CITY OF TACOMA
ENVIRONMENTAL SERVICES DEPARTMENT

REQUEST FOR BIDS, SPECIAL PROVISIONS, BID PROPOSAL AND CONTRACT

FOR

SPECIFICATION NO.
ES17-0237F

Tree Removal, Pruning, and Planting

Aris Efting, Project Manager
Science & Engineering Division
Environmental Services Department
326 East D Street
Tacoma, Washington 98421-1801

Revised: 02/22/17
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NOTE: ALL BIDDERS MUST HAVE A COPY OF THE SPECIFICATIONS AND THE BID SUBMITTAL PACKAGE

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REQUEST FOR BIDS ES17-0237F
Tree Removal, Pruning, and Planting

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, January 9, 2018

Submittal Delivery: Sealed submittals will be received as follows:

<table>
<thead>
<tr>
<th>By Carrier:</th>
<th>In Person:</th>
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</thead>
<tbody>
<tr>
<td>City of Tacoma Procurement &amp; Payables Division</td>
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<td>Administration Building North – Main Floor</td>
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<tr>
<td>Tacoma, WA 98409</td>
<td>3628 S 35th Street</td>
</tr>
<tr>
<td></td>
<td>Tacoma, WA 98409</td>
</tr>
</tbody>
</table>

Submittal Opening: Sealed submittals in response to a RFB will be opened by a Purchasing representative and read aloud during a public bid opening held in Conference Room M-1, located on the main floor in the same building. Submittals in response to an RFP or RFQ are recorded as received but are not typically opened and read aloud. After 1:00 p.m. the day of bid opening, the names of vendors submitting proposals are posted to the website for public viewing.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at www.TacomaPurchasing.org.
- Register for the Bid Holders List to receive notices of addenda, questions and answers and related updates.
- Click here to see a list of vendors registered for this solicitation.

Pre-Proposal Meeting: A pre-proposal meeting will not be held.

Project Scope: This Contract shall generally consist of removing trees, planting new trees and pruning existing trees on City property and the rights-of-way. This work will be completed on an as needed basis.

Estimate: $150,000 - $200,000

Paid Leave and Minimum Wage: Effective February 1, 2016, the City of Tacoma requires all employers to provide paid leave and minimum wages, as set forth in Title 18 of the Tacoma Municipal Code. For more information visit www.cityoftacoma.org/employmentstandards.

Additional Information: Requests for information regarding the specifications may be obtained by contacting Jessica Tonka, Senior Buyer by email to jtonka@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at www.tacomapurchasing.org, specifies procedures for protests submitted prior to and after submittal deadline.

Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.
SPECIAL REMINDER TO ALL BIDDERS

PLEASE NOTE: Be sure you have complied with all specifications and requirements and have signed or have caused to be signed all required instruments.

YOUR ATTENTION IS PARTICULARLY CALLED to the following forms, which must be executed in full before the bid is submitted:

1. **BID PROPOSAL**: The unit prices bid must be shown in the space provided. Be sure to check your computations for omissions and errors.

2. **SIGNATURE PAGE**: To be filled in and signed by the bidder. Be sure all parties whose signatures are legally necessary have signed, whether the bidder be an individual, partnership or corporation.

3. **BID BOND**: The Bid Bond must be executed by the person legally authorized to sign the bid, and must be properly signed by the representatives of the surety company unless the bid is accompanied by a certified check. If Bid Bond is furnished, the form furnished by the City must be followed; no variations from the language thereof will be accepted. The amount of the Bid Bond must be not less than 5% of the total amount bid; and, if shown in dollars and cents, the amount of said Bid Bond must be not less than the required 5%.

4. **STATE RESPONSIBILITY AND RECIPROCAL BID PREFERENCE INFORMATION**: The bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).

5. **STATEMENT OF QUALIFICATIONS**: The Contractor or subcontractor shall fill out this form in its entirety proving they meet the requirements as outlined in these specifications. It shall be the sole determination of the Engineer to determine if the Contractor/subcontractor does in fact meet the requirements. This is a condition of award of the contract.

6. **SMALL BUSINESS ENTERPRISE (SBE)**:

   Equal Opportunity and Small Business Enterprise forms must be fully and accurately completed and returned at the time of the submission of bids. Failure to do so may result in the bid being considered non-responsive. These forms are necessary in order to determine if the bidder complies with Chapter 1.07 of the City of Tacoma Municipal Code and State Law.

   The SBE goal for this project is zero percent (0%).

   The following steps shall be used to determine the level of SBE Usage:

   a. The low bidder who meets the City’s participation goal, for SBEs, shall be presumed to have met the requirement.
b. Otherwise the bidder who has the lowest evaluated bid based on the formula set forth below:

$$ (\text{BaseBid}) - \left[ \frac{\text{SBE Usage Percentage}}{\text{SBE Goal Percentage}} \times (0.05 \times \text{Low Bid}) \right] = \text{Evaluated Bid} $$

shall be presumed to have met the requirement and may be recommended for award.

NOTE: The ratio of SBE usage to the SBE goal in this formula above shall not exceed 1.

For the purposes of determining the Evaluated Bid all alternates, additives and deductives selected by the City will be added to your base bid as indicated in the Proposal.

Contractors are also subject to the City’s ordinance and regulations pertaining to having an affirmative action program and prohibiting discrimination. If needed, please contact the SBE Office at (253) 591-5224 for assistance. The list of SBE subcontractors is available at:


All bidders must complete and submit with their bid the following forms contained in the Bid Submittal Package:

City of Tacoma – SBE Utilization Form
City of Tacoma – Prime Contractor’s Pre-Work Form

**FAILURE TO COMPLETE AND SUBMIT THE FORMS WITH THE BID SUBMITTAL PACKAGE MAY RESULT IN THE BID BEING DECLARED UNRESPONSIVE AND REJECTED.**

7. **EQUAL EMPLOYMENT OPPORTUNITIES:** The City of Tacoma’s Prime Contractor’s Pre-Work Form shall be completed by the bidder and submitted with the bid. This form is used to determine the bidder’s EEO practices in accordance with E.O. 11246 and TMC 10.26.

**POST AWARD FORMS:** For the bidder’s information, the following forms are to be executed after the contract is awarded:

A. **CONTRACT:** Must be executed by the successful bidder.
B. **PAYMENT BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.
C. **PERFORMANCE BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.
D. GENERAL RELEASE.

**CODE OF ETHICS:** The successful bidder agrees that its violation of the City’s Code of Ethics contained in Chapter 1.46 of the Tacoma Municipal Code shall constitute a breach of the contract subjecting the contract to termination.
Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

I. STATE OF WASHINGTON

A. RESPONSIBILITY CRITERIA – STATE OF WASHINGTON

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

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 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).

B. RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor’s business entity was formed.

The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident bidder preference.
contractor’s bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

**C. SUBCONTRACTOR RESPONSIBILITY**

1. The Contractor shall include the language of this subcontractor responsibility 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. The requirements of this section apply to all subcontractors regardless of tier.

2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

   a. 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 subcontract bid submittal;

   b. Have a current Washington Unified Business Identifier (UBI) number;

   c. If applicable, have:

      a. Have Industrial Insurance (workers' compensation) coverage for the bidder’s employees working in Washington, as required in Title 51 RCW;

      b. A Washington Employment Security Department number, as required in Title 50 RCW;

      c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

      d. An electrical contractor license, if required by Chapter 19.28 RCW;

      e. An elevator contractor license, if required by Chapter 70.87 RCW and;

3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
II. CITY OF TACOMA

A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City’s Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent’s financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City’s Ethics Code and its Small Business Enterprise and Local Employment and Apprenticeship programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.
B. ADDITIONAL SUPPLEMENTAL CRITERIA – NOT APPLICABLE

C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA

Potential bidders may request modifications to the City’s supplemental criteria by submitting a written request to the Purchasing Division no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests after this date and time will not be considered.

Requests for modifications to the supplemental criteria may be submitted via postal mail or delivered personally, or sent by e-mail or fax, within the above timeline as follows:

<table>
<thead>
<tr>
<th><strong>By Carrier:</strong></th>
<th><strong>In Person:</strong></th>
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<td>City of Tacoma Procurement &amp; Payables Division&lt;br&gt;Tacoma Public Utilities Lobby Security Desk&lt;br&gt;Administration Building North – Main Floor&lt;br&gt;3628 S 35th Street&lt;br&gt;Tacoma, WA 98409</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>By Mail:</strong></th>
<th><strong>Fax:</strong> 253-502-8372&lt;br&gt;E-mail: <a href="mailto:bids@cityoftacoma.org">bids@cityoftacoma.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Tacoma Procurement &amp; Payables Division&lt;br&gt;Tacoma Public Utilities&lt;br&gt;PO Box 11007&lt;br&gt;Tacoma, WA 98411-0007</td>
<td></td>
</tr>
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</table>

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City’s website for the attention of all prospective bidders.

D. DETERMINATION OF BIDDER RESPONSIBILITY

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City’s Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to $200,000 and by Contracts and Awards Board for contracts greater than $200,000.
PART I

BID PROPOSAL AND CONTRACT FORMS
The undersigned hereby certifies that he/she has examined the details of work as outlined in the Specifications for Project No. ES17-0237F and has read and thoroughly understands the Specifications and Contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Specifications and Contract and at the following schedule of rates and prices.

The following bid schedule contains a list of work items and quantities that will be used for calculating a total amount in order to determine the low Bidder. The stated unit bid quantities below will specifically not be a part of the resultant contract documents and the actual work quantities during the life of this on-call contract may vary substantially from the unit quantities assigned by the City for purposes of determining the basis of award. The Unit Prices, however, submitted by the Contractor as part of this Bid Proposal will become part of the Contract and will be used throughout the life of this project. The winning Bidder shall not be entitled to any adjustment in its unit prices as a result of any variation – no matter how significant – between actual unit quantities and those used for purposes of determining the basis of award.

It is anticipated that the total payment for this contract will not exceed $200,000 over the two year Contract period. The Contractor should accurately complete the Bid Specification Sheet, and not limit the total bid to $200,000 or less.

Enter the unit price and extended total for all items.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM DESCRIPTION</th>
<th>ESTIMATED QUANTITIES (2 YEARS)</th>
<th>UNIT PRICE</th>
<th>TOTAL AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Faller</td>
<td>150 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>2.</td>
<td>Bucker</td>
<td>150 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>3.</td>
<td>Laborer</td>
<td>265 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>4.</td>
<td>Stump Grinder</td>
<td>30 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>5.</td>
<td>Chipper</td>
<td>30 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>6.</td>
<td>Wood Disposal Fee</td>
<td>240,000 pounds</td>
<td>$ per 100 lbs</td>
<td>$ (= unit price x 2,400)</td>
</tr>
</tbody>
</table>

Bidder Name: ____________________________
Specification No. ES17-0237F
Page 1 of 2
<table>
<thead>
<tr>
<th>Sec.</th>
<th>Item Description</th>
<th>Hours</th>
<th>Unit Price</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Diseased Wood Disposal Fee</td>
<td>70,000 pounds</td>
<td>$70,000 per 100 lbs</td>
<td>$70,000 (= unit price x 700)</td>
</tr>
<tr>
<td>8</td>
<td>Tree Pruner</td>
<td>150 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Certified Arborist</td>
<td>180 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>Tree Planting</td>
<td>40 hours</td>
<td>$ per hour</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>Bucket Truck</td>
<td>48 hours</td>
<td>$ per 4 hours</td>
<td>$ (= unit price x 12)</td>
</tr>
<tr>
<td>12</td>
<td>Initial Mobilization</td>
<td>1 lump sum</td>
<td>lump sum</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>Per Site Mobilization</td>
<td>50 each</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td>Emergency Tree Work</td>
<td></td>
<td>estimated</td>
<td>$10,000</td>
</tr>
<tr>
<td>15</td>
<td>Traffic Control</td>
<td></td>
<td>estimated</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

TOTAL BASE BID (Subtotal Items 1-13) $________________________

SALES TAX (10.1% for all businesses) $________________________

GRAND TOTAL (Base Bid + Sales Tax) $________________________
SIGNATURE PAGE

CITY OF TACOMA DEPARTMENT OF Environmental Services Department

All submittals must be in ink or typewritten and must be executed by a duly authorized officer or representative of the bidding/proposing entity. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

Submittals will be received and time stamped only at the City of Tacoma Purchasing Division, located in the Tacoma Public Utilities Administration Building North, Main Floor, at 3628 South 35th Street, Tacoma, WA 98409. See the Request for Bids page near the beginning of the specification for additional details.

REQUEST FOR BIDS SPECIFICATION NO. ES17-0237F

Tree Removal, Pruning, and Planting

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).

Bidder/Proposer’s Registered Name

Signature of Person Authorized to Enter into Contracts for Bidder/Proposer

Date

Address

Printed Name and Title

City, State, Zip

(Area Code) Telephone Number / Fax Number

E-Mail Address

State Business License Number
in WA, also known as UBI (Unified Business Identifier) Number


State Contractor’s License Number
(See Ch. 18.27, R.C.W.)

Addendum acknowledgement #1_____ #2_____ #3_____ #4_____ #5_____
Herewith find deposit in the form of a cashier’s check in the amount of $______________ which amount is not less than 5-percent of the total bid.

SIGN HERE__________________________________

BID BOND

KNOW ALL MEN BY THESE PRESENTS:
That we, ______________________________________________________________, as Principal, and ____________________________________________________________________, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of _________________ ______________________________________________________________________ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS ________________ DAY OF __________________, 20______. 

PRINCIPAL:  SURETY: 

_________________________________________  ____________________________________________

_________________________________________  ____________________________________________

_________________________________________  ____________________________________________

_________________________________________, 20____

Received return of deposit in the sum of $ ____________________________

__________________________________________
State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor (must be in effect at the time of bid submittal):

Number: ________________________
Effective Date: ________________
Expiration Date: ________________

Current Washington Unified Business Identifier (UBI) number:

Number: ________________________

Do you have industrial insurance (workers' compensation) coverage for your employees working in Washington?

☐ Yes  ☐ No  ☐ Not Applicable

Washington Employment Security Department number:

Number: ________________________
☐ Not Applicable

Washington Department of Revenue state excise tax registration number:

Number: ________________________
☐ Not Applicable

Have you been disqualified from bidding on any public works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes  ☐ No  If yes, provide an explanation of your disqualification on a separate page.

Do you have a physical office located in the state of Washington?

☐ Yes  ☐ No

If incorporated, in what state were you incorporated?

State: __________________________
☐ Not Incorporated

If not incorporated, in what state was your business entity formed?

State: __________________________
Statement of Qualifications for Tree Removal, Pruning, and Planting

Contractor information and sections 1A, 1B, 1C, 1D, 1E, and 1F of this form shall be completed in entirety and submitted with the bid to provide evidence of qualifications. (Use additional copies of this form for subcontractor information, if necessary). **Failure to submit and meet the requirements as stated in Section 1-02.1 of the Special Provisions shall be grounds for rejection of the Bid.**

The City will be the sole judge of the bidder's ability to meet these requirements.

Contractor:
Name:______________________________________________________________________
Address:____________________________________________________________________
Phone:_______________________ Contact Person:_________________________________
Email:______________________________________

Only Contractors with a record of at least three successfully completed projects within the past five (5) years of similar scope, complexity, and overall cost will be considered. The Contractor must have completed at least one (1) project in each of the three (3) categories: tree removal, tree pruning, and tree planting. At least two (2) of these projects must have been performed for a municipality.

#1A Tree Removal (required)
Municipality or Company:______________________________________________________
Contact Person/Dept.__________________________________________________________
City, State__________________________________________ Phone:___________________________  Email:____________________________________
Project Name or Description:____________________________________________________
Date(s):________________________ Approx. Total Project Cost:____________________

#2A Tree Removal
Municipality or Company:______________________________________________________
Contact Person/Dept.__________________________________________________________
City, State__________________________________________ Phone:___________________________  Email:____________________________________
Project Name or Description:____________________________________________________
Date(s):________________________ Approx. Total Project Cost:____________________

#3A Tree Removal
Municipality or Company:______________________________________________________
Contact Person/Dept.__________________________________________________________
City, State__________________________________________ Phone:___________________________  Email:____________________________________
Project Name or Description:____________________________________________________
Date(s):________________________ Approx. Total Project Cost:____________________
#1B Tree Pruning (required)
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State _________________________________________________________________
Phone: ___________________ Email: ________________________________
Project Name or Description: _________________________________________________
Date(s): _______________ Approx. Total Project Cost: ___________________________

#2B Tree Pruning
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State _________________________________________________________________
Phone: ___________________ Email: ________________________________
Project Name or Description: _________________________________________________
Date(s): _______________ Approx. Total Project Cost: ___________________________

#3B Tree Pruning
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State _________________________________________________________________
Phone: ___________________ Email: ________________________________
Project Name or Description: _________________________________________________
Date(s): _______________ Approx. Total Project Cost: ___________________________

#1C Tree Planting (required)
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State _________________________________________________________________
Phone: ___________________ Email: ________________________________
Project Name or Description: _________________________________________________
Date(s): _______________ Approx. Total Project Cost: ___________________________

#2C Tree Planting
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State _________________________________________________________________
Phone: ___________________ Email: ________________________________
Project Name or Description: _________________________________________________
Date(s): _______________ Approx. Total Project Cost: ___________________________
#3C Tree Planting
Municipality or Company: ______________________________________________________
Contact Person/Dept. _________________________________________________________
City, State ____________________________________________
Phone:___________________________ Email:____________________________________
Project Name or Description:____________________________________________________
Date(s):________________________ Approx. Total Project Cost:______________________

An ISA Certified Arborist must be on the Primary Contractor’s staff.

The following information must be completed for at least one (1) staff member.

#1D ISA Certification (required)
Name:__________________________ ISA Certification Type:_________________________
ISA License No. _____________________ License Expiration Date____________________

#2D ISA Certification
Name:__________________________ ISA Certification Type:_________________________
ISA License No. _____________________ License Expiration Date____________________

#3D ISA Certification
Name:__________________________ ISA Certification Type:_________________________
ISA License No. _____________________ License Expiration Date____________________

Bidder must be a registered contractor in the State of Washington and have a Unified
Business Identification Number in the State of Washington.

#1E State of Washington Contractor Registration Number (required)
________________________

#1F State of Washington Unified Business Identification Number (required)
________________________
SBE GOAL UTILIZATION FORM

SMALL BUSINESS ENTERPRISE REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation forms contained in the bid submittal package:

City of Tacoma – Prime Contractor’s Pre-Work Form

IMPORTANT NOTE:

It is the bidder’s responsibility to insure that the SBE subcontractor(s) listed on the SBE Utilization Form are currently certified by the City of Tacoma at the time of bid opening. This may be verified by contacting Carrie Lynn, SBE Program Coordinator at (253) 591-5224 between 7:30AM - 5PM Monday through Friday. This form must have clear expression of SBE participation your company will use on this project. Ordinance 27867, passed by the City Council on December 15, 2009, establishes the overall SBE goal of 22%, except where modified through appropriate procedures. Please refer to the City of Tacoma SBE Provisions included elsewhere in these Special Provisions.

SBE GOAL: The SBE office has determined a zero (0%) SBE goal should apply to this project. Due to limited scope and specific nature of the project, no reasonable opportunity for subcontracting exists.

For any questions or concerns, please call Carrie Lynn at (253) 591-5224

MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE SBE UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 27867.

CCD/SBE/Single Trade: ES17-0237F On-Call Tree Servicing
Date of Record: 11/28/2017
## PRIME CONTRACTOR'S PRE-WORK FORM

### Company Name

---

### Telephone

---

### Address/City/State/Zip Code

---

<table>
<thead>
<tr>
<th>Specification Number</th>
<th>Specification Title</th>
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### JOB CATEGORIES

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<th>TOTAL MINORITY EMPLOYEES</th>
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<th>ASIAN or PACIFIC ISLANDER</th>
<th>AMERICAN INDIAN or ALASKAN NATIVE</th>
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### CONTRACTOR'S PROJECTED WORK FORCE - THIS PROJECT

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<tr>
<th></th>
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### TOTALS

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</thead>
</table>

### Type or Print Name of Responsible Officer / Title

---

### Signature of Responsible Officer

---

### Date

---

CCD/SBE/FORMS revised May 2017
INSTRUCTIONS FOR COMPLETING
PRIME CONTRACTOR’S PRE-WORK FORM

This form only applies to employees who will be working on this specific project.

1. "Heading" the company name and address should reflect the prime contractor actually doing business with the City of Tacoma. If this address is different from that of the Equal Employment Opportunity Officer that administers the EEO programs of the company, the Equal Employment Opportunity Officer's address should be noted in the "Comments" section at the bottom of the form. "Telephone" should contain the area code, telephone number and extension (if any) for the Equal Employment Officer or the responsible official.

2. "Job Categories" at the extreme left hand column of the form specifying "Job Categories" lists "Officials & Managers." You are to list in addition to Officials & Managers any appropriate job titles such as Sales Workers, Office/Clerical, Professionals, Technical, etc., as they apply to your own company and only as pertains to this specific project.

3. The "M" and "F" headings at the top of each column refer to "Male" and "Female."

4. The "Total Employees" column should list the total number of male employees under "M" and the total female number of female employees under "F" for each job category listed. They should be listed in a similar manner in the "Total" category at the bottom of the form. The "Total Employees" column should include all those employees listed under "Non-Minority" and "Total Minorities." "Non-Minority" should include all employees not listed in the minority columns.

5. "Total Minorities" should include all employees listed under the "Black," "Asian or Pacific Islander" (A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.), "American Indian or Alaskan Native," and "Hispanic" columns. These columns should include only employees who are members of that particular minority group. Designation and definitions of ethnic/national origin status follow the instructions and definitions of the Federal EEO-1 Form of the U. S. Equal Employment Opportunity Commission.

6. "Totals" this line should reflect the total of all lines in each of the above columns.

7. The signature of your company's designated responsible official or similar official responsible for equal employment opportunity must appear in the designated space at the bottom of the form. Please PRINT OR TYPE the person's name on the top line across from the signature. This is required since some signatures are difficult to read.

8. "Comments" this section is to be used as needed for explanations to under utilization rate or lack of turnover, proposed expansion or reduction of staff or any other pertinent information you believe will help clarify or explain the data presented on the form. If you need additional space, please explain on a separate sheet of paper.

9. If you need assistance or have questions regarding the completion of this form, please call the SBE Office at 253-594-7933 or 253-591-5224.

CCD/SBE/FORMS revised May 2017
Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (December 1, 2017), that the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

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

Bidder

Signature of Authorized Official*

Printed Name

Title

Date                             City                             State

Check One:
Individual ☐  Partnership ☐  Joint Venture ☐  Corporation ☐

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

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

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

Request for Bids Specification No. ES17-0237F - Tree Removal, Pruning, and Planting

A. Complete and return this form with your submittal. If your company is awarded the project, the information below will be used to determine the appropriate contract documents and retainage method.

B. As provided for in RCW 39.08.010, a bond is required on any work resulting from this solicitation, provided that on contracts of $150,000 or less, the contractor may, in lieu of the performance bond and payment bond, elect to have the City of Tacoma retain 10 percent of the contract amount for a period of 30 days after the date of final acceptance, or until receipt of all necessary releases from the Department of Revenue, the Department of Labor and Industries, and settlement of any liens filed under RCW CHAPTER 60.28, whichever is later.

C. Please specify your choice:

- Performance bond* and payment bond* (5% retainage)
- Hold 10% retainage in lieu of performance bond and payment bond (reserved for contracts $150,000 or less per RCW 39.08.010)
- Bond in-lieu-of retainage*
- Escrow agreement*

*The City's forms must be used. Contractor may not substitute its own forms.

Pursuant to RCW 60.28, a sum of five percent of the monies earned by the Contractor will be retained from progress estimates. Such retainage shall be used as a trust fund for the protection and payment (1) to the state with respect to taxes imposed pursuant to Title 82, RCW, and (2) the claims of any person arising under the contract.

Release of the retainage will be made 60 days following the completion date (pursuant to RCW 39.12, and RCW 60.28) provided the following conditions are met:

1. On contracts totaling more than $20,000, a release has been obtained from the Washington State Department of Revenue.
2. Affidavits of Wages Paid for the Contractor and all Subcontractors are on file with the contracting agency (RCW 39.12.040).
3. A release has been obtained from the Washington State Department of Labor and Industries (per Section 1-07.10) and the Washington State Employment Security Department.
4. All claims, as provided by law, filed against the retainage have been resolved. In the event claims are filed, and provided the conditions of 1, 2, and 3 are met, the Contractor will be paid such retained percentage less an amount sufficient to pay any such claims together with a sum determined by the contracting agency sufficient to pay the cost of foreclosing on claims and to cover attorney’s fees.
This Contract is made and entered into effective this _____ day of _____, 20____, ("Effective Date") by and between the City of Tacoma, a Municipal Corporation of the State of Washington ("City"), and ("Contractor").

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as "Contract Documents":

1. Specification No. _______ and Title _______ together with all authorized addenda.
2. Contractor's submittal (or specifically described portions thereof) dated _____ submitted in response to Specification No. _______ and Title _______.
3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel etc.) or any other additional items mutually intended to be binding upon the parties.

In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:

1. Contract
2. List remaining Contract Documents in applicable controlling order.

II. The total price to be paid by City for Contracts full and complete performance hereunder may not exceed: $ ______________, plus applicable sales tax.

III. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.

IV. Contractor acknowledges, and by signing this Contract agrees, that the Indemnification provisions set forth in the controlling Contract Documents, including the Industrial Insurance immunity waiver (if applicable), are totally and fully part of this Contract and, within the context of the competitive bidding laws, have been mutually negotiated by the Parties hereto.

V. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.

VI. It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA: ________________________________

By: ________________________________

Enter title of dept or div staff w/auth to sign for this $ amt ________________

By: ________________________________

Select for over $50K or NA ________________

CONTRACTOR: ________________________________

By: ________________________________

Signature ________________

Printed Name ________________

Form No. SPEC-120A

Revised: 06/29/17
By: ____________________________  ____________________________

Director of Finance  Title

APPROVED AS TO FORM:

By: ____________________________

City Attorney
PAYMENT BOND
TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned,

as principal, and

as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,

$________________________ , for the payment whereof Contractor and Surety bind themselves,

their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No.
Specification Title:
Contract No.

(which contract is referenced to herein and is made a part hereof as though attached here)

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 80.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any way affect its obligation on this bond, and waivers notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.
One original bond shall be executed, and be signed by the parties’ duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Approved as to form:

Deputy City Attorney

Principal: Vendor Legal Name

By: ______________________________

Surety:

By: ______________________________

Agent’s Name:

Agent’s Address:

Sample
PERFORMANCE BOND
TO THE CITY OF TACOMA

That we, the undersigned,______________________________
as principal, and______________________________
as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of,
$______________________________, for the payment whereof Contractor and Surety bind themselves,
their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

Specification No.

Specification Title:

Contract No.

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance bond shall become null and void, if and when the principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal’s obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney’s fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of “Surety Companies Acceptable in Federal Bonds” as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

One original bond shall be executed, and signed by the parties’ duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Approved as to form:______________________________

Principal: Vendor Legal Name

Deputy City Attorney

By: ______________________________

Surety:

By: ______________________________

Agent’s Name: ______________________________

Agent’s Address: ______________________________
GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for Project / Spec. # between ________________ and the City of Tacoma, (Themselves or Itself) dated ________________, 20___, hereby releases the City of Tacoma, its departmental officers and agents from any and all claim or claims whatsoever in any manner whatsoever at any time whatsoever arising out of and/or in connection with and/or relating to said contract, excepting only the equity of the undersigned in the amount now retained by the City of Tacoma under said contract, to-wit the sum of $__________________.

Signed at Tacoma, Washington this _____ day of ______, 20__.

________________________
Contractor

By _____________________

Title ____________________
PART II

STATE AMENDMENTS
TO THE
STANDARD SPECIFICATIONS
INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2016 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.

1-01.AP1
Section 1-01, Definitions and Terms
August 1, 2016

1-01.3 Definitions
The following new term and definition is inserted after the eighth paragraph:

Cold Weather Protection Period – A period of time 7 days from the day of concrete placement or the duration of the cure period, whichever is longer.

1-02.AP1
Section 1-02, Bid Procedures and Conditions
June 1, 2017

1-02.4(1) General
The first sentence of the last paragraph is revised to read:

Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business on the Thursday preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.6 Preparation of Proposal
In this section, “Disadvantaged Business Enterprise” is revised to read “Underutilized Disadvantaged Business Enterprise”, and “DBE” is revised to read “UDBE”.

1-02.9 Delivery of Proposal
The last sentence of the third paragraph is revised to read:

The Contracting Agency will not open or consider any Proposal when the Proposal or Bid deposit is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals unless an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received.

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

1-02.12 Public Opening of Proposals

This section is supplemented with the following new paragraph:

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be opened at the time indicated in the call for Bids the time specified for opening of Proposals will be deemed to be extended to the same time of day on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.13 Irregular Proposals

In this section, “Disadvantaged Business Enterprise” is revised to read “Underutilized Disadvantaged Business Enterprise”, and “DBE” is revised to read “UDBE”.

1-04.AP1

Section 1-04, Scope of the Work

June 1, 2017

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

The following new paragraph is inserted before the second to last paragraph:

Whenever reference is made in these Specifications or the Special Provisions to codes, rules, specifications, and standards, the reference shall be construed to mean the code, rule, specification, or standard that is in effect on the Bid advertisement date, unless otherwise stated or as required by law.

1-04.3 Reference Information

This section is supplemented with the following new sentence:

If a document that is provided as reference information contains material also included as a part of the Contract, that portion of the document shall be considered a part of the Contract and not as Reference Information.

1-04.4(2)A General

Item number 4 in the third paragraph is revised to read:

4. Provide substitution for deleted or reduced Condition of Award Work, Apprentice Utilization and Training.
This section is supplemented with the following new section and subsections:

1-06.6 Recycled Materials

The Contractor shall make their best effort to utilize recycled materials in the construction of the project; the use of recycled concrete aggregate as specified in Section 1-06.6(1)A is a requirement of the Contract.

The Contractor shall submit a Recycled Material Utilization Plan as a Type 1 Working Drawing within 30 calendar days after the Contract is executed. The plan shall provide the Contractor’s anticipated usage of recycled materials for meeting the requirements of these Specifications. The quantity of recycled materials will be provided in tons and as a percentage of the Plan quantity for each material listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material. When a Contract does not include Work that requires the use of a material that is included in the requirements for using materials the Contractor may state in their plan that no recycled materials are proposed for use.

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.

1-06.6(1) Recycling of Aggregate and Concrete Materials

1-06.6(1)A General

The minimum quantity of recycled concrete aggregate shall be 25 percent of the total quantity of aggregate that is incorporated into the Contract for those items listed in Section 9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material that allow the use of recycled concrete aggregate. The percentage of recycled material incorporated into the project for meeting the required percentage will be calculated in tons based on the quantity of recycled concrete used on the entire Contract and not as individual items.

If the Contractor’s total cost for Work with recycled concrete aggregate is greater than without the Contractor may choose to not use recycled concrete aggregate. When the Contractor does not meet the minimum requirement of 25 percent recycled concrete aggregate for the Contract due to costs or any other reason the following shall be submitted:

1. A cost estimate for each material listed in Section 9-03.21(1)E that is utilized on the Contract. The cost estimate shall include the following:

   a. The estimated costs for the Work for each material with 25 percent recycled concrete aggregate. The cost estimate shall include for each
material a copy of the price quote from the supplier with the lowest total cost for the Work.

b. The estimated costs for the Work for each material without recycled concrete aggregate.

The Contractor’s cost estimates shall be submitted as an attachment to the Recycled Materials Reporting form.

1-07.AP1
Section 1-07, Legal Relations and Responsibilities to the Public
January 3, 2017

1-07.1 Laws to be Observed
In the second to last sentence of the third paragraph, “WSDOT” is revised to read “Contracting Agency”.

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax
The last three sentences of the first paragraph are deleted and replaced with the following new sentence:
The Contractor (Prime or Subcontractor) shall include sales or use tax on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project, in the unit bid prices.

1-07.3(1) Forest Fire Prevention
This section is supplemented with the following new subsections:

1-07.3(1)A Fire Prevention Control and Countermeasures Plan
The Contractor shall prepare and implement a project-specific fire prevention, control, and countermeasures plan (FPCC Plan) for the duration of the project. The Contractor shall submit a Type 2 Working Drawing no later than the date of the preconstruction conference.

1-07.3(1)A1 FPCC Plan Implementation Requirements
The Contractor’s FPCC Plan shall be fully implemented at all times. The Contractor shall update the FPCC Plan throughout project construction so that the plan reflects actual site conditions and practices. The Contractor shall update the FPCC Plan at least annually and maintain a copy of the updated FPCC Plan that is available for inspection on the project site. Revisions to the FPCC Plan and the Industrial Fire Precaution Level (IFPL) shall be discussed at the weekly project safety meetings.

1-07.3(1)A2 FPCC Plan Element Requirements
The FPCC Plan shall include the following:

1. The names, titles, and contact information for the personnel responsible for implementing and updating the plan.

2. The names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a fire.
3. All potential fire causing activities such as welding, cutting of metal, blasting, fueling operations, etc.

4. The location of fire extinguishers, water, shovels, and other firefighting equipment.

5. The response procedures the Contractor shall follow in the event of a fire.

Most of Washington State is covered under the IFPL system which, by law, is managed by the Department of Natural Resources (DNR). It is the Contractor’s responsibility to be familiar with the DNR requirements and to verify whether or not IFPL applies to the specific project.

If the Contractor wishes to continue a work activity that is prohibited under an industrial fire precaution level, the Contractor shall obtain a waiver from the DNR and provide a copy to the Engineer prior to continuation of work on the project.

If the IFPL requirements prohibit the Contractor from performing Work the Contractor may be eligible for an unworkable day in accordance with Section 1-08.5.

The Contractor shall comply with the requirements of these provisions at no additional cost to the Contracting Agency.

1-07.8 High-Visibility Apparel

The last paragraph is revised to read:

High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107 (2004 or later version) and shall be used in accordance with manufacturer recommendations.

1-07.8(1) Traffic Control Personnel

In this section, references to “ANSI/ISEA 107-2004” are revised to read “ANSI/ISEA 107”.

1-07.8(2) Non-Traffic Control Personnel

In this section, the reference to “ANSI/ISEA 107-2004” is revised to read “ANSI/ISEA 107”.

1-07.9(2) Posting Notices

Items 1 and 2 are revised to read:


Items 5, 6 and 7 are revised to read:

5. WHD 1420 (revised 02/13) – Employee Rights and Responsibilities Under The Family And Medical Leave Act published by US Department of Labor. Post on all projects.
6. WHD 1462 (revised 01/16) – **Employee Polygraph Protection Act** published by US Department of Labor. Post on all projects.


Items 9 and 10 are revised to read:


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

The second sentence of the first paragraph is deleted.

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

The SPCC Plan shall address all fuels, petroleum products, hazardous materials, and other materials defined in Chapter 447 of the WSDOT Environmental Manual M 31-11.

Item number four of the fourth paragraph (up until the colon) is revised to read:

4. **Potential Spill Sources** – Describe each of the following for all potentially hazardous materials brought or generated on-site, including but not limited to materials used for equipment operation, refueling, maintenance, or cleaning:

The first sentence of item 7e of the fourth paragraph is revised to read:

BMP methods and locations where they are used to prevent discharges to ground or water during mixing and transfer of hazardous materials and fuel.

The last paragraph is deleted.

**Section 1-08, Prosecution and Progress**

**June 1, 2017**

**1-08.1 Subcontracting**

The eighth and ninth paragraphs are revised to read:

On all projects, the Contractor shall certify to the actual amounts paid to all firms that were used as Subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the Contract. This includes all Disadvantaged, Minority, Small, Veteran or Women’s Business Enterprise firms. This Certification shall be submitted to the Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the Contract using the application available at: https://wsdot.diversitycompliance.com. A monthly report shall be submitted for every month between Execution of the Contract and Physical Completion regardless of whether payments were made or work occurred.
The Contractor shall comply with the requirements of RCW 39.04.250, 39.76.011, 39.76.020, and 39.76.040, in particular regarding prompt payment to Subcontractors. Whenever the Contractor withholds payment to a Subcontractor for any reason including disputed amounts, the Contractor shall provide notice within 10 calendar days to the Subcontractor with a copy to the Contracting Agency identifying the reason for the withholding and a clear description of what the Subcontractor must do to have the withholding released. Retainage withheld by the Contractor prior to completion of the Subcontractors work is exempt from reporting as a payment withheld and is not included in the withheld amount. The Contracting Agency’s copy of the notice to Subcontractor for deferred payments shall be submitted to the Engineer concurrently with notification to the Subcontractor.

1-08.1(1) Prompt Payment, Subcontract Completion and Return of Retainage Withheld

In item number 5 of the first paragraph, “WSDOT” is revised to read “Contracting Agency”.

The last sentence in item number 11 of the first paragraph is revised to read:

The Contractor may also require any documentation from the Subcontractor that is required by the subcontract or by the Contract between the Contractor and Contracting Agency or by law such as affidavits of wages paid, and material acceptance certifications to the extent that they relate to the Subcontractor’s Work.

Item number 12 of the first paragraph is revised to read:

12. If the Contractor fails to comply with the requirements of the Specification and the Subcontractor’s retainage or retainage bond is wrongfully withheld, the Contractor will be subject to the actions described in No. 7 listed above. The Subcontractor may also seek recovery against the Contractor under applicable prompt pay statutes in addition to any other remedies provided for by the subcontract or by law.

1-08.5 Time for Completion

In item 2c of the last paragraph, “Quarterly Reports” is revised to read “Monthly Reports”.

1-09.AP1

Section 1-09, Measurement and Payment

April 4, 2016

1-09.6 Force Account

The second sentence of item number 4 is revised to read:

A “specialized service” is a work operation that is not typically done by worker classifications as defined by the Washington State Department of Labor and Industries and by the Davis Bacon Act, and therefore bills by invoice for work in road, bridge and municipal construction.
Section 1-10, Temporary Traffic Control

January 3, 2017

1-10.1(2) Description
The first paragraph is revised to read:

The Contractor shall provide flaggers and all other personnel required for labor for traffic control activities that are not otherwise specified as being furnished by the Contracting Agency.

In the third paragraph, “Project Engineer” is revised to read “Engineer”.

The following new paragraph is inserted after the third paragraph:

The Contractor shall keep lanes, on-ramps, and off-ramps, open to traffic at all times except when Work requires closures. Ramps shall not be closed on consecutive interchanges at the same time, unless approved by the Engineer. Lanes and ramps shall be closed for the minimum time required to complete the Work. When paving hot mix asphalt the Contractor may apply water to the pavement to shorten the time required before reopening to traffic.

1-10.3(2)C Lane Closure Setup/Takedown
The following new paragraph is inserted before the last paragraph:

Channelization devices shall not be moved by traffic control personnel across an open lane of traffic. If an existing setup or staging of traffic control devices require crossing an open lane of traffic, the traffic control devices shall be taken down completely and then set up in the new configuration.

Section 2-03, Roadway Excavation and Embankment
August 1, 2016

2-03.3(7)C Contractor-Provided Disposal Site
The second paragraph is revised to read:

The Contractor shall acquire all permits and approvals required for the use of the disposal sites before any waste is hauled off the project. The Contractor shall submit a Type 1 Working Drawing consisting of copies of the permits and approvals for any disposal sites to be used. The cost of any such permits and approvals shall be included in the Bid prices for other Work.

The third paragraph is deleted.

Section 2-06, Subgrade Preparation
January 3, 2017

2-06.3(2) Subgrade for Pavement
The second sentence in the first paragraph is revised to read:
The Contractor shall compact the Subgrade to a depth of 6 inches to 95 percent of maximum density as determined by the compaction control tests for granular materials.

Section 3-04, Acceptance of Aggregate
January 3, 2017

3-04.5 Payment
In Table 1, the Contingent Unit Price Per Ton value for the item HMA Aggregate is revised to read “$15.00”.

Section 4-04, Ballast and Crush Surfacing
January 3, 2017

4-04.3(5) Shaping and Compaction
The first sentence is revised to read:

Immediately following spreading and final shaping, each layer of surfacing shall be compacted to at least 95 percent of maximum density determined by the requirements of Section 2-03.3(14)D before the next succeeding layer of surfacing or pavement is placed.

Section 5-01, Cement Concrete Pavement Rehabilitation
January 3, 2017

In this section, “portland cement” is revised to read “cement”.

5-01.2 Materials
In the first paragraph, the following item is inserted after the item “Joint Sealants”:

Closed Cell Foam Backer Rod 9-04.2(3)A

5-01.3(1)A Concrete Mix Designs
This section, including title, is revised to read:

5-01.3(1)A Mix Designs
The Contractor shall use either concrete patching materials or cement concrete for the rehabilitation of cement concrete pavement. Concrete patching materials shall be used for spall repair and dowel bar retrofitting and cement concrete shall be used for concrete panel replacement.

5-01.3(1)A1 Concrete Patching Materials
Item number 1 is revised to read:

1. Materials – The prepackaged concrete patching material and the aggregate extender shall conform to Section 9-20.
5-01.3(1)A2 Portland Cement Concrete
This section, including title, is revised to read:

5-01.3(1)A2 Cement Concrete for Panel Replacement
Cement concrete for panel replacement shall meet the requirements of Sections 5-05.3(1) and 5-05.3(2) and be air entrained with a design air content of 5.5 percent. Cement concrete for panel replacement may use rapid hardening hydraulic cement meeting the requirements of Section 9-01.2(2). Rapid hardening hydraulic cement will be considered a cementitious material for the purpose of calculating the water/cementitious materials ratio and the minimum cementitious materials requirement.

5-01.3(1)B Equipment
This section’s title is revised to read:

Equipment for Panel Replacement

5-01.3(2)B Portland Cement Concrete
This section’s title is revised to read:

Cement Concrete for Panel Replacement

This section is supplemented with the following new subsection:

5-01.3(2)B1 Conformance to Mix Design
Acceptance of cement concrete pavement for panel replacement shall be in accordance with Section 5-01.3(2)B. The cement, coarse, and fine aggregate weights shall be within the tolerances of the mix design in accordance with Section 5-05.3(1).

5-01.3(2)B1 Rejection of Concrete
This section is renumbered as follows:

5-01.3(2)B2 Rejection of Concrete

5-01.3(4) Replace Portland Cement Concrete Panel
This section’s title is revised to read:

Replace Cement Concrete Panel

5-01.3(8) Sealing Existing Transverse and Longitudinal Joints
This section’s title is revised to read:

Sealing Existing Longitudinal and Transverse Joint

The first paragraph is revised to read:

The Contractor shall clean and seal existing longitudinal and transverse joints where shown in the Plans or as marked by the Engineer.

The first sentence of the second paragraph is revised to read:
Old sealant and incompressible material shall be completely removed from the joint to the depth of the new reservoir with a diamond blade saw in accordance with the detail shown in the Standard Plans.

The fifth paragraph is revised to read:

Immediately prior to sealing, the cracks shall be blown clean with dry oil-free compressed air. If shown in the Plans, a backer rod shall be placed at the base of the sawn reservoir. The joints shall be completely dry before the sealing installation may begin. Immediately following the air blowing and backer rod placement, if required, the sealant material shall be installed in conformance to manufacturer’s recommendations and in accordance with Section 5-05.3(8)B.

5-01.3(9) Portland Cement Concrete Pavement Grinding

This section’s title is revised to read:

Cement Concrete Pavement Grinding

5-01.3(11) Concrete Slurry and Grinding Residue

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

Slurry shall not be allowed to drain into an area open to traffic, off of the paved surface, into any drainage structure, water of the state, or wetlands.

The following new sentence is inserted at the end of the second paragraph:

The Contractor shall submit copies of all disposal tickets to the Engineer within 5 calendar days.

5-01.4 Measurement

The fourth paragraph is revised to read:

Sealing existing longitudinal and transverse joint will be measured by the linear foot, measured along the line of the completed joint.

5-01.5 Payment

The Bid item “Sealing Transverse and Longitudinal Joints”, per linear foot and the paragraph following Bid item are revised to read:

“Sealing Existing Longitudinal and Transverse Joint”, per linear foot.

The unit Contract price per linear foot for “Sealing Existing Longitudinal and Transverse Joint”, shall be full payment for all costs to complete the Work as specified, including removing incompressible material, preparing and sealing existing transverse and longitudinal joints where existing transverse and longitudinal joints are cleaned and for all incidentals required to complete the Work as specified.
5-02.AP5
Section 5-02, Bituminous Surface Treatment
April 4, 2016

5-02.3(2) Preparation of Roadway Surface
This section is supplemented with the following new subsection:

5-02.3(2)E Crack Sealing
Where shown in the Plans, seal cracks and joints in the pavement in accordance with
Section 5-04.3(4)A1 and the following:

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.

5-04.AP5
Section 5-04, Hot Mix Asphalt
April 3, 2017

This section (and all subsections) is revised to read:

This Section 5-04 is written in a style which, unless otherwise indicated, shall be interpreted as direction to the Contractor.

5-04.1 Description
This Work consists 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.

HMA shall be composed of asphalt binder and mineral materials as required, and may include reclaimed asphalt pavement (RAP) or reclaimed asphalt shingles (RAS), mixed in the proportions specified to provide a homogeneous, stable, and workable mix.

5-04.2 Materials
Provide materials as specified in these sections:

Asphalt Binder 9-02.1(4)
Cationic Emulsified Asphalt 9-02.1(6)
Anti-Stripping Additive 9-02.4
Warm Mix Asphalt Additive 9-02.5
Aggregates 9-03.8
Reclaimed Asphalt Pavement (RAP) 9-03.8(3)B
Reclaimed Asphalt Shingles (RAS) 9-03.8(3)B
Mineral Filler 9-03.8(5)
Recycled Material 9-03.21
Joint Sealants 9-04.2
Closed Cell Foam Backer Rod 9-04.2(3)A

5-04.2(1) How to Get an HMA Mix Design on the QPL
Comply with each of the following:
• Develop the mix design in accordance with WSDOT SOP 732.
• Develop a mix design that complies with Sections 9-03.8(2) and 9-03.8(6).
• Develop a mix design no more than 6 months prior to submitting it for QPL evaluation.
• Submit mix designs to the WSDOT State Materials Laboratory in Tumwater, including WSDOT Form 350-042.
• Include representative samples of the materials that are to be used in the HMA production as part of the mix design submittal.
• Identify the brand, type, and percentage of anti-stripping additive in the mix design submittal.
• Include with the mix design submittal a certification from the asphalt binder supplier that the anti-stripping additive is compatible with the crude source and the formulation of asphalt binder proposed for use in the mix design.
• Do not include warm mix asphalt (WMA) additives when developing a mix design or submitting a mix design for QPL evaluation. The use of warm mix asphalt (WMA) 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.

The Contracting Agency’s basis for approving, testing, and evaluating HMA mix designs for approval on the QPL is dependent on the contractual basis for acceptance of the HMA mixture, as shown in Table 1.

<table>
<thead>
<tr>
<th>Contractual Basis for Acceptance of HMA Mixture (see Section 5-04.3(9))</th>
<th>Basis for Contracting Agency Approval of Mix Design for Placement on QPL</th>
<th>Contracting Agency Materials Testing for Evaluation of the Mix Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical Evaluation</td>
<td>WSDOT Standard Practice QC-8</td>
<td>The Contracting Agency will test the mix design materials for compliance with Sections 9-03.8(2) and 9-03.8(6).</td>
</tr>
<tr>
<td>Visual Evaluation</td>
<td>Review of Form 350-042 for compliance with Sections 9-03.8(2) and 9-03.8(6)</td>
<td>The Contracting Agency may elect to test the mix design materials, or evaluate in accordance with WSDOT Standard Practice QC-8, at its sole discretion.</td>
</tr>
</tbody>
</table>
If the Contracting Agency approves the mix design, it will be listed on the QPL for 12 consecutive months. The Contracting Agency may extend the 12 month listing provided the Contractor submits a certification letter to the Qualified Products Engineer verifying that the aggregate source and job mix formula (JMF) gradation, and asphalt binder crude source and formulation have not changed. The Contractor may submit the certification no sooner than three months prior to expiration of the initial 12 month mix design approval. Within 7 calendar days of receipt of the Contractor’s certification, the Contracting Agency will update the QPL. The maximum duration for approval of a mix design and listing on the QPL will be 24 months from the date of initial approval or as approved by the Engineer.

5-04.2(1)A Mix Designs Containing RAP and/or RAS

Mix designs are classified by the RAP and/or RAS content as shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mix Design Classification Based on RAP/RAS Content</strong></td>
</tr>
<tr>
<td><strong>RAP/RAS Classification</strong></td>
</tr>
<tr>
<td>Low RAP/No RAS</td>
</tr>
<tr>
<td>High RAP/Any RAS</td>
</tr>
</tbody>
</table>

<sup>1</sup>Percentages in this table are by total weight of HMA

<sup>2</sup>See Table 4 to determine the limits on the maximum amount RAP and/or RAS.

5-04.2(1)A1 Low RAP/No RAS – Mix Design Submittals for Placement on QPL

For Low RAP/No RAS mix designs, comply with the following additional requirements:

1. Develop the mix design with or without the inclusion of RAP.
2. The asphalt binder grade shall be the grade indicated in the Bid item name or as otherwise required by the Contract.
3. Submit samples of RAP if used in development of the mix design.
4. Testing RAP or RAS stockpiles is not required for obtaining approval for placing these mix designs on the QPL.

5-04.2(1)A2 High RAP/Any RAS - Mix Design Submittals for Placement on QPL

For High RAP/Any RAS mix designs, comply with the following additional requirements:
1. For mix designs with any RAS, test the RAS stockpile (and RAP stockpile if any RAP is in the mix design) in accordance with Table 3.

2. For High RAP mix designs with no RAS, test the RAP stockpile in accordance with Table 3.

3. For mix designs with High RAP/Any RAS, construct a single stockpile for RAP and a single stockpile for RAS and isolate (sequester) these stockpiles from further stockpiling before beginning development of the mix design. Test the RAP and RAS during stockpile construction as required by item 1 and 2 above. Use the test data in developing the mix design, and report the test data to the Contracting Agency on WSDOT Form 350-042 as part of the mix design submittal for approval on the QPL. Account for the reduction in asphalt binder contributed from RAS in accordance with AASHTO PP 78. Do not add to these stockpiles after starting the mix design process.

### Table 3

<table>
<thead>
<tr>
<th>Test Frequency</th>
<th>Test for</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1/1000 tons of RAP (minimum of 10 per mix design) and • 1/100 tons of RAS (minimum of 10 per mix design)</td>
<td>Asphalt Binder Content and Sieve Analysis of Fine and Coarse Aggregate</td>
<td>FOP for AASHTO T 308 and FOP for WAQTC T 27/T 11</td>
</tr>
</tbody>
</table>

1“tons”, in this table, refers to tons of the reclaimed material before being incorporated into HMA.

4. Limit the amount of RAP and/or RAS used in a High RAP/Any RAS mix design by the amount of binder contributed by the RAP and/or RAS, in accordance with Table 4.

### Table 4

<table>
<thead>
<tr>
<th>Maximum Amount of RAP and/or RAS in HMA Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Amount of Binder Contributed from:</td>
</tr>
<tr>
<td>RAP</td>
</tr>
<tr>
<td>RAS</td>
</tr>
<tr>
<td>40%(^1) minus contribution of binder from RAS</td>
</tr>
</tbody>
</table>

1 Calculated as the weight of asphalt binder contributed from the RAP as a percentage of the total weight of asphalt binder in the mixture.

2 Calculated as the weight of asphalt binder contributed from the RAS as a percentage of the total weight of asphalt binder in the mixture.
5. Develop the mix design including RAP, RAS, recycling agent, and new binder.

6. Extract, recover, and test the asphalt residue from the RAP and RAS stockpiles to determine the percent of recycling agent and/or grade of new asphalt binder needed to meet but not exceed the performance grade (PG) of asphalt binder required by the Contract.

   a. Perform the asphalt extraction in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade solvent.

   b. Perform the asphalt recovery in accordance with AASHTO R 59 or ASTM D 1856.

   c. Test the recovered asphalt residue in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4).

   d. After determining the recovered asphalt binder grade, determine the percent of recycling agent and/or grade of new asphalt binder in accordance with ASTM D 4887.

   e. Test the final blend of recycling agent, binder recovered from the RAP and RAS, and new asphalt binder in accordance with AASHTO R 29. The final blended binder shall meet but not exceed the performance grade of asphalt binder required by the Contract and comply with the requirements of Section 9-02.1(4).

7. Include the following test data with the mix design submittal:

   a. All test data from RAP and RAS stockpile construction.

   b. All data from testing the recovered and blended asphalt binder.

8. Include representative samples of the following with the mix design submittal:

   a. RAP and RAS.

   b. 150 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production.

5-04.2(1)B Commercial HMA - Mix Design Submittal for Placement on QPL
For HMA used in the Bid item Commercial HMA, in addition to the requirements of 5-04.2(1) identify the following in the submittal:

1. Commercial HMA
2. Class of HMA
3. Performance grade of binder
4. Equivalent Single Axle Load (ESAL)

The Contracting Agency may elect to approve Commercial HMA mix designs without evaluation.

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

Develop a new mix design and resubmit for approval on the QPL when any of the following changes occur. When these occur, discontinue using the mix design until after it is reapproved on the QPL.

1. Change in the source of crude petroleum used in the asphalt binder.
2. Changes in the asphalt binder refining process.
3. Changes in additives or modifiers in the asphalt binder.
4. Changes in the anti-strip additive, brand, type or quantity.
5. Changes to the source of material for aggregate.
6. Changes to the job mix formula that exceed the amounts as described in item 2 of Section 9-03.8(7), unless otherwise approved by the Engineer.
7. Changes in the percentage of material from a stockpile, when such changes exceed 5% of the total aggregate weight.
   a. For Low RAP/No RAS mix designs developed without RAP, changes to the percentage of material from a stockpile will be calculated based on the total aggregate weight not including the weight of RAP.
   b. For Low RAP/No RAS mix designs developed with RAP, changes to the percentage of material from a stockpile will be calculated based on the total aggregate weight including the weight of RAP.
   c. For High RAP/Any RAS mix designs, changes in the percentage of material from a stockpile will be based on total aggregate weight including the weight of RAP (and/or RAS when included in the mixture).

Prior to making any change in the amount of RAS in an approved mix design, notify the Engineer for determination of whether a new mix design is required, and obtain the Engineer’s approval prior to implementing such changes.
5-04.2(2) Mix Design – Obtaining Project Approval

Use only mix designs listed on the Qualified Products List (QPL). Submit WSDOT Form 350-041 to the Engineer to request approval to use a mix design from the QPL. Changes to the job mix formula (JMF) that have been approved on other contracts may be included. The Engineer may reject a request to use a mix design if production of HMA using that mix design on any contract is not in compliance with Section 5-04.3(11)D, E, F, and G for mixture or compaction.

5-04.2(2)A Changes to the Job Mix Formula

The approved mix design obtained from the QPL will be considered the starting job mix formula (JMF) and shall be used as the initial basis for acceptance of HMA mixture, as detailed in Section 5-04.3(9).

During production the Contractor may request to adjust the JMF. Any adjustments to the JMF will require approval of the Engineer and shall be made in accordance with item 2 of Section 9-03.8(7). After approval by the Engineer, such adjusted JMF’s shall constitute the basis for acceptance of the HMA mixture.

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

The Contractor may, at the Contractor’s discretion, elect to use warm mix asphalt (WMA) processes for producing HMA. WMA processes include organic additives, chemical additives, and foaming. The use of WMA is subject to the following:

- Do not use WMA processes in the production of High RAP/Any RAS mixtures.
- Before using WMA processes, obtain the Engineer’s approval using WSDOT Form 350-076 to describe the proposed WMA 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 in Table 5, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

<table>
<thead>
<tr>
<th>Compacted Thickness (Feet)</th>
<th>Wearing Course</th>
<th>Other Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.10</td>
<td>55°F</td>
<td>45°F</td>
</tr>
<tr>
<td>0.10 to 0.20</td>
<td>45°F</td>
<td>35°F</td>
</tr>
<tr>
<td>More than 0.20</td>
<td>35°F</td>
<td>35°F</td>
</tr>
</tbody>
</table>

5-04.3(2) Paving Under Traffic

These requirements apply when the Roadway being paved is open to traffic.

AMENDMENTS TO THE 2016 STANDARD SPECIFICATIONS BOOK
Revised: 6/1/17
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.

During paving operations, maintain temporary pavement markings throughout the project. Install temporary pavement markings on the Roadway prior to opening to traffic. Temporary pavement markings shall comply with Section 8-23.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Equip mixing plants as follows.

1. Use tanks for storage and preparation of asphalt binder which:
   - Heat the contents by means that do not allow flame to contact the contents or the tank, such as by steam or electricity.
   - Heat and hold contents at the required temperatures.
   - Continuously circulate contents to provide uniform temperature and consistency during the operating period.
   - Provide an asphalt binder sampling valve, in either the storage tank or the supply line to the mixer.

2. Provide thermometric equipment:
   - In the asphalt binder feed line near the charging valve at the mixer unit, capable of detecting temperature ranges expected in the HMA and in a location convenient and safe for access by Inspectors.
   - At the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates, and situated in full view of the plant operator.

3. When heating asphalt binder:
   - Do not exceed the maximum temperature of the asphalt binder recommended by the asphalt binder supplier.
   - Avoid local variations in heating.
   - Provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F.

4. Provide a mechanical sampler for sampling mineral materials that:
   - Meets the crushing or screening requirements of Section 1-05.6.
5. **Provide HMA sampling equipment that complies with WSDOT T168.**

- Use a mechanical sampling device installed between the discharge of the silo and the truck transport, approved by the Engineer, or
- Platforms or devices to enable sampling from the truck transport without entering the truck transport for sampling HMA.

6. **Provide for setup and operation of the Contracting Agency’s field testing:**

- As required in Section 3-01.2(2).

7. **Provide screens or a lump breaker:**

- When using any RAP or any RAS, to eliminate oversize RAP or RAS particles from entering the pug mill or drum mixer.

**5-04.3(3)B Hauling Equipment**

Provide HMA hauling equipment with tight, clean, smooth metal beds and a cover of canvas or other suitable material of sufficient size to protect the HMA from adverse weather. Securely attach the cover to protect the HMA whenever the weather conditions during the work shift include, or are forecast to include, precipitation or an air temperature less than 45°F.

Prevent HMA from adhering to the hauling equipment. Spray metal beds with an environmentally benign release agent. Drain excess release agent prior to filling hauling equipment with HMA. Do not use petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA. For hopper trucks, operate the conveyer during the process of applying the release agent.

**5-04.3(3)C Pavers**

Use self-contained, power-propelled pavers provided with an internally heated vibratory screed that is capable of spreading and finishing courses of HMA in lane widths required by the paving section shown in the Plans.

When requested by the Engineer, provide written certification that the paver is equipped with the most current equipment available from the manufacturer for the prevention of segregation of the coarse aggregate particles. The certification shall list the make, model, and year of the paver and any equipment that has been retrofitted to the paver.

Operate the screed in accordance with the manufacturer’s recommendations and in a manner to produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. Provide a copy of the manufacturer’s recommendations upon request by the Contracting Agency. Extensions to the screed will be allowed provided they produce the same results, including ride, density, and surface texture as
obtained by the primary screed. In the Travelled Way do not use extensions without both augers and an internally heated vibratory screed.

Equip the paver with automatic screed controls and sensors for either or both sides of the paver. The controls shall be capable of sensing grade from an outside reference line, sensing the transverse slope of the screed, and providing automatic signals that operate the screed to maintain the desired grade and transverse slope. Construct the sensor so it will operate from a reference line or a mat referencing device. The transverse slope controller shall be capable of maintaining the screed at the desired slope within plus or minus 0.1 percent.

Equip the paver with automatic feeder controls, properly adjusted to maintain a uniform depth of material ahead of the screed.

Manual operation of the screed is permitted in the construction of irregularly shaped and minor areas. These areas include, but are not limited to, gore areas, road approaches, tapers and left-turn channelizations.

When specified in the Contract, provide reference lines for vertical control. Place reference lines on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line is permitted. Automatically control the grade and slope of intermediate lanes by means of reference lines or 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, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

Furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6.

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

Use a material transfer device (MTD) or material transfer vehicle (MTV) to deliver the HMA from the hauling equipment to the paving machine for any lift in (or partially in) the top 0.30 feet of the pavement section used in traffic lanes. However, an MTD/V is not required for HMA placed in irregularly shaped and minor areas such as tapers and turn lanes, or for HMA mixture that is accepted by Visual Evaluation. At the Contractor’s request the Engineer may approve paving without an MTD/V; the Engineer will determine if an equitable adjustment in cost or time is due. If a windrow elevator is used, the Engineer may limit the length of the windrow in urban areas or through intersections.
To be approved for use, an MTV:

1. Shall be a self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be connected to the hauling vehicle or paver.
3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTD:

1. Shall be positively connected to the paver.
2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers
Operate rollers in accordance with the manufacturer’s recommendations. When requested by the Engineer, provide a Type 1 Working Drawing of the manufacturer’s recommendation for the use of any roller planned for use on the project. Do not use rollers that crush aggregate, produce pickup or washboard, unevenly compact the surface, displace the mix, or produce other undesirable results.

5-04.3(4) Preparation of Existing Paved Surfaces
Before constructing HMA on an existing paved surface, the entire surface of the pavement shall be clean. Entirely remove all fatty asphalt patches, grease drippings, and other deleterious substances from the existing pavement to the satisfaction of the Engineer. Thoroughly clean all pavements or bituminous surfaces of dust, soil, pavement grindings, and other foreign matter. Thoroughly remove any cleaning or solvent type liquids used to clean equipment spilled on the pavement before paving proceeds. Fill all holes and small depressions with an appropriate class of HMA. Level and thoroughly compact the surface of the patched area.

Apply a uniform coat of asphalt (tack coat) to all paved surfaces on which any course of HMA is to be placed or abutted. Apply tack coat to cover the cleaned existing pavement with a thin film of residual asphalt free of streaks and bare spots.
Apply a heavy application of tack coat to all joints. For Roadways open to traffic, limit the application of tack coat to surfaces that will be paved during the same working shift. Equip the spreading equipment with a thermometer to indicate the temperature of the tack coat material.

Do not operate equipment on tacked surfaces until the tack has broken and cured. Repair tack coat damaged by the Contractor’s operation, prior to placement of the HMA.

Unless otherwise approved by the Engineer, use cationic emulsified asphalt CSS-1, CSS-1h, STE-1, or Performance Graded (PG) asphalt for tack coat. The CSS-1 and CSS-1h may be diluted with water at a rate not to exceed one part water to one part emulsified asphalt. Do not allow the tack coat material to exceed the maximum temperature recommended by the asphalt supplier.

When shown in the Plans, prelevel uneven or broken surfaces over which HMA is to be placed by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

**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 crack. 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.

**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. 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.

5-04.3(4)B Soil Residual Herbicide
Where shown in the Plans, apply one application of an approved soil residual
herbicide. Comply with Section 8-02.3(3)B. Complete paving within 48 hours of
applying the herbicide.

Use herbicide registered with the Washington State Department of Agriculture
for use under pavement. Before use, obtain the Engineer’s approval of the
herbicide and the proposed rate of application. Include the following
information in the request for approval of the material:

1. Brand Name of the Material,
2. Manufacturer,
3. Environmental Protection Agency (EPA) Registration Number,
4. Material Safety Data Sheet, and
5. Proposed Rate of Application.

5-04.3(4)C Pavement Repair
Excavate pavement repair areas and backfill these with HMA in accordance
with the details shown in the Plans and as staked. Conduct the excavation
operations in a manner that will protect the pavement that is to remain. Repair
pavement not designated to be removed that is damaged as a result of the
Contractor’s operations to the satisfaction of the Engineer at no cost to the
Contracting Agency. Excavate only within one lane at a time unless approved
otherwise by the Engineer. Do not excavate more area than can be completely
backfilled and compacted during the same shift.

Unless otherwise shown in the Plans or determined by the Engineer, excavate
to a depth of 1.0 feet. The Engineer will make the final determination of the
excavation depth required.

The minimum width of any pavement repair area shall be 40 inches unless
shown otherwise in the Plans. Before any excavation, sawcut the perimeter of
the pavement area to be removed unless the pavement in the pavement repair
area is to be removed by a pavement grinder.
Excavated materials shall be the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Apply a heavy application of tack coat to all surfaces of existing pavement in the pavement repair area, in accordance with Section 5-04.3(4).

Place the HMA backfill in lifts not to exceed 0.35-foot compacted depth. Thoroughly compact each lift by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates, RAP, & RAS
Produce aggregate in compliance with Section 3-01. Comply with Section 3-02 for preparing stockpile sites, stockpiling, and removing from stockpile each of the following: aggregates, RAP, and RAS. Provide sufficient storage space for each size of aggregate, RAP and RAS. Fine aggregate or RAP may be uniformly blended with the RAS as a method of preventing the agglomeration of RAS particles. Remove the aggregates, RAP and RAS from stockpile(s) in a manner that ensures minimal segregation when being moved to the HMA plant for processing into the final mixture. Keep different aggregate sizes separated until they have been delivered to the HMA plant.

5-04.3(5)A Stockpiling RAP or RAS for High RAP/Any RAS Mixes
Do not place any RAP or RAS into a stockpile which has been sequestered for a High RAP/Any RAS mix design. Do not incorporate any RAP or RAS into a High RAP/Any RAS mixture from any source other than the stockpile which was sequestered for approval of that particular High RAP/Any RAS mix design.

RAP that is used in a Low RAP/No RAS mix is not required to come from a sequestered stockpile.

5-04.3(6) Mixing
The asphalt supplier shall introduce 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.

Anti-strip is not required for temporary work that will be removed prior to Physical Completion.

Use asphalt binder of the grade, and from the supplier, in the approved mix design.

Prior to introducing reclaimed materials into the asphalt plant, remove wire, nails, and other foreign material. Discontinue use of the reclaimed material if the Engineer, in their sole discretion, determines the wire, nails, or other foreign material to be excessive.

Size RAP and RAS prior to entering the mixer to provide uniform and thoroughly mixed HMA. If there is evidence of the RAP or RAS not breaking down during the heating and mixing of the HMA, immediately suspend the use of the RAP or RAS until changes have been approved by the Engineer.
After the required amount of mineral materials, RAP, RAS, new asphalt binder and recycling agent have been introduced into the mixer, mix the HMA until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, RAP and RAS is ensured.

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

During the daily operation, HMA may be temporarily held in approved storage facilities. Do not incorporate HMA into the Work that has been held for more than 24 hours after mixing. Provide an easily readable, low bin-level indicator on the storage facility that indicates the amount of material in storage. Waste the HMA in storage when the top level of HMA drops 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. Dispose of rejected or waste HMA at no expense to the Contracting Agency.

5-04.3(7) Spreading and Finishing
Do not exceed the maximum nominal compacted depth of any layer in any course, as shown in Table 6, unless approved by the Engineer:

<table>
<thead>
<tr>
<th>HMA Class</th>
<th>Wearing Course</th>
<th>Other than Wearing Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 inch</td>
<td>0.35 feet</td>
<td>0.35 feet</td>
</tr>
<tr>
<td>¾ and ½ inch</td>
<td>0.30 feet</td>
<td>0.35 feet</td>
</tr>
<tr>
<td>⅜ inch</td>
<td>0.15 feet</td>
<td>0.15 feet</td>
</tr>
</tbody>
</table>

Use HMA pavers complying with Section 5-04.3(3) to distribute the mix. 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, place the material produced for each JMF with separate spreading and compacting equipment. Do not intermingle HMA produced from more than one JMF. 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

Sample aggregate for meeting the requirements of Section 3-04 prior to being incorporated into HMA. (The acceptance data generated for the Section 3-04 acceptance analysis will not be commingled with the acceptance data generated for the Section 5-04.3(9) acceptance analysis.) Aggregate acceptance samples shall be taken as described in Section 3-04. Aggregate acceptance testing will be performed by the Contracting Agency. Aggregate contributed from RAP and/or RAS will not be evaluated under Section 3-04.

For aggregate that will be used in HMA mixture which will be accepted by Statistical Evaluation, the Contracting Agency’s acceptance of the aggregate will be based on:

1. Samples taken prior to mixing with asphalt binder, RAP, or RAS;
2. Testing for the materials properties of fracture, uncompacted void content, and sand equivalent;
3. Evaluation by the Contracting Agency in accordance with Section 3-04, including price adjustments as described therein.

For aggregate that will be used in HMA which will be accepted by Visual Evaluation, evaluation in accordance with items 1, 2, and 3 above is at the discretion of the Engineer.

5-04.3(9) HMA Mixture Acceptance

The Contracting Agency will evaluate HMA mixture for acceptance by one of two methods as determined from the criteria in Table 7.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial HMA placed at any location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any HMA placed in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• sidewalks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• road approaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ditches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• slopes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• paths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• trails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• gores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• prelevel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• temporary pavement¹</td>
<td></td>
<td>All HMA mixture other than that accepted by Visual Evaluation</td>
</tr>
<tr>
<td>○ pavement repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other nonstructural applications of HMA as approved by the Engineer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Temporary pavement is HMA that will be removed before
Physical Completion of the Contract.

5-04.3(9)A Test Sections
This Section applies to HMA mixture accepted by Statistical Evaluation. A test section is not allowed for HMA accepted by Visual Evaluation.

The purpose of a test section is to determine whether or not the Contractor’s mix design and production processes will produce HMA meeting the Contract requirements related to mixture. Construct HMA mixture test sections at the beginning of paving, using at least 600 tons and a maximum of 1,000 tons or as specified by the Engineer. Each test section shall be constructed in one continuous operation.

5-04.3(9)A1 Test Section – When Required, When to Stop
Use Tables 8 and 9 to determine when a test section is required, optional, or not allowed, and to determine when performing test sections may end. Each mix design will be evaluated independently for the test section requirements. If more than one test section is required, each test section shall be evaluated separately by the criteria in table 8 and 9.

Table 8
Criteria for Conducting and Evaluating HMA Mixture Test Sections
(For HMA Mixture Accepted by Statistical Evaluation)

<table>
<thead>
<tr>
<th>High RAP/Any RAS</th>
<th>Low RAP/No RAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is Mixture Test Section Optional or Mandatory?</td>
<td>Mandatory¹</td>
</tr>
<tr>
<td>Waiting period after paving the test section.</td>
<td>4 calendar days²</td>
</tr>
<tr>
<td>What Must Happen to Stop Performing Test Sections?</td>
<td>Meet “Results Required to Stop Performing Test Sections” in Table 9 for High RAP/Any RAS.</td>
</tr>
</tbody>
</table>

¹If a mix design has produced an acceptable test section on a previous contract (paved in the same calendar year, from the same plant, using the same JMF) the test section may be waived if approved by the Engineer.

²This is to provide time needed by the Contracting Agency to complete testing and the Contractor to adjust the mixture in response to those test results. Paving may resume when this is done.

Table 9
### Results Required to Stop Performing HMA Mixture Test Sections

(For HMA Mixture Accepted by Statistical Evaluation)

<table>
<thead>
<tr>
<th>Test Property</th>
<th>Type of HMA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High RAP/Any RAS</td>
<td>Low RAP/No RAS</td>
</tr>
<tr>
<td></td>
<td>Minimum PF$_i$ of 0.95 based on the criteria in Section 5-04.3(9)B4</td>
<td>None$^4$</td>
</tr>
<tr>
<td>Gradation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt Binder</td>
<td>Minimum PF$_i$ of 0.95 based on the criteria in Section 5-04.3(9)B4</td>
<td>None$^4$</td>
</tr>
<tr>
<td>$V_a$</td>
<td>Minimum PF$_i$ of 0.95 based on the criteria in Section 5-04.3(9)B4</td>
<td>None$^4$</td>
</tr>
<tr>
<td>Hamburg Wheel Track Indirect Tensile Strength</td>
<td>Meet requirements of Section 9-03.8(2).$^3$</td>
<td>These tests will not be done as part of Test Section.</td>
</tr>
<tr>
<td>Aggregates Sand Equivalent Uncompacted Void Content Fracture</td>
<td>Nonstatistical Evaluation in accordance with the requirements of Section 3-04$^3$</td>
<td>None$^3$</td>
</tr>
</tbody>
</table>

1. In addition to the requirements of this table, acceptance of the HMA mixture used in each test section is subject to the acceptance criteria and price adjustments for Statistical Evaluation (see Table 9a).
2. Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for the property in the first column.
3. Take one sample for each test section lot. Test the sample for the properties in the first column.
4. Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for the property in the first column. There are no criteria for discontinuing test sections for these mixes; however, the contractor must comply with Section 5-04.3(11)F before resuming paving.

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

The Engineer will evaluate the HMA mixture in each test section for rejection, acceptance, and price adjustments based on the criteria in Table 9a using the data generated from the testing required by Table 9. Each test section shall be considered a separate lot.

Table 9a
Acceptance Criteria for HMA Mixture Placed in a Test Section
(For HMA Mixture Accepted by Statistical Evaluation)

<table>
<thead>
<tr>
<th>Test Property</th>
<th>Type of HMA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High RAP/Any RAS</td>
</tr>
<tr>
<td></td>
<td>Low RAP/No RAS</td>
</tr>
<tr>
<td>Gradation</td>
<td>Statistical Evaluation</td>
</tr>
<tr>
<td>Asphalt Binder $V_a$</td>
<td>Statistical Evaluation</td>
</tr>
<tr>
<td>Hamburg Wheel Track Indirect Tensile</td>
<td>Pass/Fail for the requirements</td>
</tr>
<tr>
<td>Strength</td>
<td>of Section 9-03.8(2)(^1)</td>
</tr>
<tr>
<td>HMA Aggregate</td>
<td>Nonstatistical Evaluation in</td>
</tr>
<tr>
<td>Sand Equivalent</td>
<td>accordance with the requirements of Section 3-04</td>
</tr>
<tr>
<td>Uncompacted Void Content</td>
<td>Nonstatistical Evaluation in</td>
</tr>
<tr>
<td></td>
<td>accordance with the requirements of Section 3-04</td>
</tr>
</tbody>
</table>

\(^1\)Failure to meet the specifications for Hamburg and/or IDT will cause the mixture in the test section to be rejected. Refer to Section 5-04.3(11).

5-04.3(9)B Mixture Acceptance – Statistical Evaluation

5-04.3(9)B1 Mixture Statistical Evaluation – Lots and Sublots

HMA mixture which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing that HMA tonnage into mixture lots, and each mixture lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each mixture lot into mixture sublots. All mixture in a mixture lot shall be of the same mix design. The mixture sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each mixture lot comprises a maximum of 15 mixture sublots, except:

- The final mixture lot of each mix design on the Contract will comprise a maximum of 25 sublots.
- A mixture lot for a test section will consist of three sublots.

Each mixture sublot shall be approximately uniform in size with the maximum mixture sublot size as specified in Table 10. The quantity of material represented by the final mixture sublot of the project, for each mix design on the project, may be increased to a maximum of two times the mixture sublot quantity calculated.

| Table 10
| Maximum HMA Mixture Sublot Size For HMA Accepted by Statistical Evaluation
<table>
<thead>
<tr>
<th>HMA Original Plan Quantity (tons)(^1)</th>
<th>Maximum Sublot Size (tons)(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20,000</td>
<td>1,000</td>
</tr>
<tr>
<td>20,000 to 30,000</td>
<td>1,500</td>
</tr>
<tr>
<td>&gt;30,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

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Revised: 6/1/17
“Plan quantity” means the plan quantity of all HMA of the same class and binder grade which is accepted by Statistical Evaluation.

The maximum sublot size for each combination of HMA class and binder grade shall be calculated separately.

- For a mixture lot in progress with a mixture CPF less than 0.75, a new mixture 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.

- If, before completing a mixture lot, the Contractor requests a change to the JMF which is approved by the Engineer, the mixture produced in that lot after the approved change will be evaluated on the basis of the changed JMF, and the mixture produced in that lot before the approved change will be evaluated on the basis of the unchanged JMF; however, the mixture before and after the change will be evaluated in the same lot. Acceptance of subsequent mixture lots will be evaluated on the basis of the changed JMF.

5-04.3(9)B2 Mixture Statistical Evaluation – Sampling
Comply with Section 1-06.2(1).

Samples of HMA mixture which is accepted by Statistical Evaluation will be randomly selected from within each sublot, with one sample per sublot. The Engineer will determine the random sample location using WSDOT Test Method T 716. The Contractor shall obtain the sample when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with FOP for WAQTC T 168.

5-04.3(9)B3 Mixture Statistical Evaluation – Acceptance Testing
Comply with Section 1-06.2(1).

The Contracting Agency will test the mixture sample from each sublot (including sublots in a test section) for the properties shown in Table 11.

Table 11

<table>
<thead>
<tr>
<th>Test</th>
<th>Procedure</th>
<th>Performed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_a$</td>
<td>WSDOT SOP 731</td>
<td>Engineer</td>
</tr>
<tr>
<td>Asphalt Binder Content</td>
<td>FOP for AASHTO T 308</td>
<td>Engineer</td>
</tr>
<tr>
<td>Gradation: Percent Passing</td>
<td>FOP for WAQTC T 27/T 11</td>
<td>Engineer</td>
</tr>
<tr>
<td>$1\frac{1}{2}$&quot;, $1&quot;$, $\frac{3}{4}$&quot;, $\frac{1}{2}$&quot;, $\frac{3}{8}$&quot;, No. 4, No. 8, No. 200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The mixture samples and tests taken for the purpose of determining acceptance of the test section (as described in Section 5-04.3(9A)) shall also be used as the test results for acceptance of the mixture described in 5-04.3(9)B3, 5-04.3(9)B4, 5-04.3(9)B5, and 5-04.3(9)B6.

5-04.3(9)B4 Mixture Statistical Evaluation – Pay Factors
Comply with Section 1-06.2(2).

The Contracting Agency will determine a pay factor (PFi) for each of the properties in Table 11, for each mixture lot, using the quality level analysis in Section 1-06.2(2)D. For Gradation, a pay factor will be calculated for each of the sieve sizes listed in Table 11 which is equal to or smaller than the maximum allowable aggregate size (100 percent passing sieve) of the HMA mixture. The USL and LSL shall be calculated using the Job Mix Formula Tolerances (for Statistical Evaluation) in Section 9-03.8(7).

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)B5 Mixture Statistical Evaluation – Composite Pay Factors (CPF)
Comply with Section 1-06.2(2).

In accordance with Section 1-06.2(2)D4, the Contracting Agency will determine a Composite Pay Factor (CPF) for each mixture lot from the pay factors calculated in Section 5-04.3(9)B4, using the price adjustment factors in Table 12. Unless otherwise specified, the maximum CPF for HMA mixture shall be 1.05.

<table>
<thead>
<tr>
<th>Table 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA Mixture Price Adjustment Factors</td>
</tr>
<tr>
<td>Constituent</td>
</tr>
<tr>
<td>All aggregate passing: 1½”, 1”, ¾”, ½”, ⅜” and No.4 sieves</td>
</tr>
<tr>
<td>All aggregate passing No. 8 sieve</td>
</tr>
<tr>
<td>All aggregate passing No. 200 sieve</td>
</tr>
<tr>
<td>Asphalt binder</td>
</tr>
<tr>
<td>Air Voids (Vₐ)</td>
</tr>
</tbody>
</table>

5-04.3(9)B6 Mixture Statistical Evaluation – Price Adjustments
For each HMA mixture lot, a Job Mix Compliance Price Adjustment will be determined and applied, as follows:

\[ JMCPA = [0.60 \times (CPF - 1.00)] \times Q \times UP \]

Where

\[ JMCPA = \text{Job Mix Compliance Price Adjustment for a given lot of mixture} (\$) \]
CPF = Composite Pay factor for a given lot of mixture
(maximum is 1.05)
Q = Quantity in a given lot of mixture (tons)
UP = Unit price of the HMA in a given lot of mixture ($/ton)

5-04.3(9)B7 Mixture Statistical Evaluation – Retests
The Contractor may request that a mixture sublot be retested. To
request a retest, submit a written request to the Contracting Agency
within 7 calendar days after the specific test results have been posted
to the website or emailed to the Contractor, whichever occurs first.
The Contracting Agency will send a split of the original acceptance
sample for testing by the Contracting Agency to either the Region
Materials Laboratory or the State Materials Laboratory as determined
by the Engineer. The Contracting Agency will not test the split of the
sample with the same equipment or by the same tester that ran the
original acceptance test. The sample will be tested for a complete
gradation analysis, asphalt binder content, 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 sublot sample test results. The cost of testing
will be deducted from any monies due or that may come due the
Contractor under the Contract at the rate of $250 per sample.

5-04.3(9)C Vacant

5-04.3(9)D Mixture Acceptance – Visual Evaluation
Visual Evaluation of HMA mixture will be by visual inspection by the
Engineer or, in the sole discretion of the Engineer, the Engineer may
take samples and test the mixture.

5-04.3(9)D1 Mixture Visual Evaluation – Lots, Sampling, Testing,
Price Adjustments
HMA mixture accepted by Visual Evaluation will not be broken into
lots unless the Engineer determines that testing is required. When
that occurs, the Engineer will identify the limits of the questionable
HMA mixture, and that questionable HMA mixture shall constitute a
lot. Then, the Contractor will take samples from the truck, or the
Engineer will take core samples from the roadway at a minimum of
three random locations from within the lot, selected in accordance
with WSDOT Test Method T 716, taken from the roadway in
accordance with WSDOT SOP 734, and tested in accordance with
WSDOT SOP 737. The Engineer will test one of the samples for all
constituents in Section 5-04.3(9)B3. If all constituents from that test
fall within the Job Mix Formula Tolerances (for Visual Evaluation) in
Section 9-03.8(7), the lot will be accepted at the unit Contract price
with no further evaluation.

When one or more constituents fall outside those tolerance limits, the
other samples will be tested for all constituents in Section 5-
04.3(9)B3, and a Job Mix Compliance Price Adjustment will be
calculated in accordance with Table 13.

Table 13
Visual Evaluation – Out of Tolerance Procedures

Comply with the Following

<table>
<thead>
<tr>
<th>Pay Factors(^1)</th>
<th>Section 5-04.3(9)B4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite Pay Factors(^2)</td>
<td>Section 5-04.3(9)B5</td>
</tr>
<tr>
<td>Price Adjustments</td>
<td>Section 5-04.3(9)B6</td>
</tr>
</tbody>
</table>

\(^1\)The Visual Evaluation tolerance limits in Section 9-03.8(7) will be used in the calculation of the PF\(_i\).
\(^2\)The maximum CPF shall be 1.00.

5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results

The results of all mixture acceptance testing and the Composite Pay Factor (CPF) of the lot after three sublots have been tested will be available to the Contractor through The Contracting Agency’s website.

The Contracting Agency will endeavor to provide written notification (via email to the Contractor’s designee) of acceptance test results through its web-based materials testing system Statistical Analysis of Materials (SAM) within 24 hours of the sample being made available to the Contracting Agency. However, the Contractor agrees:

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

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

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

5-04.3(10) HMA Compaction Acceptance

For all HMA, the Contractor shall comply with the General Compaction Requirements in Section 5-04.3(10)A. The Contracting Agency will evaluate all HMA for compaction compliance with one of the following - Statistical Evaluation, Visual Evaluation, or Test Point Evaluation - determined by the criteria in Table 14:

| Criteria for Determining Method of Evaluation for HMA Compaction\(^1\) |
|----------------------------------|------------------|------------------|
| Statistical Evaluation of HMA Compaction is Required For: | Visual Evaluation of HMA Compaction is Required For: | Test Point Evaluation of HMA Compaction is Required For: |
Any HMA for which the specified course thickness is greater than 0.10 feet, and the HMA is in:
- traffic lanes, including but not limited to:
  - ramp lanes
  - truck climbing lanes
  - weaving lanes
  - speed change lanes

“HMA for Preleveling…”
“HMA for Pavement Repair…”

Any HMA not meeting the criteria for Statistical Evaluation or Visual Evaluation

This table applies to all HMA, and shall be the sole basis for determining the acceptance method for compaction.

The Contracting Agency may, at its sole discretion, evaluate any HMA for compliance with the Cyclic Density requirements of Section 5-04.3(10)B.

5-04.3(10)a HMA Compaction – General Compaction Requirements
Immediately after the HMA has been spread and struck off, and after surface irregularities have been adjusted, thoroughly and uniformly compact the mix. The completed course shall be free from ridges, ruts, humps, depressions, objectionable marks, and irregularities and shall conform to the line, grade, and cross-section shown in the Plans. If necessary, alter the JMF in accordance with Section 9-03.8(7) to achieve desired results.

Compact the mix when it is in the proper condition so that no undue displacement, cracking, or shoving occurs. Compact areas inaccessible to large compaction equipment by mechanical or hand tampers. Remove HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective. Replace the removed material with new HMA, and compact it immediately to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor’s option, provided the specified densities are attained. An exception shall be that pneumatic tired rollers shall be used for compaction of the wearing course beginning October 1st of any year through March 31st of the following year. Coverage with a steel wheel roller may precede pneumatic tired rolling. Unless otherwise approved by the Engineer, operate rollers in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, do not operate a roller in a mode that results in checking or cracking of the mat.

On bridge decks and on the five feet of roadway approach immediately adjacent to the end of bridge/back of pavement seat, operate rollers in static mode only.
5-04.3(10)B   HMA Compaction – Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer’s discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A $500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

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

HMA compaction which is accepted by Statistical Evaluation will be based on acceptance testing performed by the Contracting Agency, and statistical analysis of those acceptance tests results. This will result in a Compaction Price Adjustment.

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

HMA compaction which is accepted by Statistical Evaluation will be evaluated by the Contracting Agency dividing the project into compaction lots, and each compaction lot will be evaluated using stratified random sampling by the Contracting Agency sub-dividing each compaction lot into compaction sublots. All mixture in any individual compaction lot shall be of the same mix design. The compaction sublots will be numbered in the order in which the mixture (of a particular mix design) is paved.

Each compaction lot comprises a maximum of 15 compaction sublots, except for the final compaction lot of each mix design on the Contract, which comprises a maximum of 25 sublots.

Each compaction subplot shall be uniform in size as shown in Table 15, except that the last compaction subplot of each day may be increased to a maximum of two times the compaction subplot quantity calculated. Minor variations in the size of any subplot shall not be cause to invalidate the associated test result.

<table>
<thead>
<tr>
<th>HMA Compaction Sublot Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA Original Plan Quantity (tons)¹</td>
</tr>
<tr>
<td>&lt;20,000</td>
</tr>
<tr>
<td>20,000 to 30,000</td>
</tr>
<tr>
<td>&gt;30,000</td>
</tr>
</tbody>
</table>

¹ In determining the plan quantity tonnage, do not include any tons accepted by test point evaluation.

The following will cause one compaction lot to end prematurely and a new compaction lot to begin:

- For a compaction lot in progress with a compaction CPF less than 0.75, 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.

All HMA which is paved on a bridge and accepted for compaction by Statistical Evaluation will compose a bridge compaction lot. If the contract includes such HMA on more than one bridge, compaction will be evaluated on each bridge individually, as separate bridge compaction lots.

Bridge compaction sublots will be determined by the Engineer subject to the following:

- All sublots on a given bridge will be approximately the same size.
- Sublots will be stratified from the lot.
- In no case will there be less than 3 sublots in each bridge compaction lot.
- No sublot will exceed 50 tons.
- Compaction test locations will be determined by the Engineer in accordance with WSDOT FOP for AASHTO T716.

5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing
Comply with Section 1-06.2(1).

The location of HMA compaction acceptance tests will be randomly selected by the Contracting Agency from within each sublot, with one test per sublot. The Contracting Agency will determine the random sample location using WSDOT Test Method T 716.

Use Table 16 to determine compaction acceptance test procedures and to allocate compaction acceptance sampling and testing responsibilities between the Contractor and the Contracting Agency. HMA cores shall be taken or nuclear density testing shall occur after completion of the finish rolling, prior to opening to traffic, and on the same day that the mix is placed.

Table 16

<table>
<thead>
<tr>
<th>HMA Compaction Acceptance Testing Procedures and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Contract Includes Bid Item “HMA Core – Roadway” or “HMA Core – Bridge”</td>
</tr>
<tr>
<td>Basis for Test:</td>
</tr>
</tbody>
</table>

AMENDMENTS TO THE 2016 STANDARD SPECIFICATIONS BOOK
Revised: 6/1/17
<table>
<thead>
<tr>
<th>Density Determines by:</th>
<th>Contractor shall take cores(^1) using WSDOT SOP 734(^2)</th>
<th>Contracting Agency will take cores(^1) using WSDOT SOP 734</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contracting Agency will determine core density using FOP for AASHTO T 166</td>
<td>Contracting Agency will determine core density using FOP for AASHTO T 166</td>
</tr>
<tr>
<td></td>
<td>Contracting Agency, using WSDOT SOP 734</td>
<td>Contracting Agency, using WSDOT SOP 734</td>
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<tr>
<td></td>
<td>Contracting Agency, using WSDOT SOP 734</td>
<td>Contracting Agency, using WSDOT SOP 734</td>
</tr>
<tr>
<td></td>
<td>Contracting Agency, using WSDOT FOP for AASHTO T 355</td>
<td>Contracting Agency, using WSDOT FOP for AASHTO T 355</td>
</tr>
<tr>
<td>Theoretical Maximum Density Determines by:</td>
<td>Contracting Agency, using FOP for AASHTO T 209</td>
<td></td>
</tr>
<tr>
<td>Rolling Average of Theoretical Maximum Densities Determines by:</td>
<td>Contracting Agency, using WSDOT SOP 729</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)The core diameter shall be 4-inches unless otherwise approved by the Engineer.

\(^2\)The Contractor shall take the core samples in the presence of the Engineer, at locations designated by the Engineer, and deliver the core samples to the Contracting Agency.

\(^3\)The Contracting Agency will determine, in its sole discretion, whether it will take cores or use the nuclear density gauge to determine in-place density. Exclusive reliance on cores for density acceptance is generally intended for small paving projects and is not intended as a replacement for nuclear gauge density testing on typical projects.

\(^4\)The basis for test of all compaction sublots in a bridge compaction lot shall be cores. These cores shall be taken by the Contractor when the Proposal includes the bid item “HMA Cores – Bridge”. When there is no bid item for “HMA Cores – Bridge”, the Engineer will be responsible for taking HMA cores for all compaction sublots in a bridge compaction lot. In either case, the Engineer will determine core location, in-place density of the core, theoretical maximum density, rolling average of theoretical maximum density, and percent compaction using the procedure called for in this Section.

\(^5\)When using the nuclear density gauge for acceptance testing of pavement density, the Engineer will follow WSDOT SOP 730 for correlating the nuclear gauge with HMA cores. When cores are required for the correlation, coring and testing will be by the
Contracting Agency. When a core is taken for gauge correlation at the location of a sublot, the relative density of the core will be used for the sublot test result and is exempt from retesting.

5-04.3(10)C3 HMA Statistical Compaction – Price Adjustments
For each HMA compaction lot (that is accepted by Statistical Evaluation) which has less than three compaction sublots, for which all compaction sublots attain a minimum of 91 percent compaction determined in accordance with WSDOT FOP for AASHTO T 355 (or WSDOT SOP 736 when provided by the Contract), the HMA will be accepted at the unit Contract price with no further evaluation.

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) to determine the appropriate Compaction Price Adjustment (CPA). All of the test results obtained from the acceptance samples from a given compaction lot shall be evaluated collectively. Additional testing by either a nuclear density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For the statistical analysis in Section 1-06.2, use the following values:

\[
x = \text{Percent compaction of each sublot} \\
USL = 100 \\
LSL = 91
\]

Each CPA will be determined as follows:

\[
CPA = [0.40 \times (CPF - 1.00)] \times Q \times UP
\]

Where

\[
CPA = \text{Compaction Price Adjustment for the compaction lot ($)} \\
CPF = \text{Composite Pay Factor for the compaction lot (maximum is 1.05)} \\
Q = \text{Quantity in the compaction lot (tons)} \\
UP = \text{Unit price of the HMA in the compaction lot ($/ton)}
\]

5-04.3(10)C4 HMA Statistical Compaction – Requests for Retesting
For a compaction subplot that has been tested with a nuclear density gauge that did not meet the minimum of 91 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. The relative density of the core will replace the relative density determined by the nuclear density gauge for the compaction subplot and will be used for calculation of the CPF and acceptance of HMA.
compaction lot. When cores are taken by the Contracting Agency at
the request of the Contractor, they shall be requested by noon of the
next workday after the test results for the compaction subplot have
been provided or made available to the Contractor. Traffic control
shall be provided by the Contractor as requested by the Engineer.
Failure by the Contractor to provide the requested traffic control will
result in forfeiture of the request for retesting. When the CPF for the
compaction lot based on the results of the cores is less than 1.00, the
Contracting Agency will deduct the cost for the coring from any
monies due or that may become due the Contractor under the
Contract at the rate of $200 per core and the Contractor shall pay for
the cost of the traffic control.

5-04.3(10)D HMA Compaction – Visual Evaluation
Visual Evaluation will be the basis of acceptance for compaction of the Bid
items “HMA for Pavement Repair Cl. ___ PG ___” and “HMA for
Prelevelling Class ___ PG ___. This HMA shall be thoroughly compacted
to the satisfaction of the Engineer. HMA that is used to prelevel wheel
ruts shall be compacted with a pneumatic tire roller.

5-04.3(10)E HMA Compaction – Test Point Evaluation
When compaction acceptance is by Test Point Evaluation, compact HMA
based on a test point evaluation of the compaction train. Perform the test
point evaluation 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.

5-04.3(10)F HMA Compaction Acceptance – Notification of
Acceptance Test Results
The obligations and responsibilities for notifying the Contractor of
compaction acceptance test results are the same as for mixture
acceptance test results. See Section 5-04.3(9)E.

5-04.3(11) Reject Work
This Section applies to HMA and all requirements related to HMA (except
aggregates prior to being incorporated into HMA). For rejection of aggregate
prior to its incorporation into HMA refer to Section 3-04.

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.

5-04.3(11)B Rejection by Contractor
The Contractor may, prior to acceptance sampling and testing, 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.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests the rejected material to be tested. If the Contractor requests testing, acceptance will be by Statistical Evaluation, and a minimum of three samples will be obtained and tested. When uncompacted material is required for testing but not available, the Engineer will determine random sample locations on the roadway in accordance with WSDOT Test Method T 716, take cores in accordance with WSDOT SOP 734, and test the cores in accordance with WSDOT SOP 737.

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 (Mixture or Compaction)

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a mixture or compaction sublot 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. The Contracting Agency will obtain a minimum of three random samples of the suspect material and perform the testing. When uncompacted material is required for testing but is not available, the Engineer will select random sample locations on the roadway in accordance with WSDOT Test Method T 716, take cores samples in accordance with WSDOT SOP 734, and test the material in accordance with WSDOT SOP 737. 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 (Mixture or Compaction)

An entire mixture or compaction sublot that is suspected of being defective may be rejected. When this occurs, a minimum of two additional random samples from this sublot will be obtained. When uncompacted material is required for the additional samples but the material has been compacted, the Contracting Agency will take and test cores from the roadway as described in Section 5-04.3(11)D. The additional samples and the original sublot 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 (Mixture or Compaction)
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 when:

1. the Composite Pay Factor (CPF) of a mixture or compaction lot in progress drops below 1.00 and the Contractor is taking no corrective action, or

2. the Pay Factor (PF) for any constituent of a mixture or compaction lot in progress drops below 0.95 and the Contractor is taking no corrective action, or

3. either the PF for any constituent (or the CPF) of a mixture or compaction 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
Conduct operations such that placement of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, but the roller may pass over the unprotected end of the freshly laid HMA only when the placement of the course is discontinued for such a length of time that the HMA will cool below compaction temperature. When the Work is resumed, cut back the previously compacted HMA to produce a slightly beveled edge for the full thickness of the course.

Construct a temporary wedge of HMA on a 50H:1V where a transverse joint as a result of paving or planing is open to traffic. Separate the HMA in the temporary wedge from the permanent HMA upon which it is placed by strips of heavy wrapping paper or other methods approved by the Engineer. Remove the wrapping paper and trim the joint to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

Waste the material that is cut away and place new HMA against the cut. Use rollers or tamping irons to seal the joint.

5-04.3(12)A2 Longitudinal Joints
Offset the longitudinal joint in any one course from the course immediately below by not more than 6 inches nor less than 2 inches. Locate all longitudinal joints constructed in the wearing course at a lane line or an edge line of the Traveled Way. Construct a notched wedge joint 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 nor more than ½ of the compacted lift thickness, and
then taper down on a slope not steeper than 4H:1V. Uniformly compact the sloped portion of the HMA notched wedge joint.

On one-lane ramps a longitudinal joint may be constructed at the center of the traffic lane, subject to approval by the Engineer, if:

1. The ramp must remain open to traffic, or
2. The ramp is closed to traffic and a hot-lap joint is constructed.
   a. Two paving machines shall be used to construct the hot-lap joint.
   b. The pavement within 6 inches of the hot-lap joint will not be excluded from random location selection for compaction testing.
   c. Construction equipment other than rollers shall not operate on any uncompacted HMA.

When HMA is placed adjacent to cement concrete pavement, construct longitudinal joints between the HMA and the cement concrete pavement. Saw the joint to the dimensions shown on Standard Plan A-40.10 and fill with joint sealant meeting the requirements of Section 9-04.2.

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 seal 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 HMA overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer’s application procedure.

Construct the bridge paving joint seal as specified in the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with Section 5-05.3(8). Apply the sealant in accordance with Section 5-05.3(8)B and the manufacturer’s application procedure.

5-04.3(12)B2 Paved Panel Joint Seal
Construct the paved panel joint seal in accordance with the requirements specified in Section 5-04.3(12)B1 and the following requirement:
1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness
The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. 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. The transverse slope of the completed surface of the wearing course shall vary not more than \( \frac{1}{4} \) inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, correct the pavement surface by one of the following methods:

1. Remove material from high places by grinding with an approved grinding machine, or
2. Remove and replace the wearing course of HMA, or
3. By other method approved by the Engineer.

Correct defects until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of $500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When portland cement 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 portland cement concrete pavement. Prior to placing the portland cement concrete pavement, bring any such irregularities to the required tolerance by grinding or other means approved by the Engineer.

When utility appurtenances such as manhole covers and valve boxes are located in the Traveled Way, pave the Roadway before the utility appurtenances are adjusted to the finished grade.

5-04.3(14) Planing Bituminous Pavement
Plane in such a manner that the underlying pavement is not torn, broken, or otherwise damaged by the planing operation. Delamination or raveling of the underlying pavement will not be construed as damage due to the Contractor’s operations. Pavement outside the limits shown in the Plans or designated by the Engineer that is damaged by the Contractor’s operations shall be repaired.
to the satisfaction of the Engineer at no additional cost to the Contracting Agency.

For mainline planing operations, use equipment with automatic controls and with sensors for either or both sides of the equipment. The controls shall be capable of sensing the grade from an outside reference line, or a mat-referencing device. The automatic controls shall have a transverse slope controller capable of maintaining the mandrel at the desired transverse slope (expressed as a percentage) within plus or minus 0.1 percent.

Remove all loose debris from the planed surface before opening the planed surface to traffic. The planings and other debris resulting from the planing operation shall become the property of the Contractor and be disposed of in accordance with Section 2-03.3(7)C, or as otherwise allowed by the Contract.

5-04.3(15) Sealing Pavement Surfaces
Apply a fog seal where shown in the Plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches
Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

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 HMA. If the Contractor elects to remove and replace HMA 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.

Crack Sealing-LF will be measured by the linear foot along the line of the crack.

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 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.

HMA sawcut and seal, and paved panel joint seal, 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 ___”, and “Commercial HMA” shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

“Crack Sealing-FA”, by force account.
“Crack Sealing-FA” will be paid for by force account as specified in Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

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

“Soil Residual Herbicide ____ ft. Wide”, per mile, or
“Soil Residual Herbicide”, per square yard.
The unit Contract price per mile or per square yard for “Soil Residual Herbicide” shall be full payment for all costs incurred to obtain, provide and install herbicide in accordance with Section 5-04.3(4)B.

“Pavement Repair Excavation Incl. Haul”, per square yard.
The unit Contract price per square yard for “Pavement Repair Excavation Incl. Haul” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)C with the exception, however, that all costs involved in the placement of HMA shall be included in the unit Contract price per ton for “HMA for Pavement Repair Cl. ___ PG ___”, per ton.

“Asphalt for Fog Seal”, per ton.
Payment for “Asphalt for Fog Seal” is described in Section 5-02.5.

“Longitudinal Joint Seal”, per linear foot.
The unit Contract price per linear foot for “Longitudinal Joint Seal” shall be full payment for all costs incurred to construct the longitudinal joint between HMA and cement concrete pavement, as described in Section 5-04.3(12)B.
“HMA Sawcut And Seal”, per linear foot.
The unit Contract price per linear foot for “HMA Sawcut And Seal” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(12)B1.

“Paved Panel Joint Seal”, per linear foot.
The unit Contract price per linear foot for “Paved Panel Joint Seal” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(12)B2.

“Planing Bituminous Pavement”, per square yard.
The unit Contract price per square yard for “Planing Bituminous Pavement” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(14).

“Temporary Pavement Marking”, per linear foot.
Payment for “Temporary Pavement Marking” is described in Section 8-23.5.

“Water”, per M gallon.
Payment for “Water” is described in Section 2-07.5.

“Job Mix Compliance Price Adjustment”, by calculation.
“Job Mix Compliance Price Adjustment” will be calculated and paid for as described in Section 5-04.3(9)B6 and 5-04.3(9)D1.

“Compaction Price Adjustment”, by calculation.
“Compaction Price Adjustment” will be calculated and paid for as described in Section 5-04.3(10)C3.

“HMA Core – Bridge”, per each.
The unit Contract price per each for “HMA Core – Bridge” shall be full payment for all costs, including traffic control, associated with taking HMA density cores in pavement that is on a bridge deck.

“HMA Core – Roadway”, per each.
The unit Contract price per each for “HMA Core – Roadway” shall be full payment for all costs, including traffic control, associated with taking HMA density cores in pavement that is not on a bridge deck.

“Cyclic Density Price Adjustment”, by calculation.
“Cyclic Density Price Adjustment” will be calculated and paid for as described in Section 5-04.3(10)B.

Section 5-05, Cement Concrete Pavement
January 3, 2017

5-05.3(1) Concrete Mix Design for Paving
In last sentence of the second paragraph of item number 1, the reference to “Section 9-01.2(4)” is revised to read “Section 9-01.2(1)B”.

The following is inserted after item number 2:
3. **Mix Design Modifications** - The Contractor may initiate adjustments to the aggregate proportions of the approved mix design. An adjustment in both the fine and coarse aggregate batch target weights of plus or minus 200 pounds per cubic yard will be allowed without resubmittal of the mix design. The adjusted aggregate weights shall become the new batch target weights for the mix design.

Item number 3 is renumbered to 4 and revised (up until the table) to read:

4. **Conformance to Mix Design** - Cement and coarse and fine aggregate weights shall be within the following tolerances of the batch target weights of the mix design:

<table>
<thead>
<tr>
<th>Portland Cement Concrete Batch Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
</tr>
<tr>
<td>Coarse Aggregate</td>
</tr>
<tr>
<td>Fine Aggregate</td>
</tr>
</tbody>
</table>

5-05.3(3)B **Mixing Equipment**

The last sentence of item number 4 is revised to read:

Plant-mixed concrete may be transported in nonagitated vehicles provided that the concrete is in a workable condition when placed and:

a. discharge is completed within 45 minutes after the introduction of mixing water to the cement and aggregates, or

b. discharge is completed within 60 minutes after the introduction of mixing water to the cement and aggregates, provided the concrete mix temperature is 70°F or below during placement, or

c. discharge is completed within 60 minutes after the introduction of mixing water to the cement and aggregates, provided the mix contains an approved set retarder at the manufacturer’s minimum dosage rate.

5-05.3(6) **Subgrade**

This section, including title, is revised to read:

5-05.3(6) **Surface Preparation**

The Subgrade surface shall be prepared and compacted a minimum of 3 feet beyond each edge of the area which is to receive concrete pavement in order to accommodate the slip-form equipment.

Concrete shall not be placed during a heavy rainfall. Prior to placing concrete:

1. The surface shall be moist;

2. Excess water (e.g., standing, pooling or flowing) shall be removed from the surface.

3. The surface shall be clean and free of any deleterious materials.
4. The surface temperature shall not exceed 120°F or be frozen.

5-05.3(7)A  Slip-Form Construction

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

The alignment and elevation of the paver shall be regulated from outside reference lines established for this purpose, or by an electronic control system capable of controlling the line and grade within required tolerances.

6-02.AP6

Section 6-02, Concrete Structures

April 3, 2017

6-02.3(2)  Proportioning Materials

In the sixth paragraph, the reference to “Section 9-01.2(4)” is revised to read “9-01.2(1)B”.

6-02.3(2)A  Contractor Mix Design

The following new sentence is inserted after the first sentence of the third paragraph:

The mix design submittal shall also include test results no older than one year showing that the Aggregates do not contain Deleterious Substances in accordance with Section 9-03.

6-02.3(2)A1  Contractor Mix Design for Concrete Class 4000D

The following new sentence is inserted after the second sentence of the last paragraph:

Mix designs using shrinkage reducing admixture shall state the specific quantity required.

The following new sentence is inserted before the last sentence of the last paragraph:

Testing samples of mixes using shrinkage reducing admixture shall use the admixture amount specified in the mix design submittal.

6-02.3(2)B  Commercial Concrete

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

Commercial concrete does not require mix design or source approvals for cement, aggregate, and other admixtures.

6-02.3(6)A1  Hot Weather Protection

This section is revised to read:

The Contractor shall provide concrete within the specified temperature limits. Cooling of the coarse aggregate piles by sprinkling with water is permitted provided the moisture content is monitored and the mixing water is adjusted for the free water in the aggregate. Shading or cooling aggregate piles (sprinkling of fine aggregate piles with water is not allowed). If sprinkling of the coarse aggregates is to be used, the piles moisture content shall be monitored and the mixing water adjusted for the free water in the aggregate. In addition, when removing the coarse aggregate, it shall be removed from at least 1 foot above the bottom of the pile. Refrigerating mixing water; or replacing
all or part of the mixing water with crushed ice, provided the ice is completely melted by placing time.

If air temperature exceeds 90°F, the Contractor shall use water spray or other accepted methods to cool all concrete-contact surfaces to less than 90°F. These surfaces include forms, reinforcing steel, steel beam flanges, and any others that touch the mix.

6-02.3(6)A2 Cold Weather Protection

This section is revised to read:

Concrete shall be maintained at or above a temperature of 40°F during the first seven days of the Cold Weather Protection Period and at or above a temperature of 35°F during the remainder of the Cold Weather Protection Period. Cold weather protection requirements do not apply to concrete in shafts and piles placed below the ground line.

Prior to placing concrete in cold weather, the Contractor shall submit a Type 2 Working Drawing with a written procedure for cold weather concreting. The procedure shall detail how the Contractor will adequately cure the concrete and prevent the concrete temperature from falling below the minimum temperature. Extra protection shall be provided for areas especially vulnerable to freezing (such as exposed top surfaces, corners and edges, thin sections, and concrete placed into steel forms). Concrete placement will only be allowed if the Contractor’s cold weather protection plan has been accepted by the Engineer.

Prior to concrete placement, the Contractor shall review the 7-day temperature predictions for the job site from the Western Region Headquarters of the National Weather Service (www.wrh.noaa.gov). When temperatures below 35°F are predicted, the Contractor shall:

1. Install temperature data loggers in each concrete pour. One data logger shall be installed for every 100 yards of concrete placed. Data loggers shall be installed at locations directed by the Engineer, and shall be placed 1.5 inches from the face of concrete.

2. Immediately after concrete placement, temperature data loggers shall be installed on the concrete surface at locations directed by the Engineer. One data logger shall be installed for every 100 yards of concrete placed.

The data loggers shall be operated continuously during the Cold Weather Protection Period. Temperatures shall be measured, recorded and stored a minimum of every 30 minutes. Temperature data shall be submitted to the Engineer as a Type 1 Working Drawing within three days following the end of the Cold Weather Protection Period.

For each day that the concrete temperature falls below 40°F during the first seven days of the Cold Weather Protection Period, no curing time is awarded for that day and the Cold Weather Protection Period is extended for one additional day. If the concrete temperature falls below 35°F during Cold Weather Protection Period, the concrete may be rejected by the Engineer.

6-02.3(7) Concrete Exposed to Sea Water

This section including title is revised to read:
6-02.3(7) Vacant

6-02.3(8) Concrete Exposed to Alkaline Soils or Water
This section including title is revised to read:

6-02.3(8) Vacant

6-02.3(17)K Concrete Forms on Steel Spans
In the last paragraph, "ASTM A325" is revised to read "ASTM F3125 Grade A325".

6-02.3(17)N Removal of Falsework and Forms
The fifth paragraph is deleted.

6-02.3(25) Prestressed Concrete Girders
Under the heading "Prestressed Concrete Slab Girder", the second sentence is deleted.

6-02.3(25)A Shop Drawings
The sixth paragraph is deleted.

6-02.3(25)F Prestress Release
The last two sentences of the last paragraph are deleted and replaced with the following single sentence:

This request shall be submitted as a Type 2E Working Drawing analyzing changes in vertical deflection, girder lateral stability and concrete stresses in accordance with Section 6-02.3(25)L2.

6-02.3(25)H Finishing
Item number 2 in the first paragraph is revised to read:

2. The bottoms, sides, and tops of the lower flanges on all girders, including the top of the bottom slab between the tub girder webs.

6-02.3(25)I Fabrication Tolerances
Items 4 and 5 in the first paragraph are revised to read:

4. Flange Depth: ± ¼ inch
5. Strand Position:
   Individual strands: ± ¼ inch
   Bundled strands: ± ½ inch
   Harped strand group center of gravity at the girder ends: ± 1 inch

Items 7, 8 and 9 in the first paragraph are revised to read:

8. Bearing Recess (center of recess to girder end): ± ½ inch.
9. Girder Ends (deviation from square or designated skew):

| Horizontal: ± ⅛ inch per foot of girder width, up to a maximum of ± ½ inch |
| Vertical: ± ⅛ 16 inch per foot of girder depth, up to a maximum of ± 1½ inch |

Items 14 and 15 in the first paragraph are revised to read:

14. Local smoothness of any surface: ± ¼ inch in 10 feet.

15. Differential Camber between Girders in a Span (measured in place at the job site):

| For wide flange deck and deck bulb tee girders with a cast-in-place reinforced concrete deck: | Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ¾ inch |
| For wide flange deck, deck bulb tee and slab girders without a cast-in-place reinforced concrete deck: | Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ¼ inch |

Item 17 in the first paragraph is revised to read:

17. Position of Lifting Embedments: ± 3 inches longitudinal, ± ¼ inch transverse.

6-02.3(25)J Horizontal Alignment

The Contractor shall check and record the horizontal alignment (sweep) of each girder at the following times:

1. Initial – Upon removal of the girder from the casting bed
2. Shipment – Within 14 days prior to shipment; and
3. Erection – After girder erection and cutting temporary top strands but prior to any equalization, welding ties or placement of diaphragms.

Horizontal alignment of the top and bottom flanges shall be checked and recorded. Alternatively, the Contractor may check and record the horizontal alignment of the web near mid-height of the girder. Each check shall be made by measuring the maximum offset at mid-span relative to a chord that starts and stops at the girder ends. The Contractor shall check and record the alignment at a time when the girder is not influenced by temporary differences in surface temperature. Records for the initial check (item 1 above) shall be included in the Contractor’s prestressed concrete certificate of compliance. Records for all other checks shall be submitted as a Type 1 Working Drawing.

For each check (Items 1 to 3 above), the alignment shall not be offset more than ¼ inch for each 10 feet of girder length. Girders not meeting this tolerance for the shipment check (Item 2 above) shall require an analysis of girder lateral stability and stresses in accordance with Section 6-02.3(25)L1. The Contractor shall perform this analysis and submit it as a Type 2E Working Drawing prior to shipment of the girder. Any girder that
exceeds an offset of $\frac{1}{8}$ inch for each 10 feet of girder length for the erection check (Item 3 above) shall be corrected at the job site to the $\frac{1}{8}$ inch maximum offset per 10 feet of girder length before concrete is placed into the diaphragms. The Contractor shall submit a Type 2 Working Drawing for any required corrective action.

The maximum distance between the side of a prestressed concrete slab girder, or the edge of the top flange of a wide flange deck, wide flange thin deck or deck bulb tee girder, and a chord that extends the full length of the girder shall be ±$\frac{1}{2}$ inch after erection (Item 3 above).

### 6-02.3(25)K Vertical Deflection

Items 2 and 3 in the first paragraph are revised to read:

2. Shipment – Within 14 days prior to shipment;

3. Erection – After girder erection and cutting temporary top strands but prior to any equalization, welding ties or placement of diaphragms.

The following new paragraph is inserted after the second paragraph:

Girders with vertical deflections not meeting the limit shown in the Plans for the shipment check (Item 2 above) shall require an analysis of girder lateral stability and stresses in accordance with Section 6-02.3(25)L1. The Contractor shall perform this analysis and submit it as a Type 2E Working Drawing prior to shipment.

The following new sentence is inserted after the second sentence of the fourth to last paragraph:

Any diaphragms are assumed to be placed.

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

If the girder vertical deflection measured for the erection check (Item 3 above) is not between the lower “D” dimension bound shown in the Plans and the upper “D” dimension bound shown in the Plans plus $\frac{3}{4}$ inches, the Engineer may require corrective action. The Contractor shall submit a Type 2 Working Drawing for any required corrective action.

### 6-02.3(25)L Handling and Storage

The second paragraph is revised to read:

For strand lift loops, only $\frac{1}{2}$-inch diameter or 0.6-inch diameter strand conforming to Section 9-07.10 shall be used, and a minimum 2-inch diameter straight pin of a shackle shall be used through the loops. Multiple loops shall be held level in the girder during casting in a manner that allows each loop to carry its share of the load during lifting. The minimum distance from the end of the girder to the centroid of the strand lift loops shall be 3 feet. The loops for all prestressed concrete girders, with the exception of prestressed concrete slab girders, shall project a minimum of 1′-6″ from the top of the girder. The loops for prestressed concrete slab girders shall project a minimum of 4 inches. Loops shall extend to within 3 inches clear of the bottom of the girder, terminating with a 9-inch long 90-degree hook. Loads on individual loops shall be limited.
to 12 kips, and all girders shall be picked up at a minimum angle of 60 degrees from the
top of the girder.

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

Alternatively, these temporary strands may be post-tensioned provided the strands are
stressed on the same day that the permanent prestress is released into the girder and
the strands are tensioned prior to lifting the girder.

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

When the post-tensioned alternative is used, the Contractor shall be responsible for
properly sizing the anchorage plates, and configuring the reinforcement adjacent to the
anchorage plates, to prevent bursting or splitting of the concrete in the top flange.

The second to last paragraph is deleted.

This section is supplemented with the following new subsections:

6-02.3(25)L1 Girder Lateral Stability and Stresses
The Contractor shall be responsible for safely lifting, storing, shipping and erecting
prestressed concrete girders.

The Contract documents may provide shipping and handling details for girders including
lifting embedment locations (L), shipping support locations (L₁ and L₂), minimum
shipping support rotational spring constants (K₀), minimum shipping support center-to-
center wheel spacings (Wcc), vertical deflections and number of temporary top strands.
These shipping and handling details have been determined in accordance with Section
6-02.3(25)L2.

The Contractor shall submit a Type 2E Working Drawing analyzing girder lateral stability
and concrete stresses during lifting, storage, shipping and erection in accordance with
Section 6-02.3(25)L2 in the following cases:

1. Any of the analysis assumptions listed in Section 6-02.3(25)L2 are invalid.
   Determination of validity shall be made by the Contractor, except that analysis
   assumptions shall be considered invalid if the actual values are outside of the
   provided tolerances.

2. The Contractor intends to alter the shipping and handling details provided in
   the Contract documents.

3. The Contract documents do not provide shipping and handling details.

6-02.3(25)L2 Lateral Stability and Stress Analysis
Analysis for girder lateral stability and concrete stresses during lifting, storage, shipping
and erection shall be in accordance with the PCI Recommended Practice for Lateral
Stability of Precast, Prestressed Concrete Bridge Girders, First Edition, Publication CB-
02-16-E and the AASHTO LRFD Bridge Design Specifications edition identified in the
Contract documents. The following design criteria shall be met:

1. Factor of Safety against cracking shall be at least 1.0
2. Factor of Safety against failure shall be at least 1.5
3. Factor of Safety against rollover shall be at least 1.5
4. Allowable concrete stresses shall be as specified in Section 6-02.3(25)L3

The analysis shall address any effects on girder vertical deflection (camber), “A”
dimensions at centerline of bearings and deck screed cambers (C).

Shipping and handling details provided in the Contract documents have been
determined using the following analysis assumptions:

1. Girder dimensions, strand locations and lifting embedment locations are within
the tolerances specified in Section 6-02.3(25)I
2. Girder horizontal alignment (sweep) is within the tolerance specified in Section
6-02.3(25)J
3. Girder vertical deflection (camber) at midspan is less than or equal to the value
shown in the Plans for shipping
4. Minimum concrete compressive strength at release (f'c) has been reached
before initial lifting from casting bed. Minimum concrete compressive strength
at 28 days (f'c) has been reached before shipping.
5. Height of girder bottom above roadway at shipping supports is less than or
equal to 72 inches
6. Height of shipping support roll center above roadway is 24 inches, ± 2 inches
7. Shipping support longitudinal placement (L₁ and L₂) tolerance is ± 6 inches
8. Shipping support lateral placement tolerance is ±1 inches
9. Shipping supports provide the minimum shipping support rotational spring
constant (Kθ) and minimum shipping support center-to-center wheel spacings
(Wcc) shown in the Plans
10. For shipping at highway speeds a ± 20% dynamic load allowance (impact) is
included with a typical roadway superelevation of 2%
11. For turning at slow speeds, no dynamic load allowance (impact) is included
with a maximum roadway superelevation of 6%
12. Wind, centrifugal and seismic forces are not considered

6-02.3(25)L3  Allowable Stresses
Prestressed concrete girder stresses shall be limited to the following values at all stages
of construction and in service:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Stress</th>
<th>Location</th>
<th>Allowable Stress (ksi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary Stress at Transfer and Lifting from Casting Bed</td>
<td>Tensile</td>
<td>In areas without bonded reinforcement sufficient to resist the tensile force in the concrete</td>
<td>$0.0948\lambda \sqrt{f_{ci}^{'}} \leq 0.2$</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>In areas with bonded reinforcement sufficient to resist the tensile force in the concrete</td>
<td>$0.24\lambda \sqrt{f_{ci}^{'}}$</td>
<td></td>
</tr>
<tr>
<td>Compressive</td>
<td>All locations</td>
<td></td>
<td>$0.65f_{ci}^{'}$</td>
</tr>
<tr>
<td>Temporary Stress at Shipping and Erection</td>
<td>Tensile</td>
<td>In areas without bonded reinforcement sufficient to resist the tensile force in the concrete</td>
<td>$0.0948\lambda \sqrt{f_{ci}^{'}} \leq 0.2$</td>
</tr>
<tr>
<td></td>
<td>In areas with bonded reinforcement sufficient to resist the tensile force in the concrete</td>
<td>$0.19\lambda \sqrt{f_{ci}^{'}}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In areas with bonded reinforcement sufficient to resist the tensile force in the concrete when shipping at 6% superelevation, without impact</td>
<td>$0.24\lambda \sqrt{f_{ci}^{'}}$</td>
<td></td>
</tr>
<tr>
<td>Compressive</td>
<td>All locations</td>
<td></td>
<td>$0.65f_{ci}^{'}$</td>
</tr>
<tr>
<td>Final Stresses at Service Load</td>
<td>Tensile</td>
<td>Precompressed tensile zone</td>
<td>$0.0$</td>
</tr>
<tr>
<td></td>
<td>Compressive</td>
<td>Effective prestress and permanent loads</td>
<td>$0.45f_{ci}^{'}$</td>
</tr>
<tr>
<td></td>
<td>Effective prestress, permanent loads and transient (live) loads</td>
<td>$0.60f_{ci}^{'}$</td>
<td></td>
</tr>
<tr>
<td>Final Stresses at Fatigue Load</td>
<td>Compressive</td>
<td>Fatigue I Load Combination plus one-half effective prestress and permanent loads</td>
<td>$0.40f_{ci}^{'}$</td>
</tr>
</tbody>
</table>

Variables are as defined in the AASHTO LRFD Bridge Design Specifications.

6-02.3(25)M Shipping

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

Girder lateral stability and stresses during shipping shall be in accordance with Section 6-02.3(25)L1.

If the Contractor elects to assemble spliced prestressed concrete girders into shipping configurations not shown in the Contract documents, the Contractor shall submit a Type 2E Working Drawing analyzing girder lateral stability and concrete stresses in accordance with Section 6-02.3(25)L2 before shipping.
6-02.3(25)N  Prestressed Concrete Girder Erection

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

The erection plan shall conform to Section 6-02.3(25)L1.

The last paragraph is revised to read:

Stop plates and dowel bars for prestressed concrete girders shall be set with either epoxy grout conforming to Section 9-26.3 or type IV epoxy bonding agent conforming to Section 9-26.1.

6-02.3(25)O  Girder to Girder Connections

The second paragraph is revised to read:

Prestressed concrete girders shall be constructed in the following sequence:

1. If required, deflections shall be equalized in accordance with the Contractor's equalization plan.

2. Any intermediate diaphragms shall be placed and any weld ties shall be welded in accordance with Section 6-03.3(25). Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

3. Any keyways between adjacent girders shown in the Plans to receive grout shall be filled flush with the surrounding surfaces using a grout conforming to Section 9-20.3(2).

4. Equalization equipment shall not be removed and other construction equipment shall not be placed on the structure until intermediate diaphragms and keyway grout have attained a minimum compressive strength of 2,500 psi.

6-02.3(26)D2  Test Block Dimensions

The first sentence is revised to read:

The dimensions of the test block perpendicular to the tendon in each direction shall be the smaller of twice the minimum edge distance or the minimum spacing specified by the special anchorage device manufacturer, with the stipulation that the concrete cover over any confining reinforcing steel or supplementary skin reinforcement shall be appropriate for the project-specific application and circumstances.

6-02.3(26)E2  Ducts for External Exposed Installation

In the first paragraph, "ASTM D3350" is revised to read "ASTM D3035".

In the fourth paragraph, "ASTM D3505" is revised to read "ASTM D3035".

6-02.3(26)G  Tensioning

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

1. All concrete has reached a compressive strength of at least 4,000 psi or the strength specified in the Plans. When tensioning takes place prior to 28-day compressive strength testing on concrete sampled in accordance with Section 6-
02.3(25)H, compressive strength shall be verified on field cured cylinders in accordance with the FOP for AASHTO T23.

6-02.3(27)A Use of Self-Consolidating Concrete for Precast Units
Item number 2 of the first paragraph is revised to read:

2. Precast reinforced concrete three-sided structures, box culverts and split box culverts in accordance with Section 7-02.3(6).

6-03.AP6
Section 6-03, Steel Structures
January 3, 2017

6-03.3(33) Bolted Connections
In this section, “AASHTO M253” is revised to read “ASTM F3125 Grade A490”, “ASTM F1852” is revised to read “ASTM F3125 Grade F1852”, and “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

In the headings of Table 3, “A 325” is revised to read “ASTM F3125 Grade A325”.
In the headings of Table 3, “M 253” is revised to read “ASTM F3125 Grade A490”.

6-05.AP6
Section 6-05, Piling
August 1, 2016

In this section, the words “capacity” and “capacities” are replaced with “resistance” and “resistances”, respectively.

6-05.3(1) Piling Terms
The third paragraph is revised to read:

Overdriving – Over-driving of piles occurs when the ultimate bearing resistance calculated from the equation in Section 6-05.3(12), or the wave equation driving criteria if applicable, exceeds the ultimate bearing resistance required in the Contract in order to reach the minimum tip elevation specified in the Contract, or as required by the Engineer.

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

Minimum Tip Elevation – The minimum tip elevation is the elevation to which the pile tip shall be driven.

6-05.3(3)A Casting and Stressing
The last sentence of the third paragraph is revised to read:

If the corrective action is not acceptable to the Engineer, the piling(s) will be subject to rejection by the Engineer.

6-05.3(5) Manufacture of Steel Piles
This section is supplemented with the following new paragraph:
At least 14-days prior to the start of production of the piling, the Contractor shall advise the Engineer of the production schedule. The Contractor shall give the Inspector safe and free access to the Work. If the Inspector observes any nonspecification Work or unacceptable quality control practices, the Inspector will advise the plant manager. If the corrective action is not acceptable to the Engineer, the piling(s) will be subject to rejection by the Engineer.

6-05.3(9)A Pile Driving Equipment Approval

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

The Contractor shall submit Type 2E Working Drawings consisting of a wave equation analysis for all pile driving systems used to drive piling with required maximum driving resistances of greater than 300 tons.

6-07.AP6

Section 6-07, Painting

April 3, 2017

6-07.3(10)A Containment

The first sentence of the fourth paragraph is replaced with the following two new sentences:

The containment system shall ensure no discharge into waters of the state. When there is no threat of discharging to the waters of the state, emissions shall not exceed the Level 2 Emissions standard in SSPC Technology Guide No. 6, Section 5.5, and assessed by Method A, Visible Emissions.

6-07.3(10)F Collecting, Testing, and Disposal of Containment Waste

The third, fourth and fifth paragraphs are deleted and replaced with the following two new paragraphs:

Containment waste is defined as all paint chips and debris removed from the steel surface and all abrasive blast media, as contained by the containment system. After all waste from the containment system has been collected, the Contractor shall collect representative samples of the components that field screening indicates are lead-contaminated material. The Contractor shall collect at least one representative sample from each container. The Contractor may choose to collect a composite sample of each container, but the composite sample must consist of several collection points (a minimum of 3 random samples) that are representative of the entire contents of the container and representative of the characteristics of the type of waste in the container. In accordance with WAC 173-303-040, a representative sample means “a sample which can be expected to exhibit the average properties of the sample source.”

The debris shall be tested for metals using the Toxicity Characteristics Leaching Procedure (TCLP) and EPA Methods 1311 and 6010. At a minimum, the materials should be analyzed for the Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Pursuant to the Dangerous Waste (DW) Regulations Chapter 173-303-90(8)(c) WAC, “Any waste that contains contaminants which occur at concentrations at or above the DW threshold must be designated as DW.” All material within each individual container or containment system that designates as DW shall be disposed of at a legally permittedSubtitle C Hazardous Waste Landfill. All material within each individual container or
containment system that designate below the DW threshold, will be designated as "Solid Waste" and shall be disposed of at a legally permitted Subtitle D Landfill. Disposal shall be in accordance with WAC 173-303 for waste designated “Dangerous Waste” and pursuant to WAC 173-350 for waste designated as “Solid Waste”.

Section 6-08, Waterproofing
January 3, 2017

This section and all subsections, including title, is revised to read:

6-08 Bituminous Surfacing on Structure Decks

6-08.1 Description
This Work consists of removing and placing Hot Mix Asphalt (HMA) or Bituminous Surface Treatment (BST) directly on or over a Structure. This Work also includes performing concrete bridge deck repair, applying waterproofing membrane, and sealing paving joints.

6-08.2 Materials
Materials shall meet the requirements of the following sections:

<table>
<thead>
<tr>
<th>Material</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bituminous Surface Treatment</td>
<td>5-02.2</td>
</tr>
<tr>
<td>Hot Mix Asphalt</td>
<td>5-04.2</td>
</tr>
<tr>
<td>Joint Sealants</td>
<td>9-04.2</td>
</tr>
<tr>
<td>Closed Cell Foam Backer Rod</td>
<td>9-04.2(3)A</td>
</tr>
<tr>
<td>Waterproofing Membrane (Deck Seal)</td>
<td>9-11</td>
</tr>
<tr>
<td>Bridge Deck Repair Material</td>
<td>9-20.5</td>
</tr>
</tbody>
</table>

6-08.3 Construction Requirements

6-08.3(1) Definitions

Adjusted Removal Depth – the Bituminous Pavement removal depth specified by the Engineer to supersede the Design Removal Depth after review of the Contractor survey of the existing Bituminous Pavement grade profile.

Bituminous Pavement – the surfacing material containing an asphalt binder.

Design Removal Depth – the value shown in the "pavement schedule" or elsewhere in the Plans to indicate the design thickness of Bituminous Pavement to be removed.

Final Grade Profile – the compacted finished grade surface of completed Bituminous Pavement surfacing consisting of a vertical profile and superelevation cross-slope, developed by the Engineer for Grade Controlled Structure Decks based on the Contractor survey.

Grade Controlled – a Structure Deck requiring restriction of Bituminous Pavement work, including restriction of pavement removal methods and restriction of overlay pavement thicknesses.

Structure Deck – the bridge deck (concrete or timber), bridge approach slab, top of concrete box culvert, or other concrete surfaces over or upon which
existing Bituminous Pavement is removed and new Bituminous Pavement is applied.

6-08.3(2) Contractor Survey for Grade Controlled Structure Decks
Prior to removing existing Bituminous Pavement from a Grade Controlled Structure Deck, the Contractor shall complete a survey of the existing surface for use in establishing the existing cross section and grade profile elevations. When removal of Bituminous Pavement is to be achieved by rotary milling/planing, the Contractor’s survey shall also include the depths of the existing surfacing at each survey point.

The Contractor is responsible for all calculations, surveying, installation of control points, and measuring required for setting, maintaining and resetting equipment and materials necessary for the construction of the overlay to the Final Grade Profile.

6-08.3(2)A Survey Requirements
The Contractor shall establish at least two primary survey control points for controlling actual Bituminous Pavement removal depth and the Final Grade Profile. Horizontal control shall be by station and offset which shall be tied to either the Roadway centerline or the Structure centerline. Vertical control may be an assumed datum established by the Contractor.

Primary control points shall be described by station or milepost and offset on the baseline selected by the Contractor. The Contractor may expand the survey control information to include secondary horizontal and vertical control points as needed for the project.

Survey information collected shall include station or milepost, offset, and elevation for each lane line and curb line. Survey information shall be collected at even 20 foot station intervals, and along the centerline of each bridge expansion joint. The survey shall extend 300'-0" beyond the bridge back of pavement seat or end of Structure Deck. The survey information shall include the top of Bituminous Pavement elevation and, when rotary milling/planing equipment is used, the corresponding depth of Bituminous Pavement to the Structure Deck. The Contractor shall ensure a surveying accuracy to within ± 0.01 feet for vertical control and ± 0.2 feet for horizontal control.

Voids in HMA created by the Contractor’s Bituminous Pavement depth measurements shall be filled by material conforming to Section 9-20 or another material acceptable to the Engineer.

6-08.3(2)B Survey Submittal
The Contractor’s survey records shall include descriptions of all survey control points including station/milepost, offset, and elevations of all secondary control points. The Contractor shall maintain survey records of sufficient detail to allow the survey to be reproduced. The Contractor shall submit a Type 2 Working Drawing consisting of the compiled survey records and information. Survey data shall be submitted as an electronic file in Microsoft Excel format.
6-08.3(2)C Final Grade Profile and Adjusted Removal Depth

Based on the results of the survey, the Engineer may develop a Final Grade Profile and Adjusted Removal Depth. If they are developed, the Final Grade Profile and Adjusted Removal Depth will be provided to the Contractor within three working days after receiving the Contractor’s survey information. When provided, the Adjusted Removal Depth supersedes the Design Removal Depth to become the Bituminous Pavement removal depth for that Structure Deck.

6-08.3(3) General Bituminous Pavement Removal Requirements

The Contractor shall remove Bituminous Pavement and associated deck repair material from Structure Decks to the horizontal limits shown in the Plans and to either the specified or adjusted Bituminous Pavement removal depth as applicable.

Removal of Bituminous Pavement within 12-inches of existing permanent features that limit the reach of the machine or the edge of the following items shall be by hand or by hand operated (nominal 30-pounds class) power tools: existing bridge expansion joint headers; steel expansion joint assemblies; concrete butt joints between back of pavement seats and bridge approach slabs, bridge drain assemblies; thrie beam post steel anchorage assemblies fastened to the side or top of the Structure Deck.

When removing Bituminous Pavement with a planer, Section 5-04.3(14) shall apply. If the planer contacts the Structure Deck in excess of the specified planing depth tolerance, or contacts steel reinforcing bars at any time, the Contractor shall immediately cease planing operations and notify the Engineer. Planing operations shall not resume until completion of the appropriate adjustments to the planing machine and receiving the Engineer’s concurrence to resume.

6-08.3(4) Partial Depth Removal of Bituminous Pavement from Structure Decks

The depth of surfacing removal, as measured to the bottom of the lowest milling groove generated by the rotary milling/planing machine shall be +0.01, -0.02-feet of the specified or Adjusted Removal Depth as applicable.

6-08.3(5) Full Depth Removal of Bituminous Pavement from Structure Decks

6-08.3(5)A Method of Removal

The Contractor shall perform full depth removal by a method that does not damage or remove the Structure Deck in excess of the specified Bituminous Pavement removal tolerance. The Contractor shall submit a Type 2 Working Drawing consisting of the proposed methods and equipment to be used for full depth removal.

6-08.3(5)B Planer Requirements for Full Depth Removal

The final planed surface shall have a finished surface with a tolerance of +0.01, -0.02 feet within the planed surface profile, as measured from a 10-foot straight edge. Multiple passes of planing to achieve smoothness will not be allowed.
In addition to Section 6-08.3(3), the planing equipment shall conform to the following additional requirements:

1. The cutting tooth spacing on the rotary milling head shall be less than or equal to ¼ inch.

2. The rotary milling/planing machine shall have cutting teeth that leave a uniform plane surface at all times. All teeth on the mill head shall be kept at a maximum differential tolerance of \( \frac{3}{8} \) -inch between the shortest and longest tooth, as measured by a straight edge placed the full width of the rotary milling head.

3. Cutting tips shall be replaced when 30 percent of the total length of the cutting tip material remains.

Prior to each day’s Bituminous Pavement removal operations, the Contractor shall confirm to the satisfaction of the Engineer that the rotary head cutting teeth are within the specified tolerances.

6-08.3(5)C Structure Deck Cleanup after Bituminous Pavement Removal

Waterproofing membrane that is loose or otherwise not firmly bonded to the Structure Deck shall be removed as an incidental component of the Work of surfacing removal. Existing waterproofing membrane bonded to the Structure Deck need not be removed.

6-08.3(6) Repair of Damage due to Bituminous Pavement Removal Operations

All concrete bridge deck, pavement seat, and steel reinforcing bar damage due to the Contractor’s surfacing removal operations shall be repaired by the Contractor in accordance with Section 1-07.13, and as specified below.

Damaged concrete in excess of the specified Bituminous Pavement removal tolerance shall be repaired in accordance with Section 6-08.3(7), with the bridge deck repair material placed to the level of the surrounding bridge deck and parallel to the final grade paving profile.

Damaged steel reinforcing bar shall be repaired as follows:

1. Damage to steel reinforcing bar resulting in a section loss less than 20-percent of the bar with no damage to the surrounding concrete shall be left in place and shall be repaired by removing the concrete to a depth \( \frac{3}{8} \) -inches around the top steel reinforcing bar and placing bridge deck repair material accepted by the Engineer to the level of the bridge deck and parallel to the final grade paving profile.

2. Damage to steel reinforcing bar resulting in a section loss of 20-percent or more in one location, bars partially or completely removed from the bridge deck, or where there is a lack of bond to the concrete, shall be repaired by removing the adjacent concrete and splicing a new bar of the same size. Concrete shall be removed to provide a \( \frac{3}{4} \) -inch minimum clearance around the bars. The splice bars shall
extend a minimum of 40 bar diameters beyond each end of the damage.

6-08.3(7) Concrete Deck Repair

This Work consists of repairing the concrete deck after Bituminous Pavement has been removed.

6-08.3(7)A Concrete Deck Preparation

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), except item 4 in Section 6-09.3(6) does not apply. Areas of Structure Deck left with existing well bonded waterproof membrane after full depth Bituminous Pavement removal are exempt from this inspection requirement.

All loose and unsound concrete within the repair area shall be removed with jackhammers or chipping hammers no more forceful than the nominal 30 pounds class, or other mechanical means acceptable to the Engineer, and operated at angles less than 45 degrees as measured from the surface of the deck to the tool. If unsound concrete exists around the existing steel reinforcing bars, or if the bond between concrete and steel reinforcing bar is broken, the Contractor shall remove the concrete to provide a ¾ inch minimum clearance to the bar. The Contractor shall take care to prevent damage to the existing steel reinforcing bars and concrete to remain.

After removing sufficient concrete to establish the limits of the repair area, the Contractor shall make ¾ inch deep vertical saw cuts and maintain square edges at the boundaries of the repair area. The exposed steel reinforcing bars and concrete in the repair area shall be abrasive blasted and blown clean just prior to placing the bridge deck repair material.

6-08.3(7)B Ultra-Low Viscosity, Two-Part Liquid, Polyurethane-Hybrid Polymer Concrete

The ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete shall be mixed in accordance with the manufacturer’s recommendations.

Aggregate shall conform to the gradation limit requirements recommended by the manufacturer. The aggregate and the ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete shall be applied to the repair areas in accordance with the sequence and procedure recommended by the manufacturer.

All repairs shall be float finished flush with the surrounding surface within a tolerance of ⅛ inch of a straight edge placed across the full width and breadth of the repair area.

6-08.3(7)C Pre-Packaged Cement Based Repair Mortar

The Contractor shall mix the pre-packaged cement based repair mortar using equipment, materials and proportions, batch sizes, and process as recommended by the manufacturer.
All repairs shall be float finished flush with the surrounding surface within a tolerance of $\frac{1}{8}$ inch of a straight edge placed across the full width and breadth of the repair area.

6-08.3(7)D Cure
All bridge deck repair areas shall be cured in accordance with the manufacturer's recommendations and attain a minimum compressive strength of 2,500 psi before allowing vehicular and foot traffic on the repair and placing waterproofing membrane on the bridge deck over the repair.

6-08.3(8) Waterproof Membrane for Structure Decks
This work consists of furnishing and placing a waterproof sheet membrane system over a prepared Structure Deck prior to placing an HMA overlay. The waterproof membrane system shall consist of a sheet membrane adhered to the Structure Deck with a primer.

The Contractor shall comply with all membrane manufacturer's installation recommendations.

6-08.3(8)A Structure Deck Preparation
The Structure Deck and ambient air temperatures shall be above 50°F and the Structure Deck shall be surface-dry at the time of the application of the primer and membrane.

All areas of a Structure Deck that have fresh cast bridge deck concrete less than 28 days old (not including bridge deck repair concrete placed in accordance with Section 6-08.3(7)) shall cure for a period of time recommended by the membrane manufacturer, or as specified by the Engineer, before application of the membrane.

The entire Structure Deck and the sides of the curb and expansion joint headers to the height of the HMA overlay shall be free of all foreign material such as dirt, grease, etc. Prior to applying the primer or sheet membrane, all dust and loose material shall be removed from the Structure Deck with compressed air. All surface defects such as spalled areas, cracks, protrusions, holes, sharp edges, ridges, etc., and other surface imperfections greater than $\frac{1}{4}$ inch in width shall be corrected prior to application of the membrane.

6-08.3(8)B Applying Primer
The primer shall be applied to the cleaned deck surfaces at the rate according to the procedure recommended by the membrane manufacturer. All surfaces to be covered by the membrane shall be thoroughly and uniformly coated with primer. Structure Deck areas left with existing well bonded waterproof membrane after bituminous surfacing removal shall receive an application of primer in accordance with the membrane manufacturer's recommendations. Precautionary measures shall be taken to ensure that pools and thick layers of primer are not left on the deck surface. The membrane shall not be applied until the primer has cured or volatile material has substantially dissipated, in accordance with the membrane manufacturer's recommendations.
The primer and waterproof membrane shall extend from the bridge deck up onto the curb face and expansion joint header face the thickness of the HMA overlay. The membrane shall adhere to the vertical surface.

6-08.3(8)C Placing Waterproof Membrane
Membrane application shall begin at the low point on the deck, and continue in a lapped shingle pattern. The overlap shall be a minimum of six inches or greater if recommended by the membrane manufacturer. Membrane seams shall be sealed as recommended by the membrane manufacturer. Hand rollers or similar tools shall be used on the applied membrane to assure firm and uniform contact with the primed Structure surfaces.

The fabric shall be neatly cut and contoured at all expansion joints and drains. The cuts at bridge drains shall be two right angle cuts made to the inside diameter of the bridge deck drain outlet, after which the corners of the waterproof membrane shall be turned down into the drains and laid in a coating of primer.

6-08.3(8)D Membrane Repair and Protection
The waterproof membrane will be visually inspected by the Engineer for uniformity, tears, punctures, bonding, bubbles, wrinkles, voids and other defects. All such deficiencies shall be repaired in accordance with the membrane manufacturer’s recommendations prior to placement of the HMA overlay.

The membrane material shall be protected from damage due to the paving operations in accordance with the membrane manufacturer’s recommendations. No traffic or equipment except that required for the actual waterproofing and paving operations will be permitted to travel or rest on the membrane until it is covered by the HMA overlay. The use of windrows is not allowed for laydown of HMA on a membrane.

Where waterproofing membrane is placed in stages or applied at different times, a strip of temporary paper shall be used to protect the membrane overlap from the HMA hand removal methods.

6-08.3(9) Placing Bituminous Pavement on Structure Decks
HMA overlay shall be applied on Grade Controlled Structure Decks using reference lines for vertical control in accordance with Section 5-04.3(3)C.

The compacted elevation of the HMA overlay on Structure Decks shall be within ± 0.02 feet of the specified overlay thickness or Final Grade Profile as applicable. Deviations from the final grade paving profile in excess of the specified tolerance and areas of non-conforming surface smoothness shall be corrected in accordance with Section 5-04.3(13).

Final grade Roadway transitions to a Structure Deck with Bituminous Pavement shall not exceed a 0.20 percent change in grade in accordance with the bridge deck transition for HMA overlay Standard Plan, unless shown otherwise in the Plans.
Final grade compacted HMA elevations shall be higher than an adjacent concrete edge by \( \frac{1}{4} \) inch ± \( \frac{1}{8} \) inch at all expansion joint headers and concrete butt joints as shown in the concrete to asphalt butt joint details of the bridge paving joint seals Standard Plan. This also applies to steel edges within the limits of the overlay such as bridge drain frames and steel joint riser bars at bridge expansion joints.

6-08.3(9)A Protection of Structure Attachments and Embedments

The Contractor is responsible for protecting all Structure attachments and embedments from the application of BST and HMA.

Drainage inlets that are to remain open, and expansion joints, shall be cleaned out immediately after paving is completed. Materials passing through expansion joints shall be removed from the bridge within 10 working days.

All costs incurred by the Contractor in protective measures and clean up shall be included in the unit Contract prices for the associated Bid items of Work.

6-08.3(10) HMA Compaction on Structure Decks

Compaction of HMA on Structure Decks shall be in accordance with Section 5-04.3(10).

Work rejected in accordance with Section 5-04.3(11) shall include the materials, work, and incidentals to repair an existing waterproof membrane damaged by the removal of the rejected work.

6-08.3(11) Paved Panel Joint Seals and HMA Sawcut and Seal

Bridge paving joint seals shall be installed in accordance with Section 5-04.3(12)B and the details shown in the Plans and Standard Plans.

When concrete joints are exposed after removal of Bituminous Pavement, the joints shall be cleaned and sealed in accordance with Section 5-01.3(8) and the paved panel joint seal details of the bridge paving joint seals Standard Plan, including placement of the closed cell backer rod at the base of the cleaned joint. If waterproofing membrane is required, the membrane shall be slack or folded at the concrete joint to allow for Structure movements without stress to the membrane. After placement of the HMA overlay, the second phase of the paved panel joint seal shall be completed by sawing the HMA and sealing the sawn joint in accordance with Section 5-04.3(12)B2.

6-08.4 Measurement

Removing existing Bituminous Pavement from Structure Decks will be measured by the square yard of Structure Deck surface area with removed overlay.

Bridge deck repair will be measured by the square foot surface area of deck concrete removed with the measurement taken at the plane of the top mat of steel reinforcing bars.
Waterproof membrane will be measured by the square yard surface area of Structure Deck and curb and header surface area covered by membrane.

6-08.5 Payment
Payment will be made for each of the following Bid items when they are included in the Proposal:

“Structure Surveying”, lump sum.

“Removing Existing Overlay From Bridge Deck___”, per square yard.
The unit Contract price per square yard for "Removing Existing Overlay From Bridge Deck___", shall be full pay for performing the Work as specified for full removal of Bituminous Pavement on Structure Decks, including the removal of existing waterproof membrane and disposing of materials.

“Bridge Deck Repair Br. No.___”, per square foot.
The unit Contract price per square foot for "Bridge Deck Repair Br. No.___" shall be full pay for performing the Work as specified, including removing and disposing of the concrete within the repair area and furnishing, placing, finishing, and curing the repair concrete.

“Waterproof Membrane Br. No.___”, per square yard.
The unit Contract price per square yard for "Waterproof Membrane Br. No.___" shall be full pay for performing the Work as specified, including repairing any damaged or defective waterproofing membrane and repair of damaged HMA overlay.

6-09.AP6
Section 6-09, Modified Concrete Overlays
April 4, 2016

6-09.3(8)A Quality Assurance for Microsilica Modified and Fly Ash Modified Concrete Overlays
The first sentence of the first paragraph is revised to read the following two new sentences:

The Engineer will perform slump, temperature, and entrained air tests for acceptance in accordance with Section 6-02.3(5)D and as specified in this Section after the Contractor has turned over the concrete for acceptance testing. Concrete samples for testing shall be supplied to the Engineer in accordance with Section 6-02.3(5)E.

The last paragraph is deleted.

6-09.3(8)B Quality Assurance for Latex Modified Concrete Overlays
The first two paragraphs are deleted and replaced with the following:

The Engineer will perform slump, temperature, and entrained air tests for acceptance in accordance with Section 6-02.3(5)D and as specified in this Section after the Contractor has turned over the concrete for acceptance testing. The Engineer will perform testing as the concrete is being placed. Samples shall be taken on the first charge through each mobile mixer and every other charge thereafter. The sample shall be taken after the first 2 minutes of continuous mixer operation. Concrete samples for testing shall be supplied to the Engineer in accordance with Section 6-02.3(5)E.
The second to last sentence of the last paragraph is revised to read:

Recommendations made by the technical representative on or off the jobsite shall be adhered to by the Contractor.

6-10.AP6
Section 6-10, Concrete Barrier
August 1, 2016

6-10.3(5) Temporary Concrete Barrier
This section title is revised to read:

Temporary Barrier

The first paragraph is revised to read:

For temporary barrier, the Contractor may use precast concrete barrier or temporary steel barrier. Temporary concrete barrier shall comply with Standard Plan requirements and cross-sectional dimensions, except that: (1) it may be made in other lengths than those shown in the Standard Plan, and (2) it may have permanent lifting holes no larger than 4 inches in diameter or lifting loops. Temporary steel barrier shall be certified that it meets NCHRP 350 or MASH crash test requirements and shall be installed in accordance with the manufacturer’s recommendations.

6-10.4 Measurement
The first sentence of the second paragraph is revised to read:

Temporary barrier will be measured by the linear foot along the completed line and slope of the barrier, one time only for each setup of barrier protected area.

6-10.5 Payment
The Bid item “Temporary Conc. Barrier”, per linear foot, and the paragraph following this Bid item, is revised to read:

“Temporary Barrier”, per linear foot.

The unit Contract price per linear foot for “Temporary Barrier” shall be full pay for all costs, including furnishing, installing, connecting, anchoring, maintaining, temporary storage, and final removal of the temporary barrier.

6-12.AP6
Section 6-12, Noise Barrier Walls
January 3, 2017

6-12.3(9) Access Doors and Concrete Landing Pads
The first sentence of the last paragraph is revised to read:

The Contractor shall construct concrete landing pads for each access door location as shown in the Plans.
6-12.5 Payment
In the paragraph following the bid item “Noise Barrier Wall Access Door”, per each, “concrete landing pad” is revised to read “concrete landing pads”.

6-14.AP6
Section 6-14, Geosynthetic Retaining Walls
January 3, 2017

6-14.3(2) Submittals
The first sentence of the first paragraph is revised to read:
The Contractor shall submit Type 2E Working Drawings consisting of detailed plans for each wall.

6-14.5 Payment
The bid item “Concrete Fascia Panel”, per square foot, and the paragraph following this bid item are revised to read:
“Concrete Fascia Panel For Geosynthetic Wall”, per square foot.
All costs in connection with constructing the concrete fascia panels as specified shall be included in the unit Contract price per square foot for “Concrete Fascia Panel For Geosynthetic Wall”, including all steel reinforcing bars, premolded joint filler, polyethylene bond breaker strip, joint sealant, PVC pipe for weep holes, exterior surface finish, and pigmented sealer (when specified), constructing and placing the concrete footing, edge beam, anchor beam, anchor rod assembly, and backfill.

6-19.AP6
Section 6-19, Shafts
January 3, 2017

6-19.3 Construction Requirements
This section is supplemented with the following new subsection:
6-19.3(10) Engineer’s Final Acceptance of Shafts
The Engineer will determine final acceptance of each shaft, based on the nondestructive QA test results and analysis for the tested shafts, and will provide a response to the Contractor within 3 working days after receiving the test results and analysis submittal.

6-19.3(1)B Nondestructive Testing of Shafts
This section’s content is deleted and replaced with the following new subsections:
6-19.3(1)B1 Nondestructive Quality Assurance (QA) Testing of Shafts
Unless otherwise specified in the Special Provisions, the Contractor shall perform nondestructive QA testing of shafts, except for those constructed completely in the dry. Either crosshole sonic log (CSL) testing in accordance with ASTM D 6760 or thermal integrity profiling (TIP) testing in accordance with ASTM D 7949 shall be used.
6-19.3(1)B2 Nondestructive Quality Verification (QV) Testing of Shafts

The Contracting Agency may perform QV nondestructive testing of shafts that have been QA tested by the Contractor. The Contracting Agency may test up to ten percent of the shafts. The Engineer will identify the shafts selected for QV testing and the testing method the Contracting Agency will use.

The Contractor shall accommodate the Contracting Agency’s nondestructive testing.

6-19.3(2) Shaft Construction Submittal

This section is revised to read:

The shaft construction submittal shall be comprised of the following four components: construction experience; shaft installation narrative; shaft slurry technical assistance; and nondestructive QA testing personnel. The submittals shall be Type 2 Working Drawings, except the shaft slurry technical assistance and nondestructive QA testing personnel submittals shall be Type 1.

This section is supplemented with the following new subsection:

6-19.3(2)D Nondestructive QA Testing Organization and Personnel

The Contractor shall submit the names of the testing organizations, and the names of the personnel who will conduct nondestructive QA testing of shafts. The submittal shall include documentation that the qualifications specified below are satisfied. For TIP testing, the testing organization is the group that performs the data analysis and produces the final report. The testing organizations and the testing personnel shall meet the following minimum qualifications:

1. The testing organization shall have performed nondestructive tests on a minimum of three deep foundation projects in the last two years.

2. Personnel conducting the tests for the testing organization shall have a minimum of one year experience in nondestructive testing and interpretation.

3. The experience requirements for the organization and personnel shall be consistent with the testing methods the Contractor has selected for nondestructive testing of shafts.

4. Personnel preparing test reports shall be a Professional Engineers, licensed under Title 18 RCW, State of Washington, and in accordance with WAC 196-23-020.

6-19.3(3) Shaft Excavation

The second paragraph is revised to read:

Shaft excavation shall not be started until the Contractor has received the Engineer's acceptance for the reinforcing steel centralizers required when the casing is to be pulled during concrete placement.

This section is supplemented with the following:

Except as otherwise noted, the Contractor shall not commence subsequent shaft excavations until receiving the Engineer’s acceptance of the first shaft, based on the

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results and analysis of the nondestructive testing for the first shaft. The Contractor may commence subsequent shaft excavations prior to receiving the Engineer’s acceptance of the first shaft, provided the following condition is satisfied:

The Engineer permits continuing with shaft construction based on the Engineer’s observations of the construction of the first shaft, including, but not limited to, conformance to the shaft installation narrative in accordance with Section 6-19.3(2)B, and the Engineer’s review of Contractor’s daily reports and Inspector’s daily logs concerning excavation, steel reinforcing bar placement, and concrete placement.

6-19.3(5)B Steel Reinforcing Bar Cage Centralizers
This section is supplemented with the following new sentence:

The Contractor shall furnish and install additional centralizers as required to maintain the specified concrete cover throughout the length of the shaft.

6-19.3(5)C Concrete Cover Over Steel Reinforcing Bars
In the table, the second column (including heading) is revised to read:

<table>
<thead>
<tr>
<th>Minimum Concrete Cover, and Concrete Cover Tolerance, Except at Permanent Slip Casing (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, -1½</td>
</tr>
<tr>
<td>4, -2</td>
</tr>
<tr>
<td>4, -2</td>
</tr>
<tr>
<td>6, -3</td>
</tr>
</tbody>
</table>

The following new paragraph is inserted after the table:

The concrete cover tolerances specified above apply to the concrete cover specified in the Plans, even if it exceeds the minimum concrete cover.

6-19.3(6) Access Tubes for Crosshole Sonic Log (CSL) Testing
This section title is revised to read:

6-19.3(6) Contractor Furnished Accessories for Nondestructive QA Testing
This section is supplemented with the following three new subsections:

6-19.3(6)D Shafts Requiring Thermal Wire
The Contractor shall furnish and install thermal wire in all shafts receiving the thermal wire method of TIP testing, except as otherwise noted in Section 6-19.3(1)B1.

6-19.3(6)E Thermal Wire and Thermal Access Points (TAPs)
The thermal wire and associated couplers shall be obtained from the source specified in the Special Provisions.

The Contractor shall securely attach the thermal wire to the interior of the reinforcement cage of the shaft in conformance with the supplier’s instructions. At a minimum, one thermal wire shall be furnished and installed for each foot of shaft diameter, rounded to the nearest whole number, as shown in the Plans. The number of thermal wires for
shaft diameters specified as "X feet 6 inches" shall be rounded up to the next higher whole number. The thermal wires shall be placed around the shaft, inside the spiral or hoop reinforcement, and tied to the vertical reinforcement with plastic "zip" ties at a maximum spacing of 2-feet. Steel tie wire shall not be used.

The thermal wire shall be installed in straight alignment and taut, but with enough slack to not be damaged during reinforcing cage lofting. The wires shall be as near to parallel to the vertical axis of the reinforcement cage as possible. The thermal wire shall extend from the bottom of the reinforcement cage to the top of the shaft, with 15-feet of slack wire provided above the top of shaft. Care shall be taken to prevent damaging the thermal wires during reinforcement cage installation and concrete placement operations in the shaft excavation.

After completing shaft reinforcement cage fabrication at the site and prior to installation of the cage into the shaft excavation, the Contractor shall install and connect thermal access points (TAPs) to the thermal wires. The TAPs shall record data for at least one hour after the cage is placed in the excavation to measure the slurry temperature and enable the steel and slurry temperatures to equilibrate prior to placing concrete in the shaft. The TAPs shall record and store data every 15 minutes. The TAPs shall remain active for a minimum of 36 hours.

Prior to beginning concrete placement the TAPs shall be checked to ensure they are recording data and that the wires have not been damaged. If a TAP unit is not functioning due to a damaged wire, the Contractor shall repair or replace the wire. If a TAP unit fails or a wire breaks after concrete placement has started, the Contractor shall not stop the concrete placement operation to repair the wire.

6-19.3(6)F Use of Access Tubes for TIP Testing Under the Thermal Probe Method
The Contractor may use access tubes for TIP testing under the thermal probe method. Access tubes shall be cared for in accordance with Section 6-19.3(6)C. Prior to TIP testing under the thermal probe method, the water in each tube shall be removed, collected, and stored in an insulated container. The access tube shall be blown dry and swabbed to remove residual water. After TIP testing, the collected and stored tube water shall be introduced back into the access tube. New potable water may be used, provided the water temperature is not more than 10°F cooler than the average concrete temperature measured by the probe.

6-19.3(6)A Shafts Requiring CSL Access Tubes
This section, including title, is revised to read:

6-19.3(6)A Shafts Requiring Access Tubes
The Contractor shall furnish and install access tubes in all shafts receiving CSL testing or the thermal probe method of TIP testing, except as otherwise noted in Section 6-19.3(1)B1.

6-19.3(6)B Orientation and Assembly of the CSL Access Tubes
This section’s title is revised to read:

6-19.3(6)B Orientation and Assembly of the Access Tubes

6-19.3(6)C Care for CSL Access Tubes from Erection through CSL Testing
This section’s title is revised to read:
6-19.3(6)C Care for Access Tubes from Erection Through Nondestructive QA Testing

The second sentence is revised to read:

The Contractor shall keep all of a shaft’s access tubes full of water through the completion of nondestructive QA testing of that shaft.

6-19.3(7)A Concrete Class for Shaft Concrete

This section is revised to read:

Shaft concrete shall be Class 5000P conforming to Section 6-02.

6-19.3(7)B Concrete Placement Requirements

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

The Section 6-02.3(6) restriction for 5 feet maximum free fall shall not apply to placement of concrete into a shaft.

6-19.3(7)I Requirements for Placing Concrete Above the Top of Shaft

This section is revised to read:

Concrete shall not be placed above the top of shaft (for column splice zones, columns, footings, or shaft caps) until the Contractor receives the Engineer’s acceptance of nondestructive QA testing, if performed at that shaft, and acceptance of the shaft.

6-19.3(9) Nondestructive Testing of Shafts (Crosshole Sonic Log (CSL) Testing)

This section, including title, is revised to read:

6-19.3(9) Nondestructive QA Testing of Shafts

The Contractor shall provide nondestructive QA testing and analysis on all shafts with access tubes or thermal wires and TAPs facilitating the testing (See Section 6-19.3(1)B). The testing and analysis shall be performed by the testing organizations identified by the Contractor’s submittal in accordance with Section 6-19.3(2)D.

The Engineer may direct that additional testing be performed at a shaft if anomalies or a soft bottom are detected by the Contractor’s testing. If additional testing at a shaft confirms the presence of a defect(s) in the shaft, the testing costs and the delay costs resulting from the additional testing shall be borne by the Contractor in accordance with Section 1-05.6. If the additional testing indicates that the shaft has no defect, the testing costs and the delay costs resulting from the additional testing will be paid by the Contracting Agency in accordance with Section 1-05.6, and, if the shaft construction is on the critical path of the Contractor’s schedule, a time extension equal to the delay created by the additional testing will be granted in accordance with Section 1-08.8.

6-19.3(9)A Schedule of CSL Testing

This section, including title, is revised to read:
6-19.3(9)A  TIP Testing Using Thermal Probes or CSL Testing
If selected as the nondestructive QA testing method by the Contractor, TIP testing using thermal probes, or CSL testing shall be performed after the shaft concrete has cured at least 96 hours. Additional curing time prior to testing may be required if the shaft concrete contains admixtures, such as set retarding admixture or water-reducing admixture, added in accordance with Section 6-02.3(3). The additional curing time prior to testing required under these circumstances shall not be grounds for additional compensation or extension of time to the Contractor in accordance with Section 1-08.8.

6-19.3(9)B  Inspection of CSL Access Tubes
This section’s title is revised to read:

6-19.3(9)B  Inspection of Access Tubes

6-19.3(9)C  Engineer’s Final Acceptance of Shafts
This section, including title, is revised to read:

6-19.3(9)C  TIP Testing With Thermal Wires and TAPs
If selected as the nondestructive QA testing method by the Contractor, TIP testing with thermal wires and TAPs (See Section 6-19.3(6)E) shall be performed. The TIP testing shall commence at the beginning of the concrete placement operation, recording temperature readings at 15-minute intervals until the peak temperature is captured in the data. Additional curing time may be required if the shaft concrete contains admixtures, such as set retarding admixture or water-reducing admixture, added in accordance with Section 6-02.3(3). The additional curing time required under these circumstances shall not be grounds for additional compensation or extension of time to the Contractor in accordance with Section 1-08.8.

TIP testing shall be conducted at all shafts in which thermal wires and TAPs have been installed for thermal wire analysis (Section 6-19.3(6)A).

6-19.3(9)D  Requirements to Continue Shaft Excavation Prior to Acceptance of First Shaft
This section, including title, is revised to read:

6-19.3(9)D  Nondestructive QA Testing Results Submittal
The Contractor shall submit the results and analysis of the nondestructive QA testing for each shaft tested. The Contractor shall submit the test results within three working days of testing. Results shall be a Type 1 Working Drawing presented in a written report.

TIP reports shall include:

1. A map or plot of the wire/tube location within the shaft and their position relative to a known and identifiable location, such as North.

2. Graphical displays of temperature measurements versus depth of each wire or tube for the analysis time selected, overall average temperature with depth, shaft radius or diameter with depth, concrete cover versus cage position with depth, and effective radius.

3. The report shall identify unusual temperatures, particularly significantly cooler local deviations from the overall average.
4. The report shall identify the location and extent where satisfactory or questionable concrete is identified.
   
   a. Satisfactory (S) - 0 to 6% Effective Radius Reduction and Cover Criteria Met
   
   b. Questionable (Q) - Effective Local Radius Reduction > 6%, Effective Local Average Diameter Reduction > 4%, or Cover Criteria Not Met

5. Variations in temperature between wire/tubes (at each depth) which in turn correspond to variations in cage alignment.

6. Where shaft specific construction information is available (e.g. elevations of the top of shaft, bottom of casing, bottom of shaft, etc.), these values shall be noted on all pertinent graphical displays.

   CSL reports shall include:

   1. A map or plot of the tube location within the shaft and their position relative to a known and identifiable location, such as North.
   
   2. Graphical displays of CSL Energy versus Depth and CSL signal arrival time versus depth or velocity versus depth.
   
   3. The report shall identify the location and extent where good, questionable, and poor concrete is identified, where no signal was received, or where water is present.
   
   a. Good (G) - No signal distortion and decrease in signal velocity of 10% or less is indicative of good quality concrete.
   
   b. Questionable (Q) - Minor signal distortion and a lower signal amplitude with a decrease in signal velocity between 10% and 20%.
   
   c. Poor (P) - Severe signal distortion and much lower signal amplitude with a decrease in signal velocity of 20% or more.
   
   d. No Signal (NS) - No signal was received.
   
   e. Water (W) - A measured signal velocity of nominally $V = 4,800$ to $5,000$ fps.

All QA test reports will provide a recommendation to accept the shaft as-is, recommendation for further review by the Engineer, or will provide a plan for further testing, investigation or repair to address any deficiencies identified by the testing.

6-19.3(9)E Additional CSL Testing

This section, including title, is revised to read:

6-19.3(9)E Vacant
6-19.3(9)I Requirements for CSL Access Tubes and Cored Holes After CSL Testing

This section’s title is revised to read:

6-19.3(9)I Requirements for Access Tubes and Cored Holes After CSL Testing

6-19.4 Measurement

This section is revised to read:

Constructing shafts will be measured by the linear foot. The linear foot measurement will be calculated using the top of shaft elevation and the bottom of shaft elevation for each shaft as shown in the Plans.

Rock excavation for shaft, including haul, will be measured by the linear foot of shaft excavated. The linear feet measurement will be computed using the top of the rock line, defined as the highest bedrock point within the shaft diameter, and the bottom elevation shown in the Plans.

QA shaft test will be measured once per shaft tested.

6-19.5 Payment

This section is revised to read:

Payment will be made for the following Bid items when they are included in the Proposal:

“Constructing ___ Diam. Shaft”, per linear foot.

The unit Contract price per linear foot for “Constructing ___ Diam. Shaft” shall be full pay for performing the Work as specified, including:

1. Soil excavation for shaft, including all costs in connection with furnishing, mixing, placing, maintaining, containing, collecting, and disposing of all mineral, synthetic and water slurry, and disposing of groundwater collected by the excavated shaft.

2. Furnishing and placing temporary shaft casing, including temporary casing in addition to the required casing specified in the Special Provisions, and including all costs in connection with completely removing the casing after completing shaft construction.

3. Furnishing permanent casing for shaft.

4. Placing permanent casing for shaft.

5. Casing shoring, including all costs in connection with furnishing and installing casing shoring above the specified upper limit for casing shoring but necessary to provide for sufficient water head pressure to resist artesian water pressure present in the shaft excavation, removing casing shoring, and placing seals when required.
6. Furnishing and placing steel reinforcing bar and epoxy-coated steel reinforcing bar, including furnishing and installing steel reinforcing bar centralizers.

7. Installation of CSL tubes or thermal wires.

8. Furnishing, placing and curing concrete to the top of shaft or to the construction joint at the base of the shaft-column splice zone as applicable.

Payment for “Constructing___Diam. Shaft” will be made upon Engineer acceptance of the shaft, including completion of satisfactory QA shaft tests as applicable.

“Rock Excavation For Shaft Including Haul”, per linear foot.

When rock excavation is encountered, payment for rock excavation is in addition to the unit Contract price per linear foot for “Constructing___Diam. Shaft”

“Shoring Or Extra Excavation Cl. A - ___”, lump sum.

The lump sum Contract price for “Shoring Or Extra Excavation Cl. A - ___” shall be full pay for performing the Work as specified, including all costs in connection with all excavation outside the limits specified for soil and rock excavation for shaft including haul, all temporary telescoping casings, and all temporary casings beyond the limits of required temporary casing specified in the Special Provisions.

“QA Shaft Test”, per each.

The unit Contract price per each for “QA Shaft Test” shall be full pay for performing the Work as specified, including operating all associated accessories necessary to record and process data and develop the summary QA test reports. Section 1-04.6 does not apply to this bid item.

“Removing Shaft Obstructions”, estimated.

Payment for removing, breaking-up, or pushing aside shaft obstructions, as defined in Section 6-19.3(3)E, will be made for the changes in shaft construction methods necessary to deal with the obstruction. The Contractor and the Engineer shall evaluate the effort made and reach agreement on the equipment and employees utilized, and the number of hours involved for each. Once these cost items and their duration have been agreed upon, the payment amount will be determined using the rate and markup methods specified in Section 1-09.6. For the purpose of providing a common proposal for all Bidders, the Contracting Agency has entered an amount for the item “Removing Shaft Obstructions” in the Bid Proposal to become a part of the total Bid by the Contractor.

If drilled shaft tools, cutting teeth, casing or Kelly bar is damaged as a result of the obstruction removal work, the Contractor will be compensated for the costs to repair this equipment in accordance with Section 1-09.6.

If shaft construction equipment is idled as a result of the Work required to deal with the obstruction and cannot be reasonably reassigned within the project, then standby payment for the idled equipment will be added to the payment calculations. If labor is idled as a result of the Work required to deal with the obstruction and cannot be reasonably reassigned within the project, then all labor costs resulting
from Contractor labor agreements and established Contractor policies will be added to the payment calculations.

The Contractor shall perform the amount of obstruction Work estimated by the Contracting Agency within the original time of the Contract. The Engineer will consider a time adjustment and additional compensation for costs related to the extended duration of the shaft construction operations, provided:

1. The dollar amount estimated by the Contracting Agency has been exceeded, and
2. The Contractor shows that the obstruction removal Work represents a delay to the completion of the project based on the current progress schedule provided in accordance with Section 1-08.3.

7-02.AP7
Section 7-02, Culverts
January 3, 2017

7-02.2 Materials
The following three new items are inserted after the item “Aggregate for Portland Cement Concrete:
Gravel Backfill for Pipe Zone Bedding 9-03.12(3)
Butyl Rubber Sealant 9-04.11
External Sealing Band 9-04.12

The last paragraph is deleted.

7-02.3(6) Precast Reinf. Conc. Three Sided Structures, Box Culverts and Split Box Culverts
This section is supplemented with the following new paragraph:

When the Plans include a complete set of design details for a Structure (defining panel shapes and dimensions, concrete strength requirements, and steel reinforcing bar, joint, and connection details), the design and load rating preparation and calculation submittal requirements of Sections 7-02.3(6)A1 and 7-02.3(6)A2 do not apply for the components shown in the Plans, but all other requirements of this Section remain in effect. The Contractor may propose alternate concrete culvert designs, accommodating the same rise, span, and length as shown in the Plans, to replace the Structure details shown in the Plans. If an alternate concrete culvert design is proposed, all of the requirements of this Section, including design and load rating preparation and calculation submittal, apply.

7-02.3(6)A General
This section is supplemented with the following two new paragraphs:

Tolerances for PRCTSS shall be as follows:
1. Internal Dimensions – The internal dimension shall not vary more than 1 percent or 2 inches, whichever is less, from the Plan dimensions. The haunch dimensions shall not vary more than \( \frac{3}{4} \) inch from the Plan dimensions.

2. Slab and Wall Thickness – The slab and wall thickness shall not be less than that shown in the Plans by more than 5 percent or \( \frac{1}{2} \) inch, whichever is greater. A thickness more than that required in the Plans will not be a cause for rejection if proper joining is not affected.

3. Length of Opposite Surfaces – Variations in lengths of two opposite surfaces of the three-sided section shall not be more than \( \frac{3}{8} \) inch unless beveled sections are being used to accommodate a curve in the alignment.

4. Reinforcing steel placement shall meet the tolerances specified in Section 6-02.3(24)C.

Tolerances for PRCBC and PRCSBC shall be as follows:

1. Internal Dimensions – The internal dimensions shall not vary more than 1 percent from the Plan dimensions. If haunches are used, the haunch dimensions shall not vary more than \( \frac{1}{4} \) inch from the Plan dimensions.

2. Slab and Wall Thickness – The slab and wall thickness shall not be less than that shown in the Plans by more than 5 percent or \( \frac{5}{16} \) inch, whichever is greater. A thickness more than that required in the Plans will not be a cause for rejection.

3. Length of Opposite Box Segments – Variations in lengths of two opposite surfaces of the box segments shall not be more than \( \frac{1}{8} \) inch per foot of internal span, with a maximum of \( \frac{5}{8} \) inch for all sizes through 7 feet internal span, and a maximum of \( \frac{3}{4} \) inch for internal spans greater than 7 feet, except where beveled sections are being used to accommodate a curve in the alignment.

4. Length of Box Segments – The underrun in length of a segment shall not be more than \( \frac{1}{8} \) inch per foot of length with a maximum of \( \frac{5}{8} \) inch in any box segment.

5. Length of Legs and Slabs – The variation in length of the legs shall not be more than \( \frac{1}{8} \) inch per foot of the rise of the leg per leg with a maximum of \( \frac{5}{6} \) inches. The differential length between opposing legs of the same segment shall not be more than \( \frac{1}{2} \) inch. Length of independent top slab spans shall not vary by more than \( \frac{1}{8} \) inch per foot of span of the top slab, with a maximum of \( \frac{5}{8} \) inches.

6. Reinforcing steel placement shall meet the tolerances specified in Section 6-02.3(24)C.

This section is supplemented with the following new subsection:

7-02.3(6)A5 Wingwalls and Retaining Walls

Wingwalls and retaining walls (including cutoff walls and headwalls) shall be constructed in accordance with the Contractor’s design and Working Drawing submittal
or when the Plans include a complete set of design details for a wall (defining panel shapes and dimensions, concrete strength requirements, and steel reinforcing bar, joint, and connection details), the details shown in the Plans.

Precast concrete construction shall conform to Sections 6-02.3(28) and 6-11.3(3).

Culvert bedding material shall be furnished, placed, and compacted in accordance with Section 7-02.3(6)A4.

7-02.3(6)A1 Design Criteria
The first sentence of the last paragraph is revised to read:

Whenever the minimum finished backfill or surfacing depth above the top of the Structure is less than 1'-0" (except when the top of the Structure is directly exposed to vehicular traffic), either all steel reinforcing bars in the span unit shall be epoxy-coated with 2" minimum concrete cover from the face of concrete to the face of the top mat of steel reinforcing bars, or the minimum concrete cover shall be 2½".

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

Concrete cover from the face of any concrete surface to the face of any steel reinforcement shall be 1-inch minimum end clearance at all joints, and 2-inches minimum at all other locations.

7-02.3(6)A2 Submittals
The first paragraph is revised to read:

The Contractor shall submit shop drawings of the precast Structures. Fabrication shop drawings replicating complete design details when shown in the Plans shall be Type 2 Working Drawings. Submittals completing the design based on the schematic geometric requirements shown in the Plans, or proposing a Contractor designed alternative concrete culvert Structure shall be Type 2E Working Drawings with supporting design calculations.

The last paragraph is revised to read:

For precast Structures with a span length greater than 20-feet (as defined in Section 7-02.3(6)A1), except when the depth of fill above the top of culvert exceeds the Structure span length, a Type 2E Working Drawing shall be submitted consisting of a load rating report prepared in accordance with the AASHTO Manual for Bridge Evaluation and WSDOT Bridge Design Manual LRFD M 23-50 Chapter 13. Soil pressures used shall include effects from the backfill material and compaction methods, and shall be in accordance with the WSDOT Geotechnical Design Manual M 46-03 and the geotechnical report prepared for the project.

7-02.3(6)A3 Casting
This section is revised to read:

Concrete shall conform to Section 6-02.3(28)B, with a 28-day compressive strength as specified in the Plans or the Working Drawings submittal.
7-02.3(6)A4 Excavation and Bedding Preparation

The last paragraph is revised to read:

The upper layer of 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. The plan limits of the culvert bedding material shall extend 1-foot beyond the plan limits of the culvert or the Structure footing as applicable. The culvert bedding material shall be compacted in accordance with the Section 2-09.3(1)E requirements for gravel backfill for drains. After compaction, the culvert bedding material shall be screeded transversely to the specified line and grade. Voids in the screeded culvert bedding material shall be filled and then rescreeded prior to erecting the precast Structure.

7-02.3(6)B3 Erection

The last paragraph is revised to read:

Adjacent precast sections shall be connected by welding the weld-tie anchors in accordance with Section 6-03.3(25). Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties. The weld-tie anchor spacing shall not exceed 6'-0". After connecting the weld-tie anchors, the Contractor shall paint the exposed metal surfaces with one coat of field primer conforming to Section 9-08.1(2)F. Keyways shall be filled with grout conforming to Section 9-20.3(2).

7-02.3(6)C1 Casting

This section is revised to read:

PRCSBC shall consist of lid elements and “U” shaped base elements. The vertical legs of the “U” shaped base elements shall be full height matching the rise of the culvert, except as otherwise specified for culvert spans greater than 20-feet. For PRCSBC spans greater than 20-feet (as defined in Section 7-02.3(6)A1), the lid elements may include vertical legs of a maximum length of 4-feet.

All vertical and horizontal joints of PRCBC and PRCSBC elements shall be tongue and groove type joints, except PRCBC and PRCSBC of 20-foot span or less may have keyway joints connected by weld-tie anchors in accordance with Section 6-02.3(25)O. The weld-tie anchor spacing shall not exceed 6'-0". There shall be at least two galvanized steel tie plates across each top unit tongue and groove joint and each tongue and groove joint between upper and lower units, unless otherwise shown in the Plans or required by the seismic designed completed in accordance with Section 7-02.3(6)A1.

7-02.3(6)C3 Erection

This section is revised to read:

PRCBC and PRCSBC shall be erected and backfilled in accordance with the erection sequence specified in the Working Drawing submittal, and the construction equipment restrictions specified in Section 6-02.3(25)O.

The Contractor shall install a continuous strip of butyl rubber sealant within all tongue and groove joints prior to connecting the precast elements together. The butyl rubber sealant shall have a minimum cross section of 1/2-inch by 1 1/2-inch, unless otherwise shown in the Plans.
After connecting the joints with weld-tie anchors, the Contractor shall paint the exposed metal surfaces with one coat of field primer conforming to Section 9-08.1(2)F. Keyways shall be filled with grout conforming to Section 9-20.3(2).

The Contractor shall wrap all exterior joints along the top and sides of the PRCBC and PRCSBC with a 12-inch wide strip of external sealing band centered about the joint and adhesively bonded to the concrete surface.

Backfill beside the PRCBC and PRCSBC shall be brought up in sequential layers, compacted concurrently. The difference in backfill height on opposing sides of the Structure shall not exceed 2-feet.

7-02.4 Measurement
This section is supplemented with the following:

Culvert bedding material will be measured by the cubic yard of material placed.

7-02.5 Payment
This section is supplemented with the following:

“Culvert Bedding Material”, per cubic yard.

7-08.AP7
Section 7-08, General Pipe Installation Requirements
January 3, 2017

7-08.3(1)A Trenches
The second sentence of the last paragraph is revised to read:

The embankment material shall be compacted to 95 percent of maximum density and the moisture content at the time of compaction shall be between optimum and 3 percentage points below optimum as determined by the Compaction Control Tests specified in Section 2-03.3(14)D.

7-09.AP7
Section 7-09, Water Mains
April 3, 2017

7-09.3(24)D Dry Calcium Hypochlorite
The second paragraph is revised to read:

The number of grams of 70 percent test calcium hypochlorite required for a 20-foot length of pipe equals $0.238 \times d^2$, in which “$d$” is the diameter in inches.

8-01.AP8
Section 8-01, Erosion Control and Water Pollution Control
August 1, 2016

8-01.2 Materials
This section is supplemented with the following new paragraph:
Recycled concrete, in any form, shall not be used for any Work defined in Section 8-01.

8-01.3(7) Stabilized Construction Entrance
The last sentence of the first paragraph is revised to read:

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 street sweepers shall be used to remove and collect sediment and other debris from the Roadway, whenever required by the Engineer. 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.

Street washing with water will require the concurrence of the Engineer.

8-09.AP8
Section 8-09, Raised Pavement Markers
January 3, 2017

8-09.5 Payment
In the last paragraph, “flaggers and spotters” is revised to read “flaggers”.

8-10.AP8
Section 8-10, Guide Posts
January 4, 2016

8-10.3 Construction Requirements
The last sentence of the second paragraph is deleted.

8-11.AP8
Section 8-11, Guardrail
January 17, 2017

8-11.3(1)C Terminal and Anchor Installation
This section is supplemented with the following new paragraph:

Beam Guardrail Non-flared Terminals for Type 1 guardrail shall meet the crash test and evaluation criteria of NCHRP 350 or the Manual for Assessing Safety Hardware (MASH). Beam Guardrail Non-flared Terminals for Type 31 guardrail shall meet the crash test and evaluation criteria of MASH.

8-11.3(1)F Removing and Resetting Beam Guardrail
The last sentence of the first paragraph is deleted.
8-11.5 Payment
The paragraph following the Bid item “Removing and Resetting Beam Guardrail”, per linear foot is revised to read:

The unit Contract price per linear foot for “Removing and Resetting Beam Guardrail” shall be full payment for all costs to perform the Work as described in Section 8-11.3(1)F, except for replacement posts and blocks.

The paragraph following the Bid item “Raising Existing Beam Guardrail”, per linear foot is revised to read:

The unit Contract price per linear foot for “Raising Existing Beam Guardrail” shall be full payment for all costs to perform the Work as described in Section 8-11.3(1)E, except for replacement posts and blocks.

8-20.AP8
Section 8-20, Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical
January 3, 2017

8-20.1(1) Regulations and Code
The second paragraph is revised to read:

Wherever reference is made in these Specifications or in the Special Provisions to the Code, the rules, or the standards mentioned above, the reference shall be construed to mean the code, rule, or standard that is in effect on the Bid advertisement date.

8-20.3(5)A General
The last paragraph is revised to read:

Immediately after the sizing mandrel has been pulled through, install an equipment grounding conductor if applicable (see Section 8-20.3(9)) and any new or existing wire or cable as specified in the Plans. Where conduit is installed for future use, install a 200-pound minimum tensile strength pull string with the equipment grounding conductor. The pull string shall be attached to duct plugs or caps at both ends of the conduit.

8-20.3(5)A1 Fiber Optic Conduit
The last paragraph is deleted.

8-20.3(5)B Conduit Type
The second and third paragraphs are deleted and replaced with the following new paragraph:

PVC and HDPE conduits shall be Schedule 80 unless installed as innerduct.

8-20.3(5)D Conduit Placement
Item number 2 is revised to read:

2. 24-inches below the top of the untreated surfacing on a Roadbed.
8-20.3(9) Bonding, Grounding

The following two new paragraphs are inserted after the first paragraph:

Install an equipment grounding conductor in all new conduit, whether or not the equipment grounding conductor is called for in the wire schedule.

For each new conduit with innerduct install an equipment grounding conductor in only one of the innerducts unless otherwise required by the NEC or the Plans.

The fourth paragraph (after the preceding Amendments are applied) is revised to read:

Bonding jumpers and equipment grounding conductors meeting the requirements of Section 9-29.3(2)A3 shall be minimum #8 AWG, installed in accordance with the NEC. Where existing conduits are used for the installation of new circuits, an equipment grounding conductor shall be installed unless an existing equipment ground conductor, which is appropriate for the largest circuit, is already present in the existing raceway. The equipment ground conductor between the isolation switch and the sign lighter fixtures shall be minimum #14 AWG stranded copper conductor. Where parallel circuits are enclosed in a common conduit, the equipment-grounding conductor shall be sized by the largest overcurrent device serving any circuit contained within the conduit.

The second sentence of the fifth paragraph (after the preceding Amendments are applied) is revised to read:

A non-insulated stranded copper conductor, minimum #8 AWG with a full circle crimp on connector (crimped with a manufacturer recommended crimper) shall be connected to the junction box frame or frame bonding stud, the other end shall be crimped to the equipment bonding conductor, using a “C” type crimp connector.

The last two sentences of the sixth paragraph (after the preceding Amendments are applied) are revised to read:

For light standards, signal standards, cantilever and sign bridge Structures the supplemental grounding conductor shall be #4 AWG non-insulated stranded copper conductor. For steel sign posts which support signs with sign lighting or flashing beacons the supplemental grounding conductor shall be #6 AWG non insulated stranded copper conductor.

The fourth to last paragraph is revised to read:

Install a two grounding electrode system at each service entrance point, at each electrical service installation and at each separately derived power source. The service entrance grounding electrode system shall conform to the “Service Ground” detail in the Standard Plans. If soil conditions make vertical grounding electrode installation impossible an alternate installation procedure as described in the NEC may be used. Maintain a minimum of 6 feet of separation between any two grounding electrodes within the grounding system. Grounding electrodes shall be bonded copper, ferrous core materials and shall be solid rods not less than 10 feet in length if they are ½ inch in diameter or not less than 8 feet in length if they are ⅜ inch or larger in diameter.
8-20.3(13)A  Light Standards
The first sentence in the second to last paragraph is revised to read:

All new and relocated metal light standards shall be numbered for identification using painted 4 inch block gothic letters (similar to series C highway lettering) and numbers installed 3 feet above the base facing the Traveled Way.

The numbered list in the second to last paragraph is deleted and replaced with the following:

NN
CC-SSSS
VVV

Where:
NN – Is the pole number as identified in the Plans. May be one or more characters.
CC – Is the circuit letter as identified in the Plans. May be one or more characters.
SSSS – Is the service cabinet number as identified in the Plans. Do not include the two or three letter prefix. Up to four digits - do not include leading zeros.
VVV – Is the operating voltage of the luminaire. Always three digits.

8-20.3(13)C  Luminaires
The first paragraph is revised to read:

The Contractor shall mark the installation date on the inside of the luminaire ballast or driver housing using a permanent marking pen.
Section 9-01, Portland Cement
January 3, 2017

This section’s title is revised to read:

Cement

9-01.1 Types of Cement
This section is revised to read:

Cement shall be classified as portland cement, blended hydraulic cement, or rapid hardening hydraulic cement.

9-01.2(2) Vacant
This section, including title, is revised to read:

9-01.2(2) Rapid Hardening Hydraulic Cement
Rapid hardening hydraulic cement shall meet the requirements of ASTM C 1600.

9-01.2(3) Low Alkali Cement
This section is renumbered as follows:

9-01.2(1)A Low Alkali Cement

9-01.2(4) Blended Hydraulic Cement
This section is renumbered as follows:

9-01.2(1)B Blended Hydraulic Cement

In the first paragraph, the last two sentences of item number 3 are revised to read:

Separate testing of each source of fly ash at each proposed replacement level shall be conducted in accordance with ASTM C1012 at the storage temperature prescribed in Section 9.3 of the test procedure. Expansion at 180 days shall be 0.10 percent or less.

In the first paragraph, the last two sentences of item number 4 are revised to read:

Separate testing of each source of slag at each proposed replacement level shall be conducted in accordance with ASTM C1012 at the storage temperature prescribed in Section 9.3 of the test procedure. Expansion at 180 days shall be 0.10 percent or less.

In the first paragraph, the last two sentences of item number 5 are revised to read:

Separate testing of each source of fly ash or slag at each proposed replacement level shall be conducted in accordance with ASTM C1012 at the storage temperature prescribed in Section 9.3 of the test procedure. Expansion at 180 days shall be 0.10 percent or less.

9-01.3 Tests and Acceptance
The second paragraph is revised to read:
Cement producers/suppliers that certify portland cement or blended hydraulic cement shall participate in the Cement Acceptance Program as described in WSDOT Standard Practice QC 1. Rapid hardening hydraulic cement producers/suppliers are not required to participate in WSDOT Standard Practice QC 1.

9-03.AP9

Section 9-03, Aggregates
January 3, 2017

9-03.1(1) General Requirements
In this section, each reference to “Section 9-01.2(3)” is revised to read “Section 9-01.2(1)A”.

This first paragraph is supplemented with the following:

Reclaimed aggregate may be used if it complies with the specifications for Portland Cement Concrete. Reclaimed aggregate is aggregate that has been recovered from plastic concrete by washing away the cementitious materials.

9-03.1(2) Fine Aggregate for Portland Cement Concrete
This section is revised to read:

Fine aggregate shall consist of natural sand or manufactured sand, or combinations thereof, accepted by the Engineer, having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to meet the specifications.

9-03.1(2)A Deleterious Substances
This section is revised to read:

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 6 and not exceed the following values:

<table>
<thead>
<tr>
<th>Material</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material finer than No. 200 Sieve</td>
<td>2.5 percent by weight</td>
</tr>
<tr>
<td>Clay lumps and friable particles</td>
<td>3.0 percent by weight</td>
</tr>
<tr>
<td>Coal and lignite</td>
<td>0.25 percent by weight</td>
</tr>
<tr>
<td>Particles of specific gravity less than 2.00</td>
<td>1.0 percent by weight</td>
</tr>
</tbody>
</table>

Organic impurities shall be tested in accordance with AASHTO T 21 by the glass color standard procedure and results darker than organic plate no. 3 shall be rejected. A darker color results from AASHTO T 21 may be used provided that when tested for the effect of organic impurities on strength of mortar, the relative strength at 7 days, calculated in accordance with AASHTO T 71, is not less than 95 percent.

9-03.1(4) Coarse Aggregate for Portland Cement Concrete
This section is revised to read:

Coarse aggregate for concrete shall consist of gravel, crushed gravel, crushed stone, or combinations thereof having hard, strong, durable pieces free from adherent coatings. Coarse aggregate shall be washed to meet the specifications.

9-03.1(4)A Deleterious
This section, including title, is revised to read:
9-03.1(4)A Deleterious Substances

The amount of deleterious substances in the washed aggregate shall be tested in accordance with AASHTO M 80 and not exceed the following values:

- Material finer than No. 200: 1.0\(^1\) percent by weight
- Clay lumps and Friable Particles: 2.0 percent by weight
- Shale: 2.0 percent by weight
- Wood waste: 0.05 percent by weight
- Coal and Lignite: 0.5 percent by weight
- Sum of Clay Lumps, Friable Particles, and Chert (Less Than 2.40 specific gravity SSD): 3.0 percent by weight

\(^1\)If the material finer than the No. 200 sieve is free of clay and shale, this percentage may be increased to 1.5.

9-03.1(4)C Grading

The following new sentence is inserted at the beginning of the last paragraph:

Where coarse aggregate size 467 is used, the aggregate may be furnished in at least two separate sizes.

9-03.1(5) Combined Aggregate Gradation for Portland Cement Concrete

This section is revised to read:

As an alternative to using the fine aggregate sieve grading requirements in Section 9-03.1(2)B, and coarse aggregate sieve grading requirements in Section 9-03.1(4)C, a combined aggregate gradation conforming to the requirements of Section 9-03.1(5)A may be used.

9-03.1(5)A Deleterious Substances

This section is revised to read:

The amount of deleterious substances in the washed aggregates 3/16 inch or larger shall not exceed the values specified in Section 9-03.1(4)A and for aggregates smaller than 3/16 inch they shall not exceed the values specified in Section 9-03.1(2)A.

9-03.1(5)B Grading

The first paragraph is deleted.

9-03.8(2) HMA Test Requirements

In the table in item number 3, the heading “Statistical and Nonstatistical” is revised to read “Statistical”.

9-03.8(7) HMA Tolerances and Adjustments

In the table in item number 1, the column titled “Nonstatistical Evaluation” is deleted.

In the table in item 1, the last column titled “Commercial Evaluation” is revised to read “Visual Evaluation”.

9-03.11(1) Streambed Sediment

The following three new sentences are inserted after the first sentence of the first paragraph:

AMENDMENTS TO THE 2016 STANDARD SPECIFICATIONS BOOK
Revised: 6/1/17
Alternate gradations may be used if proposed by the Contractor and accepted by the Engineer. The Contractor shall submit a Type 2 Working Drawing consisting of 0.45 power maximum density curve of the proposed gradation. The alternate gradation shall closely follow the maximum density line and have Nominal Aggregate Size of no less than 1½ inches or no greater than 3 inches.

9-03.12(4) Gravel Backfill for Drains
The following new sentence is inserted at the beginning of the second paragraph:

As an alternative, AASHTO grading No. 57 may be used in accordance with Section 9-03.1(4)C.

9-03.12(5) Gravel Backfill for Drywells
The following new sentence is inserted at the beginning of the second paragraph:

As an alternative, AASHTO grading No. 4 may be used in accordance with Section 9-03.1(4)C.

9-03.21(1)B Concrete Rubble
This section, including title, is revised to read:

9-03.21(1)B Recycled Concrete Aggregate
Recycled concrete aggregates are coarse aggregates manufactured from hardened concrete mixtures. Recycled concrete aggregate may be used as coarse aggregate or blended with coarse aggregate for Commercial Concrete. Recycled concrete aggregate shall meet all of the requirements for coarse aggregate contained in Section 9-03.1(4) or 9-03.1(5). In addition to the requirements of Section 9-03.1(4) or 9-03.1(5), recycled concrete shall:

1. Contain an aggregated weight of less than 1 percent of adherent fines, vegetable matter, plastics, plaster, paper, gypsum board, metals, fabrics, wood, tile, glass, asphalt (bituminous) materials, brick, porcelain or other deleterious substance(s) not otherwise noted;
2. Be free of harmful components such as chlorides and reactive materials unless mitigation measures are taken to prevent recurrence in the new concrete;
3. Have an absorption of less than 10 percent when tested in accordance with AASHTO T 85.

Recycled concrete aggregate shall be in a saturated condition prior to mixing.

Recycled concrete aggregate shall not be placed below the ordinary high water mark of any water of the State.

9-03.21(1)D Recycled Steel Furnace Slag
This section title is revised to read:

Steel Slag

9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material
In the Hot Mix Asphalt column, each value of “20” is revised to read “25”.

The last column heading “Steel Furnace Slag” is revised to read “Steel Slag”.

The following new row is inserted after the second row:

| Coarse Aggregate for Commercial Concrete | 9-03.1(4) | 0 | 100 | 0 | 0 |

9-04.AP9

Section 9-04, Joint and Crack Sealing Materials

January 3, 2017

This section is supplemented with the following two new subsections:

9-04.11 Butyl Rubber Sealant
Butyl rubber sealant shall conform to ASTM C 990.

9-04.12 External Sealing Band
External sealing band shall by Type III B conforming to ASTM C 877.

9-04.1(2) Premolded Joint Filler for Expansion Joints
This section is supplemented with the following:

As an alternative to the above, a semi-rigid, non-extruding, resilient type, closed-cell polypropylene foam, preformed joint filler with the following physical properties as tested to AASHTO T 42 Standard Test Methods may be used.

<table>
<thead>
<tr>
<th>Closed-Cell Polypropylene Foam Preformed Joint Filler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Property</td>
</tr>
<tr>
<td>Water Absorption</td>
</tr>
<tr>
<td>Compression Recovery</td>
</tr>
<tr>
<td>Extrusion</td>
</tr>
<tr>
<td>Density</td>
</tr>
<tr>
<td>Water Boil (1 hr.)</td>
</tr>
<tr>
<td>Hydrochloric Acid Boil (1 hr.)</td>
</tr>
<tr>
<td>Heat Resistance °F</td>
</tr>
</tbody>
</table>

9-04.2(1) Hot Poured Joint Sealants
This section’s content is deleted and replaced with the following new subsections:

9-04.2(1)A Hot Poured Sealant
Hot poured sealant shall be sampled in accordance with ASTM D5167 and tested in accordance with ASTM D5329.

9-04.2(1)A1 Hot Poured Sealant for Cement Concrete Pavement
Hot poured sealant for cement concrete pavement shall meet the requirements of ASTM D6690 Type IV, except for the following:

1. The Cone Penetration at 25°C shall be 130 maximum.
2. The extension for the Bond, non-immersed, shall be 100 percent.

9-04.2(1)A2 Hot Poured Sealant for Bituminous Pavement
Hot poured sealant for bituminous pavement shall meet the requirements of ASTM D6690 Type I or Type II.

9-04.2(1)B Sand Slurry for Bituminous Pavement
Sand slurry is mixture consisting of the following components measured by total weight:

1. Twenty percent CSS-1 emulsified asphalt,
2. Two percent portland cement, and
3. Seventy-eight percent fine aggregate meeting the requirements of 9-03.1(2)B Class 2. Fine aggregate may be damp (no free water).

9-04.2(2) Poured Rubber Joint Sealer
The last paragraph is deleted.

9-04.4(1) Rubber Gaskets for Concrete Pipes and Precast Manholes
“AASHTO M 198” is revised to read “ASTM C 990”.

9-04.4(3) Gaskets for Aluminum or Steel Culvert or Storm Sewer Pipe
In the last sentence, “AASHTO M 198” is revised to read “ASTM C 990”.

9-06.AP9 Section 9-06, Structural Steel and Related Materials
January 3, 2017

9-06.5(3) High-Strength Bolts
In this section, “ASTM A325” is revised to read “ASTM F3125 Grade A325”, “ASTM A490” is revised to read “ASTM F3125 Grade A490”, and “ASTM F1852” is revised to read “ASTM F3125 Grade F1852”.

In the fifth paragraph, “ASTM-A325” is revised to read “ASTM F3125”.

9-06.12 Bronze Castings
In this section, “AASHTO M107” is revised to read “ASTM B22”.

9-06.16 Roadside Sign Structures
In the first paragraph, “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

9-07.AP9 Section 9-07, Reinforcing Steel
August 1, 2016

9-07.1(1)A Acceptance of Materials
The first sentence of the first paragraph is revised to read:
Reinforcing steel rebar manufacturers shall comply with the National Transportation Product Evaluation Program (NTPEP) Work Plan for Reinforcing Steel (rebar) Manufacturers.

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

Steel reinforcing bar manufacturers use either English or a Metric size designation while stamping rebar.

9-07.1(2) Bending

The first two sentences of the first paragraph are deleted and replaced with the following two new sentences:

Steel reinforcing bars shall be cut and bent cold to the shapes shown on the Plans. Fabrication tolerances shall be in accordance with ACI 315.

9-10.AP9

Section 9-10, Piling

August 1, 2016

9-10.3 Cast-In-Place Concrete Piling

This section is revised to read:

Reinforcement for cast-in-place concrete piles shall conform to Section 9-07.2.

9-11.AP9

Section 9-11, Waterproofing

January 3, 2017

This section (and all subsections), including title, is revised to read:

9-11 Waterproof Membrane

9-11.1 Asphalt for Waterproofing

Waterproof membrane shall be a sheet membrane conforming to ASTM D 6153 Type III, the puncture capacity specified below, and either the thin polymer sheet tensile stress or the geotextile and fabric grab tensile strength specified below:

<table>
<thead>
<tr>
<th>Performance Properties</th>
<th>Test Method</th>
<th>Specification Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Stress (for Thin Polymer Sheets)</td>
<td>ASTM D 882</td>
<td>75 pounds per inch min.</td>
</tr>
<tr>
<td>Grab Tensile Strength (for Geotextiles and Fabrics)</td>
<td>ASTM D 4632 (Woven or Nonwoven)</td>
<td>200 pounds min.</td>
</tr>
<tr>
<td>Puncture Capacity (For Thin Polymer Sheets, Geotextiles and Fabrics)</td>
<td>ASTM E 154</td>
<td>200 pounds min.</td>
</tr>
</tbody>
</table>

Waterproofing membrane will be accepted based on a Manufacturer’s Certificate of Compliance with each lot of waterproof membrane.
9-11.2 Primer for Waterproof Membrane
The primer for the waterproof membrane shall be appropriate for bonding the sheet membrane to the bridge deck surface and shall be compatible with the membrane in accordance with the waterproof membrane manufacturer’s recommendations.

9-16.AP9
Section 9-16, Fence and Guardrail
January 17, 2017

9-16.3(3) Galvanizing
The first three sentences are deleted and replaced with the following single sentence:

W-beam or thrie beam rail elements and terminal sections shall be galvanized in accordance with AASHTO M 180, Class A, Type II.

9-20.AP9
Section 9-20, Concrete Patching Material, Grout, and Mortar
January 3, 2017

This section is supplemented with the following new subsection:

9-20.5 Bridge Deck Repair Material
Bridge deck repair material shall be either an ultra-low viscosity, two-part liquid, polyurethane-hybrid polymer concrete, or a pre-packaged cement based repair mortar, conforming to the following requirements:

2. Total soluble chloride ion content by mass of product shall conform to the limits specified in Section 6-02.3(2) for reinforced concrete.
3. Permeability of less than 2,000 coulombs at 56-days in accordance with AASHTO T 277.

If pre-packaged deck repair material does not include coarse aggregate, the Contractor shall extend the mix with coarse aggregate as recommended by the manufacturer.

9-23.AP9
Section 9-23, Concrete Curing Materials and Admixtures
January 3, 2017

9-23.9 Fly Ash
The first paragraph is revised to read:

Fly ash shall conform to the requirements of AASHTO M295 Class C or F including supplementary optional chemical requirements as set forth in Table 2.

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

The supplementary optional chemical limits in AASHTO M295 Table 2 do not apply to fly ash used in Controlled Density Fill.
9-23.12 Metakaolin

This section, including title, is revised to read:

9-23.12 Natural Pozzolan

Natural Pozzolans shall be either Metakaolin or ground Pumice and shall conform to the requirements of AASHTO M295 Class N, including supplementary optional chemical requirements as set forth in Table 2.

9-28.AP9

Section 9-28, Signing Materials and Fabrication

April 3, 2017

9-28.14(3) Aluminum Structures

This section is revised to read:

Welding of aluminum shall be in accordance with AWS D1.2/D1.2M, latest edition, Structural Welding Code – Aluminum.

Aluminum alloy filler metals utilized on anodized structures shall result in color matching to base metals.

9-29.AP9

Section 9-29, Illumination, Signal, Electrical

January 3, 2017

9-29.2 Junction Boxes, Cable Vaults, and Pull Boxes

This section is supplemented with the following new subsections:

9-29.2(5) Testing Requirements

The Contractor shall provide for testing of junction boxes, cable vaults and pull boxes. Junction boxes, cable vaults and pull boxes shall be tested by an independent materials testing facility, and a test report issued documenting the results of the tests performed.

For each junction box, vault and pull box type, the independent testing laboratory shall meet the requirements of AASHTO R 18 for Qualified Tester and Verified Test Equipment. The test shall be conducted in the presence of a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural, and each test sheet shall have the Professional Engineer’s original signature, date of signature, original seal, and registration number. One copy of the test report shall be furnished to the Contracting Agency certifying that the box and cover meet or exceed the loading requirements for that box type, and shall include the following information:

1. Product identification.
2. Date of testing.
3. Description of testing apparatus and procedure.
4. All load deflection and failure data.
5. Weight of box and cover tested.
6. Upon completion of the required test(s) the box shall be loaded to failure or to the maximum load possible on the testing machine (70,000 pounds minimum).

7. A brief description of type and location of failure or statement that the testing machine reached maximum load without failure of the box.

9-29.2(5)A Standard Duty Boxes and Vaults
Standard Duty Concrete Junction Boxes, Cable Vaults, and Pull Boxes shall be load tested to 22,500 pounds. The test load shall be applied uniformly through a 10 by 10 by 1-inch steel plate centered on the lid. The test load shall be applied and released ten times, and the deflection at the test load and released state shall be recorded for each interval. At each interval the junction box shall be inspected for lid deformation, failure of the lid/frame welds, vertical and horizontal displacement of the lid/frame, cracks, and concrete spalling.

Concrete junction boxes will be considered to have withstood the test if none of the following conditions are exhibited:

1. Permanent deformation of the lid or any impairment to the function of the lid.
2. Vertical or horizontal displacement of the lid frame.
3. Cracks wider than 0.012 inches that extend 12 inches or more.
4. Fracture or cracks passing through the entire thickness of the concrete.
5. Spalling of the concrete.

9-29.2(5)B Retrofit Security Lids for Standard Duty Concrete Junction Boxes
Security lids used to retrofit existing Standard Duty Concrete Junction Boxes shall be tested as follows:

1. The security lid shall be installed on any appropriately sized box that is currently approved on the Qualified Products List.
2. The security lid and box assembly shall be load tested in accordance with Section 9-29.2(5)A. After the ten load cycles but before loading to failure, the security lid shall be fully opened and removed to verify operability.
3. The locking mechanism(s) shall be tested as follows:
   a. The locking mechanism shall be cycled 250 times (locked, then unlocked again) at room temperature (60-80°F). If there is more than one identical locking mechanism, only one needs to be cycled in this manner.
   b. Temperature changes should be limited to no more than 60°F per hour.
c. The security lid shall be cooled to and held at -30°F for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature.

d. The security lid shall be heated to and held at 120-122°F for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature.

e. The security lid shall be temperature adjusted to and held at 110°F and 95% humidity for 15 minutes. The locking mechanism shall then be cycled once to verify operation at this temperature and humidity.

9-29.2(5)C Standard Duty Non-Concrete Junction Boxes
Non-concrete Junction Boxes shall be tested as defined in the ANSI/SCTE 77 Tier 15 test method using the test load of 22,500 pounds (minimum) in place of the design load during testing. In addition, the Contractor shall provide a Manufacturer Certificate of Compliance for each non-concrete junction box installed.

9-29.2(5)D Heavy-Duty Boxes and Vaults
Heavy-Duty Junction Boxes, Cable Vaults, and Pull Boxes shall be load tested to 46,000 pounds. The test load shall be applied vertically through a 10 by 20 by 1-inch steel plate centered on the lid with an orientation both on the long axis and the short axis of the junction box. The test load shall be applied and released ten times on each axis. The deflection at the test load and released state shall be recorded for each interval. At each interval the test box shall be inspected for lid deformation, failure of the lid or frame welds, vertical and horizontal displacement of the lid frame, cracks, and concrete spalling. After the twentieth loading interval the test shall be terminated with a 60,000 pound load being applied vertically through the steel plate centered on the lid and with the long edge of steel plate orientated parallel to the long axis of the box.

Heavy-Duty Junction Boxes will be considered to have withstood the 46,000 pound test if none of the following conditions are exhibited:

1. Permanent deformation of the lid or any impairment to the function of the lid.
2. Vertical or horizontal displacement of the lid frame.
3. Cracks wider than 0.012 inches that extend 12 inches or more.
4. Fracture or cracks passing through the entire thickness of the concrete.
5. Spalling of the concrete.

Heavy-Duty Junction Boxes will be considered to have withstood the 60,000 pound test if all of the following conditions are exhibited:

1. The lid is operational.
2. The lid is securely fastened.
3. The welds have not failed.

4. Permanent dishing or deformation of the lid is ¼ inch or less.

5. No buckling or collapse of the box.

9-29.2(1) Standard Duty and Heavy Duty Junction Boxes
This section, including title, is revised to read:

9-29.2(1) Junction Boxes
For the purposes of this Specification concrete is defined as portland cement concrete and non-concrete is all others.

The Contractor shall provide shop drawings for all components, hardware, lid, frame, reinforcement, and box dimensions. The shop drawings shall be prepared by (or under the supervision of) a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural. Each sheet shall carry the following:

1. Professional Engineer’s original signature, date of signature, original seal, and registration number. If a complete assembly drawing is included which references additional drawing numbers, including revision numbers for those drawings, then only the complete assembly drawing is required to be stamped.

2. The initials and dates of all participating design professionals.

3. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

Design calculations shall carry on the cover page, the Professional Engineer’s original signature, date of signature, original seal, and registration number.

For each type of junction box, or whenever there is a change to the junction box design, a proof test, as defined in this Specification, shall be performed and new shop drawings submitted.

9-29.2(1)A Standard Duty Junction Boxes
This section is revised to read:

Standard Duty Junction Boxes are defined as Type 1, 2 and 8 junction boxes and shall have a minimum load rating of 22,500 pounds and be tested in accordance with Section 9-29.2(5). A complete Type 8 Junction Box includes the spread footing shown in the Standard Plans. All Standard Duty Junction Boxes placed in sidewalks, walkways, and shared use paths shall have slip resistant surfaces. Non-slip lids and frames shall be hot dip galvanized in accordance with AASHTO M111.

9-29.2(1)A1 Concrete Junction Boxes
The Standard Duty Concrete Junction Box steel frame, lid support, and lid shall be painted with a black paint containing rust inhibitors or painted with a shop applied, inorganic zinc primer in accordance with Section 6-07.3, or hot-dip galvanized in accordance with AASHTO M 111.
Concrete used in Standard Duty Junction Boxes shall have a minimum compressive strength of 6,000 psi when reinforced with a welded wire hoop, or 4,000 psi when reinforced with welded wire fabric or fiber reinforcement. The frame shall be anchored to the box by welding headed studs ⅜ by 3 inches long, as specified in Section 9-06.15, to the frame. The wire fabric shall be attached to the studs and frame with standard tie practices. The box shall contain ten studs located near the centerline of the frame and box wall. The studs shall be placed one anchor in each corner, one at the middle of each width and two equally spaced on each length of the box.

Materials for Type 1, 2, and 8 Concrete Junction Boxes shall conform to the following:

<table>
<thead>
<tr>
<th>Materials</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>Section 6-02</td>
</tr>
<tr>
<td>Reinforcing Steel</td>
<td>Section 9-07</td>
</tr>
<tr>
<td>Fiber Reinforcing</td>
<td>ASTM C1116, Type III</td>
</tr>
<tr>
<td>Lid</td>
<td>ASTM A786 diamond plate steel</td>
</tr>
<tr>
<td>Slip Resistant Lid</td>
<td>ASTM A36 steel</td>
</tr>
<tr>
<td>Frame</td>
<td>ASTM A786 diamond plate steel or ASTM A36 steel</td>
</tr>
<tr>
<td>Slip Resistant Frame</td>
<td>ASTM A36 steel</td>
</tr>
<tr>
<td>Lid Support</td>
<td>ASTM A36 steel, or ASTM A1011 SS Grade 36 (or higher)</td>
</tr>
<tr>
<td>Handle &amp; Handle support</td>
<td>ASTM A36 steel, or ASTM A1011 CS (Any Grade) or SS (Any Grade)</td>
</tr>
<tr>
<td>Anchors (studs)</td>
<td>Section 9-06.15</td>
</tr>
<tr>
<td>Bolts, Studs, Nuts, Washers</td>
<td>ASTM F593 or A193, Type 304 or 316, or Stainless Steel grade 302, 304, or 316 steel in accordance with approved shop drawing</td>
</tr>
<tr>
<td>Locking and Latching Mechanism Hardware and Bolts</td>
<td>In accordance with approved shop drawings</td>
</tr>
</tbody>
</table>

9-29.2(1)A2 Non-Concrete Junction Boxes

Material for the non-concrete junction boxes shall be of a quality that will provide for a similar life expectancy as portland cement concrete in a direct burial application.

Type 1, 2, and 8 non-concrete junction boxes shall have a Design Load of 22,500 pounds and shall be tested in accordance with Section 9-29.2(5). Non-concrete junction boxes shall be gray in color and have an open bottom design with approximately the same inside dimensions, and present a load to the bearing surface that is less than or equal to the loading presented by the concrete junction boxes shown in the Standard Plans. Non-concrete junction box lids shall include a pull slot and embedded 6 by 6 by ¼-inch steel plate, and shall be secured with two ½ inch stainless steel Penta-head bolts recessed into the cover. The tapped holes for the securing bolts shall extend completely through the box to prevent accumulation of debris. Bolts shall conform to ASTM F593, stainless steel.

9-29.2(1)B Heavy-Duty Junction Boxes

The first paragraph is revised to read:
Heavy-Duty Junction Boxes are defined as Type 4, 5, and 6 junction boxes and shall be concrete and have a minimum vertical load rating of 46,000 pounds without permanent deformation and 60,000 pounds without failure when tested in accordance with Section 9-29.2(5).

9-29.2(1)C  Testing Requirements
This section is deleted in its entirety.

9-29.2(2)  Small Cable Vaults, Standard Duty Cable Vaults, Standard Duty Pull Boxes, and Heavy Duty Pull Boxes
This section, including title, is revised to read:

9-29.2(2)  Cable Vaults and Pull Boxes
Cable Vaults and Pull Boxes shall be constructed as a concrete box and as a concrete lid. The lids for Cable Vaults and Pull Boxes shall be interchangeable and both shall fit the same box as shown in the Standard Plans.

The Contractor shall provide shop drawings for all components, including concrete box, Cast Iron Ring, Ductile Iron Lid, Steel Rings, and Lid. In addition, the shop drawings shall show placement of reinforcing steel, knock outs, and any other appurtenances. The shop drawing shall be prepared by or under the direct supervision of a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural. Each sheet shall carry the following:

1. Professional Engineer’s original signature, date of signature, original seal, and registration number. If a complete assembly drawing is included which references additional drawing numbers, including revision numbers for those drawings, then only the complete assembly drawing is required to be stamped.

2. The initials and dates of all participating design professionals.

3. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

Design calculations shall carry on the cover page, the Professional Engineer’s original signature, date of signature, original seal, and registration number.

For each type of box or whenever there is a change to the Cable Vault or Pull box design, a proof test, as defined in this Specification, shall be performed and new shop drawings submitted.

9-29.2(2)A  Small Cable Vaults, Standard Duty Cable Vaults, and Standard Duty Pull Boxes
This section’s title is revised to read:

9-29.2(2)A  Standard Duty Cable Vaults and Pull Boxes
The first paragraph is revised to read:

Standard Duty Cable Vaults and Pull Boxes shall be concrete and have a minimum load rating of 22,500 pounds and be tested in accordance with Section 9-29.2(5). For the
purposes of this Section, Small Cable Vaults are considered a type of Standard Duty Cable Vault.

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

Concrete for Standard Duty Cable Vaults and Pull Boxes shall have a minimum compressive strength of 4,000 psi.

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

All Standard Duty Cable Vaults and Pull Boxes placed in sidewalks, walkways, and shared-use paths shall have slip-resistant surfaces.

The fourth paragraph (up until the colon) is revised to read:

Materials for Standard Duty Cable Vaults and Pull Boxes shall conform to the following:

9-29.2(2)B Heavy-Duty Cable Vaults and Pull Boxes

The first paragraph is revised to read:

Heavy-Duty Cable Vaults and Pull Boxes shall be constructed of concrete having a minimum compressive strength of 4,000 psi, and have a minimum vertical load rating of 46,000 pounds without permanent deformation and 60,000 pounds without failure when tested in accordance with Section 9-29.2(5).

9-29.2(3) Structure Mounted Junction Boxes

The first and second paragraphs are revised to read:

Surface mounted junction boxes and concrete embedded junction boxes installed in cast-in-place structures shall be stainless steel NEMA 4X.

Concrete embedded junction boxes installed in structures constructed by slip forming shall be stainless steel NEMA 3R and shall be adjustable for depth, with depth adjustment bolts, which are accessible from the front face of the junction box with the lid installed.

9-29.3(1) Fiber Optic Cable

This section is revised to read:

All fiber optic cables shall be single mode fiber optic cables unless otherwise specified in the Contract. All fiber optic cables shall meet the following requirements:

1. Compliance with the current version of ANSI/ICEA S-87-640. A product data specification sheet clearly identifying compliance or a separate letter from manufacturer to state compliance shall be provided.

2. Cables shall be gel free, loose tube, low water peak, and all dielectric with no metallic component.

3. Cables shall not be armored unless specified in the Contract.
4. Cables shall be approved for mid-span entries and be rated by the manufacturer for outside plant (OSP) use, placement in underground ducts, and aerial installations.

5. Fiber counts shall be as specified in the Contract.

6. Fibers and buffer tubes shall be color coded in accordance with the current version of EIA/TIA-598.

7. Fibers shall not have any factory splices.

8. Outer Jacket shall be Type M (Medium Density Polyethylene). Outer jacket shall be free from holes, splits, blisters, or other imperfections and must be smooth and concentric as is consistent with the best commercial practice.

9. A minimum of one (1) rip cord is required for each cable.

10. Cable markings shall meet the following additional requirements:

a. Color shall be white or silver.

b. Markings shall be approximately 3 millimeters (118 mils) in height, and dimensioned and spaced to produce good legibility.

c. Markings shall include the manufacturer’s name, year of manufacture, the number of fibers, the words “OPTICAL CABLE”, and sequential length marks.

d. Sequential length markings shall be in meters or feet, spaced at intervals not more than 1 meter or 2 feet apart, respectively.

e. The actual cable length shall not be shorter than the cable length marking. The actual cable length may be up to 1% longer than the cable length marking.

f. Cables with initial markings that do not meet these requirements will not be accepted and may not be re-marked.

11. Short term tensile strength shall be a minimum of 600 pounds (1bs). Long term tensile strength shall be a minimum of 180 pounds (1bs). Tensile strength shall be achieved using a fiberglass reinforced plastic (FRP) central member and / or aramid yarns.

12. All cables shall be new and free of material or manufacturing defects and dimensional non-uniformity that would:

a. Interfere with the cable installation using accepted cable installation practices;

b. Degrade the transmission performance or environmental resistance after installation;
c. Inhibit proper connection to interfacing elements;

d. Otherwise yield an inferior product.

13. The fiber optic cables shall be shipped on reels with a drum diameter at least 20 times the diameter of the cable, in order to prevent damage to the cable. The reels shall be substantial and constructed so as to prevent damage during shipment and handling. Reels shall be labeled with the same information required for the cable markings, with the exception that the total length of cable shall be marked instead of incremental length marks. Reels shall also be labeled with the type of cable.

This section is supplemented with the following new subsection:

9-29.3(1)B Multimode Optical Fibers
Where multimode fiber optic cables are specified in the Contract, the optical fibers shall be one of the following types, as specified in the Contract:

a. Type OM1, meeting the requirements of EIA/TIA 492-AAAA-A or ISO/IEC 11801. The fiber core diameter shall be 62.5 µm.

b. Type OM2, meeting the requirements of EIA/TIA 492-AAAB-A or ISO/IEC 11801. The fiber core diameter shall be 50 µm.

All multimode optical fibers shall have a maximum attenuation of 3.0 dB/km at 850nm and 1.0 dB/km at 1300nm. Completed cable assemblies shall be rated for 1000BaseLX Ethernet communications.

9-29.3(1)A Singlemode Fiber Optic Cable
This section is revised to read:

Single-Mode optical fibers shall be EIA/TIA 492-CAAB or ISO/IEC 11801 Type OS2, low water peak zero dispersion fibers, meeting the requirements of ITU-T G.652.D.

9-29.6 Light and Signal Standards
The third paragraph is revised to read:

Light standard, signal standards, slip base hardware and foundation hardware shall be hot dip galvanized in accordance with AASHTO M 111 and AASHTO M 232. Where colored standards are required, standards shall be powder-coated after galvanizing in accordance with Section 6-07.3(11). The standard color shall be as specified in the Contract.

9-29.6(1) Steel Light and Signal Standards
In the first paragraph, “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

9-29.6(2) Slip Base Hardware
In this section, “ASTM A325” is revised to read “ASTM F3125 Grade A325”.

9-29.7(2) Fused Quick-Disconnect Kits
The table is supplemented with the following new row:
The following footnote is inserted after the table:

* Applies to all LED luminaires, regardless of wattage. Fuses for LED luminaires shall be slow blow.

9-29.10 Luminaires
The first sentence of the third paragraph is revised to read:

All luminaires shall be provided with markers for positive identification of light source type and wattage in accordance with ANSI C136.15-2011, with the exception that LED luminaires shall be labeled with the wattage of their conventional luminaire equivalents – the text “LED” is optional.

The table in the fourth paragraph is revised to read:

<table>
<thead>
<tr>
<th>Conventional Lamp Wattage</th>
<th>Conventional Wattage Legend</th>
<th>Equivalent LED Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>7</td>
<td>7E</td>
</tr>
<tr>
<td>100</td>
<td>10</td>
<td>10E</td>
</tr>
<tr>
<td>150</td>
<td>15</td>
<td>15E</td>
</tr>
<tr>
<td>175</td>
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<td>17E</td>
</tr>
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<td>200</td>
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<td>20E</td>
</tr>
<tr>
<td>250</td>
<td>25</td>
<td>25E</td>
</tr>
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<td>310</td>
<td>31</td>
<td>31E</td>
</tr>
<tr>
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<td>40</td>
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</tr>
<tr>
<td>700</td>
<td>70</td>
<td>70E</td>
</tr>
<tr>
<td>750</td>
<td>75</td>
<td>75E</td>
</tr>
<tr>
<td>1,000</td>
<td>X1</td>
<td>X1E</td>
</tr>
</tbody>
</table>

9-29.25 Amplifier, Transformer, and Terminal Cabinets
Item 2C is revised to read:

c. Transformer up to 12.5 KVA  20"  48"  24"
   Transformer 12.6 to 35 KVA  30"  60"  32"

The following new sentence is inserted before the last sentence of item number 10:

There shall be an isolation breaker on the input (line) side of the transformer, and a breaker array on the output (load) side.

9-35.AP9
Section 9-35, Temporary Traffic Control Materials
August 1, 2016

9-35.12 Transportable Attenuator
The second sentence of the first paragraph is revised to read:

The transportable attenuator shall be mounted on, or attached to, a host vehicle that complies with the manufacturer’s recommended weight range.
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INTRODUCTION
(April 16, 2016 Tacoma GSP)

The following special provisions shall be used in conjunction with the "2016 Standard Specifications for Road, Bridge and Municipal Construction" and "Standard Plans for Road, Bridge, and Municipal Construction" as prepared by the Washington State Department of Transportation (WSDOT). State Standard Specifications are available through WSDOT, by calling (360) 705-7430, emailing engrpubs@wsdot.wa.gov, or may be downloaded, free of charge, from this location on the WSDOT home page: http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm

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 GSPs are labeled under the headers of each GSP, with the date of the GSP and its source, as follows:

(May 18, 2007 APWA GSP)
(August 7, 2006 WSDOT GSP)
(April 2, 2007 Tacoma GSP)

The project specific Special Provisions are labeled under the headers of each Special Provision as follows: (******)

DESCRIPTION OF WORK
(******)

This Contract shall generally consist of removing trees, planting new trees and pruning existing trees on City property and the rights-of-way. This work will be completed on an as needed basis.

END OF SECTION
1-01 DEFINITIONS AND TERMS

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

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.

**Engineer**
The term engineer throughout this specification refers to the project manager.

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

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

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

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

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

Supplement this Section with the following:

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

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

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

All references to “final contract voucher certification” shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.
Additive
A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

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

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

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

Contract Documents
See definition for “Contract”.

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

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

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

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

This section is supplemented with the following:
(July 28, 2016 Tacoma GSP)

All references to the acronym D/M/WBE” shall be revised to read “DBE/SBE”.
All references in the Standard Specifications to the term “Proposal Bond” shall be revised to read “Bid Bond.”

Base Bid
The summation of Bid Item amounts (extensions) in the Bid Forms, excluding Additives, Alternates, Deductives, and taxes collected separately pursuant to Section 1-07.2.

Calendar Day
The time period of 24 hours measured from midnight to the next midnight, including weekends and holidays.
**Change Order**
A written order to the Contractor, issued by the Contracting Agency after execution of the contract, authorizing an addition, deletion, or other revision in the Work, within the scope of the Contract Documents, and establishing the basis of payment and time adjustments, if any, for the Work affected by the change.

**Day**
Unless otherwise specified, a calendar day.

**Deductive**
A supplemental unit of work or group of Bid Items, identified separately in the Bid, which may, at the discretion of the Contract Agency, be deducted from the Base Bid should the Contract Agency choose not to Award the total Base Bid.

**Grand Total Price**
The Grand Total Price of the Contract will include the Base Bid, Additives, Alternates, Deductives, Force Accounts, and taxes collected separately pursuant to Section 1-07.2.

**Standard Specifications**
Divisions One through Nine of the specified edition of the WSDOT “Standard Specifications for Road, Bridge, and Municipal Construction.”

END OF SECTION
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.

Add the following new section:
1-02.1(1) Supplemental Qualifications Criteria
(March 25, 2009 Tacoma GSP)

In addition, the Contracting Agency has established Contracting Agency-specific and/or project-specific supplemental criteria, in accordance with RCW 39.04.350(2), for determining Bidder responsibility, including the basis for evaluation and the deadline for appealing a determination that a Bidder is not responsible. These criteria are contained in Section 1-02.1(3).

1-02.1(3) Supplemental Qualification Criteria
(******)

The Contractor shall submit a Statement of Qualifications with this Bid.

The forms shall be completed as indicated and submitted with the bid for the Contractor and all Subcontractors. Failure to submit the completed forms and meet the requirements as stated in Section 1-02.1 of the Special Provisions shall be grounds for rejection of bid.

Qualifications of the Contractor:

Only Contractors with a record of at least three successfully completed projects within the past five (5) years of similar scope, complexity, and overall cost will be considered. The Contractor must have completed at least one (1) project in each of the three (3) categories: tree removal, tree pruning, and tree planting. At least two (2) of these projects must have been performed for a municipality.

An ISA Certified Arborist shall be on the Primary Contractor’s staff.

1-02.4(1) General
(******)
The first sentence of the last paragraph is revised to read:

Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business 15 business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.5 Proposal Forms
(******)
Delete this section and replace it with the following:

The Proposal Form will describe the work, estimated quantities, and units of measurement. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; total bid amounts; total base bid; contractor name; and, where applicable, retail sales taxes.
The Proposal Form will also provide acknowledgment of addenda; the bidder’s name, address, telephone number, and signature; previous experience; a State of Washington Contractor’s Registration Number; a Washington Unified Business Identifier; and an ISA Certified Arborist Registration Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

1-02.6 Preparation of Proposal

The second paragraph is supplemented with the following:

(June 27, 2011 APWA GSP)

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.

5. Any correction to a bid made by interlineations, alteration, or erasure, shall be initialed by the signer of the bid.

The last paragraph is revised to read:

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

The fourth paragraph is revised to read:

(October 18, 2013 Tacoma GSP)

The bidder shall submit the following completed forms:

City of Tacoma – SBE Utilization Form
City of Tacoma – Prime Contractor Pre-Work Form

1-02.7 Bid Deposit

(April 1, 2012 Tacoma GSP)

Delete this section and replace it with the following:

A deposit of at least 5 percent of the total Bid shall accompany each Bid. This deposit may be cash, certified check, cashier’s check, or a bid bond (Surety bond). Any bid bond shall be on a form acceptable to the Contracting Agency and shall be signed by the Bidder and the Surety. A bid bond shall not be conditioned in any way to modify the minimum 5 percent required. The Surety shall: (1) be registered with the Washington State Insurance Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner.

The failure to furnish a Bid deposit of a minimum of 5 percent shall make the Bid nonresponsive and shall cause the Bid to be rejected by the Contracting Agency.
If a Bid Bond is furnished, the form furnished by the Contracting Agency must be followed. No variations from the language thereof will be accepted.

**1-02.9 Delivery of Proposal**  
**(August 15, 2016 APWA GSP, Option A)**  
*Delete this section and replace it with the following:*

Each proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

If the project has FHWA funding and requires DBE Written Confirmation Document(s) or Good Faith Effort (GFE) Documentation, then to be considered responsive, the Bidder shall submit written Confirmation Documentation from each DBE firm listed on the Bidder’s completed DBE Utilization Certification, form 272-056 EF, as required by Section 1-02.6. The DBE Written Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid Proposal or as a Supplement to the Bid. The document(s) shall be received **no later than 24 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with “DBE Supplemental Information” added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any DBE confirmations or GFE documentation proposal that is received after the time specified above, or received in a location other than that specified in the Call for Bids.

**1-02.10 Withdrawing, Revising, or Supplementing Proposal**  
**(March 16, 2016 Tacoma GSP)**  
*Delete this section and replace it with the following:*

After submitting a Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person, and
2. The Contracting Agency receives the request before the time set for receipt of Proposals.
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

The original Bid Proposal may be supplemented, or revised and resubmitted as the official Bid Proposal if the Contracting Agency receives it before the time set for receipt of Proposals.

**1-02.13 Irregular Proposals**  
**(October 18, 2013 Tacoma GSP)**  
*Revise item 1 to read:*

1. A proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The authorized proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;

e. A price per unit cannot be determined from the Bid Proposal;

f. The Proposal form is not properly executed;

g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;

h. The bidder fails to submit or properly complete the “City of Tacoma – SBE Utilization Form” and “City of Tacoma – Prime Contractor Pre-Work Form” as required in Section 1-02.6;

i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or

j. More than one proposal is submitted for the same project from a Bidder under the same or different names.

1-02.14 Disqualification of Bidders
(October 18, 2013 Tacoma GSP)

A Bidder will be deemed not responsible if:

1. the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or

2. evidence of collusion exists with any other Bidder or potential Bidder. Participants in collusion will be restricted from submitting further bids; or

3. the Bidder, in the opinion of the Contracting Agency, is not qualified for the work or to the full extent of the bid, or to the extent that the bid exceeds the authorized prequalification amount as may have been determined by a prequalification of the Bidder; or

4. an unsatisfactory performance record exists based on past or current Contracting Agency work or for work done for others, as judged from the standpoint of conduct of the work; workmanship; or progress; affirmative action; equal employment opportunity practices; termination for cause; or Disadvantaged Business Enterprise, Minority Business Enterprise, or Women’s Business Enterprise utilization; or

5. there is uncompleted work (Contracting Agency or otherwise) which in the opinion of the Contracting Agency might hinder or prevent the prompt completion of the work bid upon; or

6. the Bidder failed to settle bills for labor or materials on past or current contracts, unless there are extenuating circumstances acceptable to the Contracting Agency; or

7. the Bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract, unless there are extenuating circumstances acceptable to the Contracting Agency; or

8. the Bidder is unable, financially or otherwise, to perform the work, in the opinion of the Contracting Agency; or

9. there are any other reasons deemed proper by the Contracting Agency; or

10. the Bidder fails to meet the Project-specific supplemental bidder responsibility criteria listed in the Section 1-021(2); or

11. The bidder fails to meet the SBE requirements as described in Section 1-02.6.

As evidence that the Bidder meets the bidder responsibility criteria above, the apparent two lowest Bidders must submit to the Contracting Agency within 24 hours of the bid submittal deadline, documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with all applicable responsibility criteria, including all documentation specifically listed in the supplemental criteria. The Contracting Agency reserves the right to request such documentation from other Bidders as well, and to request further documentation as needed to assess bidder responsibility.

The basis for evaluation of Bidder compliance with these supplemental criteria shall be any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) which any
reasonable owner would rely on for determining such compliance, including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from owners for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above 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 24 hours of receipt of the Contracting Agency’s determination by presenting its appeal to the Contracting Agency. The Contracting Agency will consider the appeal 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 final determination.

1-02.15 Pre Award Information

(* *****)

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:

4. A breakdown of costs assigned to any bid item,
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.

END OF SECTION
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.

1-03.2 Award of Contract
(March 27, 2003 Tacoma GSP)

All references to 45 calendar days shall be revised to read 60 calendar days.

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 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 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).

1-03.5 Failure to Execute Contract
(October 18, 2013 Tacoma GSP)

*The first sentence is revised to read:*

Failure to return the insurance certification and bond with the signed contract as required in Section 1-03.3, or failure to provide Small Business Enterprise (SBE) information if required in the contract, or failure or refusal to sign the Contract, or failure to register as a contractor in the state of Washington shall result in forfeiture of the bid bond or deposit of this Bidder

END OF SECTION

1-04 SCOPE OF THE WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda
(March 13, 2012 APWA GSP)

*Revise the second paragraph to read:*

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):
Addenda,
Proposal Form,
Special Provisions,
Contract Plans,
Amendments to the Standard Specifications,
Standard Specifications,
Contracting Agency’s Standard Plans or Details (if any), and
WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.6 Variation in Estimated Quantities
(******)
This section is supplemented with the following:

The quantities for this Contract have been entered into the Proposal only to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses on an as-needed basis, and will be paid at the original bid price, regardless of final quantity. These bid items shall not be subject to the provisions of 1-04.6 of the Standard Specifications.

END OF SECTION
1-05 CONTROL OF WORK

1-05.7 Removal of Defective and Unauthorized Work
(October 1, 2005 APWA GSP)
Supplement this section with the following:

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

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

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

No adjustment in Contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency’s rights provided by this Section.

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

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

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

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor’s request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefore.
Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

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

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

(******)

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall inform the Engineer. The Engineer will then make a final inspection within 2 business days and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

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

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

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

**END OF SECTION**

**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.

1-07.2 State Taxes
(January 6, 2015 TACOMA GSP)
Supplement this section with the following:

Washington State Department of Revenue Rules 170 and 171 shall apply as shown in the Proposal and per Section 1-07.2 of the WSDOT and APWA Standard Specifications for Road, Bridge, and Municipal Construction.

1-07.2(3) Services

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

1-07.9 Wages

1-07.9(5) Required Documents
(******)

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

Certified payrolls shall be submitted for the Contractor and all lower tier subcontractors or agents upon the completion of each individual project

This section is supplemented with the following:

Where fringe benefits are paid in cash, certified payrolls shall include the fringe benefit dollar amount paid to each employee for each employee classification.

Where fringe benefits are paid into approved plans, funds, or programs, the amount of the fringe benefits shall be identified in the “Benefit Distribution” section of the Certified Payroll Affirmation form.

1-07.15 Temporary Water Pollution/Erosion Control
(March 23, 2010 Tacoma GSP)

This section is supplemented with the following:

Stormwater or dewatering water that has come in contact with concrete rubble, concrete pours, or cement treated soils shall be maintained to pH 8.5 or less before it is allowed to enter waters of the State or the City stormwater system. If pH exceeds 8.5, the Contractor shall immediately discontinue work and initiate treatment according to the plan to lower the pH. Work may resume, with treatment, once
the pH of the stormwater is 8.5 or less or it can be demonstrated that the runoff will not reach surface waters or the City stormwater system.

High pH process water shall not be discharged to waters of the State or the City stormwater system. Unless specific measures are identified in the Special Provisions, high pH water may be infiltrated, dispersed in vegetation or compost, or discharged to a sanitary sewer system. Disposal shall be in accordance with the City of Tacoma Surface Water Management Manual or to City wastewater system with proper approval. Water being infiltrated or dispersed shall have no chance of discharging directly to waters of the State or the City stormwater system, including wetlands or conveyances that indirectly lead to waters of the State. High pH process water shall be treated to within a range of 6.5 to 8.5 pH units prior to infiltration to ensure the discharge does not cause a violation of groundwater quality standards. If water is discharged to the sanitary sewer, the Contractor shall provide a copy of permits and requirements for placing the material into a sanitary sewer system prior to beginning the work. Process water may be collected and disposed of by the Contractor off the project site. The Contractor shall provide a copy of the permit for an approved waste site for the disposal of the process water prior to the start of work that generates the process water. A Special Approved Discharge permit shall be required for all discharges to the sanitary sewer system.

1-07.15(1) Spill Prevention, Control and Countermeasures Plan
(Feb 2011 Tacoma GSP)

This section is revised to read:

The Contractor shall prepare a City wide spill prevention, control, and countermeasures plan (SPCC Plan) that will be used for the duration of the project. This will be incorporated into the lump sum Initial Mobilization cost (Item #12 on the Bid Form). The Contractor shall submit the plan to the Project Engineer no later than the date of the preconstruction conference. No on-site construction activities may commence until the Contracting Agency accepts an SPCC Plan for the project.

The term “hazardous materials,” as used in this Specifications, is defined in Chapter 447 of the WSDOT Environmental Procedures Manual (M 31-11). Occupational safety and health requirements that may pertain to SPCC Plan implementation are contained in, but not limited to, WAC 296-824 and WAC 296-843.

Implementation Requirements

The Contractor shall update the SPCC Plan at least annually and maintain a copy of the updated SPCC Plan on the project site. All project employees shall be trained in spill prevention and containment, and they shall know where the SPCC Plan and spill response kits are located and have immediate access to them.

If hazardous materials are encountered or spilled during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. The Contractor shall supply and maintain spill response kits of appropriate size within close proximity to hazardous materials and equipment.

The Contractor shall implement the spill prevention measures identified in the SPCC Plan before performing any of the following:

1. Placing materials or equipment in staging or storage areas.
2. Refueling, washing, or maintaining equipment.

SPCC Plan Element Requirements
The SPCC Plan shall set forth the following information in the following order:

1. Responsible Personnel
   Identify the name(s), title(s), and contact information, including a 24/7 emergency contact number, for the personnel responsible for implementing and updating the plan, including all spill responders.

2. Spill Reporting
   List the names and telephone numbers of the Federal, State, and local agencies the Contractor shall notify in the event of a spill. The City of Tacoma contact will be the Wastewater Treatment Plant Operations number at 253.591.5595 and the City Source Control Spill Response number at 253.502.2222.

3. Project and Site Information
   Describe the following items:
   A. The project Work.
   B. The site location and boundaries.
   C. The drainage pathways from the site, including both stormwater and sanitary conveyance pathways.
   D. Nearby waterways and sensitive areas and their distances from the site.

4. Potential Spill Sources
   Describe each of the following for all potentially hazardous materials brought or generated on-site (including materials used for equipment operation, refueling, maintenance, or cleaning):
   A. Name of material and its intended use.
   B. Estimated maximum amount on-site at any one time.
   C. Location(s) (including any equipment used below the ordinary high water line) where the material will be staged, used, and stored and the distance(s) from nearby waterways and sensitive areas.
   D. Decontamination location and procedure for equipment that comes into contact with the material.
   E. Disposal procedures.
   F. Include a Material Safety Data Sheet (MSDS) for each potentially hazardous material.

5. Pre-Existing Contamination
   Describe any pre-existing contamination and contaminant sources (such as buried pipes or tanks) in the project area that are described in the Contract documents. Identify equipment and work practices that will be used to prevent the release of contamination.

6. Spill Prevention and Response Training
   Describe how and when all personnel (including refueling Contractors and Subcontractors) will be trained in spill prevention, containment, and response in accordance with the Plan. Describe how and when all spill responders will be trained in accordance with WAC 296-824.

7. Spill Prevention
   Describe the following items:
   A. Spill response kit contents and location(s).
   B. Security measures for potential spill sources.
   C. Secondary containment practices and structures for all containers to handle the maximum volume of potential spill of hazardous materials.
   D. Methods used to prevent stormwater from contacting hazardous materials.
   E. Site inspection procedures and frequency.
   F. Equipment and structure maintenance practices.
   G. Daily inspection and cleanup procedures that ensure all equipment used below the ordinary high water line is free of all external petroleum-based products.
H. Refueling procedures for equipment that cannot be moved from below the ordinary high water line.

8. Spill Response
Outline the response procedures the Contractor will follow for each scenario listed below. Include a description of the actions the Contractor shall take and the specific on-site spill response equipment that shall be used to assess the spill, secure the area, contain and eliminate the spill source, and clean up and dispose of spilled and contaminated material.

Response procedures shall be outlined in the Spill Response section and shall include notification to the City of Tacoma Wastewater Treatment Plant Operations number at 253.591.5595 and the City Source Control Spill Response number at 253.502.2222.

A. A spill of each type of hazardous material at each location identified in 4, above.
B. Stormwater that has come into contact with hazardous materials.
C. Drainage pathways from the site, including both stormwater and sanitary conveyance pathways.
D. A release or spill of any unknown pre-existing contamination and contaminant sources (such as buried pipes or tanks) encountered during project Work.
E. A spill occurring during Work with equipment used below the ordinary high water line.

If the Contractor will use a Subcontractor for spill response, provide contact information for the Subcontractor under item 1 (above), identify when the Subcontractor will be used, and describe actions the Contractor shall take while waiting for the Subcontractor to respond.

9. Spill Report Forms
Provide a copy of the spill report form(s) that the Contractor will use in the event of a release or spill.

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

“SPCC Plan,” lump sum.

The lump sum payment for “SPCC Plan” shall be full pay for:

1. All costs associated with creating the accepted SPCC Plan.
2. All costs associated with providing and maintaining the on-site spill prevention equipment described in the accepted SPCC Plan.
3. All costs associated with providing and maintaining the on-site standby spill response equipment and materials described in the accepted SPCC Plan.
4. All costs associated with implementing the spill prevention measures identified in the accepted SPCC Plan.
5. All costs associated with updating the SPCC Plan as required by this Specification.

As to other costs associated with releases or spills, the Contractor may request payment as provided for in the Contract. No payment shall be made if the release or spill was caused by or resulted from the Contractor’s operations, negligence, or omissions.
1-07.16 Protection and Restoration of Property

1-07.16(1) Private/Public Property
(January 13, 2011 Tacoma GSP)

1-07.16(1) Private/Public Property
(******)
This section is supplemented with the following:

Stockpiling in City of Tacoma right-of-way or on existing or new improvements shall not occur unless approved by the Engineer. All stockpile sites shall be restored to as good or better condition.

The Contractor shall contact all property owners and tenants in the vicinity of the Project Site, via door hanger when utility locate limits are established. The Contractor shall submit a template of the property owner notification prior to posting at any Project Site.

The posting shall advise the owners and tenants of the construction schedule and indicate the Contractor’s name, contact person, and telephone numbers.

1-07.17 Utilities and Similar Facilities
(March 7, 2017 Tacoma GSP)
The first paragraph is supplemented with the following:

Public and private utilities or their Contractors will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocations, replacement, or construction will be done within the time for performance of this project. The Contractor shall coordinate their work with such adjustment, relocation, or replacement of utility work. This may require the Contractor to phase their work in a manner that will allow for the utility work.

The Contractor shall coordinate their work with all utilities and other organizations, which have to adjust or revise their facilities within the project area. These may include, but are not limited to:

- City of Tacoma Light Division, Contact: Kevin Kelley, phone: (253) 502-8229
- City of Tacoma Water Division, Contact: Kimberly Baard, phone: (253) 396-3317
- City of Tacoma Traffic Division, Signal/Streetlight Shop, phone: (253) 591-5287
- CLICK! Network, Contact: Ken Mathes, phone: (253) 502-8851
- Puget Sound Energy, Contact: Mike Klapplerich, Electric, phone: (253) 313-3790 OR Cheryl Paras, Gas, phone: (253) 476-6300
- CenturyLink, Contact: Eric Charity, phone: (206) 733-8871
- Comcast, Contact: Todd Gallant, phone: (253) 878-4955
- AT&T Broadband Information Services, Contact: Dan McGeough, phone: (425) 896-9630
- Level 3 Communications, Contact: Pat Thackeray, e-mail: Pat.Thackeray@Level3.com OR Brad Landis, e-mail: Brad.landis@level3.com
- One-Number Locator Service “One Call System” telephone 1-800-424-5555

If the Contractor plans to excavate or trench within ten (10) feet of any utility pole or other electric or water utility structure owned by the City of Tacoma, the Contractor shall contact the City of Tacoma, Department of Public Utilities, Field Coordinator, telephone number 502-8044, and arrange for an inspection before proceeding. The Contractor shall perform, at the Contractor's expense, such additional work as is required to protect the pole or structure from subsidence. The Contractor may be directed to suspend work at the site of any such excavation until such utility structures are adequately protected.
Garbage, recycling, and yard waste pick up information can be found at
https://www.cityoftacoma.org/government/city_departments/environmentalservices/solid_waste/collection_schedule
Residential yard/food is picked up on the opposite weeks of garbage/recycling.

1-07.18 Public Liability and Property Damage Insurance
Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance
(******)

1-07.18(1) General Requirements

a) The City of Tacoma (the City) reserves the right to approve or reject the insurance
provided based upon the insurer (including financial condition), terms and coverage,
the Certificate of Insurance (COI), and/or endorsements. The insurance must be
provided by an insurer with a rating of (A-) VII or higher in the A.M. Best's Key
Rating Guide (http://www.ambest.com/home/default.aspx), and pursuant to RCW 48,
licensed to do business in the State of Washington (or issued as a surplus line by a
Washington Surplus Lines broker).

b) The Contractor shall keep this insurance in force during the entire term of the contract and for
thirty (30) calendar days after completion of all work required by the Contract, unless
otherwise provided herein.

c) The liability insurance policies required by this section shall:
   1. Contain a "severability of insureds," "separation of interest," or "cross liability"
      provision.
   2. Be primary and non-contributory insurance to any insurance coverage or self-
      insurance program the City may maintain.
   3. Contain a Waiver of Subrogation clause in favor of the City.
   4. Other than professional liability, reflect coverage on an “occurrence”, not “claims-
      made” policy form.

d) The Contractor shall provide the City notice of any cancellation or non-renewal of this required
insurance within 30 calendar days.

e) The Contractor shall forward to the City, a full and certified copy of the insurance policy(s)
and endorsements required by this section upon the City’s request.

f) The Contractor shall not begin work under the Contract until the required insurance has
been obtained and approved by the City.

g) Failure on the part of the Contractor to obtain and maintain the insurance as required by this
section shall constitute a material breach of the Contract, upon which the City may, after
giving five business day notice to the Contractor to correct the breach, immediately terminate
the Contract or, at its discretion, procure or renew such insurance and pay any and all
premiums in connection therewith; with any sums so expended to be repaid to the City by the
Contractor upon demand, or at the sole discretion of the City, offset against funds due the
Contractor from the City.

h) All costs for insurance shall be incidental to and included in the unit or lump sum prices of
the Contract and no additional payment will be made by the City to the Contractor.
For all liability insurance policies required by this Section, the City, including its officers, elected officials, employees, agents, and volunteers, and any other entities as required by the Contract, shall be named as additional insured(s) by amendatory endorsement, EXCEPT Professional Liability (if applicable), Workers Compensation, Owners and Contractors Protective Liability, and Railroad Protective Liability.

1-07.18(1)A Evidence of Insurance

The Contractor shall deliver a COI and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work to the City. The certificate and endorsements must conform to the following requirements:

a) An ACORD certificate or a form determined by the City to be equivalent.

b) Copies of all endorsements showing the policy number and naming the City as an additional insured.

c) The endorsement is to state that the insurance is primary and non-contributory over any City insurance or self-insurance.

d) The endorsement is to extend “Products/Completed Operations” coverage to the City as an additional insured.

e) A statement of additional insured status on an ACORD COI shall not satisfy this requirement.

f) Any other amendatory endorsements to show the coverage required herein.

1-07.18(1)B Certificate Requirements Specific Representations

The following must be indicated on the COI:

a) The City is named as an additional insured ("with respect to a specific Contract" or "for any and all work performed with the City" may be included in this statement).

b) "This insurance is primary and non-contributory over any insurance or self-insurance the City may carry" ("with respect to a specific Contract" or "for any and all work performed with the City" may be included in this statement).

c) A Waiver of Subrogation in favor of the City for General Liability and Automobile Liability.

d) Self-Insured Retention and applicable deductible limits must be disclosed on the COI and be no more than $10,000.

e) Contract or Permit number and the City Department.

f) All coverage other than professional liability, Cyber/Privacy & Security, and Pollution Liability must be written on “occurrence” form and not “claims-made” form.

g) Reflect the existence and form numbers of all required endorsements.

1-07.18(2) Additional Insurance

1-07.18(2)A Employers’ Liability (EL) (Stop-Gap) Insurance

The Contractor shall maintain EL coverage with limits not less than $1,000,000 each employee, $1,000,000 each accident, and $1,000,000 policy limit.

1-07.18(2)B Professional Liability Insurance (PLI)

The Contractor and/or its subcontractor shall provide evidence of PLI covering professional errors and omissions. Such policy must provide minimum limits of $1,000,000 per claim and $2,000,000 aggregate. If the scope of such design-related professional services includes work related to pollution conditions, the PLI policy shall include Pollution Liability coverage. If provided on a “claims-made” basis, such coverage shall be maintained by policy renewals or an extended reporting period endorsement for not less than three years following the end of the Contract.
1-07.18(2)C Commercial Property (CP) Insurance
The Contractor or Vendor shall provide CP for loss or damage to any and all equipment owned by the City while in the care, custody or control of the Contractor, Vendor, Subcontractors, or their agents. The coverage shall be provided on an ISO special form Causes of Loss form or equivalent and shall provide full replacement cost coverage, and shall not be subject to a deductible of more than $2,500. The Contractor/Vendor shall be liable for the payment of the deductible.

1-07.18(2)D Other Insurance
Other insurance as may be deemed appropriate to cover the specified risk and exposure arising from the scope of work or changes to the scope of work required by the City. The costs of such necessary and appropriate insurance coverage shall be borne by the Contractor.

1-07.18(3) Subcontractors
It is the Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage. The Contractor shall provide evidence of such insurance upon the City’s request.

1.07.18(5) Certificate Requirements for Coverages and Limits
The insurance shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits. None of the policies or coverage required by this section shall be subject to a deductible or self-insured retained limit of more than $10,000 unless first approved in writing by the City Contracting Department.

1.07.18(5)A Commercial General Liability (CGL) Insurance
The CGL insurance policy must provide limits not less than $1,000,000 each occurrence and $2,000,000 annual aggregate.

The CGL policy shall be written on an "occurrence", not "claims-made", basis and shall include the following coverage:

a) Must use (Insurance Services Office (ISO) form CG0001(04-13) or its equivalent).
b) A per project aggregate policy limit.
c) Products Hazard/Completed Operations- for a period of one year following final acceptance of the work.
d) Personal/Advertising Injury.
e) Contractual Liability.
f) Explosion, Collapse, or Underground Property Damage.
g) Blasting (only required when the Contractor's work under this Contract includes exposures to which this specified coverage responds).
h) If Contractor is performing work within 50 feet of a railroad right of way, the General Liability policy shall be endorsed to eliminate the Contractual Liability exclusion pertaining to work within 50 feet of a railroad right of way using ISO form CG2417(10-01) or equivalent.
i) Abuse & Molestation, by a separate coverage part or an endorsement to the CGL, with limits not less than $1,000,000 each occurrence & $2,000,000 aggregate for Contractors working directly with youth under the age of 18. If Abuse & Molestation coverage is provided on a “claims-made” basis, coverage must be maintained for not less than
three years following the end of the contract. This may be done by policy renewals or an Extended Reporting Period Endorsement.

j) Include the City as additional insured and:
1. Use ISO forms CG2010(04-13) and CG2037(04-13) or equivalent for Contractors performing work on behalf of the City and name the City as an additional insured for ongoing and completed operations.
2. Use ISO form CG2012(04-13) or equivalent for Permits and name the City as an additional insured.
3. Use ISO form CG2026(04-13) or equivalent for Facility Use Agreements and name the City as an additional insured.
4. Blanket additional insured provisions within a policy form will be accepted in lieu of the specific additional insured endorsement forms specified herein. However, a blanket additional insured endorsement shall provide the equivalent coverage provided by specific additional insured endorsements specified herein.

1.07.18(5)B Commercial Automobile Liability (CAL) Insurance
The Contractor shall obtain and keep in force during the term of the Contract, a policy of CAL insurance coverage, providing bodily injury coverage and property damage coverage for owned (if any), non-owned, hired, and leased vehicles.

The Contractor must also maintain an MCS 90 endorsement or equivalent and a CA 9948 endorsement or equivalent if “Pollutants” are to be transported. CAL policies must provide limits not less than $1,000,000 each accident for bodily injury and property damage. Must use ISO form CA 0001 or equivalent.

1.07.18(5)B Workers' Compensation
The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

1-07.23 Public Convenience and Safety

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.

1-07.23(1) Construction Under Traffic
(March 1, 2004 Tacoma GSP)
This section is supplemented with the following:

The following special traffic requirements shall be adhered to during all phases of construction:

Streets shall remain fully open to vehicular and pedestrian traffic at all times.

EXCEPTION: The City may establish specific traffic control requirements for each Project Site as they are determined.
To minimize the disruption to access to adjacent properties, and to Pierce Transit operations, the lane closure area shall be limited to that area of active work and necessary for appropriate lane closure tapers. The Contractor shall stage work to maintain access to and egress from all properties at all times.

A safe pedestrian access shall be provided at all times through the project area. All lane closures shall be coordinated with the adjacent businesses, other contractors working within the project vicinity, local transit agencies and the City.

Where, in the opinion of the Engineer, parking is a hazard to through traffic or to the construction work, parking may be restricted either entirely or during the time when it creates a hazard. Signs for restricting parking shall be approved by the City and placed by the Contractor. The Contractor shall be responsible for and shall maintain all such signs. The replacement of signs restricting parking shall be as approved by the Engineer.

The Contractor shall notify all property owners and tenants of detours, street and alley closures, or other restrictions that may interfere with their access as the utility locate limits are established by the contractor. Emergency traffic, such as police, fire, and disaster units, shall be provided access at all times. In addition, the Contractor shall coordinate Contractor activities with all disposal firms and transit bus service that may be operating in the project area.

If street closures or lane restrictions, not provided for in the Specifications, are allowed subsequent to award of the contract, an equitable adjustment of the Contract amount shall be negotiated.

It is the intent of the Contract to effectively prevent the deposition of debris on streets in areas of public traffic or where such debris may be transported into a drainage system. When construction operations are such that debris from the work is deposited on the streets, the Contractor shall, at a minimum, remove on a daily basis any deposits or debris which may accumulate on the roadway surface. Should daily removal be insufficient to keep the streets clean, the Contractor shall perform removal operations on a more frequent basis. If the Engineer determines that a more frequent cleaning is impractical or if the Contractor fails to keep the streets free from deposits and debris resulting from the work, the Contractor shall, upon order of the Engineer, provide facilities for and remove all deposits from the tires or between wheels before trucks or other equipment will be allowed to travel over paved streets. Should the Contractor fail or refuse to clean the streets in question, or the trucks or equipment in question, the Engineer may order the work suspended at the Contractor’s risk until compliance with Contractor’s obligations is assured, or the Engineer may order the streets in question cleaned by others and such costs incurred by the City in achieving compliance with these contract requirements, including cleaning of the streets, shall be deducted from moneys due or to become due the Contractor on monthly estimate. The Contractor shall have no claim for delay or additional costs should the Engineer choose to suspend the Contractor’s work until compliance is achieved.

1-07.23(2) Construction and Maintenance of Detours
(March 1, 2004 Tacoma GSP)
This section is supplemented with the following:

Detour signing during any allowed road closures shall be in accordance with Detour Plans, when included in the Contract Documents. When plans are not included in the Contract Documents, the Contractor shall submit plans for detours in accordance with the “Manual on Uniform Traffic Control Devices (MUTCD)”. In addition, where the Contractor believes an alternate plan will safely and adequately maintain vehicular and pedestrian traffic, the Contractor may submit alternate plans to those for traffic control and detours required by MUTCD or contract documents. Such alternate plans must comply with the MUTCD and shall be in writing and submitted to the Engineer at least fifteen (15) days in advance of their intended use. In general, detouring of arterial traffic must be accomplished on streets designated as City Arterials. Detouring of arterial traffic on non-arterial streets will not be allowed.
The acceptance of any alternate plan shall be entirely at the discretion of the Engineer and the Contractor shall have no claim by reason of a plan being rejected or modified, nor shall there be any additional payment by reason of using a substitute plan.

The Contractor shall notify the Engineer three (3) working days in advance of implementation of any street closures/detours allowed under the Contract. Advance notice signing shall be placed a minimum of three (3) working days prior to implementation of any street closure/detour.

A minimum of three (3) working days prior to any street closure, the Contractor shall notify all entities below:

- Tacoma Fire Dept. (253-591-5733)
- Tacoma Police Dept. (253-591-5950)
- LESA Communications Center (253-798-4721 - Opt.#1)
- Tacoma Public Schools Transportation Office (253-571-1853)
- Pierce Transit (253-581-8109)
- Tacoma Environmental Services Solid Waste (253-591-5544)
- Tacoma Public Works Engineering Division (253-591-5500)
- Tacoma Public Works Streets and Grounds (253-591-5495)

1-07.24 Rights of Way
(******)

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.

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

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

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

END OF SECTION
1-08 PROSECUTION AND PROGRESS

Add the following new section:

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

1-08.0(1) Preconstruction Conference
(******)

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

1. To establish a working understanding among the various parties associated or affected by the work;
2. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
3. To establish normal working hours for the work;
4. To review safety standards and traffic control; and
5. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:
1. A breakdown of all lump sum items; and
2. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work
(******)

Except in the case of emergency or unless otherwise approved by the Contracting Agency, the normal straight time working hours for the contract shall be any consecutive 8 hour period between 8:00 a.m. and 5:00 p.m. Monday through Friday.

The Contractor is not allowed to work on holidays, Saturdays, Sundays, or before 8:00 a.m. or after 5:00 p.m. on any day, without permission from the Engineer to work such times.

Permission to work between the hours of 9:00 p.m. and 8:00 a.m. during weekdays and between the hours of 9:00 p.m. and 9:00 a.m. on weekends or holidays may also be subject to noise control requirements. Approval to continue work during these hours may be revoked at any time the Contractor exceeds the Contracting Agency’s noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor’s operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Permission to work Saturdays, Sundays, holidays or other than the agreed upon working hours Monday through Friday may be given subject to certain other conditions set forth by the Contracting Agency. These conditions may include but are not limited to the removal or pruning of a tree causing eminent and immediate hazard to the public or threat of significant infrastructure damage.

Add the following new section:

1-08.0(3) Reimbursement for Overtime Work of Contracting Agency Employees
(******)
The Contractor shall not work on a Saturday, Sunday, or holiday, or longer than an 8-hour work shift on a regular working day, as defined in the Standard Specifications. Such work shall be considered as overtime work and require the permission of the City in writing.

1-08.1 Subcontracting - D/M/WBE Reporting
(Semptember 29, 2009 Tacoma GSP)
The eighth paragraph is revised to read:

On all projects funded with Contracting Agency funds only, the Contractor shall certify to the actual amounts paid Disadvantaged, Minority, or Women’s Business Enterprise firms that were used as subcontractors, lower tier subcontractors, manufacturers, regular dealers, or service providers on the contract. This certification shall be submitted to the Engineer, on the form provided by the Engineer, 20 calendar days after physical completion of the contract.

1-08.4 Prosecution of Work
Delete this section and replace it with the following:

1-08.4 Notice to Proceed and Prosecution of Work
(*****)

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within the time established in section 1-08.0(2), unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

1-08.5 Time for Completion
(*****)
Revise the third and fourth paragraphs to read:

The Engineer is to notify the Contractor of the proposed work in the form of a Formal Task Authorization Form, which specifies the description of work and approach for the proposed project in compliance with the scope of this Contract. The Contractor shall reply with the completed Formal Task Authorization Form, to include completed cost estimate information and proposed schedule of work, to the City for approval within two calendar days of the initial City request notification. Upon City approval of the Formal Task Authorization Form, the contractor shall complete the work within seven calendar days and within four consecutive standard work days of the commencement of work. In the case of emergency tree work, as indicated by the eminent and immediate hazard to the public or threat of significant infrastructure damage, the Contractor will address the tree work in the fastest timeframe feasible. If the Engineer and Contractor cannot mutually agree to a reasonable time of action for emergency tree work, or the contractor is not responsive to the request within an agreed upon expedited timeframe, the Engineer may choose to operate and conduct work outside of this contract. Costs in excess of the estimate agreed upon by the Engineer and the Contractor, must be approved in writing by the Engineer prior to additional work proceeding.
Invoices will be provided to the Engineer within 10 working days of project completion. 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.

This contract will be valid for two years from Notice to Proceed or until the maximum contract amount is reached, whichever occurs first.

Upon mutual agreement, the contracting agency and the contractor may extend the Contract for a period of up to one year, or until the maximum Contract amount is reached, whichever comes first.

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 all projects 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:
1. Certified Payrolls (per Section 1-07.9(5)).
2. Reports of Amounts Credited as SBE Participation, as required by the Contract Provisions.
3. Final Contract Voucher Certification
4. Copies of the approved “Affidavit of Prevailing Wages Paid” for the Contractor and all Subcontractors
5. Property owner releases per Section 1-07.24

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.

END OF SECTION

1-09 MEASUREMENT AND PAYMENT

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.

(January 13, 2011 Tacoma GSP)

*Item #3 of this Section is supplemented with the following:*

The Contractor shall submit a comprehensive summary list of all equipment anticipated to be used on the project and their associated AGC/WSDOT Equipment Rental Rates. The list shall include the contractor’s equipment number, make, model, year, operation rate, standby rate, applicable attachments and any other applicable information necessary to determine the applicable rates in accordance with this section. In addition, the contractor shall submit an Equipment Watch rate sheet ([www.equipmentwatch.com](http://www.equipmentwatch.com)) for each piece of equipment in the summary list. Access to the Equipment Watch web site is available at the City’s Construction Management Office. Copies requested by the contractor will be charged at the current applicable rate.

**1-09.7 Mobilization**

(******)

*Supplement this Section with the following:*

Initial Mobilization consists of expenses and the costs of preparatory Work and operations performed by the Contractor which occur before work begins on a project site. Items which are not to be included in the item of Mobilization include but are not limited to:

1. Any portion of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Any costs of mobilizing equipment for force account Work.
4. Any costs of mobilizing equipment or material needed to perform the work at each individual site.

Mobilization per Project Site bid item shall consist of expenses and cost for preparatory Work related to equipment, material, and personnel needed for the Project Site. The Contractor shall not include the following costs in this Bid item:

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

**1-09.9 Payments**

(******)

*Delete the first four paragraphs and replace them with the following:*

Lump sum item breakdowns are required.

**Payments for each Project Site will be made when the Site is considered Physically Complete and all the required documents such as force account information is received for the Project Site.**

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 upon request, to enable the Project Engineer to determine the Work performed on a per project 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.
This section is supplemented with the following:
(******)

Breakdowns of all lump sum items shall be provided for all lump sum items and shall include all costs for labor, equipment, materials, and taxes (as applicable) associated with the lump sum item. Washington State Department of Revenue Rules 170 and 171 apply to lump sum items per Section 1-07.2 of the WSDOT State Amendments to the Standard Specifications.

1-09.9(1) Retainage
(May 10, 2006 Tacoma GSP)
The fourth paragraph is supplemented with the following:

6. A “General Release to the City of Tacoma” is on file with the Contracting Agency.
7. A release has been obtained from the City of Tacoma’s City Clerk’s Office.

1-09.13(3)A Administration of Arbitration
(October 1, 2005 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 are located. 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

1-10.1(2) Description
(******)
This section is supplemented by the following:

The City will provide traffic control if needed, however in the event the City is unable to provide traffic control, the Contractor will be responsible.

Only uniformed off-duty police officers shall be used to control traffic when it is necessary to override or provide traffic control at signalized intersections.

The City will make all necessary temporary adjustments to existing traffic signals and traffic signal activators.

Existing signs shall not be removed until the Contractor has provided for temporary measures sufficient to safeguard and direct traffic after existing signs have been removed. Preservation of temporary traffic control and street name signs shall be the sole responsibility of the Contractor.

As the work progresses and permits, temporarily relocated and/or removed traffic signs shall be reset in their permanent location. Permanent signs and other traffic control devices damaged or lost by the Contractor shall be replaced or repaired at the Contractor’s expense.

1-10.2(1) General
Section 1-10.3 is supplemented with the following:

1-10.3(2) F Signalized Intersections
(January 11, 2006 Tacoma GSP)
When construction operations are such that an existing traffic signal is required to be overridden to allow for traffic control measures, the signal shall be overridden only by a uniformed off-duty police officer.

All off-duty officers shall be commissioned within the State of Washington.

**1-10.3(3) A Construction Signs**  
(**January 11, 2006 Tacoma GSP**)  
*The fifth paragraph is revised to read:*

Signs, posts, or supports that are lost, stolen, damaged, destroyed, or which the Engineer deems to be unacceptable while their use is required on the project shall be replaced by the Contractor at their expense.

**1-10.3(3)C Portable Changeable Message Sign**  
(**August 4, 2010 Tacoma GSP**)  
*This section is supplemented with the following:*

Portable Changeable Message Signs shall be required on arterials streets where construction occurs for durations longer than seven (7) calendar days. Signs shall be solar charged and programmable. Signs shall be provided a minimum of seven (7) calendar days prior to construction and remain through the duration of the construction on the arterial street. Signs shall be provided on each end of the arterial street construction zone notifying oncoming traffic of the construction conditions. All costs associated with providing and maintain the signs for the required duration shall be included in the proposal item, “Project Temporary Traffic Control”, per lump sum

**1-10.5(1) Lump Sum Bid for Project (No Unit Items)**  
*This section is replaced with the following:*

“Project Temporary Traffic Control”, by force account as provided in Section 1-09.6.

All costs incurred by the Contractor in performing the Contract Work defined in Section 1-10 and all costs associated with providing pedestrian control and protection as required in Section 1-07.23(2) will be paid by force account in accordance with Section 1-09.6.

**END OF SECTION**

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**2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP**  
*****

**2-01.1 Description**  
*The first sentence of the first paragraph is revised to read:*

The Contractor shall clear, grub, and clean up all debris each day before the work crew leaves a site, unless permission is given by the City to do otherwise. All streets and sidewalks shall be swept and all debris caused by the work performed shall be removed from the site. In the case of dispute, the City may remove the debris and charge the cost to the Contractor, as the City shall determine to be just.
This section is supplemented with the following:

2-01.2 Disposal of Usable Material and Debris

The section is revised to read:

Wood disposal may or may not apply to each tree removal or tree pruning and will be at the direction of the City per project.

It shall be the responsibility of the Contractor to remove and dispose of all logs, brush, chips and debris resulting from the tree removal and pruning operations, if applicable as directed by the City, in the manner described here:

1. No wood or brush may be left on City right-of-way overnight.

2. As much wood as is possible shall be chipped on site, into pieces no larger than 3”.

3. Any wood that is too large to be put through a chipper must be disposed of on the same day it is cut. Any wood determined to need disposal shall be disposed of at Tacoma’s Landfill at 3510 S. Mullen St, Tacoma, WA.

Diseased Wood Disposal – Diseased elm wood and other diseased wood must be handled carefully to prevent the spread of Dutch Elm Disease and other tree diseases. It shall be the responsibility of the Contractor to remove and dispose of all logs, brush, chips and debris resulting from the tree removal operations in the manner described here:

1. No diseased wood or brush may be left on City right of way overnight.

2. As much wood as is possible shall be chipped on site, into pieces no larger than 3”. Chips from diseased elms do not spread the disease and may be handled and disposed the same as chips from non-diseased wood.

3. Any wood that is too large to be put through a chipper must be disposed of on the same day it is cut, delivered to and disposed of at the City Landfill at 3510 S. Mullen St, Tacoma, WA. Diseased wood may also be disposed of at other public or private agencies equipped to properly handle the wood and provide disposal documentation.

4. The Contractor must contact the City landfill a minimum of 24 hours prior to disposing of diseased wood. Other disposal facilities may have similar notification timeframes. The Contractor must provide copies of receipts or proof of proper wood disposal to the contract administrator (contact information provided after award) before any payments will be made under this Contract.

END OF SECTION

2-14 TREE REMOVAL

(******)
2-14.1 Description
The work performed shall be removing trees and/or stumps that are dead, diseased, and/or high risk trees.

2-14.2 Definitions

**Artificial Snag** – a tree that has been cut to resemble a standing, dead or dying tree

**Bucker** - a person who cuts felled, and de-limbed trees into logs

**Bucket Truck** - a truck equipped with an extendable, hydraulic boom carrying a large bucket for raising workers to elevated, inaccessible areas

**Certified Arborist** – an ISA Certified Arborist® having met all requirements to be eligible for the exam, which includes three or more years of full-time, eligible, practical work experience in arboriculture and/or a degree in the field of arboriculture, horticulture, landscape architecture, or forestry from a regionally accredited educational institution

**Chipper** - a person with the qualifications and knowledge to operate power tools and equipment to grind logs and limbs into wood chips

**Faller** - a person who fells trees using sound forestry practices through the use of hand-held chainsaws and other felling machines

**Laborer** - a person in the construction trade, typically performing unskilled labor

**Root Crown** – that part of the root system from which a stem arises

**Stump grinder** - a person with the qualifications and knowledge to operate power tools and equipment to remove tree stumps

**Tree** - any self-supporting, woody perennial plant having a main stem (trunk) and which normally attains a height of at least ten (10) feet at maturity, usually with one (1) main stem or trunk and many branches

2-14.3 Construction Requirements
All removal practices and standards shall conform to the latest revision of ANSI A300, “Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance”, and ANSI Z133.1 “American National Standard for Arboricultural Operations - Safety Requirements,” available from the American National Standards Institute, the National Arborist Association, or the International Society of Arboriculture. Where the standards or practices of ANSI A300 differ from those listed in these specifications, the standards and practices in these specifications shall apply.

1. Tree Removal Type 1

Stumps shall always be ground in Type 1 removals. Stump removal means the removal of the stump to a minimum of 8” below the grade of the walk and curb, including the root crown that affects the construction of a new sidewalk or landscaping. All stump grinding debris shall be removed by Contractor and topsoil shall be applied to fill the hole left by the stump in a manner that is level with existing grade upon settling. Soil shall be provided by the City, however it is the responsibility of the contractor to transport the soil.
2. Removal Type 2

Type 2 removals shall not include stump grinding and the wood may be left on site, as specified by the City. Any wood left on site shall be left in direct contact with the soil to eliminate fire hazards. Type 2 removals may require reduction in tree height, rather than complete removal, to create an artificial snag. Artificial snags shall be cut to appear like a natural break; no clean cuts will be accepted.

2-14.4 Measurement

Tree removal shall be paid by the hour for work performed by a faller, bucker, laborer, stump grinder, chipper, and certified arborist. Pricing is to include all labor, consulting, equipment, and materials required including but not limited to chainsaw, personal protection equipment, fuel etc., unless otherwise specified, to perform the work in accordance with this contract and the directions of the City. All removals must follow proper disposal of materials as approved by the City (see 2-01.2).

Bucket truck pricing is paid in half-day (4 hour) increments, and includes all labor, equipment, and materials required including but not limited to personal protection equipment, fuel, vehicle maintenance, etc.

Mobilization fees shall be paid daily and include all travel for all employees, equipment (excluding bucket trucks) and materials to and from a site on a work day. Travel time to assess a site and/or provide cost estimates is not considered mobilization. Only one mobilization fee shall apply per day, regardless if the contractor works at more than one location within Tacoma city limits. The contractor shall be paid an additional mobilization fee if s/he is requested to re-mobilize during normal business hours.

2-14.5 Payment

Payment shall be made in accordance with section 1-04.1.

“Faller”, per hour

“Bucker”, per hour

“Stump Grinder”, per hour

“Chipper”, per hour

“Certified Arborist”, per hour

“Bucket Truck”, per 4 hours

“Mobilization”, per one (1) work day

2-15 TREE PRUNING

(******)

2-15.1 Description

The work performed shall be pruning trees to reduce the risk or prevent hazardous trees.

2-15.3 Construction Requirements

All pruning practices and standards shall conform to the latest revision of ANSI A300, “Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance”, and ANSI Z133.1 “American
National Standard for Arboricultural Operations - Safety Requirements,” available from the American National Standards Institute, the National Arborist Association, or the International Society of Arboriculture. Where the standards or practices of ANSI A300 differ from those listed in these specifications, the standards and practices in these specifications shall apply.

2-15.3(1) Pruning Practices

All branches shall retain their natural hierarchical character after pruning (large limb small branch-twig). Tipping or stub cutting shall be considered destruction of property, and trees so damaged shall be repaired or replaced by Contractor at his/her expense as per the Protection of Property section of this Contract.

All cuts shall be made as close as possible to the trunk or parent limb, without cutting into the branch collar (flush cutting) or leaving a protruding stub. Bark at the edge of all pruning cuts shall remain firmly attached.

All branches too large to support with one hand shall be notched on the underside and precut to avoid splitting or tearing of the bark.

Any loose bark at trunk or branch wounds shall be cut off close to the wood.

No paints or wound dressings of any kind are to be applied.

Utmost care shall be taken by Contractor to avoid damage to tree trunks and limbs. No climbing spurs or spikes of any kind shall be used. All ladders, lift equipment and saw blades shall be utilized in a manner as to prevent damage to the tree. Flush cuts shall be considered trunk damage and shall not be permitted. Repeated use of flush cuts or other damage to live wood shall be just cause for the City to terminate this Contract and may result in tree replacement by Contractor at his/her expense as per the Protection of Property section of this Contract.

Trees with major defects or extensive decay or damage shall be reported to the City, and shall not be pruned prior to obtaining the expressed approval of the City. Obvious girdling roots or signs of insect or disease infestation shall be reported to the City, either before or after pruning.

2-15.3(2) Pruning Standards (Execution)

No more than 20% of the live, leaf-bearing crown shall be removed from any tree, except where cracked limbs or obstructed traffic signs or signals pose a hazard to public safety. The priority of pruning cuts shall be made in the manner described here:

a. **Crown Cleaning:** All dead, dying, diseased, decaying, and cracked branches shall be removed.

b. **Clearance & Visibility:**
   i. All street signs, traffic signs and signals shall be cleared, regardless of leaf crown removal restrictions. Stop signs and traffic signals must be visible to drivers from 250 feet away.

   ii. Where practical, limbs blocking business signs or street lights may be shortened or removed, always cutting back to a limb that is no more than 1½ times the diameter of the removed branch.

c. **Crown Raising:** The lowest limbs shall be removed to improve pedestrian and vehicle clearance beneath the tree, to 8 feet above the sidewalk and 14 feet above the street. However, no more than 1/3 of any tree’s height shall have the
trunk cleaned of all limbs, except where such condition existed prior to this contract. Where pruning is necessary to improve clearance and where limb removal would violate the 1/3 height rule (such as on newly planted trees), lowest limbs should be shortened to 1/2 or 1/3 their original length to the nearest lateral.

d. **Structural Pruning:**

i. The weaker or less desirable of co-dominant stems shall be removed if it is less than 3” in diameter. Where such co-dominants are more than 3” in diameter, the weaker or less desirable branch shall be stunted by cutting back to about 1/3 of its length, to a point where a smaller branch originates.

ii. The weaker or less desirable of crossed branches shall be removed, unless such removal will leave large open spaces in the crown. Overlong limbs (maximum 2 per tree) may be shortened, always cutting back to a limb that is no more than 1½ times the diameter of the remaining branch.

### 2-15.3(3) Tree Damage

Climbing irons, spurs or spikes shall not be used on trees to be pruned. Use of such devices and any pruning performed contrary to the Technical Specifications of this specification shall be considered damage to trees. Any tree damage caused by the Contractor shall be repaired immediately, at no additional expense and to the satisfaction of the City. Trees damaged beyond repair, as judged by a qualified arborist acceptable to the City and the Contractor (whose expenses shall be jointly covered by both parties), are to be removed at no expense to the City. Each damaged tree shall be replaced, at no expense to the City, by a tree of size and species designated by the City. Should a replacement be unavailable, the dollar value of such damaged trees shall be paid to the City. The value of such trees shall be determined by a qualified arborist, acceptable to the City and the Contractor, (whose expenses shall be jointly covered by both parties) shall be deducted from the monies owed the Contractor.

### 2-15.4 Measurement

Tree pruning shall be paid by the hour for work performed by a faller, bucker, laborer, chipper, and certified arborist. Pricing is to include all labor, consulting, equipment, and materials required including but not limited to chainsaw, personal protection equipment, fuel etc., unless otherwise specified, to perform the work in accordance with this contract and the directions of the City. All pruning must follow proper disposal of materials as approved by the City.

Bucket truck pricing is paid in half-day (4 hour) increments, and includes all labor, equipment, and materials required including but not limited to fuel, vehicle maintenance, etc.

Mobilization fees shall be paid daily and include all travel for all employees, equipment (excluding bucket trucks) and materials to and from a site on a work day. Travel time to assess a site and/or provide cost estimates is not considered mobilization. Only one mobilization fee shall apply per day, regardless if the contractor works at more than one location within Tacoma city limits. The contractor shall be paid an additional mobilization fee if s/he is requested to re-mobilize during normal business hours.

### 2-15.5 Payment

Payment shall be made in accordance with section 1-04.1.

“Faller”, per hour

“Bucker”, per hour

“Chipper”, per hour
“Certified Arborist”, per hour

“Bucket Truck”, per 4 hours

“Mobilization”, per one (1) work day

2-16 TREE PLANTING
(******)

2-16.1 Description

The work performed shall be planting trees.

2-16.3 Construction Requirements

All planting practices and standards shall conform to the latest revision of ANSI A300, “Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance”, and ANSI Z133.1 “American National Standard for Arboricultural Operations - Safety Requirements,” available from the American National Standards Institute, the National Arborist Association, or the International Society of Arboriculture. Where the standards or practices of ANSI A300 differ from those listed in these specifications, the standards and practices in these specifications shall apply.

2-16.3(1) Planting Practices

Tree planting size may vary from 1.5-3-inch caliper deciduous trees and 5-8- foot high coniferous trees. All plant materials will be provided by the City.

Handling of the plant material for short distance relocation or transport shall be done by the root ball or container. The plant material shall not be lifted or handled by the trunk or branches.

Plant materials shall not be transplanted during freezing weather or while the ground is frozen. Plant materials shall not be transplanted during excessively wet conditions, or during unsuitable soil or weather conditions. Unsuitable conditions include but are not limited to standing water, high winds, heavy rains, and high water levels.

Trees supplied in containers shall not be removed from the containers until the time of planting at the planting location, unless cleaned of all soil at another site and transported with the roots kept sufficiently moist and minimal exposure to air.

All burlap, baskets, string, wire, excess soil and other such materials shall be removed from the hole (and tree) before transplanting. The plant material shall be handled in such a manner that the root systems are kept covered and damp at all times. The root systems of all bare root plant material shall be soaked in water for one hour immediately prior to transplanting.

In their final position, all plants shall have their top true root (not adventitious root) no more than 1-inch below the soil surface, no matter where that root was located in the original root ball or container. The backfill material and root ball shall be thoroughly watered immediately following transplanting regardless of season.

2-16.3(2) Planting Standards (Execution)
The hole size for tree transplanting shall be twice as wide and equal in depth to the root system. Any glazed surface of the hole shall be removed by hand methods. Scarify the bottom of the planting pit to a depth of four inches. If groundwater is encountered upon excavation of the planting holes, the Contractor shall promptly notify the City.

Plant materials shall be removed from containers in a manner that prevents unnecessary damage to the root system. Containers may require vertical cuts down the depth of the container to accommodate removal.

a. Soak the root ball to remove all excess soil from the root mass.

b. Remove or straighten (as applicable) all circling and girdling, damaged, adventitious, and tangled roots from the root system with sterile, sharp hand pruners. No more than 15% of the root mass shall be removed.

c. Set plant material upright, plumb, and faced with the lowest branches away from the street, or area of highest activity if there is no adjacent street.

d. All packaging, including but not limited to burlap, wire baskets, tape, twine, trunk wrap, tags and labels are to be removed from all plant materials prior to transplanting. Sterile and sharp hand pruners, scissors, or knives shall be used to remove packaging in a manner that will not cause injury to plant materials. Packaging is not to be ripped or torn from plant materials.

e. Roots shall be spread and arranged in their natural alignment, and shall not be bunched, curled, twisted, or unreasonably bent when placed in the prepared hole. No filling will be permitted around trunks or stems or above graft unions on grafted trees.

f. Soil material shall be gauged by the bottom of the trunk flare (top of root crown) at finished grade.

g. Backfill the planting hole with the soil provided by the City. Do not use frozen or muddy soil for backfilling. Backfill around roots in layers while gently tamping to settle soil and eliminate voids and air pockets.

h. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Form a ring of soil around the planting pit to retain water.
2-16.3(3) Staking

Stake all deciduous and evergreen trees immediately after planting as specified and shown here:

Stake trees with two or three (as directed by City) treated 2-inch diameter doweled tree stakes 8-feet in length. Loop each tie around half tree loosely to provide 1-inch slack for trunk growth. “Chainlock” or equal tree tie material (1-inch size) shall be used to secure tree to stakes.

Nail or staple tree tie material to stake to hold vertically. Do not nail or staple tree tie material into any part of the tree. Stakes are not to penetrate through the root mass.

2-16.3(4) Mulching

Mulch shall be according to the following:
Arborist Wood Chip Mulch shall be coarse ground wood chips (approximately $\frac{1}{2}$-inch to 4-inch along the longest chip dimension) derived from the mechanical grinding of whole trees or portions of trees. It may contain wood, wood fiber, roots, bark, branches and leaves, but may not contain visible amounts of soil. It shall be free of weeds and weed seeds, and may not contain more than 1% by weight of manufactured inert material (plastic, concrete, ceramics, metal, etc.). Mulch shall be provided by the City, however it is the responsibility of the contractor to transport the mulch.

Apply 2 to 3 inches (settled) average thickness of mulch over whole surface of transplanting area. Taper mulch at the base of the tree as to not pile up any mulch against the trunk. Thoroughly water mulched areas. After watering, rake mulch to create a uniform finished surface.

2-16.4 Measurement

Tree planting shall be paid per one (1) tree planted. Pricing is to include all labor, consulting, equipment, and materials required including but not limited personal protection equipment, shovels, fuel etc., unless otherwise specified, to perform the work in accordance with this contract and the directions of the City. All pruning must follow proper disposal of materials as approved by the City.

Mobilization fees shall be paid daily and include all travel for all employees, equipment and materials to and from a site on a work day. Travel time to assess a site and/or provide cost estimates is not considered mobilization. Only one mobilization fee shall apply per day, regardless if the contractor works at more than one location within Tacoma city limits. The contractor shall be paid an additional mobilization fee if s/he is requested to re-mobilize during normal business hours.

2-16.5 Payment

Payment shall be made in accordance with section 1-04.1.

“Certified Arborist”, per hour

“Tree Planting”, per tree

“Mobilization”, daily lump sum
END OF SPECIAL PROVISIONS
PART VII

CITY OF TACOMA

SMALL BUSINESS ENTERPRISE PROGRAM
Chapter 1.07
SMALL BUSINESS ENTERPRISE

Sections:
1.07.010 Policy and purpose.
1.07.020 Definitions.
1.07.030 Discrimination prohibited.
1.07.040 Program administration.
1.07.050 Certification.
1.07.060 Program requirements.
1.07.070 Evaluation of submittals.
1.07.080 Contract compliance.
1.07.090 Program monitoring.
1.07.100 Enforcement.
1.07.110 Remedies.
1.07.120 Unlawful acts.
1.07.130 Severability.
1.07.140 Sunset and review of program.

1.07.010 Policy and purpose.
It is the policy of the City of Tacoma that citizens be afforded an opportunity for full participation in our free enterprise system and that historically underutilized business enterprises shall have an equitable opportunity to participate in the performance of City contracts. The City finds that in its contracting for supplies, services and public works there has been historical underutilization of small businesses located in certain geographically and economically disfavored locations and that this underutilization has had a deleterious impact on the economic well-being of the City. The purpose of this chapter is to remedy the effects of such underutilization through use of reasonably achievable goals to increase opportunities for historically underutilized businesses to participate in City contracts. It is the goal of this chapter to facilitate a substantial procurement, education, and mentorship program designed to promote equitable participation by historically underutilized businesses in the provision of supplies, services, and public works to the City. It is not the purpose of this chapter to provide any person or entity with any right, privilege, or claim, not shared by the public, generally, and this chapter shall not be construed to do so. This chapter is adopted in accordance with Chapter 35.22 RCW and RCW 49.60.400.
(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.020 Definitions.
Terms used in this chapter shall have the following meanings unless defined elsewhere in the Tacoma Municipal Code (“TMC”), or unless the context in which they are used clearly indicates a different meaning.

A. “Affidavit of Small Business Enterprise Certification” means the fully completed, signed, and notarized affidavit that must be submitted with an application for SBE certification. Representations and certifications made by the applicant in this Affidavit are made under penalty of perjury and will be used and relied upon by City to verify SBE eligibility and compliance with SBE certification and documentation requirements.

B. “Base Bid” means a Bid for Public Works to be performed or Supplies or Services to be furnished under a City Contract, including additives, alternates, deductives, excluding force accounts, and taxes collected separately pursuant to Washington Administrative Code (“WAC”) 458-20-171.

C. “Bid” means an offer submitted by a Respondent to furnish Supplies, Services, and/or Public Works in conformity with the Specifications and any other written terms and conditions included in a City request for such offer.

D. “Bidder” means an entity or individual who submits a Bid, Proposal or Quote. See also “Respondent.”

E. “City” means all Departments, Divisions and agencies of the City of Tacoma.

F. “Contract” means any type of legally binding agreement regardless of form or title that governs the terms and conditions for procurement of Public Works and Improvements and/or Non-Public Works and Improvements Supplies and Services. Contracts include the terms and conditions found in Specifications, Bidder or Respondent Submittals, and purchase orders issued by the City. A “Contract” as used in this chapter shall include an agreement between the City and a non-profit entity to perform construction-related services for Public Works. A “Contract” does not include: (1) awards made by the City with federal/state grant or City general funds monies to a non-profit entity where the City offers assistance, guidance, or
supervision on a project or program, and the recipient of the grant awards uses the grant moneys to provide services to the community; (2) sales transactions where the City sells its personal or real property; (3) a loan transaction where the City is acting as a debtor or a creditor; (4) lease, franchise; (5) agreements to use City real property (such as Licenses, Permits and Easements) and, (6) banking and other financial or investment services.

G. “Contractor” means any Person that presents a Submittal to the City, enters into a Contract with the City, and/or performs all or any part of a Contract awarded by the City, for the provision of Public Works, or Non-Public Works and Improvements, Supplies or Services.

H. “Evaluated Bid” means a Bid that factors each Respondent’s Base Bid including any alternates, deductive and additives selected by the City that will result in a weighed reduction based on that Respondent’s percentage of SBE participation, as defined by formula set forth in this chapter or in the SBE Regulations adopted pursuant to this chapter.

I. “Goals” means the annual level of participation by SBEs in City Contracts as established in this chapter, the SBE Regulations, or as necessary to comply with applicable federal and state nondiscrimination laws and regulations. Goals for individual Contracts may be adjusted as provided for in this chapter and shall not be construed as a minimum for any particular Contract or for any particular geographical area.

J. “SBE Certified Business” (or “SBEs”) means a business that meets the criteria set forth in Section 1.07.050 of this chapter and has been certified as meeting that criteria by the Community and Economic Development Department-SBE Program Coordinator.

K. “SBE Program Coordinator” means the individual appointed, from time to time, by the City’s Community and Economic Development Director to administer the SBE Regulations.

L. “SBE Regulations” shall mean the written regulations and procedures adopted pursuant to this chapter for procurement of Supplies, Services and Public Works.

M. “Lowest and Best Responsible Bidder” means the Bidder submitting the lowest Bid received that is within the range of acceptable bids, that also has the ability to timely perform the Contract bid upon considering such factors as financial resources, skills, quality of materials, past work record, and ability to comply with state, federal, and local requirements, including those set forth in the SBE Regulations.

N. “Non-Public Works and Improvements” means all competitively solicited procurement of Supplies and/or Services by the City not solicited as Public Works.

O. “Person” means individuals, companies, corporations, partnerships, associations, cooperatives, any other legally recognized business entity, legal representative, trustee, or receivers.

P. “Proposal” means a written offer to furnish Supplies or Services in response to a Request for Proposals. This term may be further defined in the Purchasing Policy Manual and/or in competitive solicitations issued by the City.

Q. “Public Works (or “Public Works and Improvements)” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the City, or that is by law a lien or charge on any property therein. This term includes all Supplies, materials, tools, and equipment to be furnished in accordance with the Contract for such work, construction, alteration, repair, or improvement.

R. “Quote” means a competitively solicited written offer to furnish Supplies or Services by a method of procurement that is less formalized than a Bid or a Proposal. This term may be further defined in the Purchasing Policy Manual.

S. “Respondent” means any entity or Person, other than a City employee, that provides a Submittal in response to a request for Bids, Request for Proposals, Request for Qualifications, request for quotes or other request for information, as such terms are defined in Section 1.06.251 TMC. This term includes any such entity or Person whether designated as a supplier, seller, vendor, proposer, Bidder, Contractor, consultant, merchant, or service provider that: (1) assumes a contractual responsibility to the City for provision of Supplies, Services, and/or Public Works; (2) is recognized by its industry as a provider of such Supplies, Services, and/or Public works; (3) has facilities similar to those commonly used by Persons engaged in the same or similar business; and/or (4) distributes, delivers, sells, or services a product or performs a Commercially Useful Function.

T. “Services” means non-Public Works and Improvements services and includes professional services, personal services, and purchased services, as such terms are defined in Section 1.06.251 TMC and/or the City’s Purchasing Policy Manual.

U. “Submittal” means Bids, Proposals, Quotes, qualifications or other information submitted in response to requests for Bids, Requests for Proposals, Requests for Qualifications, requests for Quotations, or other City requests for information, as such terms are defined in Section 1.06.251 TMC.
V. “Supplies” means materials, Supplies, and other products that are procured by the City through a competitive process for either Public Works procurement or Non-Public Works and Improvements procurement unless an approved waiver has been granted by the appropriate authority.


1.07.030 Discrimination prohibited.
A. No person that is engaged in the construction of public works for the City, engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services to the City, shall discriminate against any other person on the basis of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental or physical disability in employment. Such discrimination includes the unfair treatment or denial of normal privileges to a person as manifested in employment upgrades, demotions, transfers, layoffs, termination, rates of pay, recruitment of employees, or advertisement for employment.

B. The violation of the terms of RCW 49.60 or Chapter 1.29 TMC by any person that is engaged in the construction of public works for the City, is engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services shall result in the rebuttable presumption that the terms of this chapter have also been violated. Such violation may result in termination of any City contract the violator may have with the City and/or the violator’s ineligibility for further City Contracts.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.040 Program administration.
A. The Community and Economic Development Director, or his or her designated SBE Program Coordinator, shall be responsible for administering this chapter and obtaining compliance with respect to contracts entered into by the City and/or its contractors. It shall be the duty of the Director to pursue the objectives of this chapter by conference, conciliation, persuasion, investigation, or enforcement action, as may be necessary under the circumstances. The Director is authorized to implement an administrative and compliance program to meet these responsibilities and objectives.

B. The Director is hereby authorized to adopt and to amend administrative rules and regulations known as the SBE Regulations to properly implement and administer the provisions of this chapter. The SBE Regulations shall be in conformance with City of Tacoma policies and state and federal laws and be designed to encourage achievement of the SBE goals set forth herein. The SBE Regulations shall become effective following public notice and an opportunity to comment by the public.

C. The SBE Regulations adopted pursuant to this section are for the administrative and procedural guidance of the officers and employees of the City and are further expressions of the public policy of the City. The SBE Regulations, when adopted, shall not confer an independent cause of action or claim for relief cognizable in the courts of the state of Washington or the United States of America to any third parties, and such provisions shall not be used as the basis for a lawsuit in any court of competent jurisdiction challenging the award of any contract by the City.


1.07.050 Certification.
A. The SBE Program Coordinator shall approve a person as a SBE Certified Business if all of the following criteria are satisfied:

1. Each person with an ownership interest in the company has a personal net worth of less than $1,320,000 excluding one personal residence and the net worth of the business;

2. The company’s total gross receipts for any consecutive three year period within the last six years is not more than $36,500,000 for public works companies and not more than $15,000,000 for non-public works and improvements companies;

3. The owner(s) of the company executes an Affidavit of Small Business Enterprise Certification and files it with the City which states that all information submitted on the SBE application is accurate, that the business has sought or intends to do business with the City and/or within the Pierce County area and has experienced or expects to experience difficulty competing for such business due to financial limitations that impair its ability to compete against larger firms; and

4. The company can demonstrate that it also meets at least one of the following additional requirements:

a. The company’s business offices, or the personal residence of the owner, is located within a City of Tacoma designated Renewal Community/Community Empowerment Zone, prior to designation as a SBE, or
b. The company’s business offices, or the personal residence of the owner, is located within the City of Tacoma for at least six months prior to designation as a SBE; or

c. The company’s business offices are located in a federally designated HUBZONE in Pierce County or any adjacent county for at least 12 months prior to designation as a SBE; or

d. The company’s business offices are located in a federally designated HUBZONE in a County wherein the work will be performed, or an adjacent county, for at least 12 months prior to designation as a SBE.

B. Application Process. The SBE Program Coordinator shall make the initial determination regarding certification or recertification. Each SBE applicant shall provide the following documents; as such documents are more fully described in the SBE Regulations, to the SBE Program Coordinator:

1. A completed Statement of Personal Net Worth form;

2. A completed, signed, and notarized Affidavit of Small Business Enterprise Certification that affirms compliance with the certification and documentation requirements of this section;

3. List of equipment and vehicles used by the SBE;

4. Description of company structure and owners;

5. Such additional information as the SBE Program Coordinator or designee may require.

When another governmental entity has an equivalent SBE classification process the City may enter into an interlocal cooperative agreement for mutual recognition of certifications.

C. Recertification. A SBE qualified business shall demonstrate annually to the satisfaction of the SBE Program Coordinator that the following SBE qualifications are still in effect for such business:

1. That the company still meets all of the criteria set forth in subsection 1.07.050.A. TMC, and

2. That the company has maintained all applicable and necessary licenses in the intervening period, and

3. That the company demonstrates that the owner and/or designated employees have completed the minimum annual continuing business education training requirements set forth in the SBE Regulations.

D. Appeals. The applicant may appeal any certification determination by the SBE Program Coordinator under this chapter to the Director. The appeal must be made in writing and must set forth the specific reasons for the appeal. The Director shall make a decision on the appeal request within a reasonable time, which decision shall be final unless further appeal is made to the Hearing Examiner. In that event, the Hearing Examiner Rules of Procedure for Hearings, Chapter 1.23 TMC, shall be applicable to that appeal proceeding.


1.07.060 Program requirements.

A. Establishment of Annual SBE Goals. The SBE Regulations adopted pursuant to this chapter shall state reasonably achievable cumulative annual goals for utilization of SBEs in the provision of supplies, services, and public works procured by the City. Cumulative annual goals for the participation of SBEs in City contracts shall be based on the number of qualified SBEs operating within Pierce County or in a county that is adjacent to Pierce County or in a HUBZone in a county where the supplies, services and/or public works will be delivered or performed. The dollar value of all contracts awarded by the City to SBEs in the procurement of supplies, services, and public works shall be counted toward the accomplishment of the applicable SBE goal. The initial cumulative annual SBE goal for all public works, non-public works and improvements supplies and services procured by the City of Tacoma is 22 percent.

B. Revision of Annual SBE Goals. SBE utilization goals for supplies, services, and public works shall be reviewed annually to determine the total level of SBE participation reasonably attainable. If no certified SBEs are available to provide supplies, services, and/or public works, the dollar value of such supplies, services, or public works shall be exempt from the calculation of the cumulative annual goals set forth in the SBE Regulations. Proposed reduction of the cumulative annual SBE goals shall be in accordance with the SBE Regulations.

C. Application of SBE Goals to Contracts. The SBE Program Coordinator shall consult with City departments/divisions to establish the SBE goal for competitively solicited contracts of $25,000 and above, in accordance with this chapter and the SBE Regulations. No SBE goal will be established if no certified SBEs are available to provide supplies, services and/or public works.
D. Waivers. City departments/divisions or the SBE Program Coordinator may request to waive one or more of the requirements of this chapter as they apply to a particular contract or contracts. Waivers may be granted in any one or more of the following circumstances:

1. Emergency: The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency and waiver must be documented by the department/division awarding the contract.

2. Not Practicable: Compliance with the requirements of this chapter would impose an unwarranted economic burden or risk to the City after consideration of existing budgetary approvals.

3. Sole source: The supplies, services, and/or public works are available from only one source, and subcontracting possibilities do not reasonably exist as determined by the finance purchasing manager.

4. Government purchasing. The City is a party to or included in a federal, state or inter-local government purchasing agreement as approved by the finance purchasing manager.

5. Lack of SBEs: An insufficient number of qualified SBE contractors exist to create SBE utilization opportunities.

6. Best interests of the City: Waiver of SBE goals is in the best interests of the City due to unforeseen circumstances, provided that said circumstances are set forth in writing by the requestor.

E. Review of Waivers. A waiver determination by the finance purchasing manager may be reviewed by the Board of Contracts and Awards (C&A Board). The C&A Board may also review a request to reduce or waive the SBE utilization goals based on Not Practicable or Best Interests of the City circumstances. The C&A Board shall determine whether compliance with such goals would impose an unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance. If the determination of the C&A Board does not resolve the matter, a final determination shall be made by the City Council or Public Utility Board, as the case may be.


1.07.070 Evaluation of submittals.

A. All submittals for a supplies, services, or public works and improvements contract valued at $25,000 or more shall be evaluated for attainment of the SBE goal established for that contract in accordance with this chapter and the SBE Regulations.

B. The determination of SBE usage and the calculation of SBE goal attainment per this section shall include the following considerations:

1. General. The dollar value of the contract awarded by the City to a SBE in the procurement of supplies, services, or public works shall be counted toward achievement of the SBE goal.

2. Supplies. A public works and improvements contractor may receive credit toward attainment of the SBE goal for expenditures for supplies obtained from a SBE; provided such SBE assumes the actual and contractual responsibility for delivering the supplies with its resources. The contractor may also receive credit toward attainment of the SBE goal for the amount of the commission paid to a SBE resulting from a supplies contract with the City; provided the SBE performs a commercially useful function in the process.

3. Services and Public Works subcontracts. Any bid by a certified SBE or a bidder that utilizes a certified SBE shall receive credit toward SBE goal attainment based on the percentage of SBE usage demonstrated in the bid. A contractor that utilizes a SBE-certified subcontractor to provide services or public works shall receive a credit toward the contractor’s attainment of the SBE goal based on the value of the subcontract with that SBE.

4. Brokers, Fronts, or Similar Pass-Through Arrangements. SBEs acting as brokers, fronts, or similar pass-through arrangements (as such terms are defined in the SBE Regulations) shall not count toward SBE goal attainment unless the activity reflects normal industry practices and the broker performs a commercially useful function.

C. Evaluation of competitively solicited submittals for public works and improvements and for services when a SBE utilization goal has been established for the contract to be awarded shall be as follows:

1. When contract award is based on price. The lowest priced bid submitted by a responsive and responsible bidder will be reviewed to determine if it meets the SBE goal. Such low bid shall be determined to meet the SBE goal if the bidder is a certified SBE.

a. If the low bidder meets the SBE goal, the bid shall be presumed the lowest and best responsible bid for contract award.

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(Revised 4/2017)
b. If the lowest priced bid does not meet the SBE goal, but the bid of any other responsive and responsible bidder does, and such other bid(s) is or are priced within five percent of the lowest bid, then the following formula shall be applied to each such other bid:

\[
\text{Evaluated Bid} = (\text{Base Bid}) - \left( \frac{\text{SBE Usage Percentages}}{\text{SBE Goal Percentages}} \right) \times (0.05 \times \text{Low Base Bid})
\]

c. The lowest evaluated bid after applying said evaluation formula shall be presumed the lowest and best responsible bid for contract award.

d. In no event shall a bidder’s evaluated bid price be adjusted more than 5 percent from its base bid price for purposes of contract award.

2. When contract award is based on qualifications or other performance criteria in addition to price. Solicitations shall utilize a scoring system that promotes participation by certified SBEs. Submittals by respondents determined to be qualified may be further evaluated based on price using the formula applicable to price based contract awards above. The SBE Regulations may establish further requirements and procedures for final selection and contract award, including:

a. Evaluation of solicitations for Architectural and Engineering (A&E) services;

b. Evaluation and selection of submittals in response to requests for proposals; and

c. Selection of contractors from pre-qualified roster(s).

D. Evaluation of competitively solicited submittals for supplies when no SBE utilization goal has been established for the contract to be awarded shall encourage SBE participation as follows:

1. A submittal from a responsive certified SBE that is priced within five percent of the otherwise lowest responsive bid shall be recommended for award. Otherwise, the lowest responsive bidder shall be recommended for contract award.

E. The SBE Regulations may establish further SBE goal evaluation requirements and procedures for award of contracts between $5,000 and $25,000.00 and for non-competitively solicited contracts. City departments/divisions shall use due diligence to encourage and obtain SBE participation for supplies, services, and public works contracts under $5,000.


1.07.080 Contract compliance.

A. The contractor awarded a contract based on SBE participation shall, during the term of the contract, comply with the SBE goal established in said contract. To ensure compliance with this requirement following contract award, the following provisions apply:

1. Any substitutions for or failure to utilize SBEs projected to be used must be approved in advance by the SBE Program Coordinator. Substitution of one SBE with another shall be allowed where there has been a refusal to execute necessary agreements by the original SBE, a default on agreements previously made or other reasonable excuse; provided that the substitution does not increase the dollar amount of the bid.

2. Where it is shown that no other SBE is available as a substitute and that failure to secure participation by the SBE identified in the solicitation is not the fault of the respondent, substitution with a non-SBE shall be allowed; provided, that, the substitution does not increase the dollar amount of the bid.

3. If the SBE Program Coordinator determines that the contractor has not reasonably and actively pursued the use of replacement SBE(s), such contractor shall be deemed to be in non-compliance.

B. Record Keeping. All contracts shall require contractors to maintain relevant records and information necessary to document compliance with this chapter and the contractor's utilization of SBEs, and shall include the right of the City to inspect such records.


1.07.090 Program monitoring.

A. The SBE Program Coordinator shall monitor compliance with all provisions of this chapter and the SBE Regulations. The SBE Program Coordinator shall establish procedures to collect data and monitor the effect of the provisions of this chapter to assure, insofar as is practical, that the remedies set forth herein do not disproportionately favor one or more racial, gender, ethnic, or other protected groups, and that the remedies do not remain in effect beyond the point that they are required to
eliminate the effects of under utilization in City contracting. The SBE Program Coordinator shall have the authority to obtain from City departments/divisions, respondents, and contractors such relevant records, documents, and other information as is reasonably necessary to determine compliance.

B. The SBE Program Coordinator shall submit an annual report to the Community and Economic Development Director, Director of Utilities, and the City Manager detailing performance of the program. The report shall document SBE utilization levels, waivers, proposed modifications to the program, and such other matters as may be specified in the SBE Regulations.


1.07.100 Enforcement.
The Director, or his or her designee, may investigate the employment practices of contractors to determine whether or not the requirements of this chapter have been violated. Such investigation shall be conducted in accordance with the procedures established in the SBE Regulations.


1.07.110 Remedies.
A. Upon receipt of a determination of contractor violation by the SBE Program Coordinator, the City Manager or Director of Utilities, as appropriate, may take the following actions, singly or together, as appropriate:

1. Forfeit the contractor’s bid bond and/or performance bond;
2. Publish notice of the contractor’s noncompliance;
3. Cancel, terminate, or suspend the contractor’s contract, or portion thereof;
4. Withhold funds due contractor until compliance is achieved; and/or
5. Recommend appropriate action including, but not limited to, disqualification of eligibility for future contract awards by the City (debarment) per Section 1.06.279 TMC;

B. Prior to exercise of any of the foregoing remedies, the City shall provide written notice to the contractor specifying the violation and the City’s intent to exercise such remedy or remedies. The notice shall provide that each specified remedy becomes effective within ten business days of receipt unless the contractor appeals said action to the Hearing Examiner pursuant to Chapter 1.23 TMC.

C. When non-compliance with this chapter or the SBE Regulations has occurred, the SBE Program Coordinator and the department/division responsible for enforcement of the contract may allow continuation of the contract upon the contractor’s development of a plan for compliance acceptable to the Director.


1.07.120 Unlawful acts.
It shall be unlawful for any Person to willfully prevent or attempt to prevent, by intimidation, threats, coercion, or otherwise, any Person from complying with the provisions of this chapter.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.130 Severability.
If any section of this chapter or its application to any Person or circumstance is held invalid by a court of competent jurisdiction, then the remaining sections of this chapter, or the application of the provisions to other Persons or circumstances, shall not be affected.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.140 Sunset and review of program.
This chapter shall be in effect through and until December 31, 2019, unless the City Council shall determine at an earlier date that the requirements of this chapter are no longer necessary. If this chapter has not been repealed by July 1, 2019, the City Council shall determine by the end of that year whether substantial effects or lack of opportunity of SBEs remain true in the relevant market and whether, and for how long, some or all of the requirements of this chapter should remain in effect.

PREVAILING WAGE RATES

This project requires prevailing wages under chapter 39.12 RCW. Any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The project site is located in Pierce County.

The effective date for prevailing wages on this project will be the **submittal deadline** with these exceptions:

a. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.

b. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.

c. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link: [http://www.lni.wa.gov/TradesLicensing/PrevWage/WageRates/default.asp](http://www.lni.wa.gov/TradesLicensing/PrevWage/WageRates/default.asp)

REQUIRED DOCUMENTS

The Contractor shall submit to the City the following Department of Labor and Industries (L&I) forms for itself and for each firm covered under 39.12 RCW that provided work and materials for the Contract:

1. A copy of an approved Statement of Intent to Pay Prevailing Wages, L&I form number **F700-029-000**. The City will make no payment under this Contract for the Work performed until this statement has been approved by L&I and a copy of the approved form has been submitted to the City.

2. A copy of an approved Affidavit of Prevailing Wages Paid, L&I form number **F700-007-000**. The Contracting Agency will not grant completion or release retainage held under chapter 60.28 RCW until all approved Affidavit of Wages paid for Contractor and all Subcontractors have been received by the City.

03/07/2016
A. One Intent to Pay Prevailing Wages and a corresponding approved Affidavit of Wages Paid (Affidavits) are to be filed for each 12 month (one year) period of the contract performance for the Contractor and all subcontractors of any tier. Intents for the Contractor and all subcontractors shall be filed prior to any payment for work performed following contract execution. Following the first 12 month period, Affidavits must be received prior to final payment for work performed during the first 12 month period. New Intents shall be filed prior to any payment for work performed during the second 12 month period for the Contractor and all subcontractors. Affidavits from the Contractor and all subcontractors must be received from Washington State’s Department of Labor and Industries (L&I) per Article 6 of the General Conditions.

B. Immediately following the end of all work completed under this Contract, the Contractor, and each Subcontractor of any tier, shall file an approved Affidavit of Wages Paid with the L&I.

C. The Contractor shall post in a location readily visible to works at the Project site (1) a copy of the Statement of Intent to Pay Prevailing Wages approved by the Industrial Statistician of the Department of Labor and Industries and (2) the address and telephone number of the Industrial Statistician of the Department of labor and Industries to whom a complaint or inquiry concerning prevailing wages may be directed.

D. If a State of Washington prevailing wage rate conflicts with another applicable wage rate (such as Davis-Bacon Ace wage rate) for the same labor classification, the higher of the two shall govern.

E. Pursuant to RCW 39.12.060, if any dispute arises concerning the appropriate prevailing wage rate for work of a similar nature, and the dispute cannot be adjusted by the parties in interest, including labor and management representatives, the mater shall be referred for arbitration to the Director of the Department of Labor and Industries, and his or her decision shall be final and conclusive and binding on all parties involved in the dispute.

F. The Contractor shall defend (at the Contractor’s sole costs, with legal counsel approved by the City of Tacoma), indemnify and hold the City harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs and expenses, whether direct, indirect, including but not limited to attorneys’ fees and consultants’ fees and other costs and expenses, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 (“Prevailing Wages on Public Works”) or Chapter 51 RCW (“Industrial Insurance”), including but not limited to RCW 51.12.050.