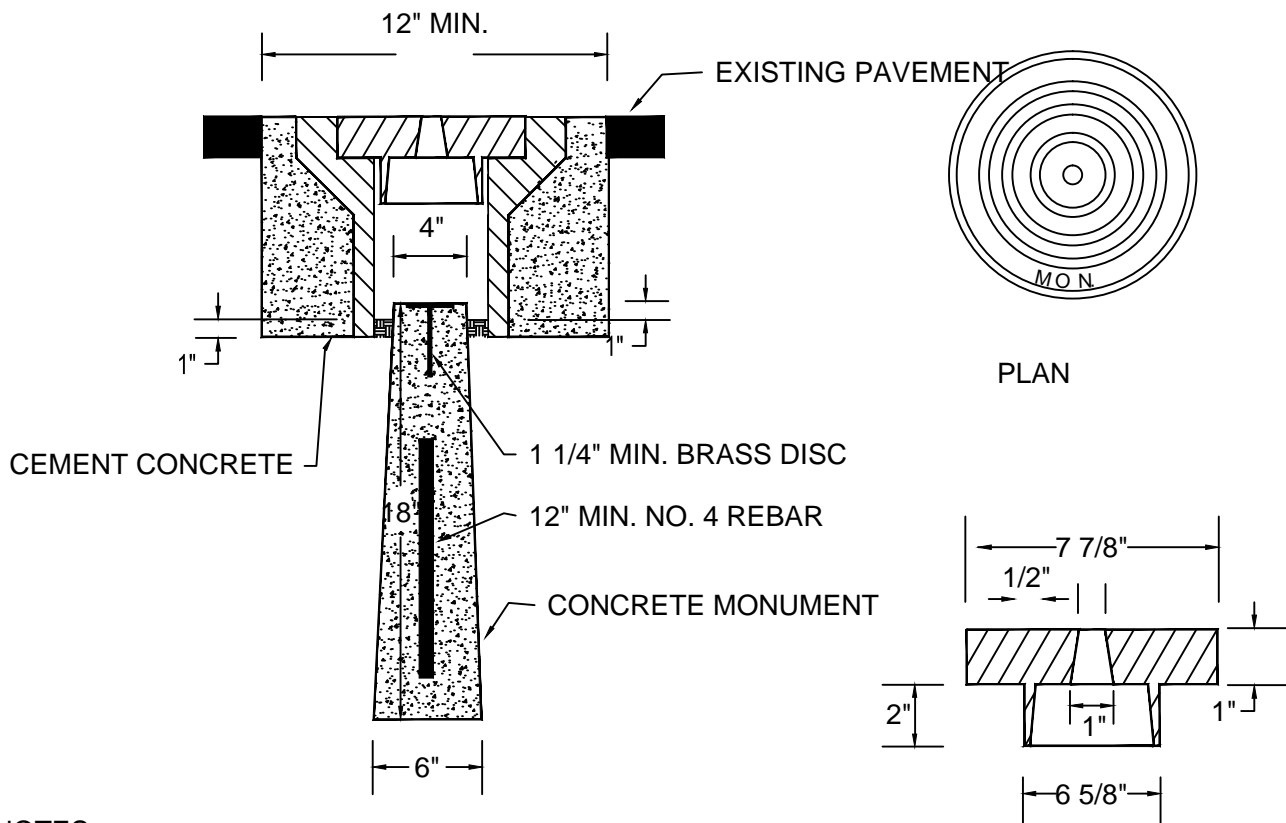
PLAN VIEW



TYPICAL SECTION

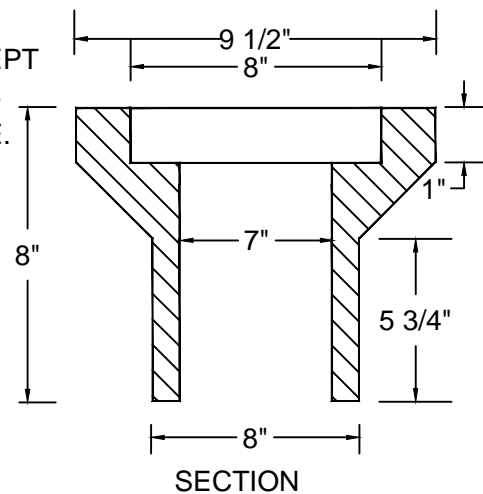
NOTES

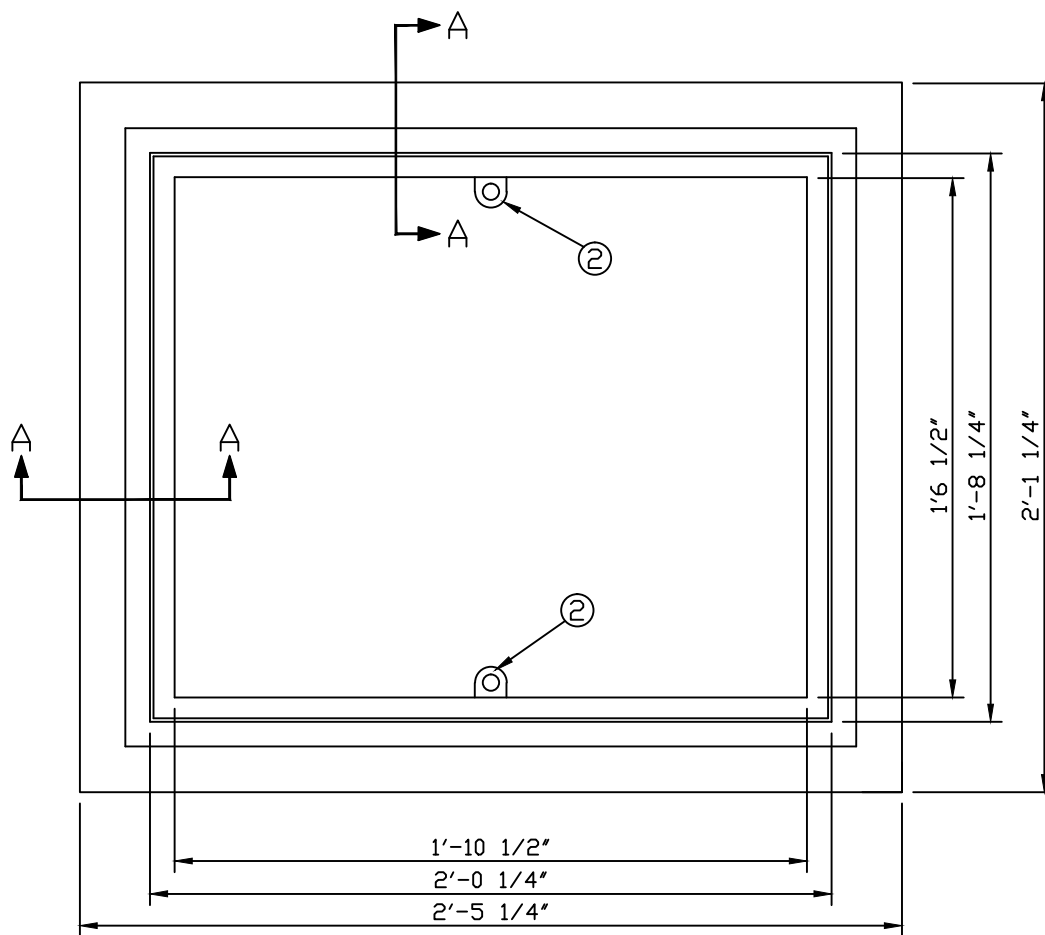
1. SIDEWALKS SHALL BE 4" THICK IN NON-TRAFFIC AREAS, 6" THICK IN TRAFFIC AREAS, AND SHALL BE 3000 PSI CONCRETE, WITH AIR ENTRAINMENT (MIN 4.5 %, MAX 7.5 %).
2. FULL DEPTH EXPANSION JOINTS SHALL GENERALLY BE PLACED TO MATCH THOSE PLACED IN ADJACENT CURB & GUTTER, WITH MAXIMUM SPACING OF 10 FEET. DUMMY JOINTS SHALL BE PLACED EVERY 5 FEET. FINAL SPACING DETERMINATION SHALL BE DECIDED BY THE INSPECTOR IN THE FIELD.
3. SUBGRADE SHALL BE COMPACTED AS SPECIFIED IN WSDOT STANDARDS AND SPECIFICATIONS.
4. THE FINISHED SIDEWALK SHALL BE COVERED BY CURING COMPOUND, WATERPROOF PAPER OR PLASTIC SHEETING IN THE EVENT OF RAIN OR OTHER INCLEMENT WEATHER. CURING TIME SHALL BE AS SPECIFIED BY WSDOT 6-02.3 (11).
5. ALL JOINTS SHALL BE CLEANED AND EDGED WITH AN EDGER HAVING A 1/4" RADIUS.
6. SIDEWALKS ARE TYPICALLY 5' WIDE, EXCEPT 7' IN SOME COMMERCIAL AREAS, OR AS APPROVED BY THE PUBLIC WORKS DIRECTOR. SIDEWALKS ARE WIDER THAN 7' IN CERTAIN ZONES (E.G. CITY CENTER)



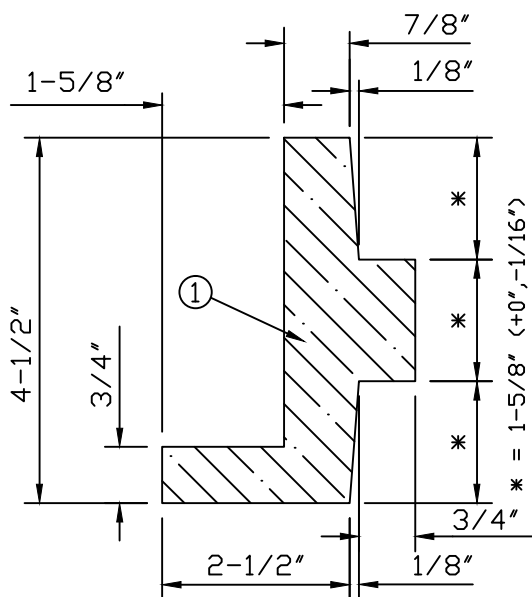
NOTES:

1. THE OFF-STREET MONUMENT SHALL BE THE SAME EXCEPT USING A NO. 8 REBAR AND WITHOUT A CASE AND COVER. THE OFF-STREET MONUMENT SHALL BE 3" ABOVE GRADE.
2. MONUMENT CASE AND COVER SHALL BE CAST IRON.
3. BRASS DISC SHALL BEAR LAND SURVEYOR'S REGISTRATION NUMBER.



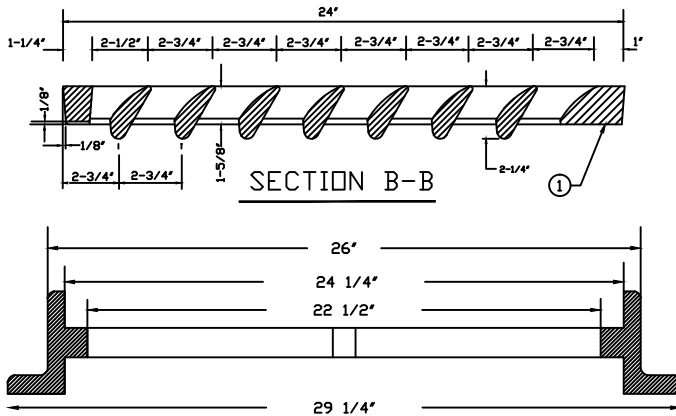
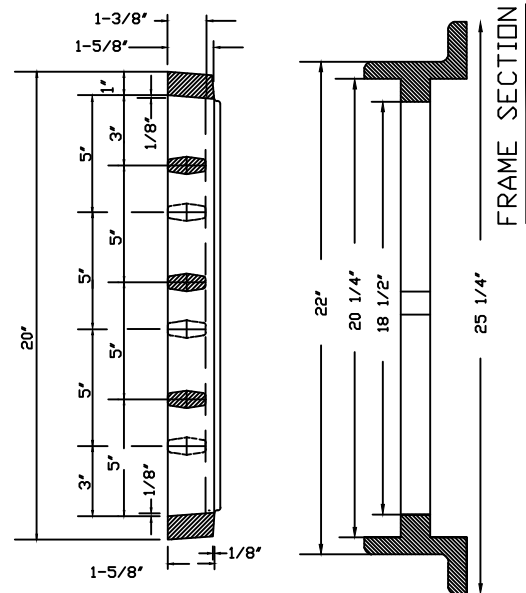
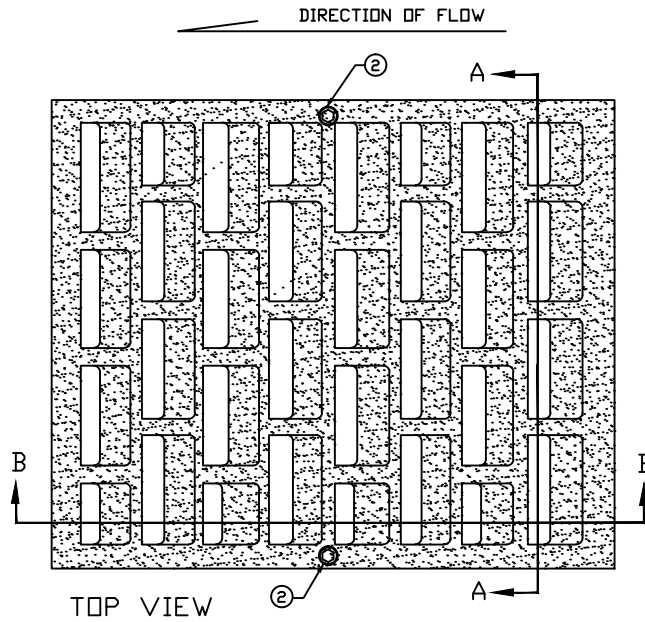


TOP VIEW



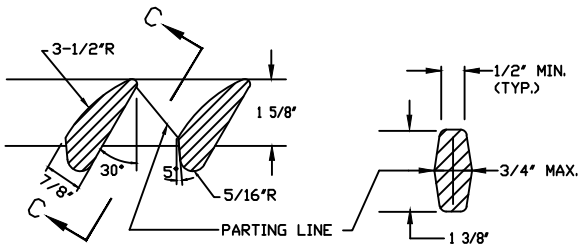
NOTES:

- ① MATERIAL USED SHALL BE CAST IRON PER ASTM-A48, CLASS 30. FRAME SHALL HAVE A BITUMINOUS COATING APPLIED.
- ② WHEN A LOCKING GRATE OR COVER IS REQUIRED THE FRAME SHALL BE FABRICATED SO AS TO ACCEPT TWO (2) 5/8" STAINLESS STEEL SOCKET HEAD CAP SCREWS OF GRATE OR COVER.
- ③ FOR APPROVED GRATES AND SOLID COVER SEE STD DWG'S 4-6 & 4-8

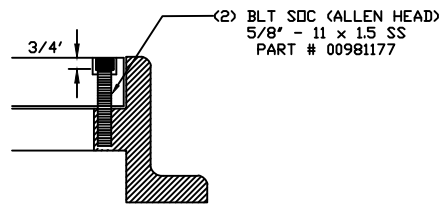


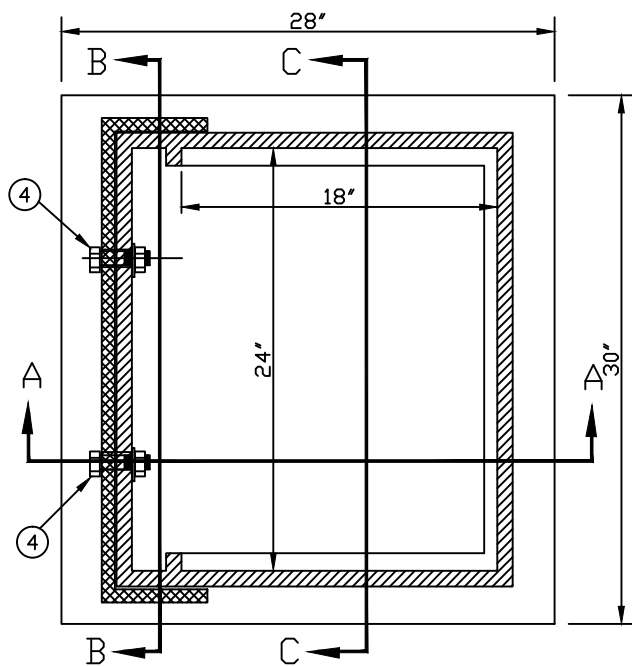
NOTE:

- ① MATERIAL USED SHALL BE DUCTILE IRON PER ASTM-A536, GRADE 80-55-06, WITH BITUMINOUS COATING.
- ② FRAME AND VANED GRATE LOCKABLE EAST JORDAN #00775013 & #00775043 OR EQUAL.
- ③ GRATE TO BE USED WITH FRAME SHOWN IN STD DWG 4-5. CAST IRON ASTM A48 CL35
- ④ THE NAME OF THE MANUFACTURER AND DIRECTION OF FLOW SHALL BE EMBOSSED ON THE TOP SURFACE OF EACH GRATE. LETTERING TO BE RECESSED 1/16".
- ⑤ DIMENSIONS SHALL HAVE A +/- TOLERANCE, EXCEPT AS NOTED.
- ⑥ EDGES SHALL HAVE A 1/8" RADIUS, 1/8" CHAMFER OR COMPLETE DEBURRING.
- ⑦ AS AN ALTERNATE, EIGHT PADS 1 1/2" X 3/4" X 1/8" INTEGRALLY CAST WITH THE GRATE MAY BE USED.
- ⑧ LOAD RATING HEAVY DUTY

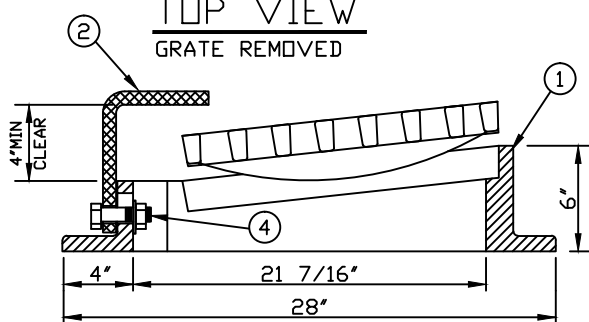


V.S.D.D.T. STD PLAN B-2B

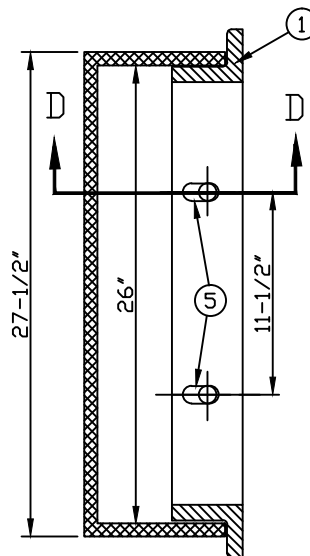




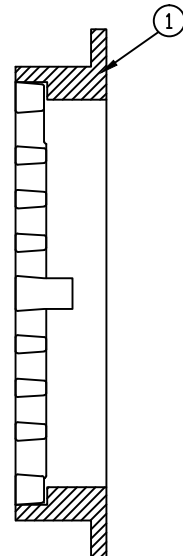
TOP VIEW
GRATE REMOVED



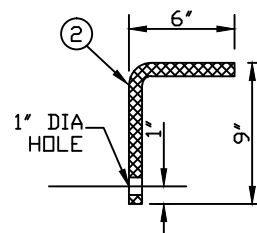
SECTION A-A
GRATE RAISED



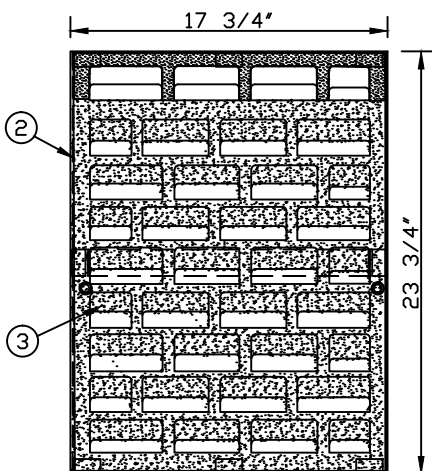
SECTION B-B



SECTION C-C



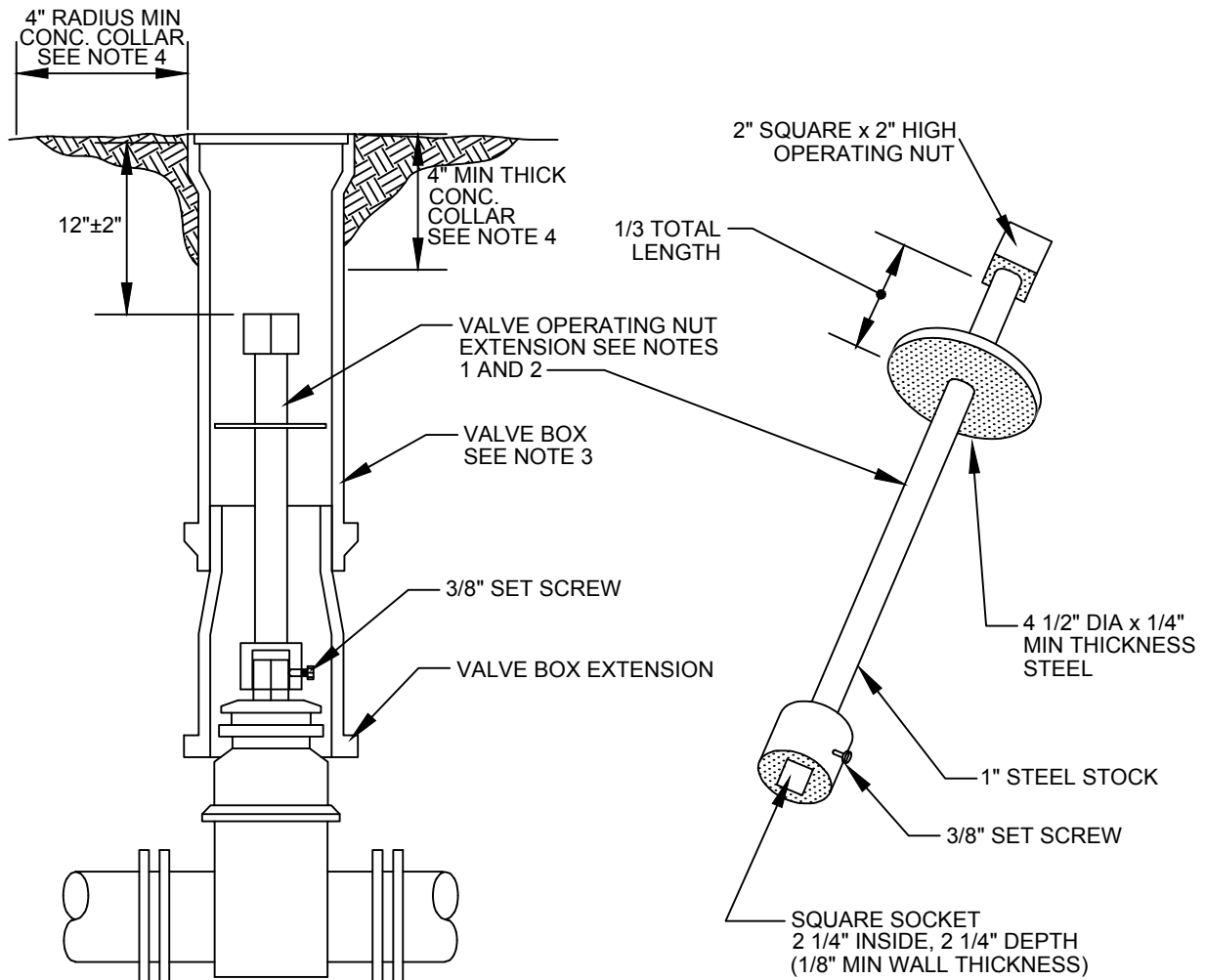
SECTION D-D



GRATE TOP VIEW

NOTES:

- ① FRAME MATERIAL SHALL BE CAST IRON ASTM A48, CLASS 35, WITH A BITUMINOUS COATING.
- ② GRATE AND COVER MATERIAL SHALL BE DUCTILE IRON ASTM A536, GRADE 80-55-06 WITH BITUMINOUS COATING. FRAME GRAY IRON ASTM A48 CL35. LOAD RATING HEAVY DUTY.
- ③ FRAME AND GRATE TO BE EAST JORDAN PRODUCT #00770112, 00770178 & 00770168 OR EQUAL
- ④ GRATE TO BE LOCKABLE. PROVIDE 3/4" BOLT, NUT AND WASHERS
- ⑤ ADJUSTMENT SLOT IN FRAME CASTING APPROXIMATELY 1"x2". VERTICAL PLACEMENT TO PROVIDE MIN CLEARANCE BETWEEN GRATE AND COVER PLATE.
- ⑥ SEE STANDARD DWG 4-10 FOR INSTALLATION DETAILS.

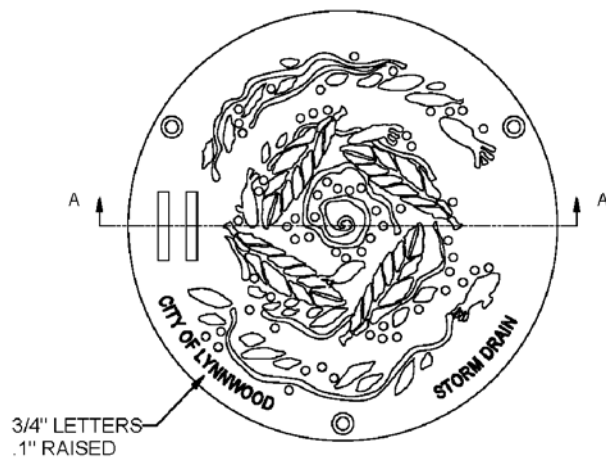


VALVE BOX AND EXTENSION

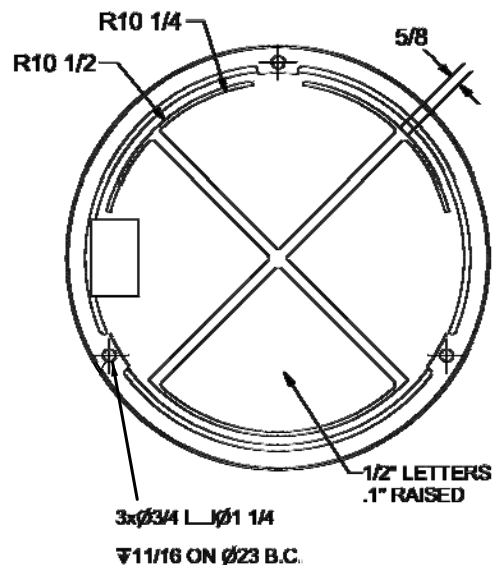
VALVE OPERATING NUT EXTENSION

NOTES:

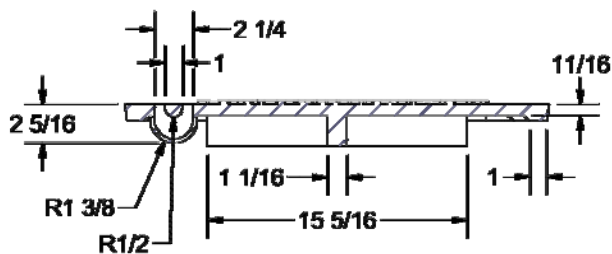
1. VALVE OPERATING NUT EXTENSIONS ARE REQUIRED WHEN THE VALVE NUT IS MORE THAN THREE (3) FEET BELOW FINISHED GRADE. EXTENSIONS ARE TO BE A MINIMUM OF ONE (1) FOOT LONG. ONLY ONE EXTENSION WILL BE ALLOWED PER VALVE.
2. ALL VALVE OPERATING NUT EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH TWO (2) COATS OF METAL RUST RESISTANT PAINT.
3. VALVE BOXES SHALL BE CAST IRON, TWO PIECE UNITS AND CAST IRON VALVE BOX LID WITH TABS ALIGNED IN THE DIRECTION OF THE FLOW OF WATER.
4. VALVE BOXES TO BE ADJUSTED FLUSH WITH FINISHED PAVING. VALVE BOX COLLARS REQUIRED IF VALVE BOX IS OUT OF PAVING AREA. COLLARS TO BE FLUSH WITH FINISHED LANDSCAPE, SOD, OR UNIMPROVED AREAS. SLOPE COLLARS AWAY FROM LID AT 2% (TYP).



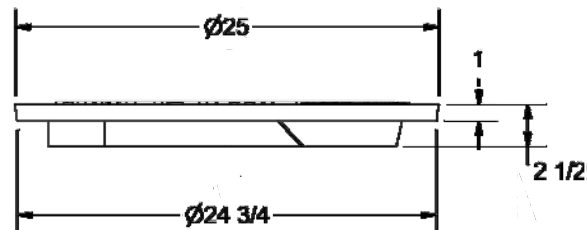
TOP OF COVER



BOTTOM OF COVER



SECTION A-A

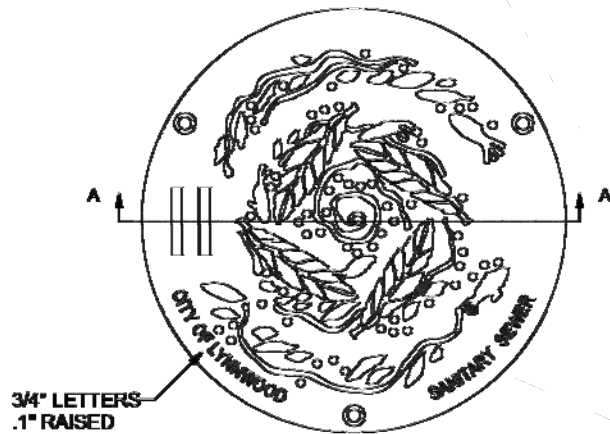


SIDE OF COVER

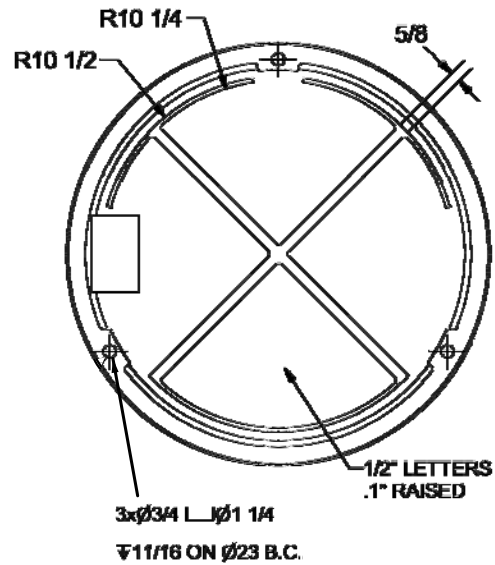


NOTES

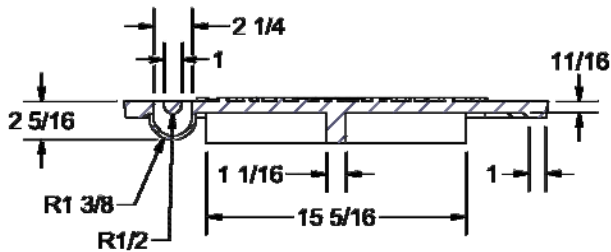
1. STORM MANHOLE COVER SHALL BE EQUAL TO OLYMPIC FOUNDRY MH30 PART NO. 11-2948.
2. THIS DETAIL FOR STORM MANHOLES IN RIGHT-OF-WAY ONLY. ALL OTHER MANHOLES SHALL ONLY BE MARKED "STORM".



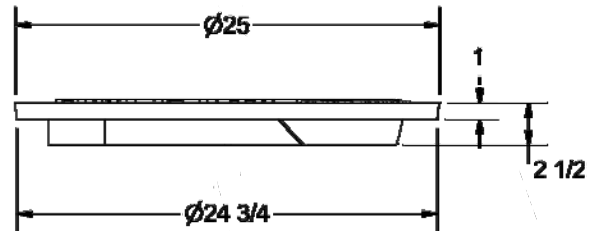
TOP OF COVER



BOTTOM OF COVER



SECTION A-A



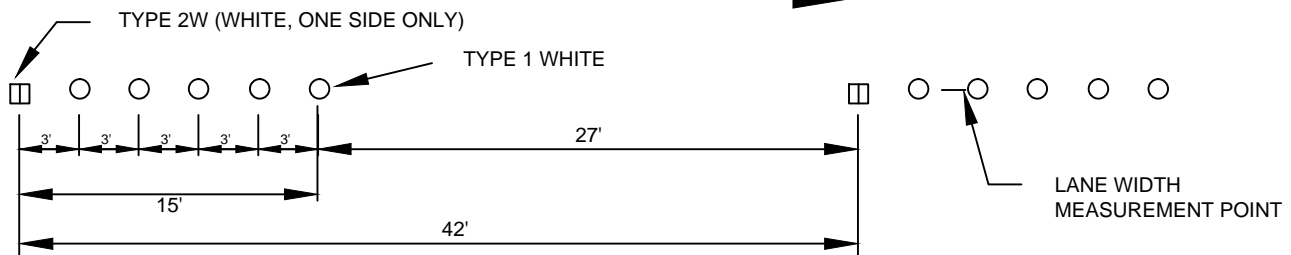
SIDE OF COVER



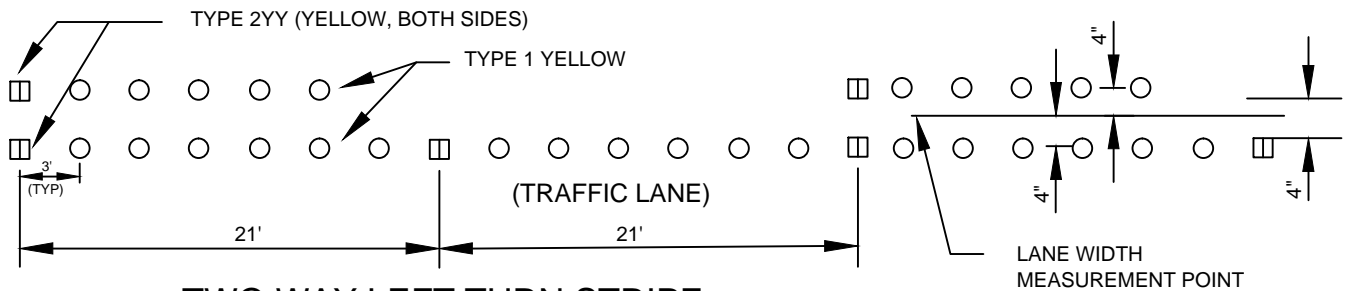
NOTES

1. SEWER MANHOLE COVER SHALL BE EQUAL TO OLYMPIC FOUNDRY MH30 PART NO. 11-2948.
2. THIS DETAIL FOR SEWER MANHOLES IN RIGHT-OF-WAY ONLY. ALL OTHER MANHOLES SHALL ONLY BE MARKED "SEWER".

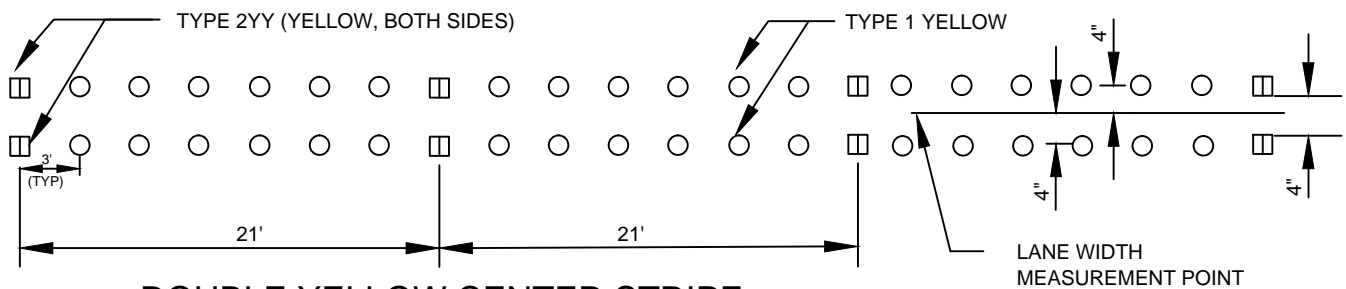
TYP TRAFFIC FLOW →



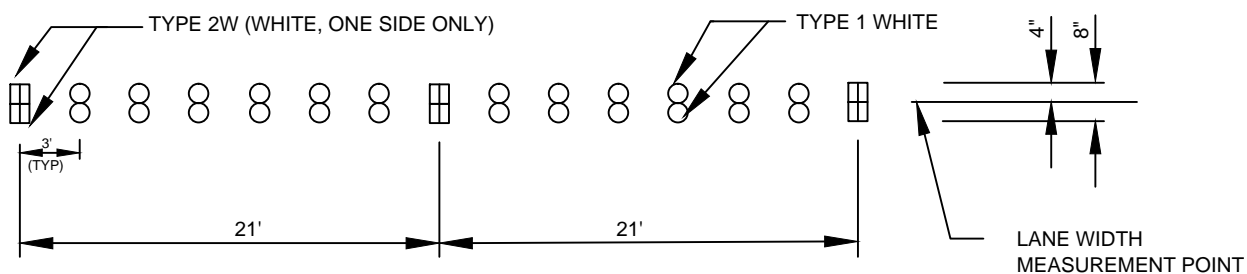
LANE STRIPE



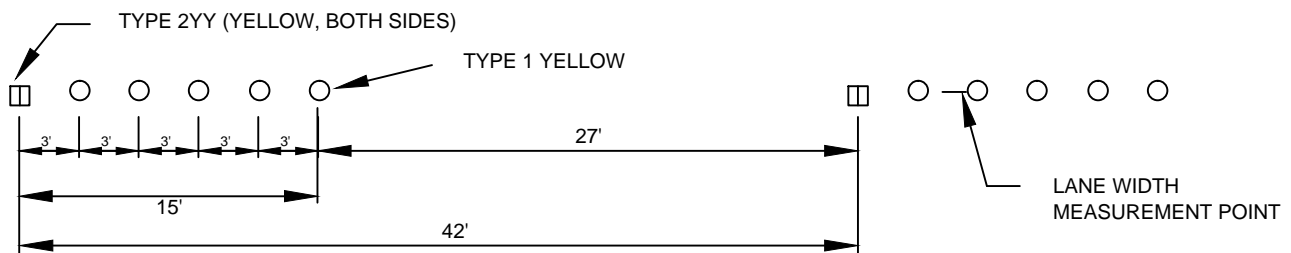
TWO WAY LEFT TURN STRIPE



DOUBLE YELLOW CENTER STRIPE

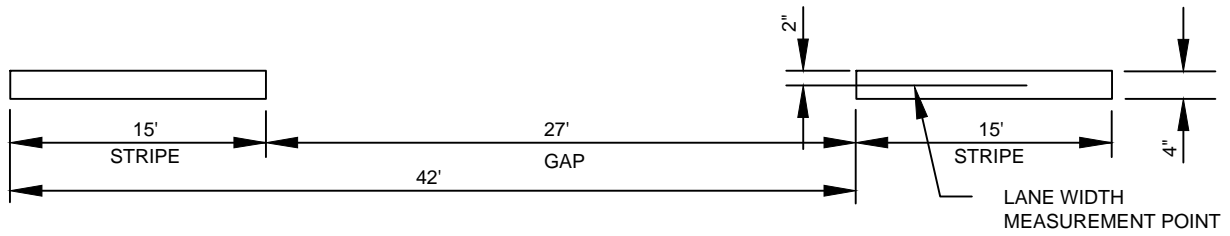


GORE STRIPE

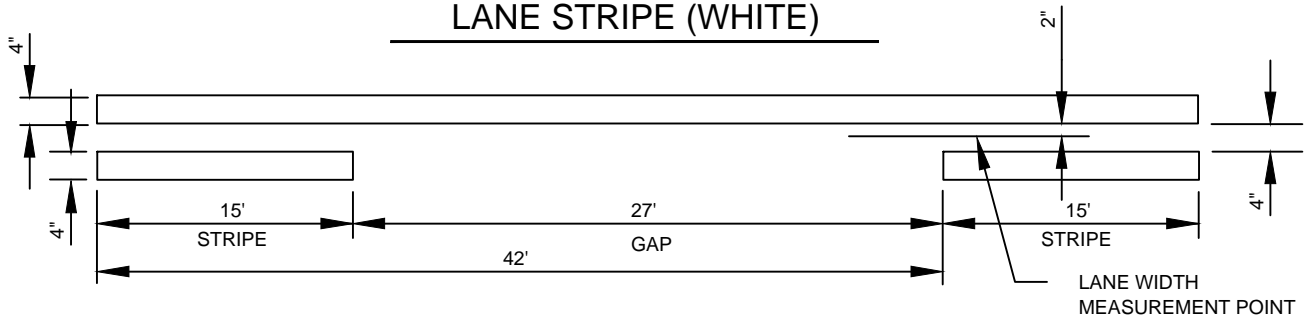


SKIP CENTER STRIPE

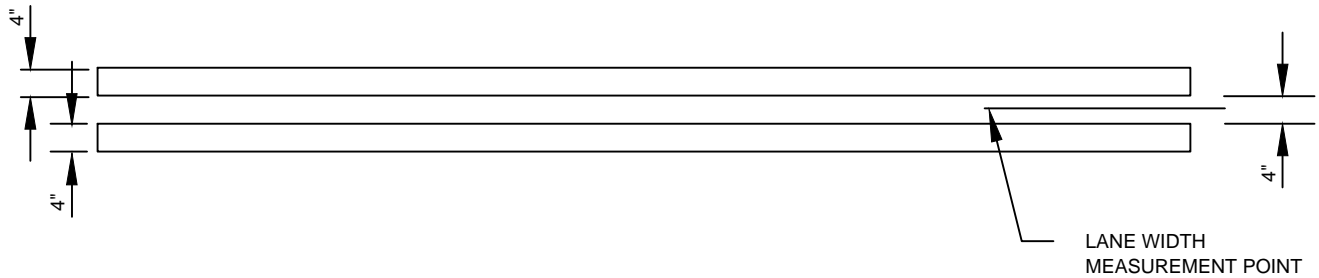
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SCALE	NONE
REVISION DATE	03/02
DEPARTMENT	PW



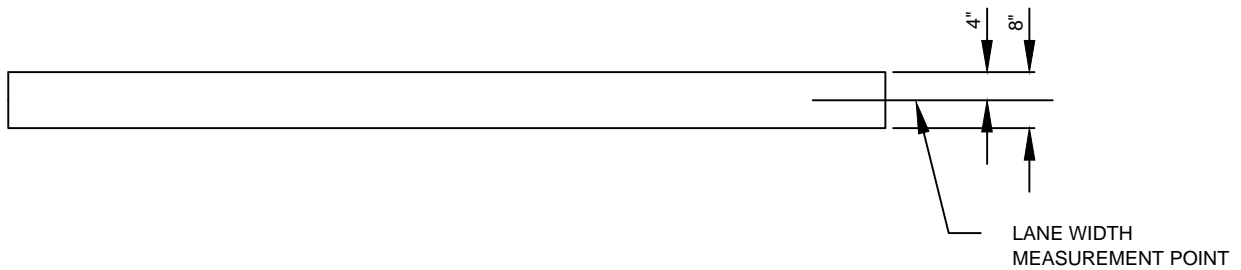
LANE STRIPE (WHITE)



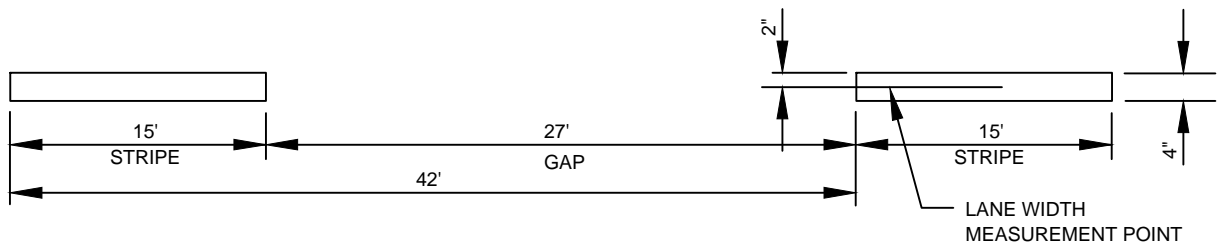
TWO WAY LEFT TURN STRIPE (YELLOW)



DOUBLE YELLOW CENTER STRIPE



GORE STRIPE (WHITE)



SKIP CENTER STRIPE (YELLOW)

LOCATE IN
THE CENTER OF
THE LANE

3'4"
TYPICAL
MODULE
1'4"
1'

6'-0"

6'-0"

8' 4' 2' 2'

8' TYPICAL

CENTER EACH
MODULE ON
A LANE
MARKING

TYPE II
WHITE

TYPE I
WHITE

TYPE II
YELLOW

TYPE I
YELLOW

FOR LANES < 12'

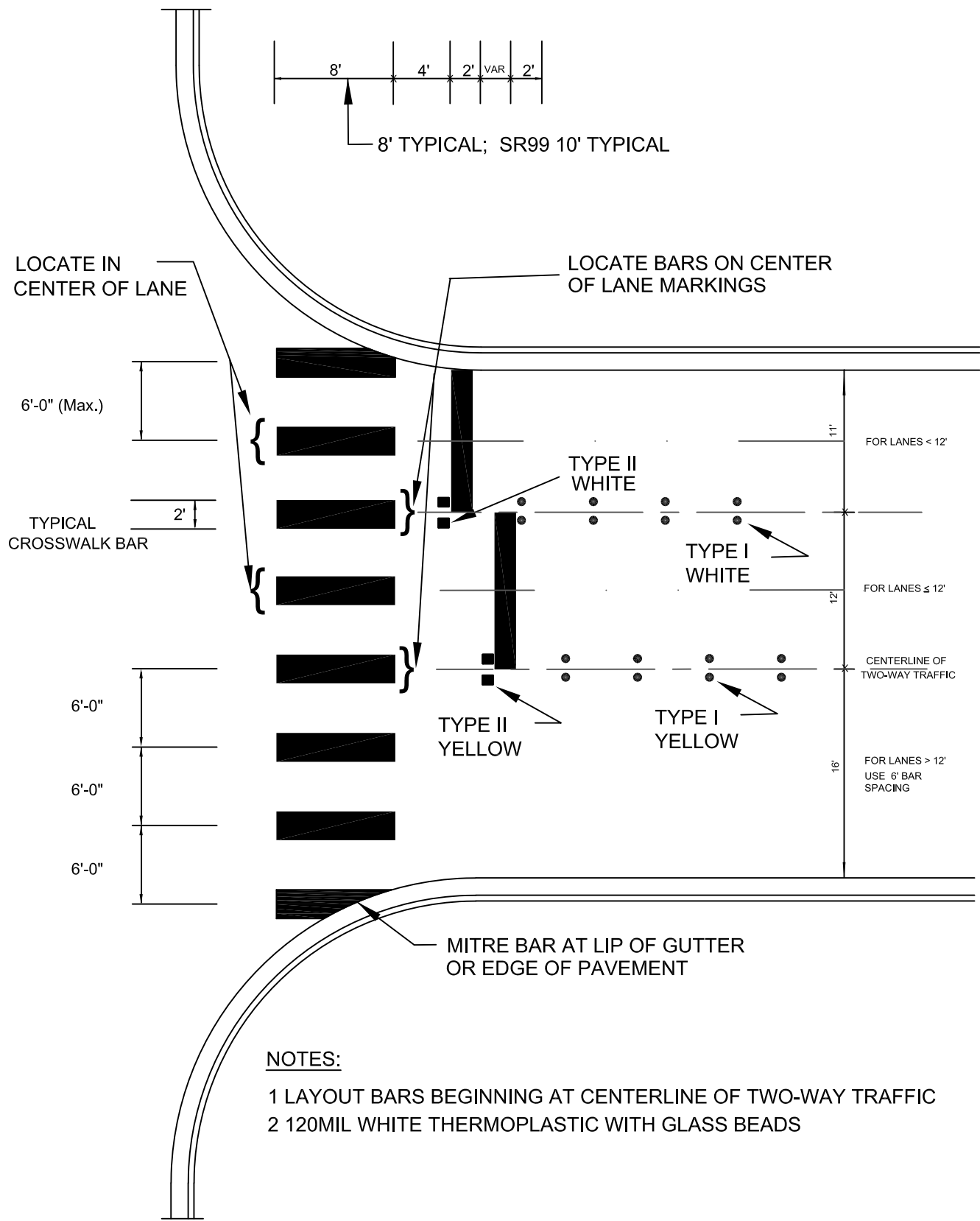
FOR LANES < 12'

FOR LANES > 12'

USE A 6'
MODULE SPACING

NOTES:

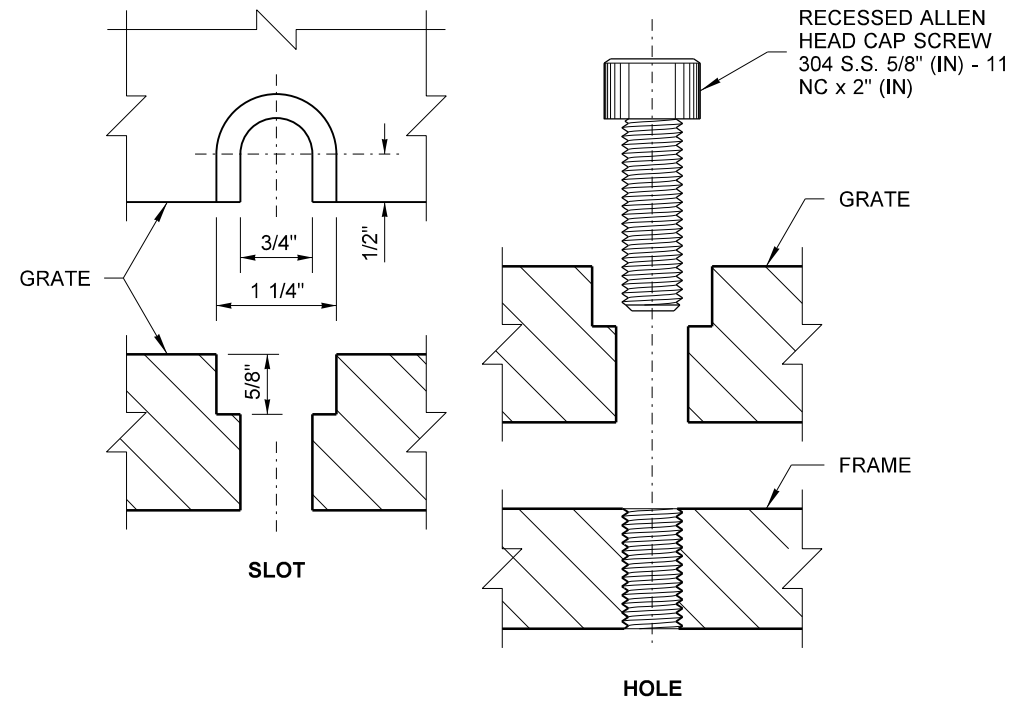
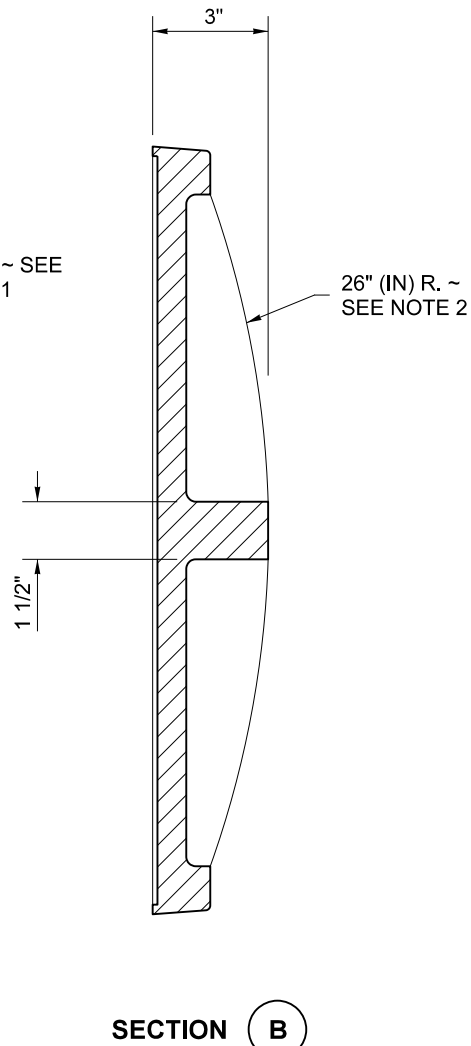
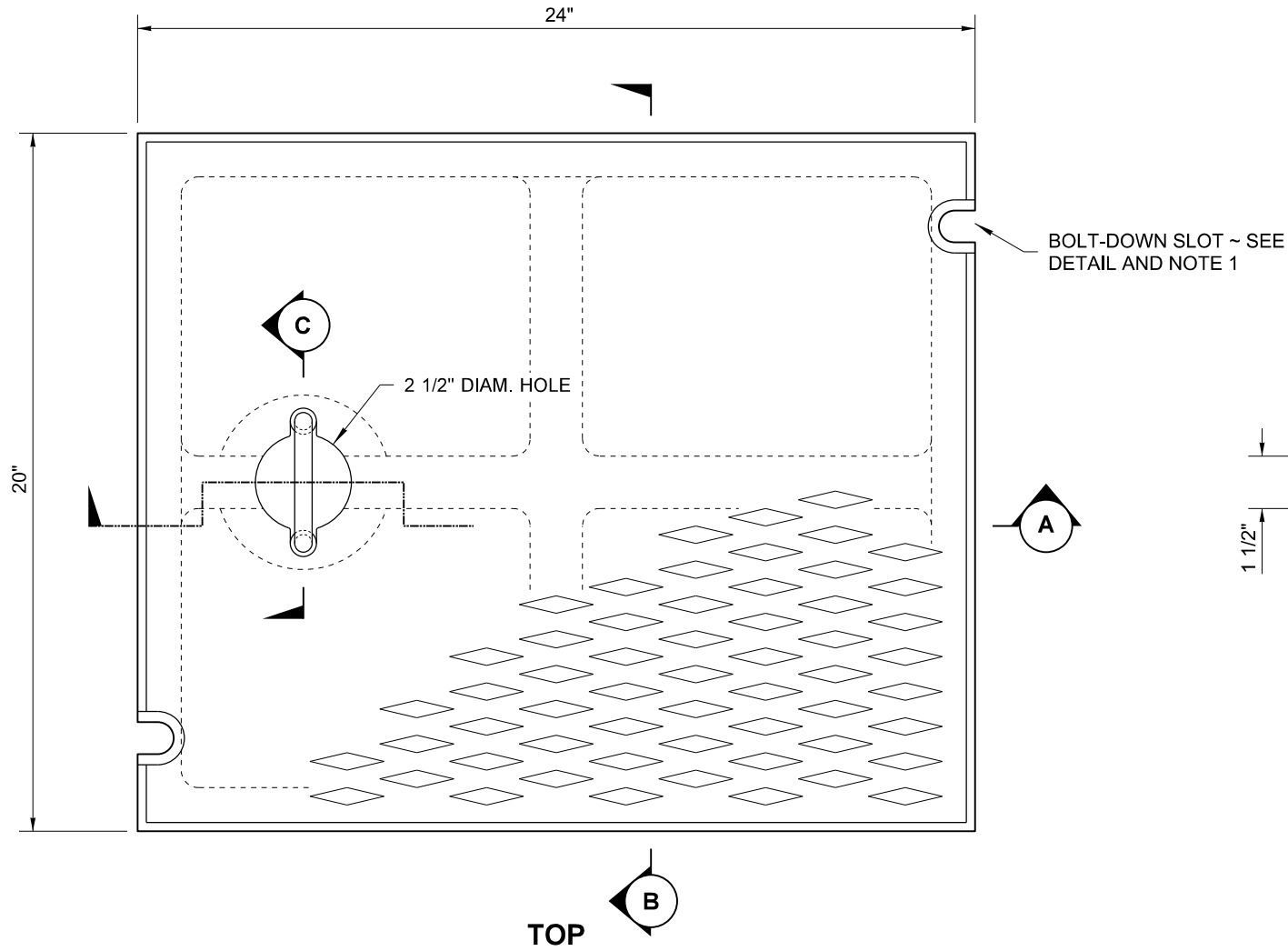
1 120MIL WHITE THERMOPLASTIC WITH GLASS BEADS



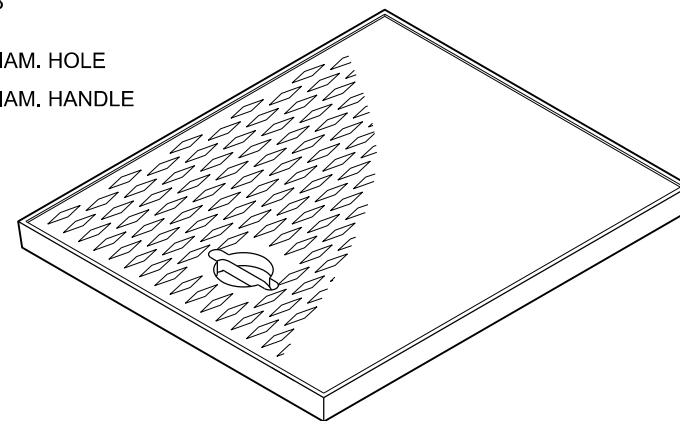
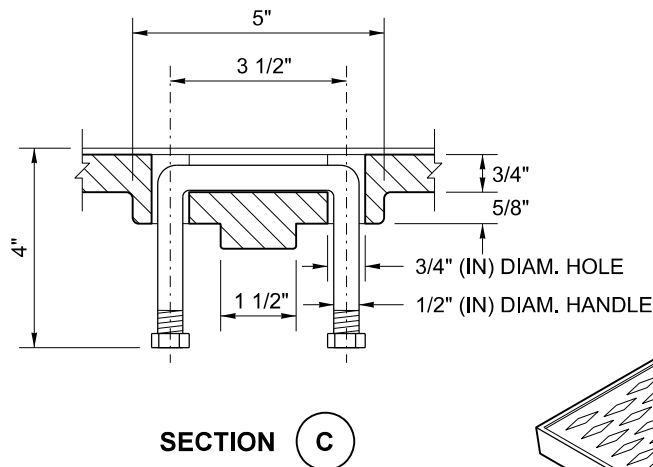
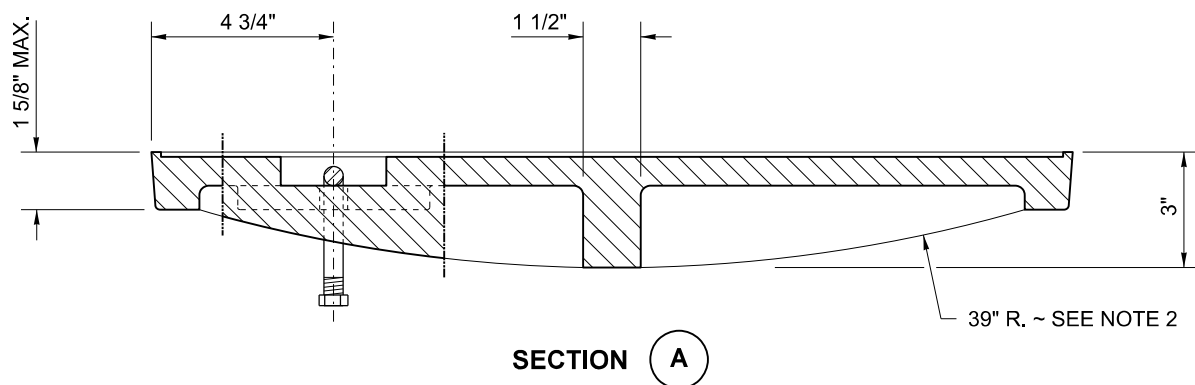
NOTES:

- 1 LAYOUT BARS BEGINNING AT CENTERLINE OF TWO-WAY TRAFFIC
- 2 120MIL WHITE THERMOPLASTIC WITH GLASS BEADS

DRAWING NUMBER	STD7-20A
SCALE	NONE
REVISION DATE	11/18
DEPARTMENT	PW



BOLT-DOWN DETAILS
SEE NOTE 1

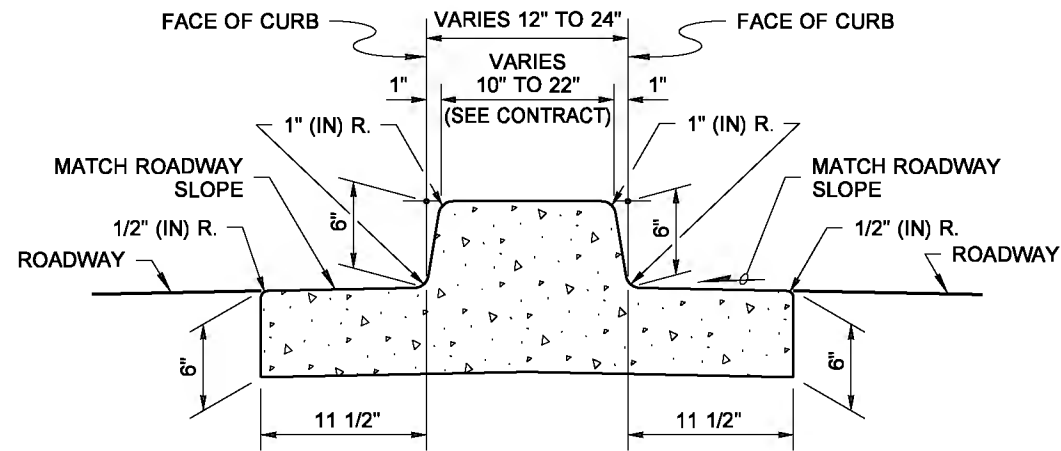


**RECTANGULAR SOLID
METAL COVER**

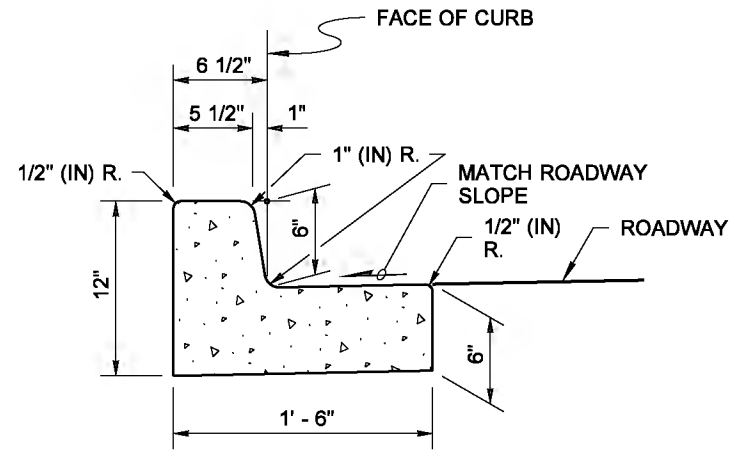
STANDARD PLAN B-30.20-04

SHEET 1 OF 1 SHEET

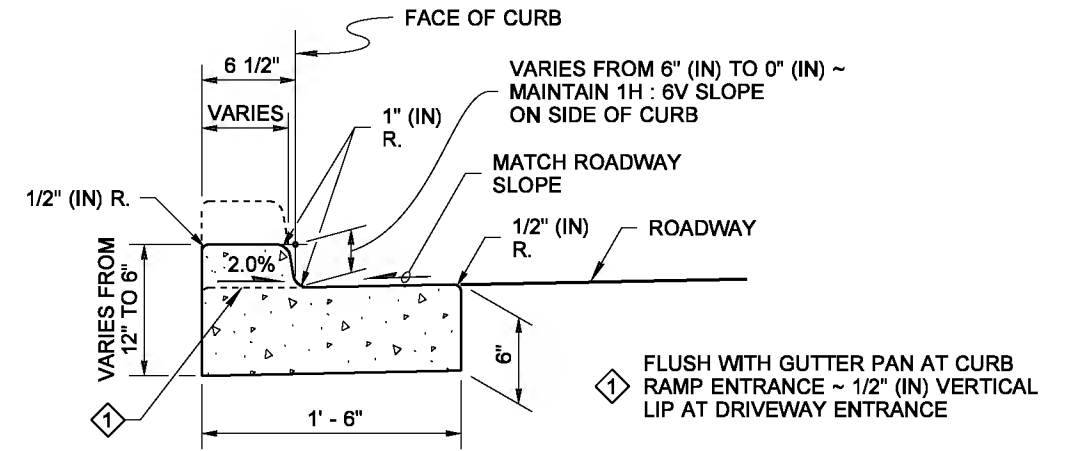
APPROVED FOR PUBLICATION



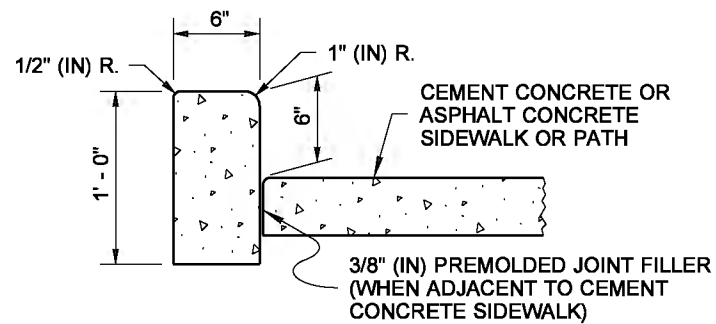
**DUAL-FACED CEMENT CONCRETE
TRAFFIC CURB AND GUTTER**



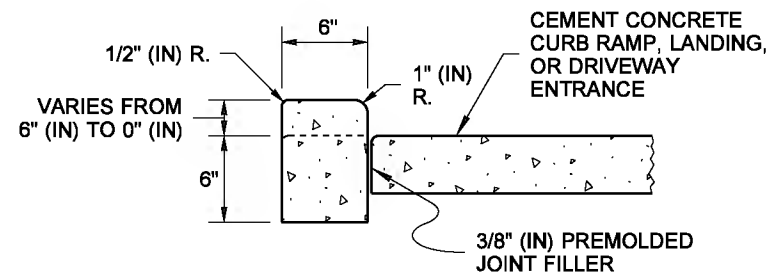
**CEMENT CONCRETE
TRAFFIC CURB AND GUTTER**



**DEPRESSED CURB SECTION
AT CURB RAMPS AND
DRIVEWAY ENTRANCES**



CEMENT CONCRETE PEDESTRIAN CURB

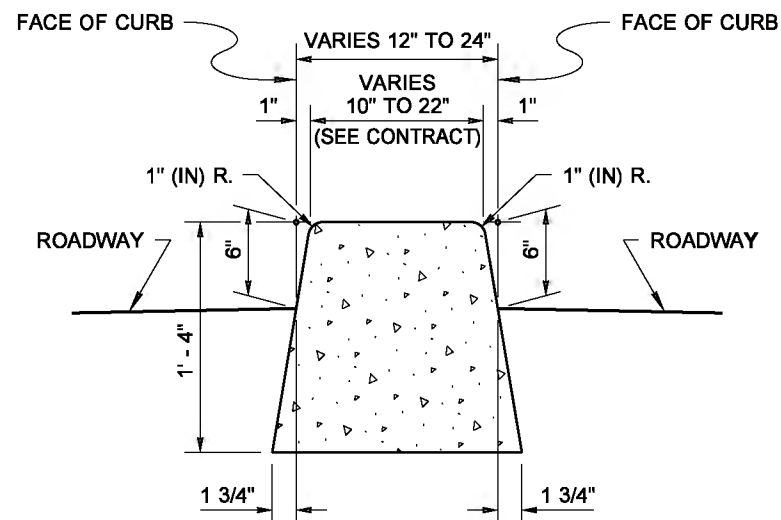


**CEMENT CONCRETE PEDESTRIAN CURB
AT CURB RAMPS, LANDINGS,
AND DRIVEWAY ENTRANCES**

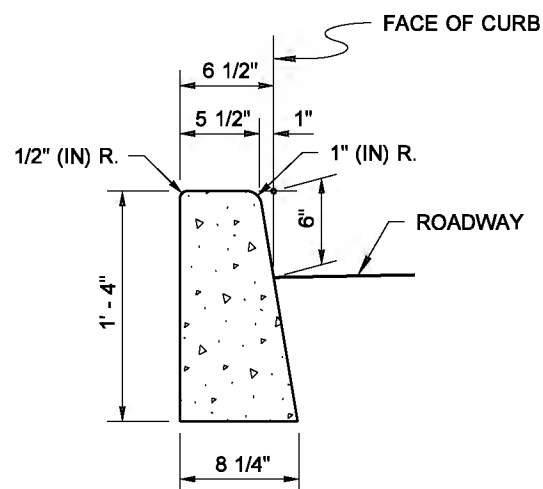
NOTE

1. See **Standard Plan F-30.10** for Curb Expansion and Contraction Joint spacing and see **Standard Specification Sections 8-04 and 9-04** for additional requirements.

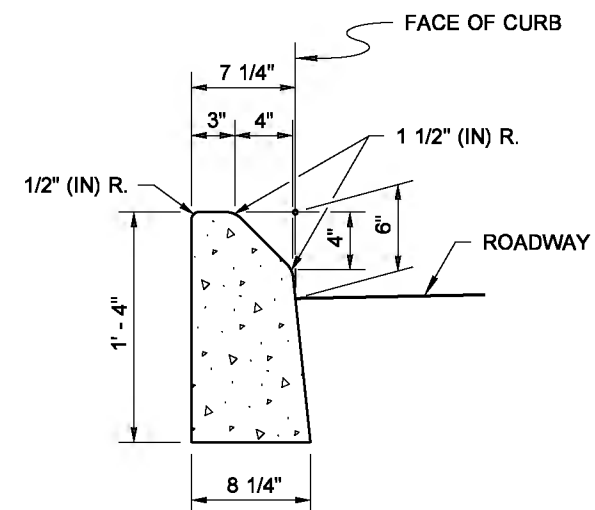
DRAWN BY: FERN LIDDELL



**DUAL-FACED CEMENT
CONCRETE TRAFFIC CURB**



**CEMENT CONCRETE
TRAFFIC CURB**



**MOUNTABLE CEMENT
CONCRETE TRAFFIC CURB**



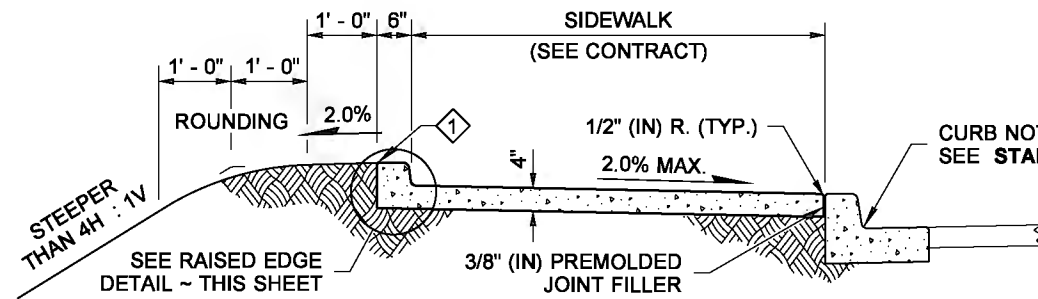
CEMENT CONCRETE CURBS

STANDARD PLAN F-10.12-03

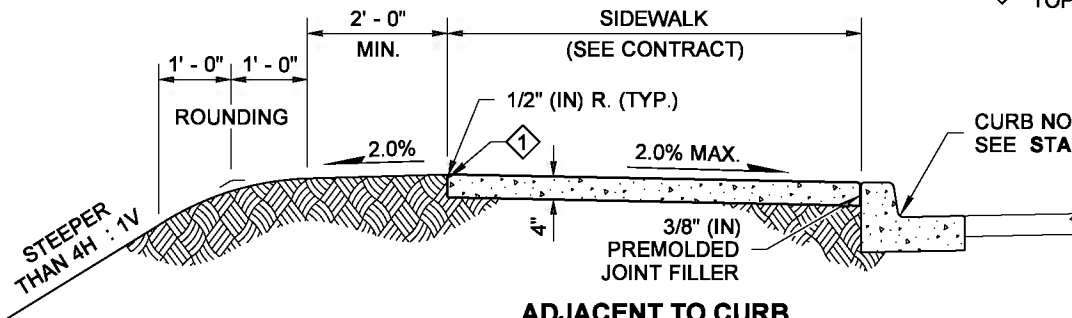
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

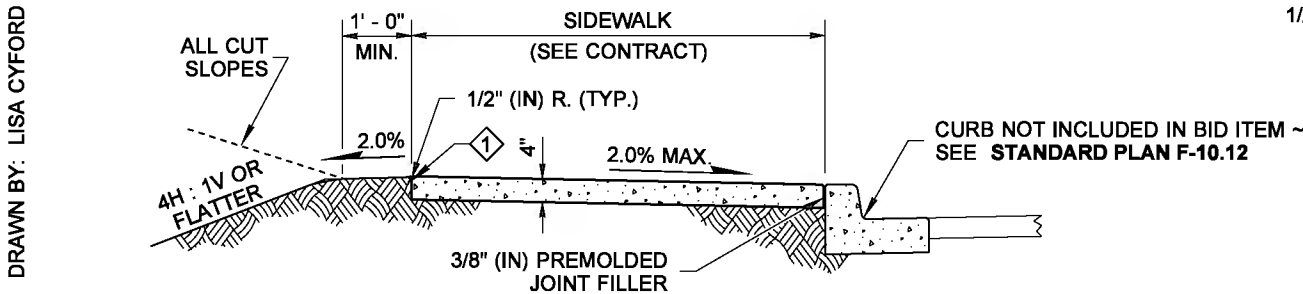
STATE DESIGN ENGINEER
Washington State Department of Transportation



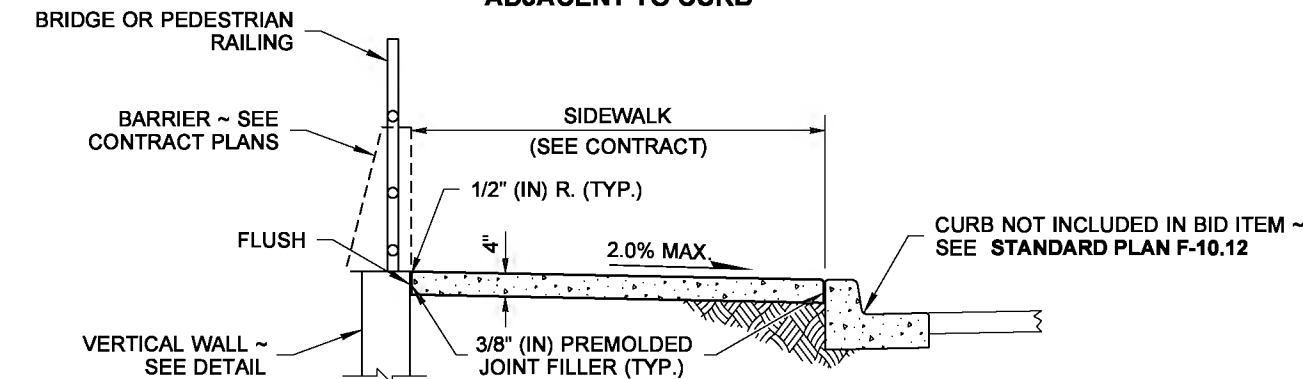
WITH RAISED EDGE



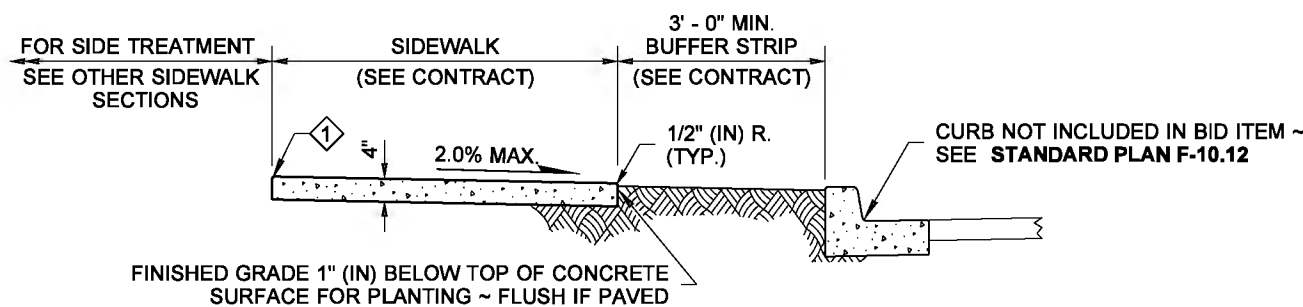
ADJACENT TO CURB
(STEEP FILL SLOPES)



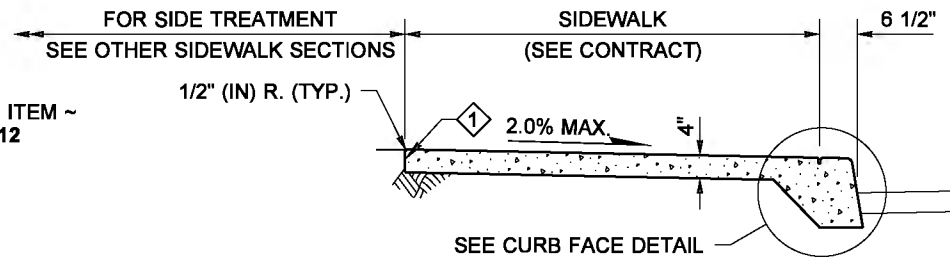
ADJACENT TO CURB



ADJACENT TO CURB AND RAILING OR WALL



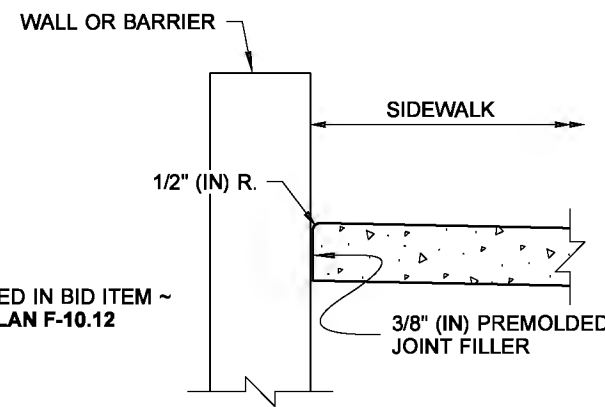
ADJACENT TO BUFFER STRIP



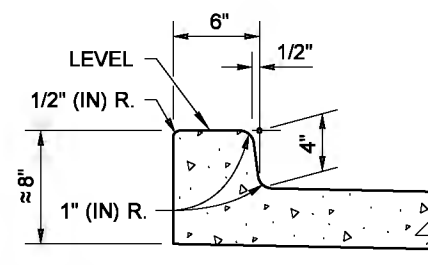
MONOLITHIC CEMENT CONCRETE
CURB AND SIDEWALK

NOTE

- Four feet of the sidewalk width shall be the minimum pedestrian accessible route free of vertical and horizontal obstructions. Gratings, Access Covers, Junction Boxes, Cable Vaults, Pull Boxes and other appurtenances within the sidewalk must have slip resistant surfaces, be flush with surface, and match grade of the sidewalk.

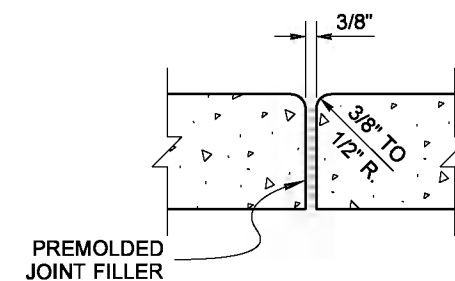


SIDEWALK ADJACENT TO WALL DETAIL

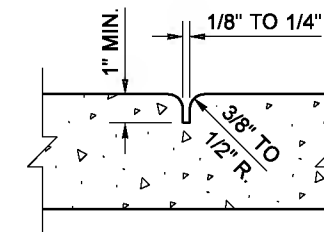


RAISED EDGE DETAIL

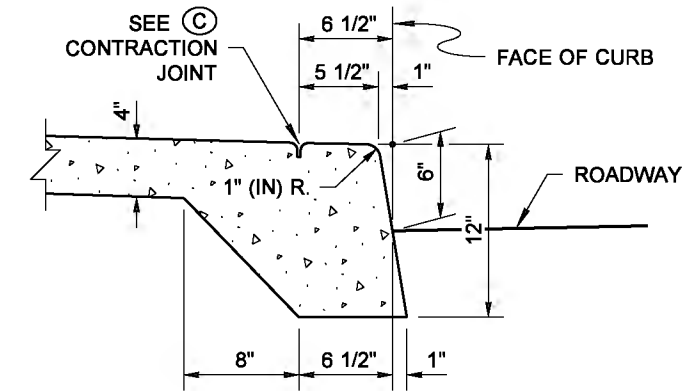
EXTEND SIDEWALK TRANSVERSE JOINTS TO INCLUDE RAISED EDGE



Ⓔ EXPANSION JOINT

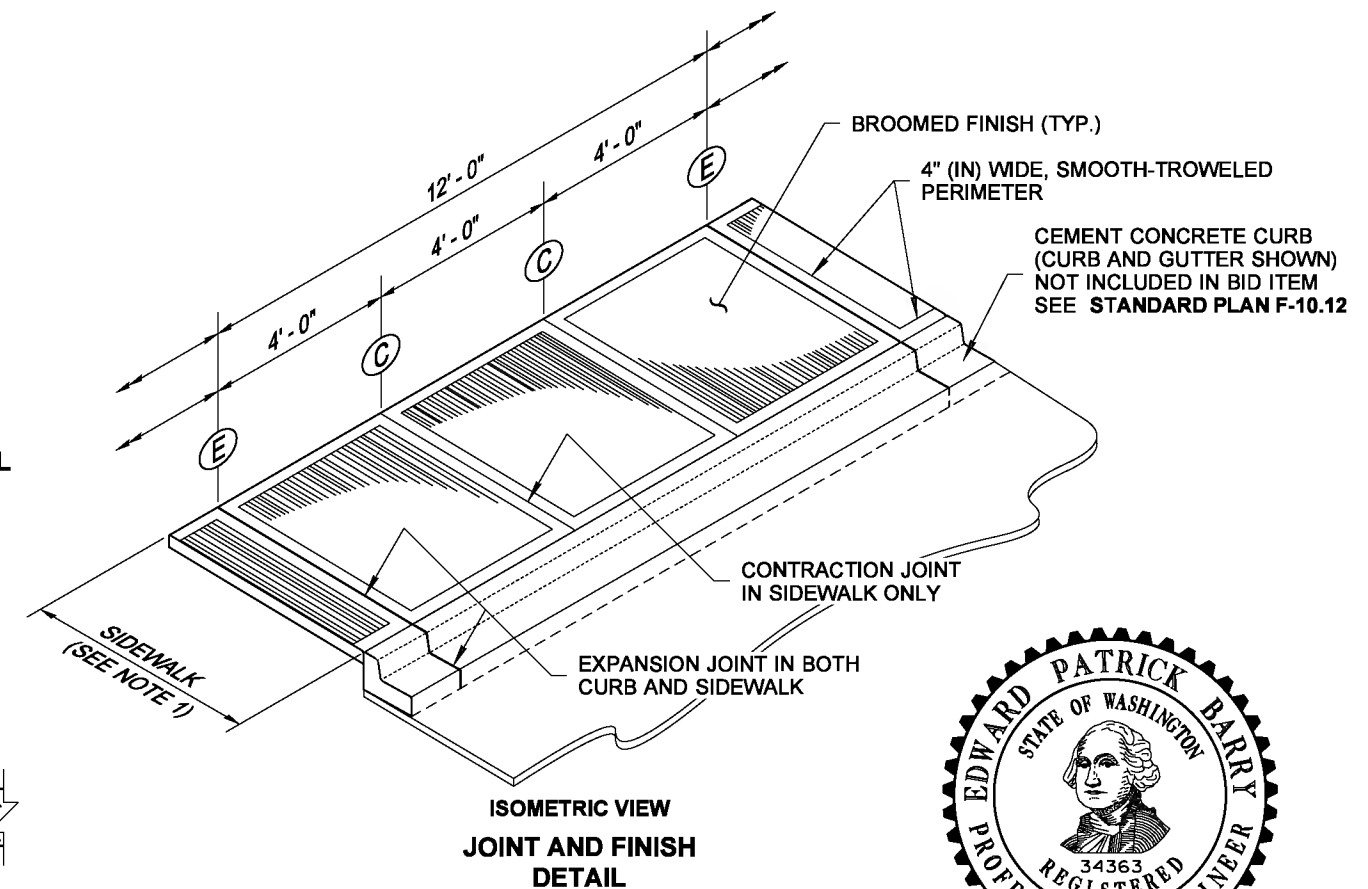


Ⓒ CONTRACTION JOINT



CURB FACE DETAIL

EXTEND SIDEWALK TRANSVERSE EXPANSION JOINTS TO INCLUDE CURB (FULL DEPTH)



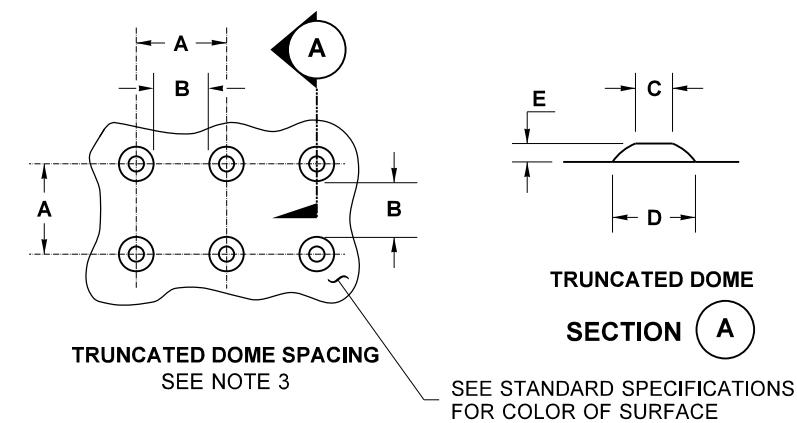
**CEMENT CONCRETE
SIDEWALK
STANDARD PLAN F-30.10-03**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

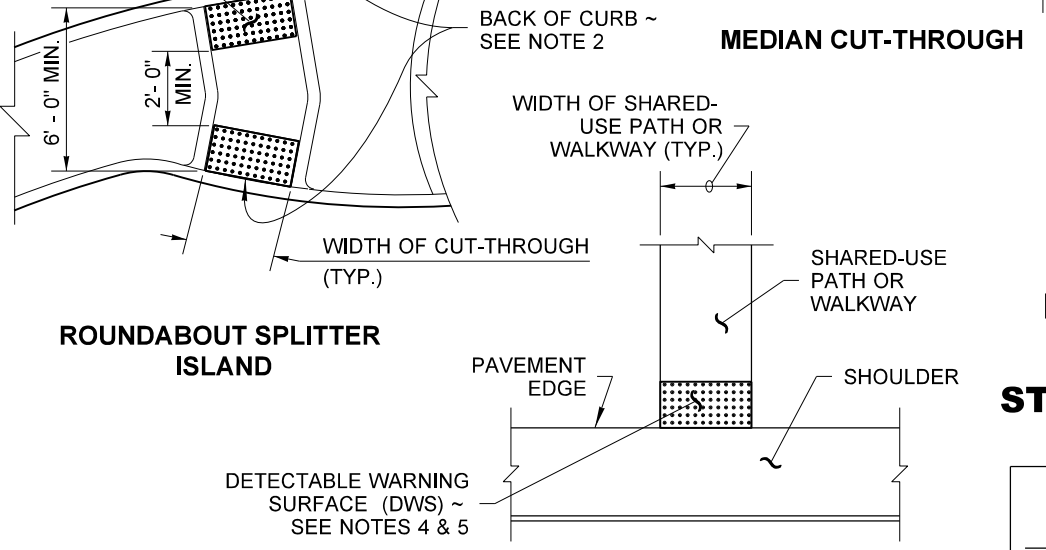
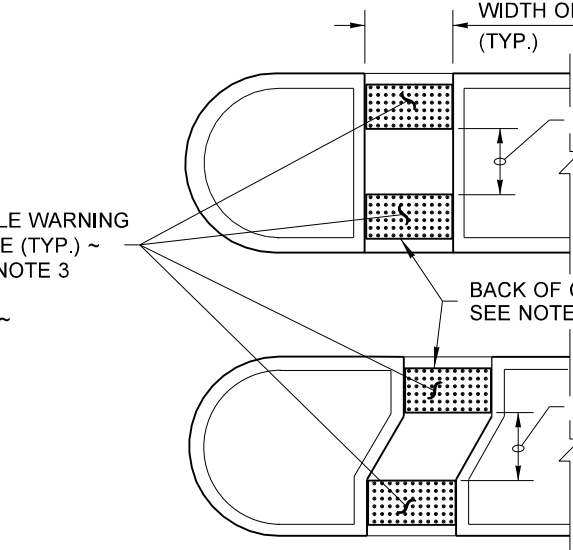
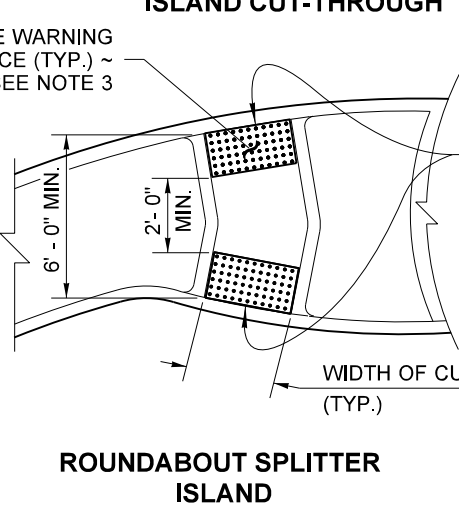
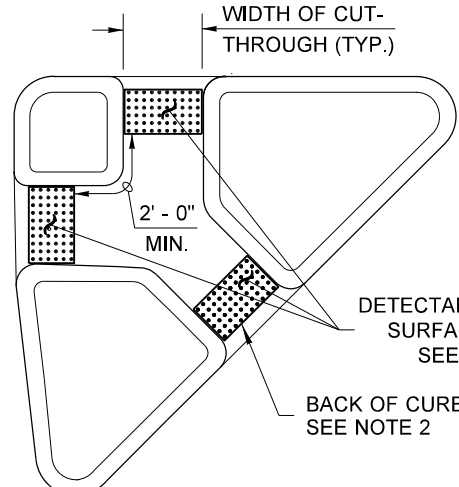
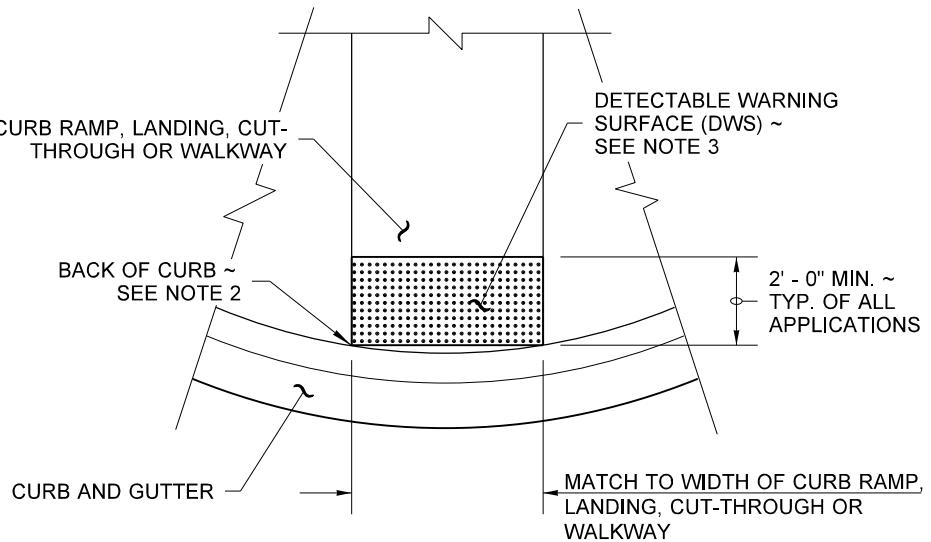
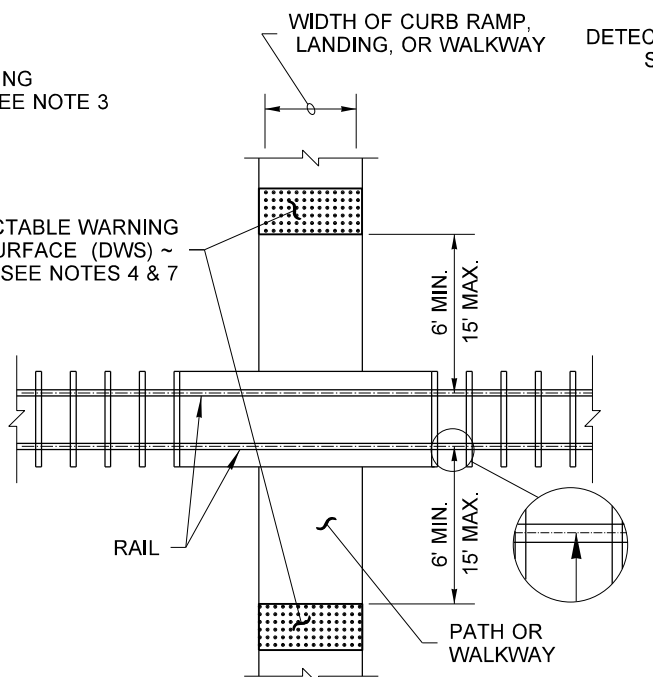
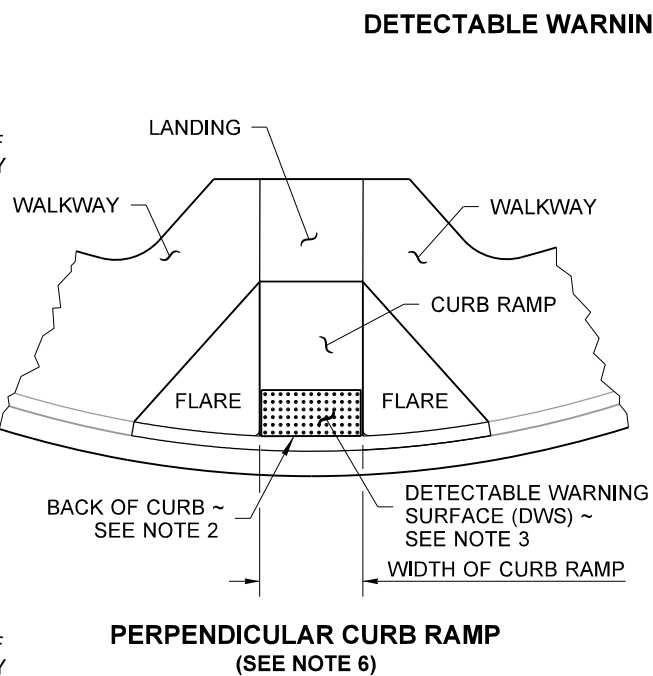
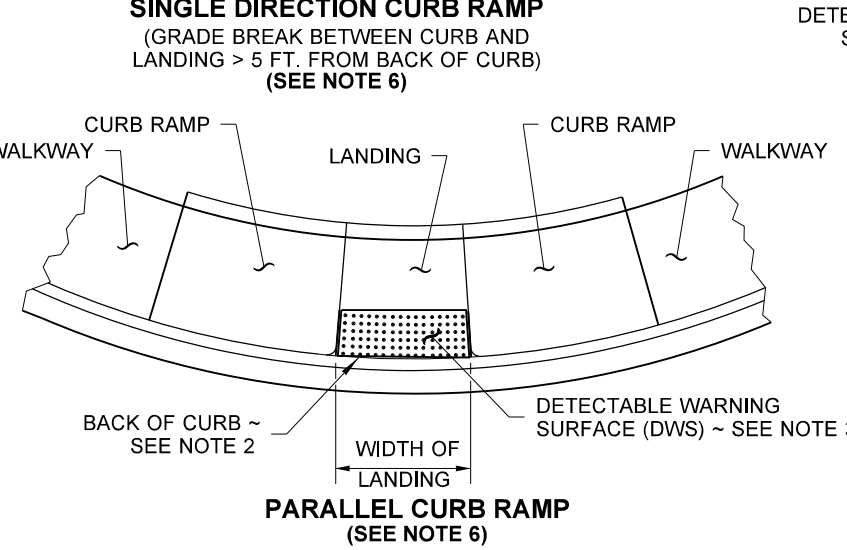
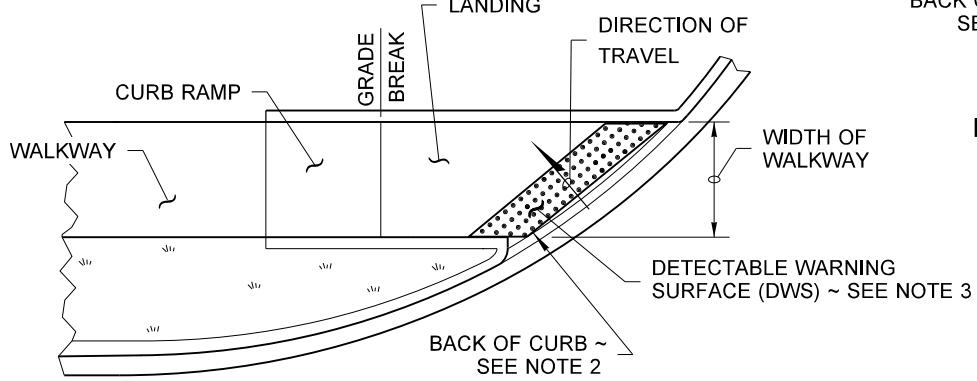
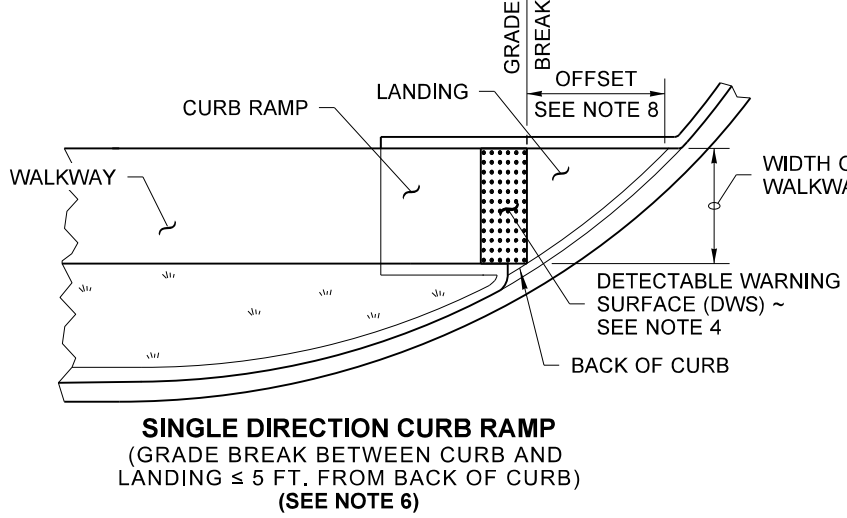
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	—
C	0.45"	0.90"
D	0.9"	1.40"
E	0.2"	0.2"

TRUNCATED DOME DETAILS



NOTES

1. The Detectable Warning Surface (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the Manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2 inches on each side of the DWS is permitted.
2. The Detectable Warning Surface (DWS) shall be placed at the back of curb, with the two leading corners of the DWS panel placed adjacent to the back of the curb, and with no more than a 2 inch gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2 inches from the back of the curb is permitted (measured at the leading corners of the DWS panel).
3. The rows of truncated domes shall be aligned to be perpendicular to the grade break at the back of curb.
4. The rows of truncated domes shall be aligned to be parallel to the direction of travel.
5. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
6. See **Standard Plans** for sidewalk and curb ramp details.
7. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail.
8. When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.



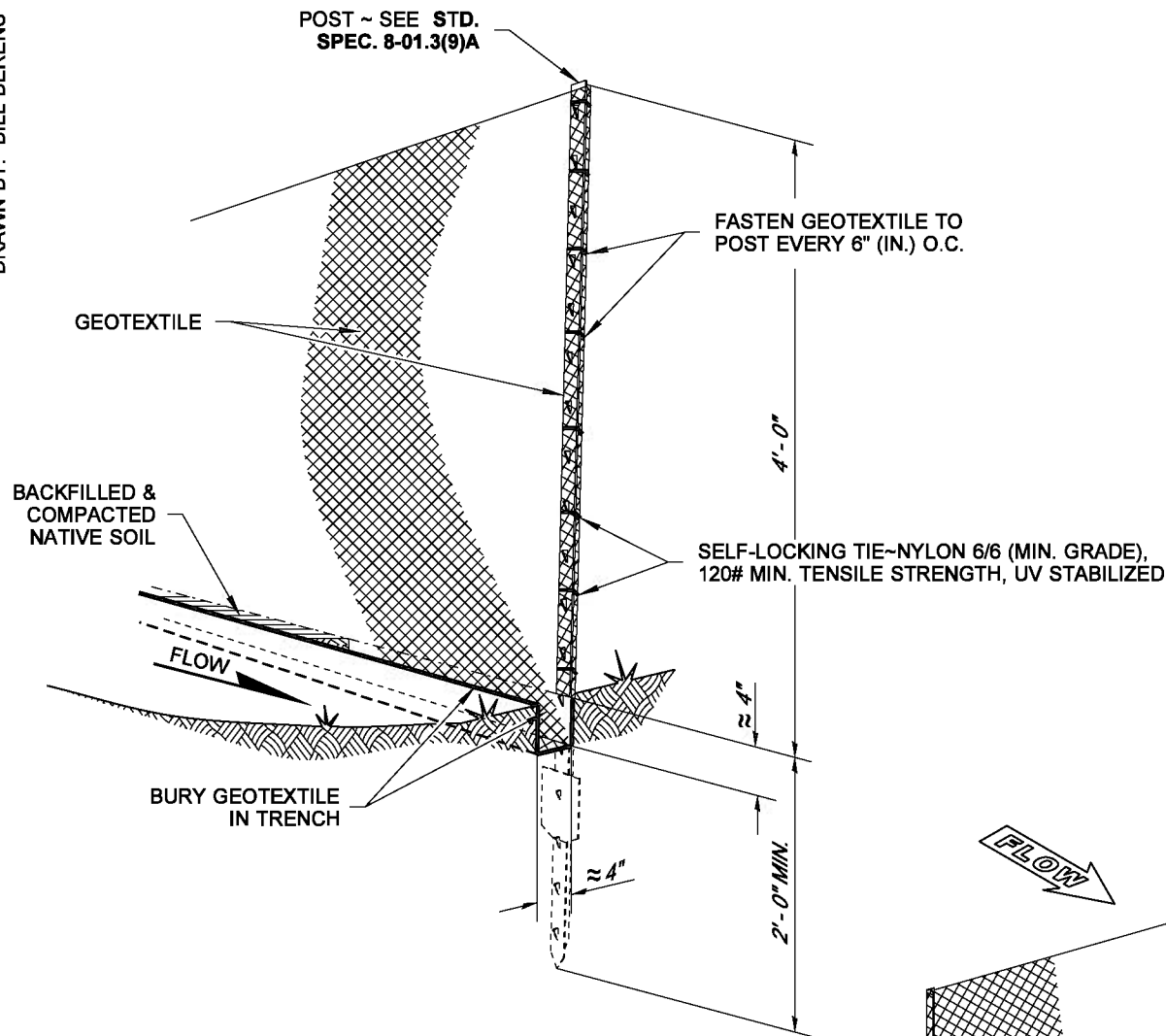
DETECTABLE WARNING SURFACE **STANDARD PLAN F-45.10-02**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

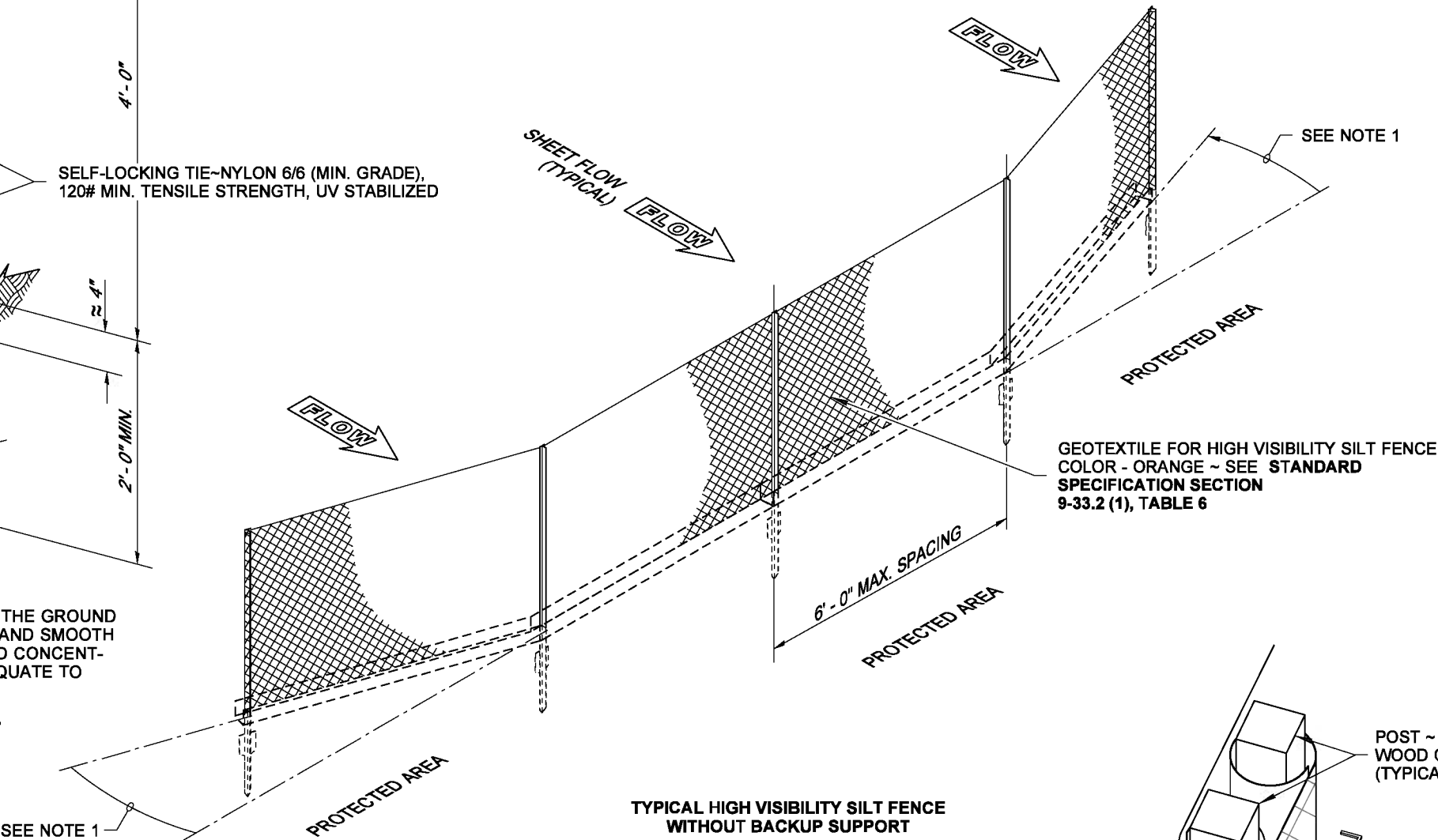


DRAWN BY: BILL BERENS



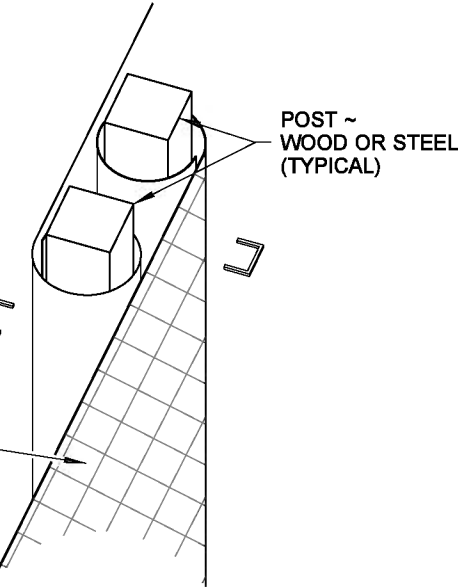
NOTE
DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENT-RATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

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)

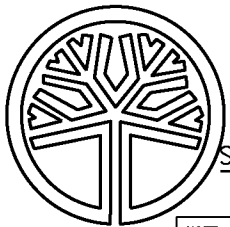


SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP. JOINING SECTIONS SHALL NOT BE PLACED IN LOW SPOTS OR IN SUMP LOCATIONS.

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

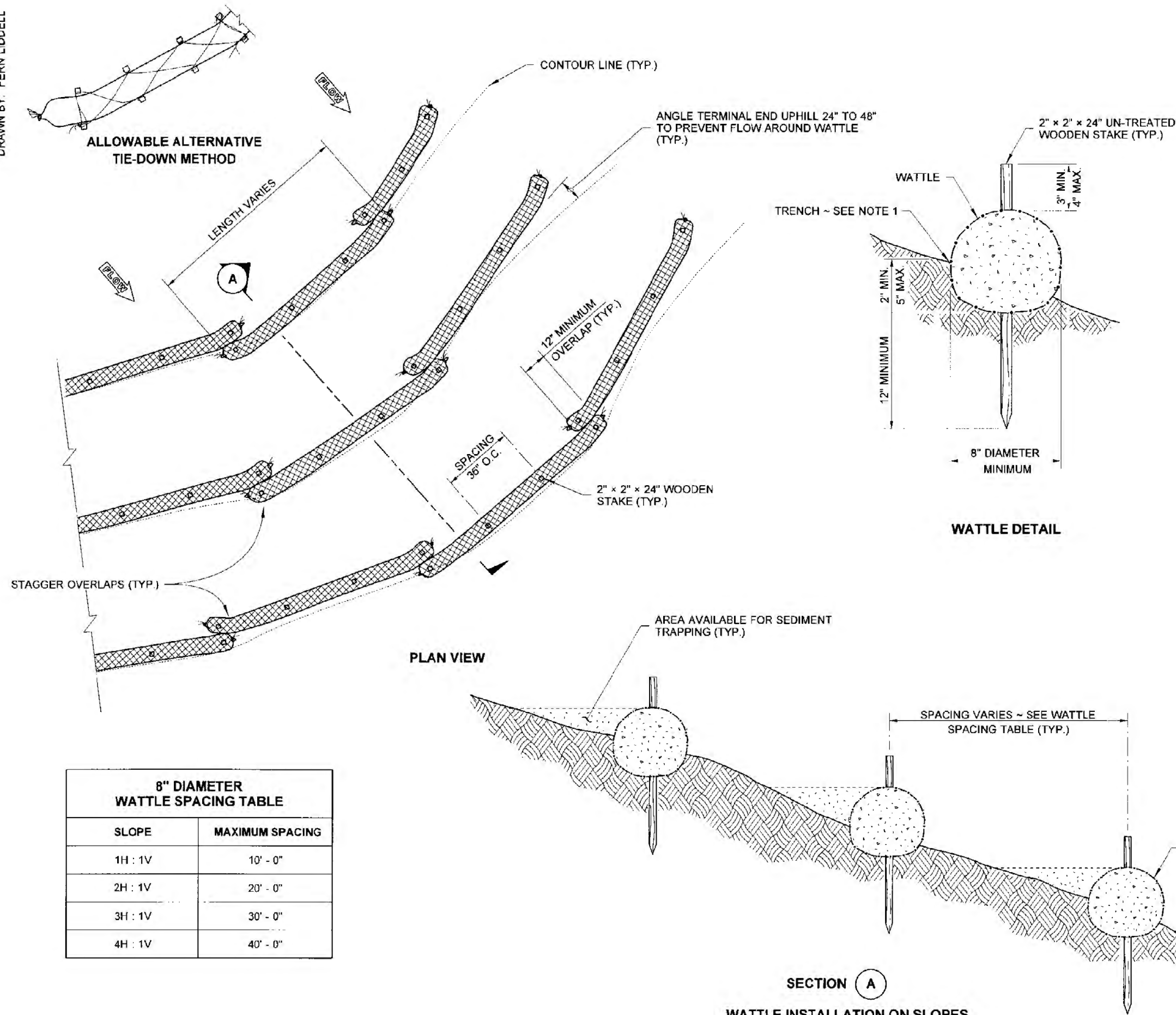
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 3/22/13

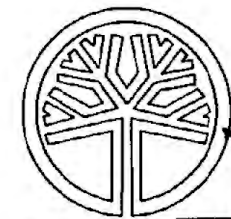
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



NOTES

1. Wattles shall be in accordance with **Standard Specification 9-14.5(5)**. Install Wattles along contours. Installation shall be in accordance with **Standard Specification 8-01.3(10)**.
2. Securely knot each end of Wattle. Overlap adjacent Wattle ends 12" behind one another and securely tie together.
3. Compact excavated soil and trenches to prevent undercutting. Additional staking may be necessary to prevent undercutting.
4. Install Wattle perpendicular to flow along contours.
5. Wattles shall be inspected regularly, and immediately after a rainfall produces runoff, to ensure they remain thoroughly entrenched and in contact with the soil.
6. Perform maintenance in accordance with **Standard Specification 8-01.3(15)**.
7. Refer to **Standard Specification 8-01.3(16)** for removal.



STATE OF
WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

Sandra L. Salisbury
SANDRA L. SALISBURY
LICENSE NO. 860

DATE: 10 June 2013

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WATTLE INSTALLATION ON SLOPE

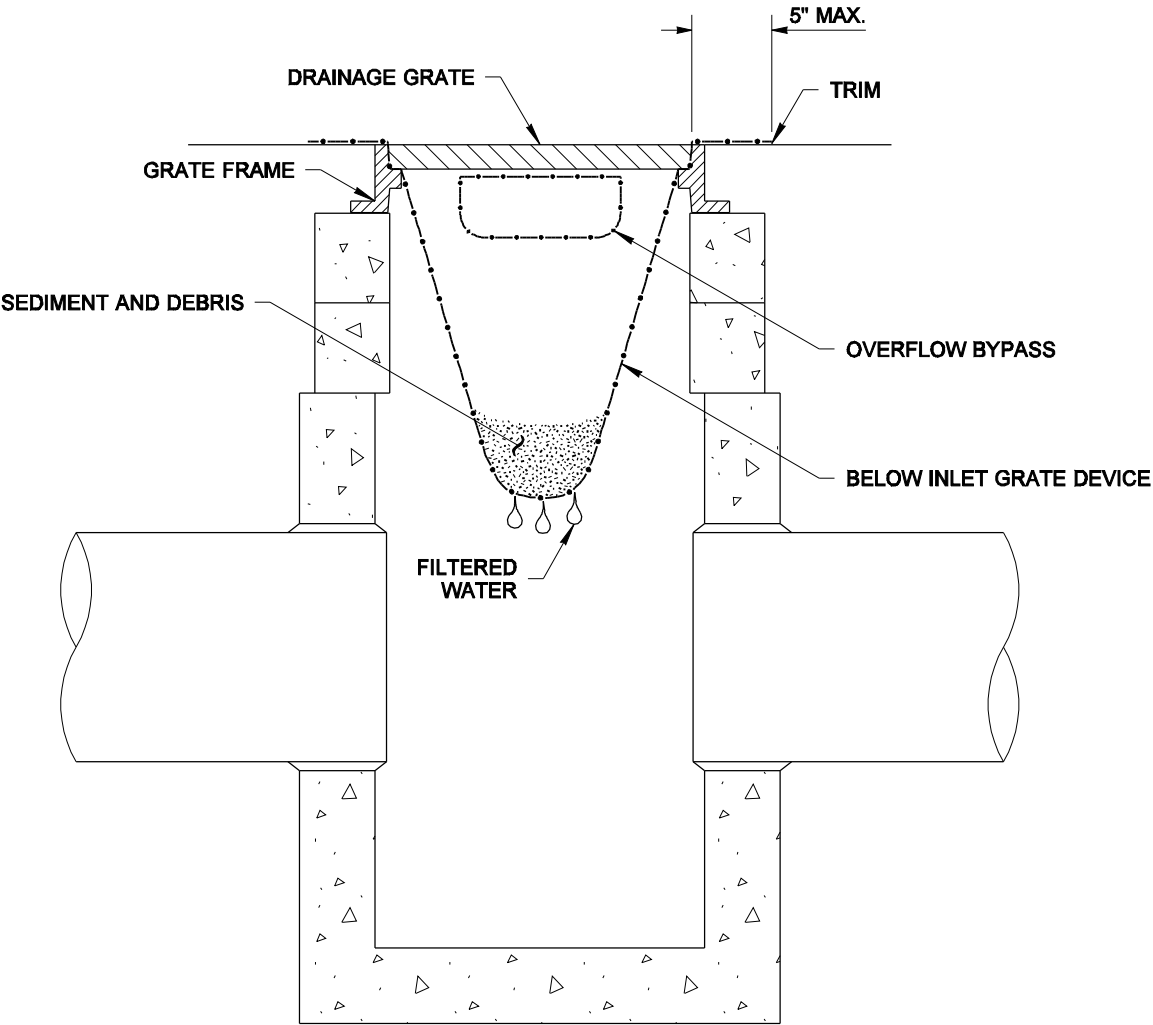
STANDARD PLAN I-30.30-01

SHEET 1 OF 1 SHEET

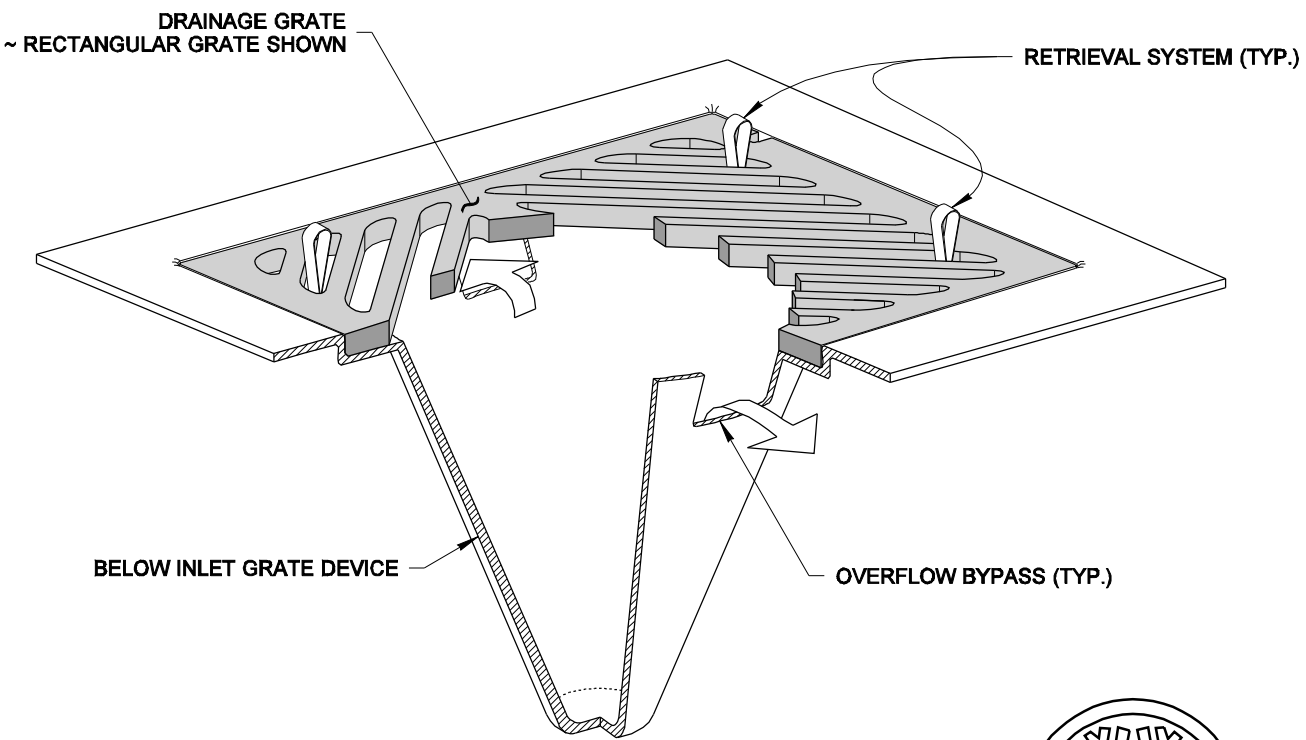
APPROVED FOR PUBLICATION

Pamela B. Bostick 4/10/13
STATE DESIGN ENGINEER DATE

Washington State Department of Transportation



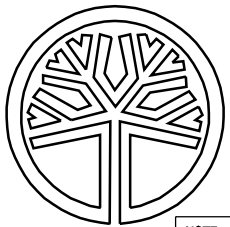
SECTION VIEW
NOT TO SCALE



ISOMETRIC VIEW

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



STATE OF
WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT

MARK W. MAURER
CERTIFICATE NO. 000598

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**STORM DRAIN
INLET PROTECTION
STANDARD PLAN I-40.20-00**

SHEET 1 OF 1 SHEET

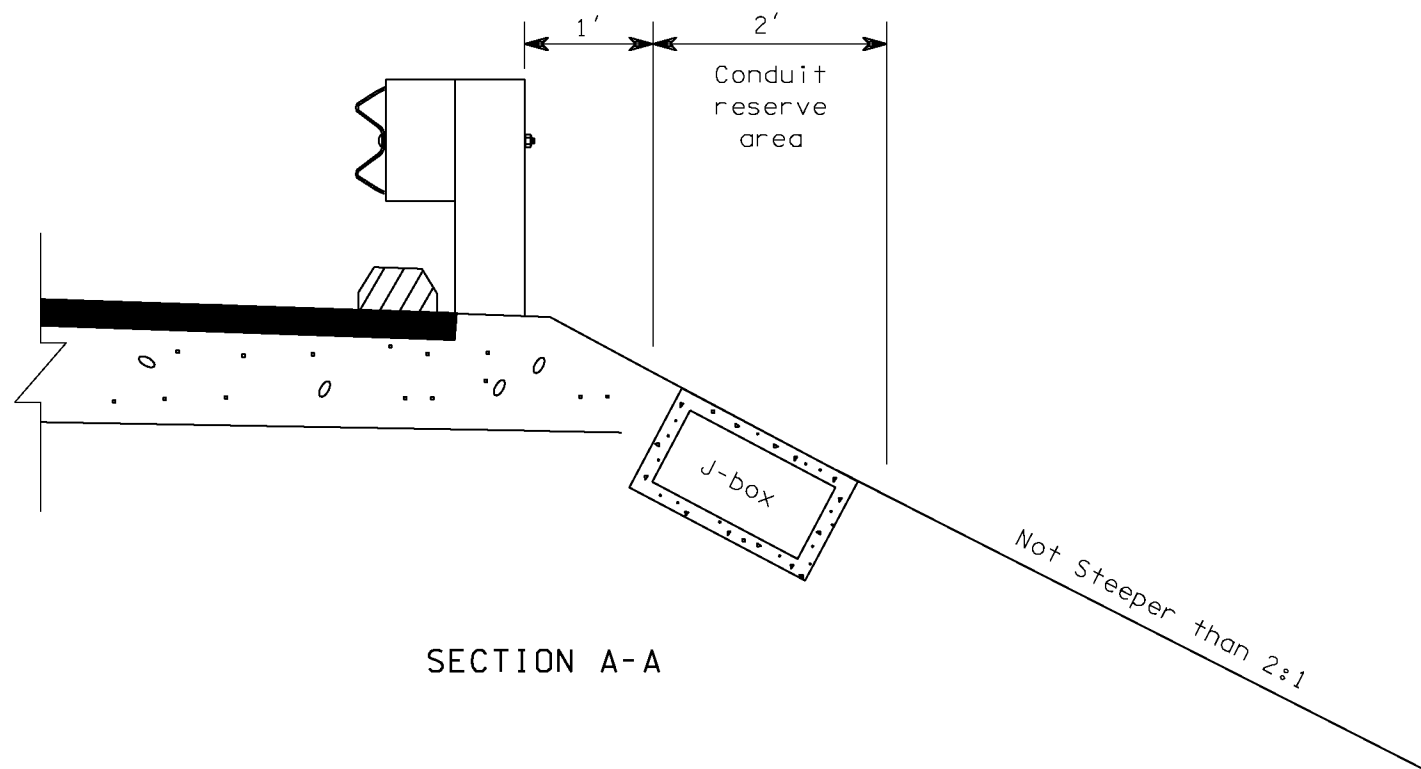
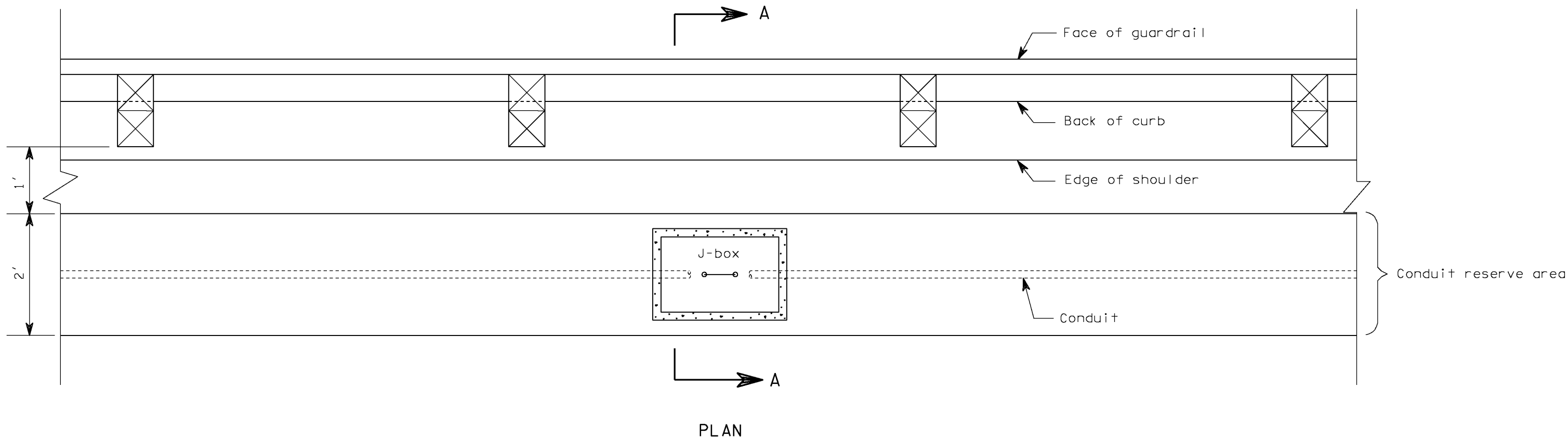
APPROVED FOR PUBLICATION

Pasco Bakotich III **09-20-07**

STATE DESIGN ENGINEER DATE



Washington State Department of Transportation



ELECTRICAL CONDUIT PLACEMENT



EXPIRES SEPT 10, 1998

STANDARD PLAN J-10

APPROVED FOR PUBLICATION

Clifford E. Mansfield

07-18-97

STATE DESIGN ENGINEER

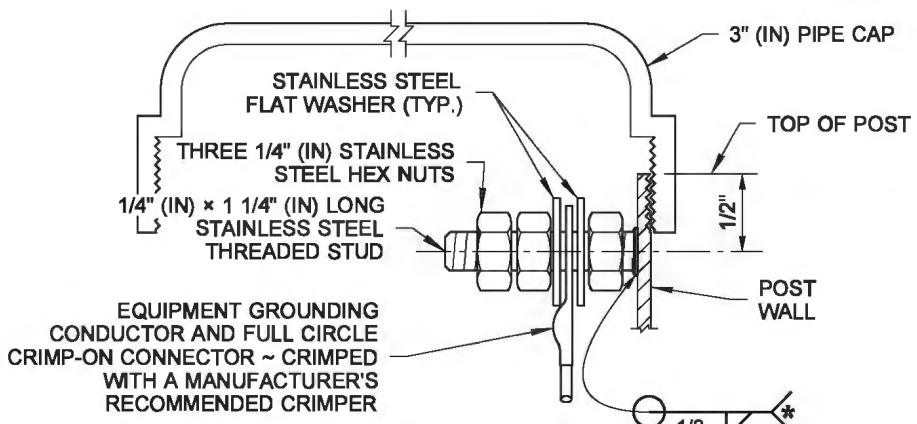
DATE



WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON

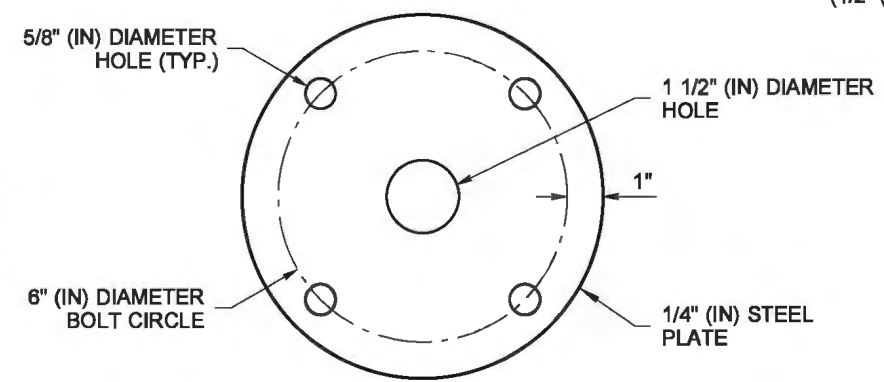
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FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

DRAWN BY: FERN LIDDELL

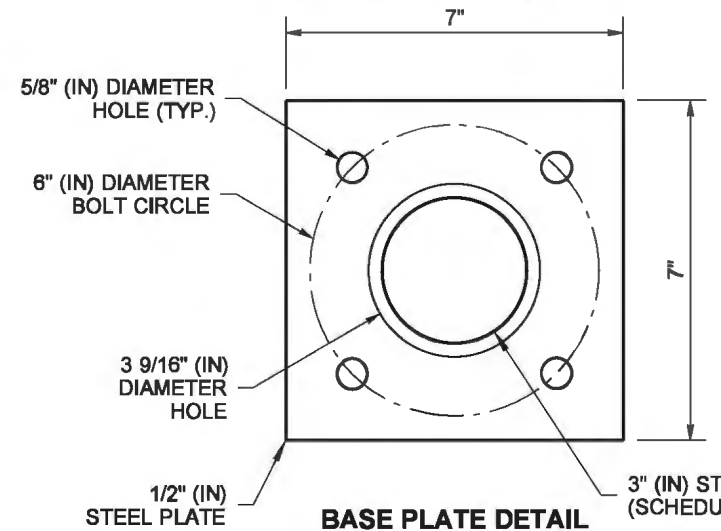


**GROUNDING CONNECTION
DETAIL**

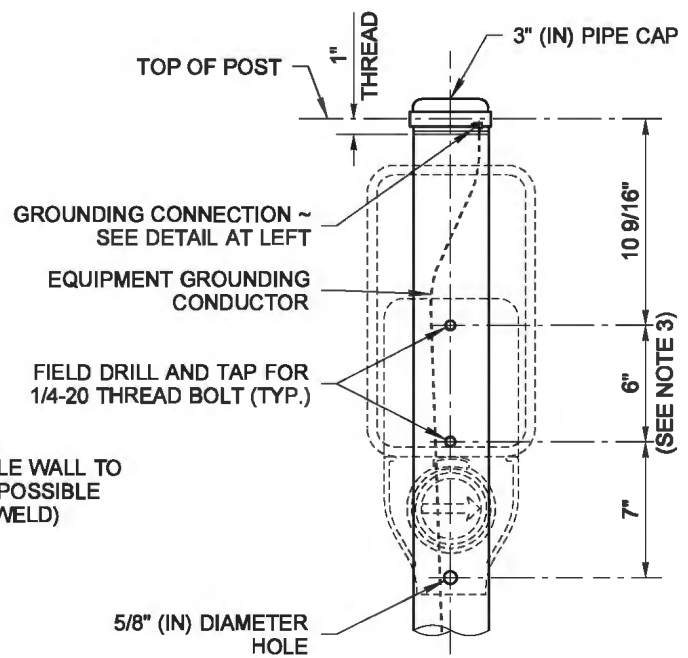
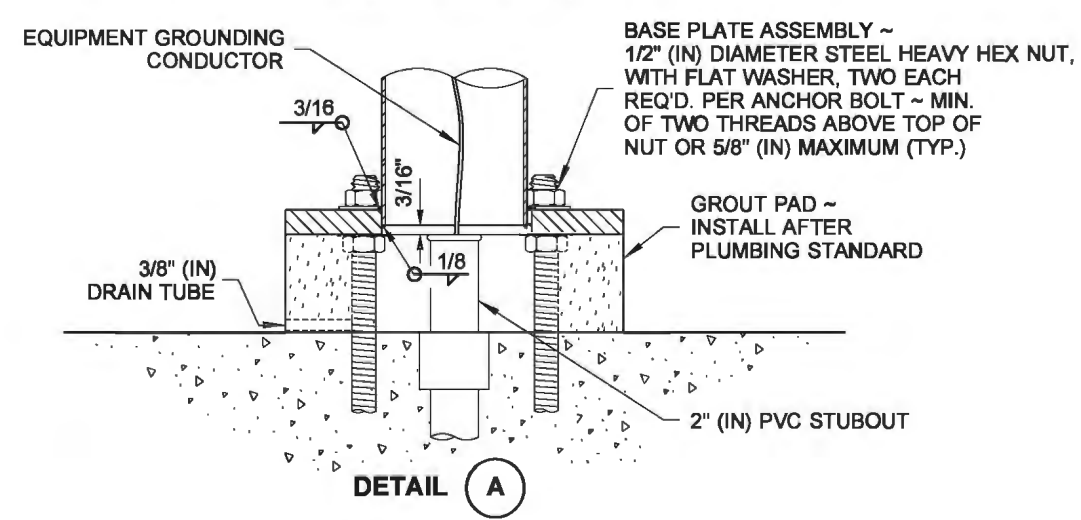
* WELD STUD TO POLE WALL TO
MAXIMUM EXTENT POSSIBLE
(1/2" (IN) MINIMUM WELD)



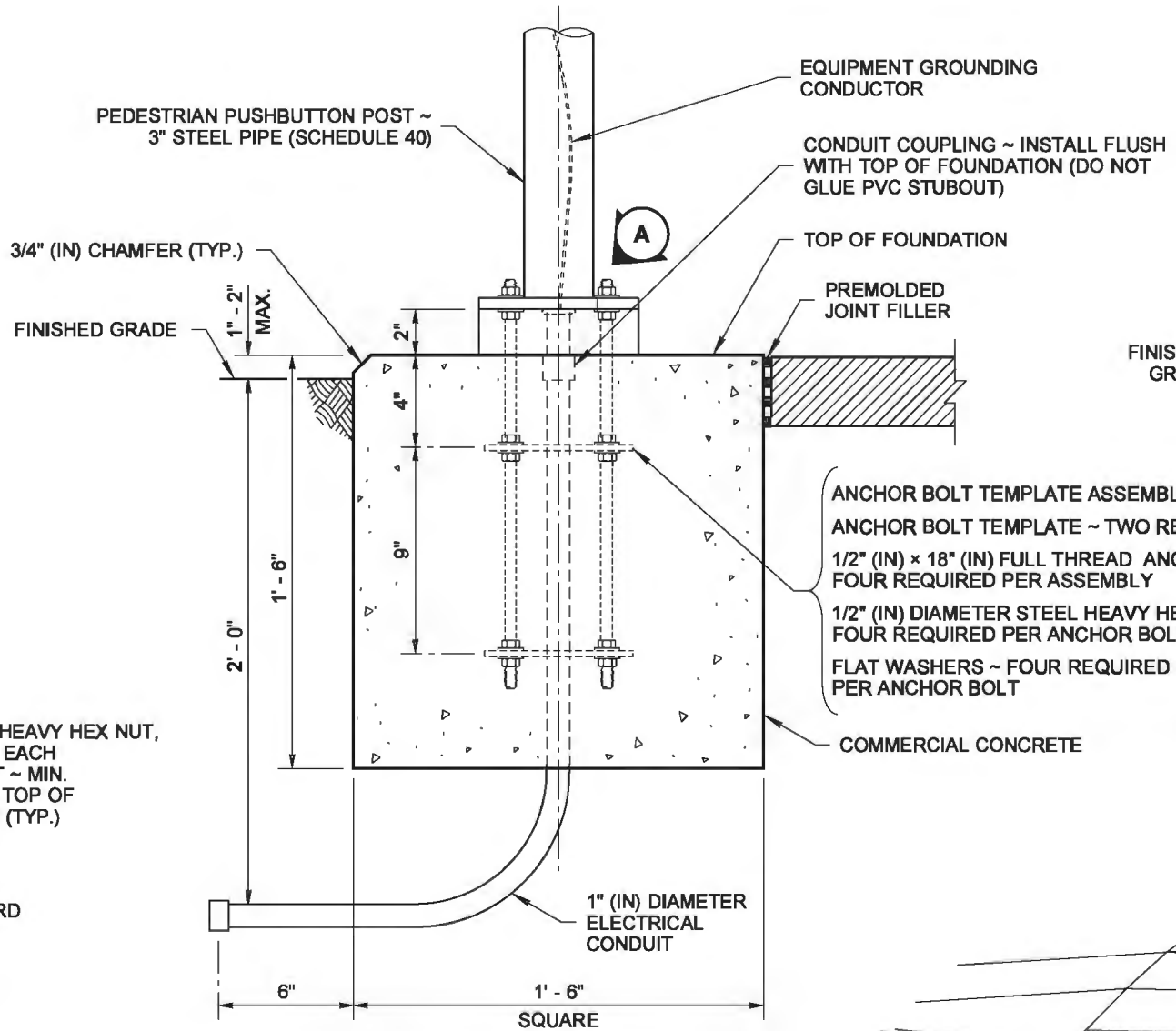
ANCHOR BOLT TEMPLATE



BASE PLATE DETAIL



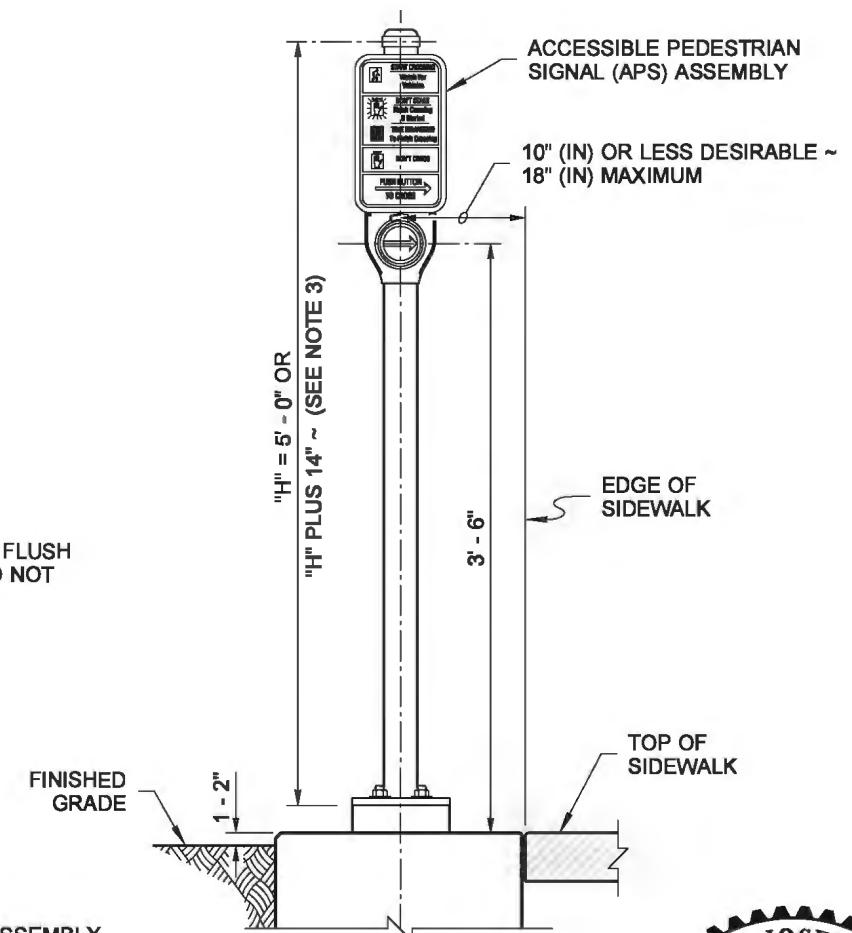
POST DETAIL



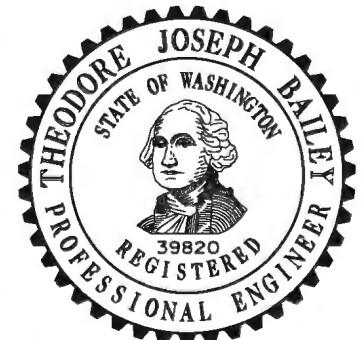
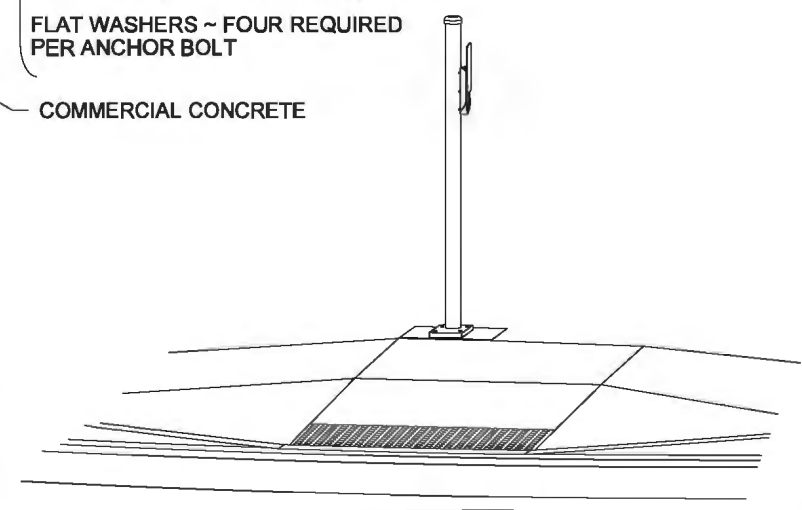
FOUNDATION DETAIL

NOTES

1. See **Standard Plan J-20.26** for Accessible Pedestrian Pushbutton details.
2. Where shown in the plans, install plaque (R10-32P) "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" above the Accessible Pedestrian Signal (APS) assembly. Add 14" (in) to post height to accommodate plaque and leave a 2" (in) space between signs.
3. Mounting distances vary between manufacturers. See manufacturers recommendations for mounting information.
4. Junction Box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.



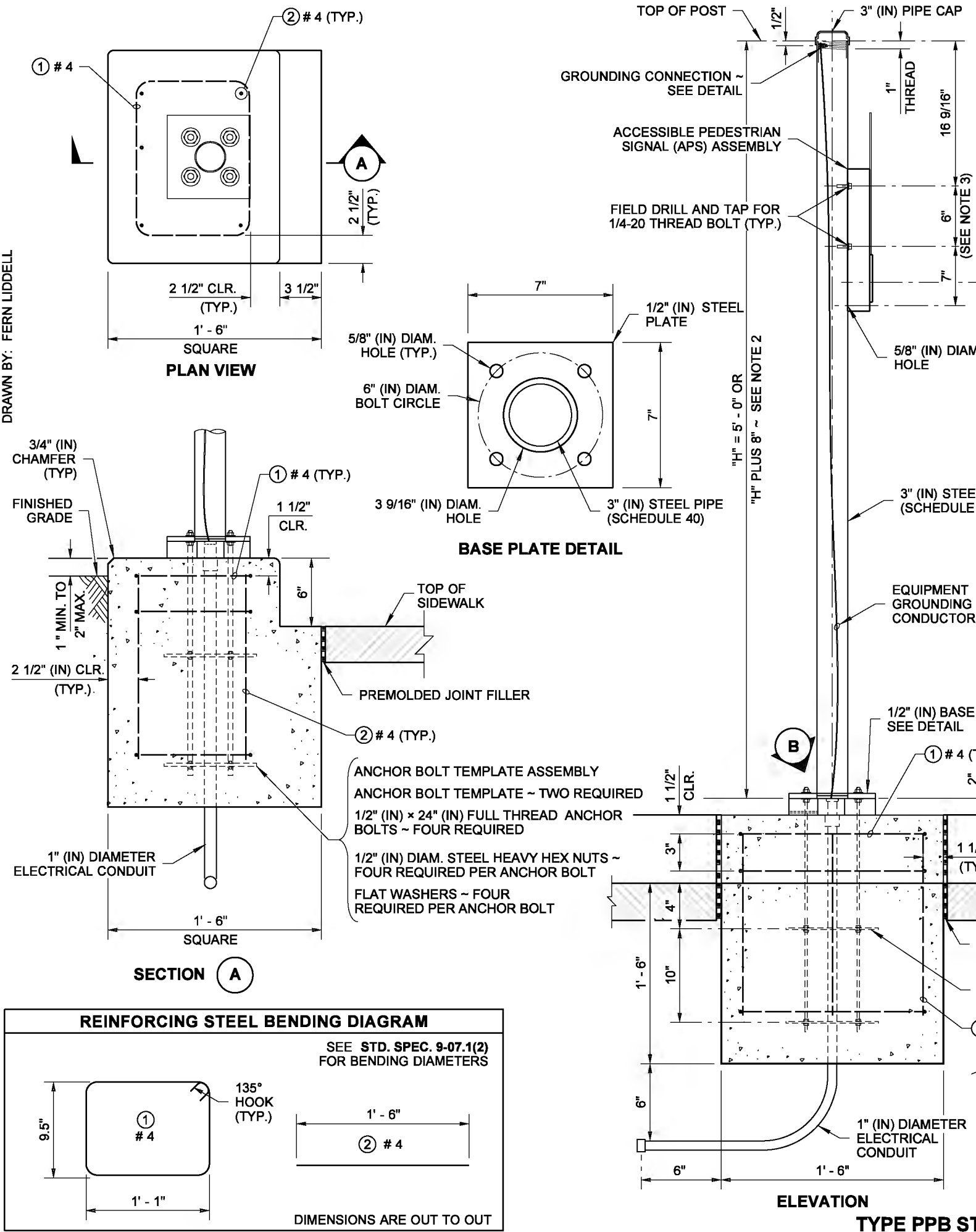
ELEVATION



Theodore Joseph Bailey Bailey, Ted
Jun 26 2014 4:20 PM
**ACCESSIBLE PEDESTRIAN
PUSHBUTTON POST (PPB)
AND FOUNDATION**
STANDARD PLAN J-20.10-03

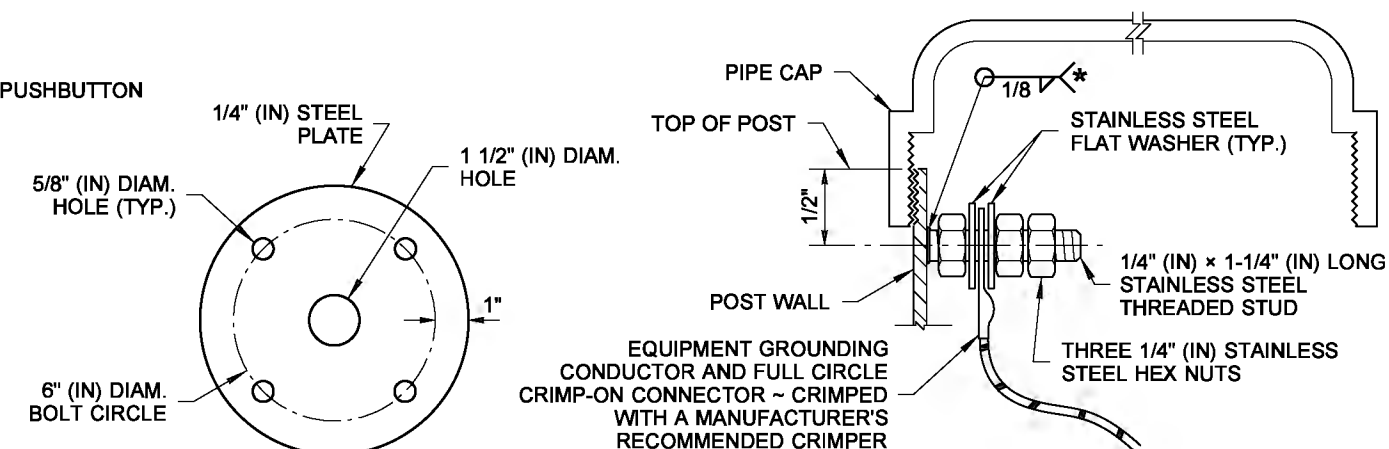
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pace Byrd Bakotich, Pasco
Jun 30 2014 3:09 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation



NOTES

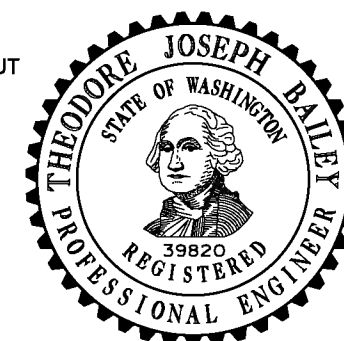
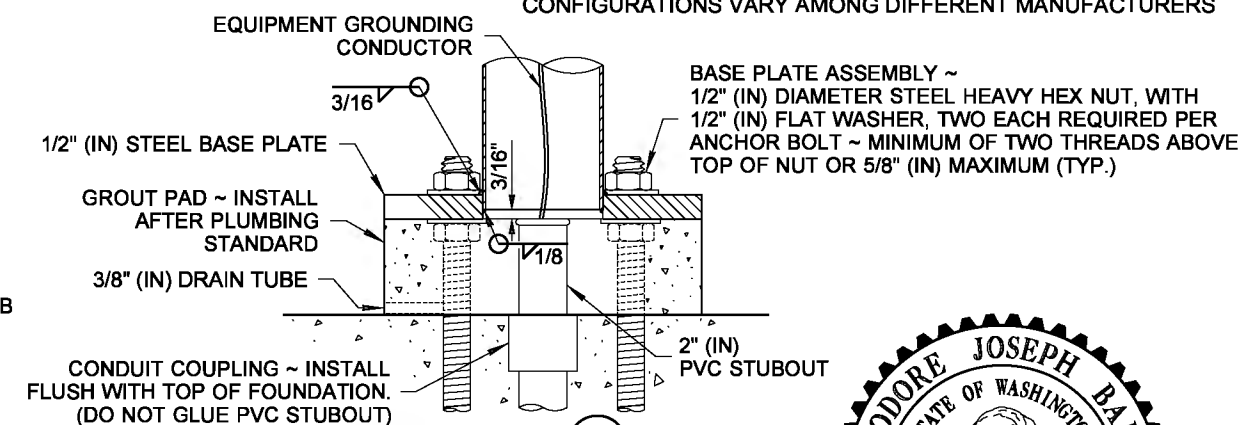
1. See **Standard Plan J-20.26** for Accessible Pedestrian Pushbutton details.
2. Where shown in the plans, install plaque (R10-32P) "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" above the Accessible Pedestrian Signal (APS) assembly. Add 14" (in) to the PPB post height to accommodate plaque and leave a 2" (in) space between signs.
3. Mounting distances vary between manufacturers. See manufacturers recommendations for mounting information.
4. Junction Box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.
5. Supplemental Grounding Conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete: Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).



GROUNDING CONNECTION DETAIL

* WELD STUD TO POLE WALL TO MAXIMUM EXTENT POSSIBLE ~ 1/2" (IN) MINIMUM WELD

CONFIGURATIONS VARY AMONG DIFFERENT MANUFACTURERS



ACCESSIBLE PEDESTRIAN PUSHBUTTON WITH CURB BASE STANDARD PLAN J-20.11-02

SHEET 1 OF 2 SHEETS

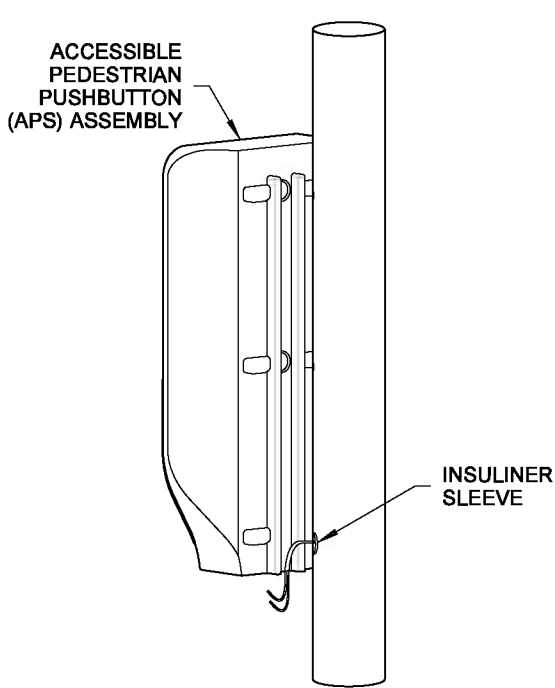
APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER

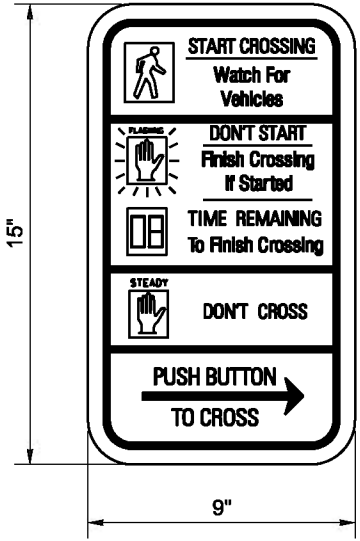


Washington State Department of Transportation

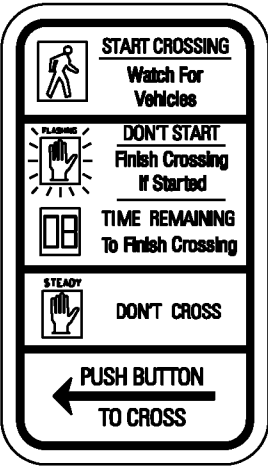
DRAWN BY: LISA CYFORD



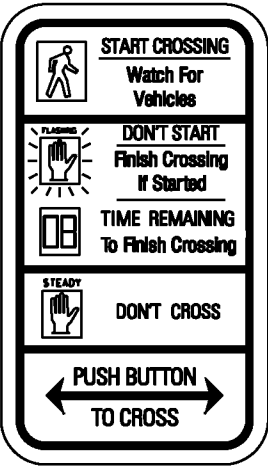
WIRE ROUTING
PERSPECTIVE VIEW



R10-3e (RIGHT)

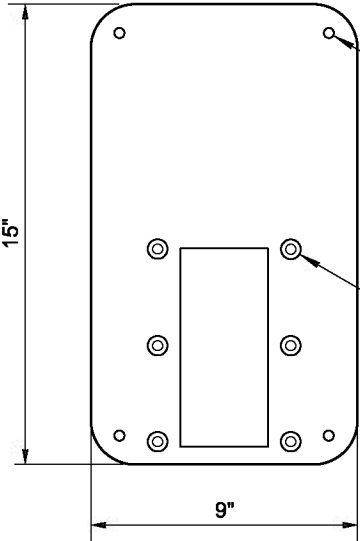


R10-3e (LEFT)

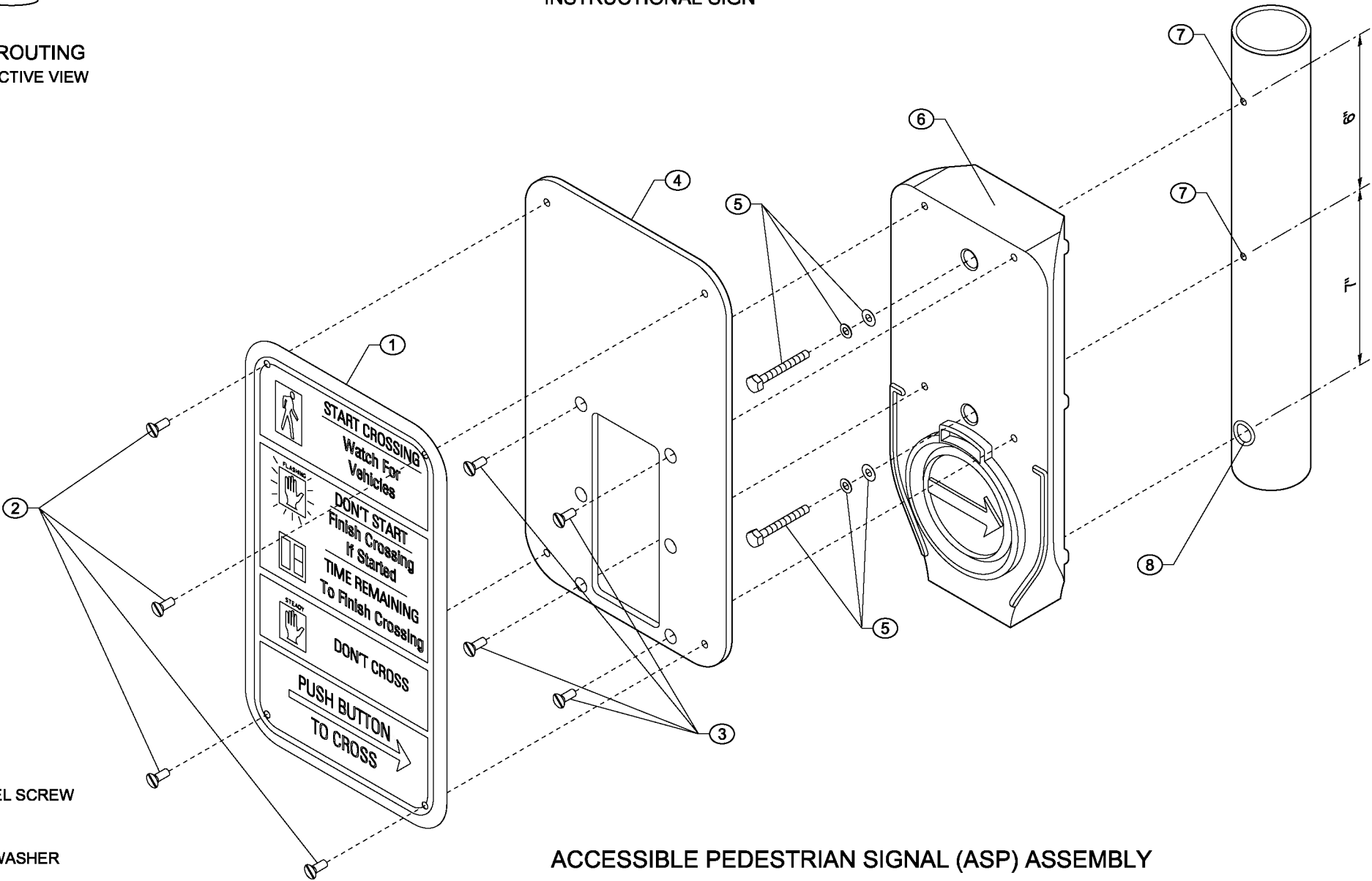


R10-3e (MOD.)

PEDESTRIAN PUSHBUTTON
INSTRUCTIONAL SIGN



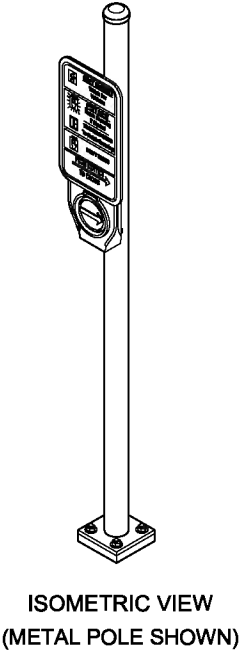
PEDESTRIAN PUSHBUTTON
FRAME ADAPTER



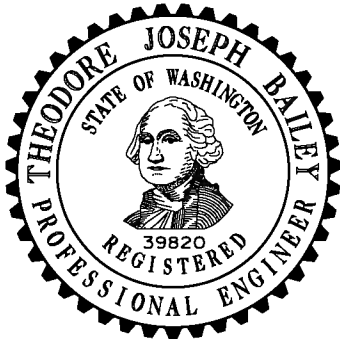
KEY

- ① FACE PLATE
- ② 1/4-20 x 3/8" LONG STAINLESS STEEL SCREW
- ③ 1/4-20 STAINLESS STEEL SCREWS
- ④ PUSHBUTTON FRAME ADAPTER
- ⑤ 1/4-20 STAINLESS STEEL BOLT W/ WASHER AND LOCK WASHER
- ⑥ PUSHBUTTON STATION
- ⑦ DRILL AND TAP SHAFT FOR 1/4" DIAM. BOLT
- ⑧ DRILL AND TAP SHAFT FOR 5/8" WIRE GUIDE HOLE - ADD INSULINER

ACCESSIBLE PEDESTRIAN SIGNAL (ASP) ASSEMBLY
METAL POLE INSTALLATION
PPB-M



ISOMETRIC VIEW
(METAL POLE SHOWN)



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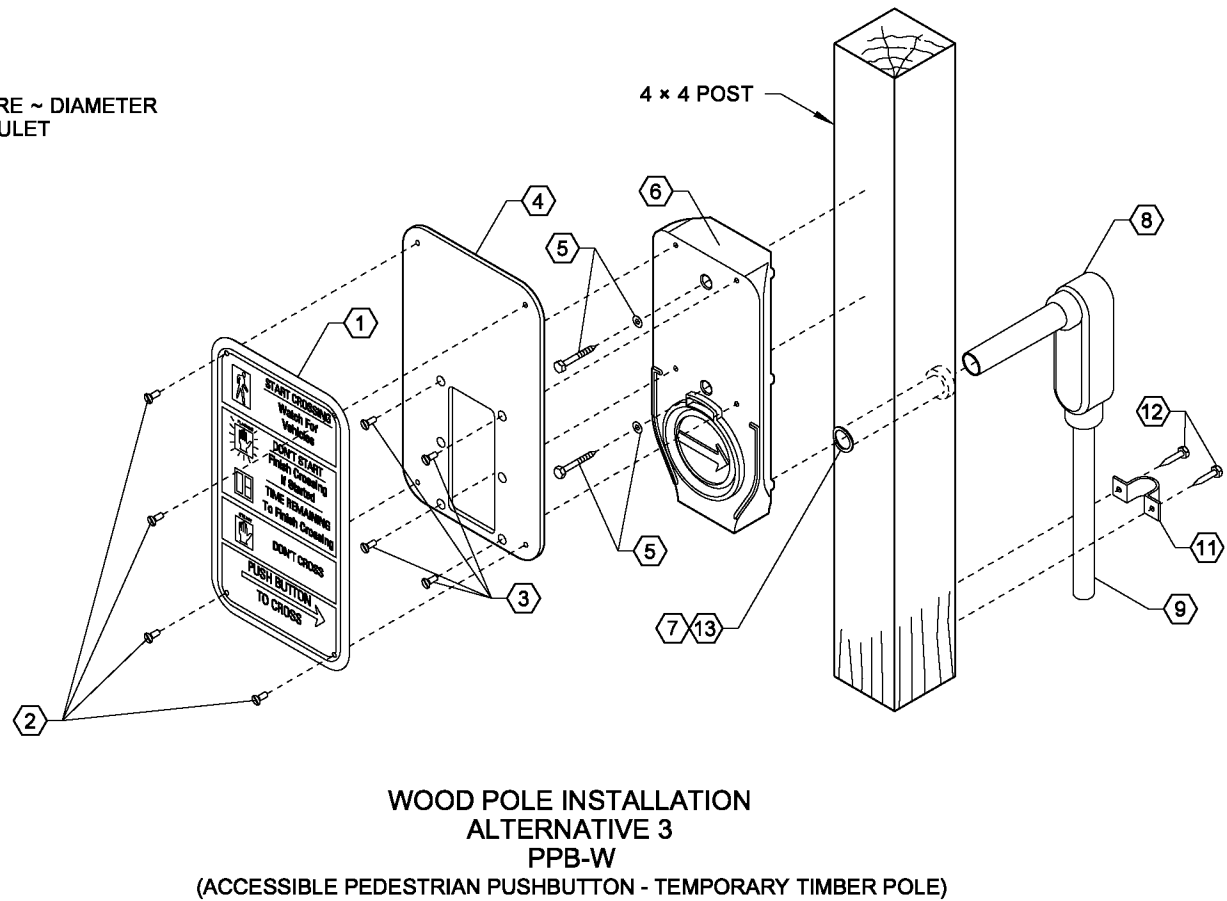
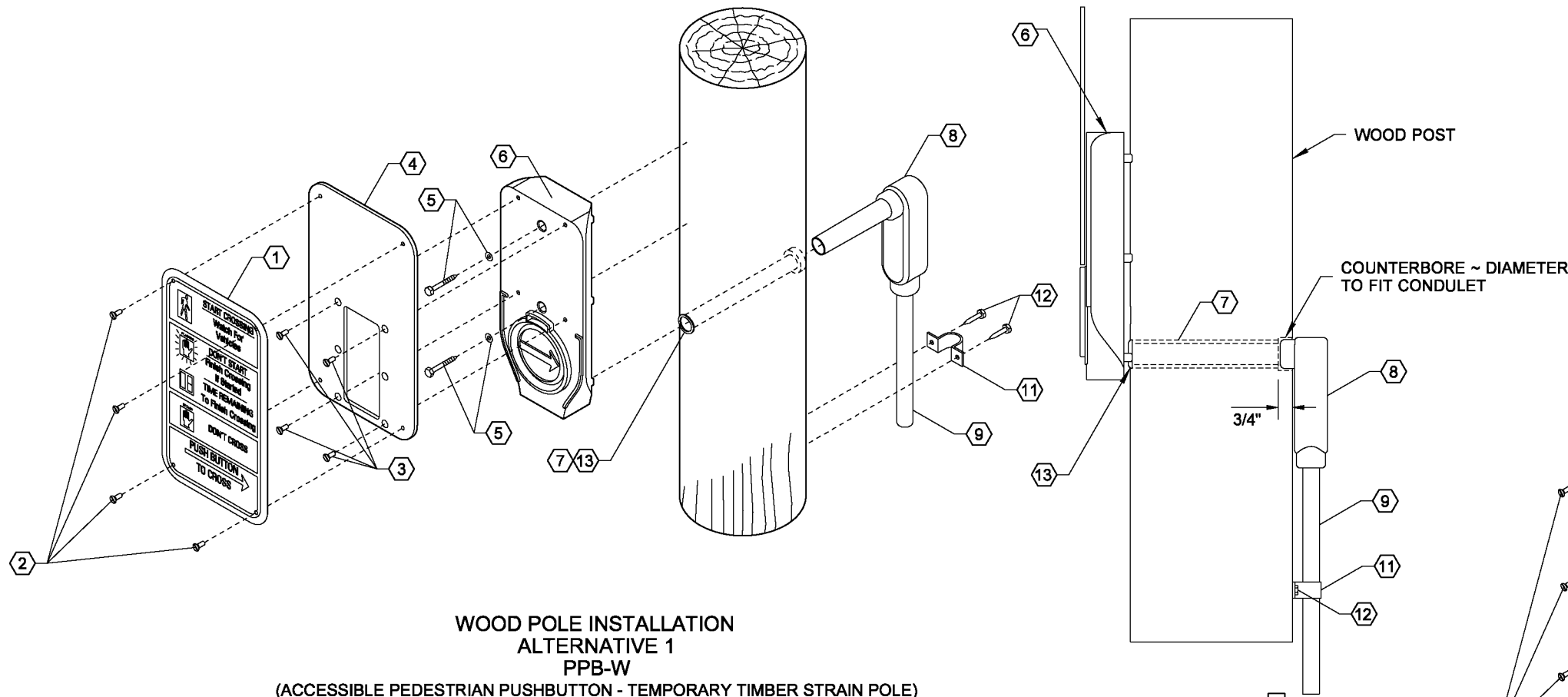
ACCESSIBLE PEDESTRIAN
PUSHBUTTON (PPB)
DETAILS
STANDARD PLAN J-20.26-01

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakotich III 7/12/12
STATE DESIGN ENGINEER DATE





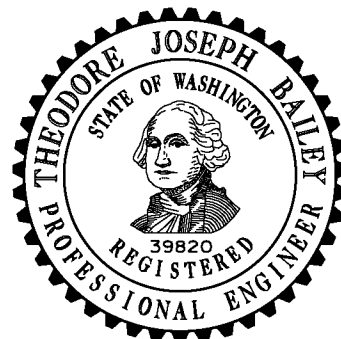
KEY

- 1 FACE PLATE
- 2 1/4-20 x 3/8" LONG STAINLESS STEEL SCREW
- 3 1/4-20 STAINLESS STEEL SCREWS
- 4 PUSHBUTTON FRAME ADAPTER
- 5 LAG BOLT WITH WASHER
- 6 PUSHBUTTON STATION
- 7 CONDUIT DIAMETER + 1/8" HOLE THRU POLE
- 8 CONDULET
- 9 3/4" CONDUIT
- 10 LIQUID-TITE FLEX CONDUIT
- 11 ONE PIECE TWO HOLE CLAMP
- 12 LAG BOLT
- 13 INSULINER SLEEVE

ACCESSIBLE PEDESTRIAN SIGNAL (ASP) ASSEMBLY
WOOD POLE INSTALLATION
ALTERNATIVE 2
PPB-W
(ACCESSIBLE PEDESTRIAN PUSHBUTTON - TEMPORARY TIMBER STRAIN POLE)

TEMPORARY TIMBER POLE

PRE-DRILL (3) 1/4" WEEP HOLES IN
BOTTOM RADIUS OF CONDUIT
DRIP LOOP. REAM HOLES WITH
DRILL BIT TO ELIMINATE BURRS



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ACCESSIBLE PEDESTRIAN
PUSHBUTTON (PPB)
DETAILS
STANDARD PLAN J-20.26-01

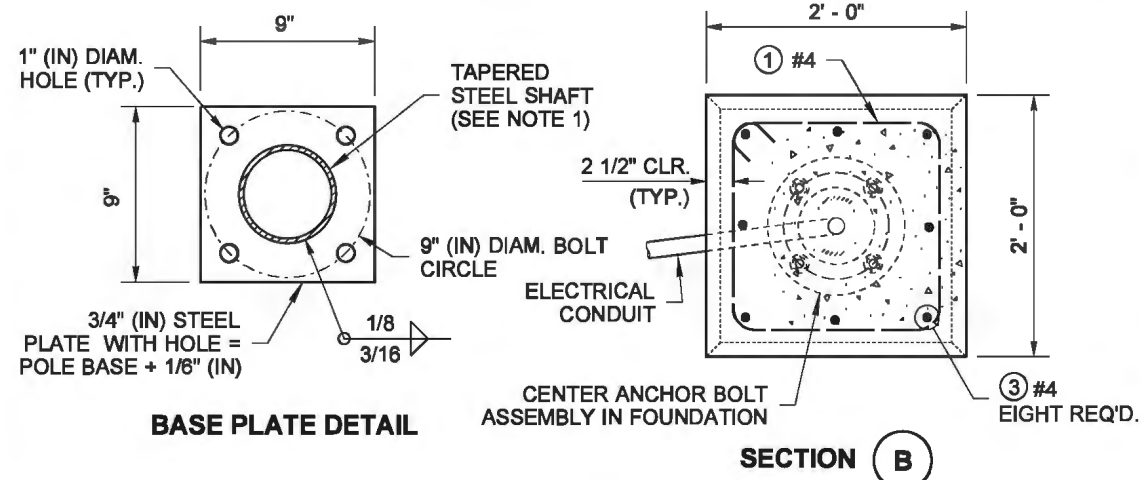
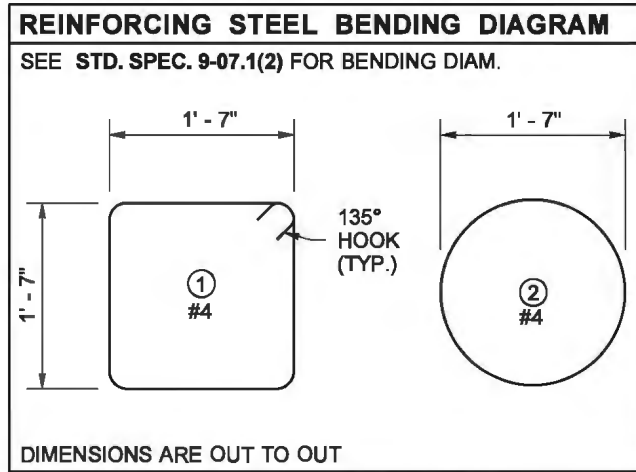
SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Pasco Bakotich III
STATE DESIGN ENGINEER

7/12/12
DATE

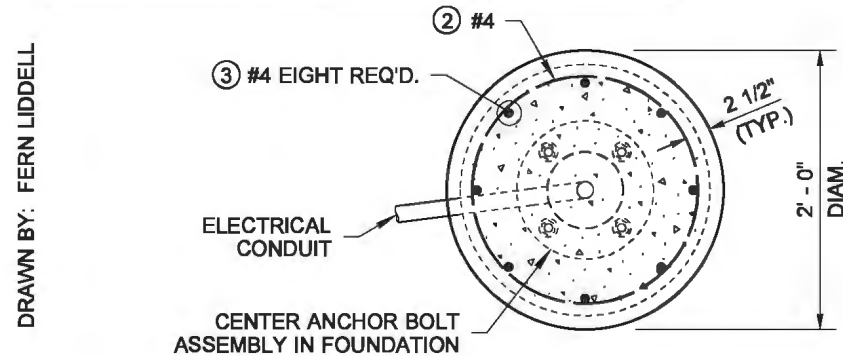
Washington State Department of Transportation



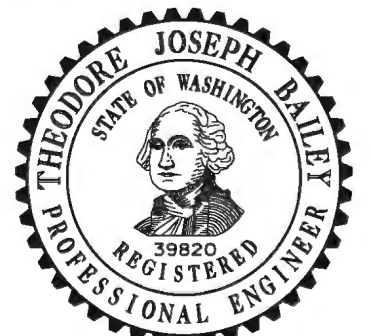
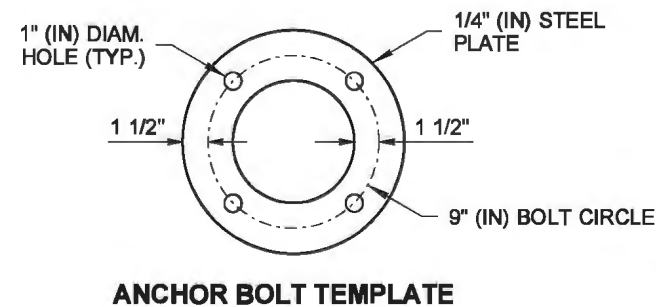
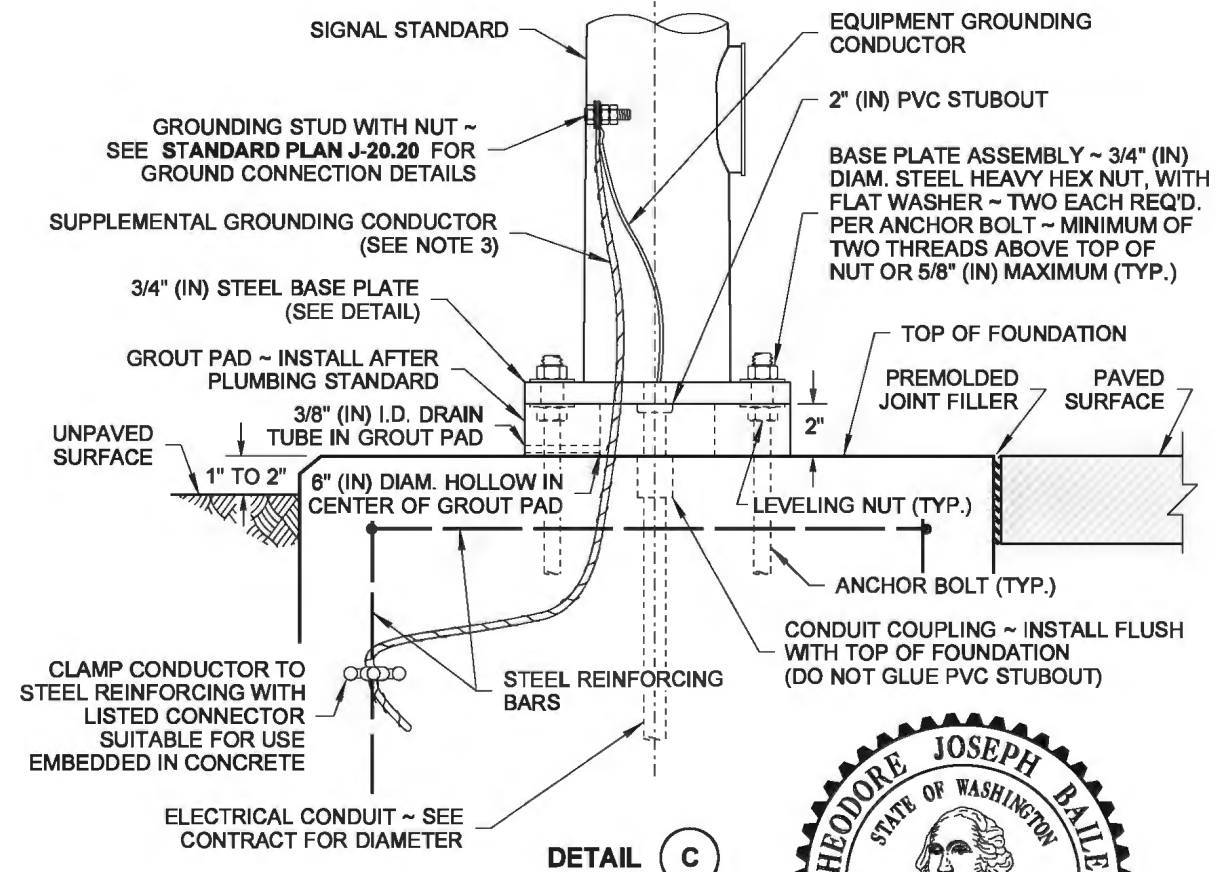
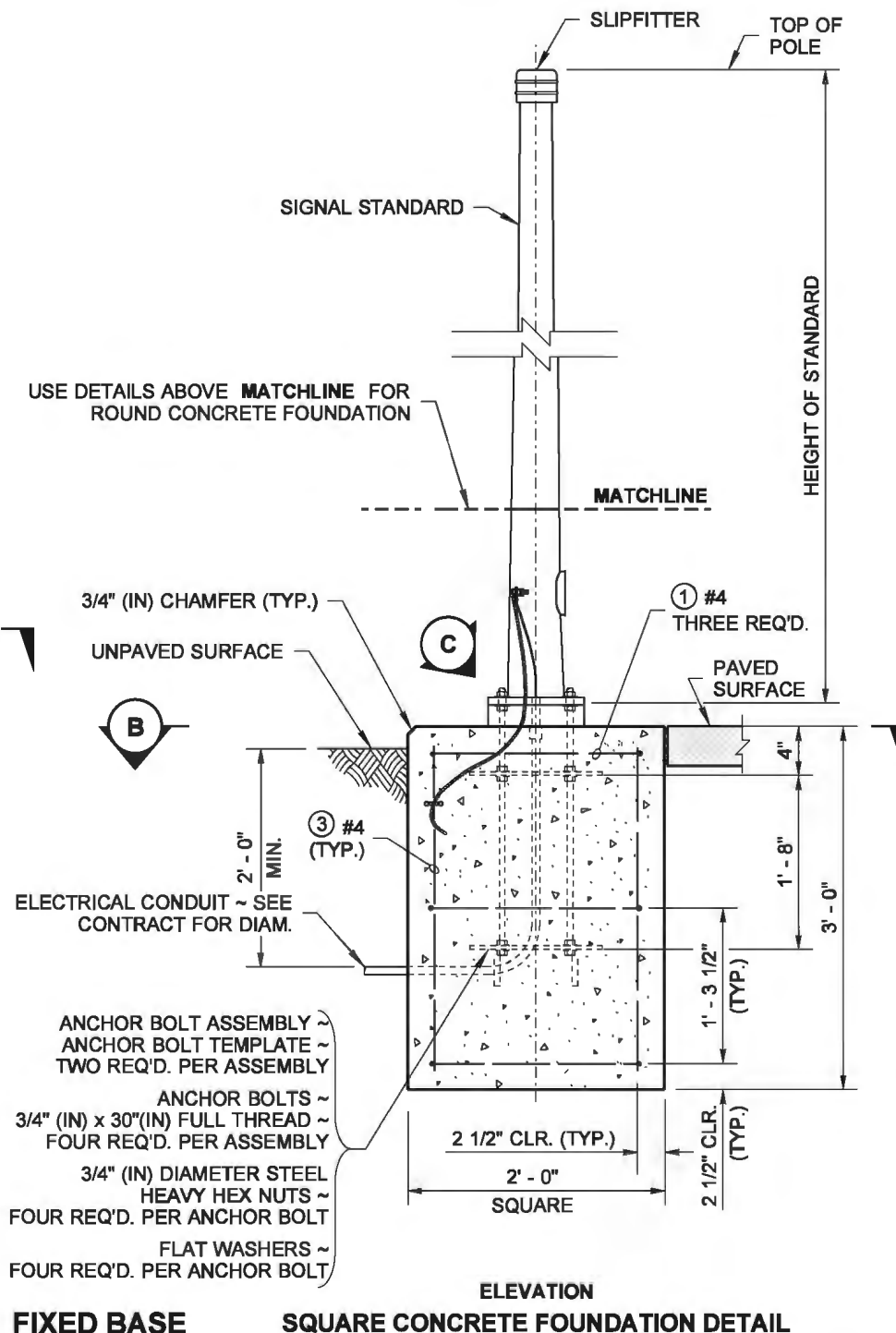
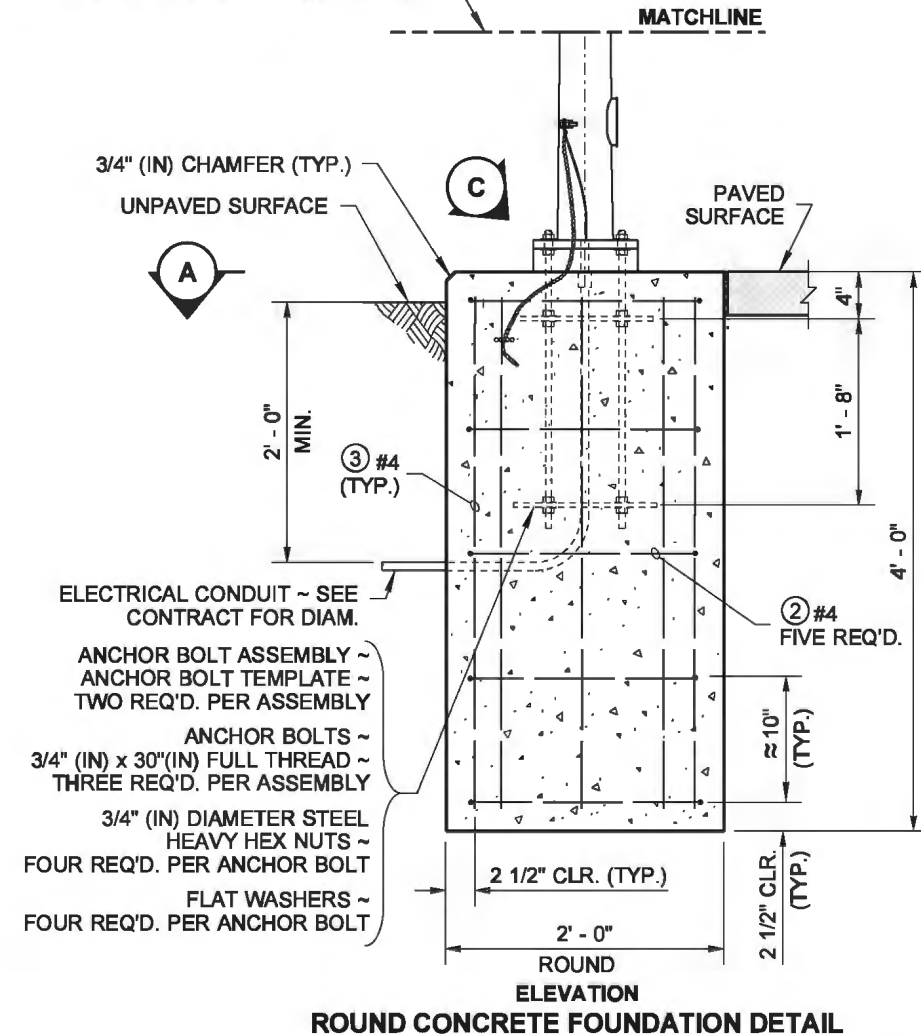
NOTES

- Clamping bolts shall be tightened to 50 ft-lbs max. torque. After state inspection, burr threads to prevent nut rotation. **DO NOT OVERTIGHTEN.**
- The final height of the Anchor Bolts shall be below the top of the slip plate assembly to ensure proper function of the slip base.
- Supplemental grounding conductor shall be non-insulated #4 AWG stranded copper and shall be clamped to vertical rebar with a connector suitable for use embedded in concrete; Provide 3' - 0" min. slack. Attach to pole grounding stud with a full circle crimp-on connector (crimped with a manufacturer recommended crimper).
- Junction box serving the Standard shall preferably be located 5' - 0" (10' - 0" Max.) from the Standard.
- Provide cable tie at wiring entering the junction box (for slip base installations only) ~ See **Detail A**, **Standard Plan J-28.70**.
- Keeper Plate shall not extend beyond the edges of the pole base plate.

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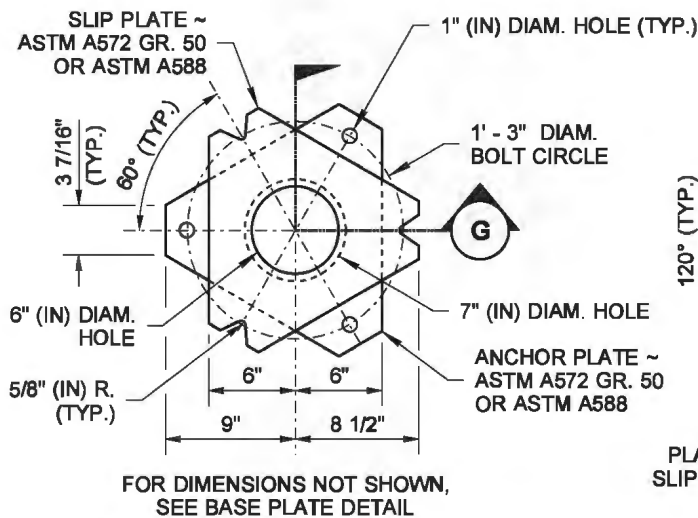
SEE DETAILS ABOVE **MATCHLINE** FOR SQUARE CONCRETE FOUNDATION



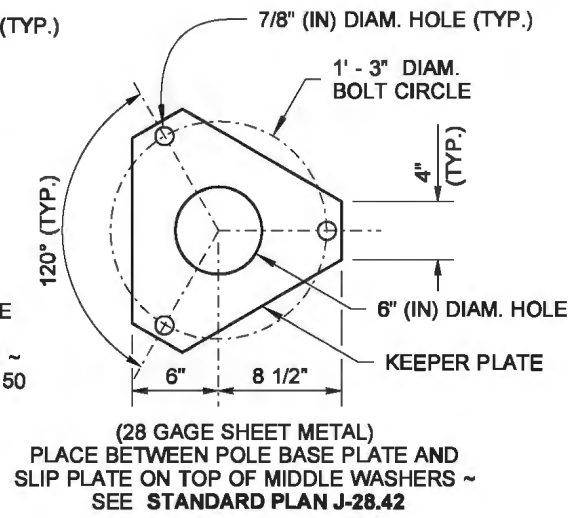
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STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
39820
Bailey, Ted
Jun 26 2014 4:29 PM
TYPE PS, TYPE 1, RM & FB SIGNAL STANDARD FOUNDATION DETAILS
STANDARD PLAN J-21.10-04

SHEET 1 OF 2 SHEETS

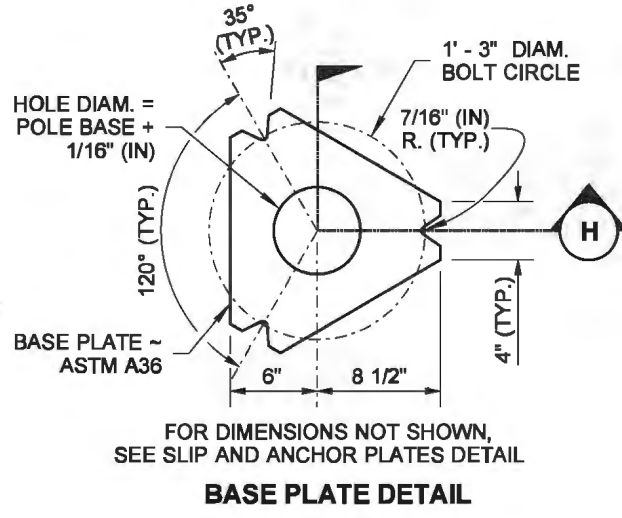
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STATE DESIGN ENGINEER
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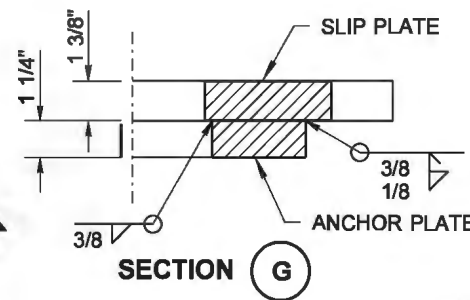
SLIP AND ANCHOR PLATES DETAIL



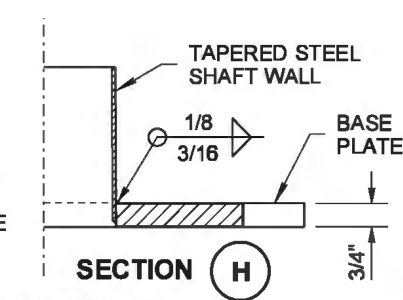
KEEPER PLATE DETAIL



BASE PLATE DETAIL

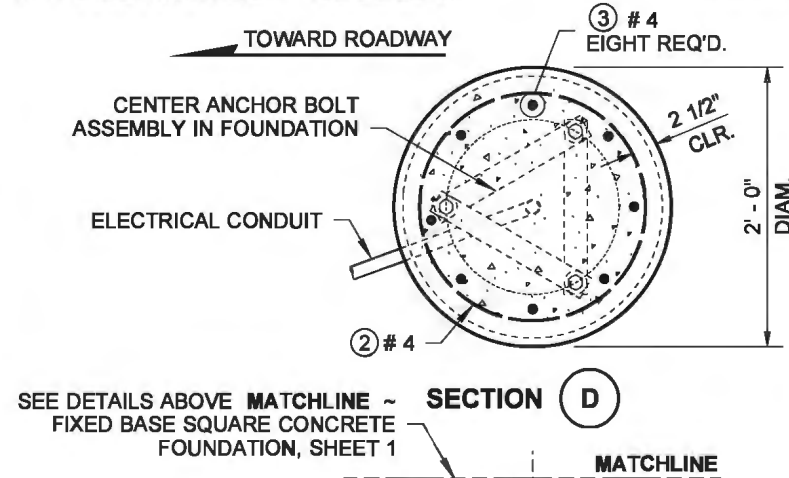


SECTION G



SECTION H

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SECTION D

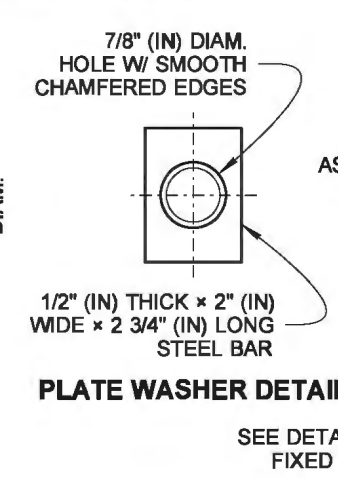
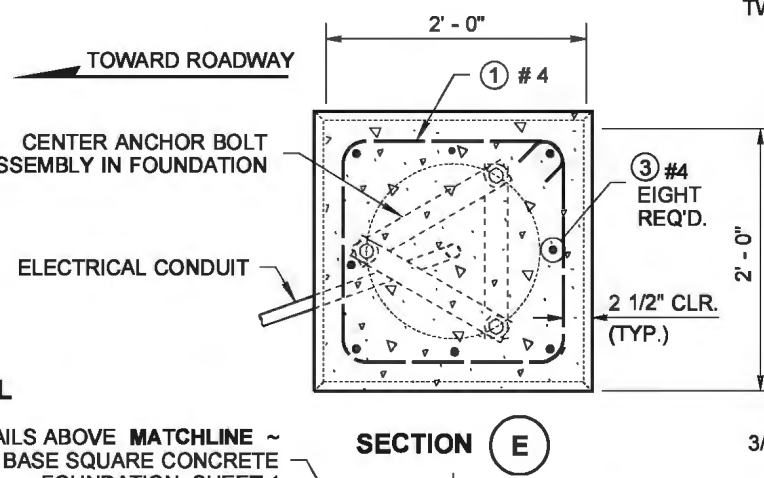
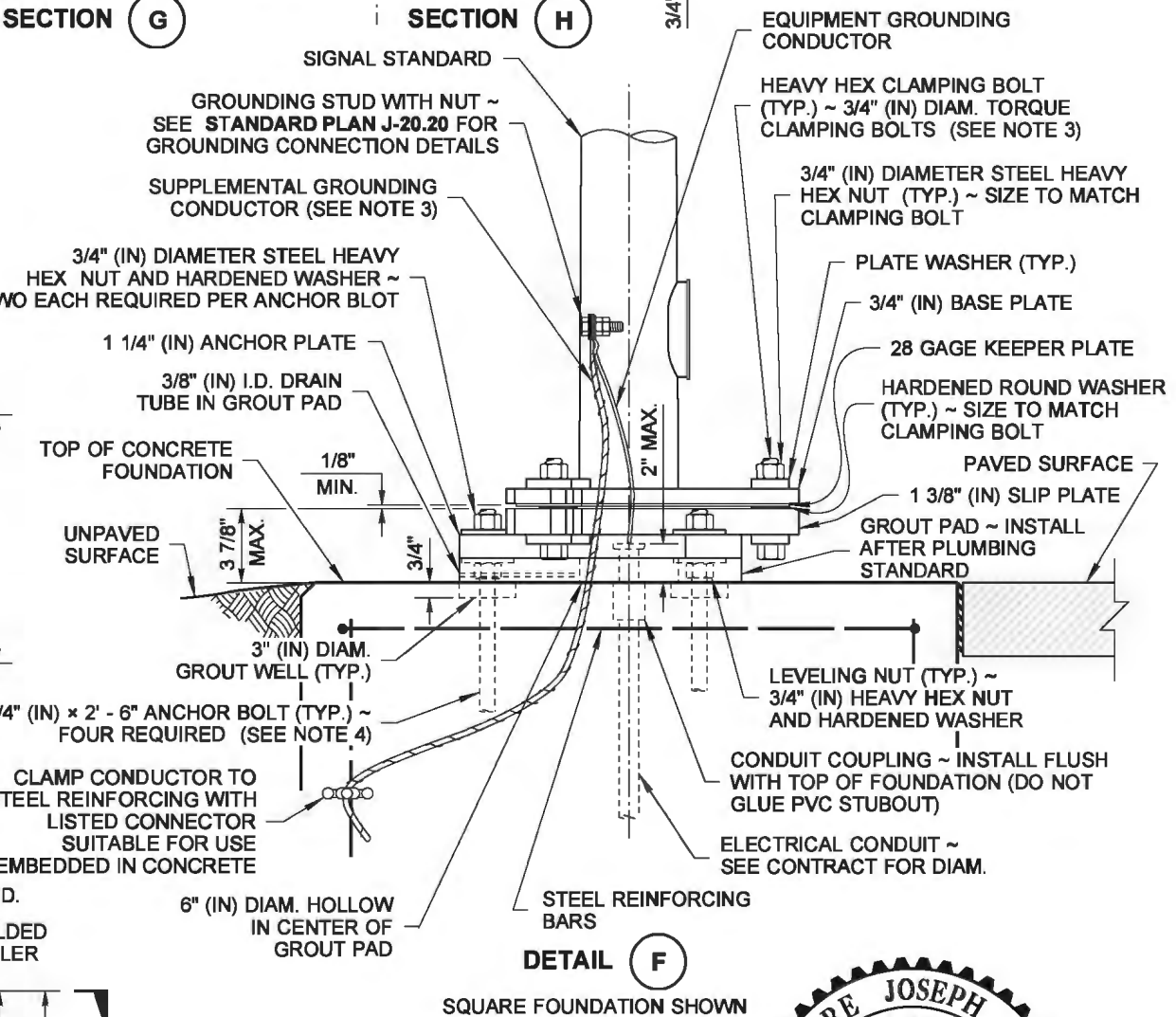


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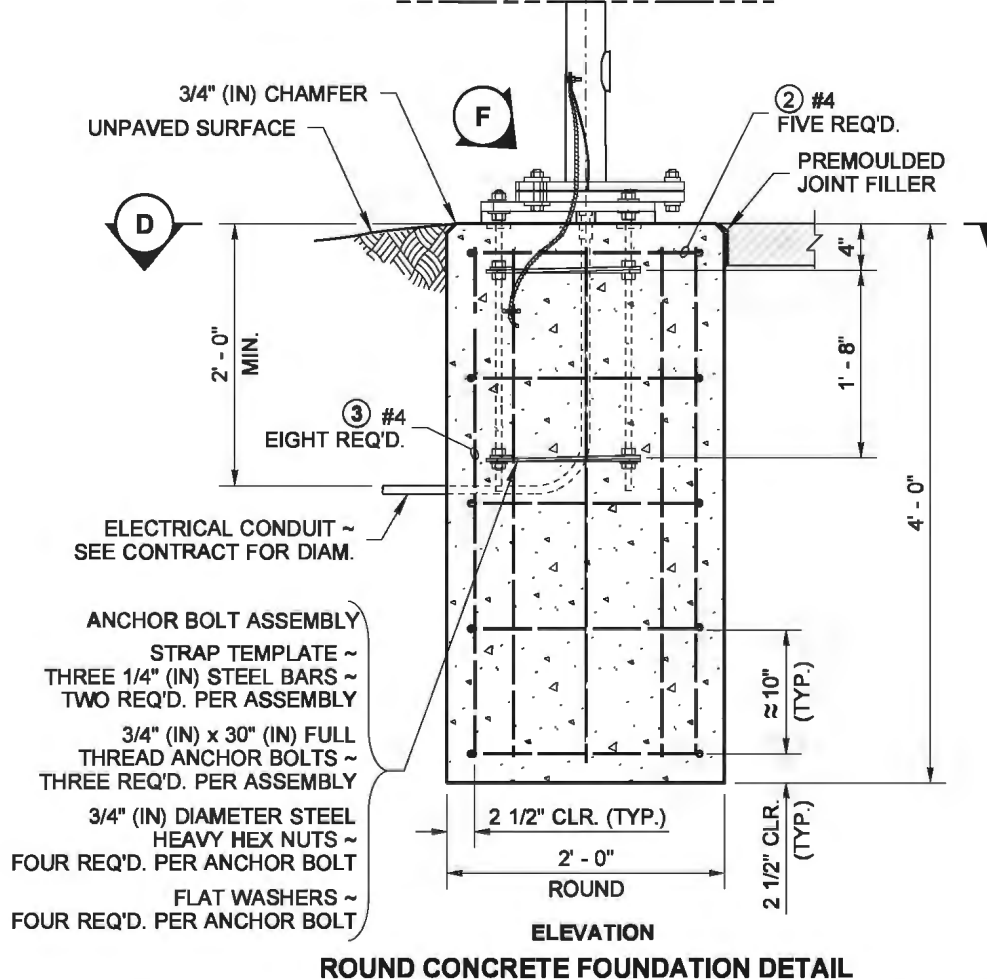


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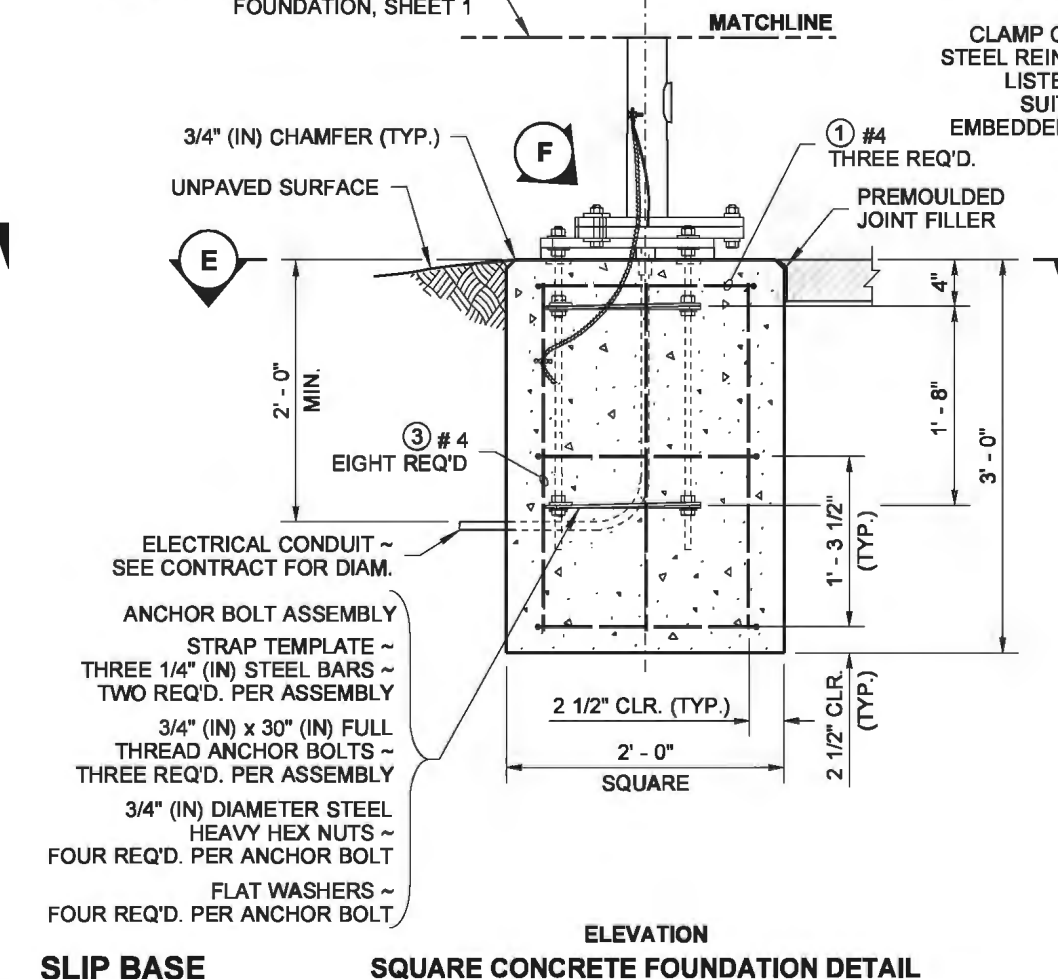


DETAIL F

SQUARE FOUNDATION SHOWN

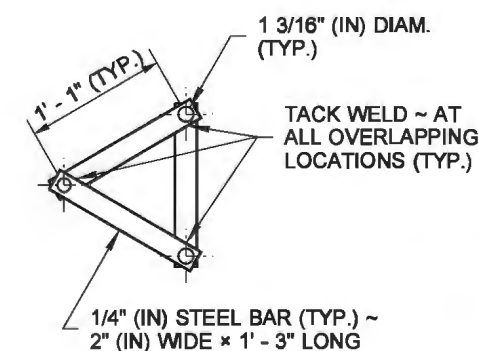


ROUND CONCRETE FOUNDATION DETAIL

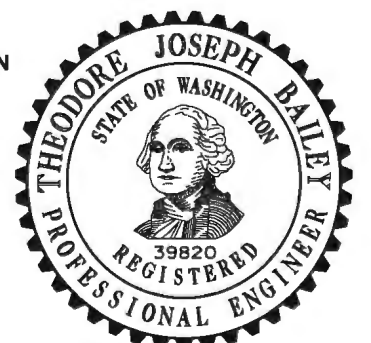


SLIP BASE

SQUARE CONCRETE FOUNDATION DETAIL



STRAP TEMPLATE DETAIL



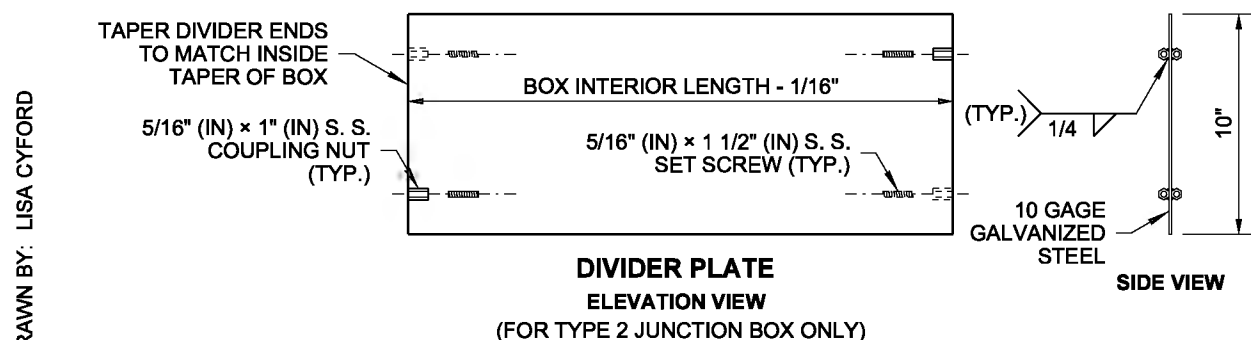
THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
39820
Bailey, Ted
Jun 26 2014 4:29 PM
**TYPE PS, TYPE 1, RM
& FB SIGNAL STANDARD
FOUNDATION DETAILS**
STANDARD PLAN J-21.10-04

SHEET 2 OF 2 SHEETS

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Bakotic, Pasco
Jun 30 2014 3:13 PM
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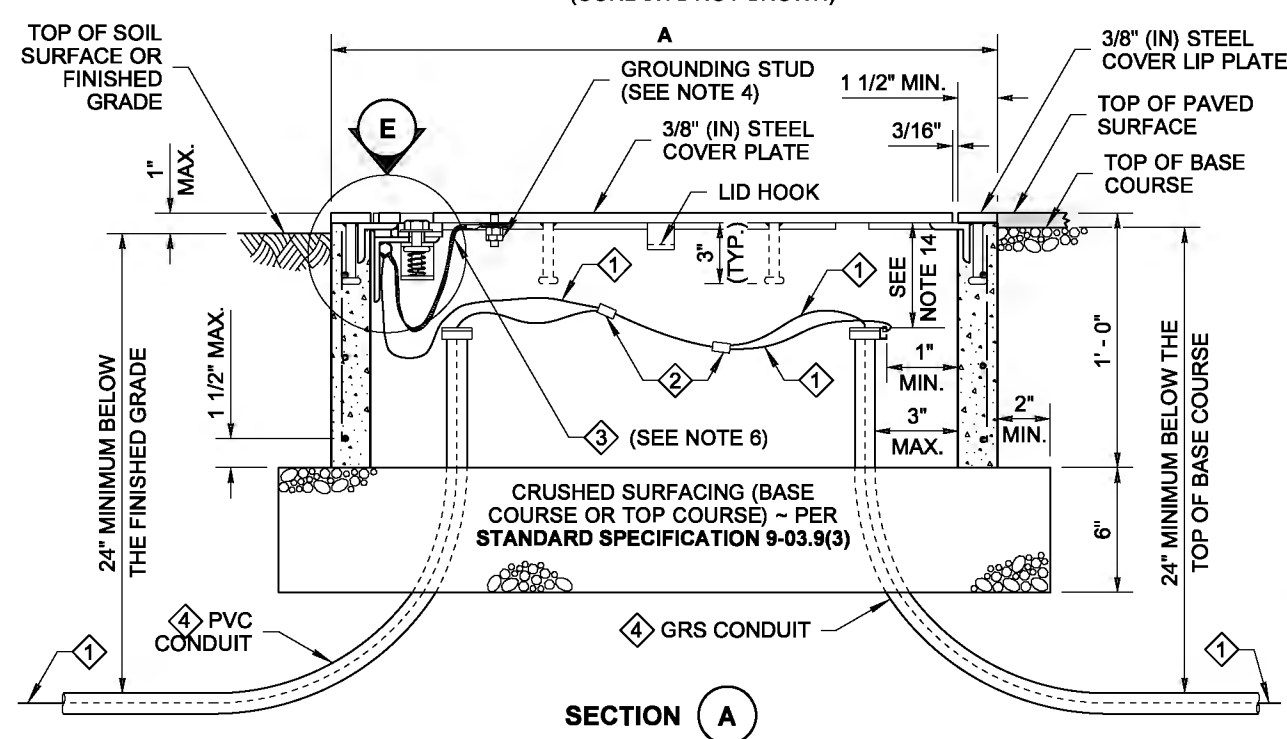
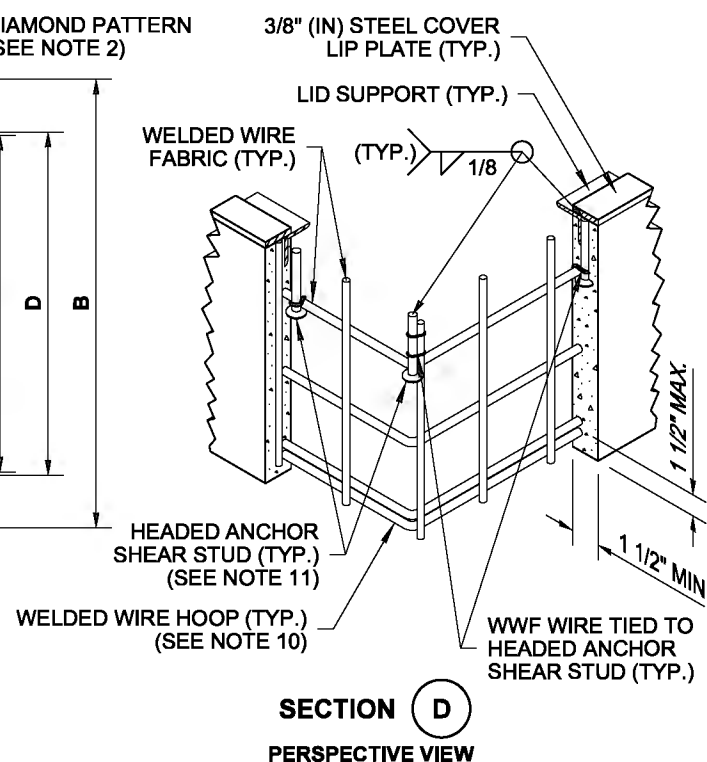
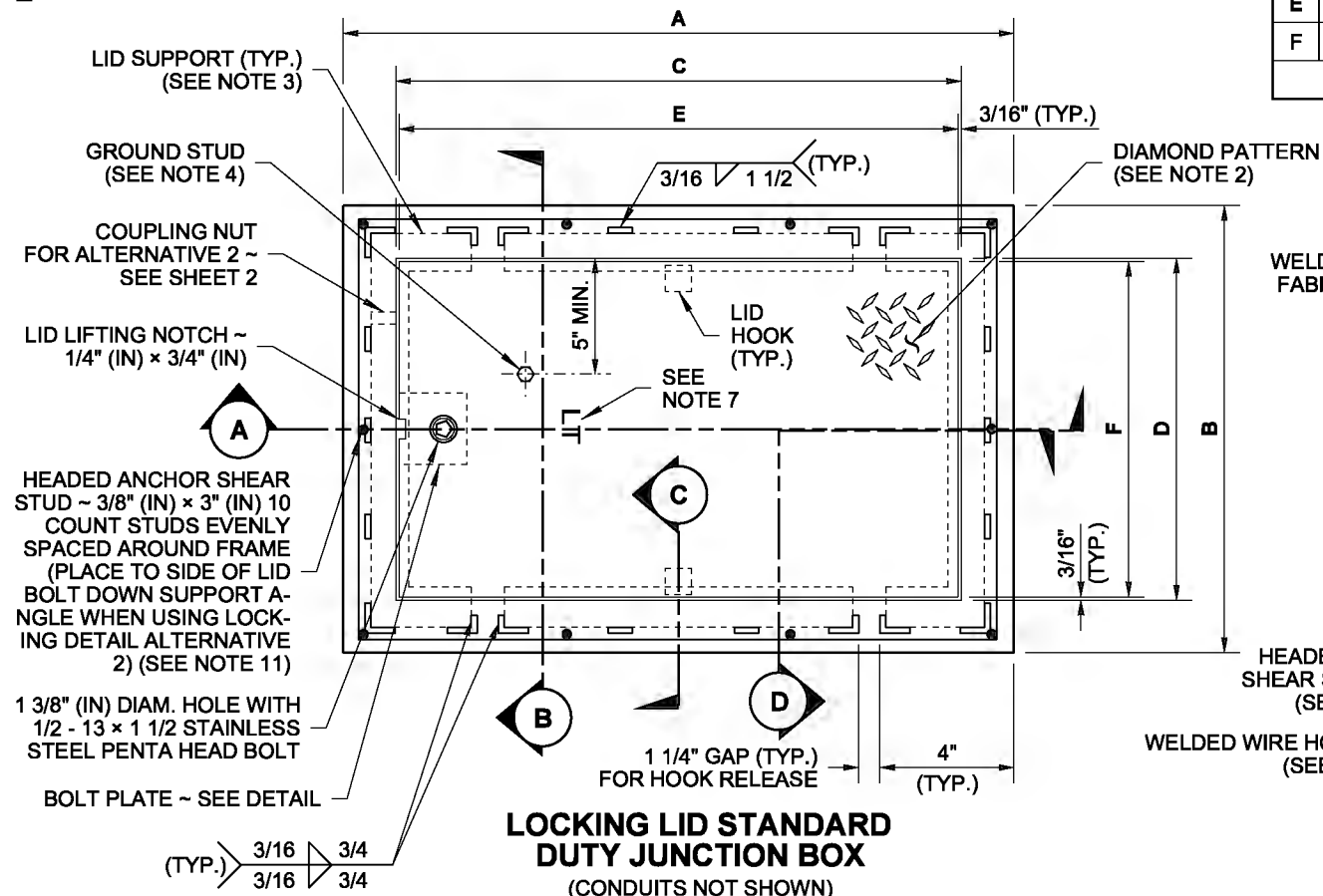
DRAWN BY: LISA CYFORD



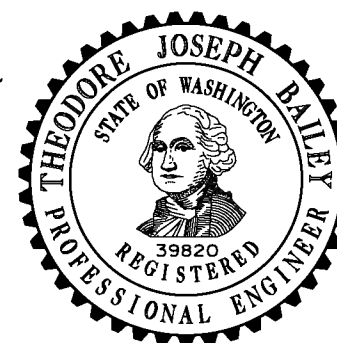
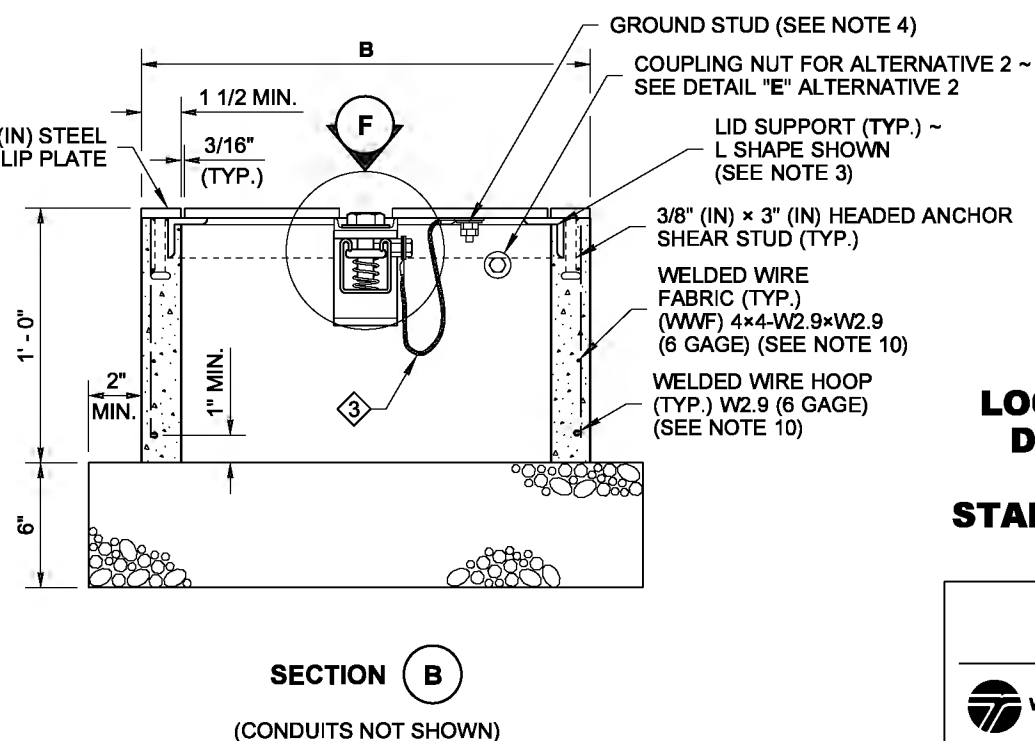
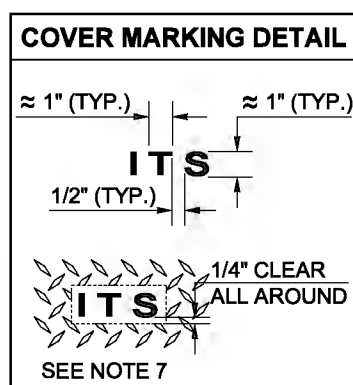
JUNCTION BOX DIMENSION TABLE			
MARK	ITEM	BOX TYPE	
		TYPE 1	TYPE 2
A	OUTSIDE LENGTH OF JUNCTION BOX	22"	33"
B	OUTSIDE WIDTH OF JUNCTION BOX	17"	22 1/2"
C	INSIDE LENGTH OF JUNCTION BOX	18" ~ 19"	28" ~ 29"
D	INSIDE WIDTH OF JUNCTION BOX	13" ~ 14"	17" ~ 18"
E	LID LENGTH	17 5/8"	28 5/8"
F	LID WIDTH	12 5/8"	18 1/8"
	CAPACITY ~ CONDUIT DIAMETER	6"	12"

NOTES

1. All box dimensions are approximate. Exact configurations vary among manufacturers.
 2. Minimum lid thickness shown. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate, and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use path. The non-slip lid shall be identified with permanent markings on the underside, indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" (in) line thickness formed with a mild steel weld bead and shall be placed prior to hot-dip galvanizing.
 3. Lid support members shall be 3/16" (in) minimum thick steel C, L, or T shape, welded to the frame.
 4. A 1/4-20 NC x 3/4" (in) stainless steel ground stud shall be welded to the bottom of the lid; include (2) stainless steel nuts and (2) stainless steel flat washers.
 5. Bolts and nuts shall be liberally coated with anti-seize compound.
 6. Equipment Bonding Jumper shall be # 8 AWG min. x 4' (ft) of tinned braided copper.
- System Identification letters shall be 1/8" (in) line thickness formed with a mild steel weld bead. See Marking detail. Grind off diamond pattern before forming letters. For System Identification details, see **Standard Specification 9-29.2(4)**.
- When required in the Contract, provide a 10" (in) x 27 1/2" (in), 10 gage divider plate, complete, with dimensions, in each Type 2 Junction Box where specified.
- When required in Contract, provide a 12" (in) deep extension for each Type 2 Junction Box where specified. See the **Standard Specifications** for alternative reinforcement and class of concrete.
- Welded Anchor Shear Studs must be welded to the Steel Cover Lip Plate and wire tied in two places to vertical Welded Wire Fabric when in contact with each other. Wire tie all other Headed Anchor Shear Studs to the horizontal Welded Wire Fabric.
- Attachment Tab provides a method of retrofitting by using a mechanical process in lieu of welding. Attachment Tab shown depicts a typical component arrangement; actual configurations of components will vary among manufacturers. See approved manufacturers' shop drawings for specifics.
- Unless otherwise noted in the plans or approved by the Engineer, Junction Boxes, Cable Vaults, and Pull Boxes shall not be placed within the sidewalks, walkways, shared use paths, traveled ways or paved shoulders. All Junction Boxes, Cable Vaults, and Pull Boxes placed within the traveled way or paved shoulders shall be Heavy-Duty.
- Clearance between the top of the conduit and the bottom of the Junction Box lid shall be 6" (in) min. to 8" (in) max. for final grade of new construction only. See **Standard Specification 8-20.3(5)**. Where adjustments are made to existing Junction Boxes, or for interim construction stages during the contract, the clearance shall be from 6" (in) min. to 10" (in) max. See **Standard Specification 8-20.3(6)**.



- ① Equipment Grounding Conductor
- ② Copper Solderless Crimp Connector 3/4" COVER
- ③ Equipment Bonding Jumper (See Note 6)
- ④ See Contract for conduit size and number



**LOCKING LID STANDARD
DUTY JUNCTION BOX
TYPES 1 & 2
STANDARD PLAN J-40.10-04**

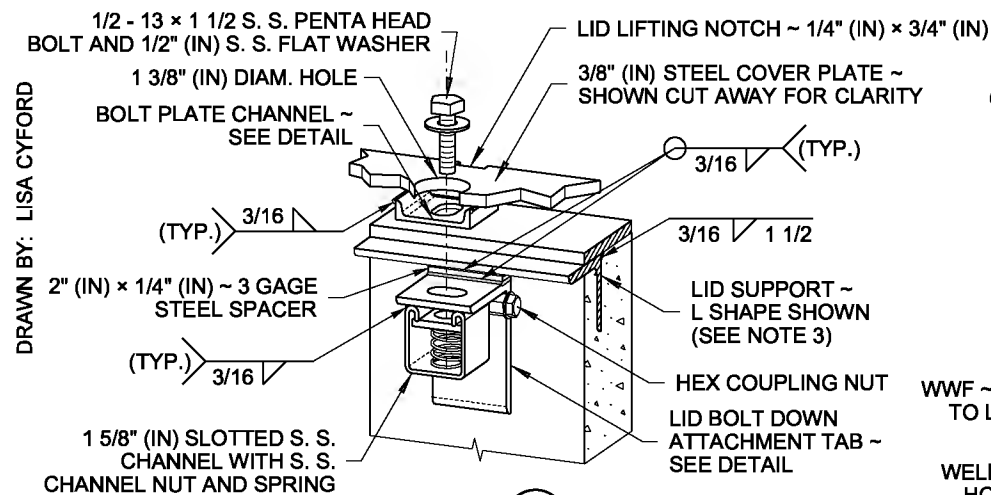
SHEET 1 OF 2 SHEETS

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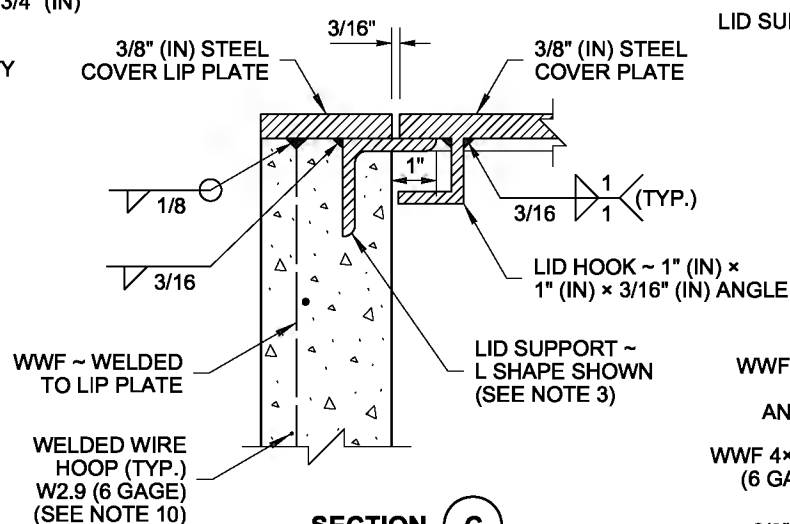
STATE DESIGN ENGINEER

 Washington State Department of Transportation

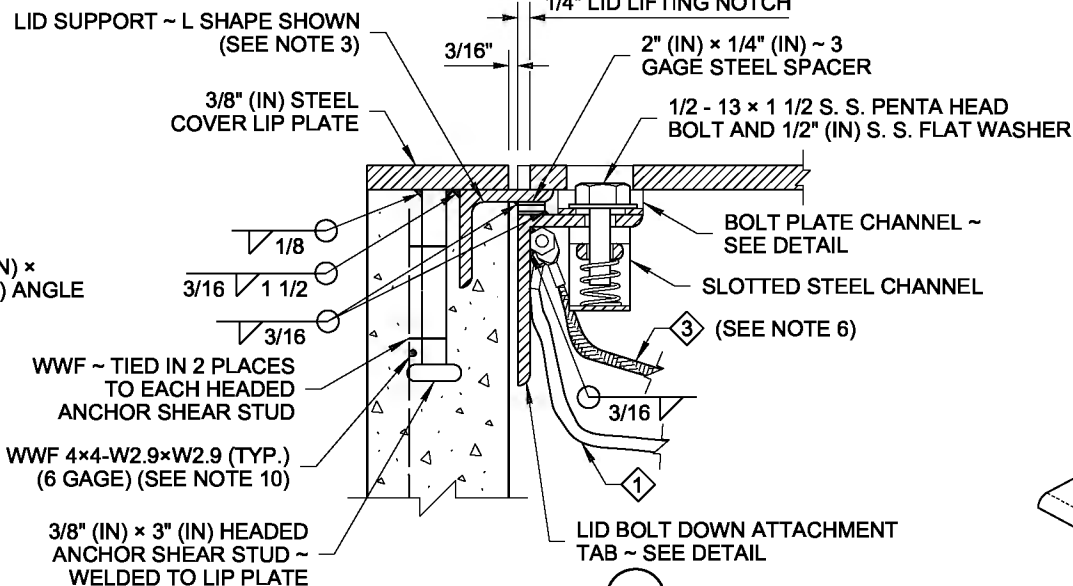


DETAIL F

ALTERNATIVE 1 SHOWN PERSPECTIVE VIEW

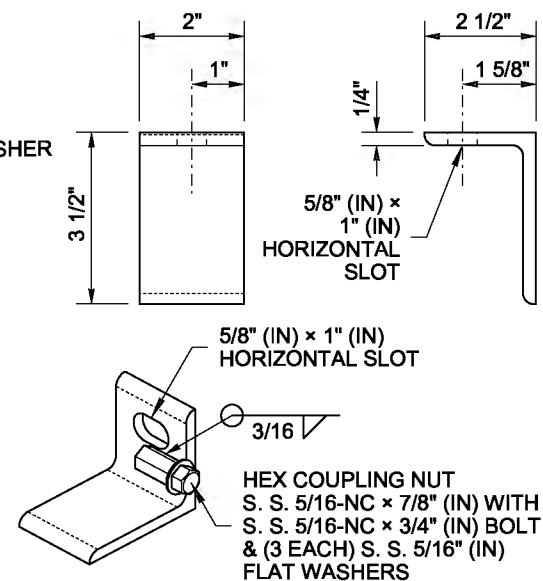


SECTION C

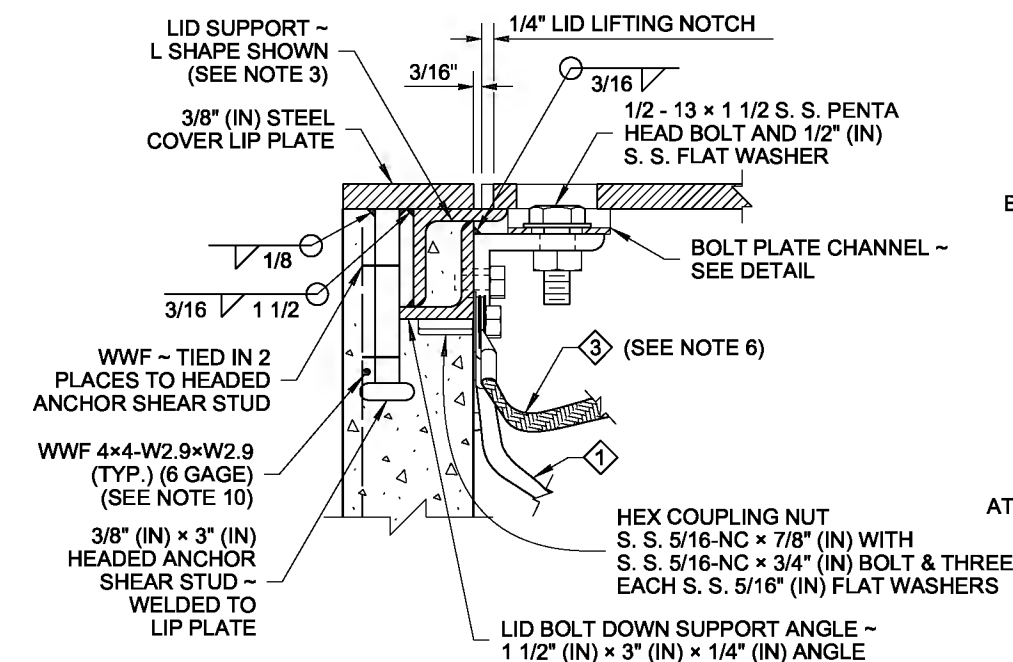


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ALTERNATIVE 1 SHOWN

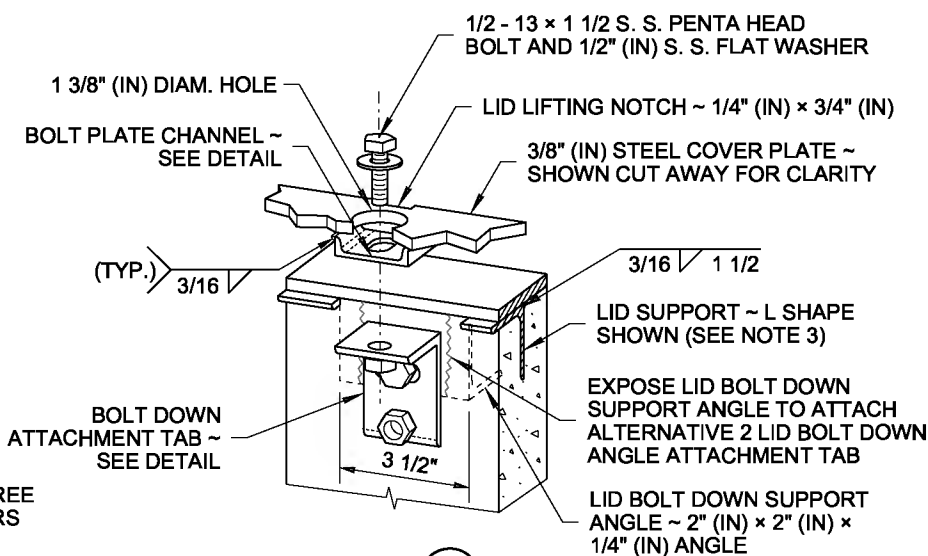


ALTERNATIVE 1 LID BOLT DOWN ATTACHMENT TAB (SEE NOTE 12)



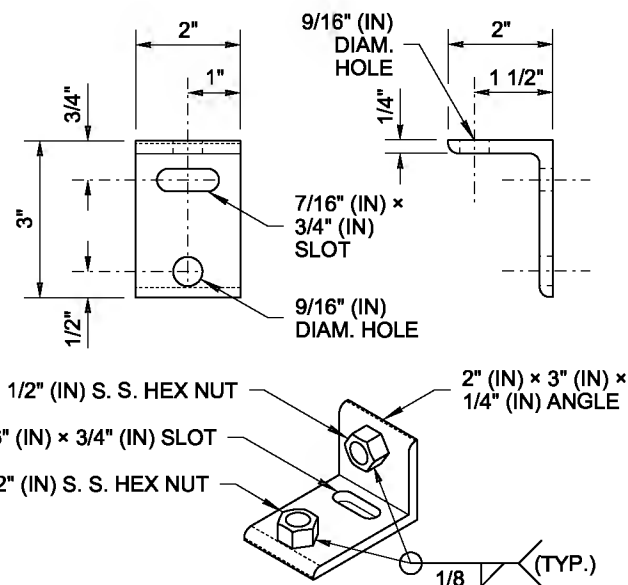
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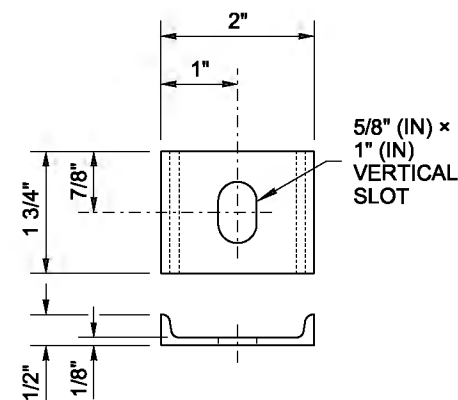


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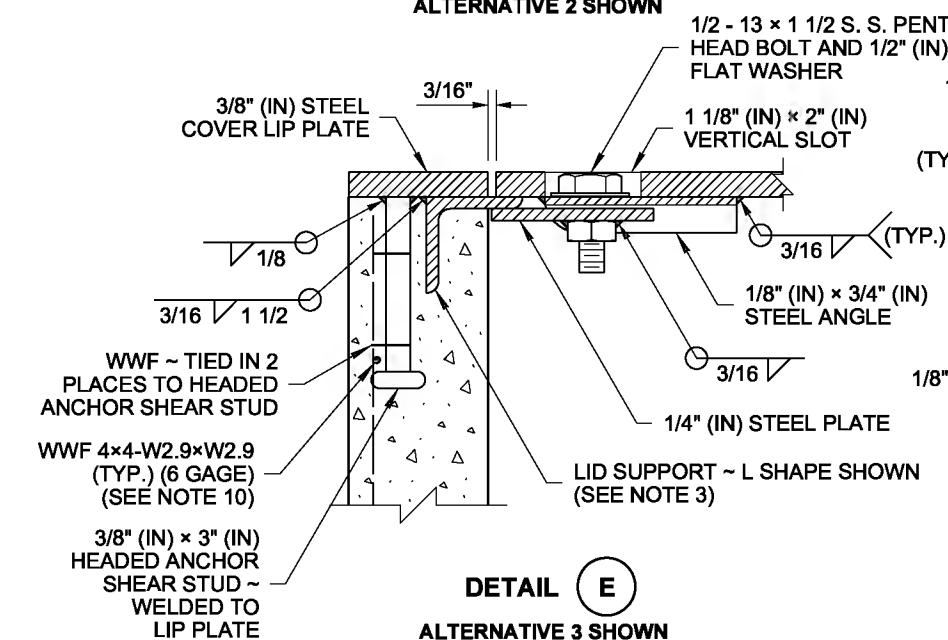
ALTERNATIVE 2 SHOWN PERSPECTIVE VIEW



ALTERNATIVE 2 LID BOLT DOWN ATTACHMENT TAB (SEE NOTE 12)

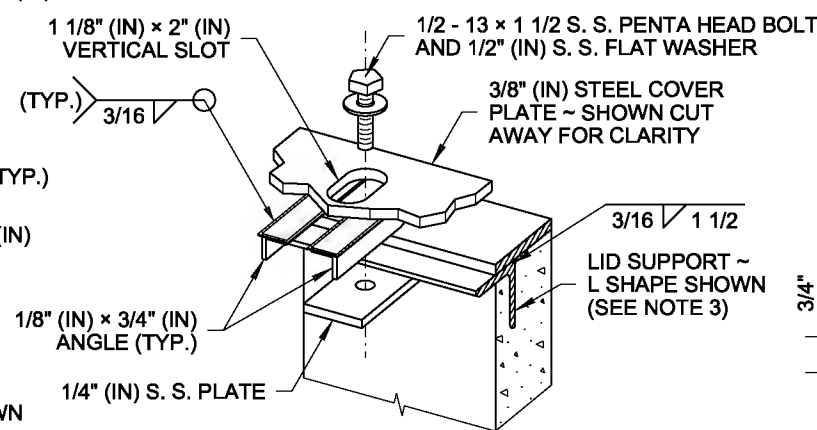


BOLT PLATE CHANNEL



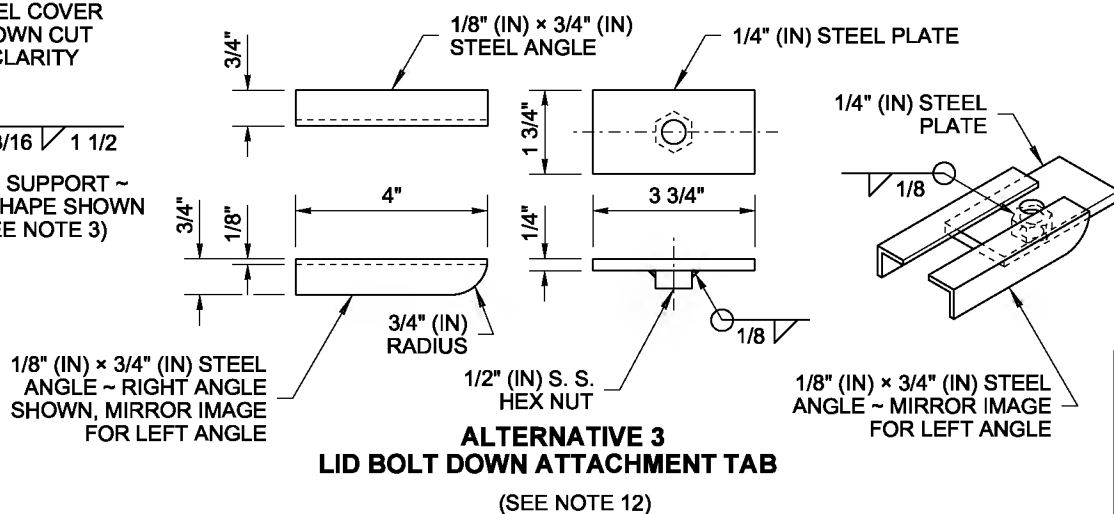
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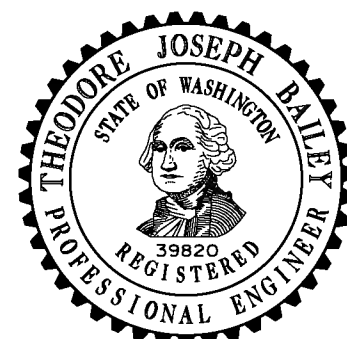


DETAIL F

ALTERNATIVE 3 SHOWN PERSPECTIVE VIEW



ALTERNATIVE 3 LID BOLT DOWN ATTACHMENT TAB (SEE NOTE 12)

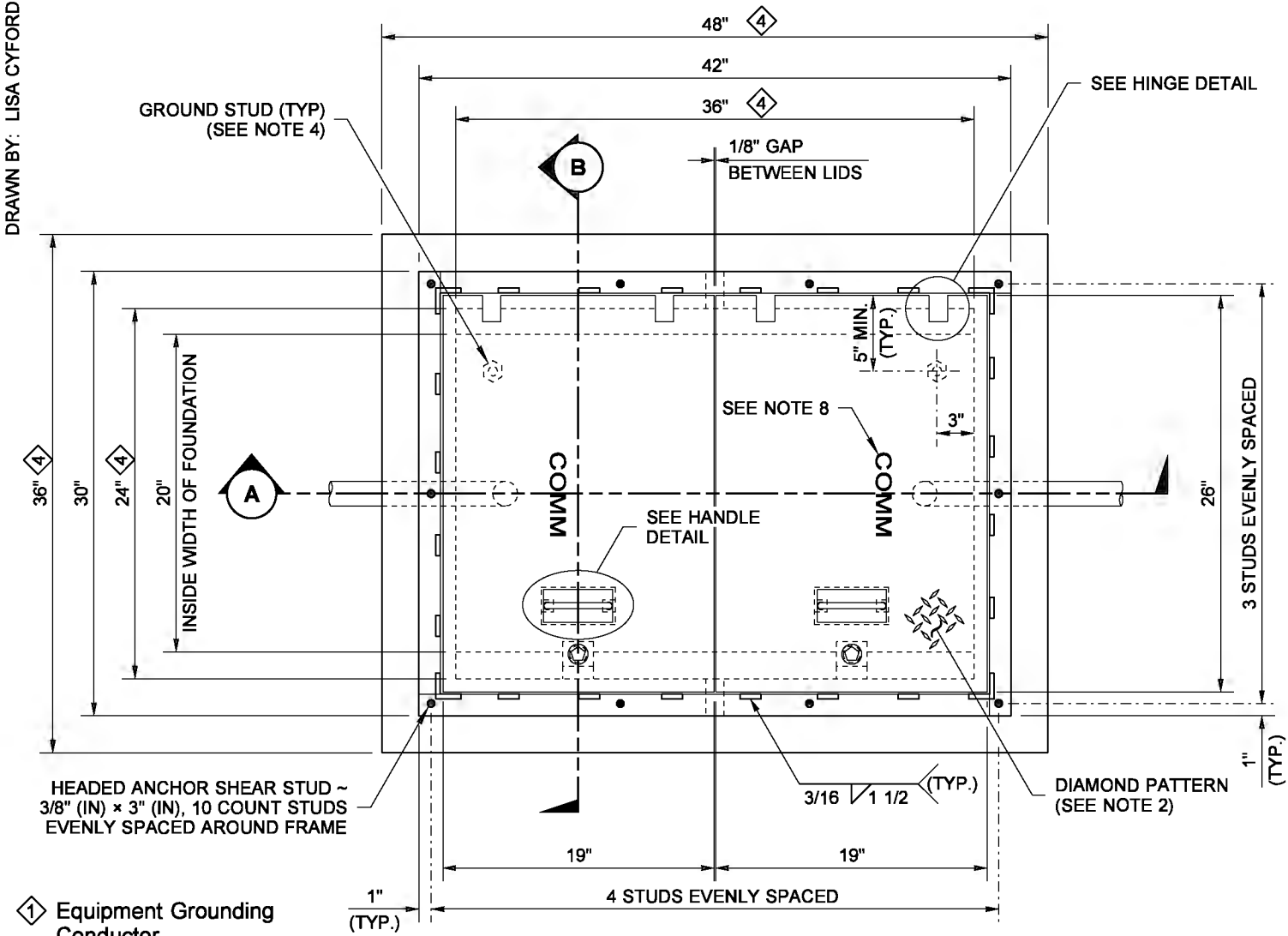


LOCKING LID STANDARD DUTY JUNCTION BOX TYPES 1 & 2 STANDARD PLAN J-40.10-04

SHEET 2 OF 2 SHEETS

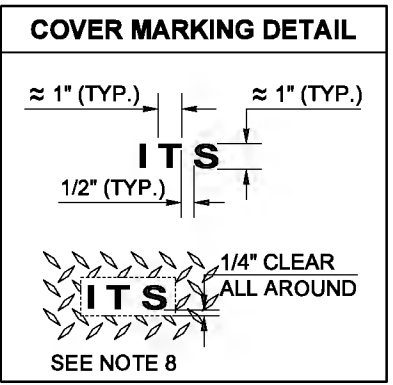
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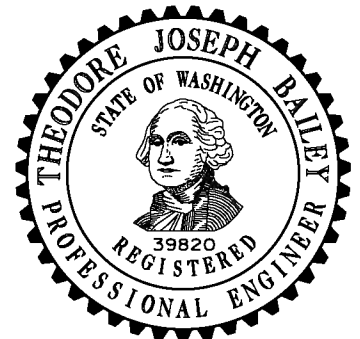
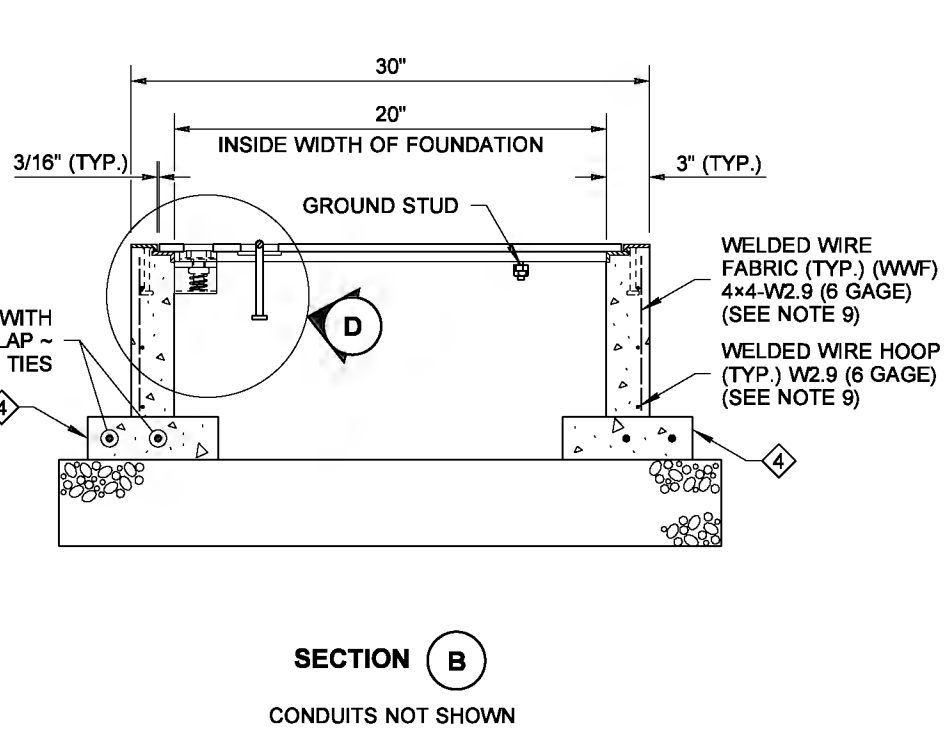
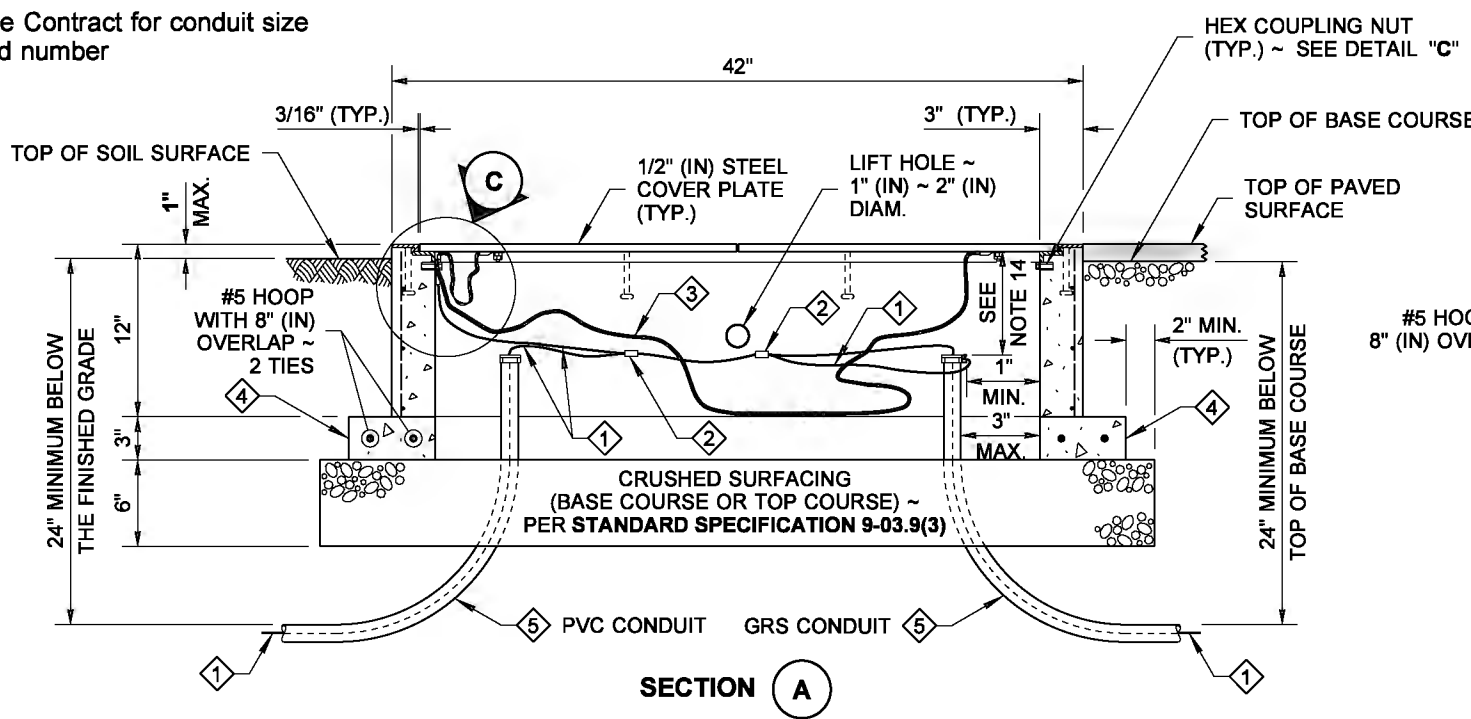
- ① Equipment Grounding Conductor
- ② Copper Solderless Crimp Connector
- ③ Equipment Bonding Jumper
- ④ Foundation
- ⑤ See Contract for conduit size and number

PLAN VIEW
LOCKING LID STANDARD DUTY JUNCTION BOX



NOTES

- All box dimensions are approximate. Exact configurations vary among manufacturers.
- Minimum lid thicknesses are shown. Junction Boxes installed in sidewalks, walkways, and shared-use paths shall have a slip-resistant coating on the lid and lip cover plate and shall be installed with the surface flush with and matched to the grade of the sidewalk, walkway, or shared-use path. The non-slip lid shall be identified with permanent markings on the underside, indicating the type of surface treatment (see Contract Documents for details) and the year of manufacture. The permanent marking shall be 1/8" (in) line thickness formed with a mild steel weld bead and shall be placed prior to hot-dip galvanizing.
- Lid support members shall be 3/16" (in) min. thick steel C, L, or T shape, welded to the frame. Exact configurations vary among manufacturers.
- A 1/4-20 NC x 3/4" (in) S. S. ground stud shall be welded to the bottom of each lid; include (2) S. S. nuts and (2) S. S. flat washers.
- The hinges shall allow the lids to open 180°.
- Bolts and nuts shall be liberally coated with anti-seize compound.
- Connect Equipment Bonding Jumper to ground stud on lid. As an alternative to the ground stud connection, the Equipment Bonding Jumper shall be attached to the front face of the hinge pocket with a 5/16-20 NC x 3/4" (in) S. S. bolt, (2) each S. S. nuts, and (2) each S. S. flat washers. Equipment Bonding Jumper shall be #8 AWG min. x 4' (ft) of tinned braided copper.
- The System Identification letters shall be 1/8" (in) line thickness formed by a mild steel weld bead. See Cover Marking detail. Grind off diamond pattern before forming letters. See **Standard Specification 9-29.2(4)** for details.
- See the **Standard Specifications** for alternative reinforcement and class of concrete.
- See **Standard Plan J-40.10** for Welded Wire Fabric and Headed Anchor Shear Stud attachment details.
- Capacity ~ conduit diameter = 24" (in)
- Lid Bolt Down Attachment Tab provides a method of retrofitting by using a mechanical process in lieu of welding. Attachment Tab shown depicts a typical component arrangement; actual configurations of assembly will vary among manufacturers. See approved manufacturers' shop drawing for specifics.
- Unless otherwise noted in the plans or approved by the Engineer, Junction Boxes, Cable Vaults and Pull Boxes shall not be placed within the sidewalk, walkway, shared use path, traveled way or paved shoulders. All Junction Boxes, Cable Vaults, and Pull Boxes placed within the traveled way or paved shoulders shall be Heavy-Duty.
- Distance between the top of the conduit and the bottom of the Junction Box lid shall be 6" (in) min. to 8" (in) max. for final grade of new construction only. See **Standard Specification 8-20.3(5)**. Where adjustments are to be made to existing Junction Boxes, or for interim construction stages during the contract, the limits shall be from 6" (in) min. to 10" (in) max. See **Standard Specification 8-20.3(6)**.



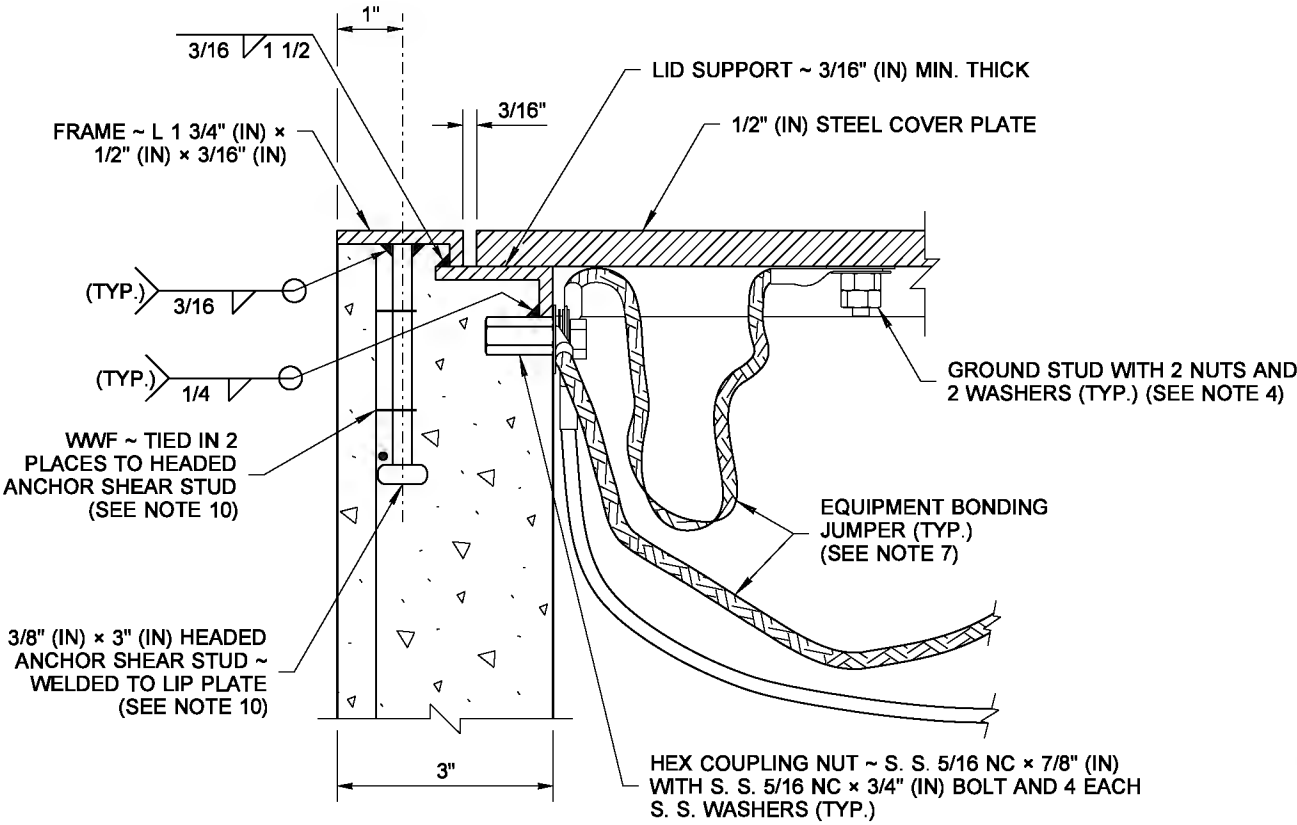
LOCKING LID STANDARD
DUTY JUNCTION BOX
TYPE 8
STANDARD PLAN J-40.30-04

SHEET 1 OF 2 SHEETS

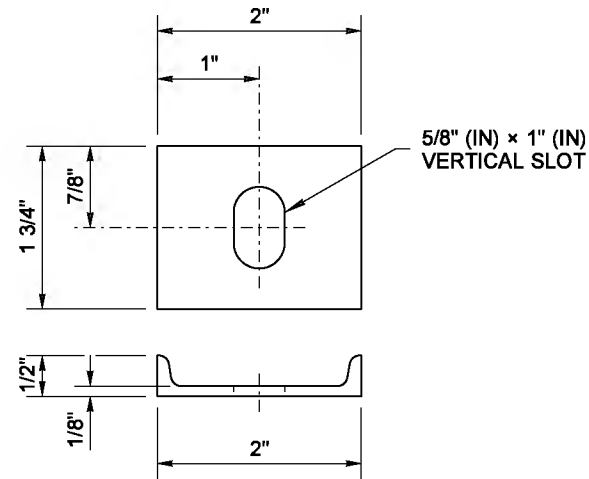
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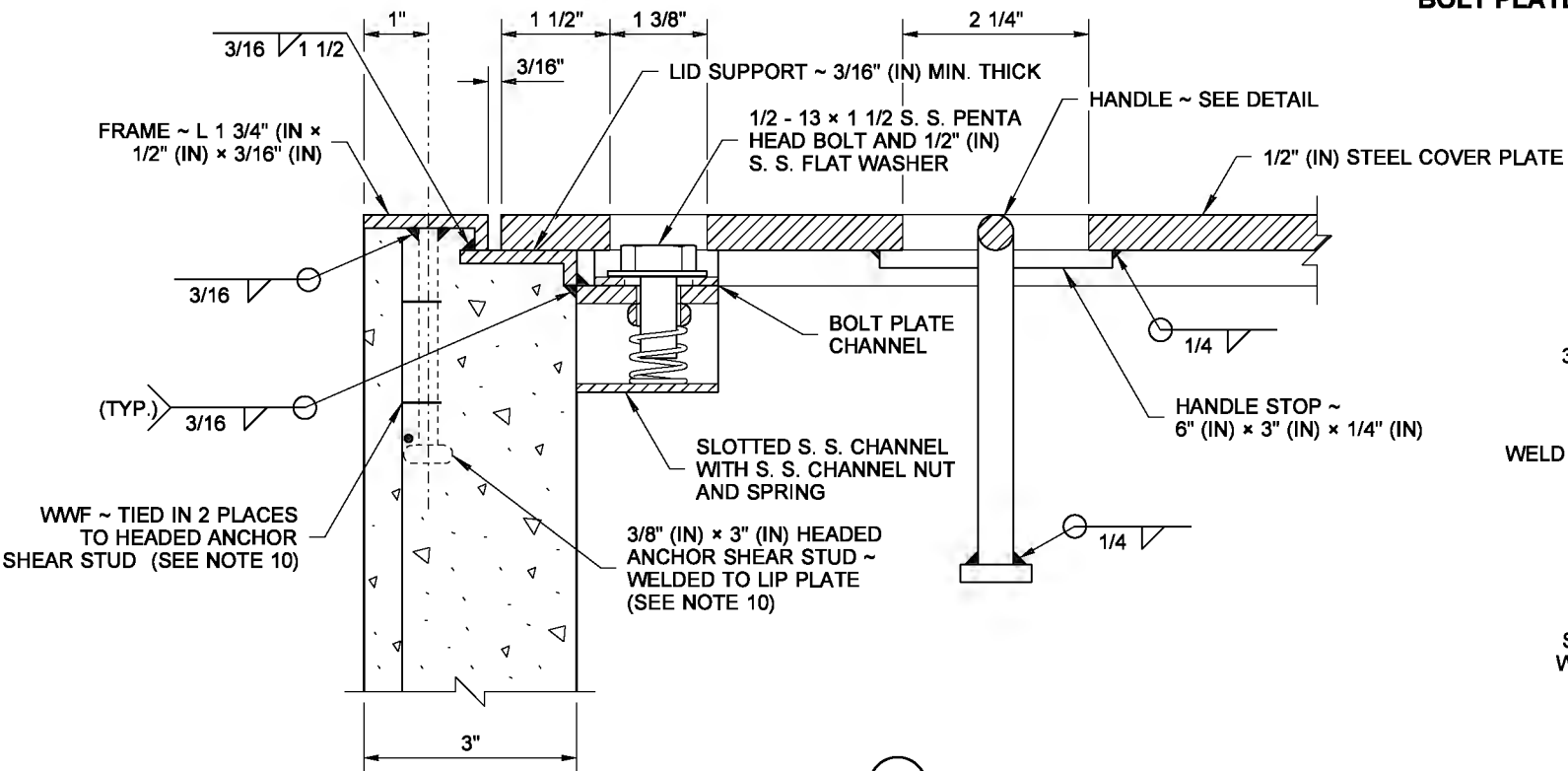
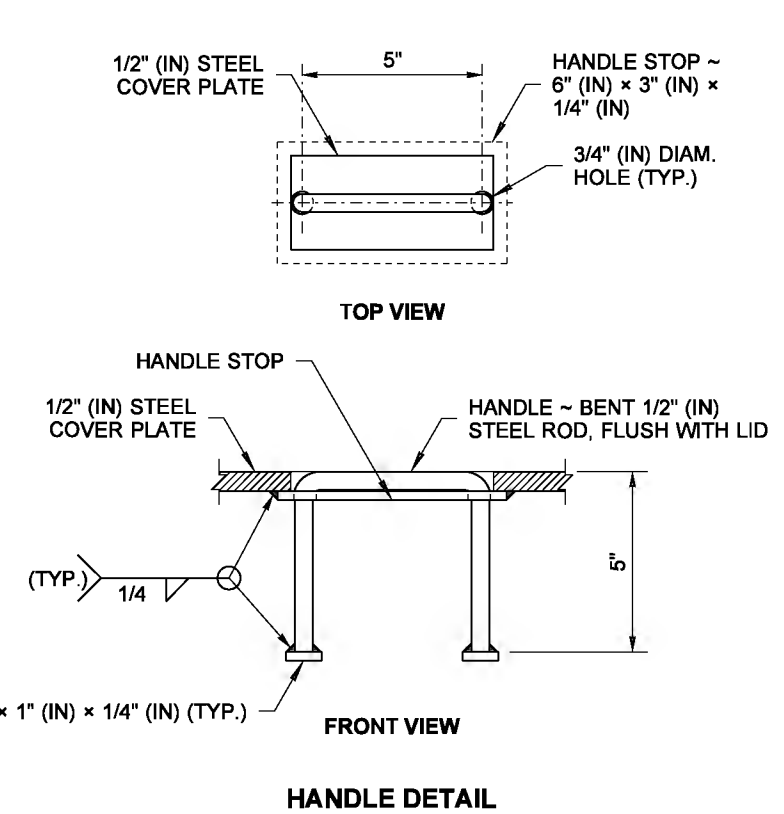
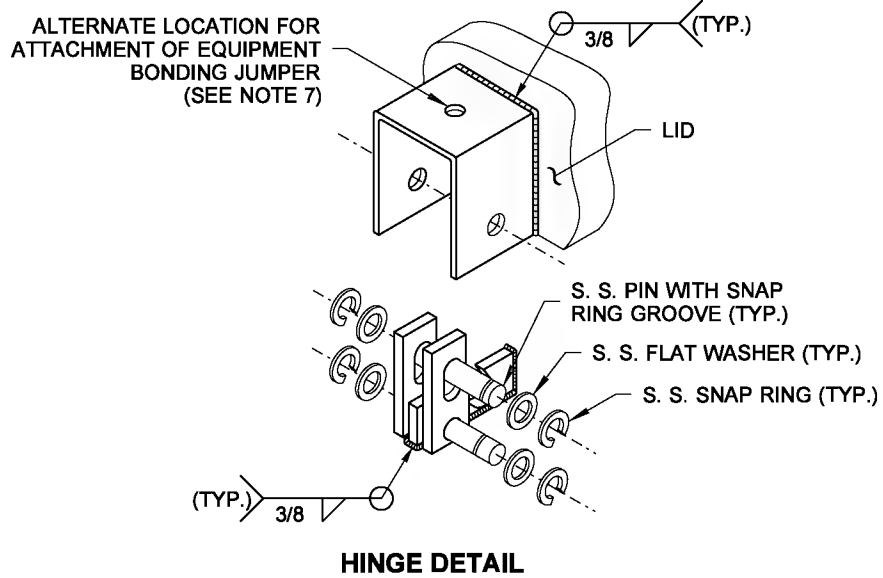
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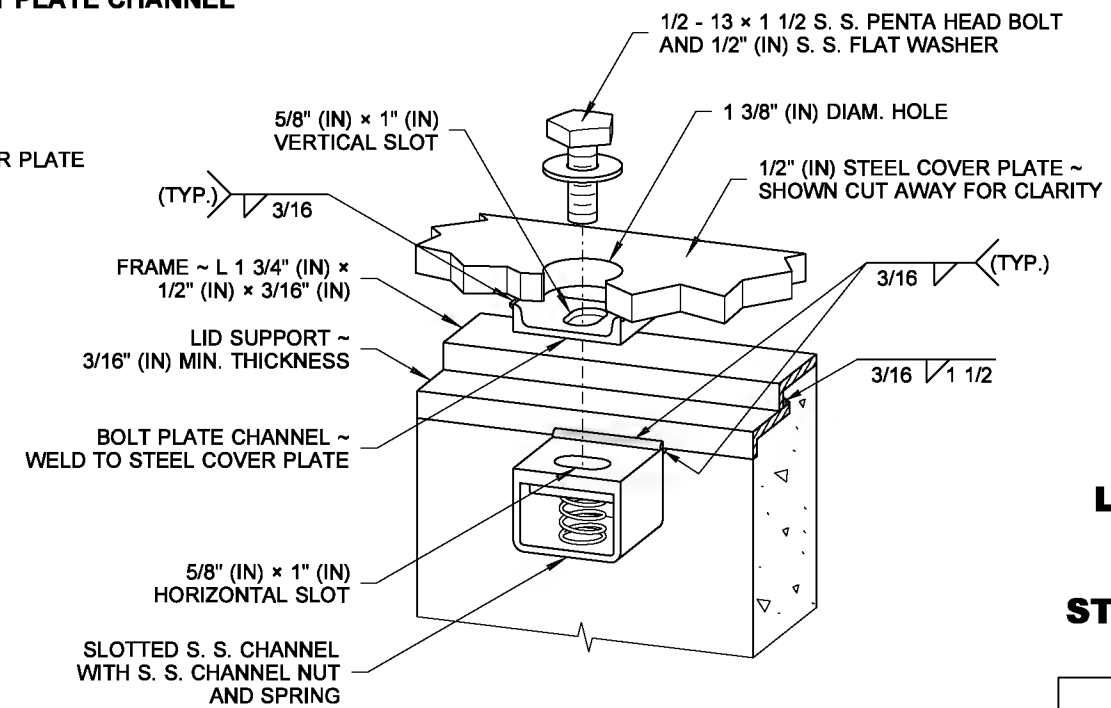
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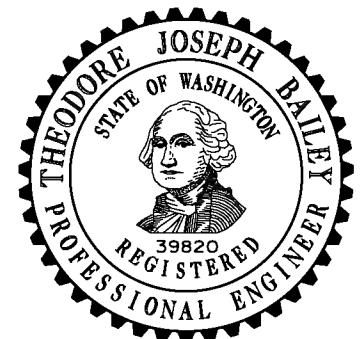
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DETAIL D



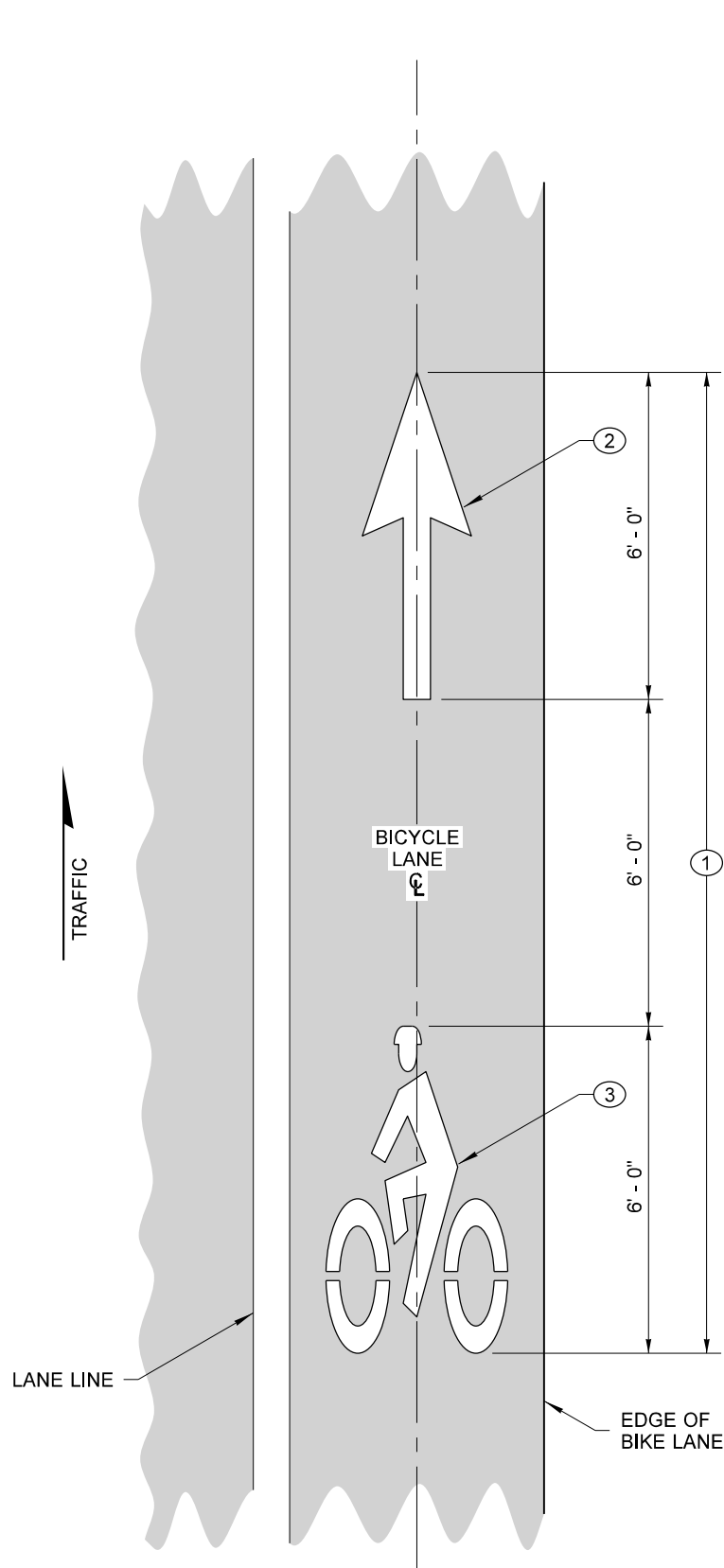
DETAIL D ISOMETRIC VIEW



**LOCKING LID STANDARD
DUTY JUNCTION BOX
TYPE 8
STANDARD PLAN J-40.30-04**

SHEET 2 OF 2 SHEETS

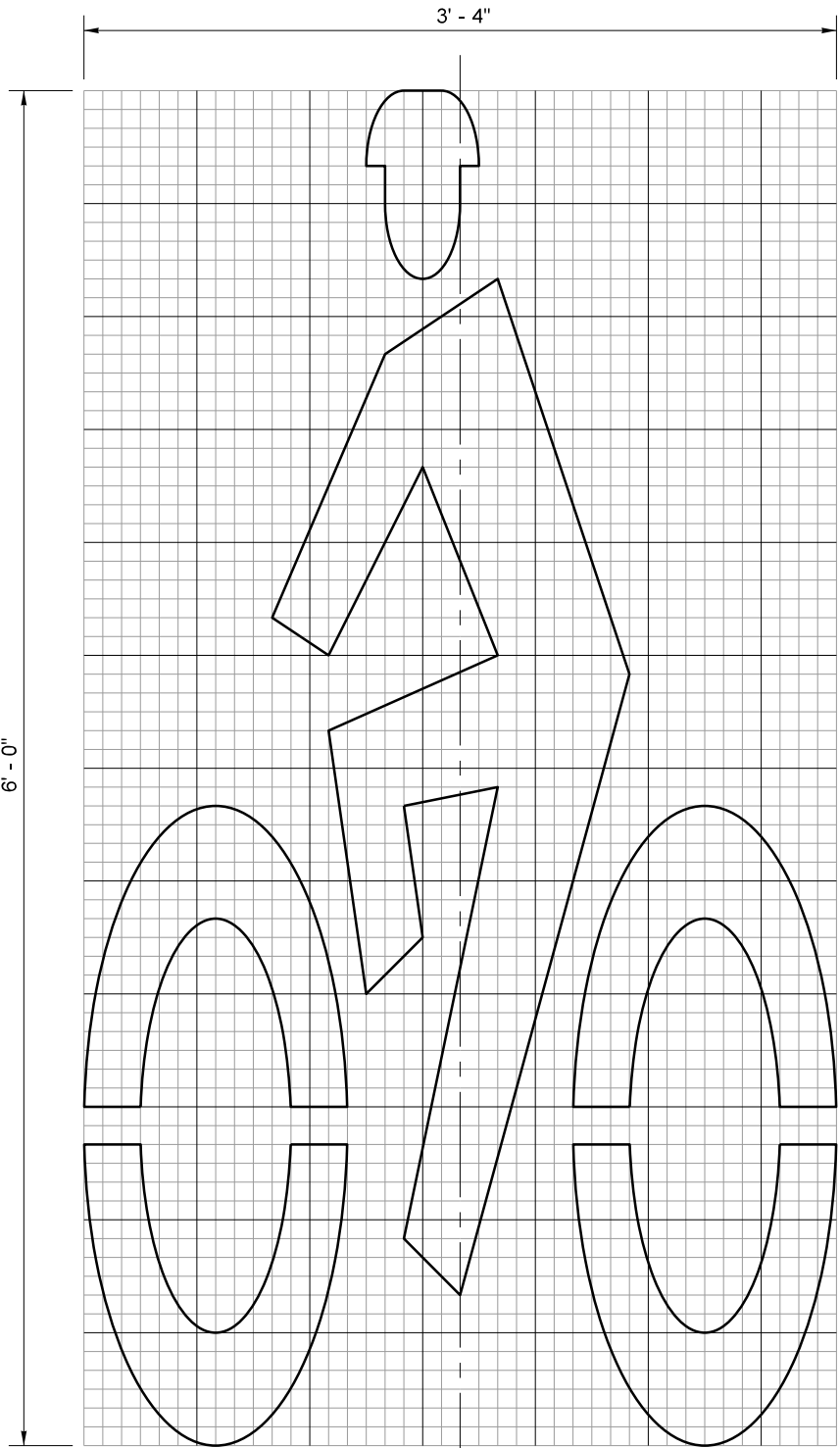
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BICYCLE LANE SYMBOL LAYOUT

KEY NOTES

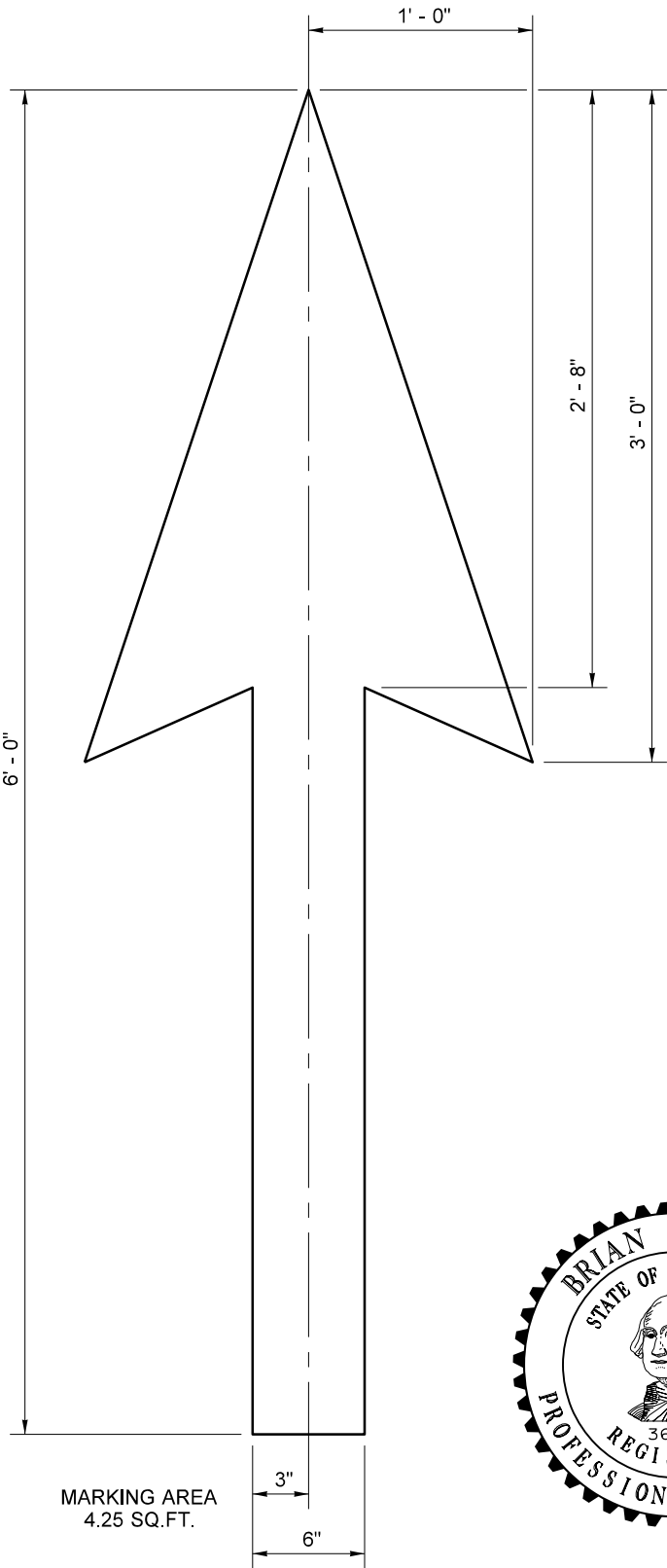
- ① Bid Item "Bicycle Lane Symbol" includes Bike Lane Arrow and Bike Rider Symbol.
- ② 2' (ft) x 6' (ft) White Bike Lane Arrow.
- ③ Bike Rider Symbol.



BIKE RIDER SYMBOL DETAIL

GENERAL NOTE

See Contract for location and material requirements.



BIKE LANE ARROW DETAIL



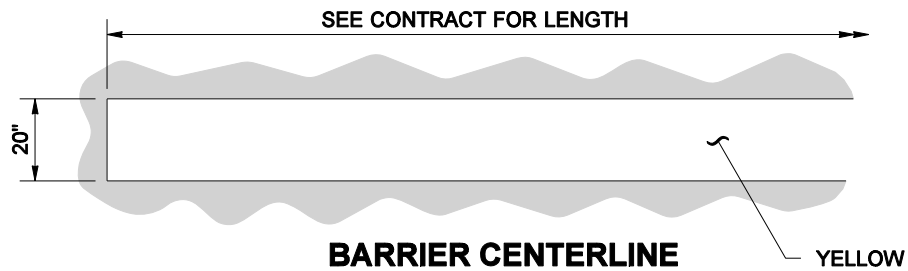
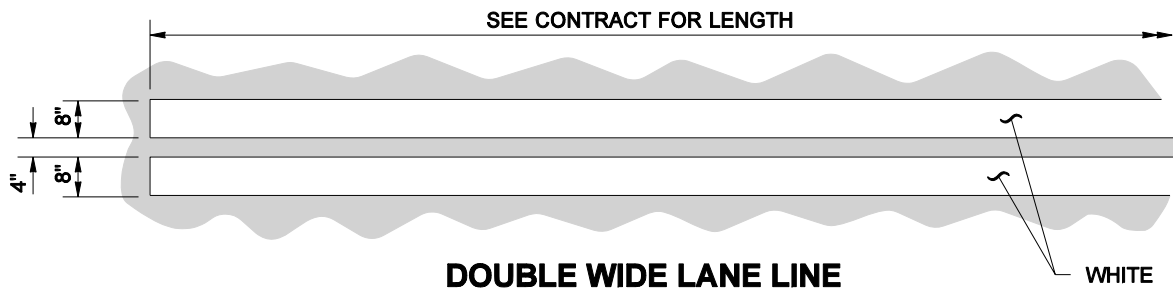
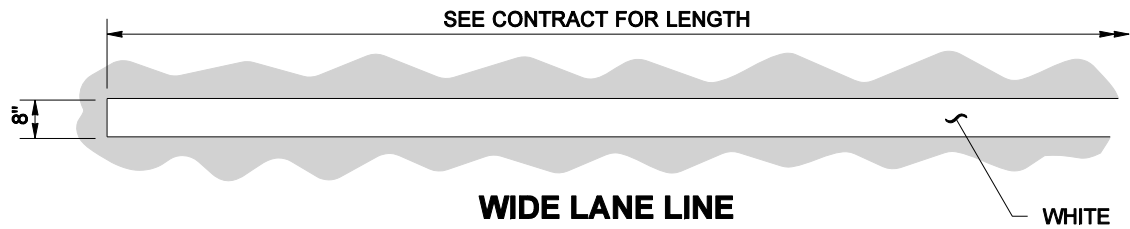
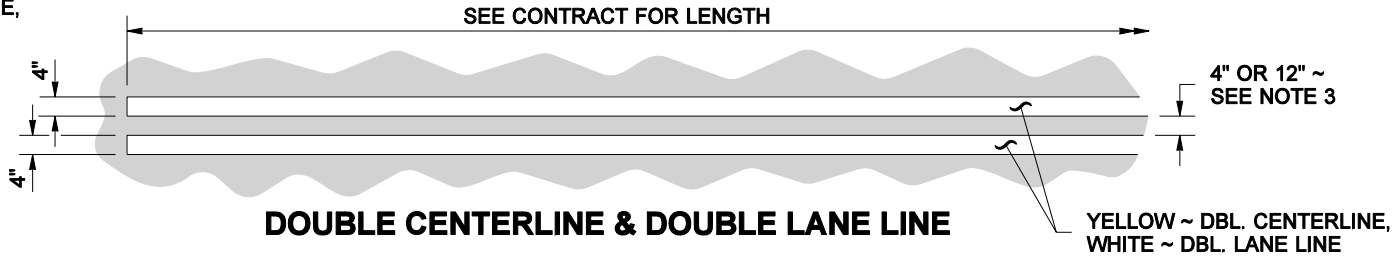
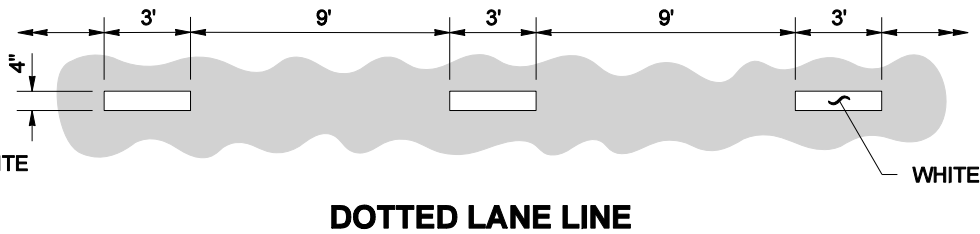
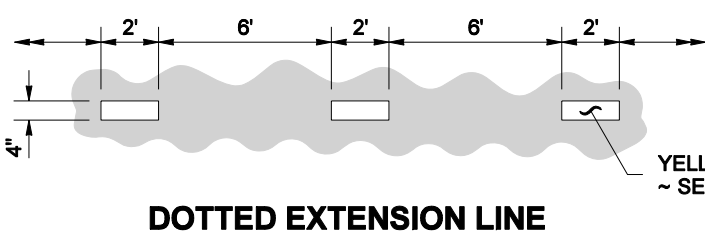
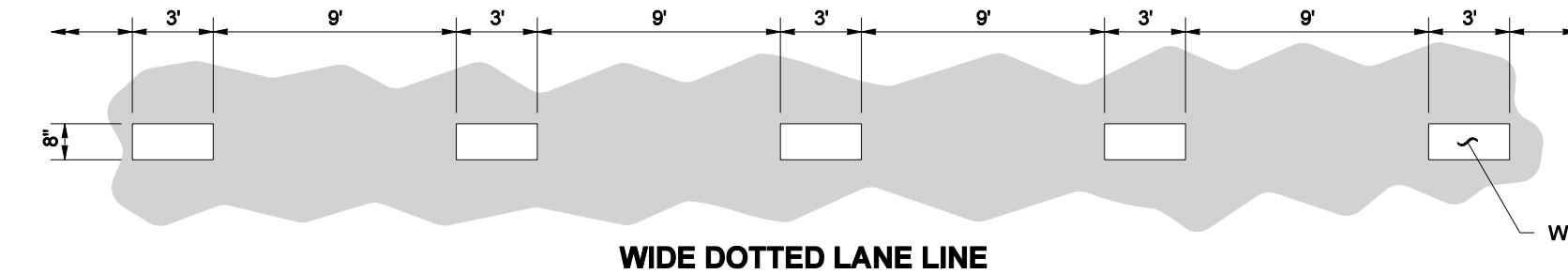
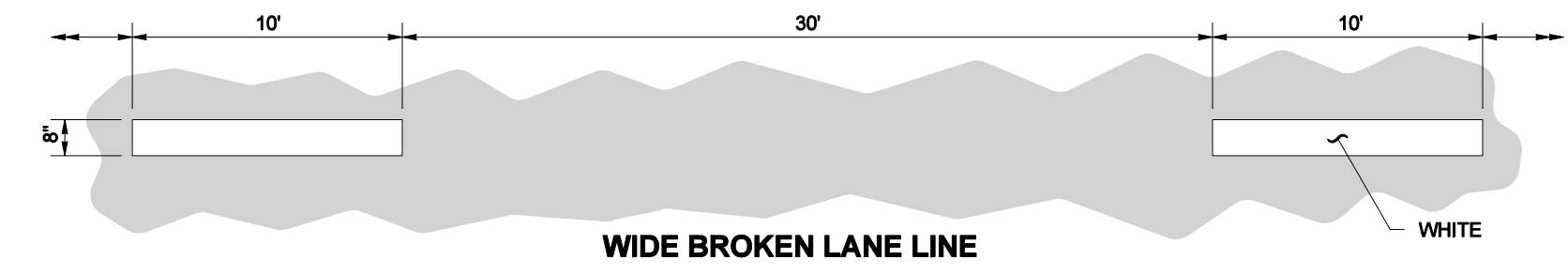
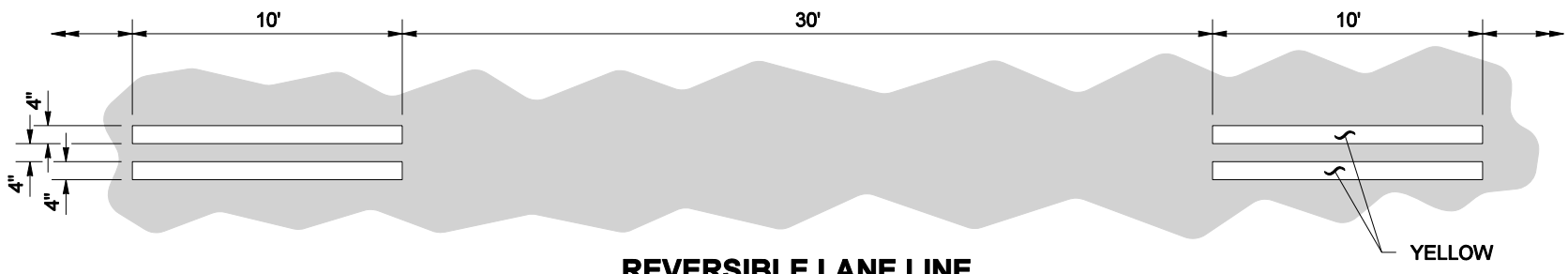
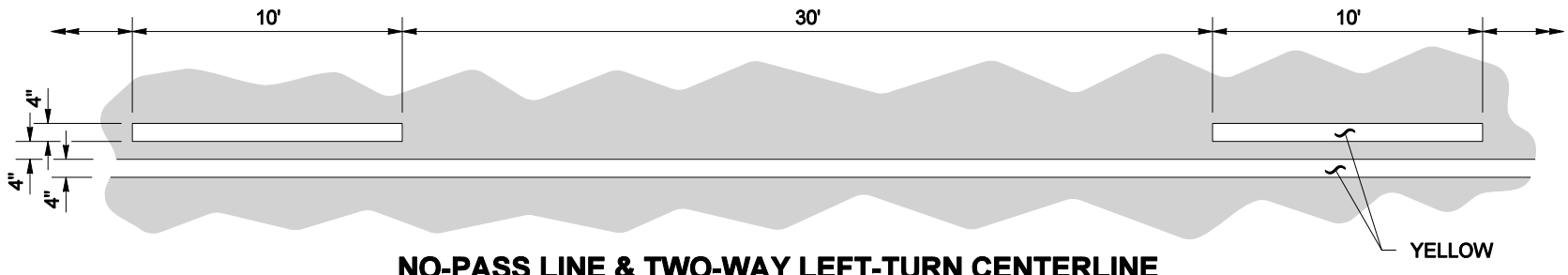
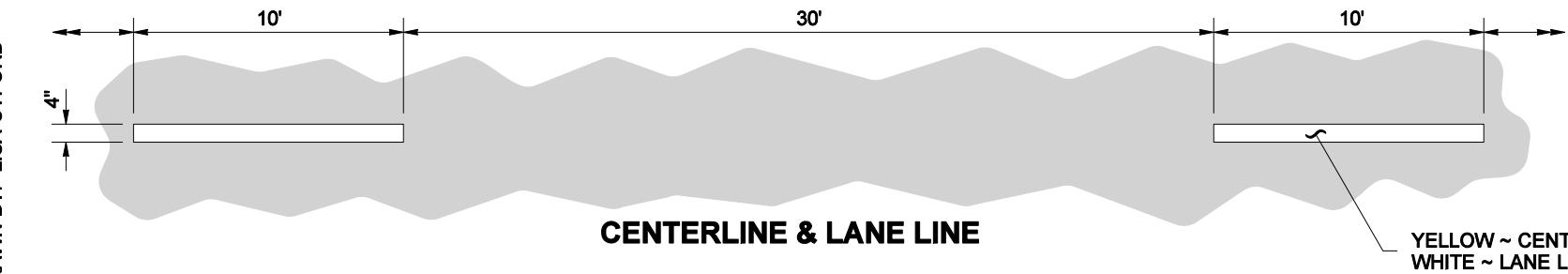
BICYCLE LANE SYMBOL LAYOUT

STANDARD PLAN M-9.50-02

SHEET 1 OF 1 SHEET

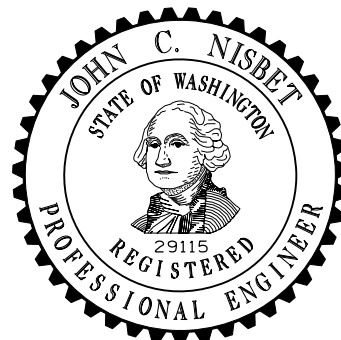
APPROVED FOR PUBLICATION

DRAWN BY: LISA CYFORD



NOTES

1. Dotted Extension Line shall be the same color as the line it is extending.
2. Edge Line shall be white on the right edge of traveled way, and yellow on the left edge of traveled way (on one-way roadways). Solid Lane Line shall be white.
3. The distance between the lines of the Double Centerline shall be 12" everywhere, except 4" for left-turn channelization and narrow roadways with lane widths of 10 feet or less. Local Agencies (on non-state routes) may specify a 4" distance for all locations.
The distance between the lines of the Double Lane Line shall be 4".



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

LONGITUDINAL MARKING PATTERNS

STANDARD PLAN M-20.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III

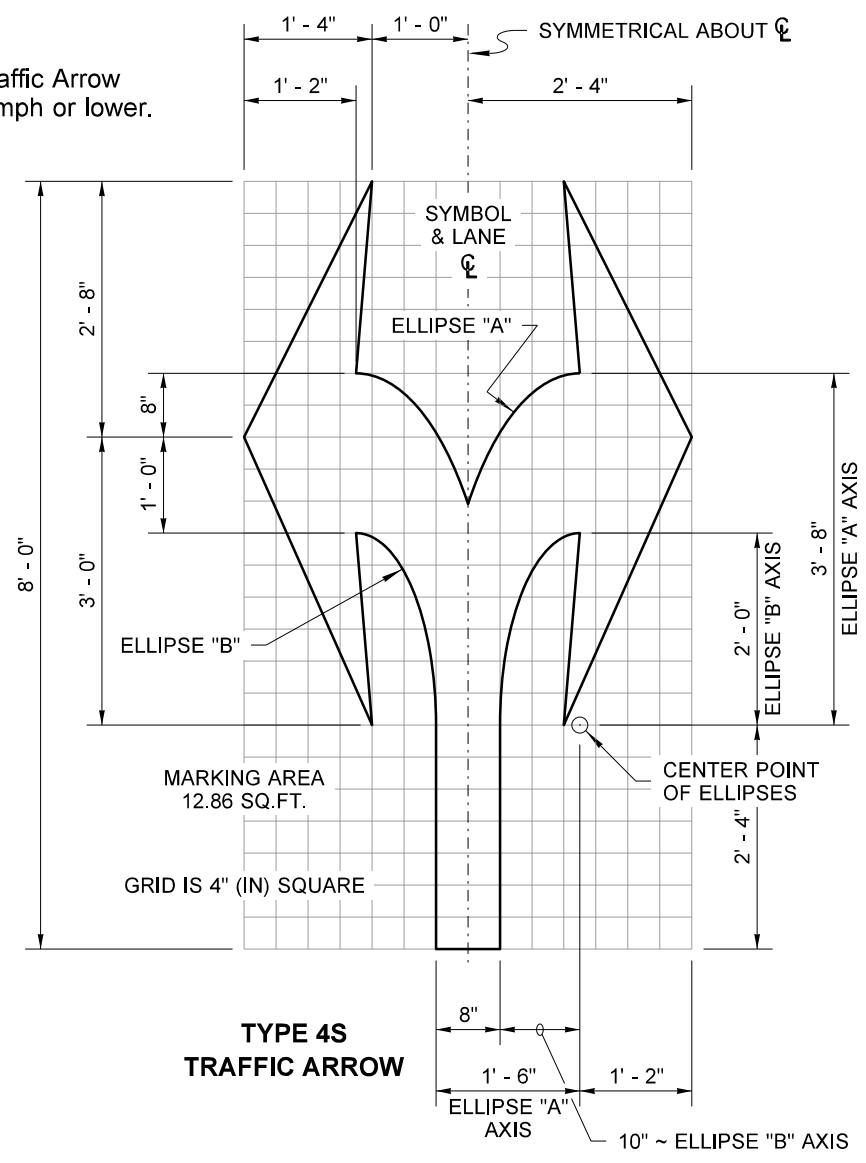
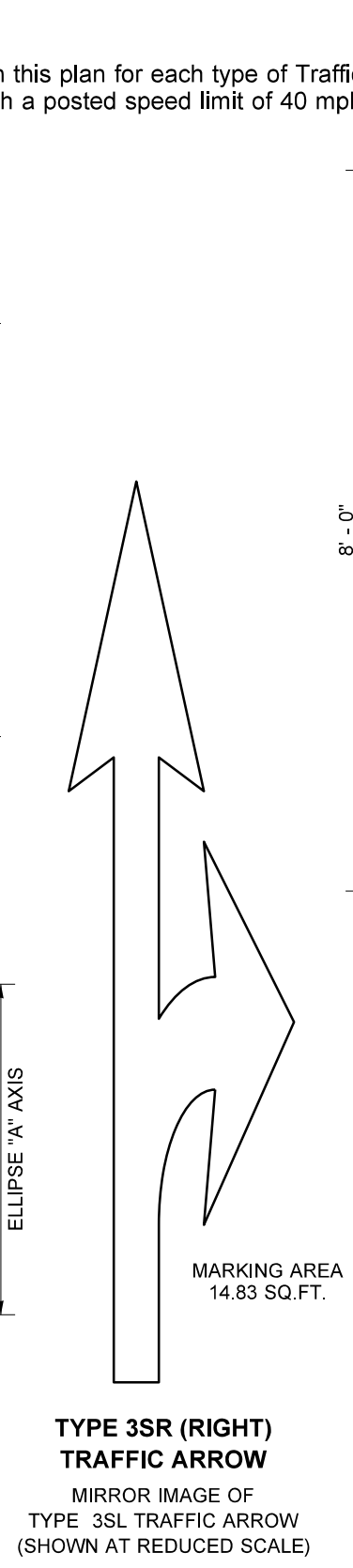
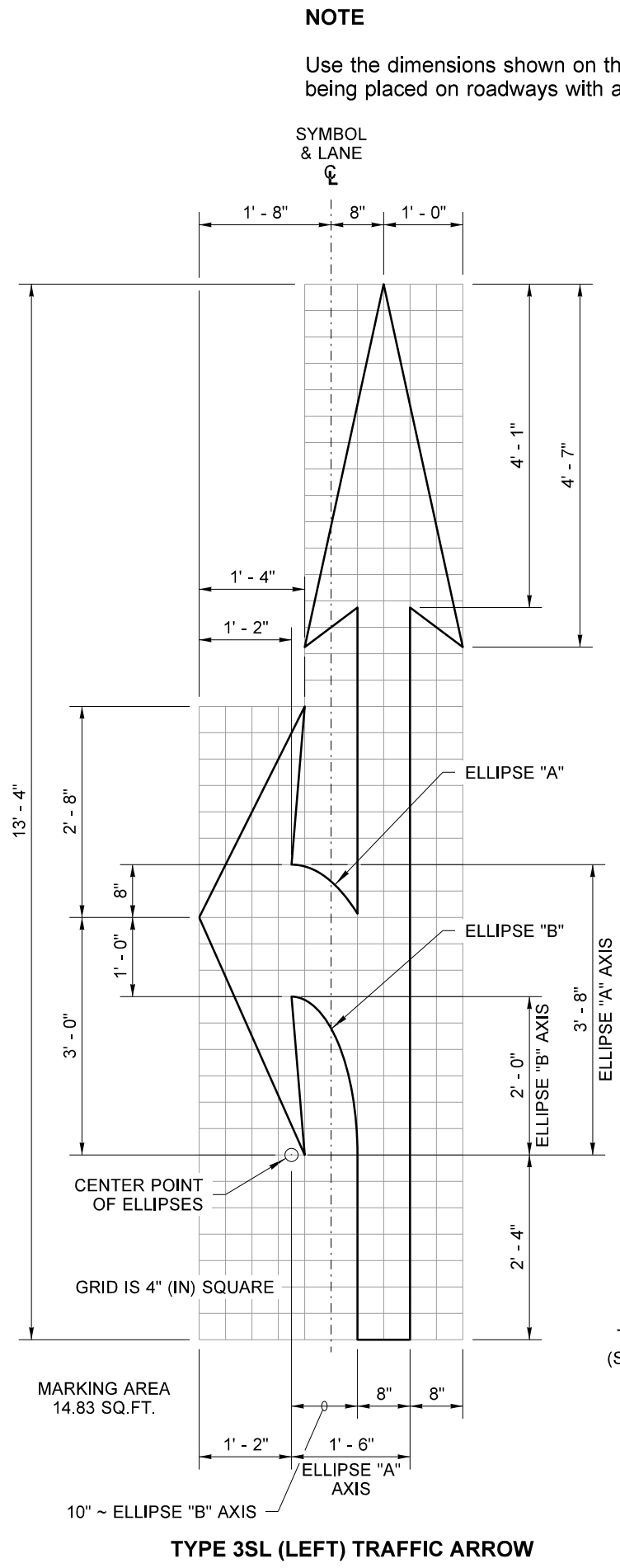
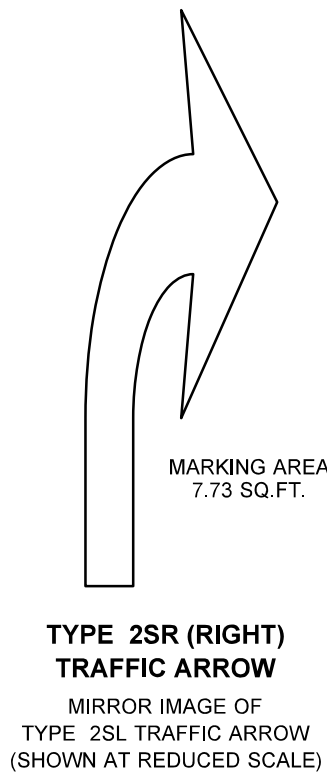
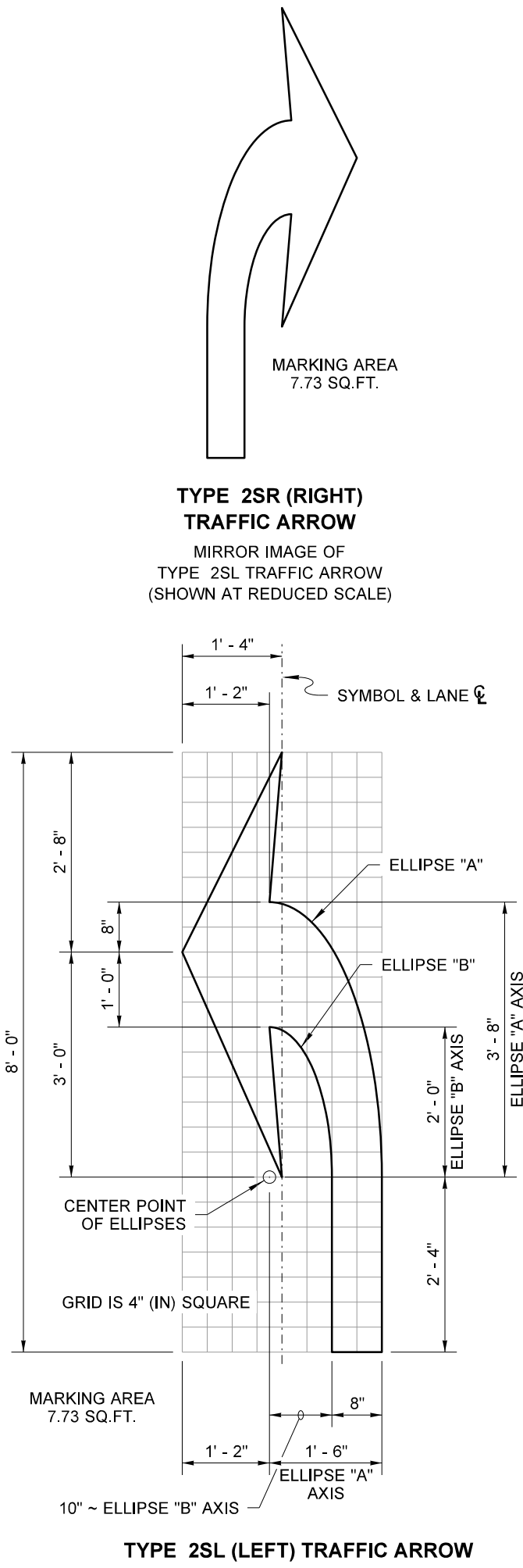
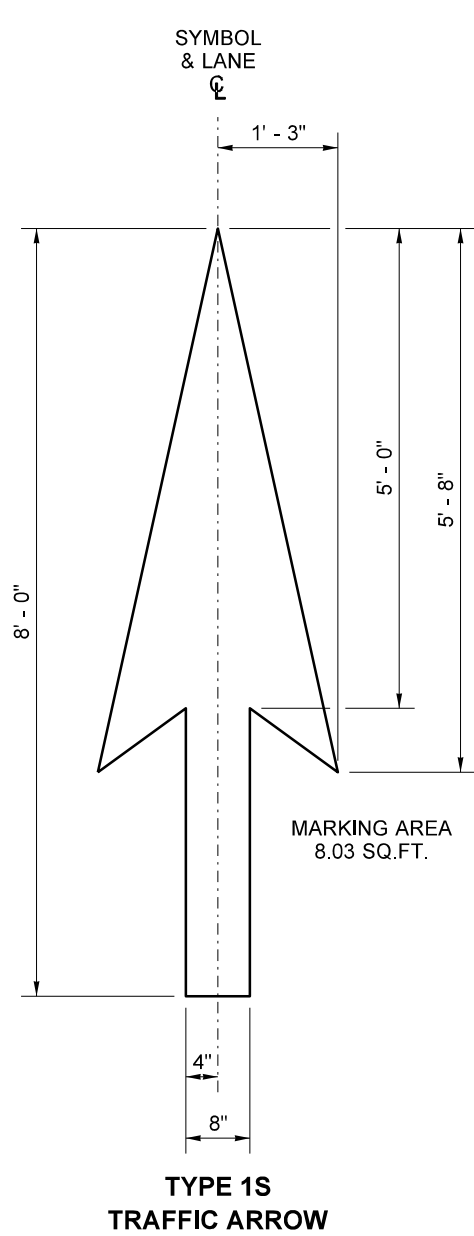
STATE DESIGN ENGINEER

06-03-11

DATE



Washington State Department of Transportation



NOTE

Use the dimensions shown on this plan for each type of Traffic Arrow being placed on roadways with a posted speed limit of 40 mph or lower.

**SYMBOL MARKINGS ~
TRAFFIC ARROWS FOR
LOW-SPEED ROADWAYS
STANDARD PLAN M-24.40-02**

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: COLBY FLETCHER

4' - 8"

2' - 4"

1' - 0"

5' - 4"

4' - 1"

4' - 7"

SYMBOL & LANE

1' - 4"

1' - 2"

13' - 4"

2' - 8"

8"

1' - 0"

ELLIPSE "A"

ELLIPSE "B"

3' - 0"

2' - 0"

3' - 8"

ELLIPSE "A" AXIS

ELLIPSE "B" AXIS

2' - 4"

SYMMETRICAL ABOUT \mathcal{C}

GRID IS 4" (IN) SQUARE

MARKING AREA
19.58 SQ.FT.

8"

8"


1' - 6"

1' - 2"

ELLIPSE "A" AXIS

10" ~ ELLIPSE "B" AXIS

CENTER POINT OF ELLIPSES

[illegible]

MARKING AREA
15.94 SQ.FT.



SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER



Washington State Department of Transportation

APPENDIX A

GEOTECHNICAL REPORT



HWA GEOSCIENCES INC.

Geotechnical & Pavement Engineering • Hydrogeology • Geoenvironmental • Inspection & Testing

January 7, 2019

HWA Project No. 2018-157-21

Perteet

2707 Colby Avenue, Suite 900

Everett, Washington 98201

Attention: Amanda Austin, P.E.

Subject: **CITY OF LYNNWOOD 2019 OVERLAY PROJECT**
Lynnwood Washington

Ms. Austin:

At your request, HWA GeoSciences Inc. (HWA) performed pavement coring at 14 locations in Lynnwood, Washington to evaluate existing pavement layer and base course thicknesses for use in overlay design. Figure 1 shows the project vicinity.

Pavement Cores

Pavement layer thicknesses and shallow subgrade support conditions were investigated in fourteen, 6-inch diameter pavement cores, designated Core-1 through Core-14, performed on December 17, 26 and 27, 2018. Shallow subsurface explorations within each core were performed using hand augers and hand digging tools. The locations of the cores were selected by Perteet.

The approximate locations of the pavement cores are shown on the Site and Exploration Plans, Figures 2A through 2F. Photographic logs of the pavement cores are presented in Appendix A.

The coring and subsurface explorations were performed by two geologists from HWA. All core holes were backfilled with compacted gravel and patched with Aquaphalt.

Laboratory Testing

Representative soil samples obtained from the subsurface explorations were taken to the HWA laboratory for further examination and testing. Laboratory tests, as described below, were conducted on selected soil samples to characterize relevant engineering properties of the on-site soils.

Moisture Content of Soil: The moisture content (percent by dry mass) of selected soil samples was determined in accordance with ASTM D 2216. The

21312 30th Drive SE
Suite 110

Bothell, WA 98021.7010

Tel: 425.774.0106

Fax: 425.774.2714

www.hwageo.com

results are shown at the sampled intervals on the appropriate exploration logs in Appendix A.

Particle Size Analysis of Soils: Selected samples were tested to determine the particle size distribution of material in accordance with ASTM D 6913. The results are summarized on the attached Particle Size Analyses of Soils Reports, Figures B-1 through B-6, Appendix B, which also provide information regarding the classification of the samples and the moisture content at the time of testing.

Pavement Structural Layers

Table 1 summarizes the pavement structures encountered in the pavement core explorations.

Table 1. Thickness of Pavement Layers

Designation	Location / Lane	HMA Thickness, (in.)	CSTC Thickness, (in.)	CSBC Thickness, (in.)	Total Pavement Thickness, (in.)
Core-1	6505 180 th St. SW, EB	2.5	-	-	2.5
Core-2	6207 182 nd St. SW, WB	3.0	-	-	3.0
Core-3	6303 183 rd Pl. SW, NB	3.0	2.5	-	5.5
Core-4	6027 187 th Pl. SW, WB	2.25	1.75	-	4.0
Core-5	5233 188 th St. SW, WB	4.0	-	-	4.0
Core-6	5233 188 th St. SW, EB	4.5	1.5	-	6.0
Core-7	18923 51 st Pl. W, NB	3.75	-	-	3.75
Core-8	4903 188 th St. SW, WB	5.0	3.0	-	8.0
Core-9	4903 188 th St. SW, EB	5.0	3.0	-	8.0
Core -10	20215 68 th Ave. W, SB	4.0	-	4.0	8.0
Core-11	20215 68 th Ave. W, NB	4.0	5.0	-	9.0
Core-12	19703 68 th Ave. W, SB	3.0	-	4.5	7.5
Core-13	19703 68 th Ave. W, NB	4.0	-	3.5	7.5
Core-14	21105 50 th Pl. W, NB	4.5	-	-	4.5

Conditions and Limitations

We have prepared this report for Perteet and the City of Lynnwood. The conclusions and interpretations presented in this report should not be construed as our warranty of the surface

conditions. Inconsistent conditions can occur between explorations and may not be detected by an exploration program of this scope and nature.

Within the limitations of scope, schedule and budget, HWA attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical and pavement engineering in the area at the time the report was prepared. No warranty, express or implied, is made.



We appreciate the opportunity to provide geotechnical services on this project. Should you have any questions or comments, or if we may be of further service, please do not hesitate to call.

Sincerely,

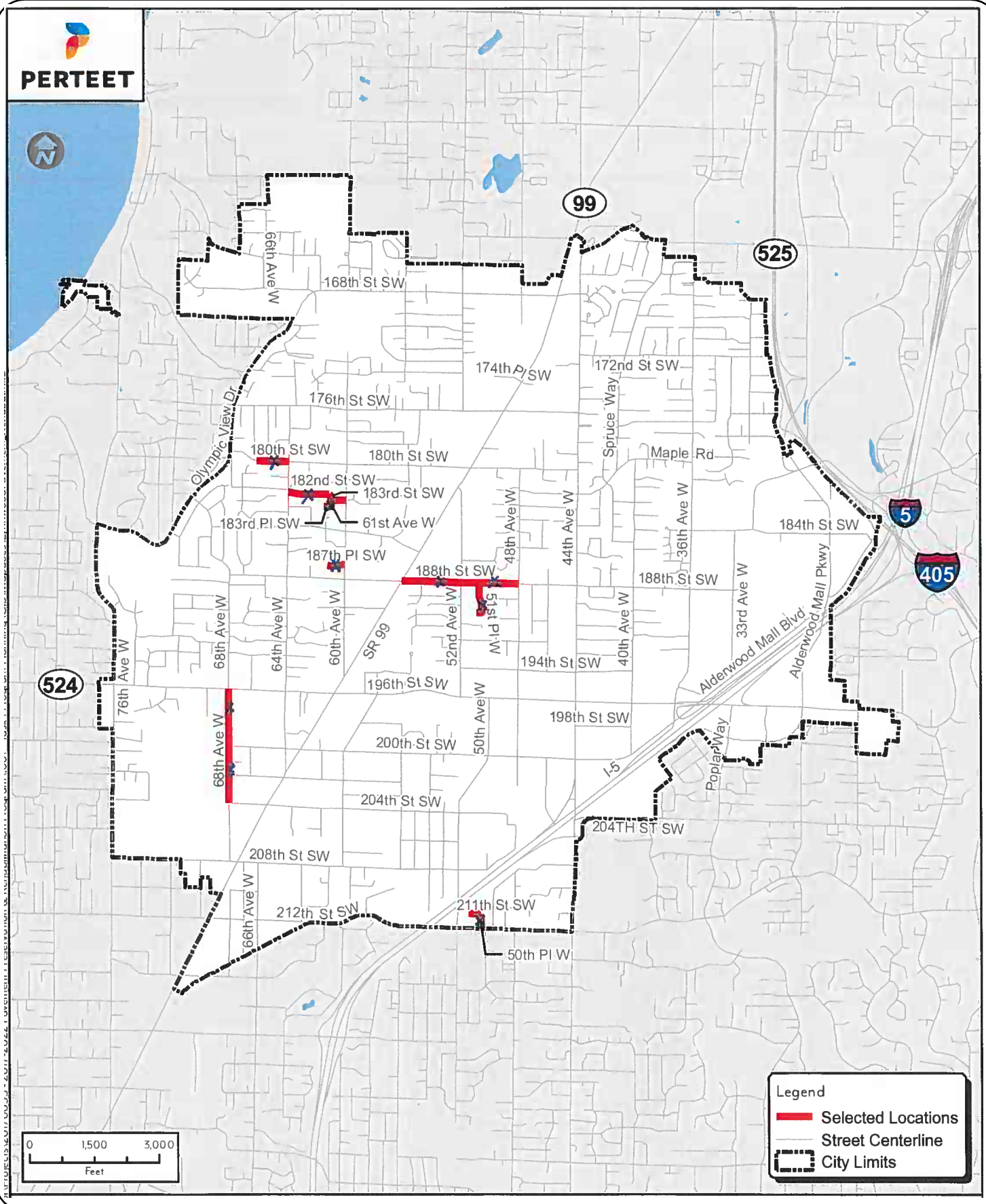
HWA GEOSCIENCES INC.

A handwritten signature in blue ink, appearing to read "Bryan K. Hawkins".

Bryan K. Hawkins, P.E.
Senior Geotechnical Engineer



PERTEET



Legend

- Selected Locations
- Street Centerline
- City Limits

SITE VICINITY MAP

LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

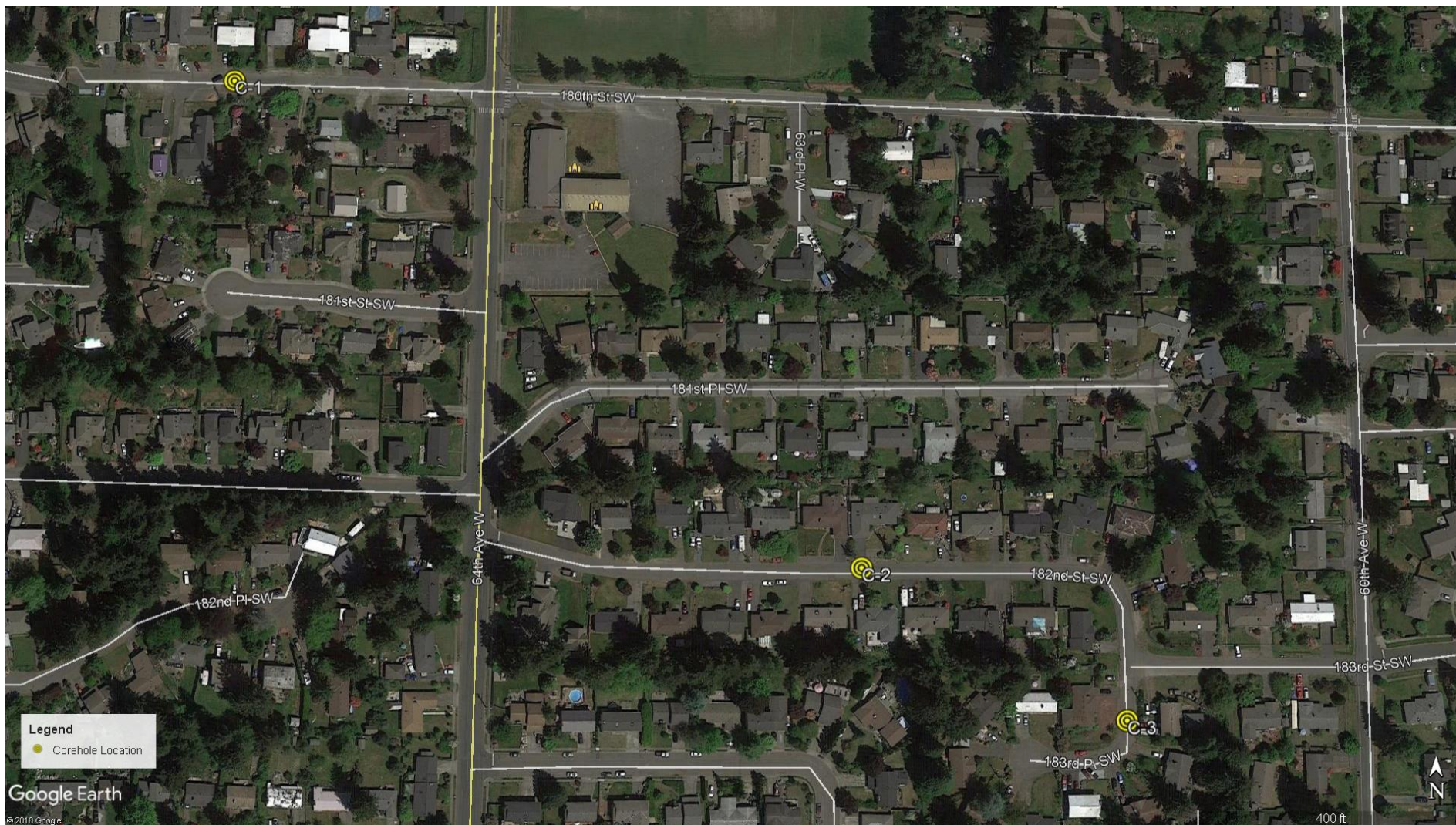
1

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2A

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

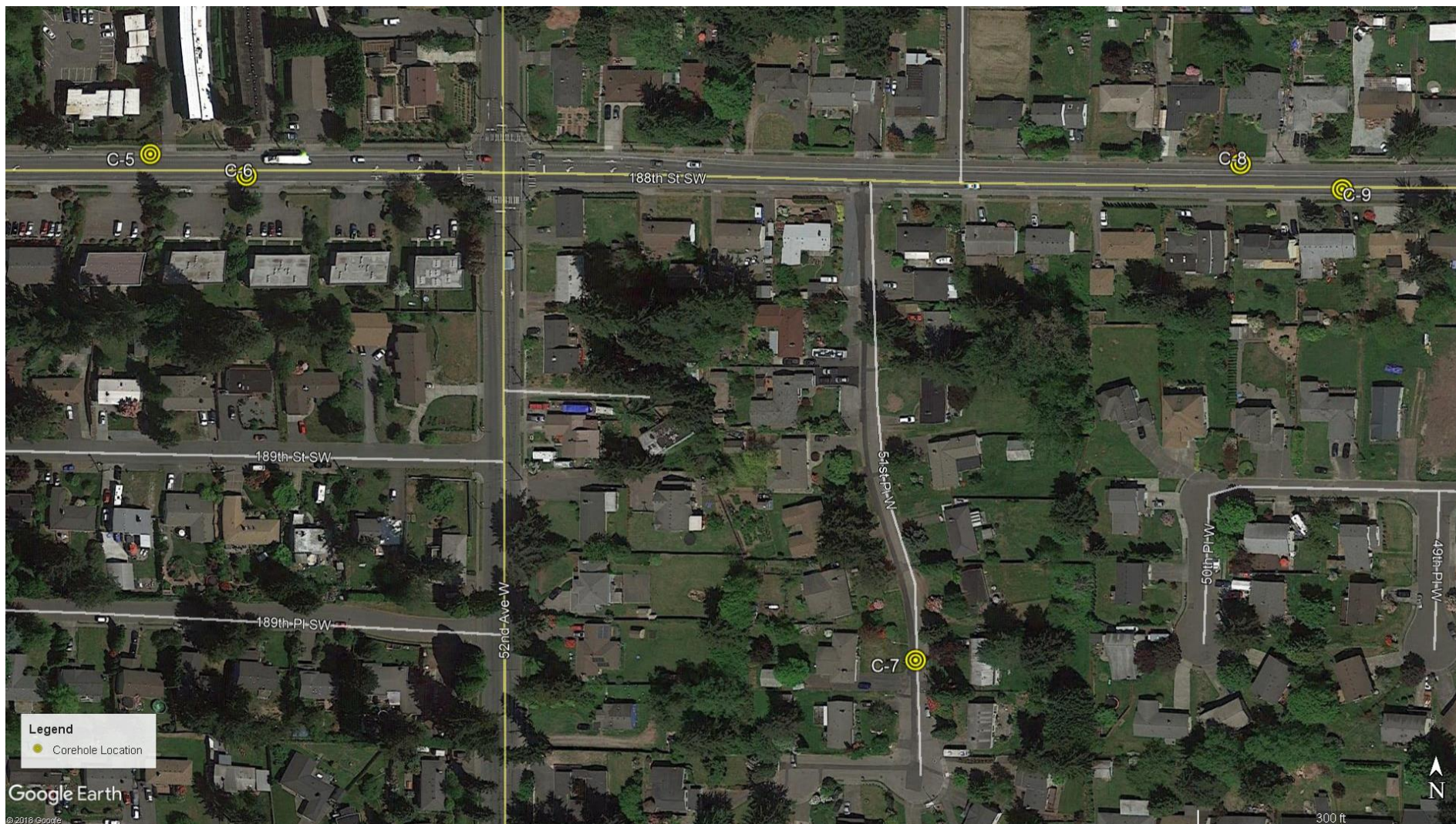
LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2B

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

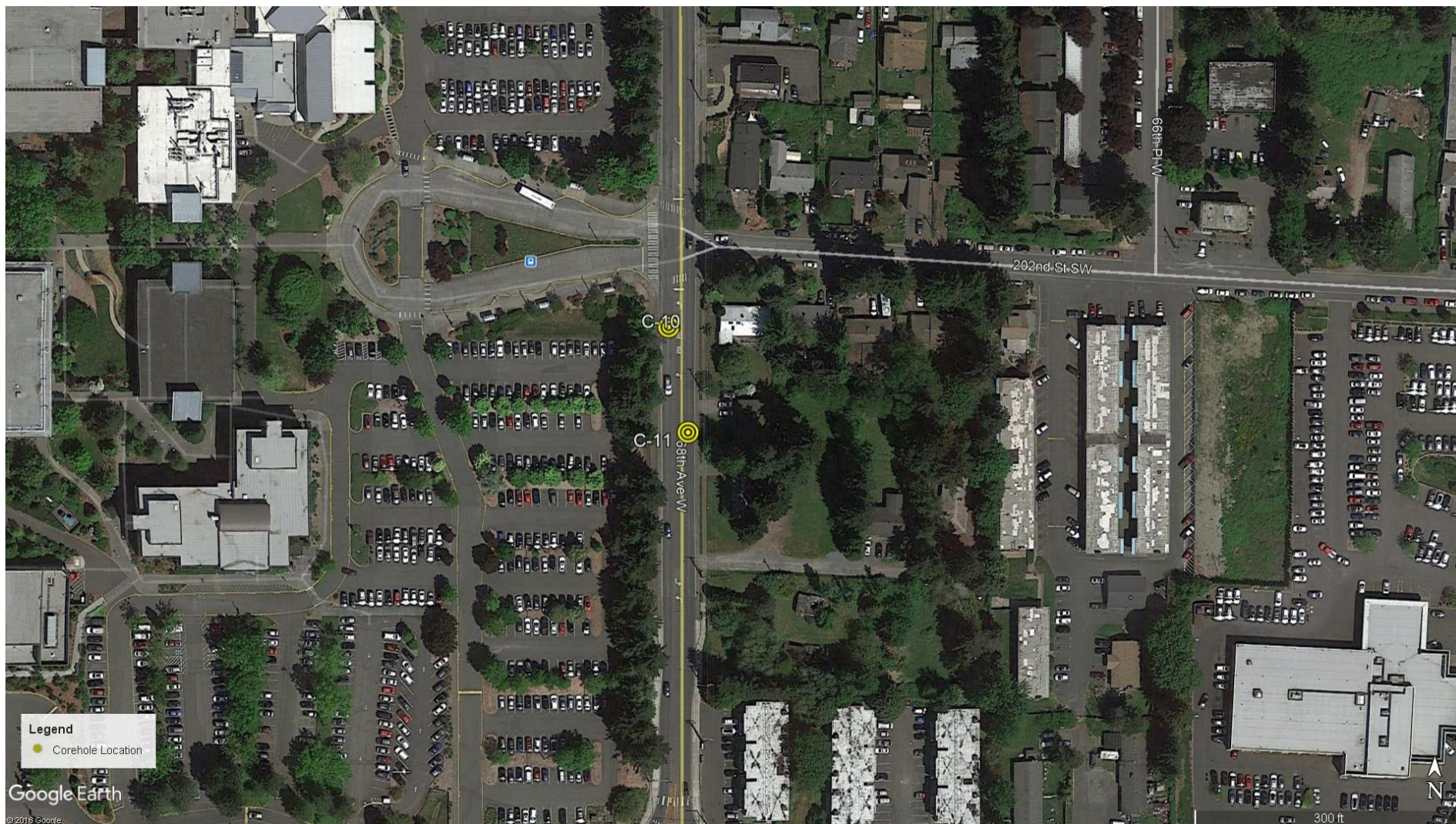
LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2C

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

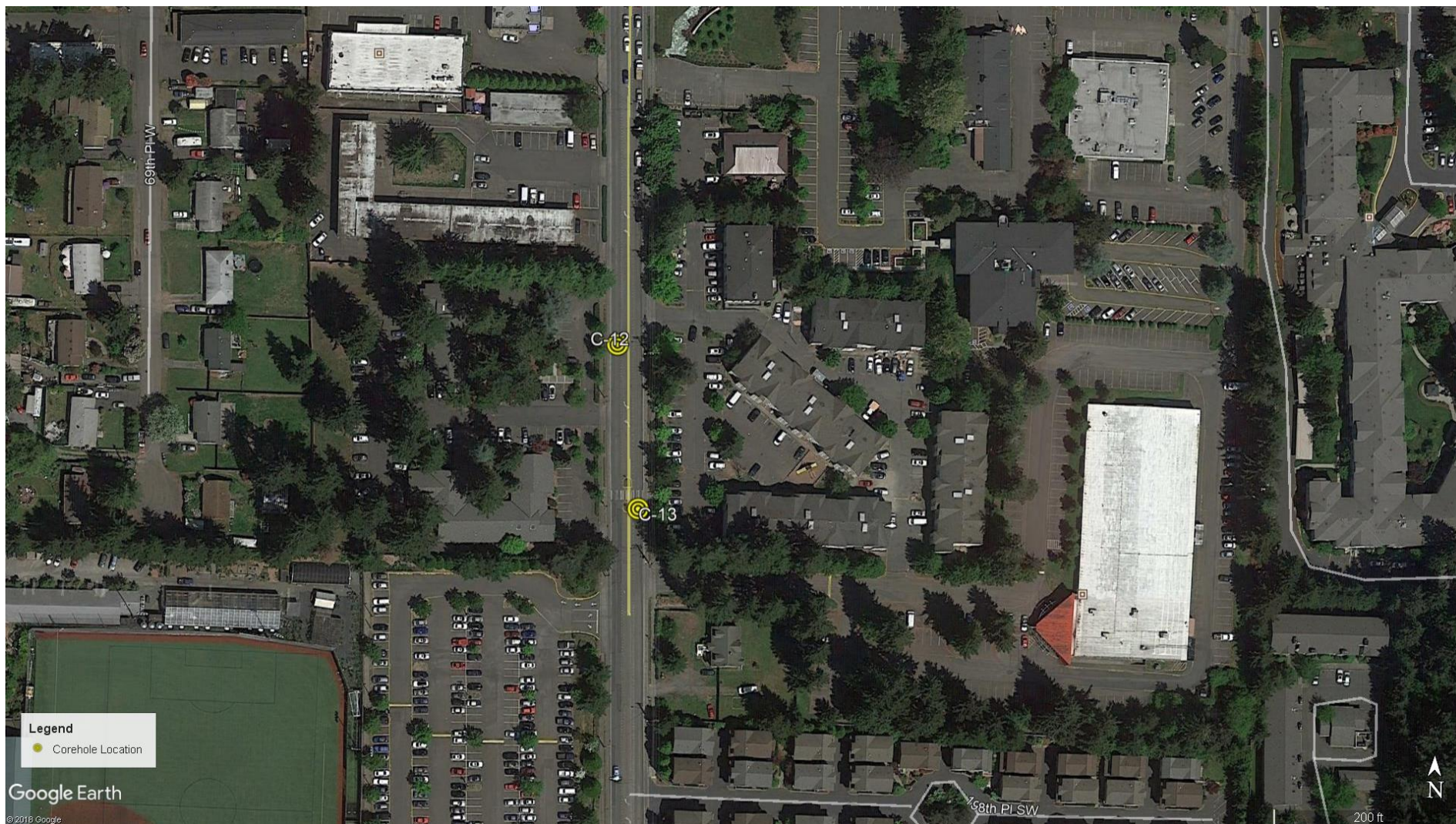
LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2D

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2E

PROJECT NO.

2018-157



HWA GEOSCIENCES INC.

SITE PLAN AERIAL PHOTO

LYNNWOOD 2019 OVERLAY
LYNNWOOD, WASHINGTON

FIGURE NO.

2F

PROJECT NO.

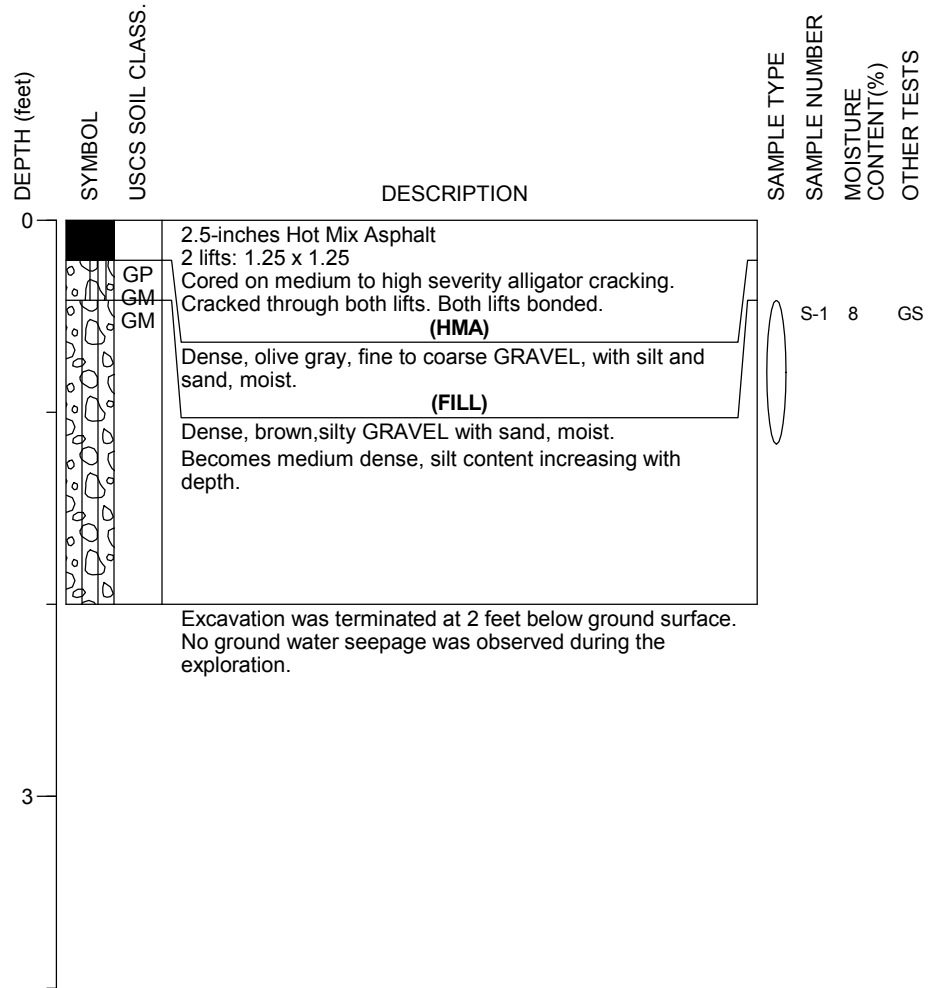
2018-157

APPENDIX A

PAVEMENT CORE PHOTO LOGS

EXCAVATION COMPANY: HWA GeoSciences Inc.
 EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
 STREET: 6505 180th St. SW, Eastbound lane, 8-feet North of Edge

LOCATION: See Figure 2A
 DATE COMPLETED: 12/17/18
 LOGGED BY: V. Oskierko



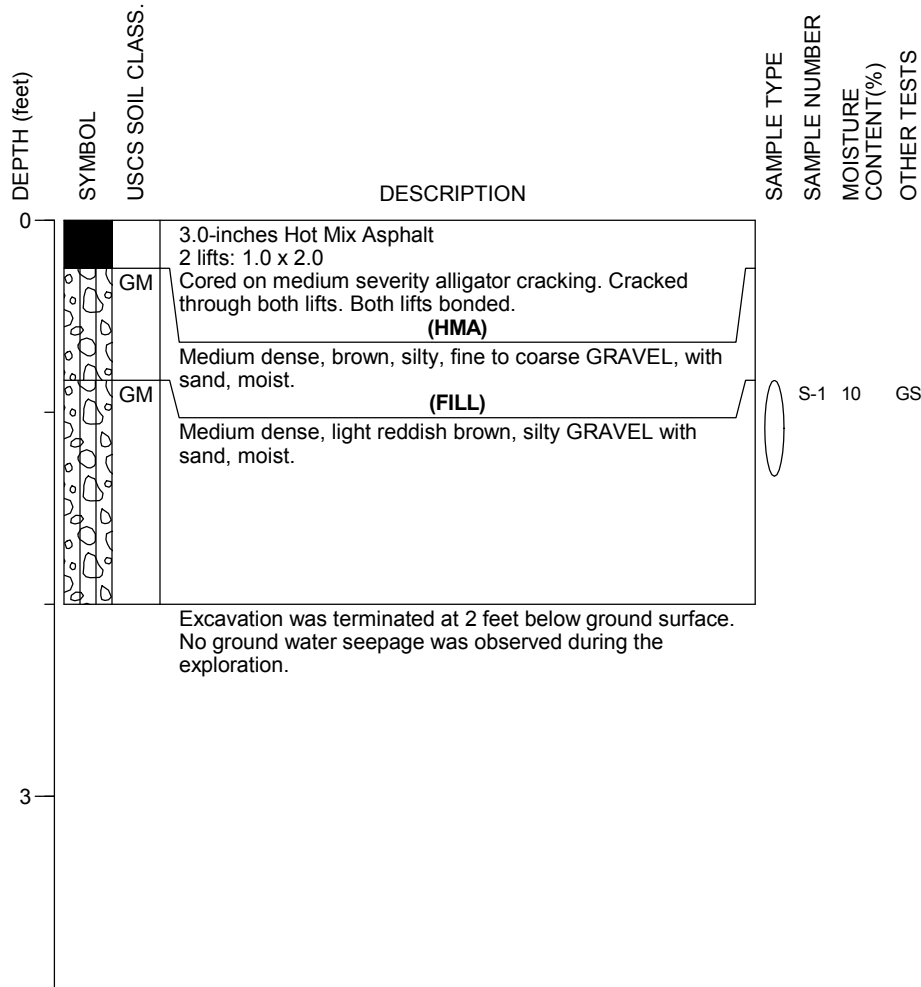
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 6207 182nd St. SW, Westbound lane, 4-feet South of Edge

LOCATION: See Figure 2A
DATE COMPLETED: 12/17/18
LOGGED BY: V. Oskierko



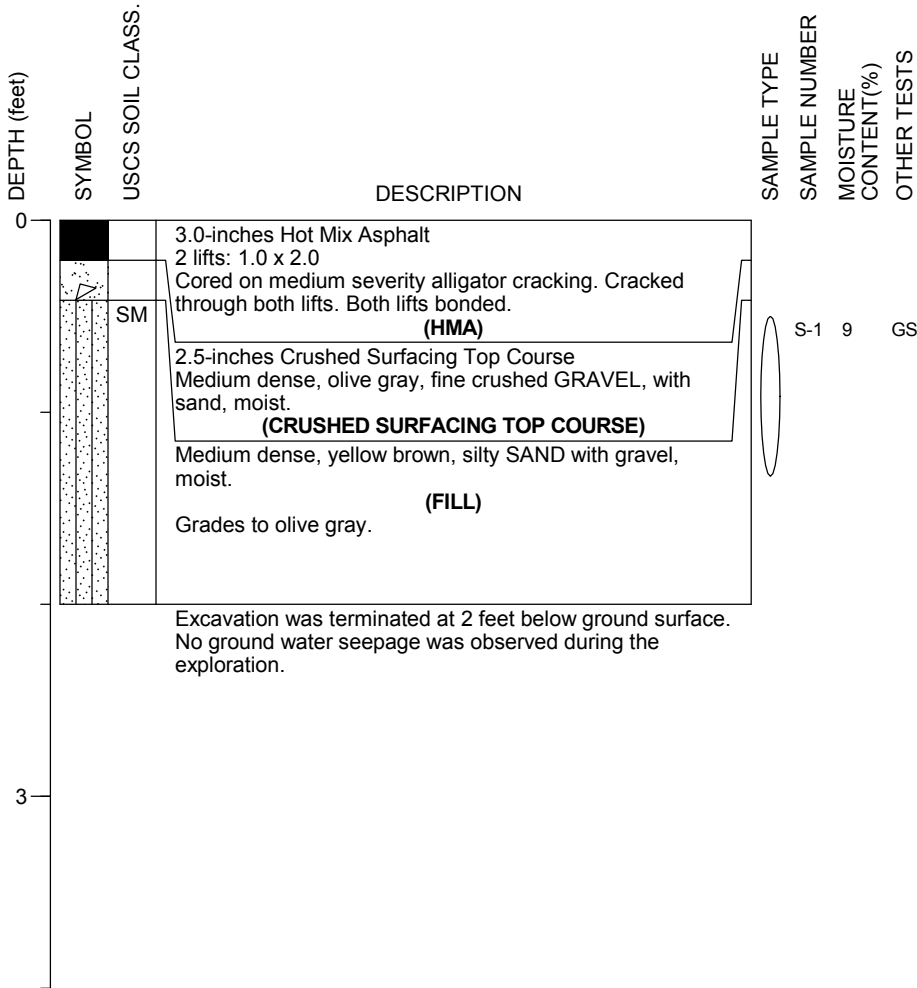
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 6030 183rd Pl. SW, Northbound lane, 8-feet West of Edge

LOCATION: See Figure 2A
DATE COMPLETED: 12/17/18
LOGGED BY: V. Oskierko



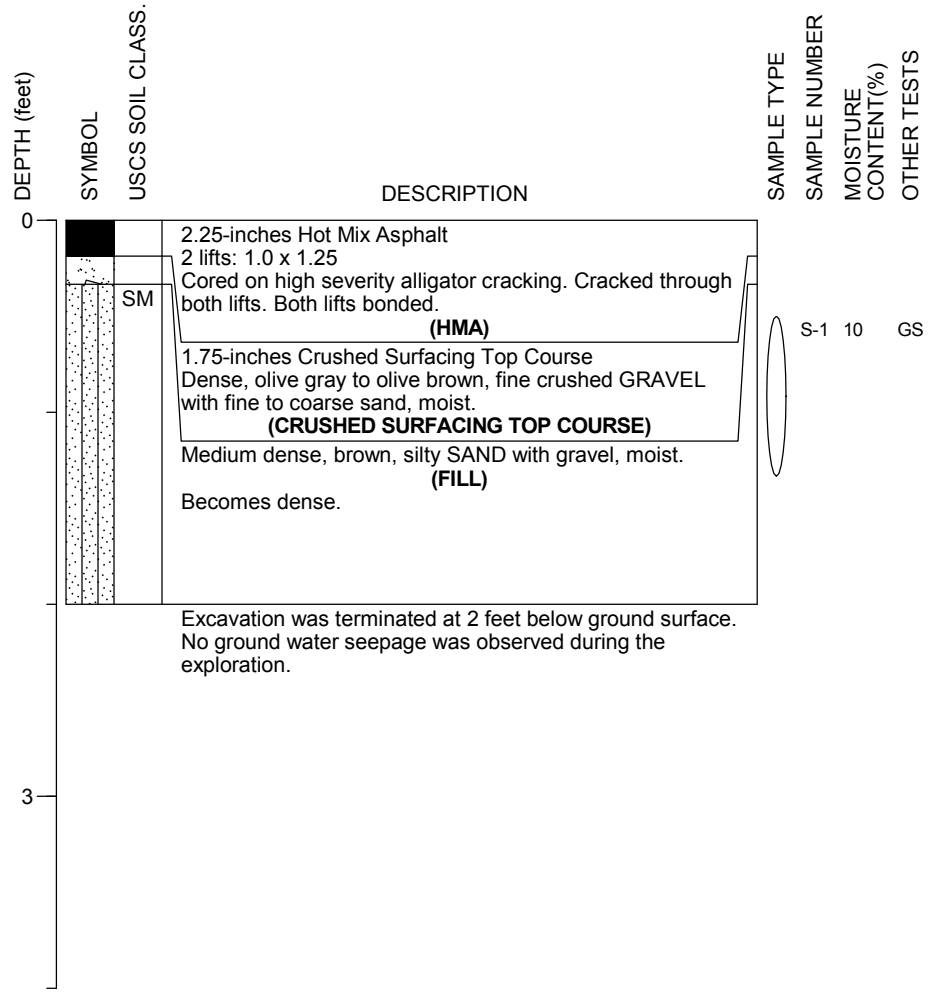
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 6027 187th Pl. SW, Westbound lane, 12-feet South of Edge

LOCATION: See Figure 2B
DATE COMPLETED: 12/17/18
LOGGED BY: V. Oskierko



PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

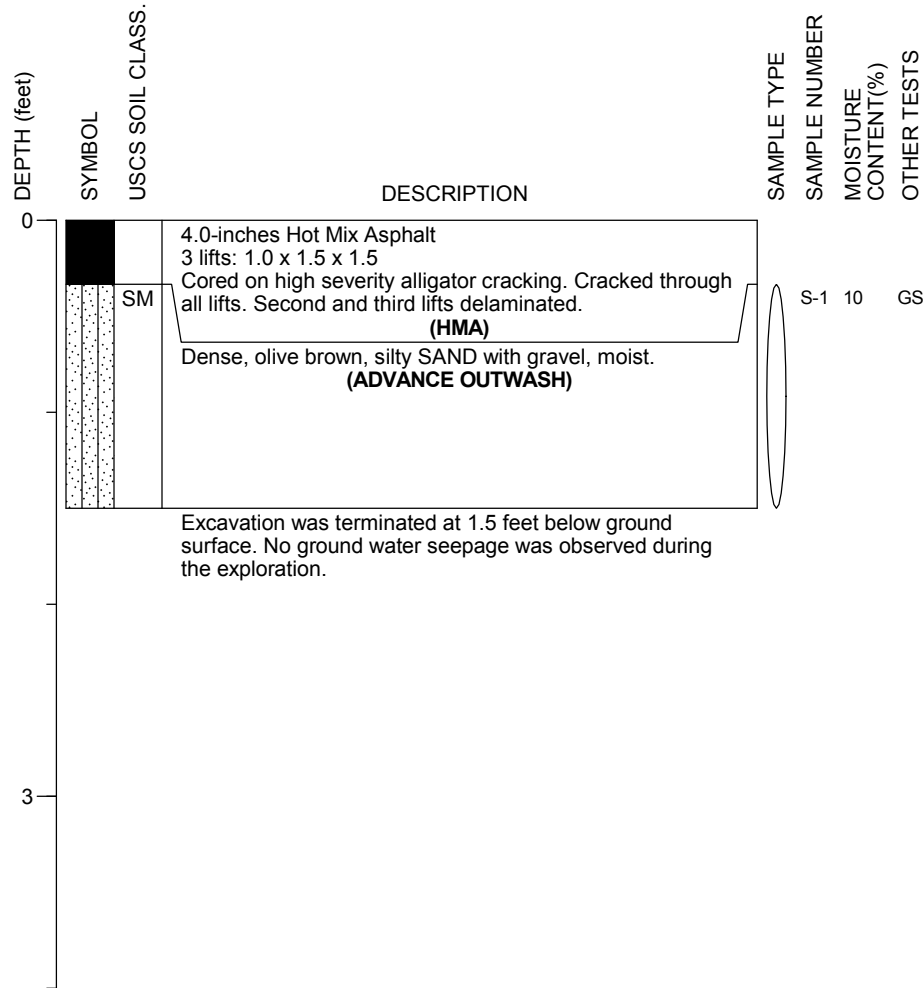


Lynnwood 2019 Overlay
Lynnwood, WA

PAVEMENT CORE
C-04

EXCAVATION COMPANY: HWA GeoSciences Inc.
 EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
 STREET: 5233 188th St. SW, Westbount lane, 7-feet from fogline

LOCATION: See Figure 2C
 DATE COMPLETED: 12/27/18
 LOGGED BY: V. Oskierko



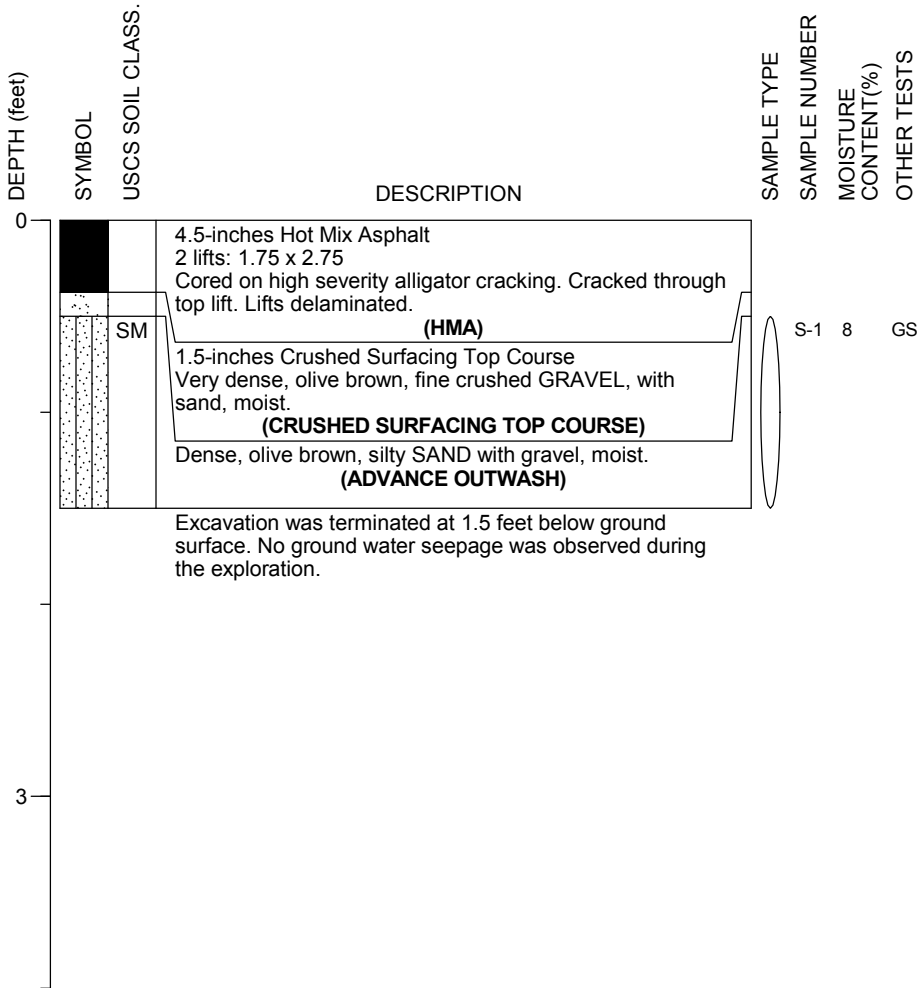
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 5233 188th St. SW, Eastbound lane, 2.5-feet from fogline

LOCATION: See Figure 2C
DATE COMPLETED: 12/27/18
LOGGED BY: V. Oskierko



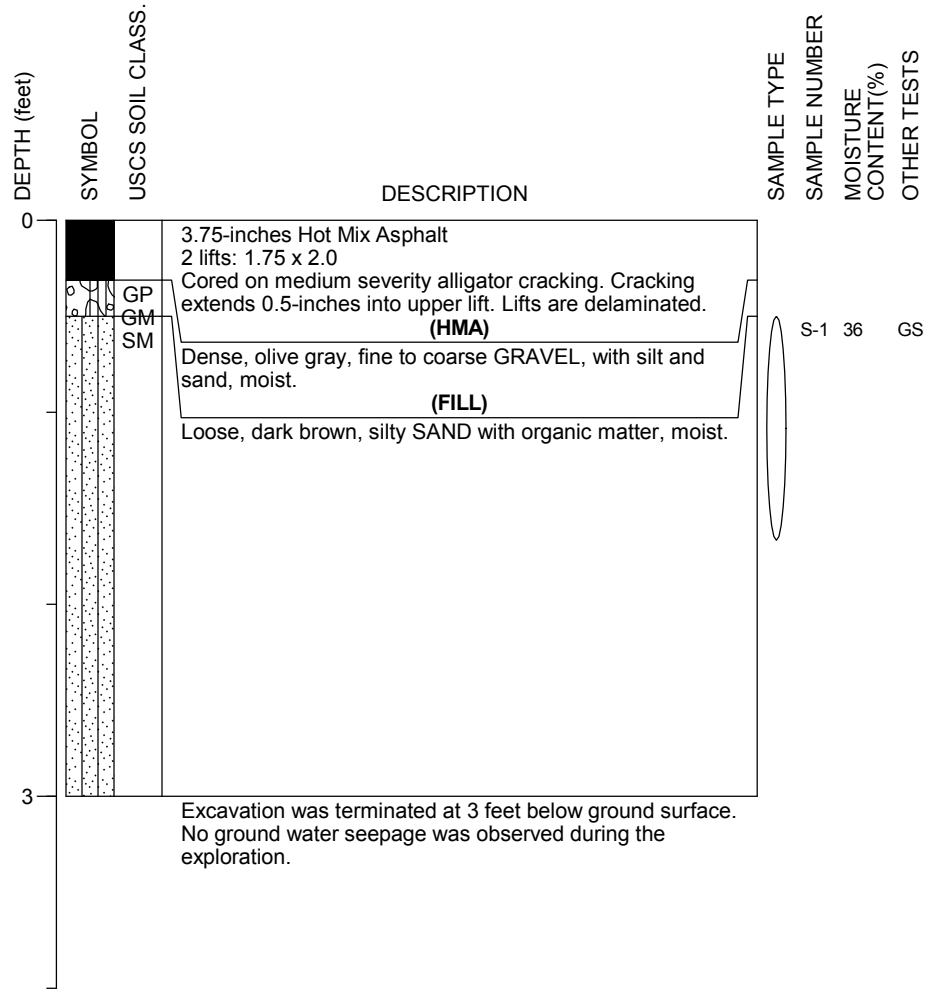
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 18923 51st Pl. W, Northbound lane, 5-feet East of Edge

LOCATION: See Figure 2C
DATE COMPLETED: 12/17/18
LOGGED BY: V. Oskierko



PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

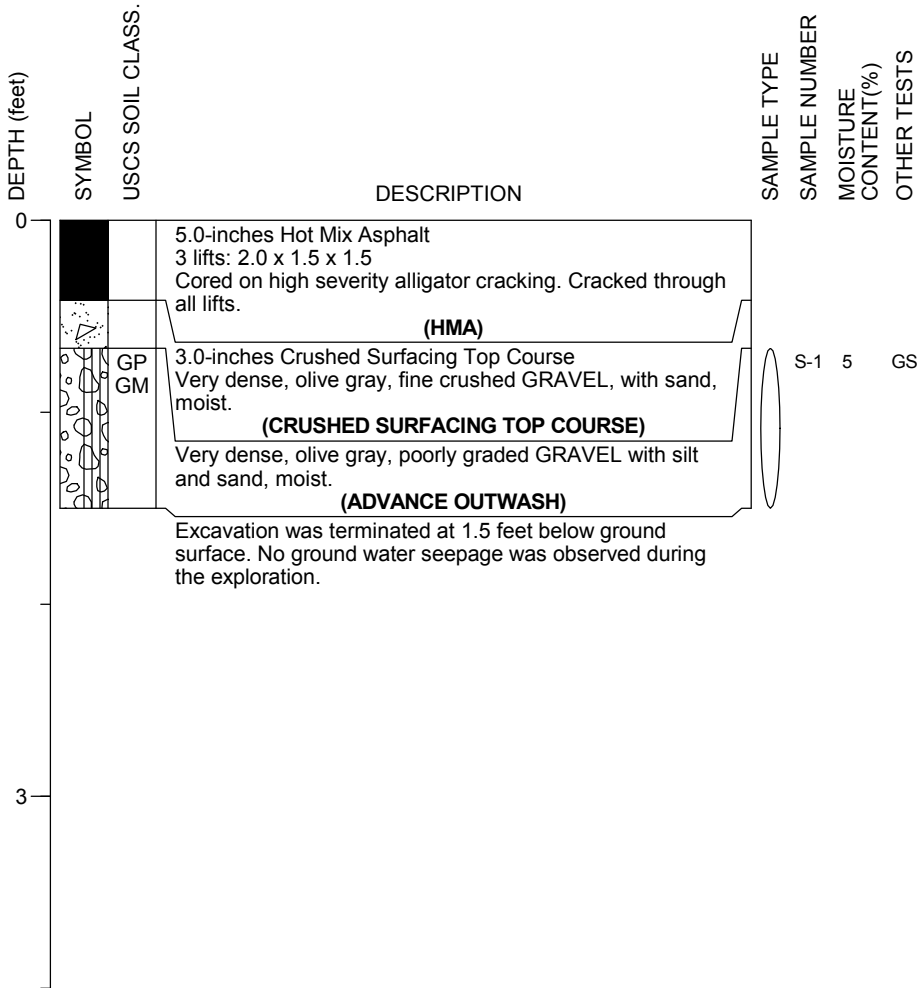


Lynnwood 2019 Overlay
Lynnwood, WA

PAVEMENT CORE
C-07

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 4903 188th St. SW, Westbound lane, 6.5-feet from fogline

LOCATION: See Figure 2C
DATE COMPLETED: 12/27/18
LOGGED BY: V. Oskierko



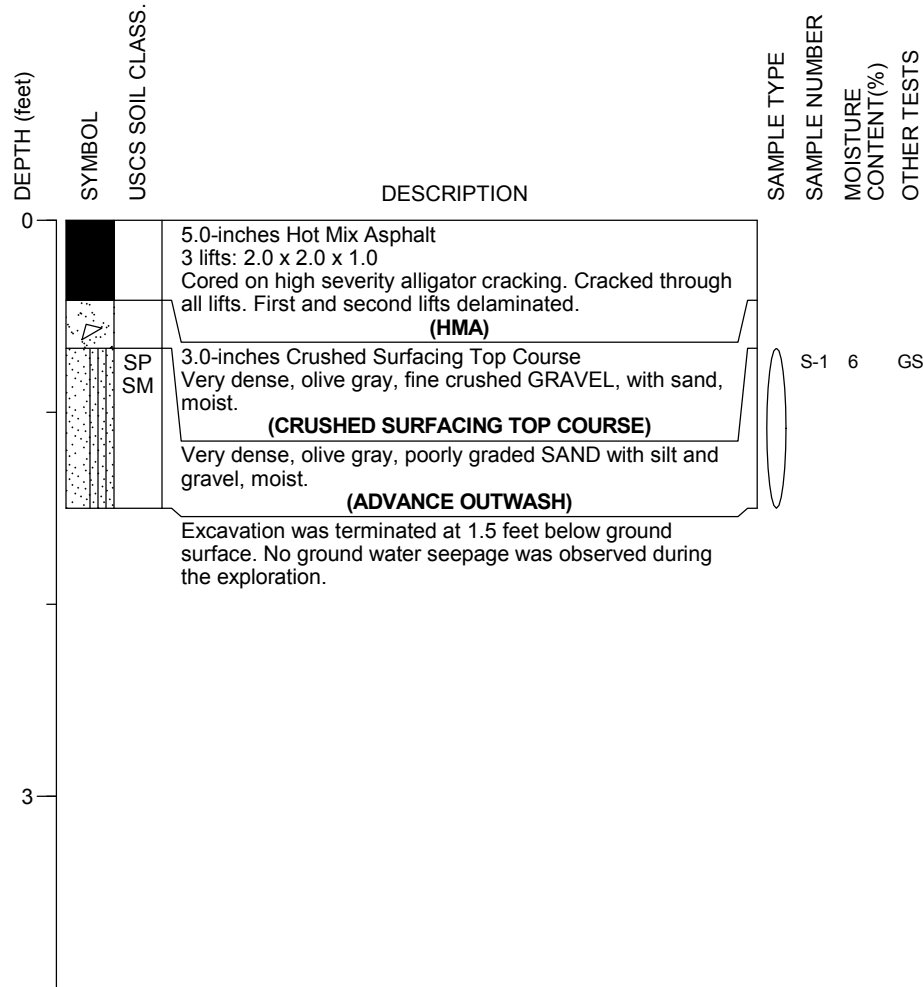
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
 EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
 STREET: 4903 188th St. SW, Eastbound lane, 1.5-feet from fogline

LOCATION: See Figure 2C
 DATE COMPLETED: 12/27/18
 LOGGED BY: V. Oskierko



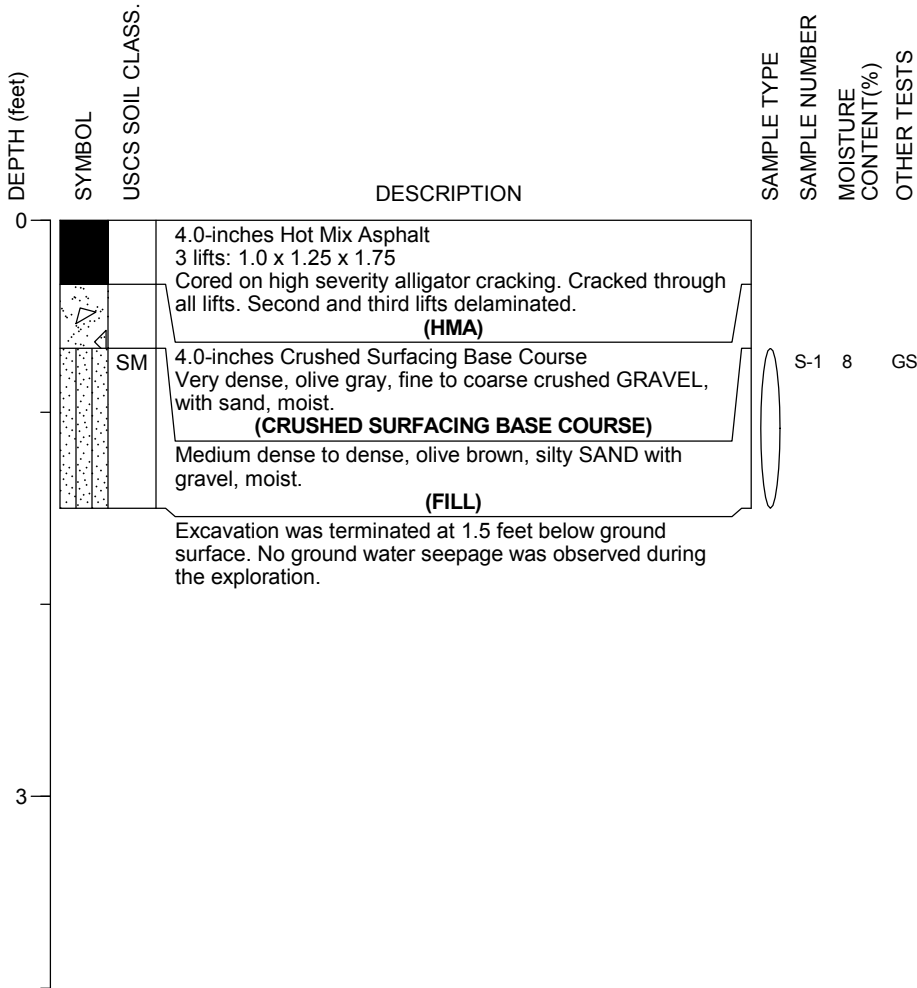
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 20215 68th Ave. W, Southbound lane, 2-feet from fogline.

LOCATION: See Figure 2D
DATE COMPLETED: 12/26/18
LOGGED BY: V. Oskierko



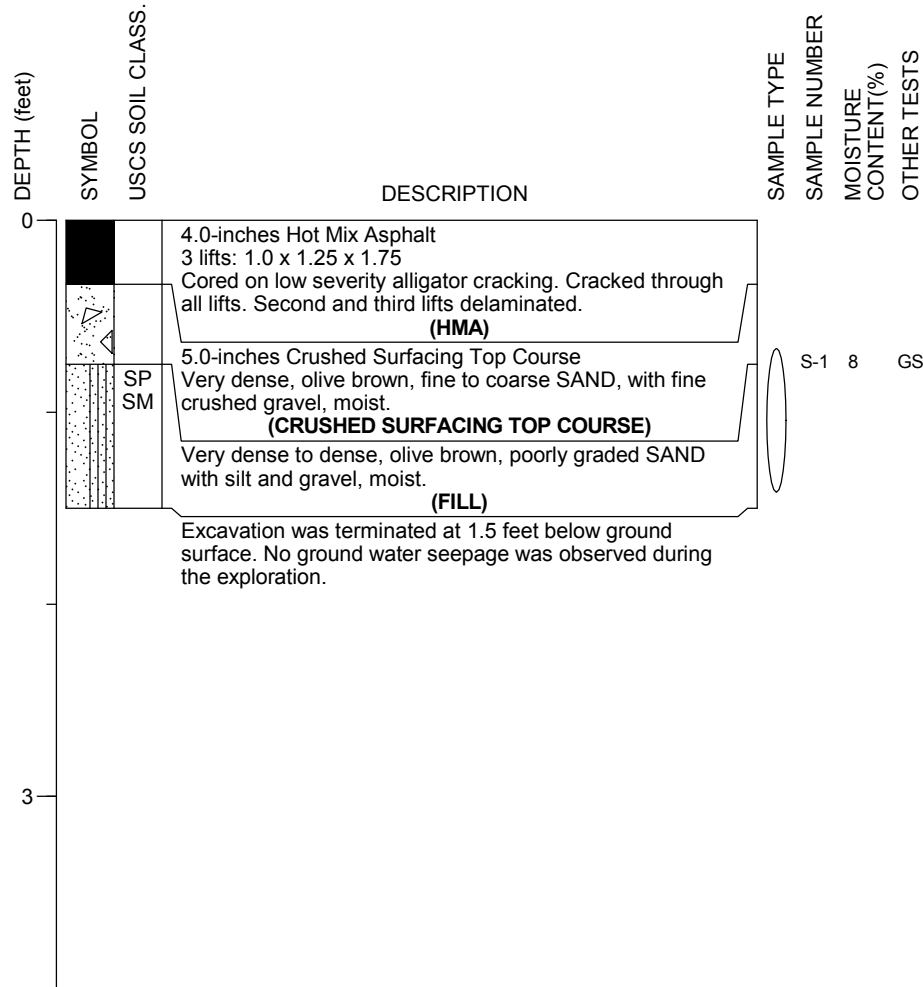
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
 EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
 STREET: 20215 68th Ave. W, Northbound lane, 9-feet from fogline.

LOCATION: See Figure 2D
 DATE COMPLETED: 12/26/18
 LOGGED BY: V. Oskierko



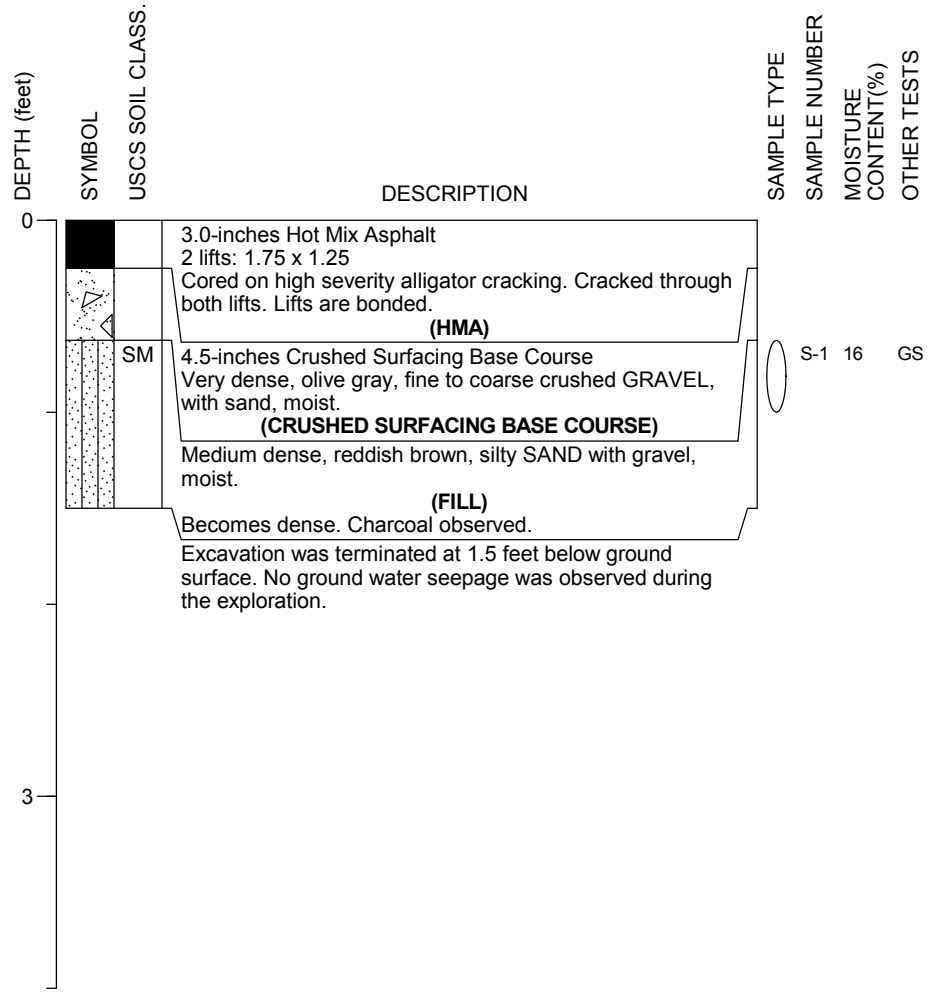
PAVEMENT CORE PHOTO



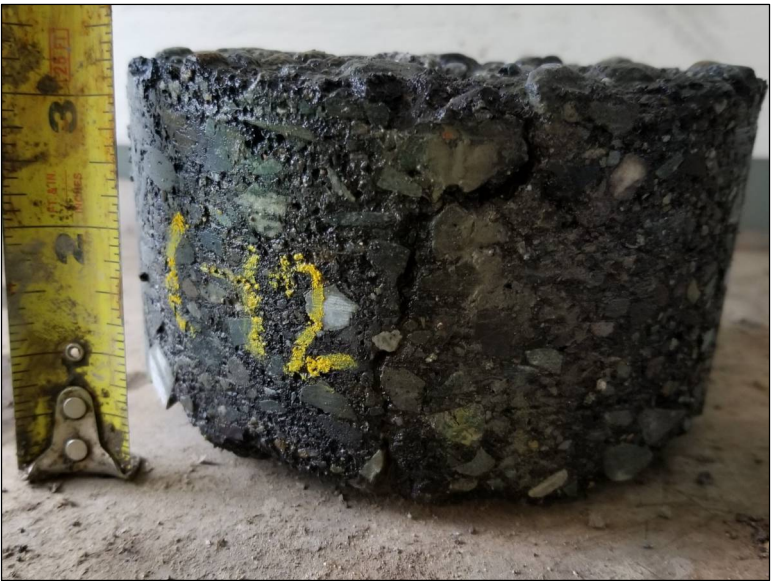
NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 19703 68th Ave. W, Southbound lane, 2-feet from fogline.

LOCATION: See Figure 2E
DATE COMPLETED: 12/26/18
LOGGED BY: V. Oskierko



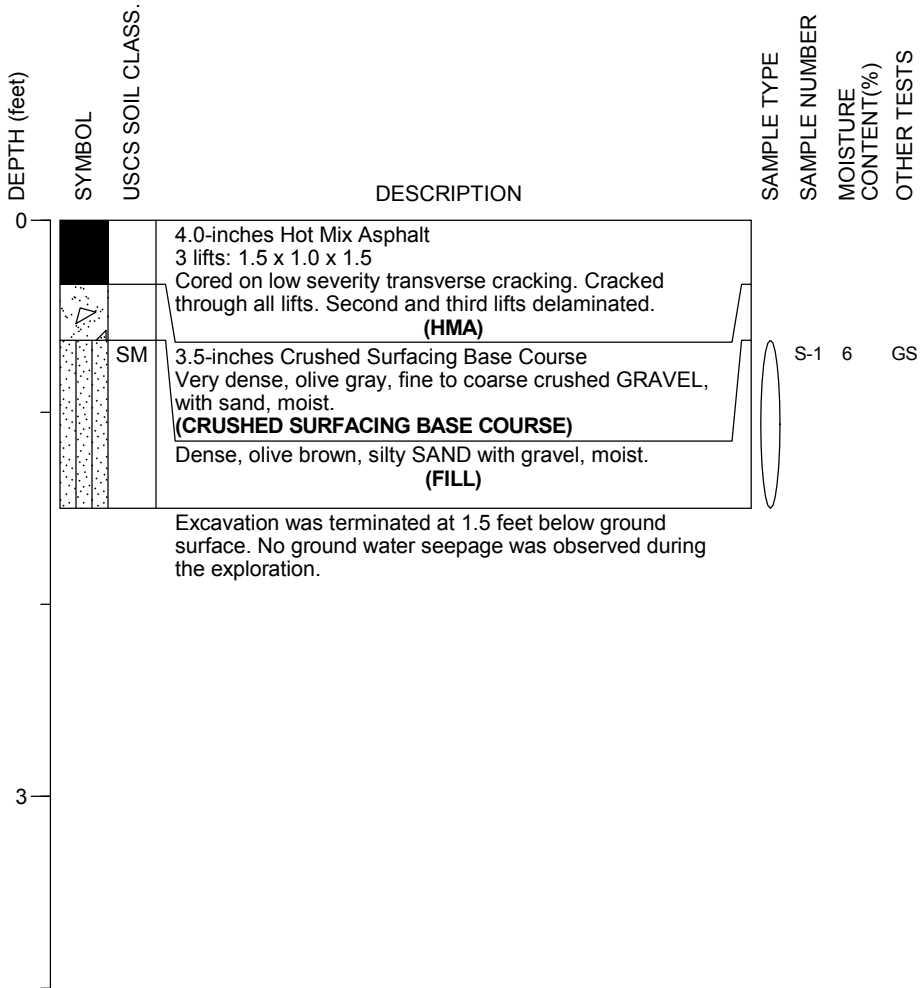
PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
STREET: 19703 68th Ave. W, Northbound lane, 1.5-feet from fogline.

LOCATION: See Figure 2E
DATE COMPLETED: 12/26/18
LOGGED BY: V. Oskierko



PAVEMENT CORE PHOTO



NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

EXCAVATION COMPANY: HWA GeoSciences Inc.
 EXCAVATING EQUIPMENT: 6-inch Diameter Core Barrel
 STREET: 21105 50th Pl. W, Northbound lane, 8-feet East of Edge

LOCATION: See Figure 2F
 DATE COMPLETED: 12/17/18
 LOGGED BY: V. Oskierko

DEPTH (feet)	SYMBOL	USCS SOIL CLASS.	DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	MOISTURE CONTENT(%)	OTHER TESTS
0			4.5-inches Hot Mix Asphalt 3 lifts: 1.75 x 1.25 x 1.5 Cored on high severity alligator cracking. Cracked through top two lifts. All Lifts delaminated. (HMA)				
	SP SM SM		Medium dense, olive gray, fine to coarse SAND, with silt and gravel, moist. (FILL)				
			Medium dense, brown, fine to medium, silty SAND, with gravel, moist.				
			Silt increasing with depth. Density decreasing.				
3	SP SM		Loose to medium dense, olive gray, fine to medium SAND, with silt, moist.				
			Excavation was terminated at 3 feet below ground surface. No ground water seepage was observed during the exploration.				

PAVEMENT CORE PHOTO



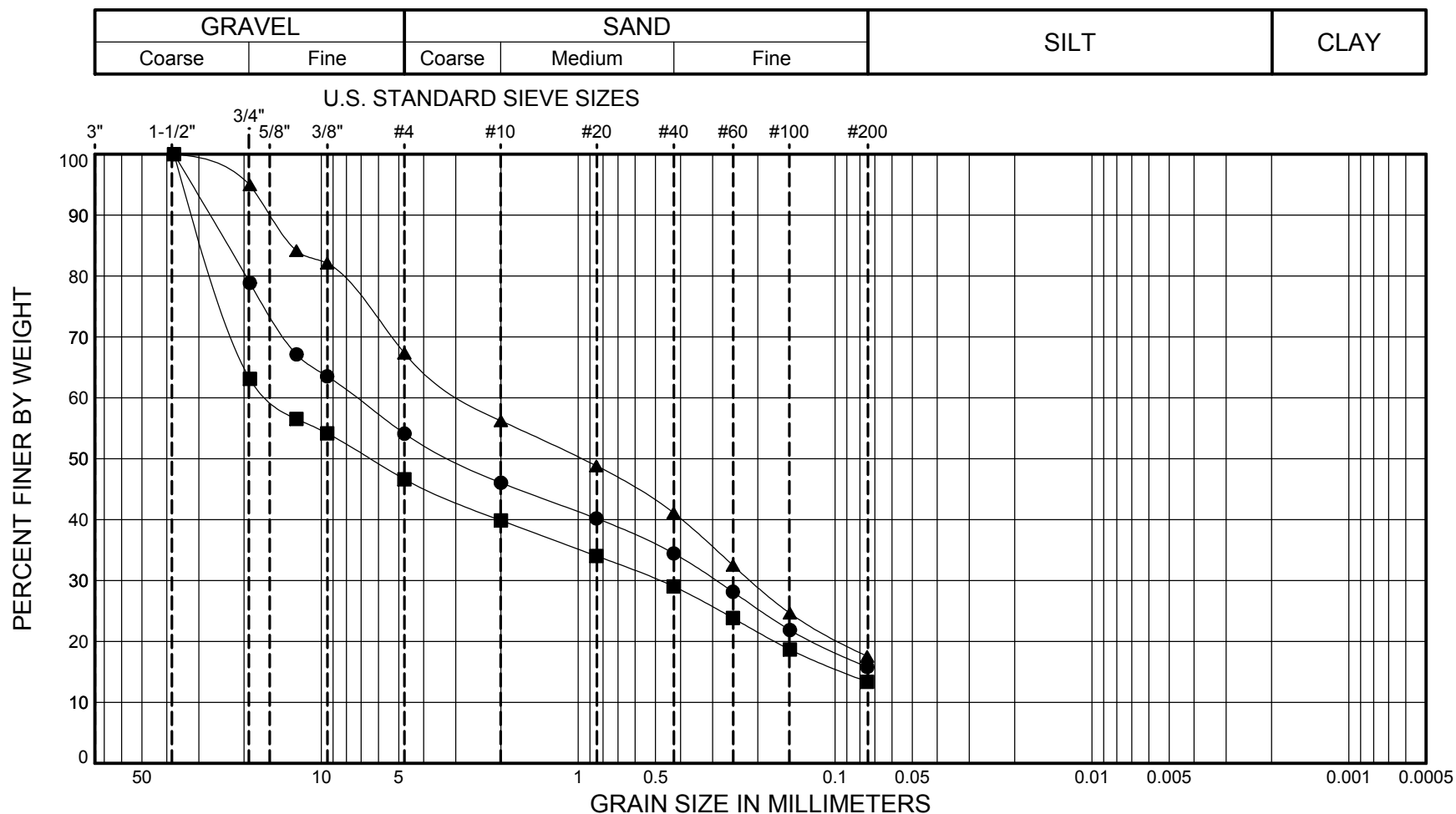
NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated
 and therefore may not necessarily be indicative of other times and/or locations.

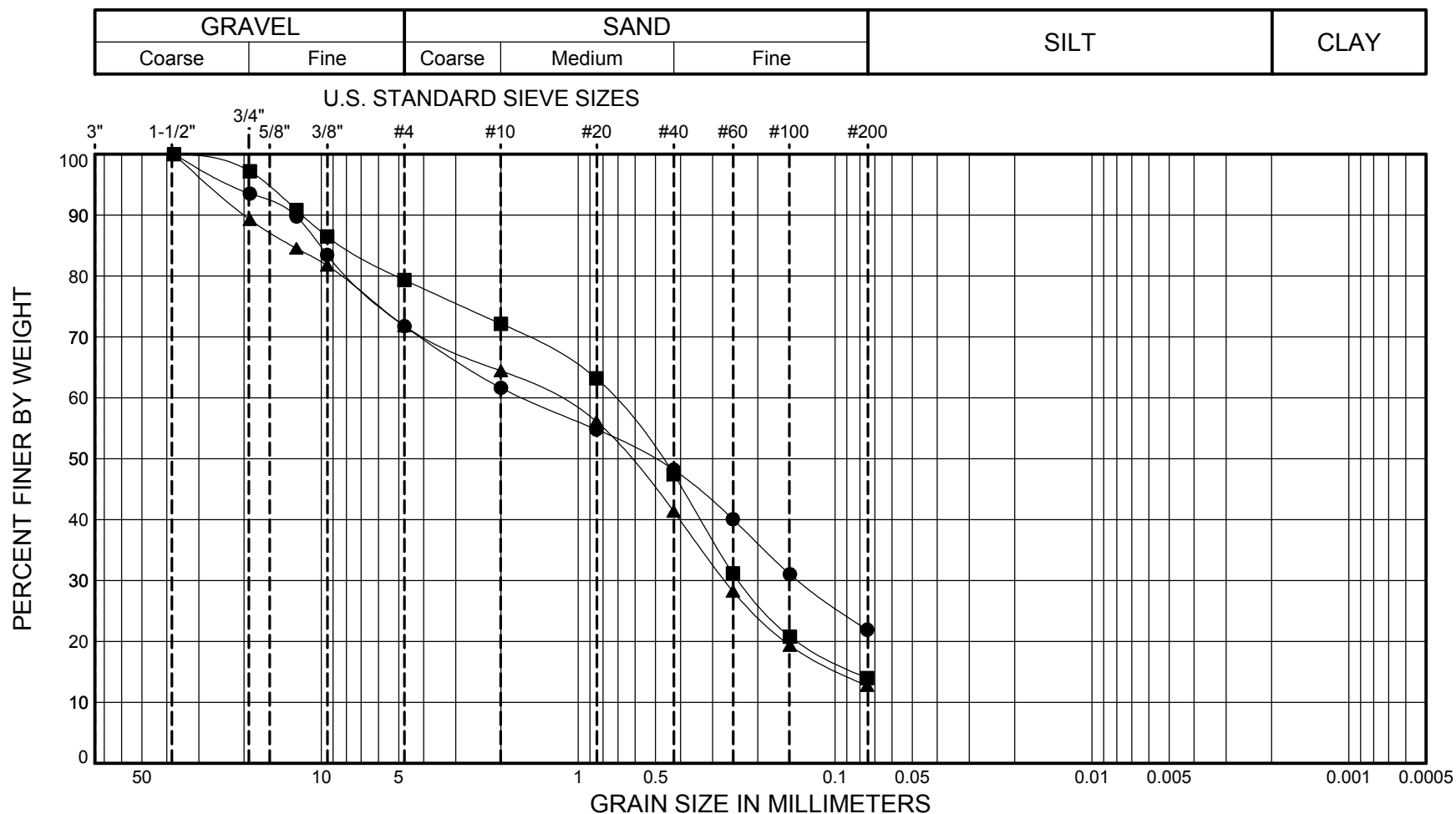
APPENDIX B

LABORATORY DATA

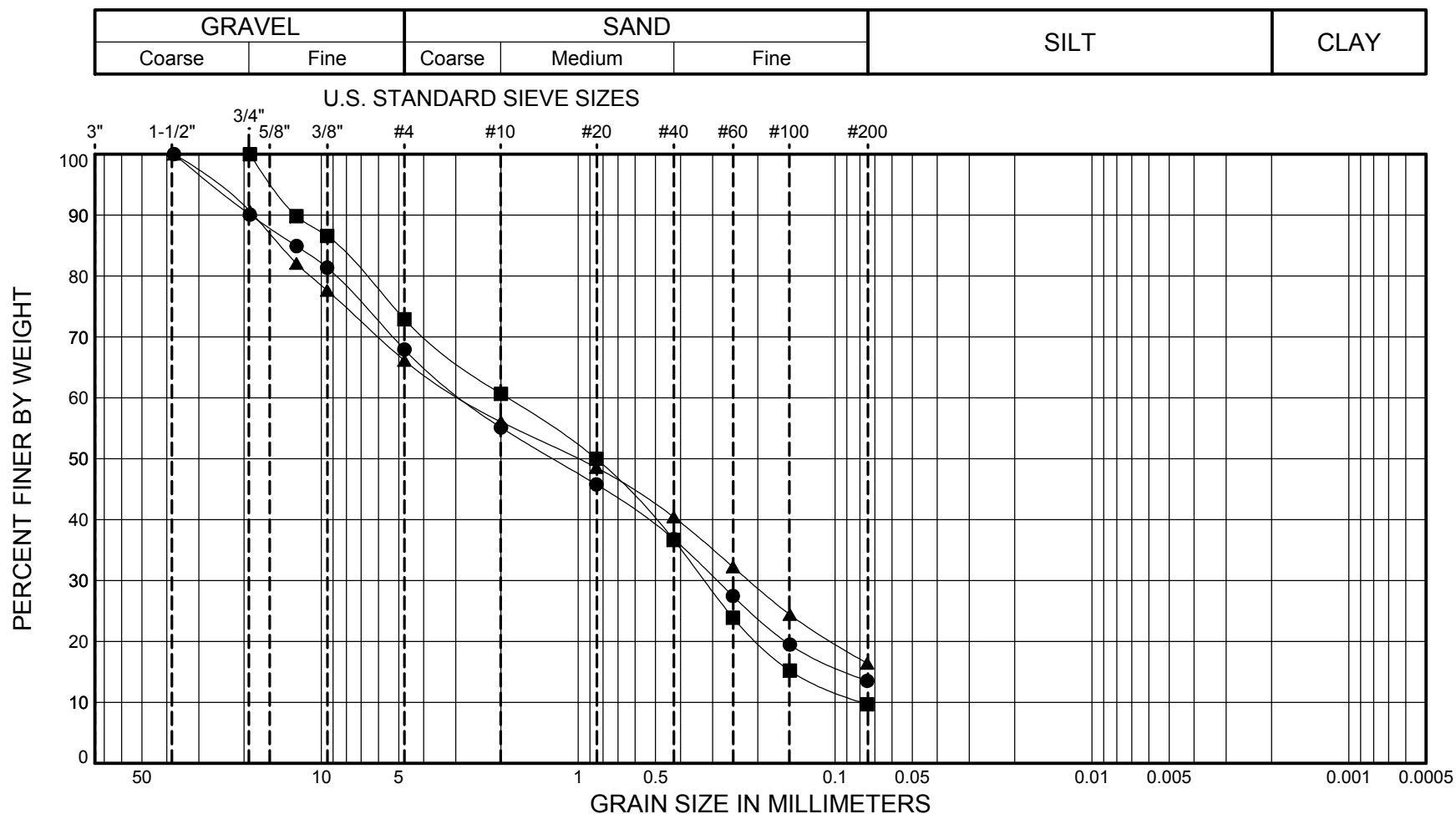
EXPLORATION DESIGNATION	TOP DEPTH (feet)	BOTTOM DEPTH (feet)	MOISTURE CONTENT (%)	ORGANIC CONTENT (%)	SPECIFIC GRAVITY	ATTERBERG LIMITS (%)			% GRAVEL	% SAND	% FINES	ASTM SOIL CLASSIFICATION	SAMPLE DESCRIPTION
						LL	PL	PI					
C-01,S-1	0.4	1.2	7.6						45.9	38.3	15.8	GM	Yellowish-brown, silty GRAVEL with sand
C-02,S-1	0.8	1.3	10.0						53.4	33.2	13.4	GM	Yellowish-brown, silty GRAVEL with sand
C-03,S-1	0.5	1.3	9.4						32.7	49.8	17.5	SM	Yellowish-brown, silty SAND with gravel
C-04,S-1	0.5	1.3	10.4						28.2	49.8	21.9	SM	Light olive-brown, silty SAND with gravel
C-05,S-1	0.3	1.5	9.6						20.7	65.3	14.0	SM	Dark yellowish-brown, silty SAND with gravel
C-06,S-1	0.5	1.5	8.0						28.2	59.1	12.7	SM	Dark yellowish-brown, silty SAND with gravel
C-07,S-1	0.5	1.7	36.4						9.9	62.5	27.6	SM	Dark brown, silty SAND with organics
C-08,S-1	0.7	1.5	5.3						48.8	42.9	8.4	GP-GM	Very dark gray, poorly graded GRAVEL with sand and silt
C-09,S-1	0.7	1.5	5.8						40.6	49.5	9.9	SP-SM	Very dark gray, poorly graded SAND with silt and gravel
C-10,S-1	0.7	1.5	8.4						32.1	54.4	13.5	SM	Yellowish-brown, silty SAND with gravel
C-11,S-1	0.7	1.4	8.3						27.1	63.2	9.7	SP-SM	Brown, poorly graded SAND with silt and gravel
C-12,S-1	0.6	1.0	16.4						33.9	49.7	16.4	SM	Strong brown, silty SAND with gravel
C-13,S-1	0.6	1.5	6.4						39.9	44.3	15.8	SM	Olive-brown, silty SAND with gravel

Notes: 1. This table summarizes information presented elsewhere in the report and should be used in conjunction with the report test, other graphs and tables, and the exploration logs.
2. The soil classifications in this table are based on ASTM D2487 and D2488 as applicable.



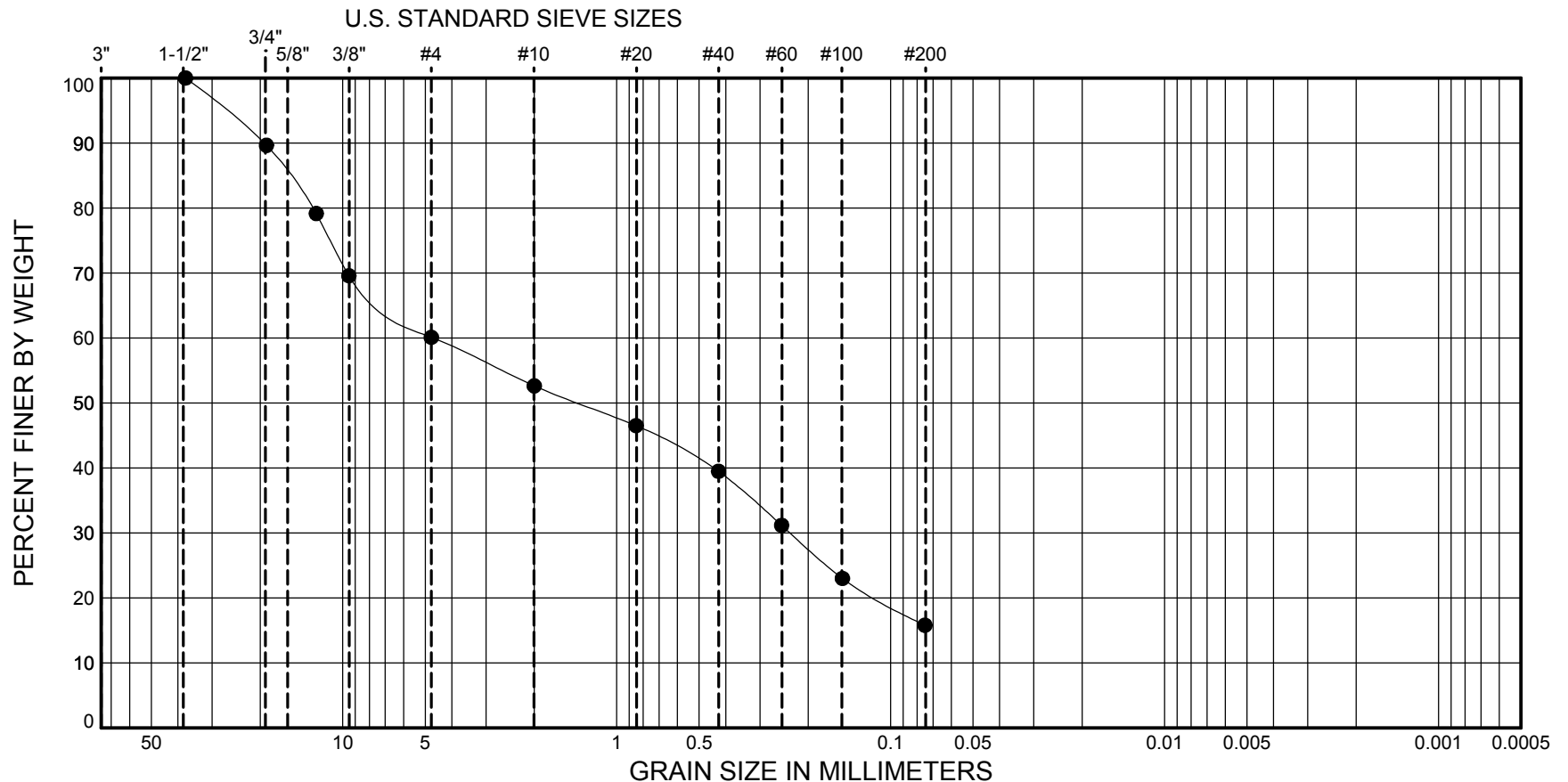


SYMBOL	SAMPLE		DEPTH (ft)	CLASSIFICATION OF SOIL- ASTM D2487 Group Symbol and Name	% MC	LL	PL	PI	Gravel %	Sand %	Fines %
●	C-04	S-1	0.5 - 1.3	(SM) Light olive-brown, silty SAND with gravel	10				28.2	49.8	21.9
■	C-05	S-1	0.3 - 1.5	(SM) Dark yellowish-brown, silty SAND with gravel	10				20.7	65.3	14.0
▲	C-06	S-1	0.5 - 1.5	(SM) Dark yellowish-brown, silty SAND with gravel	8				28.2	59.1	12.7



SYMBOL	SAMPLE		DEPTH (ft)	CLASSIFICATION OF SOIL- ASTM D2487 Group Symbol and Name	% MC	LL	PL	PI	Gravel %	Sand %	Fines %
●	C-10	S-1	0.7 - 1.5	(SM) Yellowish-brown, silty SAND with gravel	8				32.1	54.4	13.5
■	C-11	S-1	0.7 - 1.4	(SP-SM) Brown, poorly graded SAND with silt and gravel	8				27.1	63.2	9.7
▲	C-12	S-1	0.6 - 1.0	(SM) Strong brown, silty SAND with gravel	16				33.9	49.7	16.4

GRAVEL		SAND			SILT	CLAY
Coarse	Fine	Coarse	Medium	Fine		



SYMBOL	SAMPLE		DEPTH (ft)	CLASSIFICATION OF SOIL- ASTM D2487 Group Symbol and Name	% MC	LL	PL	PI	Gravel %	Sand %	Fines %
●	C-13	S-1	0.6 - 1.5	(SM) Olive-brown, silty SAND with gravel	6				39.9	44.3	15.8