Lewis County
Department of Public Works
Engineering Division

CONTRACT
PROVISIONS AND PLANS
FOR CONSTRUCTION OF:

HIGHWAY 603

STABILIZATION PROJECT

BOOK 1 of 3

FEDERAL AID PROJECT NO. STPR-G211(001)
F.A. Contract No. TA-5900
COUNTY ROAD PROJECT NO. 2144

March, 2016

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

3-21-16

BOARD OF COUNTY COMMISSIONERS

Edna J. Fund, District No. 1
P. W. Schulte, District No. 2
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INTRODUCTION

The following Amendments and Special Provisions shall be used in conjunction with the 2014 Standard Specifications for Road, Bridge, and Municipal Construction.

AMENDMENTS TO THE STANDARD SPECIFICATIONS

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

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

SECTION 1-01, DEFINITIONS AND TERMS
AUGUST 3, 2015

1-01.3 Definitions

The definition for "**Engineer**" is revised to read:

The Contracting Agency's representative who directly supervises the engineering and administration of a construction Contract.

The definition for "**Inspector**" is revised to read:

The Engineer's representative who inspects Contract performance in detail.

The definition for "**Project Engineer**" is revised to read:

Same as Engineer.

The following new term and definition is inserted after the definition for "**Proposal Form**":

Reference Information – Information provided to the Contractor by the Contracting Agency that is not part of the Contract.

The definition for "**Working Drawings**" is revised to read:

Drawings, plans, diagrams, or any other supplementary data or calculations, including a schedule of submittal dates for Working Drawings where specified, which the Contractor must submit to the Engineer.

SECTION 1-02, BID PROCEDURES AND CONDITIONS
AUGUST 3, 2015

1-02.8(1) Noncollusion Declaration

The third paragraph is revised to read:

Therefore, by including the Non-collusion Declaration as part of the signed bid Proposal, the Bidder is deemed to have certified and agreed to the requirements of the Declaration.

1-02.9 Delivery of Proposal

This section is revised to read:

For projects scheduled for Bid opening in Olympia, the Proposal shall be sealed and submitted in the envelope provided with it to the address below or shall be submitted electronically via Trns·Port Expedite® software and BidExpress®. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery. Bids are to be received no later than until 11:00:59 A.M. Pacific time on the date of Bid opening:

Washington State Department of Transportation
Room 2D20
310 Maple Park Avenue SE
Olympia WA 98501-2361

For projects scheduled for Bid opening in other locations the Proposal shall be sealed and submitted in the envelope provided with it at the location and time identified in the Special Provisions. The Bidder shall fill in all blanks on this envelope to ensure proper handling and delivery.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any 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.

When a Bid deposit is furnished in a physical format as specified in Section 1-02.7 the Bid deposit shall be submitted in a sealed envelope marked as "BID SUPPLEMENT" and with the Bidder's company name, project title, and Bid date.

1-02.10 Withdrawing, Revising, or Supplementing Proposal

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

Unless specifically allowed in the Contract, emailed requests to withdraw, revise, or supplement a Proposal are not acceptable.

1-02.13 Irregular Proposals

This section is revised to read:

1. A Proposal will be considered irregular and may be rejected if:

    a. The Bidder is not prequalified;

    b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;

    c. A price per unit cannot be determined from the Bid Proposal;

    d. The Proposal form is not properly executed;

    e. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;

    f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Utilization Certification, if applicable, as required in Section 1-02.6;

g. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed Disadvantaged Business Enterprise Utilization Certification that they are in agreement with the Bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;

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

i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:

a. The Proposal does not include a unit price for every Bid item;

b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;

c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;

d. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;

e. Receipt of Addenda is not acknowledged;

f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or

g. If Proposal form entries are not made in ink.

SECTION 1-03, AWARD AND EXECUTION OF CONTRACT
JANUARY 5, 2015

1-03.3 Execution of Contract

The first paragraph is revised to read:

Within 20 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, and shall be registered as a contractor in the state of Washington.

1-03.4 Contract Bond

The last word of item 3 is deleted.

Item 4 is renumbered to 5.

The following is inserted after item 3 (after the preceding Amendments are applied):

4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and

1-03.5 Failure to Execute Contract

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 Disadvantaged, Minority or Women's Business Enterprise 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 proposal bond or deposit of this Bidder.

SECTION 1-04, SCOPE OF THE WORK
AUGUST 3, 2015

1-04.3 Vacant

This section, including title, is revised to read:

1-04.3 Reference Information

Reference Information provided to the Contractor is not part of the Contract. The Contracting Agency does not guarantee the accuracy of the Reference Information and is not responsible for the content of the Reference Information in any manner. Any use of Reference Information by the Contractor is done solely at the Contractor's risk.

1-04.4 Changes

In the third paragraph, item number 1 and 2 are revised to read:

A. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

B. When an item of Work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original Contract quantity. For the purpose of this Section, an item of Work will be defined as any item that qualifies for adjustment under the provisions of Section 1-04.6.

The following two new sentences are inserted at the beginning of the eighth paragraph:

Within 14 calendar days of delivery of the change order the contractor shall endorse and return the change order, request an extension of time for endorsement or respond in accordance with Section 1-04.5. The Contracting Agency may unilaterally process the change order if the Contractor fails to comply with these requirements.

The last two paragraphs are deleted.

This section is supplemented with the following new subsections:

1-04.4(2) Value Engineering Change Proposal (VECP)

1-04.4(2)A General

A VECP is a Contractor proposed change to the Contract Provisions which will accomplish the projects functional requirements in a manner that is equal to or better than the requirements in the Contract. The VECP may be: (1) at a less cost or time, or (2) either no cost savings or a

minor increase in cost with a reduction in Contract time. The net savings or added costs to the Contract Work are shared by the Contractor and Contracting Agency.

The Contractor may submit a VECP for changing the Plans, Specifications, or other requirements of the Contract. The Engineer's decision to accept or reject all or part of the proposal is final and not subject to arbitration under the arbitration clause or otherwise subject to litigation.

The VECP shall meet all of the following:

1. Not adversely affect the long term life cycle costs.

2. Not adversely impact the ability to perform maintenance.

3. Provide the required safety and appearance.

4. Provide substitution for deleted or reduced Disadvantaged Business Enterprise Condition of Award Work, Apprentice Utilization and Training.

VECPs that provide a time reduction shall meet the following requirements:

1. Time saving is a direct result of the VECP.

2. Liquidated damages penalties are not used to calculate savings.

3. Administrative/overhead cost savings experienced by either the Contractor or Contracting Agency as a result of time reduction accrue to each party and are not used to calculate savings.

1-04.4(2)B VECP Savings

1-04.4(2)B1 Proposal Savings

The incentive payment to the Contractor shall be one-half of the net savings of the proposal calculated as follows:

1. (gross cost of deleted work) – (gross cost of added work) = (gross savings)

2. (gross savings) – (Contractor's engineering costs) – (Contracting Agency's costs) = (net savings)

3. (net savings) / 2 = (incentive pay)

The Contracting Agency's costs shall be the actual consultant costs billed to the Contracting Agency and in-house costs. Costs for personnel assigned to the Engineer's office shall not be included.

1-04.4(2)B2 Added Costs to Achieve Time Savings

The cost to achieve the time savings shall be calculated as follows:

1. (cost of added work) + (Contractor's engineering costs - Contracting Agency's engineering costs) = (cost to achieve time savings)

2. (cost to achieve time savings) / 2 = (Contracting Agency's share of added cost)

If the timesaving proposal also involves deleting work and, as a result, creates a savings for the Contracting Agency, then the Contractor shall also receive one-half of the savings realized through the deletion.

1-04.4(2)C VECP Approval

1-04.4(2)C1 Concept Approval

The Contractor shall submit a written proposal to the Engineer for consideration. The proposal shall contain the following information:

1. An explanation outlining the benefit provided by the change(s).

2. A narrative description of the proposed change(s). If applicable, the discussion shall include a demonstration of functional equivalency or a description of how the proposal meets the original contract scope of work.

3. A cost discussion estimating any net savings. Savings estimates will generally follow the outline below under the section, “Proposal Savings”.

4. A statement providing the Contracting Agency with the right to use all or any part of the proposal on future projects without future obligation or compensation.

5. A statement acknowledging and agreeing that the Engineer’s decision to accept or reject all or part of the proposal is final and not subject to arbitration under the arbitration clause or otherwise be subject to claims or disputes.

6. A statement giving the dates the Engineer must make a decision to accept or reject the conceptual proposal, the date that approval to proceed must be received, and the date the work must begin in order to not delay the contract. If the Contracting Agency does not approve the VECP by the date specified by the Contractor in their proposal the VECP will be deemed rejected.

7. The submittal will include an analysis on other Work that may have costs that changed as a result of the VECP. Traffic control and erosion control shall both be included in addition to any other impacted Work.

After review of the proposal, the Engineer will respond in writing with acceptance or rejection of the concept. This acceptance shall not be construed as authority to proceed with any change contract work. Concept approval allows the Contractor to proceed with the Work needed to develop final plans and other information to receive formal approval and to support preparation of a change order.

1-04.4(2)C2 Formal Approval

The Contractor’s submittal to the Engineer for formal approval shall include the following:

1. Deleted Work – Include the calculated quantities of unit price Work to be deleted. Include the proposed partial prices for portions of lump sum Work deleted. For deletion of force account items include the time and material estimates.

2. Added Work – Include the calculated quantities of unit price Work to be added, either by original unit Contract prices or by new, negotiated unit prices. For new items of Work include the quantities and proposed prices.

3. Contractor's Engineering Costs – Submit the labor costs for the engineering to develop the proposal; costs for Contractor employees utilized in contract operations on a regular basis shall not be included.

4. Schedule Analysis – If the VECP is related to time savings, the Contractor shall submit a partial progress schedule showing the changed Work. The submittal shall also include a discussion comparing the partial progress schedule with the approved progress schedule for the project.

5. Working Drawings – Type 3 Working Drawings shall be submitted; those drawings which require engineering shall be a Type 3E.

Formal approval of the proposal will be documented by issuance of a change order. The VECP change order will contain the following statements which the Contractor agrees to by signing the change order:

1. The Contractor accepts design risk of all features, both temporary and permanent, of the changed Work.

2. The Contractor accepts risk of constructability of the changed Work.

3. The Contractor provides the Contracting Agency with the right to use all or any part of the proposal on future projects without further obligation or compensation.

VECP change orders will contain separate pay items for the items that are applicable to the Proposal. These are as follows:

1. Deleted Work.

2. Added Work.

3. The Contractor's engineering costs, reimbursed at 100 percent of the Contractor's cost.

4. Incentive payment to the Contractor.

When added Work costs exceed Deleted Work costs, but time savings make a viable proposal, then items 3 and 4 above are replaced with the following:

3. The Contracting Agency's share of added cost to achieve time savings.

4. The Contractor's share of savings from deleted Work.

1-04.4(2)C3 Authority to Proceed with Changed Work

The authority for the Contractor to proceed with the VECP Work will be provided by one of the following options:

1. Execution of the VECP change order, or

2. At the Contractor's request the Contracting Agency may provide approval by letter from the Engineer for the Work to proceed prior to execution of a change order. All of the risk for proceeding with the VECP shall be the responsibility of the Contractor. Additionally, the following criteria are required to have been met:

    a) Concept approval has been granted by the Contracting Agency.

    b) All design reviews and approvals have been completed, including plans and specifications.

    c) The Contractor has guaranteed, in writing, the minimum savings to the Contracting Agency.

1-04.4(1) Minor Changes

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

Payments or credits for changes amounting to $25,000 or less may be made under the Bid item "Minor Change".

1-04.5 Procedure and Protest by the Contractor

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

The Contractor accepts all requirements of a change order by: (1) endorsing it, (2) writing a separate acceptance, (3) not responding within the allotted time as outlined in Section 1-04.4, or (4) not protesting in the way this Section provides.

SECTION 1-05, CONTROL OF WORK
AUGUST 4, 2014

1-05.1 Authority of the Engineer

In this section, "Project Engineer" is revised to read "Engineer".

The second paragraph (up until the colon) is revised to read:

The Engineer's decisions will be final on all questions including the following:

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

The Engineer represents the Contracting Agency with full authority to enforce Contract requirements.

1-05.2 Authority of Assistants and Inspectors

The first paragraph is revised to read:

The Engineer may appoint assistants and Inspectors to assist in determining that the Work and materials meet the Contract requirements. Assistants and Inspectors have the authority to reject defective material and suspend Work that is being done improperly, subject to the final decisions of the Engineer.

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

1-05.3 Plans and Working Drawings

This section's title is revised to read:

Working Drawings

This section is revised to read:

The Contract may require the Contractor to submit Working Drawings for the performance of the Work. Working Drawings shall be submitted by the Contractor electronically to the Engineer in PDF format; drawing details shall be prepared in accordance with conventional detailing practices. If the PDF format is found to be unacceptable, at the request of the Engineer, the Contractor shall provide paper copies of the Working Drawings with drawings on 11 by 17 inch sheets and calculations/text on 8½ by 11 inch sheets.

Working Drawings will be classified under the following categories:

1. **Type 1** – Submitted for Contracting Agency information. Submittal must be received by the Contracting Agency a minimum of 7 calendar days before work represented by the submittal begins.

2. **Type 2** – Submitted for Contracting Agency review and comment. Unless otherwise stated in the Contract, the Engineer will require up to 20 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall not proceed with the Work represented by the Working Drawing until comments from the Engineer have been addressed.

3. **Type 2E** – Same as a Type 2 Working Drawing with Engineering as described below.

4. **Type 3** – Submitted for Contracting Agency review and approval. Unless otherwise stated in the Contract, the Engineer will require up to 30 calendar days from the date the Working Drawing is received until it is returned to the Contractor. The Contractor shall obtain the Engineer's written approval before proceeding with the Work represented by the Working Drawing.

5. **Type 3E** – Same as a Type 3 Working Drawing with Engineering as described below.

All Working Drawings shall be considered Type 3 Working Drawings except as specifically noted otherwise in the Contract. Unless designated otherwise by the Contractor, submittals of Working Drawings will be reviewed in the order they are received by the Engineer. In the event that several Working Drawings are received simultaneously, the Contractor shall specify the sequence in which they are to be reviewed. If the Contractor does not submit a review sequence for simultaneous Working Drawing submittals, the review sequence will be at the Engineer's discretion.

Working Drawings requiring Engineering, Type 2E and 3E, shall be prepared by (or under the direction of) a Professional Engineer, licensed under Title 18 RCW, State of Washington, and in accordance with WAC 196-23-020. Design calculations shall carry the Professional Engineer's signature and seal, date of signature, and registration number on the cover page. The cover page shall also include the Contract number, Contract title and sequential index to calculation page numbers.

If more than the specified number of days is required for the Engineer's review of any individual Working Drawing or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

Review or approval of Working Drawings shall neither confer upon the Contracting Agency nor relieve the Contractor of any responsibility for the accuracy of the drawings or their conformity with the Contract. The Contractor shall bear all risk and all costs of any Work delays caused by rejection or nonapproval of Working Drawings.

Unit Bid prices shall cover all costs of Working Drawings.

SECTION 1-06, CONTROL OF MATERIAL
AUGUST 3, 2015

1-06.1(4) Fabrication Inspection Expense

This section is revised to read:

In the event the Contractor elects to have items fabricated beyond 300 miles from Seattle, Washington, the Contracting Agency will deduct from monies due or that may become due to the Contractor all costs to perform plant approval and fabrication acceptance inspection for the items listed in Table 1 and costs for initial plant approval for items listed in Table 2. Plants currently listed on the QPL for the items shown in Table 1 and Table 2 in this section do not require plant approval.

Table 1: Items Requiring Plant Approval and Fabrication Acceptance Inspection

Anchor Bolts (ASTM A449 & F1554 Grade 105)	Precast Concrete Vaults (Electrical, Utility, Drainage, etc.)
Bridge Bearings (Cylindrical, Disc, Fabric Pad, Low Rise, Pin, Pendulum, and Spherical)	Precast Concrete Girders and Precast Bridge Components
Cattle Guards	Prestressed Concrete Girders
Coated Piling and Casing	Prestressed Concrete Panels
Epoxy-Coated Reinforcing Steel	Precast Reinforced Concrete Box Culverts
Fabricated / Welded Miscellaneous Metal Drainage Items: Grate Inlets, and Drop Inlets	Precast Reinforced Concrete Split Box Culverts
Longitudinal Seismic Restrainers	Precast Reinforced Concrete Three Sided Structures
Metal Bridge Railing and Handrail	Prestressed Concrete Piles
Metal Castings for Concrete Drainage, electrical, and Utility Items	Retrofit Guardrail Posts with Welded Base Plates
Modular Expansion Joints	Signal Standards
Paint & Powder Coating Facilities for Table 1 items	Signing Material
Precast Concrete Bridge Deck Panels	Sign Structures – Cantilever , Sign Bridge, and Bridge Mounted, Roadside Type PLT / PLU
Precast Concrete Catch Basins, Manholes, Inlets, Drywells, and Risers	Soldier Piles
Precast Concrete Drain, Perforated	Steel Bridges and Steel Bridge

Underdrain, Culvert, Storm Sewer, and Sanitary Sewer Pipe	Components
Precast Concrete Floor Panels	Steel Column Jackets
Precast Concrete Junction Boxes, Pull Boxes, Cable Vaults	Steel Light Standards, and High Mast Light Poles
Precast Concrete Marine Pier Deck Panels	Strip Seal Expansion Joints
Precast Concrete Pier Caps	Structural Steel for Ferry Terminal Berthing, Pedestrian and Vehicle Loading Structures
Precast Concrete Retaining Walls, including Lagging Panels	Timber Bridges
Precast Concrete Roof Panels	Treated Timber and Lumber 6 inch by 6 inch or larger
Precast Concrete Structural Earth Walls, Noise Barrier Walls, Wall Panels, and Wall Stem Panels	Welded Structural Steel (Miscellaneous)
Precast Concrete Traffic Barrier	

Table 2: Items Requiring Initial Plant Approval Only

Epoxy Coating of Dowels and Tiebars for Concrete Pavement	Precast Concrete Blocks for Structural Earth Walls
Guardrail Posts and Blocks	Steel Pipe Piling

The deductions for fabrication inspection costs will be as shown in the Payment Table below.

Zone	Place of Fabrication or Inspection Site	Reduction in Payment
1	Within 300 airline miles from Seattle	None*
2	Between 300 and 3,000 airline miles from Seattle	$700.00 per inspection day**
3	Over 3,000 airline miles from Seattle	$1,000 per inspection day,** but not less than $2,500 per trip

* Fabrication inspection expense does not apply for initial acceptance inspection in Zone 1. Re-inspection of items due to unacceptable workmanship or scheduling errors made by the Contractor, fabricator, or facility applying protective coatings will be assessed at $60.00 per hour but not less than $120.00 per inspection.

** An inspection day includes any calendar day or portion of a calendar day spent by one inspector inspecting, on standby, or traveling to and from, a place of fabrication. An additional cost per inspection day will be assessed for each additional inspector. Reimbursement will be assessed at $280.00 per day for weekends and holidays for each on site inspector in travel status, but not engaged in inspection or travel activities when fabrication activities are not taking place.

Where fabrication of an item takes place in more than one zone, the reduction in payment will be computed on the basis of the entire item being fabricated in the farthest of zones where any fabrication takes place on that item.

The rates for Zones 2 and 3 shall be applied for the full duration of time for all fabrication inspection activities, to include, but not be limited to: plant approvals, prefabrication meetings, fabrication, coatings, and final inspection. When an inspection is for more than one Contract the fabrication inspection costs shall be prorated as determined by the Engineer.

SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC
AUGUST 3, 2015

1-07.1 Laws to be Observed

The third paragraph is supplemented with the following:

A copy of all safety plans (e.g., fall protection work plan) that are developed by the Contractor shall be submitted to the Engineer as a Type 1 Working Drawing. When requested by the Engineer, the Contractor shall provide training to WSDOT employees working on-site for any activity covered by a safety plan. Costs for training that is provided solely to Contracting Agency employees will be paid to the Contractor in accordance with Section 1-09.4.

1-07.2 State Taxes

This section is revised to read:

The Washington State Department of Revenue has issued special rules on the state sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contracting Agency will not adjust its payment if the Contractor bases a Bid on a misunderstood tax liability.

The Contracting Agency may deduct from its payments to the Contractor, retainage or lien the bond, in the amount the Contractor owes the State Department of Revenue, whether the amount owed relates to the Contract in question or not. Any amount so deducted will be paid into the proper State fund on the contractor's behalf. For additional information on tax rates and application refer to applicable RCWs, WACs or the Department of Revenue's website.

1-07.2(1) State Sales Tax: Work Performed on City, County, or Federally-Owned Land

This section including title is revised to read:

1-07.2(1) State Sales Tax: WAC 458-20-171 – Use Tax

For Work designated as Rule 171, **Use Tax,** the Contractor shall include for compensation the amount of any taxes paid in the various unit Bid prices or other Contract amounts. Typically, these taxes are collected on materials incorporated into the project and items such as the purchase or rental of; tools, machinery, equipment, or consumable supplies not integrated into the project.

The Summary of Quantities in the Contract Plans identifies those parts of the project that are subject to **Use Tax** under Section 1-07.2(1).

1-07.2(2) State Sales Tax: Work on State-Owned or Private Land

This section including title is revised to read:

1-07.2(2) State Sales Tax: WAC 458-20-170 – Retail Sales Tax

For Work designated as Rule 170, **Retail Sales Tax,** the Contractor shall collect from the Contracting Agency, **Retail Sales Tax** on the full Contract price. The Contracting Agency will automatically add this **Retail Sales Tax** to each payment to the Contractor and for this reason; the Contractor shall not include the **Retail Sales Tax** in the unit Bid prices or in any other Contract amount. However, the Contracting Agency will not provide additional compensation to the Prime Contractor or Subcontractor for **Retail Sales Taxes** paid by the Contractor in addition to the

Retail Sales Tax on the total contract amount. Typically, these taxes are collected on items such as the purchase or rental of; tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit Bid prices or in any other Contract amounts.

The Summary of Quantities in the Contract Plans identifies those parts of the project that are subject to **Retail Sales Tax** under Section 1-07.2(2).

1-07.2(3) Services

This section is revised to read:

Any contract wholly for professional or other applicable services is generally not subject to **Retail Sales Tax** and therefore the Contractor shall not collect **Retail Sales Tax** from the Contracting Agency on those Contracts. Any incidental taxes paid as part of providing the services shall be included in the payments under the contract.

1-07.15 Temporary Water Pollution/Erosion Control

This section's title is revised to read:

1-07.15 Temporary Water Pollution Prevention

This section's content is deleted.

1-07.23(1) Construction Under Traffic

In the second paragraph, the following new sentence is inserted after the second sentence:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired.

SECTION 1-08, PROSECUTION AND PROGRESS
AUGUST 3, 2015

1-08.1 Subcontracting

The eighth paragraph is revised to read:

On all projects, the Contractor shall certify to the actual amounts paid to Disadvantaged, Minority, Women's, or Small 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 Project Engineer on a monthly basis each month between Execution of the Contract and Physical Completion of the Contract using the application available at: https://remoteapps.wsdot.wa.gov/mapsdata/tools/dbeparticipation. The monthly report is due 20 calendar days following the end of the month. 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 ninth paragraph is deleted and replaced with the following new paragraph:

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 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. Following receipt of a progress payment from the Contracting Agency, a

Monthly Payment Summary form shall be submitted to the Engineer in PDF format within 20 calendar days. The Monthly Payment Summary shall include all Subcontractors that completed Work that was paid on the progress estimate by the Contracting Agency. 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 Monthly Payment Summary form is available from the Engineer. The Contracting Agency's copy of the notice to Subcontractor for deferred payments shall be submitted with the Monthly Payment Summary.

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

This section is revised to read:

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

Requirements

1. Upon request, the Engineer will provide a copy of any or all progress payment estimates, with regard to contract payments to any interested party to the project.

2. The Contractor shall make payment to the Lower Tier Subcontractor not later than ten calendar days after receipt of payment for work satisfactorily completed by the Lower Tier Subcontractor, to the extent of the Lower Tier Subcontractor's interest therein.

3. In the event the Contractor believes they have the right under the Contract or Subcontract to withhold payment in part or whole from a Lower Tier Subcontractor they shall provide immediate notification to that Lower Tier Subcontractor and the Engineer. The notice shall include an accounting of payments to date, the value and reason for the withheld amount, and an explanation of what must be done to have the withheld amount released. The Lower Tier Subcontractor shall be paid within eight calendar days after the Subcontractor completes the remedial action identified.

4. Every subcontract and lower tier subcontract shall have a dispute resolution process incorporated for resolving issues between the parties to the subcontract, or one shall be established as necessary.

5. If the parties agree, the WSDOT will make a third party neutral available provided the parties to the dispute agree that the cost of doing so is split between them.

6. The Engineer will withhold the same amount of funds from the Contractor as was withheld if the issue is not resolved by the next progress estimate.

7. Failure by a Contractor or Subcontractor to comply with these requirements may result in one or more of the following:

   a) Reflected in the Prime Contractor's Performance Evaluation.

   b) Cancellation, termination or suspension of the Contract, in whole or in part.

   c) Sanctions as provided by the Contract; subcontract; or by law under applicable prompt payment statutes including RCW 39.04.250.

8. The Subcontractor shall make a written request to the Contractor for the release of the Subcontractor's retainage or retainage bond.

9. Within 10 calendar days of the request, the Contractor shall determine if the subcontract has been satisfactorily completed including any required lien releases, documentation and material testing and shall inform the Subcontractor, in writing, of the Contractor's determination.

10. If the Contractor determines that the subcontract has been satisfactorily completed, the Subcontractor's retainage or retainage bond shall be released by the Contractor within 10 calendar days from the date of the written notice. If the Contractor determines that the Subcontractor has not achieved satisfactory completion of the subcontract, the Contractor must provide the Subcontractor with written notice, stating specifically why the subcontract Work is not satisfactorily completed and what has to be done to achieve completion. The Contractor shall release the Subcontractor's retainage or retainage bond within 10 calendar days after the Subcontractor has satisfactorily completed the Work identified in the notice.

11. In determining whether satisfactory completion has been achieved, the Contractor may require the Subcontractor to provide documentation such as certifications and releases, showing that all laborers, lower-tiered Subcontractors, suppliers of material and equipment, and others involved in the Subcontractor's Work have been paid in full. 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, material acceptance certifications and releases from applicable governmental agencies to the extent that they relate to the Subcontractor's Work.

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 Subcontractor may seek recovery against the Contractor under applicable prompt pay statutes in addition to any other remedies provided for by the subcontract or by law.

Conditions

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

2. This Section of the Contract does not apply to retainage withheld by the Contracting Agency from monies earned by the Contractor. The Contracting Agency shall continue to process the release of that retainage based upon the Completion Date of the project as defined in Section 1-08.5 Time for Completion and in accordance with the requirements and procedures set forth in RCW 60.28.

Payment

The Contractor shall be solely responsible for any additional costs involved in paying retainage to the Subcontractors prior to total project completion. Those costs shall be incidental to the respective Bid items.

SECTION 1-09, MEASUREMENT AND PAYMENT
JANUARY 5, 2015

1-09.6 Force Account

In the third paragraph of item number 3, the last sentence is revised to read:

In the event that prior quotations are not obtained and the vendor is not a firm independent from the Contractor or Subcontractor, then after-the-fact quotations may be obtained by the Engineer from the open market in the vicinity and the lowest such quotation may be used in place of submitted invoice.

SECTION 1-10, TEMPORARY TRAFFIC CONTROL
AUGUST 4, 2014

1-10.1(1) Materials

The following material reference is deleted from this section:

Barrier Drums 9-35.8

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 and not otherwise specified as being furnished by the Contracting Agency.

1-10.2(1) General

In the third paragraph, the first two sentences are revised to read:

The primary and alternate TCS shall be certified by one of the organizations listed in the Special Provisions. Possession of a current Washington State TCS card and flagging card by the primary and alternate TCS is mandatory.

1-10.2(1)B Traffic Control Supervisor

The first paragraph is revised to read:

A Traffic Control Supervisor (TCS) shall be present on the project whenever flagging or other traffic control labor is being utilized or less frequently, as authorized by the Engineer.

The last paragraph is revised to read:

The TCS may perform the Work described in Section 1-10.3(1)A Flaggers or in Section 1-10.3(1)B Other Traffic Control Labor and be compensated under those Bid items, provided that the duties of the TCS are accomplished.

1-10.2(2) Traffic Control Plans

The first paragraph is revised to read:

The traffic control plan or plans appearing in the Contract documents show a method of handling vehicle, bicycle, and pedestrian traffic. All construction signs, flaggers, and other traffic control devices are shown on the traffic control plan(s) except for emergency situations. If the Contractor proposes adding the use of flaggers to a plan, this will constitute a modification requiring approval by the Engineer. The modified plans shall show locations for all the required advance warning signs and a safe, protected location for the flagging station. If flagging is to be performed during hours of darkness, the plan shall include appropriate illumination for the flagging station.

In the second paragraph, the second sentence is revised to read:

Any Contractor-proposed modification, supplement or replacement shall show the necessary construction signs, flaggers, and other traffic control devices required to support the Work.

1-10.2(3) Conformance to Established Standards

In the second paragraph, the second sentence is revised to read:

The National Cooperative Highway Research Project (NCHRP) Report 350 and the AASHTO Manual for Assessing Safety Hardware (MASH) have established requirements for crash testing.

In the third paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

In the fourth paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

In the fifth paragraph, "NCHRP 350" is revised to read "NCHRP 350 or MASH".

1-10.3(1) Traffic Control Labor

The first paragraph is revised to read:

The Contractor shall furnish all personnel for flagging, for the execution of all procedures related to temporary traffic control and for the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations.

1-10.3(1)A Flaggers and Spotters

This section's title is revised to read:

Flaggers

The first paragraph is revised to read:

Flaggers shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. The flagging card shall be immediately available and shown to the Contracting Agency upon request.

The last paragraph is deleted.

1-10.3(1)B Other Traffic Control Labor

This section is revised to read:

In addition to flagging duties, the Contractor shall provide personnel for all other traffic control procedures required by the construction operations and for the labor to install, maintain and remove any traffic control devices shown on Traffic Control Plans.

1-10.3(3)B Sequential Arrow Signs

This section is supplemented with the following:

A sequential arrow sign is required for all lane closure tapers on a multilane facility. A separate sequential arrow sign shall be used for each closed lane. The arrow sign shall not be used to laterally shift traffic. When used in the caution mode, the four corner mode shall be used.

1-10.3(3)C Portable Changeable Message Signs

This section is revised to read:

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate, and maintain portable changeable message signs (PCMS). A PCMS shall be placed behind a barrier or guardrail whenever possible, but shall at a minimum provide 4 ft. of lateral clearance to edge of travelled lane and be delineated by channelization devices. The Contractor shall remove the PCMS from the clear zone when not in use unless protected by barrier or guardrail.

1-10.3(3)F Barrier Drums

This section including title is deleted in its entirety and replaced with the following:

1-10.3(3)F Vacant

1-10.3(3)K Portable Temporary Traffic Control Signal

The fifth paragraph is revised to read:

The Project Engineer or designee will inspect the signal system at initial installation/operation and approve the signal timing. Final approval will be based on the results of the operational inspection.

1-10.4(2) Item Bids With Lump Sum for Incidentals

In the second paragraph, the first and second sentences are revised to read:

"Flaggers" will be measured by the hour. Hours will be measured for each flagging station, shown on an approved Traffic Control Plan, when that station is staffed in accordance with Section 1-10.3(1)A.

The first sentence of the last bulleted item in this section is revised to read:

Installing and removing Barricades, Traffic Safety Drums, Cones, Tubular Markers and Warning Lights and Flashers to carry out approved Traffic Control Plan(s).

1-10.5(2) Item Bids With Lump Sum for Incidentals

This section is deleted and replaced with the following:

"Traffic Control Supervisor", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10.2(1)B.

"Pedestrian Traffic Control", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work for pedestrian traffic control defined in Section 1-10.

"Flaggers", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10.3(1)A.

"Other Traffic Control Labor", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all labor costs incurred by the Contractor in performing the Work specified for this item in Section 1-10.4(2).

"Construction Signs Class A", per square foot.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)A. In the event that "Do Not Pass" and "Pass With Care" signs must be left in place, a change order, as described in Section 1-04.4, will be required. When the Bid Proposal contains the item "Sign Covering", then covering those signs indicated in the Contract will be measured and paid according to Section 8-21.

"Sequential Arrow Sign", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)B.

"Portable Changeable Message Sign", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work for procuring all portable changeable message signs required for the project and for transporting these signs to and from the project.

"Transportable Attenuator", per each.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work described in Section 1-10.3(3)J except for costs compensated separately under the items "Operation of Transportable Attenuator" and "Repair Transportable Attenuator".

"Operation of Transportable Attenuator", per hour.

The unit Contract price, when applied to the number of units measured for this item in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred by the Contractor in performing the Work for operating transportable attenuators on the project.

"Repair Transportable Attenuator", by force account.

All costs of repairing or replacing transportable attenuators that are damaged by the motoring public while in use as shown on an approved Traffic Control Plan will be paid for by force account as specified in Section 1-09.6. To provide a common Proposal for all Bidders, the Contracting Agency has estimated the amount of force account for "Repair Transportable Attenuator" and has entered the amount in the Proposal to become a part of the total Bid by the Contractor. Transportable attenuators damaged due to the Contractor's operation or damaged in any manner when not in use shall be repaired or replaced by the Contractor at no expense to the Contracting Agency.

"Other Temporary Traffic Control", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work defined in Section 1-10, and which costs are not compensated by one of the above-listed items.

"Portable Temporary Traffic Control Signal", lump sum.

The lump sum Contract payment shall be full compensation for all costs incurred by the Contractor in performing the Work as described in Section 1-10.3(3)K, including all costs for traffic control during manual control, adjustment, malfunction, or failure of the portable traffic control signals and during replacement of failed or malfunctioning signals.

SECTION 2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP
AUGUST 3, 2015

2-01.2 Disposal of Usable Materials and Debris

This section is revised to read:

The Contractor shall meet all requirements of state, county, and municipal regulations regarding health, safety, and public welfare in the disposal of all usable material and debris.

The Contractor shall dispose of debris by one or more of the disposal methods described below.

2-01.2(1) Disposal Method No. 1 – Open Burning

The first paragraph is supplemented with the following:

All burning operations shall be strictly in accordance with these authorizations.

The second paragraph is deleted.

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

This section is revised to read:

Wood chips may be disposed of on-site in accordance with the following:

1. Chips shall be no larger than 6 square inches and no thicker than ½ inch.

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

3. Chips shall not be incorporated into the embankment but may be spread on slopes where feasible at depths no greater than 2 inches.

4. Chips shall be tractor-walked into the ground.

2-01.3(1) Clearing

In the second paragraph, item number 3 (up until the colon) is revised to read:

3. Follow these requirements for all stumps that will be buried deeper than 5 feet from the top, side, or end surface of the embankment or any structure and are in a location that will not be terraced as described in Section 2-03.3(14):

SECTION 2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS
JANUARY 5, 2015

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

This section is supplemented with the following new subsections:

2-02.3(2)A Bridge Removal

2-02.3(2)A1 Bridge Demolition Plan Submittal

The Contractor shall submit a Type 2E Working Drawing consisting of a bridge demolition plan, showing the method of removing the existing bridge(s), or portions of bridges, as specified.

The bridge demolition plan shall show all equipment, sequence of operations, and details required to complete the work, including containment, collection, and disposal of all debris. The plan shall include a crane foundation stability analysis and crane load calculations for the work. The plan shall detail the containment, collection, and disposal of all debris. The plan shall show all stages of demolition.

When the bridge removal work includes removal of a truss, and when the Contractor's removal method involves use of a crane or cranes to pick, lift, and remove the truss, the Contractor shall confirm the truss dead load weight prior to beginning the truss removal operation. The operation of confirming the truss dead load shall be performed at both ends of the truss, and shall ensure that the truss is broken free of its support bearings. The Contractor's method of confirming the truss dead load, whether by hydraulic jacks or other means, shall be included in the Contractor's bridge demolition plan submittal.

When the bridge removal work involves removing portions of existing concrete without replacement, the methods and tools used to achieve the smooth surface and profile specified in Section 2-02.3(2)A2 shall be included in the Contractor's bridge demolition plan submittal.

2-02.3(2)A2 Removing Portions of Existing Concrete

Care shall be taken in removing concrete to prevent overbreakage or damage to portions of the existing Structure which are to remain. Before concrete removal begins, a saw cut shall be made into the surface of the concrete at the perimeter of the removal limits. The saw cut shall be 3/4-inch deep when the steel reinforcement is to remain, and may be deeper when the steel reinforcement is removed with the concrete.

Concrete shall be completely removed (exposing the deformed surface of the bar) from existing steel reinforcing bars which extend from the existing members and are specified to remain. Steel reinforcing bars that are not designated to remain shall be cut a minimum of 1-inch behind the final surface. The void left by removal of the steel reinforcing bar shall be filled with mortar conforming to Section 9-20.4(2). The mortar shall match the color of the existing concrete surface as nearly as practicable.

The Contractor shall roughen, clean, and saturate existing concrete surfaces, against which fresh concrete will be placed, in accordance with Section 6-02.3(12)B. When a portion of existing concrete is to be removed without replacement, concrete shall be removed to a clean line with a smooth surface of less than 1/16 inch profile.

2-02.3(2)A3 Use of Explosives for Bridge Demolition

Explosives shall not be used for bridge demolition, except as specifically allowed by the Special Provisions.

2-02.5 Payment

This section is supplemented with the following new Bid items:

"Removing Existing Bridge___", lump sum.

"Removing Existing Structure___", lump sum.

"Removing Portion of Existing Bridge___", lump sum.

"Removing Portion of Existing Structure___", lump sum.

SECTION 2-03, ROADWAY EXCAVATION AND EMBANKMENT
AUGUST 3, 2015

2-03.1 Description

The first paragraph is supplemented with the following:

The Work includes the removal of pavement, sidewalks, curbs and gutters as described in Section 2-02 when these items lie within an excavation area.

2-03.3 Construction Requirements

This section is supplemented with the following new sub-section:

2-03.3(19) Removal of Pavement, Sidewalks, Curbs, and Gutters

The requirements of Section 2-02.3(3) shall also apply when pavements, sidewalks, curbs, and gutters lie within an excavation.

2-03.3(1) Widening of Cuts

This section is revised to read:

If routine cuts do not supply enough material to form the embankment, the Contractor shall obtain more material from areas inside or outside the Right of Way and/or from widening one or both sides of existing cuts as determined by the Engineer. The Contractor shall dress the sides of the cuts to any slopes the Engineer may require. If the Contractor has dressed a cut before the Engineer determines to widen it, the Contracting Agency will pay for the resloping as provided in Section 1-04.4. In addition, material obtained from areas beyond the cuts shown in the Plans that result in additional haul will be paid by the Contracting Agency as provided in Section 1-04.4.

2-03.3(14) Embankment Construction

The third paragraph is revised to read:

Hillside Terraces – The Contractor shall terrace the original ground or embankment when the slope of the surface is 2H:1V or steeper unless otherwise directed by the Engineer. The face of each terrace shall be a minimum of 1 foot and a maximum of 5 feet in height and shall be vertical or near vertical as required to remain stable during material placement and compaction. The bench of the terrace shall slope outward to drain and shall not be inclined steeper than 0.05 foot per foot. Terraces damaged during work shall be reestablished. The Engineer may order the Contractor to place gravel backfill, pipe drains or both to drain any seepage.

2-03.3(14)C Compacting Earth Embankments

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

Moisture Content – The Contractor shall adjust moisture content during compaction to produce a firm, stable and unyielding embankment. The embankment shall be free from pumping and rutting due to excessive moisture and is the Contractor's responsibility to manage and adjust as necessary.

The Contracting Agency will consider all costs for drying embankment material to be incidental to other Work, including excessive moisture due to inclement weather. If, however, the Contract includes an aeration item, the Contracting Agency will pay for such Work as specified in Sections 2-03.4 and 2-03.5.

The Contractor shall repair, at no expense to the Contracting Agency, any partial or complete embankment that loses stability because of continued hauling across it. Evidence of lost stability includes pumping, rutting or lateral displacement of embankment. The Contractor shall also alter hauling equipment or procedures to prevent further damage.

2-03.3(14)L Embankment Widening for Guardrail

The first sentence is revised to read:

Embankments widened for the installation of beam guardrail shall be terraced in accordance with the requirements for hillside terraces in Section 2-03.3(14).

The second sentence is deleted.

SECTION 2-09, STRUCTURE EXCAVATION
AUGUST 3, 2015

2-09.3(2) Classification of Structure Excavation

The first sentence of item number 1 is revised to read:

Class A – Structure excavation required for bridge and retaining wall footings, precast reinforced concrete three sided structure footings, geosynthetic retaining walls, structural earth walls, sign structure footings, pile or drilled shaft caps, seals, wingwall footings, precast reinforced concrete box culverts, precast reinforced concrete split box culverts, detention vaults, and noise barrier wall footings shall be classified as Structure excavation Class A.

2-09.4 Measurement

The second paragraph is revised to read:

Horizontal Limits – The Contracting Agency will use the sides of the trench or pit as horizontal limits in measuring excavation. No payment for Structure excavation will be made for material removed (1) more than 1 foot outside the perimeter of any pile cap, footing, or seal; (2) more than 3 feet beyond the Roadway side of a wing wall; (3) more than 1 foot beyond the other sides and end of a wing wall; (4) more than 1 foot outside the perimeter of the soil reinforcement area for geosynthetic and structural earth walls; and (5) more than 4-feet beyond the inside opening of precast reinforced concrete box culverts and precast reinforced concrete split box culverts. For precast reinforced concrete three sided structures, no payment for Structure excavation will be made for material removed more than 1 foot outside the perimeter of the footing or more than 4 feet beyond the inside opening, whichever is greater.

The seventh paragraph is revised to read:

For pipelines the lower limit in measuring structure excavation will be the foundation level as shown in the Plans or as directed by the Engineer.

SECTION 2-12, CONSTRUCTION GEOSYNTHETIC
JANUARY 5, 2015

2-12.3(4) Permanent Erosion Control and Ditch Lining

In the fourth paragraph, "Section 9-13.2" is revised to read "Section 9-13.1(4)".

SECTION 3-01, PRODUCTION FROM QUARRY AND PIT SITES
AUGUST 3, 2015

3-01.2(2) Preparation of Site

This section is supplemented with the following three new paragraphs:

The Contractor shall provide sufficient space as required for the setup and operation of the Contracting Agency's field testing facilities at the site of crushing or hot mix asphalt production.

As directed by the Engineer, the Contractor shall provide one of the following to ensure 24-hour per day operation of the Contracting Agency's laboratory trailer(s) that may be set up at the site during production:

1. A power source and a power cord of sufficient length to reach the Contracting Agency's laboratory trailer(s) which may be set up at the site. The cord shall be capable of carrying at least 120/240 volts, 60 cycles at a sustained load of up to 200 amps. The cord and trailer(s) electrical hookup shall meet the NEC code. Power shall be provided and connected when requested by the Engineer. The laboratory trailer(s) hookup shall be protected by a 2 pole 50 amp 240 VAC circuit breaker.

2. A daily supply of fuel adequate for operation of the Contracting Agency's generator(s).

Potable water shall be provided to the Contracting Agency's laboratory trailer(s) for use during plant operations when requested by the Engineer.

SECTION 3-04, ACCEPTANCE OF AGGREGATE
APRIL 6, 2015

3-04.5 Payment

In Table 1, the "Maximum Sublot Size (Tons)" value for the item HMA Aggregate is revised to read "2000".

In Table 2, the row containing the item "HMA Aggregate" is revised to read:

9-03.8(2)	HMA Aggregate						15	15	Uncompacted Void Content 15

SECTION 5-01, CEMENT CONCRETE PAVEMENT REHABILITATION
AUGUST 4, 2014

5-01.2 Materials

The referenced section for the following item is revised to read:

Dowel Bars	9-07.5

5-01.3(4) Replace Portland Cement Concrete Panel

In the third paragraph, the last sentence is deleted.

The seventeenth paragraph (beginning with "The Contractor shall place a bond-breaking material…") is deleted.

SECTION 5-02, BITUMINOUS SURFACE TREATMENT
AUGUST 4, 2014

5-02.3(11) Temporary Raised Pavement Markings

This section's title is revised to read:

Temporary Pavement Markings

The word "raised" is deleted from this section.

SECTION 5-04, HOT MIX ASPHALT
AUGUST 3, 2015

5-04.2 Materials

The third through eighth paragraphs are deleted and replaced with the following:

The Contractor may choose to utilize recycled asphalt pavement (RAP) or reclaimed asphalt shingles (RAS) in the production of HMA. The RAP may be from pavements removed under the Contract, if any, or pavement material from an existing stockpile. The RAS may be from reclaimed shingles.

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP. If greater than 20 percent RAP by total weight of HMA or any amount of RAS is utilized in the production of HMA, the Contractor shall sample and test the RAP and RAS during stockpile construction in accordance with WSDOT FOP for AASHTO T 308 for determination of asphalt binder content and WSDOT FOP for WAQTC/AASHTO T 27/T 11 for gradation of the aggregates. The RAP shall be sampled and tested at a frequency of one sample for every 1,000 tons produced and not less than ten samples per project. The RAS shall be sampled and tested at a frequency of one sample for every 100 tons produced and not less than ten samples per project. The asphalt content and gradation test data shall be reported to the Contracting Agency when submitting the mix design for approval on the QPL. If utilized, the amount of RAS shall not exceed 5-percent of the total weight of the HMA. The Contractor shall include the RAP and RAS as part of the mix design as defined in these Specifications.

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA and no RAS. The Contractor shall submit to the

Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

When the Contracting Agency provides aggregates or provides a source for the production of aggregates, the Contract Provisions will establish the approximate percentage of asphalt binder required in the mixture for each class of HMA.

Production of aggregates shall comply with the requirements of Section 3-01.

Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.3(1) Hot Mix Asphalt Mixing Plant

In the first paragraph, the last sentence of item number 4 is revised to read:

The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).

The first paragraph is supplemented with the following:

6. **Equipment for Processing RAP and RAS.** When producing HMA for mix designs with greater than 20 percent RAP by total weight of HMA or any amount of RAS the HMA plant shall be equipped with screens or a lump breaker to eliminate oversize RAP/RAS particles from entering the pug mill or drum mixer.

5-04.3(3)A Material Transfer Device/Vehicle

The first paragraph is supplemented with the following new sentence:

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.

In the last sentence of the second paragraph, "Project Engineer" is revised to read "Engineer".

5-04.3(5)A Preparation of Existing Surfaces

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

Unless otherwise approved by the Engineer, the tack coat shall be CSS-1 or CSS-1h emulsified asphalt.

5-04.3(7) Preparation of Aggregates

This section is revised to read:

The aggregates, RAP and RAS shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate, RAP and RAS. The Contractor may uniformly blend fine aggregate or RAP with the RAS as a method of preventing the agglomeration of RAS particles. The aggregates, RAP and RAS shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(7)A1 General

This section is revised to read:

An approved mix design, listed on the Qualified Products List (QPL), is required for all HMA paving. The Contractor shall develop a mix design prior to the initial production of HMA and no more than 3 months prior to submitting for QPL evaluation. The mix design shall be developed in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2) and 9-03.8(6).

Mix designs shall be submitted by the Contractor to the WSDOT State Materials Laboratory on WSDOT Form 350-042EF. If the mix design is approved it will be listed on the QPL for up to 24 consecutive months. Mix designs not listed on the QPL or past the 24 month approved period shall not be used. After a mix design has been on the QPL for 12 months the listing will be extended provided the Contractor submits a certification letter to the Qualified Products Engineer verifying that the aggregate and asphalt binder have not changed. The Contractor may submit the certification one month prior to expiration of the mix design approval. Within 7 calendar days of receipt of the Contractor's certification the QPL will be updated. 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.

Changes to the job mix formula of a mix design may require the development of a new mix design and resubmittal for QPL approval.

Changes to aggregate that may require a new mix design include the source of material or a change in the percentage of material from a stockpile greater than 5 percent. Changes to the percentage of material from a stockpile will be calculated exclusive of the RAP content for mix designs with 20 percent RAP or less by total weight of HMA.

Changes to asphalt binder that may require a new mix design include the source of the crude petroleum supplied to the refinery, the refining process, and additives or modifiers in the asphalt binder.

The Contractor shall include the brand and type of anti-stripping additive in the mix design submittal and provide certification from the asphalt binder manufacture that the anti-stripping additive is compatible with the crude source and formulation of asphalt binder proposed in the mix design. All changes to anti-strip require the submittal of a new mix design for approval.

Mix designs with 20 percent RAP or less by total weight of HMA and no RAS will be completed without the inclusion of the RAP. For HMA mix designs with greater than 20 percent RAP by total weight of HMA or any amount of RAS the Contractor shall develop a mix design including RAP, RAS, recycling agent and new asphalt binder. Asphalt binder contributed from RAS shall be determined in accordance with AASHTO PP 78. The total quantity of asphalt binder from the RAP and RAS shall not exceed 40 percent of the total asphalt binder content of the HMA.

Once the RAP and RAS stockpiles have been constructed the Contractor shall 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 the grade of asphalt binder required by the contract. The asphalt extraction testing shall be performed in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade trichloroethylene. The asphalt recovery shall be performed in accordance with AASHTO R 59 orASTM D 1856. The recovered asphalt residue shall be tested in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4). Once the recovered asphalt binder grade is determined the percent of recycling agent and/or grade of new asphalt binder shall be determined in accordance

with ASTM D 4887. The final blend of recycling agent, recovered and new asphalt shall be tested in accordance with AASHTO R 29. The final blended asphalt binder shall be the grade as required by the Contract and comply with the requirements of in accordance with Section 9-02.1(4).

5-04.3(7)A2 Statistical or Nonstatistical Evaluation

This section is revised to read:

The Contractor shall submit WSDOT Form 350-041EF to the Engineer for approval to use a mix design from the QPL. The Contractor may include changes to the job mix formula that have been approved on other contracts. The request to use a mix design from the QPL may be rejected if production of the HMA from another contract is not in compliance with Section 5-04.3(11)D.

The Contractor shall submit representative samples of the materials that are to be used in the HMA production to the State Materials Laboratory in Tumwater. For HMA mix designs with 20 percent RAP or less by total weight of HMA and no RAS, the Contractor shall submit representative samples of the mineral materials that are to be used in the HMA production; the submittal of RAP samples is not required for these mix designs. For HMA mix designs with greater than 20 percent RAP by total weight of HMA or any amount of RAS the Contractor shall submit representative samples of the mineral materials, RAP, RAS and 100 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production. The Contracting Agency will use these samples to evaluate the mix design for approval on the QPL in accordance with WSDOT Standard Practice QC-8.

5-04.3(7)A3 Commercial Evaluation

This section is revised to read:

Approval of a Commercial Evaluation mix design for listing on the QPL will be based on a review of the Contractor's submittal of WSDOT Form 350-042EF for conformance to the requirements of Section 9-03.8(2). Testing of the HMA by the Contracting Agency for mix design approval is not required. Mix designs for HMA with greater than 20 percent RAP by total weight of HMA or any amount of RAS may be evaluated in accordance with Section 5-04.3(7)A2.

For the Bid item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.

5-04.3(8) Mixing

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

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer.

The last paragraph is supplemented with the following new sentence:

After the required amount of mineral materials, RAP, RAS, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, RAP and RAS is ensured.

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

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

The sublots shall be approximately uniform in size with a maximum sublot size based on original Plan quantity tons as specified in the following table.

This section is supplemented with the following new table:

HMA Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	1,000
20,000 to 30,000	1,500
>30,000	2,000

5-04.3(8)A7 Test Section – HMA Mixtures

This section is revised to read:

For each class of HMA accepted by statistical evaluation with 20 percent RAP or less by total weight of HMA and no RAS, the Contractor may request a single test section to determine whether the mixture meets the requirements of Section 9-03.8(2) and 9-03.8(6). For each HMA mix design accepted by statistical evaluation with greater than 20 percent RAP by weight of HMA or any amount of RAS, the Contractor shall construct a test section to determine whether the mixture meets the requirements of Sections 9-03.8(2) and 9-03.8(6). Test sections shall be constructed at the beginning of paving and will be at least 600 tons and a maximum of 1,000 tons or as approved by the Engineer. For a test section to be acceptable the pay factor (PF) for gradation, asphalt binder and Va shall be 0.95 or greater for each constituent and the remaining test requirements in Section 9-03.8(2) (fracture, uncompacted void, sand equivalent, dust/asphalt ratio, Hamburg and IDT) shall conform to the requirements of that section. No further wearing or leveling HMA will be paved on any of the four calendar days following construction of the test section. The mixture in the test section will be evaluated as a lot with a minimum of three sublots required. If more than one test section is required, each test section shall be a separate lot.

5-04.3(10)A General

In the first paragraph, “checking” and “cracking” are deleted.

In the third paragraph, the following new sentence is inserted after the second sentence:

Coverage with a steel wheel roller may precede pneumatic tired rolling.

In the third paragraph, the following new sentence is inserted before the last sentence:

Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat.

5-04.3(10)B1 General

In this section, “Project Engineer” is revised to read “Engineer”.

The first paragraph is revised to read:

HMA mixture accepted by statistical or nonstatistical evaluation that is used in traffic lanes, including lanes for ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a Composite Pay Factor (CPF) of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a minimum of 91 percent of the maximum density. The specified level of density attained will be determined by the

statistical evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8 when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

The following four new paragraphs are inserted after the first paragraph:

Tests for the determination of the pavement density will be taken in accordance the required procedures for measurement by a nuclear density gauge or roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item "Roadway Core" the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item "Roadway Core" the Contracting Agency will obtain the cores.

In the sixth paragraph (after the preceding Amendments are applied), the second sentence is revised to read:

Sublots will be uniform in size with a maximum sublot size based on original Plan quantity tons of HMA as specified in the table below.

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

HMA Original Plan Quantity (tons)	Sublot Size (tons)
<20,000	100
20,000 to 30,000	150
>30,000	200

5-04.3(10)B4 Test Results

The first paragraph is revised to read:

The results of all compaction acceptance testing and the CPF of the lot after three sublots have been tested will be available to the Contractor through WSDOT's website. Determination of the relative density of the HMA with a nuclear density gauge requires a correlation factor and may require resolution after the correlation factor is known. 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. Acceptance of HMA compaction will be based on the statistical evaluation and CPF so determined.

In the second paragraph, the first sentence is revised to read:

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 91 percent of the reference 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 be used for determination of the relative density of the sublot.

In the second sentence of the second paragraph, “moisture-density” is revised to read “density”.

In the second paragraph, the fourth sentence is deleted.

5-04.3(20) Anti-Stripping Additive

This section is revised to read:

Anti-stripping additive shall be added to the liquid asphalt by the asphalt supplier prior to shipment to the asphalt mixing plant. Anti-stripping additive shall be added in the amount designated on the QPL for the mix design. Anti-strip is not required for temporary work that will be removed prior to Completion.

5-04.4 Measurement

The following new paragraph is inserted after the first paragraph:

Roadway cores will be measured per each for the number of cores taken.

The second to last paragraph is deleted.

5-04.5 Payment

The bid item “Removing Temporary Pavement Marking”, per linear foot and paragraph following bid item are deleted.

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

“Roadway Core”, per each.

The Contractor’s costs for all other Work associated with the coring (e.g., traffic control) shall be incidental and included within the unit Bid price per each and no additional payments will be made.

SECTION 5-05, CEMENT CONCRETE PAVEMENT
APRIL 6, 2015

5-05.3(1) Concrete Mix Design for Paving

In item number 1, the first sentence of the third paragraph is revised to read:

Ground granulated blast furnace slag, if used, shall not exceed 30 percent by weight of the total cementitious material and shall conform to Section 9-23.10.

The second and third rows of the table in item number 3 are revised to read:

Coarse Aggregate	+ 30 Pounds	- 30 Pounds
Fine Aggregate	+ 30 Pounds	- 30 Pounds

5-05.4 Measurement

The fourth paragraph is supplemented with the following new sentence:

Tie bars with drill holes in cement concrete pavement placed under the Contract will not be measured.

5-05.5 Payment

The paragraph following the Bid item "Tie Bar with Drill Hole", per each is supplemented with the following new sentence:

All costs for tie bars with drill holes in cement concrete pavement placed under the Contract shall be included in the unit Contract price per cubic yard for "Cement Conc. Pavement".

SECTION 6-01, GENERAL REQUIREMENTS FOR STRUCTURES
JANUARY 5, 2015

6-01.6 Load Restrictions on Bridges Under Construction

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

If necessary and safe to do so, and if the Contractor requests it through a Type 2E Working Drawing, the Engineer may allow traffic on a bridge prior to completion.

In the second paragraph, item number 3 (up until the colon) is revised to read:

3. Provide stress calculations under the design criteria specified in the AASHTO LRFD Bridge Design Specifications, current edition, including at a minimum the following:

6-01.9 Working Drawings

This section is revised to read:

All Working Drawings required for bridges and other Structures shall conform to Section 1-05.3.

6-01.10 Utilities Supported by or Attached to Bridges

In the second paragraph, "bridge structures" is revised to read "bridges".

6-01.14 Premolded Joint Filler

In the second paragraph, the first sentence is revised to read:

The Contractor may substitute for the nails any adhesive acceptable to the Engineer.

SECTION 6-02, CONCRETE STRUCTURES
AUGUST 3, 2015

6-02.2 Materials

The reference to "Prestressed Concrete Girders" (Section 9-19) is deleted.

6-02.3(1) Classification of Structural Concrete

In paragraph two, item number 1 is revised to read:

Mix design and proportioning specified in Sections 6-02.3(2), 6-02.3(2)A and 6-02.3(2)A1.

Item number 3 is renumbered to 4.

After the preceding Amendments are applied, the following new numbered item is inserted after item number 2:

3. Temperature and time for placement requirements specified in Section 6-02.3(4)D.

6-02.3(2) Proportioning Materials

In the third paragraph, the first sentence is revised to read:

> The use of fly ash is required for Class 4000P concrete, except that ground granulated blast furnace slag may be substituted for fly ash at a 1:1 ratio.

In the table titled "Cementitious Requirement for Concrete", the row beginning with "4000D" is deleted.

The fourth paragraph is revised to read:

> When both ground granulated blast furnace slag and fly ash are included in the concrete mix, the total weight of both these materials is limited to 40 percent by weight of the total cementitious material for concrete class 4000A, and 50 percent by weight of the total cementitious material for all other classes of concrete.

6-02.3(2)A Contractor Mix Design

The first paragraph is revised to read:

> The Contractor shall provide a mix design in writing to the Engineer for all classes of concrete specified in the Plans except for lean concrete and commercial concrete. No concrete shall be placed until the Engineer has reviewed the mix design. The required average 28-day compressive strength shall be selected in accordance with ACI 301, Chapter 4, Section 4.2.3.3. ACI 211.1 shall be used to determine proportions. All proposed concrete mixes except Class 4000D shall meet the requirements in Cementitious Requirement for Concrete in Section 6-02.3(2).

In the fourth paragraph, the fourth sentence is deleted.

The sixth paragraph is revised to read:

> A retarding admixture is required in concrete Class 4000P.

The seventh paragraph is deleted.

The eighth paragraph is revised to read:

> Air content for concrete Class 4000D shall conform to Section 6-02.3(2)A1. For all other concrete, air content shall be a minimum of 4.5 percent and a maximum of 7.5 percent for all concrete placed above the finished ground line.

The following new sub-sections are added:

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

All Class 4000D concrete shall conform to the following requirements:

1. Aggregate shall use combined gradation in accordance with Section 9-03.1(5) with a nominal maximum aggregate size of 1-1/2 inches.

2. Permeability shall be less than 2,000 coulombs at 56 days in accordance with AASHTO T 277.

3. Freeze-thaw durability shall be provided by one of the following methods:

a. The concrete shall maintain an air content between 4.5 and 7.5 percent.

b. The concrete shall maintain a minimum air content that achieves a durability factor of 90 percent, minimum, after 300 cycles in accordance with AASHTO T 161, Procedure A. This air content shall not be less than 3.0 percent. Test samples shall be obtained from concrete batches of a minimum of 3.0 cubic yards.

4. Scaling shall have a visual rating less than or equal to 2 after 50 cycles in accordance with ASTM C 672.

5. Shrinkage at 28 days shall be less than 0.032 percent in accordance with AASHTO T 160.

6. Modulus of elasticity shall be measured in accordance with ASTM C 469.

7. Density shall be measured in accordance with ASTM C 138.

The Contractor shall submit the mix design in accordance with Section 6-02.3(2)A. The submittal shall include test reports for all tests listed above that follow the reporting requirements of the AASHTO/ASTM procedures. Samples for testing may be obtained from either laboratory or concrete plant batches. If concrete plant batches are used, the minimum batch size shall be 3.0 cubic yards. The Contractor shall submit the mix design to the Engineer at least 30 calendar days prior to the placement of concrete in the bridge deck.

6-02.3(2)A2 Contractor Mix Design for Self-Consolidating Concrete

Self-consolidating concrete (SCC) is concrete that is able to flow under its own weight and completely fill the formwork without the need for vibration while maintaining homogeneity, even in the presence of dense reinforcement. SCC shall be capable of being pumped, and of flowing through the steel reinforcing bar cage without segregation or buildup of differential head inside or outside of the steel reinforcing bar cage.

Type III cement may be used in SCC.

SCC may be used for the following concrete Structure elements:

1. All cast-in-place concrete elements except bridge decks, bridge approach slabs, and any cast-in-place concrete element excluded by the Special Provisions.

2. Prestressed concrete girders in accordance with Sections 6-02.3(25).

3. All precast concrete elements identified in Section 6-02.3(27)A.

The mix design submittal shall include items specified in Section 6-02.3(2)A and results of the following tests conducted on concrete that has slump flow within the slump flow range defined below:

1. Slump Flow.

a. The mix design shall specify the target slump flow in inches, in accordance with WSDOT FOP for ASTM C 1611. The slump flow range is defined as the target slump flow plus or minus 2-inches.

b. The visual stability index (VSI) shall be less than or equal to 1, in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

c. The T_{50} flow rate results shall be less than 6-seconds in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

2. Column Segregation.

a. The maximum static segregation shall be 10-percent in accordance with ASTM C 1610.

b. The Maximum Hardened Visual Stability Index (HVSI) shall be 1 in accordance with AASHTO PP 58.

3. J ring test results for passing ability shall be less than or equal to 1.5-inches in accordance with the WSDOT FOP for ASTM C 1621.

4. Rapid assessment of static segregation resistance of self-consolidating concrete using penetration test in accordance with ASTM C 1712 shall be less than or equal to 15 mm.

5. Air content shall be tested in accordance with WSDOT Test Method T 818, and shall conform to Section 6-02.3(2)A.

6. Concrete unit weight results in pounds per cubic foot shall be recorded in accordance with AASHTO T 121, except that the concrete shall not be consolidated in the test mold.

7. The temperature of all concrete laboratory test samples shall be tested in accordance with AASHTO T 309 and shall conform to the placement limits specified in Section 6-02.3(4)D.

8. The modulus of elasticity in pounds per square inch at 28 days shall be recorded in accordance with ASTM C 469.

In lieu of a Contractor-Provided mix design for SCC for Section 6-02.3(27)A Structure elements 3, 7 and 8, a representative full-size example Structure element shall be cast for inspection by the Contracting Agency in accordance with Section 6-02.3(27)B as a component of the precast fabricating facility's annual plant approval process.

6-02.3(4)C Consistency

This section is supplemented with the following new paragraph:

For self-consolidating concrete (SCC), the slump requirements specified above do not apply, and are instead replaced by the target slump flow and slump flow range specified as part of the SCC mix design.

6-02.3(4)D Temperature and Time For Placement

The first two sentences are revised to read:

Concrete temperatures shall remain between 55ºF and 90ºF while it is being placed, except that Class 4000D concrete temperatures shall remain between 55°F and 75°F during placement.

Precast concrete that is heat cured in accordance with Section 6-02.3(25)D shall remain between 50ºF and 90ºF while being placed.

6-02.3(5)A General

The first paragraph is revised to read:

Concrete for the following applications will be accepted based on a Certificate of Compliance to be provided by the supplier as described in Section 6-02.3(5)B:

1. Lean concrete.
2. Commercial concrete.
3. Class 4000P concrete for Roadside Steel Sign Support Foundations.
4. Class 4000P concrete for Type II, III, and CCTV Signal Standard Foundations that are 12'-0" or less in depth.
5. Class 4000P concrete for Type IV and V Strain Pole Foundations that are 12'-0" or less in depth.
6. Class 4000P concrete for Steel Light Standard Foundations Types A & B.

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

Slip-form barrier concrete will be accepted based on conformance to the requirements for temperature, air content and compressive strength at 28 days for sublots as tested and determined by the Contracting Agency.

6-02.3(5)B Certification of Compliance

In the list within the first paragraph, "Fly ash (if used) brand and Type" is revised to read "Fly ash (if used) brand and Class".

The first sentence of the second to last paragraph is deleted.

6-02.3(5)D Test Methods

The list in this section is supplemented with the following two new test methods:

ASTM C 1611	Standard Test Method for Slump Flow of Self-Consolidating Concrete
ASTM C 1621	Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring

6-02.3(5)G Sampling and Testing Frequency for Temperature, Consistency, and Air Content

This section's title is revised to read:

6-02.3(5)G Sampling and Testing for Temperature, Consistency, and Air Content

The first paragraph is revised to read:

Concrete properties shall be determined from concrete as delivered to the project and as accepted by the Contractor for placement. The Contracting Agency will perform acceptance testing on all concrete for temperature, and air content, if applicable. Concrete that is not self-consolidating concrete will be tested for slump. The following additional acceptance tests will be performed on self-consolidating concrete:

1. Slump flow within the target slump flow range.

2. J ring passing ability less than or equal to 1.5 inches.

3. VSI less than or equal to 1.

In the fifth sentence of the second paragraph, “five truck loads” is revised to read “ten truck loads”.

The second paragraph is supplemented with the following:

If the remaining quantity to be placed is less than ten truck loads; then a sample shall be randomly taken from one of the remaining truck loads.

In the last sentence of the third paragraph, “five truck loads” is revised to read “ten truck loads”.

6-02.3(5)H Sampling and Testing for Compressive Strength and Initial Curing

The second paragraph is revised to read:

The Contractor shall provide and maintain a sufficient number of cure boxes in accordance with WSDOT FOP for AASHTO T 23 for curing concrete cylinders. The cure boxes shall be readily accessible and no more than 500 feet from the point of acceptance testing, unless otherwise approved by the Engineer. The Contractor shall also provide, maintain and operate all necessary power sources and connections needed to operate the cure boxes. The cure boxes shall be in-place and functioning at the specified temperature for curing cylinders prior to concrete placement. Concrete cylinders shall be cured in the cure boxes in accordance with WSDOT FOP for AASHTO T 23. The cure boxes shall have working locks and the Contractor shall provide the Engineer with one key to each of the locks. Once concrete cylinders are placed in the cure box, the cure box shall not be disturbed until the cylinders have been removed. The Contractor shall retain the cure box Temperature Measuring Device log and provide it to the Engineer upon request.

The following new paragraph is inserted after the last paragraph:

All cure box costs shall be incidental to the associated item of work.

6-02.3(5)I Vacant

This section, including title, is revised to read:

6-02.3(5)I Test Section for Cast-In-Place SCC

Unless otherwise approved by the Engineer, the Contractor shall construct a test section of the element being constructed of cast-in-place SCC. The Contractor shall confirm, through the SCC placement operation in the test section, the SCC flows the distance required, completely filling the forms and encapsulating the reinforcement as required without leaving voids and pockets and causing segregation of the SCC mix. The test section forms, reinforcing steel and concrete placing operations shall be identical to those to be used in the production elements.

For horizontal elements, the test section shall simulate the flow of concrete for the maximum distance anticipated during production concrete placement. The depth and width of the test section for horizontal element may be smaller than the actual depth and width of the element to be cast. For vertical elements, the test section shall be a minimum of 33-percent of the height of the tallest element to be constructed. The Contractor shall submit Type 2 Working Drawings consisting of formwork and reinforcement details of the test section and SCC placement procedures.

After removing the forms, the test section will be inspected for signs of honeycombs, cracks, aggregate segregation, sedimentation, cold joints, and other surface and concrete placement defects. If such defects are present, the Contractor shall revise the formwork and SCC placement procedures as necessary to eliminate such defects.

Acceptance of the test section and the SCC mix design is contingent on acceptable visual inspection, and a minimum of two 4-inch minimum diameter core samples taken from the placement location and the furthest-most limits of the concrete as identified by the Engineer. The number of core locations will be specified by the Engineer. The difference in average unit weight of the locations represented by the core samples shall be less than 5-percent.

The Contractor shall use the same SCC placement procedures confirmed by the Engineer accepted test section for casting the production members.

6-02.3(6)A2 Cold Weather Protection

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

This Specification applies when the weather forecast on the day of concrete placement predicts air temperatures below 35°F at any time during the 7 days following placement.

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

The temperature of the concrete shall be maintained above 50°F during the entire curing period or 7 days, whichever is greater.

6-02.3(9) Vibration of Concrete

This section is supplemented with the following two new paragraphs:

Vibration of SCC shall only be used as described below or as approved by the Engineer:

1. To prevent the formation of a cold joint in between placement of successive batches of SCC.

2. Near the end of an SCC placement to aid in leveling the SCC in the forms.

When vibration of SCC is allowed, the magnitude and duration of the applied vibration shall be kept as minimal as possible.

6-02.3(10)A Preconstruction Meeting

This section including title is revised to read:

6-02.3(10)A Pre-Deck Pour Meeting

A pre-deck pour meeting shall be held 5 to 10 working days before placing deck concrete to discuss construction procedures, personnel, equipment to be used, concrete sampling and testing and deck finishing and curing operations. Those attending shall include, at a minimum, the

superintendent, foremen in charge of placing and finishing concrete, and representatives from the concrete supplier and the concrete pump truck supplier.

If the project includes more than one bridge deck, and if the Contractor's key personnel change between concreting operations, or at request of the Engineer, additional conferences shall be held before each deck placement.

6-02.3(10)D Concrete Placement, Finishing, and Texturing

This section's content is deleted and replaced with the following new sub-sections:

6-02.3(10)D1 Test Slab Using Bridge Deck Concrete

After the Contractor receives the Engineer's approval for the Class 4000D concrete mix design, and a minimum of seven calendar days prior to the first placement of bridge deck concrete, the Contractor shall construct a test slab using concrete of the approved mix design.

The test slab may be constructed on grade, shall have a minimum thickness of eight-inches, shall have minimum plan dimensions of 10-feet along all four edges, and shall be square or rectangular.

During construction of the test slab, the Contractor shall demonstrate concrete sampling and testing, use of the concrete temperature monitoring system, the concrete fogging system, concrete placement system, and the concrete finishing operation. The Contractor shall conduct the demonstration using the same type of equipment to be used for the production bridge decks, except that the Contractor may elect to finish the test slab with a hand-operated strike-board.

After the construction of the test slab and the demonstration of bridge deck construction operations is complete, the Contractor shall remove and dispose of the test slab in accordance with Sections 2-02.3 and 2-03.3(7)C.

6-02.3(10)D2 Preparation for Concrete Placement

Before placing bridge approach slab concrete, the subgrade shall be constructed in accordance with Sections 2-06 and 5-05.3(6).

Before any concrete is placed, the finishing machine shall be operated over the entire length of the deck/slab to check screed deflection. Concrete placement may begin only if the Engineer approves after this test.

Immediately before placing concrete, the Contractor shall check (and adjust if necessary) all falsework and wedges to minimize settlement and deflection from the added mass of the concrete deck/slab. The Contractor shall also install devices, such as telltales, by which the Engineer can readily measure settlement and deflection.

6-02.3(10)D3 Concrete Placement

The placement operation shall cover the full width of the bridge deck or the full width between construction joints. The Contractor shall locate any construction joint over a beam or web that can support the deck/slab on either side of the joint. The joint shall not occur over a pier unless the Plans permit. Each joint shall be formed vertically and in true alignment. The Contractor shall not release falsework or wedges supporting bridge deck placement sections on either side of a joint until each side has aged as these Specifications require.

Placement of concrete for bridge decks and bridge approach slabs shall comply with Section 6-02.3(6). In placing the concrete, the Contractor shall:

1. Place it (without segregation) against concrete placed earlier, as near as possible to its final position, approximately to grade, and in shallow, closely spaced piles;

2. Consolidate it around reinforcing steel by using vibrators before strike-off by the finishing machine;

3. Not use vibrators to move concrete;

4. Not revibrate any concrete surface areas where workers have stopped prior to screeding;

5. Remove any concrete splashed onto reinforcing steel in adjacent segments before concreting them;

6. Maintain a slight excess of concrete in front of the screed across the entire width of the placement operation;

7. Operate the finishing machine to create a surface that is true and ready for final finish without overfinishing or bringing excessive amounts of mortar to the surface; and

8. Leave a thin, even film of mortar on the concrete surface after the last pass of the finishing machine pan.

Workers shall complete all post screeding operations without walking on the concrete. This may require work bridges spanning the full width of the deck/slab.

After removing the screed supports, the Contractor shall fill the voids with concrete (not mortar).

If the surface left by the finishing machine is porous, rough, or has minor irregularities, the Contractor shall float the surface of the concrete. Floating shall leave a smooth and even surface. Float finishing shall be kept to the minimum number of passes necessary to seal the surface. The floats shall be at least 4-feet long. Each transverse pass of the float shall overlap the previous pass by at least half the length of the float. The first floating shall be at right angles to the strike-off. The second floating shall be at right angles to the centerline of the span. A smooth riding surface shall be maintained across construction joints.

The edge of completed roadway slabs at expansion joints and compression seals shall have a 3/8-inch radius.

After floating, but while the concrete remains plastic, the Contractor shall test the entire deck/slab for flatness (allowing for crown, camber, and vertical curvature). The testing shall be done with a 10-foot straightedge held on the surface. The straightedge shall be advanced in successive positions parallel to the centerline, moving not more than one half the length of the straightedge each time it advances. This procedure shall be repeated with the straightedge held perpendicular to the centerline. An acceptable surface shall be one free from deviations of more than 1/8-inch under the 10-foot straightedge.

If the test reveals depressions, the Contractor shall fill them with freshly mixed concrete, strike off, consolidate, and refinish them. High areas shall be cut down and refinished. Retesting and refinishing shall continue until a surface conforming to the requirements specified above is produced.

6-02.3(10)D4 Monitoring Bridge Deck Concrete Temperature After Placement

The Contractor shall monitor and record the concrete temperature and ambient temperature hourly for seven calendar days after placement. The Contractor shall monitor and record concrete temperature by placing two maturity meter temperature monitoring devices in the bridge deck at locations specified by the Engineer. The Contractor shall monitor ambient temperature using maturity meters near the locations where concrete temperature is being monitored. When the bridge deck is being enclosed and heated to meet cold weather requirements, ambient temperature readings shall be taken within the enclosure. The Contractor shall submit the concrete temperature and ambient temperature data to the Engineer in spreadsheet format within 14 calendar days from placing the bridge deck concrete.

The Contractor shall submit the type and model of maturity meter temperature monitoring device, and the associated devices responsible for recording and documenting the temperature and curing time, to the Engineer at least 14 calendar days prior to the pre-concreting conference for the first bridge deck to be cast. The placement and operation of the temperature monitoring devices and associated devices will be an agenda item at the pre-concreting conference for the first bridge deck to be cast.

6-02.3(10)D5 Bridge Deck Concrete Finishing and Texturing

Except as otherwise specified for portions of bridge decks receiving an overlay or sidewalk under the same Contract, the Contractor shall texture the surface of the bridge deck as follows:

The Contractor shall texture the bridge deck using diamond tipped saw blades mounted on a power driven, self-propelled machine that is designed to texture concrete surfaces. The grooving equipment shall provide grooves that are 1/8" ± 1/64" wide, 3/16" ± 1/16" deep, and spaced at 3/4" ± 1/8". The bridge deck shall not be textured with a metal tined comb.

The Contractor shall submit the type of grooving equipment to be used to the Engineer for approval 30 calendar days prior to performing the work. The Contractor shall demonstrate that the method and equipment for texturing the bridge deck will not chip, spall or otherwise damage the deck. The Contractor shall not begin texturing the bridge deck until receiving the Engineer's approval of the Contractor's method and equipment.

Unless otherwise approved by the Engineer, the Contractor shall texture the concrete bridge deck surface either in a longitudinal direction, parallel with centerline or in a transverse direction, perpendicular with centerline. The Contractor shall texture the bridge deck surface to within 3-inches minimum and 15-inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of the perimeter of bridge drain assemblies.

The Contractor shall contain and collect all concrete dust and debris generated by the bridge deck texturing process, and shall dispose of the collected concrete dust and debris in accordance with Section 2-03.3(7)C.

If the Plans call for placement of a sidewalk or an HMA or concrete overlay on the bridge deck, the Contractor shall produce the final finish of these areas by dragging a strip of damp, seamless burlap lengthwise over the bridge deck or by brooming it lightly. Approximately 3-feet of the drag shall contact the surface, with the least possible bow in its leading edge. It shall be kept wet and free of hardened lumps of concrete. When the burlap drag fails to produce the required finish, the Contractor shall replace it. When not in use, it shall be lifted clear of the bridge deck.

After the bridge deck has cured, the surface shall conform to the surface smoothness requirements specified in Section 6-02.3(10)D3.

The surface texture on any area repaired to address out-of-tolerance surface smoothness shall match closely that of the surrounding bridge deck area at the completion of the repair. Methods used to remove high spots shall cut through the mortar and aggregate without breaking or dislodging the aggregate or causing spalls.

6-02.3(10)D6 Bridge Approach Slab Finishing and Texturing

Bridge approach slabs that are being built as part of a bridge construction project shall be textured in accordance with Section 6-02.3(10)D5. All other bridge approach slabs shall be textured, using metal tined combs in the transverse direction, except bridge approach slabs receiving an overlay in the same Contract shall be finished as specified in Section 6-02.3(10)D5 only.

The comb shall be made of a single row of metal tines. It shall leave striations in the fresh concrete approximately 3/16-inch deep by 1/8-inch wide and spaced approximately 1/2-inch apart. The Engineer will decide actual depths at the site. If the comb has not been approved, the Contractor shall obtain the Engineer's approval by demonstrating it on a test section. The Contractor may operate the combs manually or mechanically, either singly or with several placed end to end. The timing and method used shall produce the required texture without displacing larger particles of aggregate.

Texturing shall end 2-feet from curb lines. This 2-foot untextured strip shall be hand finished with a steel trowel.

Surface smoothness, high spots, and low spots shall be addressed as specified in Section 6-02.3(10)D5. The surface texture on any area cut down or built up shall match closely that of the surrounding bridge approach slab area. The entire bridge approach slab shall provide a smooth riding surface.

6-02.3(10)F Bridge Approach Slab Orientation and Anchors

In the first paragraph, the following sentence is inserted after the first sentence:

Unless otherwise shown in the Plans, the pavement end of the bridge approach slab shall be constructed normal to the Roadway centerline.

The following new paragraph is inserted before the last paragraph:

The compression seal shall be a 2-1/2 inch wide gland selected from the current Qualified Products List.

6-02.3(11) Curing Concrete

Items number 1 through 4 are deleted and replaced with the following 5 new numbered items:

1. Bridge sidewalks, roofs of cut and cover tunnels — curing compound covered by white, reflective type sheeting or continuous wet curing. Curing by either method shall be for at least 10 days.

2. Bridge decks — See Section 6-02.3(11)B.

3. Bridge approach slabs (Class 4000A concrete) - 2 coats of curing compound and continuous wet cure for at least 10-days.

4. Concrete barriers and rail bases – See Section 6-02.3(11)A.

5. All other concrete surfaces — continuous wet cure for at least three days.

In the second paragraph, the first sentence is replaced with the following three new sentences:

During the continuous wet cure, the Contractor shall keep all exposed concrete surfaces saturated with water. Formed concrete surfaces shall be kept in a continuous wet cure by leaving the forms in place. If forms are removed during the continuous wet cure period, the Contractor shall treat the concrete as an exposed concrete surface.

The third paragraph is revised to read:

When curing Class 4000A, two coats of curing compound that complies with Section 9-23.2 shall be applied immediately (not to exceed 15 min.) after tining any portion of the bridge approach slab. The continuous wet cure shall be established as soon as the concrete has set enough to allow covering without damaging the finish.

In the fifth paragraph, the first sentence is revised to read:

If the Plans call for an asphalt overlay on the bridge approach slab, the Contractor shall use the clear curing compound (Type 1, Class B), applying at least 1 gallon per 150 square feet to the concrete surface.

The eighth paragraph is deleted.

6-02.3(11)A2 Slip-Form Barrier

In the fourth paragraph, item number 1, “Type 1D” is revised to read “Type 1”.

6-02.3(11)B Curing Bridge Decks

This new section is supplemented with the following new sub-sections:

6-02.3(11)B1 Equipment

The Contractor shall maintain a wet sheen, without developing pooling or sheeting water, using a fogging apparatus consisting of pressure washers with a minimum nozzle output of 1,500 psi, or other means approved by the Engineer.

The Contractor shall submit a bridge deck curing plan to the Engineer a minimum 14 calendar days prior to the pre-concreting conference. The Contractor’s plan shall describe the sequence and timing that will be used to fog the bridge deck, apply pre-soaked burlap, install soaker hoses and cover the deck with white reflective sheeting.

6-02.3(11)B2 Curing

The fogging apparatus shall be in place and charged for fogging prior to beginning concrete placement for the bridge deck.

The Contractor shall presoak all burlap to be used to cover the deck during curing.

Immediately after the finishing machine passes over finished concrete, the Contractor shall implement the following tasks:

1. The Contractor shall fog the bridge deck while maintaining a wet sheen without developing pooling or sheeting water.

2. The Contractor shall apply the presoaked burlap to the top surface to fully cover the deck without damaging the finish, other than minor marring of the concrete surface. The Contractor shall not apply curing compound.

3. The Contractor shall continue to keep the burlap wet by fog spraying until the burlap is covered by soaker hoses and white reflective sheeting. The Contractor shall place the soaker hoses and whiter reflective sheeting after the concrete has achieved initial set. The Contractor shall charge the soaker hoses frequently so as to keep the burlap covering the entire deck wet during the course of curing.

As an alternative to tasks 2 and 3 above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. Details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained, shall be submitted to the Engineer for approval.

The wet curing regime as described shall remain in place for at least 14 consecutive calendar days.

6-02.3(12)A Construction Joints in New Construction

The third paragraph is deleted and replaced with the following three new paragraphs:

If the Plans require a roughened surface on the joint, the Contractor shall strike it off to leave grooves at right angles to the length of the member. Grooves shall be installed using one of the following options:

1. Grooves shall be ½ to 1 inch wide, ¼ to ½ inch deep, and spaced equally at twice the width of the groove. Grooves shall terminate approximately 1 ½-inches from the face of concrete.

2. Grooves shall be 1 to 2 inches wide, a minimum of ½-inch deep, and spaced a maximum of three times the width of the groove. Grooves shall terminate approximately 1 ½-inches from the face of concrete.

If the Engineer approves, the Contractor may use an alternate method to produce a roughened surface on the joint, provided that such an alternate method leaves a roughened surface of at least a ¼-inch amplitude.

If the first strike-off does not produce the required roughness, the Contractor shall repeat the process before the concrete reaches initial set. The final surface shall be clean and without laitance or loose material.

6-02.3(12)B Construction Joints Between Existing and New Construction

The phrase “by method(s) as approved by the Engineer” is deleted from each paragraph in this section.

6-02.3(13) Expansion Joints

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

Joints made of a vulcanized, elastomeric compound (with neoprene as the only polymer) shall be installed with a lubricant adhesive as recommended by the manufacturer.

In the third paragraph, “injuring” is revised to read “damaging”.

The following two new subsections are added:

6-02.3(13)A Strip Seal Expansion Joint System

The Contractor shall submit Working Drawings consisting of the strip seal expansion joint shop drawings in accordance with Section 6-03.3(7). These plans shall include, at a minimum, the following:

1. Plan, elevation, and sections of the joint system and all components, with dimensions and tolerances.

2. All material designations.

3. Manufacturer's written installation procedure.

4. Corrosion protection system used on the metal components.

5. Locations of welded shear studs, lifting mechanisms, temperature setting devices, and construction adjustment devices.

6. Method of sealing the system to prevent leakage of water through the joint.

The strip seal shall be removable and replaceable.

The metal components shall conform to ASTM A 36, ASTM A 992, or ASTM A 572, and shall be protected against corrosion by one of the following methods:

1. Zinc metallized in accordance with Section 6-07.3(14).

2. Hot-dip galvanized in accordance with AASHTO M 111.

3. Paint in accordance with Section 6-07.3(9). The color of the top coat shall be Federal Standard 595 Color No. 26420. The surfaces embedded in concrete shall be painted only with a shop primer coat of paint conforming to Section 9-08.1(2)C.

The strip seal gland shall be continuous for the full length of the joint with no splices permitted, unless otherwise shown in the Plans.

Other than items shown in the Plans, threaded studs used for construction adjustments are the only items that may be welded to the steel shapes provided they are removed by grinding after use, and the area repaired by application of an approved corrosion protection system.

If the opening between the steel shapes is anticipated to be less than 1-1/2 inches at the time of seal installation, the seal may be installed prior to encasement of the steel shapes in concrete.

After the joint system is installed, the joint shall be flooded with water and inspected, from below the joint, for leakage. If leakage is observed, the joint system shall be repaired by the Contractor, as recommended by the manufacturer.

6-02.3(13)B Compression Seal Expansion Joint System

Compression seal glands shall be selected from the current Qualified Products List and sized as shown in the Plans.

The compression seal expansion joint system shall be installed in accordance with the manufacturer's written recommendations. The Contractor shall submit a Type 1 Working Drawing consisting of the manufacturer's written installation procedure and repair procedures if leakage testing fails.

After the joint system is installed, the joint area shall be flooded with water and inspected, from below the joint, for leakage. If leakage is observed, the joint system shall be repaired by the Contractor, as recommended by the manufacturer.

6-02.3(14) Finishing Concrete Surfaces

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

The Contractor shall clean and refinish any stained or discolored surfaces.

The following new subsection is added:

6-02.3(14)D General Requirements for Concrete Surface Finishes Produced by Form Liners

Horizontal and vertical joints shall be spliced in accordance with the manufacturer's printed instructions. The Contractor shall submit a Type 1 Working Drawing consisting of the manufacturer's joint splice instructions.

Horizontal splicing of ABS and plastic form liners to achieve the required height is not permitted and there shall be no horizontal joints. The concrete formed with ABS and plastic form liners shall be given a light sandblast to remove the glossy finish.

Side forms, traffic barrier forms, and pedestrian barrier forms using these form liners may be removed after 24 hours provided the concrete mix used includes a water-reducing admixture, and the concrete reaches 1,400 psi minimum compressive strength before form removal. Concrete in load supporting forms utilizing these form liners shall be cured in accordance with Section 6-02.3(17)N. Once the forms are removed, the Contractor shall treat the joint areas by patching or light sandblasting as required by the Engineer to ensure that the joints are not visible.

Form liners shall be cleaned, reconditioned, and repaired before each use. Form liners with repairs, patches, or defects which, in the opinion of the Engineer, would result in adverse effects to the concrete finish shall not be used.

Care shall be taken to ensure uniformity of color throughout the textured surface. A change in form release agent will not be allowed.

All surfaces formed by the form liner shall also receive a Class 2 surface finish. Form ties shall be a type that leaves a clean hole when removed. All spalls and form tie holes shall be filled as specified for a Class 2 surface finish.

6-02.3(14)C Pigmented Sealer for Concrete Surfaces

The first sentence (up until the colon) is revised to read:

The Contractor shall submit a Type 1 Working Drawing consisting of the pigmented sealer manufacturer's written instructions covering, at a minimum, the following:

The second paragraph is deleted.

In the last sentence of the third paragraph, “approval” is revised to read “acceptance”.

6-02.3(15) Date Numerals

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

When an existing Structure is widened or when traffic barrier is placed on an existing Structure, the date shall be for the year in which the original Structure was completed.

6-02.3(16) Plans for Falsework and Formwork

This section is revised to read:

The Contractor shall submit all plans for falsework and formwork as Type 2E Working Drawings. Submittal is not required for footing or retaining wall formwork if the wall is 4 feet or less in height (excluding pedestal height).

The design of falsework and formwork shall be based on:

1. Applied loads and conditions which are no less severe than those described in Section 6-02.3(17)A, Design Loads;

2. Allowable stresses and deflections which are no greater than those described in Section 6-02.3(17)B, Allowable Stresses and Deflections;

3. Special loads and requirements no less severe than those described in Section 6-02.3(17)C, Falsework and Formwork at Special Locations;

4. Conditions required by other Sections of 6-02.3(17), Falsework and Formwork.

The falsework and formwork plans shall be scale drawings showing the details of proposed construction, including: sizes and properties of all members and components; spacing of bents, posts, studs, wales, stringers, wedges and bracing; rates of concrete placement, placement sequence, direction of placement, and location of construction joints; identification of falsework devices and safe working loads as well as identification of any bolts or threaded rods used with the devices including their diameter, length, type, grade, and required torque. The falsework plans shall show the proximity of falsework to utilities or any nearby Structures including underground Structures. Formwork accessories shall be identified according to Section 6-02.3(17)H, Formwork Accessories. All assumptions, dimensions, material properties, and other data used in making the structural analysis shall be noted on the drawing.

The Contractor shall furnish associated design calculations to the Engineer as part of the submittal. The design calculations shall show the stresses and deflections in load supporting members. Construction details which may be shown in the form of sketches on the calculation sheets shall be shown in the falsework or formwork drawings as well. Falsework or formwork plans will be rejected in cases where it is necessary to refer to the calculation sheets for information needed for complete understanding of the falsework and formwork plans or how to construct the falsework and formwork.

Each sheet of falsework and formwork plans shall carry the following:

1. The initials and dates of all participating design professionals.

2. Clear notation of all revisions including identification of who authorized the revision, who made the revision, and the date of the revision.

3. The Contract number, Contract title, and sequential sheet number. These shall also be on any related documents.

4. Identify where the falsework and formwork plan will be utilized by referencing Contract Plan sheet number and related item or detail.

6-02.3(16)A Nonpreapproved Falsework and Formwork Plans

This section, including title, is deleted in its entirety and replaced with the following:

6-02.3(16)A Vacant

6-02.3(16)B Preapproved Formwork Plans

This section, including title, is revised to read:

6-02.3(16)B Pre-Contract Review of Falsework and Formwork Plans

The Contractor may request pre-contract review of formwork plans for abutments, wingwalls, diaphragms, retaining walls, columns, girders and beams, box culverts, railings, and bulkheads. Plans for falsework supporting the bridge deck for interior spans between precast prestressed concrete girders may also be submitted for pre-contract review.

To obtain pre-contract review, the Contractor shall electronically submit drawings and design calculations in PDF format directly to:

BridgeConstructionSupport@wsdot.wa.gov

The Bridge and Structures Office, Construction Support Engineer will return the falsework or formwork plan to the Contractor with review notes, an effective date of review, and any revisions needed prior to use. For each contract on which the pre-reviewed falsework or formwork plans will be used, the Contractor shall submit a copy to the Engineer. Construction shall not begin until the Engineer has given concurrence.

If the falsework or formwork being constructed has any deviations to the preapproved falsework or formwork plan, the Contractor shall submit plan revisions for review and approval in accordance with Section 6-02.3(16).

6-02.3(17)A Design Loads

The fifth paragraph is revised to read:

Live loads shall consist of a minimum uniform load of not less than 25 psf, applied over the entire falsework plan area, plus the greater of:

1. Actual weights of the deck finishing equipment applied at the rails, or;

2. A minimum load of 75 pounds per linear foot applied at the edge of the bridge deck.

6-02.3(17)J Face Lumber, Studs, Wales, and Metal Forms

The second and third to last paragraphs are deleted.

6-02.3(17)K Concrete Forms on Steel Spans

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

The Contractor shall fill the holes with fully torqued ASTM A 325 bolts in accordance with Section 6-03.3(33).

6-02.3(17)O Early Concrete Test Cylinder Breaks

The third paragraph is revised to read:

The cylinders shall be cured in the field in accordance with WSDOT FOP for AASHTO T 23 Section 10.2 Field Curing.

6-02.3(20) Grout for Anchor Bolts and Bridge Bearings

The first five paragraphs are deleted and replaced with the following two new paragraphs:

Grout shall conform to Section 9-20.3(2) for anchor bolts and for bearing assemblies with bearing plates. Grout shall conform to Section 9-20.3(3) for elastomeric bearing pads and fabric pad bearings without bearing plates.

Grout shall be a workable mix with a viscosity that is suitable for the intended application. The Contractor shall receive approval from the Engineer before using the grout.

6-02.3(24)C Placing and Fastening

The twelfth paragraph is revised to read:

In bridge decks, a "mat" is two adjacent and perpendicular layers of reinforcing steel. Top and bottom mats shall be supported adequately to hold both in their proper positions. If No. 4 bars make up the lower layer of steel in a mat, it shall be blocked at not more than 3-foot intervals (or 4-foot intervals for bars No. 5 and larger). Wire ties to girder stirrups shall not be considered as blocking. To provide a rigid mat, the Contractor shall add other supports and tie wires to the top mat as needed.

In the fourteenth paragraph, the description following "2½ inches between" is revised to read:

Adjacent bars in a layer. Bridge deck and bridge approach slab bars and the top of the slab.

In the fourteenth paragraph, the description following "2 inches between" is supplemented with the following new sentence:

Bars and the surface of concrete when not specified otherwise in this Section or in the Plans.

In the fourteenth paragraph, the first sentence in the description following "1½ inches between" is deleted.

The fifteenth paragraph is revised to read:

Except for top cover in bridge decks and bridge approach slabs, cover to ties and stirrups may be ½ inch less than the values specified for main bars but shall not be less than 1 inch. Minimum concrete cover and clearances to headed steel reinforcing bars shall also be provided to the outermost part of the head of the bar.

In the sixteenth paragraph, the first item in the second subparagraph is revised to read:

The clearance to the top surface of bridge decks and bridge approach slabs +¼ in/-0".

6-02.3(24)E Welding Reinforced Steel

This section is revised to read:

Welding of steel reinforcing bars shall conform to the requirements of ANSI/AWS D1.4 Structural Welding Code - Reinforcing Steel, latest edition, except where superseded by the Special Provisions, Plans, and these Specifications.

Before any welding begins, the Contractor shall submit a Type 2 Working Drawing consisting of the welding procedure for each type of welded splice to be used, including the weld procedure specifications and joint details. The weld procedure specifications shall be written on a form taken from AWS D1.4 Annex A, or equivalent. Test results of tensile strength, macroetch, and visual examination shall be included. The form shall be signed and dated.

Welders shall be qualified in accordance with AWS D1.4. The Contractor shall be responsible for the testing and qualification of welders, and shall submit Type 2 Working Drawings consisting of welder qualification and retention records. The weld joint and welding position a welder is qualified in shall be in accordance with AWS D1.4. The welder qualifications shall remain in effect indefinitely unless, (1) the welder is not engaged in a given process of welding for which the welder is qualified for a period exceeding six months, or (2) there is some specific reason to question a welder's ability.

Filler metals used for welding reinforcing bars shall be in accordance with AWS D1.4 Table 5.1. All filler metals shall be low-hydrogen and handled in compliance with low-hydrogen practices specified in the AWS code.

Short circuiting transfer with gas metal arc welding will not be allowed. Slugging of welds will not be allowed.

For the purpose of compatibility with AWS D1.4, welded lap splices for spiral or hoop reinforcing shall be considered Flare-V groove welds, indirect butt joints.

The Contractor is responsible for using a welding sequence that will limit the alignment distortion of the bars due to the effects of welding. The maximum out-of-line permitted will be 1/4 inch from a 3.5-foot straight-edge centered on the weld and in line with the bar.

The ground wire from the welding machine shall be clamped to the bar being welded.

Where epoxy-coated steel reinforcing bars are specified to be spliced by welding, the epoxy coating shall be left off or removed from the surfaces to be heated, but in no cases less than six inches of each bar being welded. After the welding is complete, the Contractor shall apply epoxy patching material to the uncoated portions of the bar in accordance with Section 6-02.3(24)H.

6-02.3(25) Prestressed Concrete Girders

This section is revised to read:

The Contractor shall perform quality control inspection. The manufacturing plant of prestressed concrete girders shall be certified by the Precast/Prestressed Concrete Institute's Plant Certification Program for the type of prestressed member to be produced and shall be approved by WSDOT as a Certified Prestress Concrete Fabricator prior to the start of production. WSDOT

certification will be granted at, and renewed during, the annual prestressed plant review and approval process in accordance with WSDOT Materials Manual M 46-01.04 Standard Practice QC 6.

Prior to the start of production of girders, 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 girder(s) will be subject to rejection by the Engineer.

The Contracting Agency intends to perform Quality Assurance Inspection. By its inspection, the Contracting Agency intends only to facilitate the Work and verify the quality of that Work. This inspection shall not relieve the Contractor of any responsibility for identifying and replacing defective material and workmanship.

The various types of prestressed concrete girders are:

Prestressed Concrete I Girder – Refers to a prestressed concrete girder with a flanged I shaped cross section, requiring a cast-in-place concrete deck to support traffic loads. WSDOT standard girders in this category include Series W42G, W50G, W58G, and W74G.

Prestressed Concrete Wide Flange I Girder – Refers to a prestressed concrete girder with an I shaped cross section with wide top and bottom flanges, requiring a cast-in-place concrete deck to support traffic loads. WSDOT standard girders in this category include Series WF36G, WF42G, WF50G, WF58G, WF66G, WF74G, WF83G, WF95G, and WF100G.

Prestressed Concrete Wide Flange Deck Girder – Refers to a prestressed concrete wide flange I girder with extended top flange widths designed to support traffic loads, and designed to be mechanically connected at the flange edges to adjacent girders at the job site. WSDOT standard girders in this category include Series WF39DG, WF45DG, WF53DG, WF61DG, WF69DG, WF77DG, WF86DG, WF98DG, and WF103DG.

Prestressed Concrete Wide Flange Thin Deck Girder – Refers to a prestressed concrete wide flange I girder with extended top flange widths requiring a cast-in-place concrete deck to support traffic loads. Flange edges extend to flange edges of adjacent girders at the job site. WSDOT standard girders in this category include Series WF36TDG, WF42TDG, WF50TDG, WF58TDG, WF66TDG, WF74TDG, WF83TDG, WF95TDG, and WF100TDG.

Prestressed Concrete Deck Bulb Tee Girder – Refers to a prestressed concrete girder with a top flange designed to support traffic loads, and designed to be mechanically connected at the flange edges to adjacent girders at the job site. WSDOT standard girders in this category include Series W35DG, W41DG, W53DG, and W65DG.

Prestressed Concrete Slab Girder – Refers to a prestressed concrete slab girder, with or without voids. Prestressed concrete slab girders are mechanically connected at the member edges to adjacent girders at the job site. Prestressed concrete ribbed section girders and prestressed concrete double tee girders shall conform to the requirements specified for prestressed concrete slab girders.

Prestressed Concrete Tub Girder – Refers to prestressed concrete tub girders with a U shaped cross section, requiring a cast-in-place concrete deck to support traffic loads. WSDOT standard girders in this category include Series U**G* or Series UF**G*, where U specifies webs without top

flanges, UF specifies webs with top flanges, ** specifies the girder height in inches, and * specifies the bottom flange width in feet.

Spliced Prestressed Concrete Girder – Refers to prestressed concrete girders initially fabricated in segments which are longitudinally spliced together with cast-in-place concrete closures and post tensioning. Post tensioning materials and construction shall conform to Section 6-02.3(26), except that ducts for prestressed concrete wide flange I girders may be 24-gage, semi-rigid, galvanized, corrugated, ferrous metal. WSDOT prestressed concrete wide flange I girders in this category include Series WF74PTG, WF83PTG, WF95PTG, and WF100PTG. WSDOT prestressed concrete tub girders in this category include Series U**PTG* and UF**PTG* where U, UF, **, and * are as defined for prestressed concrete tub girders.

6-02.3(25)A Shop Drawings

This section is revised to read:

Shop drawings for prestressed concrete girders shall be submitted as Type 2 Working Drawings. The only deviations to the Plans that will be permitted are those approved by the annual plant approval process and those listed below:

1. Addition of inserts for construction purposes including falsework

2. Small penetrations no larger than 1” diameter for construction purposes including overhang bracket supports, deck formwork hangers and temporary girder bracing. Penetrations in top flanges shall be offset from the edge of the flange the minimum distance shown in the Plans.

3. Small penetrations no larger than 2” in diameter for girder shipping tie-downs.

4. Small adjustments in girder length to account for elastic shortening, creep and shrinkage

5. Strand adjustments, as long as the center of gravity of the strands remains at the location shown in the plans and concrete cover is not reduced

6. Diaphragm web hole vertical adjustments to avoid harped strands

7. Substitution of welded wire reinforcement for conventional reinforcing steel

Shop drawings shall show the size and location of all inserts and penetrations. Penetrations for deck formwork and falsework shall match the deck formwork Working Drawings. Field-drilled holes in prestressed concrete girders are not allowed.

Deformed welded wire reinforcement conforming to Sections 9-07.7 and 9-07.8 may be substituted for the mild steel reinforcement shown in the plans. The substitution shall be submitted as a Type 2E Working Drawing. The AASHTO LRFD Bridge Design Specification requirements (latest edition including interims) shall be satisfied, including at a minimum the following Articles:

5.8.2.6 Types of Transverse Reinforcement

5.8.2.8 Design and Detailing Requirements

5.10.3 Spacing of Reinforcement

5.10.6.3 Ties

5.10.7 Transverse Reinforcement for Flexural Members

5.10.8 Shrinkage and Temperature Reinforcement

5.10.10 Pretensioned Anchorage Zones

5.11.2.5 Welded Wire Fabric

5.11.2.6.3 Anchorage of Wire Fabric Reinforcement

5.11.6 Splices of Welded Wire Fabric

Yield strengths in excess of 75.0 ksi shall not be used for welded wire reinforcement.

The spacing of vertical welded wire reinforcement within slabs and girder webs shall not exceed 18 inches or the height of the member minus 3 inches, whichever is less. Longitudinal wires and welds are permitted in girder flanges but shall be excluded from girder webs. For vertical welded wire reinforcement in prestressed concrete slab girders, no welded joints other than those required for anchorage shall be permitted. Epoxy-coated wire and welded wire reinforcement shall conform to Section 9-07.3 with the exception that ASTM A884 Class A Type I shall be used instead of ASTM A775.

End regions of prestressed concrete girders shall meet the requirements of WSDOT Bridge Design Manual LRFD (M23-50) Sections 5.6.2.F and 5.6.2.G.

Shop drawings for spliced prestressed concrete girders shall also conform to Section 6-02.3(26)A. The Working Drawings for spliced prestressed concrete girders shall include all details related to the post-tensioning operations in the field, including details of hardware required, tendon geometry, blockout details, and details of additional or modified steel reinforcing bars required in cast-in-place closures.

6-02.3(25)B Casting

This section, including title, is revised to read:

6-02.3(25)B Prestressing

Each stressing system shall have a pressure gauge or load cell that will measure jacking force. The gauge shall display pressure accurately and readably with a dial at least 6 inches in diameter or with a digital display. Each jack and its gauge shall be calibrated as a unit and shall be accompanied by a certified calibration chart. The Contractor shall submit a Type 1 Working Drawing consisting of 1 copy of this chart. The cylinder extension during calibration shall be in approximately the position it will occupy at final jacking force.

Jacks and gauges shall be recalibrated and recertified:

1. Annually,

2. After any repair or adjustment, and

3. Anytime there are indications that the jack calibration is in error.

The Engineer may use load cells to check jacks, gauges, and calibration charts before and during tensioning.

All load cells shall be calibrated and shall have an indicator that shows prestressing force in the strand. The range of this cell shall be broad enough that the lowest 10 percent of the manufacturer's rated capacity will not be used to measure jacking force.

From manufacture to encasement in concrete, prestressing strand shall be protected against dirt, oil, grease, damage, and all corrosives. Strand shall be stored in a dry, covered area and shall be kept in the manufacturer's original packaging until placement in the forms. If prestressing strand has been damaged or pitted, it will be rejected. Prestressing strand with rust shall be spot-cleaned with a nonmetallic pad to inspect for any sign of pitting or section loss. Once the prestressing steel has been installed, no welds or grounds for welders shall be made on the forms or the steel in the girder, except as specified.

Post-tensioning of spliced prestressed concrete girders shall conform to Section 6-02.3(26) and the following requirements:

1. Before tensioning, the Contractor shall remove all side forms from the cast-in-place concrete closures. From this point until 48 hours after grouting the tendons, the Contractor shall keep all construction and other live loads off the Superstructure and shall keep the falsework supporting the superstructure in place.

2. The Contractor shall not tension the post-tensioning reinforcement until the concrete in the cast-in-place closures reaches the minimum compressive strength specified in the Plans. This strength shall be measured with concrete cylinders made of the same concrete and cured under the same conditions as the cast-in-place closures.

3. All post-tensioning shall be completed before placing the sidewalks and barriers on the Superstructure.

6-02.3(25)C Prestressing

This section, including title, is revised to read:

6-02.3(25)C Casting

Side forms shall be steel except that cast-in-place concrete closure forms for spliced prestressed concrete girders, interior forms of prestressed concrete tub girders, and end bulkhead forms of prestressed concrete girders may be wood. Interior voids for prestressed concrete slab girders with voids shall be formed by either wax soaked cardboard or expanded polystyrene forms. The interior void forms shall be secured in the position as shown in the Working Drawings, and shall remain in place.

All concrete mixes to be used shall be preapproved in the WSDOT plant certification process. The temperature of the concrete when placed shall be between 50°F and 90°F.

Slump shall not exceed 4 inches for normal concrete nor 7 inches with the use of a high range water-reducing admixture, nor 9 inches when both a high range water-reducing admixture is used and the water/cement ratio is less than or equal to 0.35. For self-consolidating concrete (SCC), the slump requirements specified above do not apply, and are instead replaced by the target slump flow and slump flow range specified as part of the SCC mix design.

Air-entrainment is not required in the concrete placed into prestressed concrete girders, including cast-in-place concrete closures for spliced prestressed concrete girders.

This section is supplemented with the following new sub-section:

6-02.3(25)C1 Acceptance Testing of Concrete for Prestressed Concrete Girders

Compressive strength cylinders and concrete acceptance testing shall be performed once per prestressed concrete girder or once per fabrication line of prestressed concrete girders. Concrete shall not be placed until fresh concrete testing indicates concrete is within acceptable limits.

Acceptance testing shall be performed by the Contractor and test results shall be submitted to the Engineer. Unless otherwise noted below, the test methods described in Section 6-02.3(5)D shall be followed. Concrete compressive strength shall be in accordance with Section 6-02.3(25)E.

Concrete that is not self-consolidating concrete will be accepted as follows:

1. Temperature within the allowable temperature band.

2. Slump below the maximum allowed.

Concrete that is self-consolidating concrete will be accepted as follows:

1. Temperature within the allowable temperature band.

2. Slump flow within the target slump flow range.

3. VSI less than or equal to 1 in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

4. J ring passing ability less than or equal to 1.5-inches.

5. Rapid assessment of static segregation resistance of self-consolidating concrete using penetration test in accordance with ASTM C 1712 shall be less than or equal to 15 mm.

6-02.3(25)D Curing

The first paragraph is revised to read:

During curing, the Contractor shall keep the girder in a saturated curing atmosphere until the girder concrete has reached the required release strength. If the Engineer concurs, the Contractor may shorten curing time by heating the outside of impervious forms. Heat may be radiant, convection, conducted steam, or hot air. With steam, the arrangement shall envelop the entire surface with saturated steam. Hot air curing will not be allowed, unless the Contractor submits Type 2 Working Drawings consisting of the proposed method to envelop and maintain the girder in a saturated atmosphere. Saturated atmosphere means a relative humidity of at least 90 percent. The Contractor shall never allow dry heat to touch the girder surface at any point.

6-02.3(25)E Contractors Control Strength

This section is revised to read:

Concrete strength shall be measured on test cylinders cast from the same concrete as that in the girder. These cylinders shall be cured under time-temperature relationships and conditions that simulate those of the girder. If the forms are heated by steam or hot air, test cylinders will remain in

the coolest zone throughout curing. If forms are heated another way, the Contractor shall provide a record of the curing time-temperature relationship for the cylinders for each girder to the Engineer. When two or more girders are cast in a continuous line and in a continuous pour, a single set of test cylinders may represent all girders provided the Contractor demonstrates uniformity of casting and curing to the satisfaction of the Engineer.

The Contractor shall mold, cure, and test enough of these cylinders to satisfy Specification requirements for measuring concrete strength. The Contractor may use 4- by 8-inch or 6- by 12-inch cylinders.

Test cylinders may be cured in a moist room or water tank in accordance with WSDOT FOP for AASHTO T 23 after the girder concrete has obtained the required release strength. If, however, the Contractor intends to ship the girder prior to the standard 28-day strength test, the design strength for shipping shall be determined from cylinders placed with the girder and cured under the same conditions as the girder. These cylinders may be placed in a noninsulated, moisture-proof envelope.

To measure concrete strength in the girder, the Contractor shall randomly select two test cylinders. The average compressive strength of the two cylinders shall be equal or greater than the specified strength and neither cylinder shall have a compressive strength that is more than 5% below the specified strength.

If too few cylinders were molded to carry out all required tests on the girder, the Contractor shall remove and test cores from the girder under the surveillance of the Engineer. If the Contractor casts cylinders to represent more than one girder, all girders in that line shall be cored and tested. Cores shall avoid all prestressing strands, steel reinforcing bars and interior voids.

For prestressed concrete slab girders, a test shall consist of four cores measuring 3 inches in diameter by 6 inches in length (for slabs) or by the thickness of the web (for ribbed and double tee sections). Two cores shall be taken from each side of the girder with one on each side of the girder span midpoint, at locations accepted by the Engineer. The core locations for prestressed concrete ribbed and double tee sections shall be immediately beneath the top flange.

For prestressed concrete tub girders, a test shall consist of four cores measuring 3 inches in diameter by the thickness of the web. Two cores shall be taken from each web, approximately 3 feet to the left and to the right of the center of the girder span.

For all other prestressed concrete girders, a test shall consist of three cores measuring 3 inches in diameter by the thickness of the web and shall be removed from just below the top flange; one at the midpoint of the girder's length and the other two approximately 3 feet to the left and approximately 3 feet to the right.

The cores shall be taken in accordance with AASHTO T 24 and shall be tested in accordance with WSDOT FOP for AASHTO T 22. The Engineer may accept the girder if the average compressive strength of all test cores from the girder are at least 85 percent of the specified compressive strength with no one core less than 75 percent of specified compressive strength.

If there are more than four cored holes in a girder, the prestressing reinforcement shall not be released until the holes are patched and the patch material has attained a minimum compressive strength equal to the required release compressive strength.

All cored holes shall be patched and cured prior to shipment of the girder. The girder shall not be shipped until tests show the patch material has attained a minimum compressive strength of 4,000 psi.

If the annual plant approval includes procedures for patching cored holes, the cored holes shall be patched in accordance with this procedure. Otherwise, the Contractor shall submit a core hole patching procedure as a Type 2 Working Drawing.

6-02.3(25)F Prestress Release

The second and third paragraphs are revised to read:

All strands shall be released in a way that will minimize eccentricity of the prestressing force about the centerline of the girder. This release shall not occur until tests show each girder has reached the minimum compressive strength required by the Plans.

The Contractor may request permission to release the prestressing reinforcement at a minimum concrete compressive strength less than specified in the Plans. This request shall be submitted as a Type 2E Working Drawing and shall be accompanied with calculations showing the adequacy of the proposed release concrete compressive strength and any effects on girder camber. The calculated release strength shall meet the requirements outlined in the WSDOT Bridge Design Manual LRFD (M23-50) for tension and compression at release.

6-02.3(25)G Protection of Exposed Reinforcement

The last paragraph is deleted.

6-02.3(25)H Finishing

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

The interface on girders that contact a cast-in-place concrete deck shall have a finish of dense, screeded concrete without a smooth sheen or laitance on the surface.

The third and fourth paragraphs are revised to read:

On prestressed concrete wide flange deck girders, deck bulb tee girders, ribbed section girders and double tee girders, the Contractor shall test the top surface for flatness and make corrections in accordance with Section 6-02.3(10)D3 except that the straightedge need not exceed the width of the girder top flange when checking the transverse direction. The top surface shall be finished in accordance with Section 6-02.3(10)D6.

The Contractor may repair defects in the girder provided the repair is covered in the annual plant approval package. Any repairs that are not covered by the annual plant approval process shall be submitted to the Engineer as Type 2 Working Drawings or shall be submitted through the email resolution process.

6-02.3(25)I Fabrication Tolerances

This section is revised to read:

The girders shall be fabricated as shown in the processed shop drawings, and shall meet the dimensional tolerances listed below. Construction tolerances of cast-in-place closures for spliced prestressed concrete girders shall conform to the tolerances specified for spliced prestressed concrete girders. Actual acceptance or rejection will depend on how the Engineer believes a defect outside these tolerances will affect the Structure's strength or appearance:

1. Length: ± ¼ inch per 25 feet of beam length, up to a maximum of ± 1½ inches.

2. Width:

   Flanges and webs: + ⅜ inch, - ¼ inch.

   Slab girders: ± ¼ inch.

3. Girder Depth (overall): ± ¼ inch.

4. Flange Depth:

   For I and wide flange I girders: ± ¼ inch

   For all other girders: + ¼ inch, - ⅛ inch

5. Strand Position:

   Straight strands: ± ¼ inch

   Bundled strand group center of gravity: ± ½ inch

   Harped strand group center of gravity at the girder ends: ± 1 inch

6. Longitudinal Location of Harp Points for Harped Strands from Design Locations: ± 20 inches

7. Position of an Interior Void, vertically and horizontally (slab girders): ± ½ inch.

8. Bearing Recess (center of recess to girder end): ± ¼ inch.

9. Girder Ends (deviation from square or designated skew):

   Horizontal: ± ½ inch

   Vertical: ± ⅛ inch per foot of girder depth

10. Bearing Area Deviation from Plane (in length or width of bearing): 1⁄16 inch.

11. Stirrup Reinforcing Spacing: ± 1 inch.

12. Stirrup Projection from Top of Girder:

    Wide flange thin deck and slab girders: ± ¼ inch

    All other girders: ± ¾ inch

13. Mild Steel Concrete Cover: - ⅛ inch, + ⅜ inch.

14. Offset at Form Joints (deviation from a straight line extending 5 feet on each side of joint): ± ¼ inch.

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

For wide flange deck, wide flange thin deck, deck bulb tee and slab girders with a reinforced concrete topping:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ½ inch
For all other wide flange deck, deck bulb tee and slab girders:	Cambers shall be equalized when the differences in cambers between adjacent girders exceeds ± ¼ inch
For all other prestressed concrete girders:	± ⅛ inch per 10 feet of girder length

16. Position of Inserts for Structural Connections: ± 1 inch.

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

18. Weld Ties: ± ½ inch longitudinal, ± ⅛ inch vertical.

19. Position of post tensioning ducts in spliced prestressed concrete girders: ± ¼ inch.

20. Deviation from a smooth curve for post-tensioning ducts at closures based on the sum total of duct placement and alignment tolerances: ± ⅜ inch.

6-02.3(25)J Horizontal Alignment

This section is revised to read:

The Contractor shall check and record the horizontal alignment of the top and bottom flanges of each girder at the following times:

1. Initial – Upon removal of the girder from the casting bed.

2. Shipment – Within 7 days prior to shipment.

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

Each check shall be made by measuring the distance between each flange and a chord that extends the full length of the girder. The Contractor shall perform and record each check at a time when the alignment of 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.

Immediately after the girder is removed from the casting bed, neither flange shall be offset more than ⅛ inch for each 10 feet of girder length. During storage and prior to shipping, the offset (with girder ends plumb and upright and with no external force) shall not exceed ¼ inch per 10 feet of girder length. Any girder within this tolerance may be shipped, but shall be corrected at the job site to the ⅛ inch maximum offset per 10 feet of girder length before concrete is placed into the diaphragms.

The Engineer may permit the use of external force to correct girder alignment at the plant or job site if the Contractor provides stress calculations and a proposed procedure. If external force is permitted, it shall not be released until after the bridge deck has been placed and cured 10 days.

The maximum deviation of the side of a prestressed concrete slab girder, or the edge of the top flange of a wide flange deck, wide flange thin deck, deck bulb tee, double tee or ribbed girder, measured from a chord that extends end to end of the member, shall be ± ⅛ inch per 10 feet of member length, but not greater than ½ inch total.

6-02.3(25)K Girder Deflection

This section, including title, is revised to read:

6-02.3(25)K Vertical Deflection

The Contractor shall check and record the vertical deflection (camber) of each girder at the following times:

1. Initial – Upon removal of the girder from the casting bed;

2. Shipment – Within 7 days prior to shipment;

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

At a minimum, survey data shall be taken at each girder end and at midspan. The Contractor shall perform and record each check at a time when the alignment of 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.

The "D" dimensions shown in the Plans are computed upper and lower bounds of girder vertical deflections at midspan based on a time lapse of 40 and 120 days after release of the prestressing strands. Any temporary top strands are assumed to be cut 30 days prior to these elapsed times (10 and 90 days after release of the prestressing strands). The "D" dimensions are intended to advise the Contractor of the expected range of girder vertical deflection at the time of deck placement. A positive (+) "D" dimension indicates upward deflection.

If the girder vertical deflection measured for the shipment check (Item 2 above) is not between the lower bound shown in the Plans and the upper bound shown in the Plans, the Contractor shall immediately notify the Engineer and shall submit the camber data as a Type 2 Working Drawing. The Engineer shall be notified prior to shipping the girders.

If the girder vertical deflection measured for the erection check (Item 3 above) is not between the lower bound shown in the Plans and the upper bound shown in the Plans plus ¾ inches, the Contractor shall submit a Type 2 Working Drawing describing how the deficient or excess girder camber will be addressed.

All costs including bridge deck form adjustments, maintaining steel reinforcing bar clearances, changes in deck profile or thickness, or any other modifications needed to accommodate girder deflections shall be at the Contractor's expense.

6-02.3(25)L Handling and Storage

The first paragraph is revised to read:

During handling and storage, each prestressed concrete girder shall always be kept plumb and upright. It shall be lifted only by the lifting embedments (strand lift loops or high-strength threaded steel bars) at either end.

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

For high-strength threaded steel bars, a minimum of two 1⅜-inch diameter bars conforming to Section 9-07.11 shall be used at each end 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 from the form.

The last two paragraphs are revised to read:

The Contractor may request permission to use lifting embedments, lifting embedment locations, lifting angles, concrete release strengths, or temporary top strand configurations other than specified in the Plans. The request shall be submitted as a Type 2E Working Drawing and shall conform to the **Criteria for Girder Stresses and Stability for Handling, Shipping and Erecting** in Section 6-02.3(25)M. The request shall also address any effects on girder camber.

If girders are to be stored, the Contractor shall place them on a stable foundation that will keep them in a vertical position. Stored girders shall be supported at the bearing recesses or, if there are no recesses, approximately 2 to 3 feet from the girder ends. After post-tensioning, spliced prestressed concrete girders shall be supported at points between 2 and 5 feet from the girder ends, unless otherwise shown in the Plans. For long-term storage of girders with initial horizontal curvature, the Contractor may wedge one side of the bottom flange, tilting the girders to control curvature. If the Contractor elects to set girders out of plumb during storage, the Contractor shall have the proposed method analyzed by the Contractor's engineer to ensure against damaging the girder.

6-02.3(25)M Shipping

This section is revised to read:

After the girder has reached its 28-day design strength, the girder and a completed Certification of Compliance, signed by a Precast/Prestressed Concrete Institute Certified Technician or a Professional Engineer, shall be submitted to the Engineer for inspection. If the Engineer finds the certification and the girder to be acceptable, the Engineer will stamp the girder "Approved for Shipment".

No prestressed concrete slab girder shall be shipped for at least 3 days after concrete placement. No prestressed concrete wide flange deck, deck bulb tee or tub girder shall be shipped for at least 7 days after concrete placement, except that they may be shipped 3 days after concrete placement when L/(bd) is less than or equal to 5.0, where L equals the shipping length of the girder, b equals the girder top flange width (for prestressed concrete wide flange deck and deck bulb tee girders) or the bottom flange width (for prestressed concrete tub girders), and d equals the girder depth, all in feet. No other girder shall be shipped for at least 10 days after concrete placement.

Girder support locations during shipping shall be no closer than the girder depth to the ends of the girder at the girder centerline. Support locations shown in the Plans have been determined in accordance with the criteria specified below. The Contractor shall verify the applicability of these criteria to the trucking configuration intended for transport of the girders. If the trucking configuration differs from these criteria, or the Contractor proposes to use support locations other than those shown in the Plans, the Contractor shall submit a girder shipping plan with supporting calculations conforming to the criteria specified below as a Type 2E Working Drawing.

If the Contractor elects to assemble spliced prestressed concrete girders into components of two or more segments prior to shipment, the Contractor shall submit a girder shipping plan with supporting calculations conforming to the criteria specified below as a Type 2E Working Drawing.

The Contractor shall determine if girder bracing to control lateral bending during shipping is required and shall provide it if necessary. When bracing is required, the Contractor shall submit a girder shipping plan with supporting calculations conforming to the criteria specified below as a Type 2E Working Drawing. The Contractor shall perform all bracing operations at no additional cost to the Contracting Agency.

Criteria for Girder Stresses and Stability for Handling, Shipping and Erecting: Girder stresses and lateral stability shall conform to the requirements of the WSDOT Bridge Design Manual LRFD (M23-50) including Sections 5.2.1.C, 5.6.2.C.2 and 5.6.3.

6-02.3(25)N Prestressed Concrete Girder Erection

This section is revised to read:

Before erecting any prestressed concrete girders, the Contractor shall submit an erection plan as a Type 2E Working Drawing. The erection plan shall conform to the **Criteria for Girder Stresses and Stability for Handling, Shipping and Erecting** in Section 6-02.3(25)M. The erection plan shall provide complete details of the erection process including at a minimum:

1. Temporary falsework support, bracing, guys, deadmen, and attachments to other Structure components or objects;

2. Procedure and sequence of operation;

3. Girder stresses during progressive stages of erection;

4. Girder weights, lift points, lifting embedments and devices, spreaders, and angle of lifting cables in accordance with Section 6-02.3(25)L, etc.;

5. Crane(s) make and model, mass, geometry, lift capacity, outrigger size, and reactions;

6. Girder launcher or trolley details and capacity (if intended for use); and

7. Locations of cranes, barges, trucks delivering girders, and the location of cranes and outriggers relative to other Structures, including retaining walls and wing walls.

The erection plan shall include drawings, notes, catalog cuts, and calculations clearly showing the above listed details, assumptions, and dimensions. Material properties and Specifications, structural analysis, and any other data used shall also be included.

The concrete in piers and crossbeams shall reach at least 80 percent of design strength before girders are placed on them.

The Contractor shall hoist girders only by the lifting embedments at the ends, always keeping the girders plumb and upright. When the girders are to receive a cast-in-place concrete deck, lifting embedments shall be removed after erection to provide a minimum 2½-inch clearance to the top of the deck. When the girders are not to receive a cast-in-place concrete deck, lifting embedments shall be removed 1-inch below the girder surface and grouted with an epoxy grout conforming to Section 9-26.3(1)A.

The girders shall be braced in accordance with Sections 6-02.3(17)F4 and 6-02.3(17)F5. **When temporary strands in the top flange are used, they shall be cut after the girders are braced and before the girder deflections are equalized and intermediate diaphragms are cast.**

Instead of the oak block wedges shown in the Plans, the Contractor may use Douglas fir blocks if the grain is vertical. The height of oak block wedges at the girder centerline shall not exceed the width.

The Contractor shall fill all block-out holes with a mortar or grout acceptable to the Engineer.

For prestressed concrete slab girders, the Contractor shall set stop plates and dowel bars at the top of pier walls 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 Deck Bulb Tee Girder Flange Connection

This section, including title, is revised to read:

Girder to Girder Connections

When differential camber between adjacent girders in a span exceeds the tolerance in Section 6-02.3(25)I, the Contractor shall submit a method of equalizing deflections as a Type 1 Working Drawing. Any temporary strands in the top flange shall be cut in accordance with Section 6-02.3(25)N prior to equalizing girder deflections.

Prestressed concrete wide flange deck, deck bulb tee and slab girders with grouted shear keys shall be constructed in the following sequence:

1. Deflections shall be equalized in accordance with the Contractor's equalization plan.

2. Intermediate diaphragms shall be placed and weld ties shall be welded. Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

3. The keyways 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.

Prestressed concrete wide flange deck, deck bulb tee and slab girders without grouted shear keys and prestressed concrete wide flange thin deck girders shall be constructed in the following sequence:

1. Deflections shall be equalized in accordance with the Contractor's equalization plan.

2. Intermediate diaphragms shall be placed and any weld ties shall be welded. Welding ground shall be attached directly to the steel plates being welded when welding the weld-ties.

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

6-02.3(26)F Prestressing Reinforcement

The last sentence in the fourth paragraph is revised to read:

If the prestressing reinforcement will not be stressed and grouted for more than 7 calendar days after it is placed in the ducts, the Contractor shall place an approved corrosion inhibitor conforming to Federal Specification MIL-I-22110C in the ducts.

6-02.3(27)A Use of Self-Consolidating Concrete for Precast Units

The first paragraph is deleted.

The second paragraph (up until the colon) is revised to read:

Self-consolidating concrete (SCC) may be used for the following precast concrete structure elements:

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

2. Precast reinforced concrete three-sided structures in accordance with Section 6-02.3(29).

6-02.3(27)B Submittals for Self-Consolidating Concrete for Precast Units

This section is revised to read:

With the exception of items 3, 7, and 8 in Section 6-02.3(27)A, the Contractor shall submit the mix design for SCC to the Engineer for annual plant approval in accordance with Section 6-02.3(28)B. The mix design submittal shall include items specified in Sections 6-02.3(2)A and 6-02.3(2)C1.

Items 3, 7, and 8 in Section 6-02.3(27)A require the precast plant to cast one representative structure acceptable to the Engineer and have the structure sawn in half for examination by the Contracting Agency to determine that segregation has not occurred. The Contracting Agency's approval of the sawn structure will constitute approval of the precast plant to use SCC, and a concrete mix design submittal is not required.

6-02.3(27)C Acceptance Testing of Self-Consolidating Concrete for Precast Units

This section's title is revised to read:

6-02.3(27)C Acceptance Testing of Concrete for Precast Units

This section is revised to read:

Acceptance testing shall be performed by the Contractor and test results shall be submitted to the Engineer. Concrete shall conform to the requirements specified in Section 6-02.3(2)A. Unless otherwise noted below, the test methods described in Section 6-02.3(5)D shall be followed.

Concrete compressive strength shall be in accordance with Section 6-02.3(27). Compressive strength testing shall be performed a minimum of once per day and once for every 20 cubic yards of concrete that is placed.

Concrete for items 1, 2, 4, 5, and 6 in Section 6-02.3(27)A that is not self-consolidating concrete will be accepted as follows:

1. Temperature within the allowable temperature band.

2. Slump below the maximum allowed.

3. Air content within the required range.

SCC for items 1, 2, 4, 5, and 6 in Section 6-02.3(27)A will be accepted as follows:

1. Temperature within the allowable temperature band.

2. Slump flow within the target slump flow range.

3. VSI less than or equal to 1 in accordance with ASTM C 1611, Appendix X1, using Filling Procedure B.

4. J ring passing ability less than or equal to 1.5-inches.

5. Air content within the required range.

SCC for concrete barrier will be accepted in accordance with temperature, air, and compressive strength testing listed above.

SCC for precast junction boxes, cable vaults, and pull boxes will be accepted in accordance with the temperature and compressive strength testing listed above.

SCC for precast drainage structure elements will be accepted in accordance with the requirements of AASHTO M 199.

6-02.3(28) Precast Concrete Panels

In the first paragraph, the third sentence is revised to read:

WSDOT Certification will be granted at, and renewed during, the annual precast plant review and approval process in accordance with WSDOT Materials Manual M 46-01.04 Standard Practice QC 7.

6-02.4 Measurement

The seventh paragraph (up until the colon) is revised to read:

All reinforcing steel will be measured by the computed weight of all steel required by the Plans. The weight of mechanical splices will be based on the weight specified in the manufacturer's catalog cut for the specific item. Splices noted as optional in the Plans but installed by the Contractor will be included in the measurement. Epoxy-coated bars will be measured before coating. The Contractor shall furnish (without extra allowance):

Item number 1 in the seventh paragraph is revised to read:

1. Bracing, spreaders, form blocks, wire clips, and other fasteners.

The eighth paragraph is deleted.

The following three new paragraphs are inserted before the last paragraph:

Expansion joint system___seal - superstr. will be measured by the linear foot along its completed line and slope.

Expansion joint modification will be measured by the linear foot of expansion joint modified along its completed line and slope.

Prestressed concrete girder will be measured by the linear foot of girder specified in the Proposal.

6-02.5 Payment

In the paragraph following the bid item “Commercial Concrete”, per cubic yard the second sentence is revised to read:

All costs in connection with concrete curing, producing concrete surface finish with form liners, and furnishing and applying pigmented sealer to concrete surfaces as specified, shall be included in the unit contract price per cubic yard for "Conc. Class ____".

The following new paragraph is inserted after the bid item “Superstructure (name bridge)”, lump sum:

All costs in connection with constructing, finishing and removing the bridge deck test slab as specified in Section 6-02.3(10)D1 shall be included in the lump sum Contract price for “Superstructure___” or “Bridge Deck___” for one bridge in each project, as applicable.

In the paragraph following the bid item “Epoxy-Coated St. Reinf. Bar ___”, per pound, the first sentence is revised to read:

Payment for reinforcing steel shall include the cost of drilling holes in concrete for, and setting, steel reinforcing bar dowels with epoxy bonding agent, and furnishing, fabricating, placing, and splicing the reinforcement.

The bid item “Cure Box”, lump sum and paragraph following bid item are deleted.

The following three new bid items are inserted before the bid item “Bridge Approach Slab”, per square yard:

“Expansion Joint System _____ - Superstr.”, per linear foot.

“Expansion Joint Modification - ___”, per linear foot.

“Prestressed Conc. Girder ___”, per linear foot.

SECTION 6-03, STEEL STRUCTURES
APRIL 6, 2015

6-03.2 Materials

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

The Contractor shall submit Type 1 Working Drawings describing the methods for visibly marking the material so that it can be traced.

6-03.3 Construction Requirements

This section is revised to read:

Structural steel fabricators of plate and box girders, floorbeams, truss members, stringers, cross frames, diaphragms, and laterals shall be certified under the AISC Certification Program for Steel Bridge Fabricators, Advanced Bridges Category. When fracture critical members are specified in the contract, structural steel fabricators shall also meet the supplemental requirements F, Bridges with Fracture-Critical Members, under the AISC Certification Program for Steel Bridge Fabricators.

6-03.3(7) Shop Plans

This section is revised to read:

The Contractor shall submit all shop detail plans for fabricating the steel as Type 2 Working Drawings.

If these plans will be submitted directly from the fabricator, the Contractor shall so notify the Engineer in writing.

No material shall be fabricated until: (1) the Working Drawing review is complete, and (2) the Engineer has accepted the materials source.

Before physical completion of the project, the Contractor shall furnish the Engineer one set of reproducible copies of the as-built shop plans. The reproducible copies shall be clear, suitable for microfilming, and on permanent sheets that measure no smaller than 11 by 17-inches. Alternatively, the shop drawings may be provided in an electronic format with the concurrence of the Engineer.

6-03.3(7)A Erection Methods

The first paragraph is revised to read:

Before beginning to erect any steel Structure, the Contractor shall submit Type 2E Working Drawings consisting of the erection plan and procedure describing the methods the Contractor intends to use.

The second paragraph (up until the colon) is revised to read:

The erection plan and procedure shall provide complete details of the erection process including, at a minimum, the following:

The third paragraph (up until the colon) is revised to read:

As part of the erection plan Working Drawings, the Contractor may submit details of an engineered and fabricated lifting bracket bolted to the girder top flanges providing the following requirements are satisfied:

In the third paragraph, the second sentence of item number 4 is revised to read:

Certification documentation from a previous project may be submitted;

The last sentence of the fourth paragraph is deleted.

The last paragraph is deleted.

6-03.3(10) Straightening Bent Material

In the first paragraph, the last sentence is revised to read:

A limited amount of localized heat may be applied only if carefully planned and supervised, and only in accordance with the heat-straightening procedure Working Drawing submittal.

The third paragraph is revised to read:

After straightening, the Contractor shall inspect the member for fractures using a method proposed by the Contractor and accepted by the Contracting Agency.

The last paragraph is revised to read:

The procedure for heat straightening of universal mill (UM) plates by the mill or the fabricator shall be submitted as a Type 2 Working Drawing.

6-03.3(14) Edge Finishing

In the first paragraph, the last sentence is revised to read:

Corners along exposed edges shall be broken by light grinding or another method acceptable to the Engineer to achieve an approximate 1/16-inch chamfer or rounding.

In the fifth paragraph, the last sentence is revised to read:

The fabricator shall prevent excessive hardening of flange edges through preheating, post heating, or control of the burning process as recommended by the steel manufacturer.

The sixth paragraph is revised to read:

Hardness testing shall consist of testing thermal-cut edges with a portable hardness tester. The hardness tester, and its operating test procedures, shall be submitted as a Type 1 Working Drawing. The hardness tester shall be convertible to Rockwell C scale values.

In the last paragraph, the last sentence is revised to read:

If thermal-cutting operations conform to procedures established by the steel manufacturer, and hardness testing results are consistently within acceptable limits, the Engineer may authorize a reduction in the testing frequency.

6-03.3(15) Planing of Bearing Surfaces

This section is supplemented with the following new paragraph:

Where mill to bear is specified in the Plans, the bearing end of the stiffener shall be flush and square with the flange and shall have at least 75 percent of this area in contact with the flange.

6-03.3(25) Welding and Repair Welding

In the first paragraph, the first sentence is revised to read:

Welding and repair welding of all steel bridges shall comply with the AASHTO/AWS D1.5M/D1.5, latest edition, Bridge Welding Code.

In the second paragraph, the last sentence is revised to read:

No welding, including tack and temporary welds shall be done in the shop or field unless the location of the welds is shown on the shop drawings reviewed and accepted by the Engineer.

In the third paragraph, the first sentence is revised to read:

Welding procedures shall accompany the shop drawing Working Drawing submittal.

In the fourth paragraph, the first sentence is revised to read:

Welding shall not begin until completion of the shop plan Working Drawing review as required in Section 6-03.3(7).

In item number 1 of the ninth paragraph, “approves” is revised to read “concurs”.

6-03.3(25)A3 Ultrasonic Inspection

The following new paragraph is inserted before the last paragraph:

A minimum of 30 percent of complete penetration vertical welds on steel column jackets thicker than 5/16-inch, within 1.50 column jacket diameter of the top and bottom of each column, shall be inspected. If any rejectable flaws are found, 100 percent of the weld within the specified limits shall be inspected. The largest column cross section diameter for tapered column jackets shall constitute one column jacket diameter.

6-03.3(25)A4 Magnetic Particle Inspection

Items number 3 and 4 are revised to read:

3. Complete penetration groove welds on plates $^{5}/_{16}$-inch or thinner (excluding steel column jackets) shall be 100 percent tested by the magnetic particle method. Testing shall apply to both sides of the weld, if backing plate is not used. The ends of each complete penetration groove weld at plate edges shall be tested by the magnetic particle method.

4. A minimum of 30 percent of complete penetration vertical welds on steel column jackets $^{5}/_{16}$-inch or thinner, within 1.50 column jacket diameters of the top and bottom of each column, shall be magnetic particle inspected. The largest column cross section diameter for tapered column jackets shall constitute one column jacket diameter.

The last paragraph is supplemented with the following new sentence:

If any rejectable flaws are found in any test length of item 4 above, 100 percent of the weld within the specified limits shall be inspected.

6-03.3(27) High Strength Bolt Holes

The last paragraph is revised to read:

The Contractor shall submit Type 2 Working Drawings consisting of a detailed outline of the procedures proposed to accomplish the work from initial drilling through shop assembly.

6-03.3(27)C Numerically Controlled Drilled Connections

In the second paragraph, the first sentence is revised to read:

The Contractor shall submit Type 1 Working Drawings consisting of a detailed outline of proposed N/C procedures.

6-03.3(29) Welded Shear Connectors

This section's content is deleted and replaced with the following:

Installation, production control, and inspection of welded shear connectors shall conform to Chapter 7 of the AASHTO/AWS D1.5M/D1.5:2010 Bridge Welding Code. If welded shear connectors are installed in the shop, installation shall be completed prior to applying the shop primer coat in accordance with Section 6-07.3(9)G. If welded shear connectors are installed in the field, the steel surface to be welded shall be prepared to SSPC-SP 11, power tool cleaning, just prior to welding.

6-03.3(33) Bolted Connections

In the second paragraph, the first sentence is revised to read:

The Contractor shall submit Type 1 Working Drawings providing documentation of the bolt tension calibrator, including brand, capacity, model, date of last calibration, and manufacturer's instructions for use.

In the second sentence of the second paragraph, the word "approved" is deleted.

In item number 3 of the fifth paragraph, "approved" is revised to read "specified".

In the center column header of table 1, "AASHTO M 164" is revised to read "ASTM A 325".

In the column headings of table 3, "M 164" is revised to read "A 325".

In the tenth paragraph, item number 3, "approved" is revised to read "accepted" in the second and third sentences of the first paragraph.

In the tenth paragraph, item number 3, the third paragraph is revised to read:

The Contractor shall submit Type 1 Working Drawings of the tension control bolt assembly, including bolt capacities, type of bolt, nut, and washer lubricant, method of packaging and protection of the lubricated bolt, installation equipment, calibration equipment, and installation procedures.

In the first sentence of the last paragraph, "AASHTO M 164" is revised to read "ASTM A 325".

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

Black ASTM A 325 bolts may be reused once if accepted by the Engineer.

In the last paragraph, the fourth sentence is revised to read:

Bolts to be reused shall be relubricated in accordance with the manufacturer's recommendations.

6-03.3(33)A Pre-Erection Testing

In the fifth sentence of the first paragraph, “approved” is revised to read “accepted”.

The third paragraph is revised to read:

> The Contractor shall submit Type 1 Working Drawings consisting of the manufacturer’s detailed procedure for pre-erection (rotational capacity) testing of tension control bolt assemblies.

6-03.3(33)B Bolting Inspection

In the last sentence of the first paragraph, “approved” is revised to read “specified”.

The last paragraph is revised to read:

> The Contractor shall submit Type 1 Working Drawings consisting of the manufacturer’s detailed procedure for routine observation to ensure proper use of the tension control bolt assemblies.

6-03.3(42) Surface Condition

The first subparagraph is revised to read:

> Painted steel surfaces shall be cleaned by methods required for the type of staining. The Contractor shall submit a Type 1 Working Drawing of the cleaning method.

SECTION 6-04, TIMBER STRUCTURES
JANUARY 5, 2015

6-04.3(3) Shop Details

This section is revised to read:

> The Contractor shall submit Type 2 Working Drawings consisting of shop detail plans for all treated timber. These plans shall show dimensions for all cut, framed, or bored timbers.

SECTION 6-05, PILING
JANUARY 5, 2015

6-05.3(2) Ordering Piling

The last paragraph is deleted.

6-05.3(3)A Casting and Stressing

In the second sentence of the first paragraph, “poured” is revised to read “cast”.

6-05.3(4) Manufacture of Steel Casings for Cast-In-Place Concrete Piles

This section is revised to read:

> The diameter of steel casings shall be as specified in the Contract. A full-penetration groove weld between welded edges is required.

6-05.3(5) Manufacture of Steel Piles

This section is revised to read:

> Steel piles shall be made of rolled steel H-pile sections, steel pipe piles, or of other structural steel sections described in the Contract. A full-penetration groove weld between welded edges is required.

6-05.3(6) Splicing Steel Casings and Steel Piles

This section is revised to read:

The Engineer will normally permit steel piles and steel casings for cast-in-place concrete piles to be spliced. But in each case, the Contractor shall submit Type 2 Working Drawings supporting the need and describing the method for splicing. Welded splices shall be spaced at a minimum distance of 10 feet. Only welded splices will be permitted.

Splice welds for steel piles shall comply with Section 6-03.3(25) and AWS D1.1/D1.1M, latest edition, Structural Welding Code. Splicing of steel piles shall be performed in accordance with an approved weld procedure. The Contractor shall submit a Type 2 Working Drawing consisting of the weld procedure. For ASTM A 252 material, mill certification for each lot of pipe to be welded shall accompany the submittal. The ends of all steel pipe piling shall meet the fit-up requirements of AWS D1.1/D1.1M, latest edition, Structural Welding Code Section 5.22.3.1, "Girth Weld Alignment (Tubular)," when the material is spliced utilizing a girth weld.

Splice welds of steel casings for cast-in-place concrete piles shall be the Contractor's responsibility and shall be welded in accordance with AWS D1.1/D1.1M, latest edition, Structural Welding Code. A weld procedure submittal is not required for steel casings used for cast-in-place concrete piles. Casings that collapse or are not watertight, shall be replaced at the Contractor's expense.

6-05.3(7)B Precast Concrete Piles

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

The Contractor shall submit Type 2 Working Drawings consisting of the method of lifting the piles.

6-05.3(8) Pile Tips and Shoes

In the last paragraph, the second and third sentences are deleted and replaced with the following new sentence:

If pile tips or shoes other than those denoted in the Qualified Products List are proposed, the Contractor shall submit Type 2 Working Drawings consisting of shop drawings of the proposed pile tip along with design calculations, specifications, material chemistry and installation requirements, along with evidence of a pile driving test demonstrating suitability of the proposed pile tip.

6-05.3(9)A Pile Driving Equipment Approval

In the first paragraph, the first sentence is revised to read:

Prior to driving any piles, the Contractor shall submit Type 2 Working Drawings consisting of details of each proposed pile driving system.

In the second paragraph, the first sentence 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 ultimate bearing capacities of greater than 300 tons.

In the second paragraph, the second sentence is deleted.

The last paragraph is revised to read:

Changes to the pile driving system after completion of the Working Drawing review require a revised Working Drawing submittal.

6-05.3(9)B Pile Driving Equipment Minimum Requirements

In the first paragraph, the first sentence is revised to read:

For each drop hammer used, the Contractor shall weigh it in the Engineer's presence or submit a Type 1 Working Drawing consisting of a certificate of its weight.

In the third paragraph, the first sentence is revised to read:

For each diesel, hydraulic, steam, or air-driven hammer used, the Contractor shall submit a Type 1 Working Drawing consisting of the manufacturer's specifications and catalog.

In the fourth paragraph, "approval" is revised to read "permission".

The ninth paragraph is revised to read:

These requirements for minimum hammer size may be waived if a Type 2E Working Drawing is submitted consisting of a wave equation analysis demonstrating the ability of the hammer to obtain the required bearing capacity and minimum tip elevation without damage to the pile.

6-05.3(9)C Pile Driving Leads

In the third paragraph, "approved" is revised to read "permitted".

6-05.3(11)F Pile Damage

In the first sentence of the second paragraph, "approved" is revised to read "accepted".

6-05.3(11)G Pile Cutoff

In the first paragraph, "Engineer's approval" is revised to read "Engineer's permission".

6-05.3(11)H Pile Driving From or Near Adjacent Structures

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

3. Type 2E Working Drawings are submitted in accordance with Sections 1-05.3 and 6-02.3(16), showing the structural adequacy of the existing Structure to safely support all of the construction loads.

6-05.3(12) Determination of Bearing Values

In the footnote below the formula, "approved by the Engineer" is revised to read "acceptable to the Engineer".

6-05.3(13) Treatment of Timber Pile Heads

In the second paragraph, the first sentence is revised to read:

After cutting treated timber piles to correct elevation, the Contractor shall brush three coats of a preservative that meets the requirements of Section 9-09 on all pile heads (except those to be covered with concrete footings or concrete caps).

6-05.3(15) Completion of Cast-In-Place Concrete Piles

In the first paragraph, "approval" is revised to read "acceptance".

SECTION 6-06, BRIDGE RAILINGS
JANUARY 5, 2015

6-06.3(2) Metal Railings

The second paragraph is revised to read:

Before fabricating the railing, the Contractor shall submit Type 2 Working Drawings consisting of the shop plans. The Contractor may substitute other rail connection details for those shown in the Plans if details of these changes show in the shop plans and if the Engineer accepts them in the Working Drawing response comments. In reviewing the shop plan Working Drawings, the Engineer indicates only that they are adequate and complete enough. The review does not indicate a check on dimensions.

SECTION 6-07, PAINTING
JANUARY 5, 2015

6-07.3 Painting

This section is supplemented with the following new subsections:

6-07.3(14) Metallic Coatings

6-07.3(14)A General Requirements

This specification covers the requirements for thermal spray metallic coatings, with and without additional paint coats, as a means to prevent corrosion.

The coating system consists of surface preparation by wash cleaning and abrasive blast cleaning, thermal spray application of a metallic coating using a material made specifically for that purpose, and, when specified, shop primer coat or shop primer coat plus top coat in accordance with Section 6-07.3(11)A. The system also includes inspection and acceptance requirements.

6-07.3(14)B Reference Standards

SSPC-SP 10/NACE No. 2	Near White Blast Cleaning
SSPC CS 23.00	Guide for Thermal Spray Metallic Coating Systems
ASTM-C-633	Standard Test Method for Adhesion or Cohesion Strength of Thermal Spray Coatings
ASTM D 4417	Standard Test Methods for Field Measurement of Surface Profile of Blast-Cleaned Steel
ASTM D 6386	Standard Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting
ASTM D 4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
ANSI/AWS C2.18	Guide for the Protection of Steel with Thermal Sprayed Coatings of Aluminum, Zinc and their Alloys and Composites

6-07.3(14)C Quality Assurance

A representative sample of each lot of the coating material used shall be submitted to the Engineer for analysis prior to use. Zinc shall have a minimum purity of 99.9 percent. Zinc Aluminum 85/15 wire shall be 14 percent minimum to 16 percent maximum aluminum.

The thermal sprayed coating shall have a uniform appearance. The coating shall not contain any blisters, cracks, chips or loosely adhering particles, oil or other surface contaminants, nodules, or pits exposing the substrate.

The thermal spray coating shall adhere to the substrate with a minimum bond of 700 psi. The Contractor's QA program shall include thermal spray coating bond testing.

The Engineer may cut through the coating with a knife or chisel. If upon doing so, any part of the coating lifts away from the base metal 1/4 in. or more ahead of the cutting blade without cutting the metal, then the bond is considered not effective and is rejected.

Coated areas which have been rejected or damaged in the inspection procedure described shall have the defective sections blast cleaned to remove all of the thermal sprayed coating and shall then be recoated. Before resubmittal and inspection, those sections where coating has not reached the required thickness shall be sprayed with additional metal until that thickness is achieved.

6-07.3(14)D Submittals

The Contractor shall submit to the Engineer, prior to abrasive blast cleaning, a 12 inch square steel plate, of the same material and approximate thickness of the steel to be coated, blasted clean in accordance with Section 6-07.3(14)E. The sample plate will be checked for specified angular surface pattern, the abrasive grit size and type used, and the procedure used. This plate shall be used as the visual standard to determine the acceptability of the cleaned surface. In the event the Contractor's cleaning operation is inferior to the sample plate, the Contractor shall be required to correct the cleaning operation to do a job comparable to the specimen submitted.

At the same time as submitting the abrasive blast cleaned steel plate sample, the Contractor shall submit to the Engineer, a second 12 inch square steel plate of the same material and thickness, cleaned and thermal spray coated in accordance with the same processes and with the same equipment as intended for use in applying the thermal spray coatings. The Engineer may request additional cleaned and thermal spray coated samples to be produced and submitted coincident with thermal spray coating of the items specified in the Plans to receive thermal spray coatings.

6-07.3(14)E Surface Preparation

Surface irregularities (e.g., sharp edges and/or carburized edges, cracks, delaminations, pits, etc.) interfering with the application of the coating shall be removed or repaired, prior to wash cleaning. Thermal cut edges shall be ground to reduce hardness to attain the surface profile required from abrasive blast cleaning.

All dirt, oil, scaling, etc. shall be removed prior to blast cleaning. All surfaces shall be wash cleaned with either clean water at 8000 psi or water and detergent at 2000 psi with two rinses with clean water.

The surface shall be abrasive blast cleaned to near white metal (SSPC-SP 10). The surface profile shall be measured using a surface profile comparator, replica tape, or other method suitable for the abrasive being used in accordance with ASTM D 4417.

Where zinc coatings up to and including 0.009 inch thick are to be applied, one of the following abrasive grits shall be used with pressure blast equipment to produce a 3.0 mils AA anchor tooth pattern:

1. Aluminum oxide or silicon carbide
   mesh size: SAE G-25 to SAE G-40

2. Hardened steel grit
   mesh size: SAE G-25 to SAE G-40

3. Garnet, flint, or crushed nickel or black beauty coal slag
   mesh size: SAE G-25 to SAE G-50

Where zinc coatings greater than 0.010 inch thick are to be applied, one of the following abrasive grits shall be used with pressure blast equipment to produce a 5.0 mils AA anchor tooth pattern:

1. Aluminum oxide or silicon carbide
   mesh size: SAE G-18 to SAE G-25

2. Hardened steel grit
   mesh size: SAE G-18 to SAE G-25

3. Garnet, flint, or crushed nickel or black beauty coal slag
   mesh size: SAE G-18 to SAE G-25

The pressure of the blast nozzle, as measured with a needle probe gauge, with pressure type blasting equipment shall be as follows:

1. With aluminum oxide, silicon carbide, flint, or slag - 50 psi minimum and 60 psi maximum.

2. With garnet or steel grit - 75 psi minimum.

The pressure at the blast nozzle, with siphon blasting (suction blasting), shall be as follows:

1. With aluminum oxide, silicon carbide, flint, or slag - 75 psi maximum.

2. With garnet or steel grit - 90 psi maximum.

The abrasive blast stream shall be directed onto the substrate surface at a spray angle of 75 to 90 degrees, and moved side to side. The nozzle to substrate distance shall be 4 to 12 inches.

6-07.3(14)F Application of Metallic Coating

No surface shall be sprayed which shows any sign of condensed moisture or which does not comply with Section 6-07.3(14)E. If rust bloom occurs within the holding time between abrasive blast cleaning and thermal spraying, the surface shall be reblasted at a blast angle as close to perpendicular to the surface as possible to achieve a 2.0 to 4.0 mil anchor tooth pattern. Thermal spraying shall not take place when the relative humidity is 90% or greater, when the steel temperature is less than 5°F above the dew point, or when the air or steel temperature is less than 40°F.

Clean, dry air shall be used with not less than 50 psi air pressure at the air regulator. Not more than 50 feet of 3/8 in. ID hose shall be used between the air regulator and the

metallizing gun. The metallizing gun shall be started and adjusted with the spray directed away from the work. During the spraying operation and depending upon the equipment being used, the gun shall be held as close to perpendicular as possible to the surface from 5 to 8 inches from the surface of the work.

Manual spraying shall be done in a block pattern, typically 2 feet by 2 feet square. The sprayed metal shall overlap on each pass to ensure uniform coverage. The specified thickness of the coating shall be applied in multiple layers. In no case are fewer than two passes of thermal spraying, overlapping at right angles, acceptable.

At least one single layer of coating shall be applied within 4 hours of blasting and the surface shall be completely coated to the specified thickness within 8 hours of blasting.

The minimum coating thickness shall be 6 mils unless otherwise shown in the Plans.

6-07.3(14)G Applications of Shop Coats and Field Coats

The surface shall be wiped clean with solvent immediately before applying the wash primer. The wash primer shall have a low viscosity appropriate for absorption into the thermal spray coating, and shall be applied within 8 hours after completion of thermal spraying or before oxidation occurs. The dry film thickness of the wash primer shall not exceed 0.5 mils or be less than 0.3 mils. It shall be applied using an appropriate spray gun except in those areas where brush or roller application is necessary. The subsequent shop primer or field coats shall be applied no less than one-half hour after a wash primer.

The shop primer coat, when specified, shall be applied in accordance with Section 6-07.3(11)A and the paint manufacturer's recommendations.

All field coats, when specified, shall be applied in accordance with Section 6-07.3(11)A and the paint manufacturer's recommendations. The color of the top coat shall conform to Section 6-03.3(30) as supplemented in these Special Provisions.

6-07.3(2) Submittals

The first paragraph is revised to read:

The Contractor shall submit Type 2 Working Drawings of the painting plan.

6-07.3(10)A Containment

The second paragraph is revised to read:

The containment length shall not exceed the length of a span (defined as pier to pier). The containment system shall not cause any damage to the existing structure. All clamps and other attachment devices shall be padded or designed such that they shall not mark or otherwise damage the steel member to which they are attached. All clamps and other attachment devices shall be fully described in the Contractor's painting plan Working Drawing submittal. Field welding of attachments to the existing structure will not be allowed. The Contractor shall not drill holes into the existing structure or through existing structural members except as shown in the Contractor's painting plan Working Drawing submittal. All provisions for dust collection, ventilation and auxiliary lighting within the containment system shall be fully described the Contractor's painting plan Working Drawing submittal.

In the second to last paragraph, “approved” is revised to read “accepted”.

6-07.3(10)E Surface Preparation – Full Paint Removal

This section is revised to read:

For structures where full removal of existing paint is specified, the Contractor shall remove any visible oil, grease, and road tar in accordance with SSPC-SP 1.

Following preparation by SSPC-SP 1, all steel surfaces to be painted shall be prepared in accordance with SSPC-SP 10, near-white metal blast cleaning. Surfaces inaccessible to near-white metal blast cleaning shall be prepared in accordance with SSPC-SP 11, power tool cleaning to bare metal, as allowed by the Engineer.

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

In the first paragraph, the last sentence before the numbered list is revised (up until the colon) to read:

The sealed waste containers shall be stored in accordance with Section 1-06.4, the painting plan, and the following requirements:

In the second paragraph, the first sentence is revised to read:

All material collected by and removed from the containment system shall be taken to a landside staging area, provided by the Contractor, for further processing and storage prior to transporting for disposal.

The ninth paragraph is revised to read:

The Contractor shall submit a Type 1 Working Drawing of all TCLP results.

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

The Contractor shall submit a Type 1 Working Drawing consisting of waste disposal documentation within 15 working days of each disposal.

6-07.3(10)K Coating Thickness

The last paragraph is revised to read:

If the specified number of coats does not produce a combined dry film thickness of at least the sum of the thicknesses required per coat, or if an individual coat does not meet the minimum thickness, or if visual inspection shows incomplete coverage, the coating system will be rejected, and the Contractor shall discontinue painting and surface preparation operations and shall submit a Type 2 Working Drawing of the repair proposal. The repair proposal shall include documentation demonstrating the cause of the less than minimum thickness along with physical test results, as necessary, and modifications to work methods to prevent similar results. The Contractor shall not resume painting or surface preparation operations until receiving the Engineer's acceptance of the completed repair.

6-07.3(10)L Environmental Condition Requirements Prior to Application of Paint

In the last paragraph, the second to last sentence is revised to read:

If a paint system manufacturer's recommendations allow for application of a paint under environmental conditions other than those specified, the Contractor shall submit a Type 2 Working Drawing consisting of a letter from the paint manufacturer specifying the environmental conditions under which the paint can be applied.

In the last sentence of the last paragraph, “approval” is revised to read “concurrence”.

6-07.3(11)B1 Submittals

The first paragraph (up until the colon) is revised to read:

> The Contractor shall submit Type 2 Working Drawings consisting of the following information:

6-07.3(11)B3 Galvanized Surface Cleaning and Preparation

The first paragraph is revised to read:

> Galvanized surfaces receiving the powder coating shall be cleaned and prepared for coating in accordance with ASTM D 6386, and the project-specific powder coating plan.

6-07.3(11)B4 Powder Coating Application and Curing

The first paragraph (up until the colon) is revised to read:

> After surface preparation, the two-component powder coating shall be applied in accordance with the powder coating manufacturer’s recommendations, the project-specific powder coating plan, and as follows:

6-07.3(11)B5 Testing

In the fifth sentence of the first paragraph, the phrase “as approved by the Engineer” is deleted.

The second paragraph is revised to read:

> The results of the QC testing shall be documented in a QC report, and submitted as a Type 2 Working Drawing.

In the fourth paragraph, the phrase “as approved by the Engineer” is deleted.

In the last paragraph, “Engineer’s approval” is revised to read “Engineer’s acceptance”.

6-07.3(11)B6 Coating Protection for Shipping

The phrase “as approved by the Engineer” is deleted from this section.

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

> After erection, all coating damage due to the Contractor’s shipping, storage, handling, and erection operations shall be repaired by the Contractor in accordance with the project-specific powder coating plan.

6-07.5 Payment

The following new paragraph is inserted before the last paragraph:

> All costs in connection with producing the metallic coatings as specified shall be included in the unit contract price for the applicable item or items of work.

SECTION 6-09, MODIFIED CONCRETE OVERLAYS
JANUARY 5, 2015

6-09.2 Materials

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

Microsilica will be accepted based on submittal of a Manufacturer's Certificate of Compliance.

The seventh paragraph is revised to read:

Latex admixture will be accepted based on submittal of a Manufacturer's Certificate of Compliance.

6-09.3(1)H Mobile Mixer for Latex Modified Concrete

In item number 2 of the first paragraph, "An approved recording meter" is revised to read "A recording meter".

In item number 3 of the first paragraph, "an approved flow meter" is revised to read "a flow meter".

6-09.3(1)J Finishing Machine

The last two sentences of the last paragraph are revised to read:

A machine with a vibrating pan as an integral part may be proposed. Other finishing machines will be allowed subject to concurrence of the Engineer.

6-09.3(2) Submittals

This section is revised to read:

The Contractor shall submit the following Working Drawings in accordance with Section 1-05.3:

1. A Type 1 Working Drawing of the type of machine (rotary milling, hydro-demolition, or shot blasting) selected by the Contractor for use in this project to scarify concrete surfaces.

2. A Type 1 Working Drawing of the axle loads and axle spacing of the rotary milling machine (if used).

3. A Type 2 Working Drawing of the Runoff Water Disposal Plan (if a hydro-demolition machine is used). The Runoff Water Disposal Plan shall describe all provisions for the containment, collection, filtering, and disposal of all runoff water and associated contaminants generated by the hydro-demolition process, including containment, collection and disposal of runoff water and debris escaping through breaks in the bridge deck.

4. A Type 2 Working Drawing of the method and materials used to contain, collect, and dispose of all concrete debris generated by the scarifying process, including provisions for protecting adjacent traffic from flying debris.

5. A Type 1 Working Drawing of the mix design for concrete Class M, and either fly ash modified concrete, microsilica modified concrete, or latex modified concrete, as selected by the Contractor for use in this project in accordance with Section 6-09.3(3).

6. A Type 1 Working Drawing of samples of the latex admixture and the portland cement for testing and compatibility (if latex modified concrete is used).

7. A Type 2 Working Drawing of the paving equipment specifications and details of the screed rail support system, including details of anchoring the rails and providing rail continuity.

6-09.3(3)A General

In the last paragraph, the phrase “and as approved by the Engineer” is deleted.

6-09.3(4)B Latex Admixture

In the second sentence of the second paragraph, the phrase “and as approved by the Engineer” is deleted.

6-09.3(5)A General

The second paragraph is deleted.

In the third and fourth paragraphs, the phrase “and as approved by the Engineer” is deleted.

In the fifth paragraph, “approved by the Engineer” is revised to read “acceptable to the Engineer”.

6-09.3(5)B Testing of Hydro-Demolition and Shot Blasting Machines

In the last sentence of the last paragraph, “approval” is revised to read “acceptance”.

6-09.3(5)C Hydro-Demolishing

In the third and fourth paragraphs, the phrase “as approved by the Engineer” is deleted.

6-09.3(6)B Deck Repair Preparation

The second to last paragraph is revised to read the following three new paragraphs:

The exposed steel reinforcing bars and concrete in the repair area shall be sandblasted or hydro-blasted and blown clean just prior to placing concrete.

Where existing steel reinforcing bars inside deck repair areas show deterioration exceeding the limits defined in the Plans, the Contractor shall furnish and place steel reinforcing bars alongside the deteriorated bars in accordance with the details shown in the Plans. Payment for such extra Work will be by force account as provided in Section 1-09.6.

Bridge deck areas outside the repair area or steel reinforcing bar inside or outside the repair area damaged by the Contractor’s operations, shall be repaired by the Contractor at no additional expense to the Contracting Agency, and to the satisfaction of the Engineer.

6-09.3(6)C Placing Deck Repair Concrete

The third paragraph is supplemented with the following:

The Work of Type 1 further deck preparation shall consist of removing and disposing of the concrete within the repair area.

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

The Work of Type 2 further deck preparation shall consist of removing and disposing of concrete within the repair area, and furnishing, placing, finishing, and curing the repair concrete.

6-09.3(7) Surface Preparation for Concrete Overlay

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

> If either a rotary milling machine or a shot blasting machine is used for concrete scarification, then the concrete deck shall be sandblasted or shot blasted, using equipment identified in the Working Drawing submittals, until sound concrete is exposed.

The third paragraph is revised to read:

> If a hydro-demolition machine is used for concrete scarification, then the concrete deck shall be cleaned by water blasting with 7,000 psi minimum pressure, until sound concrete is exposed.

In the fourth paragraph, “as approved by the Engineer” is revised to read “accepted by the Engineer”.

In the last sentence of the eighth paragraph, the phrase “as approved by the Engineer” is deleted.

In the first sentence of the last paragraph, “approved” is revised to read “allowed”.

6-09.3(8)B Quality Assurance for Latex Modified Concrete Overlays

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

> The technical representative shall be capable of performing, demonstrating, inspecting, and testing all of the functions required for placement of the latex modified concrete as specified in Section 6-09.3(11).

The fourth 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 at no additional expense to the Contracting Agency.

6-09.3(10)A Survey of Existing Bridge Deck Prior to Scarification

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

> A Type 1 Working Drawing of each day's survey record shall be provided to the Engineer within three working days after the end of the shift.

6-09.3(10)B Establishing Finish Overlay Profile

In the fourth sentence of the first paragraph, “approved by the Engineer” is revised to read “specified by the Engineer”.

In the second paragraph, the phrase “and as approved by the Engineer” is deleted.

6-09.3(11) Placing Concrete Overlay

In the fourth paragraph, the last sentence of item number 3 is revised to read:

> If the Contractor elects to work at night to meet these criteria, adequate lighting shall be provided at no additional expense to the Contracting Agency.

6-09.4 Measurement

The last paragraph is deleted and replaced with the following:

Further deck preparation for Type 1 deck repair and for Type 2 deck repair will be measured by the square foot of surface area of deck concrete removed in accordance with Section 6-09.3(6).

6-09.5 Payment

The Bid item "Further Deck Preparation", per cubic foot and the paragraph following this Bid item are deleted and replaced with the following two new Bid items:

"Further Deck Preparation for Type 1 Deck Repair", per square foot.

"Further Deck Preparation for Type 2 Deck Repair", per square foot.

The Bid item "Further Deck Preparation", force account and the paragraph following this Bid item are deleted.

SECTION 6-10, CONCRETE BARRIER
JANUARY 5, 2015

6-10.1 Description

In the second paragraph, "approved" is revised to read "specified".

6-10.3 Construction Requirements

In the first paragraph, "approved" is revised to read "specified".

6-10.3(5) Temporary Concrete Barrier

The last sentence of the first paragraph is deleted.

The second paragraph is revised to read:

If the Contract calls for the removal and resetting of permanent barrier, and the permanent barrier is not required to remain in place until reset, the permanent barrier may be substituted for temporary concrete barrier. Any of the permanent barrier damaged during its use as temporary barrier will become the property of the Contractor and be replaced with permanent barrier when the permanent barrier is reset to its permanent location.

The third paragraph is revised to read:

All barrier shall be in good condition, without cracks, chips, spalls, dirt, or traffic marks. If any barrier segment is damaged during or after placement, the Contractor shall immediately repair it to the Engineer's satisfaction or replace it with an undamaged section.

The following new paragraph is inserted after the third paragraph:

Delineators shall be placed on the traffic face of the barrier 6 inches from the top and spaced a maximum of 40 feet on tangents and 20 feet through curves. The reflector color shall be white on the right side of traffic and yellow on the left side of traffic. The Contractor shall maintain, replace and clean the delineators when ordered by the Engineer.

SECTION 6-11, REINFORCED CONCRETE WALLS
JANUARY 5, 2015

6-11.3(1) Submittals

The first paragraph is revised to read:

The Contractor shall submit Type 2E Working Drawings consisting of excavation shoring plans in accordance with Section 2-09.3(3)D.

The second paragraph is revised to read:

The Contractor shall submit Type 2E Working Drawings of falsework and formwork plans in accordance with Sections 6-02.3(16) and 6-02.3(17).

The third paragraph (up until the colon) is revised to read:

If the Contractor elects to fabricate and erect precast concrete wall stem panels, Type 2E Working Drawings of the following information shall be submitted in accordance with Section 6-02.3(28)A:

The last paragraph is deleted.

6-11.3(3) Precast Concrete Wall Stem Panels

In the third paragraph, the phrase "as approved by the Engineer" is deleted.

SECTION 6-12, NOISE BARRIER WALLS
JANUARY 5, 2015

6-12.3(1) Submittals

In the first paragraph, the second sentence is revised to read:

The Contractor shall submit a Type 2 Working Drawing consisting of the noise barrier wall access plan.

The second paragraph (up until the colon) is revised to read:

For construction of all noise barrier walls with shafts, the Contractor shall submit a Type 2 Working Drawing consisting of the shaft construction plan, including at a minimum the following information:

In the third paragraph, the first sentence is revised to read:

For construction of precast concrete noise barrier walls, the Contractor shall submit Type 2 Working Drawings consisting of shop drawings for the precast concrete panels in accordance with Section 6-02.3(28)A.

6-12.3(2) Work Access and Site Preparation

In the first paragraph, the first sentence is revised to read:

The Contractor shall construct work access in accordance with the work access plan.

6-12.3(3) Shaft Construction

The first paragraph is revised to read:

The Contractor shall excavate and construct the shafts in accordance with the shaft construction plan.

In the last sentence of the third paragraph, "approved by the Engineer" is revised to read "acceptable to the Engineer".

The fourth paragraph is revised to read:

> When caving conditions are encountered, the Contractor shall stop further excavation until implementing the method to prevent ground caving as specified in the shaft construction plan.

In the last sentence of the fifth paragraph, “approved” is revised to read “accepted”.

In the seventh paragraph, “approval” is revised to read “acceptance”.

In the eighth paragraph, the third sentence is revised to read:

> The Contractor shall install the steel reinforcing bar cage as specified in the shaft construction plan.

In the second sentence of the last paragraph, “approval” is revised to read “acceptance”.

In the fourth sentence of the last paragraph, the word “approved” is deleted.

6-12.3(6) Precast Concrete Panel Fabrication and Erection

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

> After receiving the Engineer’s review of the shop drawings, the Contractor shall cast one precast concrete panel to be used as the sample panel. The Contractor shall construct the sample panel in accordance with the procedure and details specified in the shop drawings. The Contractor shall make the sample panel available to the Engineer for acceptance.

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

> Upon receiving the Engineer’s acceptance of the sample panel, the Contractor shall continue production of precast concrete panels for the noise barrier wall.

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

> The sample panel shall be retained at the fabrication site until all precast concrete panels have been fabricated and accepted.

6-12.3(10) Finish Line Ground Dressing

In the last sentence of the second paragraph, the phrase “as approved by the Engineer” is deleted.

SECTION 6-13, STRUCTURAL EARTH WALLS
JANUARY 5, 2015

6-13.3(1) Quality Assurance

In the first paragraph, the first sentence is revised to read:

> The structural earth wall manufacturer shall provide a qualified and experienced representative to resolve wall construction problems.

In the first paragraph, the last sentence is revised to read:

Recommendations made by the structural earth wall manufacturer's representative shall be followed by the Contractor.

In the second paragraph, item number 4 is revised to read:

4. The base of the structural earth wall excavation shall be within three inches of the staked elevations, unless otherwise accepted or specified by the Engineer.

In the second paragraph, item number 6 is revised to read:

6. The backfill reinforcement layers shall be located horizontally and vertically within one inch of the locations shown in the structural earth wall working drawings.

6-13.3(2) Submittals

In the first paragraph, the first sentence is revised to read:

The Contractor, or the supplier as the Contractor's agent, shall furnish a Manufacturer's Certificate of Compliance certifying that the structural earth wall materials conform to the specified material requirements.

The second paragraph is revised to read:

A Type 1 Working Drawing of all test results, performed by the Contractor or the Contractor's supplier, which are necessary to assure compliance with the specifications, shall submitted along with each Manufacturer's Certificate of Compliance.

In the third paragraph, the first sentence is revised to read:

Before fabrication, the Contractor shall submit a Type 1 Working Drawing consisting of the field construction manual for the structural earth walls, prepared by the wall manufacturer.

In the fourth paragraph, the first sentence is revised to read:

The Contractor, through the license/patent holder for the structural earth wall system, shall submit Type 2E Working Drawings consisting of detailed design calculations and details.

The last paragraph is deleted.

6-13.3(3) Excavation and Foundation Preparation

In the first paragraph, the last two sentences are revised to read:

The foundation for the structure shall be graded level for a width equal to or exceeding the length of reinforcing as shown in the structural earth wall working drawings and, for walls with geogrid reinforcing, in accordance with Section 2-12.3. Prior to wall construction, the foundation, if not in rock, shall be compacted as accepted by the Engineer.

6-13.3(6) Welded Wire Faced Structural Earth Wall Erection

The first two sentences are revised to read:

The Contractor shall erect the welded wire wall reinforcement in accordance with the wall manufacturer's field construction manual. Construction geotextile for wall facing shall be placed between the backfill material within the reinforced zone and the coarse granular material

immediately behind the welded wire wall facing, as shown in the Plans and the structural earth wall working drawings.

6-13.3(7) Backfill

The third paragraph is revised to read:

Misalignment or distortion of the precast concrete facing panels or concrete blocks due to placement of backfill outside the limits of this specification shall be corrected in a manner acceptable to the Engineer.

In item number 4 of the fifth paragraph, the phrase “as approved by the Engineer” is deleted.

The last paragraph is deleted.

6-13.3(8) Guardrail Placement

In the first sentence of the second paragraph, “approval” is revised to read “permission”.

6-13.3(9) SEW Traffic Barrier and SEW Pedestrian Barrier

The first paragraph (up until the colon) is revised to read:

The Contractor, in conjunction with the structural earth wall manufacturer, shall design and detail the SEW traffic barrier and SEW pedestrian barrier in accordance with Section 6-12.3(2) and the above ground geometry details shown in the Plans. The barrier Working Drawings and supporting calculations shall be Type 2E and shall include, at a minimum, the following:

SECTION 6-14, GEOSYNTHETIC RETAINING WALLS
JANUARY 5, 2015

6-14.2 Materials

In the first paragraph, the section number next to “Anchor rods and associated nuts, washers and couplers” is revised to read:

9-06.5(4)

The following new paragraph is inserted after the first paragraph:

Anchor plate shall conform to ASTM A 36, ASTM A 572 Grade 50, or ASTM A 588.

6-14.3(2) Submittals

The first paragraph (up until the colon) is revised to read:

The Contractor shall submit Type 2 Working Drawings consisting of detailed plans for each wall. As a minimum, the submittals shall include the following:

6-14.3(4) Erection and Backfill

In the second sentence of the second paragraph, “approved by” is revised to read “acceptable to”.

In the last sentence of the fifth paragraph, “approval” is revised to read “permission”.

The sixth paragraph is deleted.

In item number 5 in the eighth paragraph, the phrase “as approved by the Engineer” is deleted.

In the ninth paragraph, the first sentence is revised to read:

> The Contractor shall construct wall corners at the locations shown in the Plans, and in accordance with the wall corner construction sequence and method in the Working Drawing submittal.

In the last paragraph, the first sentence is revised to read:

> Where required by retaining wall profile grade, the Contractor shall terminate top layers of retaining wall geosynthetic and backfill in accordance with the method in the Working Drawing submittal.

6-14.5 Payment

In the paragraph following the Bid item "Concrete Fascia Panel", per square foot, "concrete leveling pad" is revised to read "concrete footing".

SECTION 6-15, SOIL NAIL WALLS
JANUARY 15, 2015

6-15.3(3) Submittals

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

> The Contractor shall submit Type 2 Working Drawings of the following information:

6-15.3(6) Soil Nailing

In the first paragraph, the last sentence is revised to read:

> Damaged or defective encapsulation shall be repaired in accordance with the manufacturer's recommendations.

The eighth paragraph is revised to read:

> If sections of the wall are constructed at different times than the adjacent soil nail sections, the Contractor shall use stabilizing berms, temporary slopes, or other measures acceptable to the Engineer, to prevent sloughing or failure of the adjacent soil nail sections.

6-15.3(8) Soil Nail Testing and Acceptance

In the first paragraph, the second sentence is revised to read:

> The Contractor shall submit Type 1 Working Drawings of all test data.

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

> The Contractor shall submit Type 2E Working Drawings of the reaction frame.

6-15.3(8)A Verification Testing

In the third paragraph, the first sentence is revised to read:

> The Contractor shall submit Type 2E Working Drawings consisting of design details of the verification testing, including the system for distributing test load pressures to the excavation surface and appropriate nail bar size and reaction plate.

6-16.3(2) Submittals

The first paragraph is revised to read:

> The Contractor shall submit Type 2 Working Drawings consisting of shop plans as specified in Section 6-03.3(7) for all structural steel, including the steel soldier piles, and shall submit Type 2 Working Drawings consisting of shop plans and other details as specified in Section 6-17.3(3) for permanent ground anchors.

The second paragraph is revised to read:

> The Contractor shall submit Type 1 Working Drawings consisting of the permanent ground anchor grout mix design and the procedures for placing the grout.

The third paragraph (excluding the numbered list) is revised to read:

> The Contractor shall submit Type 2E Working Drawings consisting of forming plans for the concrete fascia panels, as specified in Sections 6-02.3(16) and 6-02.3(17).

In the fourth paragraph, the first sentence is revised to read:

> The Contractor shall submit Type 2 Working Drawings consisting of a shaft installation plan.

The last paragraph is deleted.

6-16.3(3) Shaft Excavation

In the third paragraph, the last sentence is revised to read:

> A temporary casing, slurry, or other methods specified in the shaft installation plan shall be used if necessary to ensure such safety and stability.

The fourth paragraph is revised to read:

> Where caving in conditions are encountered, no further excavation will be allowed until the Contractor has implemented the method to prevent ground caving as submitted in accordance with item 4 of the Shaft Installation Plan.

The sixth paragraph is revised to read:

> The excavated shaft shall be inspected and receive acceptance by the Engineer prior to proceeding with construction.

6-16.3(6)B Temporary Lagging

The second paragraph (up until the colon) is revised to read:

> The Contractor shall submit Type 2E Working Drawings consisting of the soldier pile wall lagging design details and supporting design calculations. The submittal shall include, at a minimum, the following:

In item number 4 of the second paragraph, “approved by” is revised to read “acceptable to”.

The last paragraph (excluding the table) is revised to read:

> Notwithstanding the requirements of Section 1-06.1, steel materials used by the Contractor as temporary lagging may be salvaged steel provided that the use of such salvaged steel materials shall be subject to visual inspection and acceptance by the Engineer. For salvaged steel materials where the grade of steel cannot be positively identified, the design stresses for the steel shall conform to the Section 6-02.3(17)B requirements for salvaged steel, regardless of whether rivets are present or not.

6-16.3(6)D Installing Lagging and Permanent Ground Anchor

In the last sentence of the second paragraph, the phrase "as approved by the Engineer" is deleted.

In the last sentence of the fourth paragraph, the phrase "as approved by the Engineer" is deleted.

6-16.3(8) Concrete Fascia Panel

In the first paragraph, the phrase "as approved by the Engineer" is deleted.

SECTION 6-17, PERMANENT GROUND ANCHORS
AUGUST 3, 2015

6-17.3(3) Submittals

The first paragraph is revised to read:

> The Contractor shall submit Type 2E Working Drawings consisting of details and structural design calculations for the ground anchor system or systems intended for use.

The second paragraph is revised to read:

> The Contractor shall submit a Type 1 Working Drawing consisting of a detailed description of the construction procedure proposed for use.

The third paragraph (up until the colon) is revised to read:

> The Contractor shall submit a Type 2 Working Drawing consisting of ground anchor schedule giving:

In the fourth paragraph, the first sentence is revised to read:

> The Contractor shall submit a Type 2 Working Drawing detailing the ground anchor tendon and the corrosion protection system.

In the fourth paragraph, item number 3 is revised to read:

> 3. Unbonded length corrosion protection system, including the permanent rubber seal between the trumpet and the tendon unbonded length corrosion protection and the transition between the tendon bond length and the unbonded tendon length corrosion protection.

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

The Contractor shall submit Type 2 Working Drawings consisting of shop plans as specified in Section 6-03.3(7) for all structural steel, including the permanent ground anchors.

The Contractor shall submit Type 1 Working Drawings consisting of the mix design for the grout conforming to Section 9-20.3(4) and the procedures for placing the grout. The Contractor shall also submit the methods and materials used in filling the annulus over the unbonded length of the anchor.

The Contractor shall submit Type 2 Working Drawings consisting of the method proposed to be followed for the permanent ground anchor testing. This shall include all necessary drawings and details to clearly describe the method proposed.

The Contractor shall submit Type 2 Working Drawings consisting of calibration data for each load cell, test jack, pressure gauge and master pressure gauge to be used. The calibration tests shall have been performed by an independent testing laboratory and tests shall have been performed within 60 calendar days of the date submitted.

6-17.3(5) Tendon Fabrication

In the tenth paragraph, the last sentence is deleted.

The twelfth paragraph is revised to read:

The total anchor length shall not be less than that indicated in the Plans or the Working Drawing submittal.

In the last paragraph, the phrase “as approved by the Engineer” is deleted.

6-17.3(7) Installing Permanent Ground Anchor

In the second paragraph, the third sentence is revised to read:

The Contractor’s method to prevent ground movement shall be submitted as a Type 2 Working Drawing.

In the second paragraph, the second to last sentence is revised to read:

At the point of entry the ground anchor shall be installed within plus or minus three degrees of the inclination from horizontal shown in the Plans or the Working Drawing submittal.

SECTION 6-18, SHOTCRETE FACING
JANUARY 5, 2015

6-18.3(1) Submittals

In the first paragraph, the first sentence (up until the colon) is revised to read:

The Contractor shall submit Type 2 Working Drawings consisting of the following:

In the first paragraph, item number 2 is revised to read:

2. Method and equipment used to apply, finish and cure the shotcrete facing.

The last paragraph is deleted.

6-18.3(2) Mix Design

In the first paragraph, the second and third sentences are deleted.

In the last sentence of the second paragraph, “and approved by the Engineer” is deleted.

6-18.3(3)A Preproduction Testing

In the last sentence, “approved” is revised to read “accepted”.

6-18.3(7) Shotcrete Application

In the last paragraph, the first sentence is revised to read:

> If field inspection or testing, by the Engineer, indicates that any shotcrete produced, fails to meet the requirements, the Contractor shall immediately modify procedures, equipment, or system, as necessary to produce specification material.

SECTION 6-19, SHAFTS
AUGUST 3, 2015

6-19.3(2) Shaft Construction Submittal

The last sentence is revised to read:

> The submittals shall be Type 2 Working Drawings, except the shaft slurry technical assistance submittal shall be Type 1.

6-19.3(3) Shaft Excavation

In the first paragraph, the phrase “as approved by the Engineer” is deleted.

6-19.3(3)B4 Temporary Telescoping Shaft Casing

In the first paragraph, the first sentence of item number 1 is revised to read:

> The Contractor shall submit the request to use temporary telescoping casing as a Type 2 Working Drawing.

6-19.3(3)D Bottom of Shaft Excavation

In the first sentence of the second paragraph, “approved” is revised to read “accepted”.

6-19.3(3)E Shaft Obstruction

In the last sentence, “approved” is revised to read “accepted”.

6-19.3(3)F Voids Between Permanent Casing and Shaft Excavation

In the last sentence, the words “and as approved by the Engineer” are deleted.

6-19.3(3)G Operating Shaft Excavation Equipment From an Existing Bridge

The second sentence is revised to read:

> If necessary and safe to do so, and if the Contractor submits a Type 2 Working Drawing consisting of a written request in accordance with Section 6-01.6, the Engineer may permit operation of drilling equipment on a bridge.

6-19.3(3)H Seals for Shaft Excavation in Water

The first paragraph is revised to read:

When shafts are constructed in water and the Plans show a seal between the casing shoring and the upper portion of the permanent casing of the shaft, the Contractor shall construct a seal in accordance with the shaft installation narrative specified in Section 6-19.3(2)B Item 7.

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

If the Contractor uses a casing shoring diameter other than that specified in the Plans, the Contractor shall submit a revised seal design in accordance with Section 6-19.3(2)B Item 7.

6-19.3(4)C Slurry Sampling and Testing

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

Synthetic slurry shall conform to Section 9-36.2(2), the quality control plan included in the shaft installation narrative in accordance with Section 6-19.3(2)B Item 4.

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

These records shall be submitted as a Type 1 Working Drawing once the slurry system has been established in the first drilled shaft on the project.

6-19.3(4)E Maintenance of a Stable Shaft Excavation

In the last sentence of the first paragraph, “approval” is revised to read “review”.

6-19.3(4)F Disposal of Slurry and Slurry Contacted Spoils

This section is revised to read:

The Contractor shall manage and dispose of the slurry wastewater in accordance with Section 8-01.3(1)C. Slurry-contacted spoils shall be disposed of as specified in the shaft installation narrative in accordance with Section 6-19.3(2)B, item 8, and in accordance with the following requirements:

1. Uncontaminated spoils in contact with water-only slurry may be disposed of as clean fill.

2. Uncontaminated spoils in contact with water slurry mixed with flocculants approved in Section 8-01.3(1)C3 may be disposed of as clean fill away from areas that drain to surface waters of the state.

3. Spoils in contact with synthetic slurry or water slurry with polymer-based additives or flocculants not approved in Section 8-01.3(1)C3 shall be disposed of in accordance with Section 2-03.3(7)C. With permission of the Engineer, the Contractor may re-use these spoils on-site.

4. Spoils in contact with mineral slurry shall be disposed of in accordance with Section 2-03.3(7)C. With permission of the Engineer, the Contractor may re-use these spoils on-site.

6-19.3(5)A Steel Reinforcing Bar Cage Assembly

In the second to last sentence of the first paragraph, the phrase “as approved by the Engineer” is deleted.

6-19.3(5)D Steel Reinforcing Bar Cage Support at Base of Shaft Excavation

The first sentence is revised to read:

> For shafts with temporary casing within 15-feet of the bottom of shaft elevation as specified in the Plans, the Contractor may place quarry spalls or other rock backfill acceptable to the Engineer into the shaft below the specified bottom of shaft elevation as a means to support the steel reinforcing bar cage, provided that the materials and means to accomplish this have been addressed by the shaft installation narrative, as specified in Section 6-19.3(2)B Item 9.

6-19.3(6)C Care for CSL Access Tubes From Erection Through CSL Testing

In the last sentence, “as approved by the Engineer” is revised to read “acceptable to the Engineer”.

6-19.3(8)C Requirements for Leaving Temporary Casing in Place

Item number 1 (up until the colon) is revised to read:

> 1. The Contractor shall submit a Type 2E Working Drawing of the following information:

In item C of item number 1, the phrase “in accordance with Section 6-01.9” is deleted.

Item number 2 is deleted.

6-19.3(9)D Requirements to Continue Shaft Excavation Prior to Acceptance of First Shaft

This section is revised to read:

> 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 results and analysis of the crosshole sonic log 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(9)F Contractor’s Investigation and Remedial Action Plan

This section is revised to read:

> For all shafts determined to be unacceptable, the Contractor shall submit a Type 2 Working Drawing consisting of a plan for further investigation or remedial action. All modifications to the dimensions of the shafts, as shown in the Plans, required by the investigation and remedial action plan shall be supported by calculations and working drawings. All investigation and remedial correction procedures and designs shall be submitted.

6-19.3(9)H Cored Holes

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

> Prior to beginning coring, the Contractor shall submit Type 2 Working Drawings consisting of the method and equipment used to drill and remove cores from shaft concrete.

6-19.4 Measurement

The ninth paragraph is revised to read:

Steel reinforcing bar for shaft and epoxy-coated steel reinforcing bar for shaft will be measured as specified in Section 6-02.4.

6-19.5 Payment

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

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.

SECTION 7-02, CULVERTS
AUGUST 3, 2015

7-02.2 Materials

This first two paragraphs are revised to read:

Materials shall meet the requirements of the following Sections:

Portland Cement	9-01
Aggregate for Portland Cement Concrete	9-03.1
Plain Concrete Culvert Pipe	9-05.3(1)
Reinforced Concrete Culvert Pipe	9-05.3(2)
Beveled Concrete End Sections	9-05.3(3)
Steel Culvert Pipe and Pipe Arch	9-05.4
Steel Nestable Pipe and Pipe Arch	9-05.4(8)
Steel End Sections	9-05.4(9)
Aluminum Culvert Pipe	9-05.5
Aluminum End Sections	9-05.5(6)
Solid Wall PVC Culvert Pipe	9-05.12(1)
Profile Wall PVC Culvert Pipe	9-05.12(2)
Corrugated Polyethylene Culvert Pipe	9-05.19
Steel Rib Reinforced Polyethylene Culvert Pipe	9-05.21
High-Density Polyethylene (HDPE) Pipe	9-05.23
Polypropylene Culvert Pipe	9-05.24
Steel Reinforcing Bar	9-07.2
Epoxy-Coated Steel Reinforcing Bar	9-07.3
Wire Mesh	9-07.7
Deformed Wire	9-07.8
Cold Drawn Wire	9-07.9
Grout	9-20.3(2)
Mortar	9-20.4
Concrete Curing Materials and Admixtures	9-23

This section is supplemented with the following new paragraph:

Elastomeric gaskets shall conform to ASTM D 1056 Type 2 Class C Grade 1.

7-02.3 Construction Requirements

This section is supplemented with the following new sub-sections:

7-02.3(6) Precast Reinf. Conc. Three Sided Structures, Box Culverts and Split Box Culverts

The Contractor shall design, fabricate, and erect precast reinforced concrete three sided structures (PRCTSS), precast reinforced concrete box culverts (PRCBC), and precast reinforced concrete split box culverts (PRCSBC) in accordance with these specifications and the details shown in the Plans, including associated footings, slab bases, wingwalls, cutoff walls, and headwalls.

7-02.3(6)A General

Except as otherwise noted by these specifications, the precast Structures (PRCTSS, PRCBC and PRCSBC) shall conform to all requirements of Section 6-02.3(28).

7-02.3(6)A1 Design Criteria

The precast Structures shall be designed for a minimum service life of 75-years in accordance with the WSDOT Geotechnical Design Manual (M46-03), WSDOT Bridge Design Manual LRFD (M23-50), and AASHTO LRFD Bridge Design Specifications, latest edition and current interims in effect on the Bid advertising date, including an HL-93 vehicular live load. Live load for the Extreme Event-I Limit State shall be applied in accordance with WSDOT Bridge Design Manual LRFD (M23-50) Section 3.5.

Precast Structures with an overall span length greater than 20-feet (measured along the centerline of Roadway from inside face to inside face of hydraulic opening) shall be designed for seismic loads in accordance with FHWA-NHI-10-034, Technical Manual for Design and Construction of Road Tunnels – Civil Elements, Chapter 13. The AASHTO LRFD Bridge Design Specifications Section 12.6.1 exemption from seismic loading does not apply. The design shall evaluate the seismic effects of transient racking deformations.

Wingwalls, cutoff walls, and headwalls associated with the precast Structures shall be designed in accordance with the WSDOT Geotechnical Design Manual (M46-03) and Chapter 11 of AASHTO LRFD Bridge Design Specifications, latest edition and current interims in effect on the Bid advertising date, including seismic loads.

The Contractor shall use the geotechnical report prepared for this project and available through the source(s) specified in the Special Provisions under Section 1-02.4(2).

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 1-1/2” 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 2-1/2”. Whenever the top of the Structure is directly exposed to vehicular traffic, all steel reinforcing bars in the span unit shall be epoxy-coated and the minimum concrete cover dimension from face of concrete to the face of the top mat of steel reinforcing bars shall be 2-1/2”. Concrete cover from the face of any concrete surface to the face of any steel reinforcement shall be 1-inch minimum at all other locations.

7-02.3(6)A2 Submittals

The Contractor shall submit Type 2E Working Drawings consisting of shop drawings of the precast Structures with supporting design calculations.

In addition to items 1 through 6 under shop drawing content requirements in Section 6-02.3(28)A, the following shop drawing details shall be submitted:

1. Footing and slab base details for PRCTSS.

2. Wingwall, headwall, and cutoff wall details.

3. Erection and backfill procedure.

4. Complete, site specific, itemized bar list for all steel reinforcement.

If water is expected to be present in the excavation, or is found to be present once excavation begins, the Contractor shall submit a Type 2 Working Drawing consisting of a dewatering plan.

For precast Structures with a span length greater than 20-feet (as defined in Section 7-02.3(6)A1), the Working Drawing submittal shall include a load rating prepared in accordance with the AASHTO Manual for Bridge Evaluation and WSDOT Bridge Design Manual LRFD (M23-50) Section 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 (M46-03) and the geotechnical report prepared for the project.

7-02.3(6)A3 Casting

Concrete shall conform to Section 6-02.3(28)B, with a 28-day compressive strength as specified in the Working Drawings submittal.

7-02.3(6)A4 Excavation and Bedding Preparation

All excavated material shall be disposed of in accordance with Section 2-09.3(1)D.

If water is present within the excavation, the Contractor shall dewater the excavated area in accordance with the dewatering plan Working Drawing submittal before placing the bedding material.

The bedding for the precast Structure, consisting of the backfill elements shown in the Plans, shall be placed and compacted in accordance with Section 7-08.3(1)C.

7-02.3(6)B Precast Reinf. Conc. Three Sided Structures (PRCTSS)

7-02.3(6)B1 Design Criteria

In addition to the design criteria specified in Section 7-02.3(6)A1, the following shall apply.

PRCTSS shall be precast rigid frames with monolithic upper corners internally reinforced for moment and shear resistance, except as otherwise noted. Connecting separate and individually precast concrete panels together to form the specified three sided frame geometry is acceptable provided the Structure system provides moment and shear resistance from the lateral load from backfill placed full width and full height at one side only of the PRCTSS.

7-02.3(6)B2 Finishing

The Contractor shall mark the following information, using waterproof paint, on the inside of a vertical leg of each precast section of the Structure:

1. PRCTSS span and rise dimensions, minimum and maximum design earth cover dimensions, and vehicular live load for design (HL-93).

2. WSDOT Contract Number and date of fabrication.

3. Name or trademark of the fabricator.

7-02.3(6)B3 Erection

PRCTSS shall be erected and backfilled in accordance with the erection sequence specified in the processed Working Drawings, and the construction equipment restrictions specified in Section 6-02.3(25)O.

Adjacent precast sections shall be connected by welding the weld-tie anchors in accordance with Section 6-02.3(25)O. 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 6-02.3(25)O.

7-02.3(6)C Precast Reinf. Conc. Box Culverts (PRCBC) and Precast Reinf. Conc. Split Box Culverts (PRCSBC)

7-02.3(6)C1 Casting

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, provided the legs of the base and top units are connected in accordance with Section 7-02.3(6)C3.

The joints of the "U" shaped base elements and the lid elements shall be staggered such that the lid element joints occur between quarter-points of the base element.

When the top unit includes vertical legs, the legs of the base and top units shall be connected by weld-tie anchors in accordance with Section 6-02.3(25)O. The weld-tie anchor spacing shall not exceed 6'-0".

7-02.3(6)C2 Finishing

The following information shall be legibly and permanently marked on one inside face of each PRCBC element, or one inside face of each PRCSBC "U" shaped base element by indentation, waterproof paint, or other means acceptable to the Engineer:

1. Box section span and rise dimensions, minimum and maximum design earth cover dimensions, and vehicular live load for design (HL-93).

2. WSDOT Contract Number and date of fabrication.

3. Name or trademark of the fabricator.

7-02.3(6)C3 Erection

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.

Elastomeric gaskets shall be installed at all joints between precast elements (except weld-tie connected joints), and shall be in full contact with both precast elements at the joint prior to the remainder of the joint being completely filled with grout.

When the top unit of a PRCSBC includes vertical legs, the legs of the base and top units shall be connected by welding the weld-tie anchors in accordance with Section 6-02.3(25)O. 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 6-02.3(25)O.

7-02.5 Payment

This section is supplemented with the following three new Bid items:

"Precast Reinf. Conc. Three Sided Structure No.___", lump sum.

"Precast Reinf. Conc. Box Culvert No.___", lump sum.

"Precast Reinf. Conc. Split Box Culvert 8' Span x 1'", lump sum.

SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL
AUGUST 3, 2015

8-01.2 Materials

This section is supplemented with the following new paragraph:

For all seed the Contractor shall furnish the Engineer with the following documentation:

1. The state or provincial seed dealer license and endorsements.

2. Copies of Washington State Department of Agriculture (WSDA) test results on each lot of seed. Test results must be within six months prior to the date of application.

8-01.3(1)A Submittals

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

Modified TESC Plans shall meet all requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109.

8-01.3(1)C Water Management

Items number 1 through 3 are deleted.

This section is supplemented with the following new subsections:

8-01.3(1)C1 Disposal of Dewatering Water

When uncontaminated groundwater with a pH range of 6.5 – 8.5 is encountered in an excavation on a project covered by a NPDES Construction Stormwater General Permit, it may be disposed of as follows:

1. When the turbidity of the groundwater is 25 NTU or less, it may bypass detention and treatment facilities and be discharged into the stormwater conveyance system at a rate that will not cause erosion or flooding in the receiving surface water body.

2. When the turbidity of the groundwater is not more than 25 NTU above or 125% of the turbidity of the site stormwater runoff, whichever is greater, the same detention and treatment facilities as used to treat the site runoff may be used.

3. When the turbidity of the groundwater is more than 25 NTU above or 125% of the turbidity of the site stormwater runoff, whichever is greater, the groundwater shall be treated separately from the site stormwater.

Alternatively, the Contractor may pursue independent disposal and treatment alternatives that do not use the stormwater conveyance system.

8-01.3(1)C2 Process Wastewater

Wastewater generated on-site as a byproduct of a construction process shall not be discharged to surface waters of the State. Some sources of process wastewater may be infiltrated in accordance with the NPDES Construction Stormwater General Permit.

8-01.3(1)C3 Shaft Drilling Slurry Wastewater

Wastewater generated on-site during shaft drilling activity shall be managed and disposed of in accordance with the requirements below. No shaft drilling slurry wastewater shall be discharged to surface waters of the State. Neither the sediment nor liquid portions of the shaft drilling slurry wastewater shall be contaminated, as detectable by visible or olfactory indication (e.g., chemical sheen or smell).

1. Water-only shaft drilling slurry or water slurry with approved flocculants may be infiltrated on-site. Flocculants used shall meet the requirements of Section 9-14.5(1) or shall be chitosan products listed as General Use Level Designation (GULD) on the Department of Ecology's stormwater treatment technologies webpage for construction treatment. Infiltration is permitted if the following requirements are met:

   a. Wastewater shall have a pH of 6.5 – 8.5 prior to discharge.

   b. The source water meets drinking water standards or the Groundwater Quality Criteria listed in WAC 173-200-040.

   c. The amount of flocculant added to the slurry shall be kept to the minimum needed to adequately settle out solids. The flocculant shall be thoroughly mixed into the slurry.

   d. Infiltration locations shall be at least 100 feet away from surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas. Before infiltration begins, there shall be a minimum of 5 feet of unsaturated soil between the soil surface receiving the wastewater for infiltration and the groundwater surface (i.e., saturated soil).

   e. The slurry removed from the shaft shall be contained in a leak proof cell or tank for a minimum of 3 hours.

   f. Within a 24 hour period, a maximum of 21,000 gallons of slurry wastewater may be infiltrated in an infiltration location. The infiltration rate shall be reduced if needed to prevent wastewater from leaving the infiltration location. The infiltration site shall be monitored regularly during infiltration activity. All wastewater discharged to the ground must fully infiltrate and discharges must stop before the end of each work day.

g. After infiltration activity is complete, loose sediment in the infiltration location that may have resulted from the infiltration activity or the removal of BMPs used to manage infiltration activity shall be stabilized to prevent mobilization by stormwater runoff.

h. Drilling spoils and settled sediments remaining in the containment cell or tank shall be disposed of in accordance with Section 6-19.3(4)F.

i. Infiltration locations shall be marked on the on-site temporary erosion and sediment control (TESC) plan sheets before the infiltration activity begins.

j. Prior to infiltrating water-only shaft drilling slurry or water slurry with approved flocculants, the Contractor shall submit a Shaft Drilling Slurry Wastewater Management and Infiltration Plan as a Type 2 Working Drawing. This Plan shall be kept on-site, adapted if needed to meet the construction requirements, and updated to reflect what is being done in the field. The Working Drawing shall include, at a minimum, the following information:

i. Plan sheet showing the proposed infiltration location and all surface waters, wells, on-site sewage systems, aquifer-sensitive recharge areas, sole source aquifers, and well-head protection areas within 150 feet.

ii. The proposed elevation of soil surface receiving the wastewater for infiltration and the anticipated phreatic surface (i.e., saturated soil).

iii. The source of the water used to produce the slurry.

iv. The estimated total volume of wastewater to be infiltrated.

v. The approved flocculant to be used (if any).

vi. The controls or methods (e.g., trenches, traps, berms, silt fence, dispersion, or discharge metering devices) that will be used to prevent surface wastewater runoff from leaving the infiltration location. The Working Drawing shall include all pertinent design details (e.g., sizing of trenches or traps, placement or height of berms, application techniques) needed to demonstrate the proposed controls or methods are adequate to prevent surface wastewater runoff from leaving the infiltration location.

vii. The strategy for removing slurry wastewater from the shaft and containing the slurry wastewater once it has been removed from the shaft.

viii. The strategy for monitoring infiltration activity and adapting methods to ensure compliance.

ix. A contingency plan that can be implemented immediately if it becomes evident that the controls in place or methods being used are not adequate.

x. The strategy for cleaning up the infiltration location after the infiltration activity is done. Cleanup shall include stabilizing any loose sediment on the surface within the infiltration area generated as a byproduct of suspended solids in the infiltrated wastewater or soil disturbance associated with BMP placement and removal.

2. Shaft drilling mineral slurry, synthetic slurry, or slurry with polymer additives not approved for infiltration shall be contained and disposed of by the Contractor at an approved disposal facility in accordance with Section 2-03.3(7)C. Spoils that have come into contact with mineral slurry shall be disposed of in accordance with Section 6-19.3(4)F.

8-01.3(1)C4 Management of Off-Site Water

Prior to disruption of the normal watercourse, the Contractor shall intercept the off-site surface water and pipe it either through or around the project site to prevent it from coming into contact with construction activity or mixing with construction stormwater. It shall be discharged at its preconstruction outfall point in such a manner that there is no increase in erosion downstream of the site. The Contractor shall submit a Type 2 Working Drawing consisting of the method for performing this Work.

8-01.3(2)A Preparation for Application

This section's content is deleted and replaced with the following two new subsections:

8-01.3(2)A1 Seeding

Areas to be cultivated are shown in the Plans or specified in the Special Provisions. The areas shall be cultivated to the depths specified to provide a reasonably firm but friable seedbed. Cultivation shall take place no sooner than 2 weeks prior to seeding.

All areas to be seeded, including excavated slopes shall be compacted and prepared unless otherwise specified or ordered by the Engineer. A cleated roller, crawler tractor, or similar equipment that forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded.

The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

Prior to seeding, the finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways, and other Structures. The soil shall be in a weed free and bare condition.

All bags of seed shall be brought to the site in sealed bags and shall have seed labels attached showing the seed meets the Specifications. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be accepted.

8-01.3(2)A2 Temporary Seeding

A cleated roller, crawler tractor, or similar equipment that forms longitudinal depressions at least 2 inches deep shall be used for compaction and preparation of the surface to be seeded. The entire area shall be uniformly covered with longitudinal depressions formed perpendicular to the natural flow of water on the slope. The soil shall be conditioned with sufficient water so the longitudinal depressions remain in the soil surface until completion of the seeding.

8-01.3(2)B Seeding and Fertilizing

In the list in the second paragraph, item numbers 1-5 are revised to read:

1. A hydro seeder that utilizes water as the carrying agent, and maintains continuous agitation through paddle blades. It shall have an operating capacity sufficient to agitate, suspend, and mix into a homogeneous slurry the specified amount of seed and water or other material.

Distribution and discharge lines shall be large enough to prevent stoppage and shall be equipped with a set of hydraulic discharge spray nozzles that will provide a uniform distribution of the slurry.

2. Blower equipment with an adjustable disseminating device capable of maintaining a constant, measured rate of material discharge that will ensure an even distribution of seed at the rates specified.

3. Helicopters properly equipped for aerial seeding.

4. Power-drawn drills or seeders.

5. Areas in which the above methods are impractical may be seeded by hand methods.

8-01.3(2)C Liming

This section including title is deleted in its entirety and replaced with the following:

8-01.3(2)C Vacant

8-01.3(2)D Mulching

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

Distribution of straw mulch material shall be by means that utilizes forced air to blow mulch material on seeded areas.

8-01.3(11) Outlet Protection

In the last sentence, “Section 9-13.6” is revised to read “Section 9-13.1(5)”.

8-01.4 Measurement

In the twelfth paragraph, “liming” is deleted.

8-01.5 Payment

The bid item “Liming”, per acre is deleted.

SECTION 8-02, ROADSIDE RESTORATION
JANUARY 5, 2015

8-02.3(1) Responsibility During Construction

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

This Work shall include keeping the planted and seeded areas free from insect infestation, weeds or unwanted vegetation, litter, and other debris along with retaining the finished grades and mulch in a neat uniform condition.

8-02.3(2) Roadside Work Plan

This section’s title is revised to read:

Work Plans

This section’s content is deleted in its entirety and replaced with the following new subsections:

8-02.3(2)A Roadside Work Plan

Before starting any Work that disturbs the earth and as described in Sections 8-01, 8-02 and 8-03, the Contractor shall submit a roadside work plan. The roadside work plan shall be submitted as a Type 1 Working Drawing and shall define the Work necessary to provide all Contract requirements, including: wetland excavation, soil preparation, habitat structure placement, planting area preparation, seeding area preparation, bark mulch and compost placement, seeding, planting, plant replacement, irrigation, and weed control in narrative form.

The Roadside Work Plan shall also include a copy of the approved progress schedule.

8-02.3(2)B Weed and Pest Control Plan

The Weed and Pest Control Plan shall be submitted as a Type 1 Working Drawing. The weed and pest control plan shall include scheduling and methods of all control measures required under the Contract or proposed by the Contractor including soil preparation methods to meet the required soil surface conditions in the planting, bark mulch, and wetland areas. The weed control plan shall show general weed control including hand, mechanical and chemical methods, timing, application of herbicides including type, rate, use and timing, mowing, and noxious weed control. Target weeds and unwanted vegetation to be removed shall be identified and listed in the weed control plan.

The plan shall be prepared and signed by a licensed Commercial Pest Control Operator or Consultant when chemical pesticides are proposed. The plan shall include methods of weed control; dates of weed control operations; and the name, application rate, and Material Safety Data Sheets of all proposed herbicides. In addition, the Contractor shall furnish the Engineer with a copy of the current product label for each pesticide and spray adjuvant to be used. These product labels shall be submitted with the weed control plan for approval.

8-02.3(2)C Plant Establishment Plan

The Plant Establishment Plan shall be prepared in accordance with the requirements of Section 8-02.3(13) and submitted as a Type 1 Working Drawing. The Plan shall show the proposed scheduling of activities, materials, equipment to be utilized for the first-year plant establishment, and an emergency contact person. The Plan shall include the management of the irrigation system, when applicable. Should the plan become unworkable at any time during the first-year plant establishment, the Contractor shall submit a revised plan prior to proceeding with further Work.

8-02.3(3) Weed and Pest Control

This section is supplemented with the following new paragraph:

Grass, including grass applied in accordance with Section 8-01, growing within the mulch ring of a plant shall be considered a weed and be controlled on the project in accordance with the weed and pest control plan.

8-02.3(4) Topsoil

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

After the topsoil has been spread, all large clods, hard lumps, and rocks 2 inches in diameter and larger, and litter shall be raked up, removed, and disposed of by the Contractor.

The following new paragraph is inserted after the first paragraph:

Topsoil stockpiled for project use shall be protected to prevent erosion and weed growth. Weed growth on topsoil stockpile sites shall be immediately eliminated in accordance with the approved Weed and Pest Control Plan.

8-02.3(4)C Topsoil Type C

The last sentence is revised to read:

Topsoil Type C shall meet the requirements of Sections 8-02.3(4), 8-02.3(4)B, and 9-14.1(3).

8-02.3(12) Completion of Initial Planting

Item number 4 in the last paragraph is deleted.

8-02.3(13) Plant Establishment

The first sentence of the second paragraph is deleted.

The second paragraph is supplemented with the following new sentence:

The 1 calendar year shall be extended an amount equal to any periods where the Contractor does not comply with the plant establishment plan.

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

During the first year of plant establishment under PSIPE (Plant Selection Including Plant Establishment), the Contractor shall meet monthly with the Engineer for the purpose of joint inspection of the planting material on a mutually agreed upon schedule.

The last two paragraphs are deleted.

8-02.4 Measurement

This section is supplemented with the following:

Plant selection will be measured per each.

PSIPE __ (Plant Selection Including Plant Establishment) will be measured per each.

8-02.5 Payment

The paragraph following the bid item “Topsoil Type ____”, per acre is revised to read:

The unit Contract price per acre for “Topsoil Type ____” shall be full payment for all costs for the specified Work.

The bid item “PSIPE ___”, per each and the paragraph following the bid item are revised to read:

“PSIPE ___”, per each.

The unit Contract price for “Plant Selection ___”, per each, and “PSIPE ___”, per each, shall be full pay for all Work necessary for weed control within the planting area, planting area preparation, fine grading, planting, cultivating, plant storage and protection, fertilizer and root dip, staking, cleanup, and water necessary to complete planting operations as specified to the end of first year plant establishment.

The bid item “Plant Establishment - ____ Year” is deleted.

SECTION 8-04, CURBS, GUTTERS, AND SPILLWAYS
JANUARY 5, 2015

8-04.2 Materials

The referenced section for the following item is revised to read:

Hand Placed Riprap 9-13.1(4)

8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways

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

Expansion joints in the curb or curb and gutter shall be spaced as shown in the Plans, and placed at the beginning and ends of curb returns, drainage Structures, bridges, and cold joints with existing curbs and gutters.

In the third sentence of the fourth paragraph, “¼-inch” is revised to read “⅜-inch”.

8-04.3(1)A Extruded Cement Concrete Curb

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

Cement concrete curbs shall be anchored to the existing pavement by placing steel reinforcing bars 1 foot on each side of every joint.

The third paragraph is revised to read:

Steel reinforcing bars shall meet the dimensions shown in the Standard Plans.

SECTION 8-09, RAISED PAVEMENT MARKERS
APRIL 7, 2014

8-09.3(6) Recessed Pavement Marker

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

The Contractor shall ensure that grinding of the pavement does not result in any damage, (e.g. chipping, spalling or raveling) to the pavement to remain.

SECTION 8-11, GUARDRAIL
APRIL 7, 2014

8-11.3(1) Beam Guardrail

After the below Amendments to 8-11.3(1)F and 8-11.3(1)G are applied, this section is supplemented with the following new sub-section:

8-11.3(1)F Removing and Resetting Beam Guardrail

The Contractor shall remove and reset existing guardrail posts, rail element, hardware and blocks to the location shown in the Plans. The mounting height of reset rail element shall be at the height shown in the Plans. The void caused by the removal of the post shall be backfilled and compacted.

The Contractor shall remove and replace any existing guardrail posts and blocks that are not suited for re-use, as staked by the Engineer. The void caused by the removal of the post shall be backfilled and compacted. The Contractor shall then furnish and install a new guardrail post to provide the necessary mounting height.

8-11.3(1)A Erection of Posts

The second paragraph in this section is deleted.

8-11.3(1)C Terminal and Anchor Installation

The last sentence in the last paragraph is deleted.

8-11.3(1)F Plans

This section number is revised to:

8-11.3(1)G

8-11.3(1)G Guardrail Construction Exposed to Traffic

This section number is revised to:

8-11.3(1)H

SECTION 8-18, MAILBOX SUPPORT
AUGUST 4, 2014

8-18.3(1) Type 3 Mailbox Support

In the third paragraph, the first sentence is revised to read:

With the Engineer's consent, a Type 3 Mailbox Support design, made of steel or other durable material, that meets the NCHRP 350 or the Manual for Assessing Safety Hardware (MASH) crash test criteria may be used in place of the design shown in the *Standard Plans*.

SECTION 8-20, ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEMS, AND ELECTRICAL
AUGUST 3, 2015

8-20.2(1) Equipment List and Drawings

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

Supplemental data would include such items as catalog cuts, product Specifications, shop drawings, wiring diagrams, etc.

The third paragraph (up until the colon) is revised to read:

If the luminaires are not listed in the Qualified Products List, the Contractor shall submit the following information for each different type of luminaire required on the Contract:

The fourth paragraph (up until the colon) is revised to read:

The Contractor shall submit for approval Type 3E Working Drawings in accordance with Section 1-05.3 for each of the following types of standards called for on this project:

The fifth paragraph is revised to read:

The Contractor will not be required to submit shop drawings for approval for light standards and traffic signal standards conforming to the preapproved plans listed in the Special Provisions. The Contractor may use preapproved plans posted on the WSDOT website with a more current revision date than published in the Special Provisions.

8-20.3(1) General

The following six new paragraphs are inserted after the second paragraph:

If a portion of an existing communication conduit system is damaged due to the Contractor's activities, the affected system shall be restored to original condition. Conduit shall be repaired. Communication cables shall be replaced and the communication system shall be made fully operational within 24 hours of being damaged.

Damaged communication cable shall be replaced between existing termination or splice points. No additional termination or splice points will be allowed. An existing termination or splice point is defined as a location where all existing fiber strands or twisted pair wires are terminated or spliced at one point. Communication cable shall be defined as either copper twisted pair or fiber optic cables. The Contractor may use temporary splices to restore Contracting Agency communication systems until the permanent communication cable system is restored.

When damage to an existing communication system has occurred, the Contractor shall perform the following in addition to other restoration requirements:

1. Inspect the communication raceway system including locate wire or tape to determine the extent of damage.

2. Contact the Engineer for Fiber Optic Cable and Twisted Pair (TWP) Copper Cable acceptance testing requirements and communication system restoration requirements.

3. Initially perform the acceptance tests to determine the extent of damage and also perform the acceptance tests after repairs are completed. Provide written certification that the communication cable system, including the locate wire or tape, is restored to test standard requirements.

Communication cables shall be restored by Contractor personnel that are WSDOT prequalified for communication installation work. Restoration shall be considered electrical work when the path of the communication system interfaces with electrical systems. Electrical work of this nature shall be performed by Contractor personnel that are WSDOT prequalified for work on both electrical and communication systems.

If the Contractor or Subcontractors are unable or unqualified to complete the restoration work, the Engineer may have the communication or electrical systems restored by other means and subtract the cost from the money that will be or is due the Contractor.

When field repair of existing conduit, innerduct or outerduct is required, the repair kits shall be installed per manufacturer's recommendations. Repair kits and each connection point between the repair kit and the existing raceway system shall be sealed to prevent air leakage during future cable installation.

8-20.3(5)B Conduit Type

This section is revised to read:

Conduit shall be rigid polyvinyl chloride (PVC), high density polyethylene (HDPE), rigid metal or flexible metal depending on the application.

Rigid metal conduit shall be installed at the following locations:

1. Within railroad right of way.

2. All surface-mounted conduit, with the exception of pole risers.

3. All runs within slip form placed concrete.

Unless otherwise required by the owning utility:

1. Service lateral runs shall be Schedule 80 PVC or Schedule 80 HDPE.

2. Pole risers shall be Schedule 80 PVC.

Conduit runs, including outer-duct, that enter the traveled way or shoulders shall be Schedule 80 HDPE, Schedule 80 PVC, or rigid metal.

Conduit runs, including outer-duct, that do not enter the traveled way or shoulders shall be Schedule 80 HDPE, Schedule 40 PVC or rigid metal.

Flexible metal conduit is allowed only at locations called for in the Plans.

Except as described under Non-Metallic Conduit, unless otherwise indicated in the Plans or Standard Plans, the same type of conduit shall be used for the entire length of the run, from outlet to outlet.

Innerduct shall have a smooth wall non ribbed interior surface, with factory pre-lubricated coating.

Innerduct within the Traveled Way or Shoulders and innerduct which is not factory installed shall be Schedule 40 HDPE. The innerduct shall be continuous with no splices. Innerduct which is pulled into the outer duct in the field shall be installed with an extra 2 feet of conduit beyond each end of the outer-duct and shall be allowed to finish contracting for 21 calendar days before it is terminated. Innerduct shall be terminated with end bells flush to ¼-inch out of the outer-duct and the space between the outer-duct and innerduct shall be sealed with rodent and moisture resistant foam designed for this application and installed per manufacturer's recommendations.

8-20.3(8) Wiring

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

Every conductor at every wire termination, connector, or device shall have an approved wire marking sleeve bearing, as its legend, the circuit number indicated in the Contract.

8-20.3(13)A Light Standards

In the third paragraph, the last sentence of item number 1 is revised to read:

Conduit shall extend a maximum of 1 inch above the top of the foundation, including grounding end bushing or end bell bushing.

In the fourth paragraph, the second sentence of item number 1 is revised to read:

Conduits shall be cut to a maximum height of 2 inches above the foundation including grounding end bushing or end bell bushing.

SECTION 8-21, PERMANENT SIGNING
AUGUST 3, 2015

8-21.2 Materials

This section is revised to read:

Materials shall meet the requirements of the following sections:

Roadside Sign Structures	9-06.16
Permanent Signs	9-28
Sign Support Structures	9-28.14

The Contractor shall submit a Manufacturer's Certificate of Compliance for all permanent signs; a copy of the Manufacturer's Certificate of Compliance shall be available at the fabricator's plant. Permanent signs will be inspected at the fabricator's plant prior to shipment to the project unless otherwise accepted by the Engineer. Signs without an approved decal shall not be installed on the project with the exception of double-faced signs which do not receive decals or fabricator's stickers.

8-21.3(9)F Foundations

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

The excavation and backfill shall conform to the requirements of Section 2-09.3.

SECTION 8-22, PAVEMENT MARKING
APRIL 6, 2015

8-22.3(6) Removal of Pavement Markings

The second and third sentences of the first paragraph are revised to read:

Grinding to remove pavement markings is allowed prior to application of a Bituminous Surface Treatment. Grinding to remove pavement marking from hot mix asphalt and cement concrete pavements is allowed to a depth just above the pavement surface, then water blasting or shot blasting shall be required to remove the remaining markings.

SECTION 8-23, TEMPORARY PAVEMENT MARKINGS
JANUARY 5, 2015

This section's content is deleted in its entirety and replaced with the following new sub-sections:

8-23.1 Description

The Work consists of furnishing, installing, and removing temporary pavement markings. Temporary pavement markings shall be provided where noted in the Plans; for all lane shifts and detours resulting from construction activities; or when permanent markings are removed because of construction operations.

8-23.2 Materials

Materials for temporary markings shall be paint, plastic, tape, raised pavement markers or flexible raised pavement markers. Materials for pavement markings shall meet the following requirements:

Raised Pavement Markers	9-21
Temporary Marking Paint	9-34.2(6)
Plastic	9-34.3
Glass Beads for Pavement Marking Materials	9-34.4
Temporary Pavement Marking Tape	9-34.5
Temporary Flexible Raised Pavement Markers	9-34.6

8.23.3 Construction Requirements

8-23.3(1) General

The Contractor shall select the type of pavement marking material in accordance with the Contract.

8-23.3(2) Preliminary Spotting

All preliminary layout and marking in preparation for application or removal of temporary pavement markings shall be the responsibility of the Contractor.

8-23.3(3) Preparation of Roadway Surface

Surface preparation for temporary pavement markings shall be in accordance with the manufacturer's recommendations.

8-23.3(4) Pavement Marking Application

8-23.3(4)A Temporary Pavement Markings – Short Duration

Temporary pavement markings – short duration shall meet the following requirements:

Temporary Center Line – A BROKEN line used to delineate adjacent lanes of traffic moving in opposite directions. The broken pattern shall be based on a 40-foot unit, consisting of a 4-foot line with a 36-foot gap if paint or tape is used. If temporary raised pavement markers are used, the pattern shall be based on a 40-foot unit, consisting of a grouping of three temporary raised pavement markers, each spaced 3 feet apart, with a 34 foot gap.

Temporary Edge Line – A SOLID line used on the edges of Traveled Way. The line shall be continuous if paint or tape is used. If temporary raised pavement markers are used, the line shall consist of markers installed continuously at 5-foot spacing.

Temporary Lane Line – A BROKEN line used to delineate adjacent lanes with traffic traveling in the same direction. The broken pattern shall be based on a 40-foot unit, consisting of a 4-foot line with a 36-foot gap, if paint or tape is used. If temporary raised pavement markers are used, the pattern shall be based on a 40-foot unit, consisting of a grouping of three temporary raised pavement markers, each spaced 3 feet apart, with a 34 foot gap.

Lane line and right edge line shall be white in color. Center line and left edge line shall be yellow in color. Edge lines shall be installed only if specifically required in the Contract. All temporary pavement markings shall be retroreflective.

8-23.3(4)A1 Temporary Pavement Marking Paint

Paint used for short duration temporary pavement markings shall be applied in one application at a thickness of 15 mils or 108 square feet per gallon. Glass beads shall be in accordance with Section 8-22.3(3)G.

8-23.3(4)A2 Temporary Pavement Marking Tape

Application of temporary pavement marking tape shall be in conformance with the manufacturer's recommendations.

Black mask pavement marking tape shall mask the existing line in its entirety.

8-23.3(4)A3 Temporary Raised Pavement Markers

Temporary raised pavement markers are not allowed on bituminous surface treatments.

8-23.3(4)A4 Temporary Flexible Raised Pavement Markers

Flexible raised pavement markers are required for new applications of bituminous surface treatments. Flexible raised pavement markers are not allowed on other pavement types unless otherwise specified or approved by the Engineer. Flexible raised pavement markers shall be installed with the protective cover in place. The cover shall be removed immediately after spraying asphaltic material.

8-23.3(4)B Temporary Pavement Markings – Long Duration

Application of paint, pavement marking tape and plastic for long duration pavement markings shall meet the requirements of Section 8-22.3(3); application of raised pavement markers shall meet the requirements of Section 8-09.3; and application of flexible pavement markings shall be in conformance with the manufacturer's recommendations.

8-23.3(4)C Tolerance for Lines

Tolerance for lines shall conform to Section 8-22.3(4).

8-23.3(4)D Maintenance of Pavement Markings

Temporary pavement markings shall be maintained in serviceable condition throughout the project until permanent pavement markings are installed. As directed by the Engineer; temporary pavement markings that are damaged, including normal wear by traffic, shall be repaired or replaced immediately. Repaired and replaced pavement markings shall meet the requirements for the original pavement marking.

8-23.3(4)E Removal of Pavement Markings

Removal of temporary paint is not required prior to paving; all other temporary pavement markings shall be removed.

All temporary pavement markings that are required on the wearing course prior to construction of permanent pavement markings and are not a part of the permanent markings shall be completely removed concurrent with or immediately subsequent to the construction of the permanent pavement markings. Temporary flexible raised pavement markers on bituminous surface treatment pavements shall be cut off flush with the surface if their location conflicts with the alignment of the permanent pavement markings. All other temporary pavement markings shall be removed in accordance with Section 8-22.3(6).

All damage to the permanent Work caused by removing temporary pavement markings shall be repaired by the Contractor at no additional cost to the Contracting Agency.

8-23.4 Measurement

Temporary pavement markings will be measured by the linear foot of each installed line or grouping of markers, with no deduction for gaps in the line or markers and no additional measurement for the second application of paint required for long duration paint lines. Short duration and long duration temporary pavement markings will be measured for the initial installation only.

8-23.5 Payment

Payment will be made in accordance with Section 1-04.1, for each of the following Bid items that are included in the Proposal:

"Temporary Pavement Marking – Short Duration", per linear foot.

"Temporary Pavement Marking – Long Duration", per linear foot.

The unit Contract price per linear foot for "Temporary Pavement Marking – Short Duration" and "Temporary Pavement Marking – Long Duration" shall be full pay for all Work.

SECTION 9-01, PORTLAND CEMENT
AUGUST 3, 2015

9-01.2(3) Low Alkali Cement

This section is revised to read:

When low alkali portland cement is required, the percentage of alkalies in the cement shall not exceed 0.60 percent by weight calculated as Na_20 plus 0.658 K_20. This limitation shall apply to all types of portland cement.

9-01.2(4) Blended Hydraulic Cement

The first paragraph is revised to read:

Blended hydraulic cement shall be either Type IP(X)(MS), Type IS(X)(MS), Type IT(PX)(LY), Type IT(SX)(LY), or Type IL(X) cement conforming to AASHTO M 240 or ASTM C 595, except that the portland cement used to produce blended hydraulic cement shall not contain more than 0.75 percent alkalies by weight calculated as Na_20 plus 0.658 K_20 and shall meet the following additional requirements:

1. Type IP(X)(MS) - Portland-Pozzolan Cement where (X) equals the targeted percentage of fly ash, the fly ash is limited to a maximum of 35 percent by weight of the cementitious material; (MS) indicates moderate sulfate resistance.

2. Type IS(X)(MS) - Portland Blast- Furnace Slag Cement, where: (X) equals the targeted percentage of ground granulated blast-furnace slag, the ground granulated blast furnace slag is limited to a maximum of 50 percent by weight of the cementitious material; (MS) indicates moderate sulfate resistance.

3. Type IT(PX)(LY), where (PX) equals the targeted percentage of pozzolan, and (LY) equals the targeted percentage of limestone. The pozzolan (PX) shall be Class F fly ash and shall be a minimum of 25% and a maximum of 35%. (LY) shall be a minimum of 5%

and a maximum of 15%. Separate testing of each source of fly ash at each proposed replacement level shall be conducted in accordance with ASTM C 1012 at the storage temperature prescribed in Section 9.3 of the test procedure, as well as at a storage temperature of 5.0 ± 2.0 °C. Expansion at 1 year shall be 0.10% or less for each test temperature.

4. Type IT(SX)(LY), where (SX) equals the targeted percentage of slag cement, and (LY) equals the targeted percentage of limestone. (SX) shall be a minimum of 30% and a maximum of 50%. (LY) shall be a minimum of 5% and a maximum of 15%. Separate testing of each source of slag at each proposed replacement level shall be conducted in accordance with ASTM C 1012 at the storage temperature prescribed in Section 9.3 of the test procedure, as well as at a storage temperature of 5.0 ± 2.0 °C. Expansion at 1 year shall be 0.10% or less for each test temperature.

5. Type IL(X), where (X) equals the targeted percentage of limestone, and shall be a minimum of 5% and a maximum of 15%. Type IL(X) shall only be used with either 25% to 35% replacement with Class F fly ash, or with 30% to 50% replacement with slag cement. Separate testing of each source of fly ash or slag at each proposed replacement level shall be conducted in accordance with ASTM C 1012 at the storage temperature prescribed in Section 9.3 of the test procedure, as well as at a storage temperature of 5.0 ± 2.0 °C. Expansion at 1 year shall be 0.10% or less for each test temperature.

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

The source and weight of the fly ash or ground granulated blast-furnace slag shall be certified on the cement mill test report or cement certificate of analysis and shall be reported as a percent by weight of the total cementitious material.

This section is supplemented with the following new paragraph:

Limestone shall meet the requirements of AASHTO M 240 or ASTM C 595.

9-01.3 Tests and Acceptance

The first paragraph is revised to read:

Cement may be accepted by the Engineer based on the cement mill test report number or cement certificate of analysis number indicating full conformance to the Specifications. All shipments of the cement to the Contractor or concrete supplier shall identify the applicable cement mill test report number or cement certificate of analysis number and shall be provided by the Contractor or concrete supplier with all concrete deliveries.

The second paragraph is revised to read:

Cement producers/suppliers that certify portland cement or blended cement shall participate in the Cement Acceptance Program as described in WSDOT Standard Practice QC 1.

9-01.4 Storage on the Work Site

This section is revised to read:

At the request of the Engineer, the Contractor shall provide test data to show that cement stored on site for longer than 60 days meets the requirements of 9-01. Tests shall be conducted on samples taken from the site in the presence of the Engineer. Test results that meet the

requirements of 9-01 shall be valid for 60 days from the date of sampling, after which the Engineer may require further testing.

SECTION 9-02, BITUMINOUS MATERIALS
APRIL 6, 2015

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

The first paragraph is supplemented with the following:

For HMA with greater than 20 percent RAP by total weight of HMA or any amount of RAS the new asphalt binder, recycling agent and recovered asphalt (RAP and/or RAS) when blended in the proportions of the mix design shall meet the PGAB requirements of AASHTO M 320 Table 1 for the grade of asphalt binder specified by the Contract.

This section is supplemented with the following:

The recycling agent used to rejuvenate the recovered asphalt from recycled asphalt pavement (RAP) and reclaimed asphalt shingles (RAS) shall meet the specifications in Table 1:

Table 1		**RA 1**		**RA 5**		**RA 25**	
Test	**ASTM Test Method**	**Min.**	**Max.**	**Min.**	**Max.**	**Min.**	**Max.**
Viscosity @ 140˚F cSt	D2170 or D2171	50	150	200	800	1000	4000
Flashpoint COC, ˚F	D92	400		400		400	
Saturates, Wt. %	D2007		30		30		30
Specific Gravity	D70 or D2198	Report		Report		Report	
Tests on Residue from RTFC	D2872						
Viscosity Ratio[1]			3		3		3
Mass Change ± %			4		4		4
[1]Viscosity Ratio = RTFC Viscosity @ 140˚F, cSt / Original Viscosity @ 140˚F, cSt							

9-02.1(6)A Polymerized Cationic Emulsified Asphalt CRS-2P

In the ninth row of the table, “Test” is revised to read “Tests”.

The eleventh row in the table is revised to read:

Elastic Recovery %	T 301[2]	50	

The last two rows of the table are deleted.

Footnote 2 below the table is revised to read:

2 The residue material for T 301 shall come from the modified distillation per note 1.

Footnote 3 below the table is deleted.

The last paragraph is deleted.

SECTION 9-03, AGGREGATES
AUGUST 3, 2015

9-03.1(2)C Use of Substandard Gradings

This section including title is deleted in its entirety and replaced with the following:

Vacant

9-03.1(4)C Grading

In the second paragraph, the first sentence is deleted.

The third paragraph is deleted.

9-03.1(5)B Grading

The last paragraph is revised to read:

The Contracting Agency may sample each aggregate component prior to introduction to the weigh batcher or as otherwise determined by the Engineer. Each component will be sieve analyzed separately in accordance with WSDOT FOP for WAQTC/AASHTO Test Method T-27/11. All aggregate components will be mathematically re-combined by the proportions (percent of total aggregate by weight) provided by the Contractor on Concrete Mix Design Form 350-040.

9-03.8(1) General Requirements

The first paragraph up until the colon is revised to read:

Preliminary testing of aggregates for source approval shall meet the following test requirements:

The list in the first paragraph is supplemented with the following:

Sand Equivalent 45 min.

The following new paragraph is inserted after the first paragraph:

Aggregate sources that have 100 percent of the mineral material passing the No. 4 sieve shall be limited to no more than 5 percent of the total weight of aggregate.

9-03.8(2) HMA Test Requirements

The second paragraph (up until the colon) is revised to read:

The mix design shall produce HMA mixtures when combined with RAP, RAS, coarse and fine aggregate within the limits set forth in Section 9-03.8(6) and mixed in the laboratory with the designated grade of asphalt binder, using the Superpave gyratory compactor in accordance with WSDOT FOP for AASHTO T 312, and at the required gyrations for N initial, N design, and N maximum with the following properties:

The third paragraph is revised to read:

The mix criteria for Hamburg Wheel-Track Testing and Indirect Tensile Strength do not apply to HMA accepted by commercial evaluation.

9-03.8(3)B Gradation – Recycled Asphalt Pavement and Mineral Aggregate

This section is supplemented with the following:

For HMA with greater than 20 percent RAP by total weight of HMA the RAP shall be processed to ensure that 100 percent of the material passes a sieve twice the size of the maximum aggregate size for the class of mix to be produced.

When any amount of RAS is used in the production of HMA the RAS shall be milled, crushed or processed to ensure that 100 percent of the material passes the ½ inch sieve. Extraneous materials in RAS such as metals, glass, rubber, soil, brick, tars, paper, wood and plastic shall not exceed 2.0 percent by mass as determined on material retained on the No. 4 sieve.

9-03.14(3) Common Borrow

This section is revised to read:

Material for common borrow shall consist of granular or nongranular soil and/or aggregate which is free of deleterious material. Deleterious material includes wood, organic waste, coal, charcoal, or any other extraneous or objectionable material. The material shall not contain more than 3 percent organic material by weight. The plasticity index shall be determined using test method AASHTO T 89 and AASHTO T 90.

The material shall meet one of the options in the soil plasticity table below.

Soil Plasticity Table

Option	Sieve	Percent Passing	Plasticity Index
1	No. 200	0 - 12	N/A
2	No. 200	12.1 - 35	6 or Less
3	No. 200	Above 35	0

All percentages are by weight.

If requested by the Contractor, the plasticity index may be increased with the approval of the Engineer.

9-03.14(4) Gravel Borrow for Structural Earth Wall

In the second table, the row beginning with “pH” is revised to read:

pH	WSDOT Test Method T 417	4.5 - 9	5 – 10

9-03.21(1) General Requirements

The following new paragraph is inserted after the second paragraph:

Reclaimed asphalt shingles samples shall contain less than the maximum percentage of asbestos fibers based on testing procedures and frequencies established in conjunction with the specifying jurisdiction and state or federal environmental regulatory agencies.

9-03.21(1)B Vacant

This section, including title, is revised to read:

9-03.21(1)B Concrete Rubble

Concrete rubble 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 is supplemented with the following new sentence:

Recycled steel furnace slag shall not be placed below the ordinary high water mark of any water of the State.

9-03.21(1)E Table on Maximum Allowable Percent (By Weight) of Recycled Material

In the table, the “Concrete Rubble” value for the item "Gravel Backfill for Drains" is revised to read “0”.

In the table, the “Concrete Rubble” value for the item "Backfill for Sand Drains" is revised to read “0”.

In the table, the “Concrete Rubble” value for the item "Sand Drainage Blanket" is revised to read “0”.

SECTION 9-04, JOINT AND CRACK SEALING MATERIALS
AUGUST 3, 2015

9-04.1(4) Elastomeric Expansion Joint Seals

In this section, “AASHTO M 220” is revised to read “ASTM D 2628”.

9-04.2 Joint Sealants

In the first paragraph, “AASHTO M 324” is revised to read “ASTM D 6690”.

9-04.2(2) Poured Rubber Joint Sealer

In item number 9, “WSDOT Test Method No. 412” is revised to read “ASTM D 5329”.

9-04.2(3) Polyurethane Sealant

The first paragraph is revised to read:

Polyurethane sealant shall conform to ASTM C 920 Type S Grade NS Class 25 Use M or ASTM C 920 Type S Grade NS Class 35 Use M.

SECTION 9-05, DRAINAGE STRUCTURES AND CULVERTS
APRIL 7, 2014

9-05.13 Ductile Iron Sewer Pipe

The first paragraph is deleted.

SECTION 9-06, STRUCTURAL STEEL AND RELATED MATERIALS
JANUARY 5, 2015

9-06.5(4) Anchor Bolts

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

Nuts for ASTM F 1554 Grade 36 or 55 black or galvanized anchor bolts shall conform to ASTM A 563, Grade A or DH.

SECTION 9-07, REINFORCING STEEL
AUGUST 3, 2015

9-07.2 Deformed Steel Bars

The first sentence is revised to read:

Deformed steel bars for concrete reinforcement shall conform to either AASHTO M 31 Grade 60 or ASTM A 706 Grade 60, except as otherwise noted in this Section or as shown in the Plans.

This section is supplemented with the following new sub-section:

9-07.2(1) Headed Steel Reinforcing Bar

Headed steel reinforcing bars shall conform to Section 9-07.2 and ASTM A 970, including Annex A1 requirements for Class HA head dimensions. Headed steel reinforcing bars shall be forged headed bars or threaded headed bars.

9-07.5(1) Epoxy-Coated Dowel Bars (for Cement Concrete Pavement Rehabilitation)

This section is revised to read:

Epoxy-coated dowel bars shall be round plain steel bars of the dimensions shown in the Standard Plans. They shall conform to AASHTO M 31, Grade 60 or ASTM A 615, Grade 60 and shall be coated in accordance with ASTM A 1078 Type 2 coating, except that the bars may be cut to length after being coated. Cut ends shall be coated in accordance with ASTM A 1078 with a patching material that is compatible with the coating, inert in concrete and recommended by the coating manufacturer. The thickness of the epoxy coating shall be 10 mils plus or minus 2 mils. The Contractor shall furnish a written certification that properly identifies the coating material, the number of each batch of coating material used, quantity represented, date of manufacture, name and address of manufacturer, and a statement that the supplied coating material meets the requirements of ASTM A 1078 Type 2 coating. Patching material, compatible with the coating material and inert in concrete and recommended by the manufacturer shall be supplied with each shipment for field repairs by the Contractor.

9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement)

This section's title is revised to read:

9-07.5(2) Corrosion Resistant Dowel Bars (for Cement Concrete Pavement and Cement Concrete Pavement Rehabilitation)

SECTION 9-08, PAINTS AND RELATED MATERIALS
JANUARY 5, 2015

9-08.1(2)H Top Coat, Single Component, Moisture-Cured Polyurethane

The second paragraph is revised to read:

Color and Gloss: As specified in the Plans or Special Provisions

The last item in the requirements list is revised to read:

The top coat shall be a gloss or semi-gloss

9-08.1(8) Standard Colors

The second paragraph is deleted.

The third paragraph is revised to read:

Unless otherwise specified, all top or finish coats shall be gloss or semi-gloss, with the paint falling within the range of greater than 70 for gloss and 35 to 70 for semi-gloss on the 60-degree gloss meter.

SECTION 9-09, TIMBER AND LUMBER
JANUARY 6, 2014

9-09.3(1) General Requirements

The fourth paragraph is revised to read:

All orders of treated timber and lumber shall be accompanied by a Certificate of Treatment record. The Certificate of Treatment showing conformance to this specification and AWPA standards shall include the following information:

Name and location of the wood preserving company,

Customer identification,

Date of treatment and charge number,

Type of chemical used and amount of retention,

Treating process and identification of the Specification used,

Boring records verifying treatment penetration for timber and lumber with a nominal dimension of 6” x 6” or larger,

Description of material that was treated, and

Signature of a responsible plant official.

The fifth paragraph is deleted.

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

All timber and lumber to be used in aquatic environments, unless specified otherwise in the Contract, shall be chemically treated using Western Wood Preservers Institute Best Management Practices (BMPs).

SECTION 9-10, PILING
AUGUST 3, 2015

9-10.2(1) Concrete

The first paragraph is deleted.

The first sentence of the second paragraph is deleted.

9-10.5 Steel Piling

This section is revised to read:

The material for rolled steel piling H-piling and pile splices shall conform to ASTM A 36, ASTM A 572 or ASTM A 992. The material for steel pipe piling and splices shall conform to one of the following requirements except as specifically noted in the Plans:

1. API 5L Grade X42 or X52 material may be used for longitudinal seam welded or helical (spiral) seam submerged-arc welded pipe piles of any diameter.

2. ASTM A 252 Grade 2 or 3 material may be used for longitudinal seam welded or helical (spiral) seam submerged-arc welded pipe piles of any diameter. For the purposes of welding and prequalification of base metal, steel pipe pile designated as ASTM A 252 may be treated as prequalified provided the chemical composition conforms to a prequalified base metal classification listed in Table 3.1 of the AWS D1.1/D1.1M, latest edition, Structural Welding Code, the grade of pipe piling meets or exceeds the grade specified in the Plans, and the carbon equivalent (CE) is a maximum of 0.45-percent.

3. ASTM A 572 or ASTM A 588 material may be used for longitudinal seam welded piles of any diameter.

For helical (spiral) seam submerged-arc welded pipe piles, the maximum radial offset of strip/plate edges shall be 1/8 inch. The offset shall be transitioned with a taper weld and the slope shall not be less than a 1 in 2.5 taper. The weld reinforcement shall not be greater than 3/16 inches and misalignment of weld beads shall not exceed 1/8 inch.

Steel soldier piles, and associated steel bars and plates, shall conform to ASTM A 36, ASTM A 572 or ASTM A 992, except as otherwise noted in the Plans.

All steel piling may be accepted by the Engineer based on the Manufacturer's Certificate of Compliance submitted in accordance with Section 1-06.3. The manufacturer's certificate of compliance submittal for steel pipe piles shall be accompanied by certified mill test reports, including chemical analysis and carbon equivalence, for each heat of steel used to fabricate the steel pipe piling.

SECTION 9-13, RIPRAP, QUARRY SPALLS, SLOPE PROTECTION, AND ROCK FOR EROSION AND SCOUR PROTECTION AND ROCK WALLS
JANUARY 5, 2015

This section's content is deleted.

9-13.1 Loose Riprap

This section's content, including title and subsections, is revised to read the following:

9-13.1 Riprap and Quarry Spalls

9-13.1(1) General

Riprap and quarry spalls shall consist of broken stone or broken concrete rubble and shall be free of rock fines, soil, or other extraneous material. Concrete rubble shall not be contaminated by foreign materials such as fibers, wood, steel, asphalt, sealant, soil, plastic and other contaminants or deleterious material. Concrete rubble that is imported to the job site will require testing and certification for toxicity characteristics per Section 9-03.21(1).

The grading of the riprap shall be determined by the Engineer by visual inspection of the load before it is dumped into place, or, if so ordered by the Engineer, by dumping individual loads on a flat surface and sorting and measuring the individual rocks contained in the load. Should the riprap contain insufficient spalls, as defined in Section 9-13.1(5), the Contractor shall furnish and place supplementary spall material.

Riprap and quarry spalls shall be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather and shall conform to the following requirements for quality.

Aggregate Property	Test Method	Requirement
Degradation Factor	WSDOT T 113	15 minimum
Los Angeles Wear, 500 Rev.	AASHTO T 96	50% maximum
Specific Gravity, SSD	AASHTO T 85	2.55 minimum

9-13.1(2) Heavy Loose Riprap

Heavy loose riprap shall meet the following requirements for grading:

	Minimum Size	Maximum Size
40% to 90%	1 ton (½ cubic yd.)	
70% to 90%	300 lbs. (2 cu. ft.)	
10% to 30%	3 inch	50 lbs. (spalls)

9-13.1(3) Light Loose Riprap

Light loose riprap shall meet the following requirements for grading:

	Size Range	Maximum Size
20% to 90%	300 lbs. to 1 ton (2 cu. ft. to ½ cu. yd.)	
15% to 80%	50 lbs. to 1 ton (⅓ cu. ft. to ½ cu. yd.)	
10% to 20%	3 inch	50 lbs. (spalls)

9-13.1(4) Hand Placed Riprap

Hand placed riprap shall be as nearly rectangular as possible, 60 percent shall have a volume of not less than 1 cubic foot. No stone shall be used which is less than 6 inches thick, nor which does not extend through the wall.

9-13.1(5) Quarry Spalls

Quarry spalls shall meet the following requirements for grading:

Sieve Size	Percent Passing
8″	100
3″	40 max.
¾″	10 max.

9-13.2 Hand Placed Riprap

This section, including title, is deleted in its entirety and replaced with the following:

9-13.2 Vacant

9-13.4 Rock for Erosion Control and Scour Protection

The last sentence is revised to read:

The use of recycled materials and concrete rubble is not permitted for this application.

9-13.6 Quarry Spalls

This section, including title, is deleted in its entirety and replaced with the following:

9-13.6 Vacant

SECTION 9-14, EROSION CONTROL AND ROADSIDE PLANTING
AUGUST 3, 2015

9.14.1 Soil

This section, including title, is revised to read:

9-14.1 Topsoil

Topsoil shall not contain any recycled material, foreign materials, or any listed Noxious and Nuisance weeds of any Class designated by authorized State or County officials. Aggregate shall not comprise more than 10% by volume of Topsoil and shall not be greater than two inches in diameter.

9-14.1(2) Topsoil Type B

The last sentence of the second paragraph is deleted.

9-14.2 Seed

This section is revised to read:

Seed of the type specified shall be certified in accordance with WAC 16-302. Seed mixes shall be commercially prepared and supplied in sealed containers. The labels shall show:

(1) Common and botanical names of seed

(2) Lot number

(3) Net weight

(4) Pounds of Pure live seed (PLS) in the mix

(5) Origin of seed

All seed vendors must have a business license issued by supplier's state or provincial Department of Licensing with a "seed dealer" endorsement.

9-14.4 Erosion Control and Roadside Planting

This section is supplemented with the following new sub-section:

9-14.4(9) Horticultural Grade Perlite

Horticultural grade perlite shall be in a pelletized or granular form.

Horticultural grade perlite shall meet the following requirements for quality and grading:

Quality Requirements		
Property	**Test Method** [Note 1]	**Requirement**
pH (of water slurry)	PI 202	6.5 – 8.0
Bulk Density, lb/ft^3	PI 200	2 - 10

Note 1 – PI, abbreviation for the Perlite Institute

Gradation Requirements	
Sieve Size	**Percent Passing**
No .4	99 – 100
No. 18	30 max
No. 30	10 max

All percentages are by weight.

9-14.4(3) Bark or Wood Chips

This section's title is revised to read:

Bark or Wood Chip Mulch

The first paragraph is revised to read:

Bark or wood chip mulch shall be derived from fir, pine, or hemlock species. It shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust shall not be used as mulch. Mulch produced from finished wood products or construction debris will not be allowed.

9-14.4(5) Lime

This section, including title, is revised to read:

9-14.4(5) Agricultural Grade Dolomite Lime

Agricultural grade dolomite lime shall be in a pelletized or granular form, meeting the grading requirements of ASTM C 602 for Class E.

9-14.4(6) Gypsum

This section, including title, is revised to read:

9-14.4(6) Agricultural Grade Gypsum

Agricultural grade gypsum shall consist of Calcium Sulfate ($CaSO_4 \cdot 2H_2O$) in a pelletized or granular form and shall meet the following grading requirements:

Sieve Size	Percent Passing

¼"	99 – 100
No. 20	20 max

All percentages are by weight.

9-14.4(7) Tackifier

This section is revised to read:

Tackifiers are used as a tie-down for soil, compost, seed, and/or mulch. Tackifiers shall contain no growth or germination-inhibiting materials and shall not reduce infiltration rates. Tackifiers shall hydrate in water and readily blend with other slurry materials.

The Contractor shall provide test results documenting the tackifier meets the requirements for Acute Toxicity, Solvents, and Heavy Metals as required in Table 1 in Section 9-14.4(2). The tests shall be performed at the manufacturer's recommended application rate.

9-14.4(8) Compost

The second paragraph is revised to read:

Compost production and quality shall comply with WAC 173-350.

9-14.4(8)A Compost Submittal Requirements

Item 2 is revised to read:

2. A copy of the Solid Waste Handling Permit issued to the manufacturer by the Jurisdictional Health Department in accordance with WAC 173-350 (Minimum Functional Standards for Solid Waste Handling).

9-14.6(1) Description

Item number 3 in the fourth paragraph is revised to read:

3. Live pole cuttings shall have a diameter between 2 inches and 3.5 inches. Live poles shall have no more than three branches which must be located at the top end of the pole and those branches shall be pruned back to the first bud from the main stem.

9-14.6(2) Quality

The second and third paragraphs in this section are revised to read:

All plant material shall comply with State and Federal laws with respect to inspection for plant diseases and insect infestation. Plants must meet Washington State Department of Agriculture plant quarantines and have a certificate of inspection. Plants originating in Canada must be accompanied by a phytosanitary certificate stating the plants meet USDA health requirements.

All plant material shall be purchased from a nursery licensed to sell plants in their state or province.

SECTION 9-15, IRRIGATION SYSTEM
AUGUST 4, 2014

9-15.18 Detectable Marking Tape

In the second paragraph, the table is supplemented with the following new row:

Non-Potable Water	Purple

SECTION 9-16, FENCE AND GUARDRAIL
AUGUST 4, 2014

9-16.2(1)B Wood Fence Posts and Braces

In the table, the row beginning with "ACA" is deleted.

SECTION 9-19, PRESTRESSED CONCRETE GIRDERS
AUGUST 3, 2015

This section, including title, is deleted in its entirety and replaced with the following:

Vacant

SECTION 9-29, ILLUMINATION, SIGNAL, ELECTRICAL
AUGUST 3, 2015

9-29.1 Conduit, Innerduct, and Outerduct

This section is supplemented with the following new subsection:

9-29.1(9) Repair

Manufacturer repair kits shall be used for field repair of existing conduit, innerduct and outerduct. The conduit repair kit shall be manufactured specifically for the repair of existing damaged conduit, inner duct and outer duct. The repair kit shall be prepackaged and include the split conduit and split couplings necessary to restore the damaged conduit to the original inside dimensions including a water and air tight seal.

9-29.2(1)B Heavy Duty Junction Boxes

The second paragraph is revised to read:

The Heavy-Duty Junction Box steel frame, lid support and lid fabricated from steel plate and shapes shall be painted with a shop applied, inorganic zinc primer in accordance with Section 6-07.3. Ductile iron and gray iron castings shall not be painted.

The following new paragraph is inserted after the second paragraph:

The concrete used in Heavy-Duty Junction Boxes shall have a minimum compressive strength of 4,000 psi.

In the fourth paragraph (after the preceding Amendment is applied), the table is revised to read:

Materials	**Requirement**
Concrete	Section 6-02
Reinforcing Steel	Section 9-07
Lid	ASTM A 786 diamond plate steel, rolled from plate complying with ASTM A 572, grade 50 or ASTM A 588, and having a min. CVN toughness of 20 ft-lb at 40 degrees F. Or Ductile iron casting meeting Section 9-05.15

Frame and stiffener plates	ASTM A 572 grade 50 or ASTM A 588, both with min. CVN toughness of 20 ft-lb at 40 degrees F Or Gray iron casting meeting Section 9-05.15
Anchors (studs)	Section 9-06.15
Threaded Anchors for Gray Iron Frame	ASTM F1554 grade 55 Headed Anchor Requirements
Bolts, Studs, Nuts, Washers	ASTM F 593 or A 193, Type 304 or 316, or Stainless steel grade 302, 304, or 316 in accordance with approved shop drawings
Hinges and Locking and Latching Mechanism and associated Hardware and Bolts	In accordance with approved shop drawings
Safety Bars	In accordance with approved shop drawings

The last paragraph is revised to read:

The bearing seat and lid perimeter shall be free from burrs, dirt, and other foreign debris that would prevent solid seating. Bolts and nuts shall be liberally coated with anti-seize compound. Bolts shall be installed snug tight. The bearing seat and lid perimeter shall be machined to allow a minimum of 75 percent of the bearing areas to be seated with a tolerance of 0.0 to 0.005 inches measured with a feeler gage. The bearing area percentage will be measured for each side of the lid as it bears on the frame.

9-29.2(2) Standard Duty and Heavy-Duty Cable Vaults and Pull Boxes

This section's title is revised to read:

Small Cable Vaults, Standard Duty Cable Vaults, Heavy-Duty Cable Vaults, Standard Duty Pull Boxes, and Heavy-Duty Pull Boxes

In the first paragraph, the first sentence is revised to read:

Small, Standard Duty and Heavy-Duty Cable Vaults and Standard Duty and Heavy-Duty Pull Boxes shall be constructed as a concrete box and as a concrete lid.

9-29.2(2)A Standard Duty Cable Vaults and Pull Boxes

This section's title is revised to read:

Small Cable Vaults, Standard Duty Cable Vaults, and Standard Duty Pull Boxes

The first paragraph is revised to read:

Small and Standard Duty Cable Vaults and Standard Duty 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(1)C for concrete Standard Duty Junction Boxes.

In the second paragraph, the first sentence is revised to read:

Concrete for Small and Standard Duty Cable Vaults and Standard Duty Pull Boxes shall have a minimum compressive strength of 4,000 psi.

In the third paragraph, the first sentence is revised to read:

All Small and Standard Duty Cable Vaults and Standard Duty 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 Small and Standard Duty Cable Vaults and Standard Duty Pull Boxes shall conform to the following:

9-29.3 Fiber Optic Cable, Electrical Conductors, and Cable

This section is supplemented with the following new subsection:

9-29.3(3) Wire Marking Sleeves

Wire marking sleeves shall be full-circle in design, non-adhesive, printable using an indelible ink and shall fit snugly on the wire or cable. Marking sleeves shall be made from a PVC or polyolefin, and provide permanent identification for wires and cables.

9-29.3(2)A4 Location Wire

This section is revised to read:

Location wire shall be steel core copper clad minimum size AWG 14 insulated conductor. The insulation shall be orange High Molecular Weight High Density Polyethylene (HMHDPE).

9-29.13(2) Manufacturing Quality

This section, including title, is revised to read:

9-29.13(2) Traffic Signal Controller Assembly Testing

Each traffic signal controller assembly shall be tested as follows. The Contractor shall:

1. Prior to shipping, arrange appointment for testing at the WSDOT Materials Laboratory.

2. Assembly shall be defined as tightening all screws, nuts and bolts, verifying that all wiring is clear of moving parts and properly secured, installing all pluggables, connecting all cables and ensure that all Contract required documents are present, proper documentation is provided, and all equipment required by the Contract is installed.

3. The Contractor shall demonstrate that all of the functions required by the Contract perform as intended. Demonstration shall include energizing the cabinet and verifying that all 8 phases, 4 pedestrian movements and 4 overlaps (as required by the Contract Provisions) operate per Section 9-29.13. The Contractor shall place the controller in minimum recall with interval timing set at convenient value for testing purposes. Upon a satisfactory demonstration the controller assembly will then be accepted by WSDOT for testing.

4. If the assembly and acceptance for testing is not complete within 7 calendar days of delivery, the Project Engineer may authorize the return of the assembly to the Contractor, with collect freight charges to the Contractor.

5. WSDOT will test each traffic signal control assembly in accordance with the following test methods, WSDOT T 421, T 422, T 423, T 424, T 425, T 427, and T 428.

6. If the traffic signal control assembly passes all testing, the Contractor will be notified where the assembly is to be picked-up for delivery to the project. The Contractor shall pick-up the assembly within 7 calendar days of notification.

7. If the traffic signal control assembly fails testing, the Contractor has 7 calendar days to repair or replace any components that fail during the testing process at no cost to the Contracting Agency. All repairs shall be completed during normal business hours for the State Materials Lab. A failure shall be defined as a component that no longer functions as intended under the conditions required or does not meet the requirements of the Contract and is at the sole discretion of WSDOT. Once all repairs and replacement of components is complete WSDOT will retest the traffic controller as specified in step 6 and all costs for retesting will be deducted from monies due or that may become due the Contractor.

9-29.13(2)A Traffic Signal Controller Assembly Testing

This section is deleted.

9-29.16 Vehicular Signal Heads, Displays, and Housing

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

A 1-inch-wide strip of yellow retro-reflective, type IV prismatic sheeting, conforming to the requirements of Section 9-28.12, shall be applied around the perimeter of each backplate with the exception of installations where all sections of the display will be dark as part of normal operation such as ramp meters, hawk signals and tunnels.

SECTION 9-31, ELASTOMERIC BEARING PADS
AUGUST 4, 2014

This section's title is revised to read:

Elastomeric Pads

9-31.1 Requirements

In the first paragraph, the word "bearing" is deleted from the first sentence.

In the first sentence of the second paragraph, the word "bearing" is deleted and replaced with "elastomeric".

In the last sentence of the second paragraph, the word "Bearing" is deleted and replaced with "Elastomeric".

In the third paragraph, the word "bearing" is deleted and replaced with the word "elastomeric".

SECTION 9-32, MAILBOX SUPPORT
AUGUST 4, 2014

9-32.7 Type 2 Mailbox Support

The first sentence is revised to read:

Type 2 mailbox supports shall be 2-inch 14-gage steel tube and shall meet the NCHRP 350 or the Manual for Assessing Safety Hardware (MASH) crash test criteria.

SECTION 9-33, CONSTRUCTION GEOSYNTHETIC
AUGUST 3, 2015

9-33.4(1) Geosynthetic Material Approval

This section is revised to read:

Geosynthetics listed in the WSDOT Qualified Products List (QPL) are approved for use. If the geosynthetics material is not listed inthe current WSDOT QPL, a sample of each proposed geosynthetic shall be submitted to the State Materials Laboratory in Tumwater for evaluation. Geosynthetic material approval will be based on conformance to the applicable properties from the Tables in Section 9-33.2 or in the Standard Plans or Special Provisions. Approval/Disapproval information will be provided within 30 calendar days after the sample and required information for each geosynthetic type have been received at the State Materials Laboratory in Tumwater.

The Contractor shall submit to the Engineer the following information regarding each geosynthetic material proposed for use:

Manufacturer's name and current address,
Full product name,
Geosynthetic structure, including fiber/yarn type,
Geosynthetic polymer type(s) (for permanent geosynthetic retaining walls, reinforced slopes, reinforced embankments, and other geosynthetic reinforcement applications),
Geosynthetic roll number(s),
Geosynthetic lot number(s),
Proposed geosynthetic use(s), and
Certified test results for minimum average roll values.

Geosynthetics used as reinforcement in permanent geosynthetic retaining walls, reinforced slopes, reinforced embankments, and other geosynthetic reinforcement applications require proof of compliance with the National Transportation Product Evaluation Program (NTPEP) in accordance with WSDOT Standard Practice T 925 or AASHTO Standard Practice PP 66, Standard Practice for Determination of Long-Term Strength for Geosynthetic Reinforcement.

9-33.4(3) Acceptance Samples

In the the second row of the table, the value for "Application" is revised to read:

Permanent Geosynthetic Reinforced Slopes, Retaining Walls, Reinforced Embankments, and other Geosynthetic Reinforcement Applications

The fourth paragraph is supplemented with the following:

Test results from 9-33.4(1) Geosynthetic Material Approval testing may be used for acceptance provided the tested roll(s) are part of the "lot" as defined above.

SECTION 9-34, PAVEMENT MARKING MATERIAL
JANUARY 5, 2015

9-34.2 Paint

The second paragraph is revised to read:

Blue and black paint shall comply with the requirements of yellow paint in Section 9-34.2(4) and Section 9-34.2(5), with the exception that blue and black paints do not need to meet the requirements for titanium dioxide, directional reflectance, and contrast ratio.

9-34.4 Glass Beads for Pavement Marking Materials

In the third paragraph, the table titled "Metal Concentration Limits" is revised to read:

Metal Concentration Limits		
Element	**Test Method**	**Max. Parts Per Million (ppm)**
Arsenic	EPA 3052 SW-846 6010C	10.0
Barium	EPA 3052 SW-846 6010C	100.0
Cadmium	EPA 3052 SW-846 6010C	1.0
Chromium	EPA 3052 SW-846 6010C	5.0
Lead	EPA 3052 SW-846 6010C	50.0
Silver	EPA 3052 SW-846 6010C	5.0
Mercury	EPA 3052 SW-846 7471B	4.0

9-34.5 Temporary Pavement Marking Tape

This section is revised to read:

Biodegradable tape with paper backing is not allowed.

This section is supplemented with the following new sub-sections:

9-34.5(1) Temporary Pavement Marking Tape – Short Duration

Temporary pavement marking tape for short duration shall conform to ASTM D4592 Type II except that black tape, black mask tape and the black portion of the contrast removable tape, shall be non-reflective.

9-34.5(2) Temporary Pavement Marking Tape – Long Duration

Temporary pavement marking tape for long duration shall conform to ASTM D4592 Type I. Temporary pavement marking tape for long duration, except for black tape, shall have a minimum initial coefficient of retroreflective luminance of 200 $mcd*m^{-2}*lx^{-1}$ when measured in accordance with ASTM E 2832 or ASTM E 2177. Black tape, black mask tape and the black portion of the contrast removable tape, shall be non-reflective.

9-34.6 Temporary Raised Pavement Markers

This section's title is revised to read:

Temporary Flexible Raised Pavement Markers

The second paragraph is deleted.

SECTION 9-35, TEMPORARY TRAFFIC CONTROL MATERIALS
AUGUST 4, 2014

9-35.0 General Requirements

The following item is deleted from the list of temporary traffic control materials:

Barrier Drums

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

> Certification for crashworthiness according to NCHRP 350 or the Manual for Assessing Safety Hardware (MASH) will be required as described in Section 1-10.2(3).

9-35.2 Construction Signs

The first sentence is revised to read:

> Construction signs shall conform to the requirements of the MUTCD and shall meet the requirements of NCHRP Report 350 for Category 2 devices or MASH.

9-35.7 Traffic Safety Drums

The third paragraph is revised to read:

> Drums and light units shall meet the crashworthiness requirements of NCHRP 350 or MASH as described in Section 1-10.2(3).

9-35.8 Barrier Drums

This section including title is deleted in its entirety and replaced with the following:

> **9-35.8 Vacant**

9-35.12 Transportable Attenuator

In the first paragraph, the fourth sentence is revised to read:

> The Contractor shall provide certification that the transportable attenuator complies with NCHRP 350 Test level 3 or MASH Test Level 3 requirements.

9-35.13 Tall Channelizing Devices

In the sixth paragraph, the last sentence is revised to read:

> The method of attachment must ensure that the light does not separate from the device upon impact and light units shall meet the crashworthiness requirements of NCHRP 350 or MASH as described in Section 1-10.2(3).

INTRODUCTION

The following Special Provisions are made a part of this contract and supersede any conflicting provisions of the 2014 Standard Specifications for Road, Bridge, and Municipal Construction, and the foregoing Amendments to the Standard Specifications.

The said Standard Specifications and Amendments thereto, the WSDOT Standard Plans, and WSDOT Construction Manual, together with the Special Provisions and the attached plans hereinafter contained, covering all work specified under this contract are incorporated and hereby made a part of this contract. The Special Provisions hereinafter contained shall supersede any conflicting provisions of the Standard Specifications and Amendments thereto, the WSDOT Standard Plans, and WSDOT Construction Manual.

Several types of Special Provisions are included in this contract; General, Region, Bridges and Structures, and Project Specific. Special Provisions types are differentiated as follows:

(date)	General Special Provision
(******)	Notes a revision to a General Special Provision and also notes a Project Specific Special Provision.
(APWA GSP)	American Public Works Association General Special Provision

General Special Provisions are similar to Standard Specifications in that they typically apply to many projects, usually in more than one Region. Usually, the only difference from one project to another is the inclusion of variable project data, inserted as a "fill-in".

Project Specific Special Provisions normally appear only in the contract for which they were developed.

The following paragraph pertaining to the Standard Specifications shall obtain and be made a part of this contract:

Wherever the word "State" or "Contracting Agency" is used it shall mean Lewis County; that wherever the words "Secretary (Secretary of Transportation)" are used they shall mean Lewis County Engineer; that wherever the words "State Treasurer" are used they shall mean Lewis County Treasurer; that wherever the words "State Auditor" are used they shall mean Lewis County Auditor; that wherever the words "Motor Vehicle Fund" are used they shall mean Lewis County Road Fund.

SPECIAL PROVISIONS

DIVISION 1
GENERAL REQUIREMENTS

1-01, DESCRIPTION OF WORK

(March 13, 1995)

This contract provides for the improvement of ***1.72 miles of Highway 603 in Lewis County by widening and reconstructing roadway, crushed surfacing base and top course, hot mix asphalt overlays, shoulder finishing, placing pavement markers, installing flexible guide posts, traffic control, constructing culverts, placing guardrail,*** and other related work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01.3 Definitions

(July 23, 2015 APWA GSP)

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

Dates

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

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

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

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

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

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

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

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

Supplement this Section with the following:

All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions, to the terms “State”, “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 “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 final payment form established by the Contracting Agency.

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

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

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

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

Contract Documents
See definition for "Contract".

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

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

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

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

1-02, BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder
(January 24, 2011 APWA GSP)

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

1-02.2 Plans and Specifications

(******)

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

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

Lewis County Public Works Department
2025 N.E. Kresky Avenue
Chehalis, Washington 98532
(360) 740-2612

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

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

1-02.6 Preparation Of Proposal

Section 1-02.6 is supplemented with the following:

(May 7, 2012)
The Bidder shall submit with the Bid a completed Disadvantaged Business Enterprise (DBE) Utilization Certification, when required by the Special Provisions. For each and every DBE firm listed on the Bidder's completed Disadvantaged Business Enterprise Utilization Certification, the Bidder shall submit written confirmation from that DBE firm that the DBE is in agreement with the DBE participation commitment that the Bidder has made in the Bidder's completed Disadvantaged Business Enterprise Utilization Certification. WSDOT Form 422 031 EF (Disadvantaged Business Enterprise Written Confirmation Document) is to be used for this purpose.

Bidder must submit good faith effort documentation only in the event the bidder's efforts to solicit sufficient DBE participation have been unsuccessful. Directions for delivery of the Disadvantaged Business Enterprise Written Confirmation Documents and Disadvantaged Business Enterprise Good Faith Effort documentation are included in Sections 1-02.9.

1-02.9 Delivery of Proposal

(August 15, 2012 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 Documents or Good Faith Effort Documentation, then to be considered responsive, the Bidder shall submit with their Bid Proposal, written Confirmation Documentation from each DBE firm listed on the Bidder's completed DBE Utilization Certification, form 272-056A EF, as required by Section 1-02.6.

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.

1-02.12 Public Opening Of Proposal
(******)

Section 1-02.12 is supplemented with the following:

Date and Time of Bid Opening
The Board of County Commissioners of Lewis County or designee, will open sealed proposals and publicly read them aloud on or after 11:30 a.m. on **April 12, 2016**, at the Lewis County Courthouse, Chehalis, Washington, for the Highway 603 Stabilization Project, CRP 2144, Federal Aid Project No. STPR-G211(001).

SEALED BIDS MUST BE DELIVERED BY OR BEFORE
11:00 A.M. on Tuesday, April 12, 2016
(Lewis County official time is displayed on Axxess Intertel phones in the office of the Board of County Commissioners. **Bids submitted after 11:00 AM will not be considered for this project**.)

Delivery and Marking of Sealed Bid Proposals
Sealed proposals must be delivered to the Clerk of the Board of Lewis County Commissioners (351 N.W. North Street, Room 210, CMS-01, Chehalis, Washington 98532) by or before **11:00 a.m.** on the date specified for opening, and in an envelope clearly marked: ***"SEALED BID FOR THE HIGHWAY 603 STABILIZATION PROJECT, CRP 2144, FEDERAL AID PROJECT NO. STPR-G211(001), TO BE OPENED ON OR AFTER 11:30 A.M. ON APRIL 12, 2016.***

1-02.13 Irregular Proposals
(January 4, 2016 APWA GSP)

Delete this section and replace it with the following:

1. A proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The 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 a Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
   i. The Bidder fails to submit written confirmation from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidders DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
   j The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
   k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or

l. More than one proposal is submitted for the same project from a Bidder under the same or different names.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. Receipt of Addenda is not acknowledged;
   d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   e. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders

(March 8, 2013 APWA GSP, Option B)

Delete this Section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet the following Supplemental Criteria:

1. **Delinquent State Taxes**

   A Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.

   B. Documentation: The Bidder shall not be listed on the Washington State Department of Revenue's "Delinquent Taxpayer List" website: http://dor.wa.gov/content/fileandpaytaxes/latefiling/dtlwest.aspx , or if they are so listed, they must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

2. **Federal Debarment**

   A Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.

   B. Documentation: The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database (www.sam.gov).

3. **Subcontractor Responsibility**

   A Criterion: The Bidder's standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder's subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. **Prevailing Wages**

A Criterion: The Bidder shall not have a record of prevailing wage violations as determined by WA Labor & Industries in the five years prior to the bid submittal date, that demonstrates a pattern of failing to pay workers prevailing wages, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of all prevailing wage violations in the five years prior to the bid submittal date, along with an explanation of each violation and how it was resolved. The Contracting Agency will evaluate these explanations and the resolution of each complaint to determine whether the violation demonstrate a pattern of failing to pay its workers prevailing wages as required.

5. **Claims Against Retainage and Bonds**

A Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:

- Name of project
- The owner and contact information for the owner;
- A list of claims filed against the retainage and/or payment bond for any of the projects listed;
- A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

6. **Public Bidding Crime**

A Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.

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

7. **Termination for Cause / Termination for Default**

A Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.

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

8. **Lawsuits**

A Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency

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

As evidence that the Bidder meets the mandatory and supplemental responsibility criteria stated above, the apparent two lowest Bidders must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets all of the mandatory and supplemental criteria together with supporting documentation including but not limited to that detailed above (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with all mandatory and supplemental responsibility 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 Contracting Agency also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may (but is not required to) consider mitigating factors in determining whether the Bidder complies with the requirements of the supplemental criteria.

The basis for evaluation of Bidder compliance with these mandatory and supplemental criteria shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from others 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 two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

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

1-02.15 Pre Award Information

(August 14, 2013 APWA GSP)

Revise this section to read:

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

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

1-03, AWARD AND EXECUTION OF CONTRACT

1-03.3 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 15 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 5 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).

1-05, CONTROL OF WORK

(March 13, 1995)

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.

1-05.13 Superintendents, Labor and Equipment of Contractor

(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.14 Cooperation With Other Contractors

Section 1-05.14 is supplemented with the following:
(March 13, 1995)

Other Contracts Or Other Work

It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during the course of this project and will require coordination of the work:

$$ Utilities and/or Utility Contractors. The contractor's attention is directed to Section 1-07.17 these Special Provisions. Lewis County PUD will be moving poles in coordination with the Contractor. $$

1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

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

1-06, CONTROL OF MATERIAL

Buy America

Section 1-06 is supplemented with the following:

(August 6, 2012)

In accordance with Buy America requirements contained in 23 CFR 635.410, the major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or $2,500.00, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

If domestically produced steel billets or iron ingots are exported outside of the area of coverage, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:

    a. Open hearth furnace.

    b. Basic oxygen.

    c. Electric furnace.

    d. Direct reduction.

2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products.

    a. Spinning wire into cable or strand.

    b. Corrugating and rolling into culverts.

    c. Shop fabrication.

A certification of materials origin will be required for any items comprised of, or containing, steel or iron construction materials prior to such items being incorporated into the permanent work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as DOT Form 350-109EF.

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

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

1-07.2 State Sales Tax
(June 27, 2011 APWA GSP)

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

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

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

1-07.2(1) State Sales Tax — Rule 171

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

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales

tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

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

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).

1-07.3 Forest Protection and Merchantable Timber Requirements

Section 1-07.3 is supplemented with the following:

1-07.3(2) Merchantable Timber Requirements

Section 1-07.3(2) is supplemented with the following:

(April 7, 2008)
This project contains merchantable timber.

Export Restrictions - DOT Form 410-100, Purchaser Certification for Export Restricted Timber, is included with the contract for the Contractor to fill out for execution. The form shall be completed and signed by the Contractor. The Contractor shall send the original signed form and one copy of the signed form directly to the Washington State Department of Revenue at the address on the form. The Contractor shall send one signed copy along with the other documents required by Section 1-03.3 to the Contracting Agency with the executed contract.

State Tax Requirements - It shall be the Contractor's responsibility to pay to the State Department of Revenue all taxes on harvested timber.

1-07.5 Environmental Regulations

Section 1-07.5 is supplemented with the following:

(August 3, 2009)
Environmental Commitments
The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the various documents referenced in the Special Provision PERMITS AND LICENSES. Throughout the work, the Contractor shall comply with the following requirements:

General
The Contractor shall ensure that the Project Manager representing the Prime Contractor and all Subcontractors has read and understands this Special Provision. Prior to commencing any work on site, the Contractor shall provide the Engineer with a signed statement from the Project Manager stating that the Project Manager has read, understands and will abide by the conditions of this Special Provision.

Wetlands and Water Quality
The following restrictions and requirements pertain to work throughout the project limits:

(August 3, 2009)
During any operation involving saw cutting of concrete, all water generated by the cutting operation shall be controlled and contained, to be disposed of on land with no possibility of entry to waters of the State, including wetlands.

(August 3, 2009)
No Contractor staging areas will be allowed within *** 50 *** feet of any waters of the State including wetlands. Refueling or storage of hazardous substances shall occur at least 200 feet away from any waters of the State including wetlands. All staging, stockpile and refueling areas shall be within the limits of the Area of Potential Effect depicted on the TESC Plans.

(August 3, 2009)
Payment

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

1-06.7 Permits and Licenses

Section 1-07.6 is supplemented with the following:

(September 20, 2010)
The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. All contacts with the permitting agency concerning the below-listed permit(s) shall be through the Engineer. The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable bid items for the work involved. Copies of these permits are required to be onsite at all times.

Permit, Approval, Certification or Concurrence	**Permitting Agency**
National Environmental Policy Act (NEPA) Concurrence	Federal Highway Administration (FHWA)
Section 404 Nationwide Permit 14	US Army Corps of Engineers (USACE)
Section 106 Concurrence	Department of Archaeology and Historic Preservation (DAHP)
Section 401 Water Quality Certification	Washington Department of Ecology (ECY)
Hydraulic Permit Approval	Washington Department of Fish and Wildlife
State Environmental Policy Act (SEPA) Decision Document	Lewis County Community Development (LCCD)
Floodplain Permit	LCCD
Shoreline Permit	LCCD
Fill and Grade Permit	LCCD
NPDES Costruction Stormwater General Permit Coverage	ECY
Forest Practice Act	Washington Department of Natural Resources

The contractor shall ensure that all permit conditions outlined in the Environmental Commitments spreadsheet are complied with.

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(******)

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

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

1-07.9 Wages

General

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

(January 12, 2015)

The Federal wage rates incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. WA150001.

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

(April 2, 2007)

Application of Wage Rates for the Occupation of Landscape Construction

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

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

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

Laborers with the occupation description, Landscaping or Planting, or

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

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

Contractors are responsible for determining the appropriate crafts necessary to perform the contract work. If a classification considered necessary for performance of the work is missing from the Federal Wage Determination applicable to the contract, the Contractor shall initiate a request for approval of a proposed wage and benefit rate. The Contractor shall prepare and submit Standard Form 1444, Request for Authorization of Additional Classification and Wage Rate available at http://www.wdol.gov/docs/sf1444.pdf , and submit the completed form to the Project Engineer's office. The presence of a classification wage on the Washington State

Prevailing Wage Rates For Public Works Contracts does not exempt the use of form 1444 for the purpose of determining a federal classification wage rate.

1-07.11 Requirements For Nondiscrimination

Section 1-07.11 is supplemented with the following:

(August 5, 2013)

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

1. The Contractor's attention is called to the Equal Opportunity Clause and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth herein.

2. The goals and timetables for minority and female participation set by the Office of Federal Contract Compliance Programs, expressed in percentage terms for the Contractor's aggregate work force in each construction craft and in each trade on all construction work in the covered area, are as follows:

Women - Statewide

Timetable	Goal
Until further notice	6.9%

Minorities - by Standard Metropolitan Statistical Area (SMSA)

Spokane, WA:
SMSA Counties:
Spokane, WA 2.8
WA Spokane.
Non-SMSA Counties 3.0
WA Adams; WA Asotin; WA Columbia; WA Ferry; WA Garfield; WA Lincoln, WA Pend Oreille; WA Stevens; WA Whitman.

Richland, WA
SMSA Counties:
Richland Kennewick, WA 5.4
WA Benton; WA Franklin.
Non-SMSA Counties 3.6
WA Walla Walla.

Yakima, WA:
SMSA Counties:
Yakima, WA 9.7
WA Yakima.
Non-SMSA Counties 7.2
WA Chelan; WA Douglas; WA Grant; WA Kittitas; WA Okanogan.

Seattle, WA:
SMSA Counties:
Seattle Everett, WA 7.2
WA King; WA Snohomish.
Tacoma, WA 6.2
WA Pierce.
Non-SMSA Counties 6.1
WA Clallam; WA Grays Harbor; WA Island; WA Jefferson; WA Kitsap; WA Lewis; WA Mason; WA Pacific; WA San Juan; WA Skagit; WA Thurston; WA Whatcom.

Portland, OR:
SMSA Counties:
Portland, OR-WA 4.5
WA Clark.
Non-SMSA Counties 3.8
WA Cowlitz; WA Klickitat; WA Skamania; WA Wahkiakum.

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

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

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

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

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

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

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

1. As used in these specifications:

    a. Covered Area means the geographical area described in the solicitation from which this contract resulted;

    b. Director means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

    c. Employer Identification Number means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;

    d. Minority includes:

        (1) Black, a person having origins in any of the Black Racial Groups of Africa.

        (2) Hispanic, a fluent Spanish speaking, Spanish surnamed person of Mexican, Puerto Rican, Cuban, Central American, South American, or other Spanish origin.

        (3) Asian or Pacific Islander, a person having origins in any of the original peoples of the Pacific rim or the Pacific Islands, the Hawaiian Islands and Samoa.

        (4) American Indian or Alaskan Native, a person having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

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

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

covered Contractor's or Subcontractor's failure to take good faith effort to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of this Special Provision. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

    a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

    b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

    c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunity and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the U.S. Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of the obligations under 7a through 7p of this Special Provision provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensure that the concrete benefits of the program are reflected in the Contractor's minority and female work-force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrate the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspensions, terminations and cancellations of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of this Special Provision, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include, for each employee, their name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, the Contractors will not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

16. Additional assistance for Federal Construction Contractors on contracts administered by Washington State Department of Transportation or by Local Agencies may be found at:

    Washington State Dept. of Transportation
    Office of Equal Opportunity
    PO Box 47314
    310 Maple Park Ave. SE
    Olympia WA
    98504-7314
    Ph: 360-705-7090
    Fax: 360-705-6801
    http://www.wsdot.wa.gov/equalopportunity/default.htm

1-07.11 Requirements for Nondiscrimination

(December 8, 2014 APWA GSP, Option B)

Supplement this section with the following:

Disadvantaged Business Enterprise Condition of Award Participation

The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 apply to this Contract. Demonstrating compliance with these specifications is a Condition of Award (COA) of

this Contract. Failure to comply with the requirements of this specification may result in your bid being found to be nonresponsive and may be rejected.

DBE COA Goal

The Contracting Agency has established a COA Contract goal in the amount of: $$ **9%** $$.

DBE Eligibility/Selection of DBEs

A Directory of Certified DBE Firms denoting the Description of Work the DBE Contractors are certified to perform is available at:

www.omwbe.wa.gov/certification/index.shtml.

The directory provides plain language on the Description of Work that the listed DBE's have been certified by the Office of Minority and Women's Business Enterprises (OMWBE) to perform. The Bidder shall use the Directory of Certified DBE Firms to confirm if a DBE is certified for the "Description of Work" the Bidder lists on the DBE Utilization Certification form # 272-056 EF (see form instructions) and therefore qualifies for credit towards the COA goal.

Crediting DBE Participation

Joint Venture

When a DBE performs as a participant in a joint venture, only that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces shall be credited.

DBE Prime Contractor

A DBE Prime Contractor may only take credit for that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE Prime performs with its own forces.

DBE Subcontractor

When a DBE firm participates as a Subcontractor only that portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces shall be credited.

- Include the cost of supplies and materials obtained by the DBE for the Work in the Contract including supplies purchased or equipment leased by the DBE.
  - However, you may not take credit for supplies, materials, and equipment the DBE Subcontractor purchases or leases from the Prime Contractor or its affiliate. In addition, Work performed by a DBE, utilizing resources of the Prime Contractor or its affiliates shall not be credited.

- In very rare situations, a DBE firm may utilize equipment and/or personnel from a non-DBE firm other than the Prime Contractor or its affiliates. Should this situation arise the arrangement must be short-term and have prior written approval from the Office of Equal Opportunity (OEO).

- Count the entire value of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance.

- When a DBE subcontracts to another firm, the value of the subcontracted Work may be counted as participation only if the DBE's lower tier Subcontractor is also a DBE. Work that a DBE subcontracts to a non-DBE firm shall not be credited.

- When non-DBE Subcontractor further subcontracts to a lower-tier Subcontractor or supplier who is a certified DBE, then that portion of the Work further subcontracted may be credited as DBE participation, provided it is a distinct clearly defined portion of the Work that the DBE is certified to perform and the DBE Subcontractor performs the Work with its own forces.

- If a firm is not certified as a DBE at the time of the execution of the contract, their participation cannot be counted toward any DBE goals.

Trucking

Use the following factors in determining DBE credit and whether a DBE trucking company is performing a commercially useful function:

1. The DBE must be responsible for the management and supervision of the entire trucking operation for which credit is being claimed.

2. The DBE must itself own and, with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract.

3. The DBE receives credit only for the value of the transportation services it provides on the Contract using trucks it owns or leases, licenses, insures, and operates with drivers it employs. For purposes of this requirement a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others provided it is with the consent of the DBE and the lease provides the DBE first priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

4. The DBE may lease trucks from another DBE firm including an owner-operator provided they are certified as a DBE for trucking. The DBE who leases trucks from another DBE may claim participation for the total value of the transportation services the lessee DBE provides on the Contract.

5. The DBE may also lease trucks from a non-DBE firm and may enter into an agreement with an owner-operator who is a non-DBE. The DBE shall only receive credit for the number of additional non-DBE trucks equal or less than the number of DBE trucks the firms owns or has leased/subcontracted through another DBE trucking company. The DBE must control the work of the non-DBE trucks. If the non-DBE is performing the work without supervision of that work by the DBE, the DBE is not performing a Commercially Useful Function (CUF).

6. In any lease or owner-operator situation, as described in requirement #4 and #5 above, the following rules shall apply:

    a. A written lease/rental agreement is required for all trucks leased or rented; documenting the ownership and the terms of the agreement. The agreements must be submitted and approved by the Contracting

Agency prior to the beginning of the Work. The agreement must show the leaser's name, truck description and agreed upon amount and method of payment (hour, ton, or per load). All lease agreements shall be for a long-term relationship, rather than for the individual project. (This requirement does not apply to owner-operator arrangements.)

b. Only the vehicle, (not the operator) may be leased or rented. (This requirement does not apply to owner-operator arrangements).

7. Credit may only be claimed for DBE trucking firms operating under a subcontract or a written agreement approved by the Contracting Agency prior to performing Work.

Expenditures paid to other DBEs

Expenditures paid to other DBEs for materials or supplies may be counted toward DBE goals as provided in the following:

Manufacturer

You may claim DBE credit for 100 percent of value of the materials or supplies obtained from a DBE manufacturer.

A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material or that purchases and substantially alters goods and materials to make them suitable for construction use before reselling them.

In order to receive credit as a DBE Manufacturer, the firm must be certified by OMWBE as a manufacturer in a NAICS code that falls within the 31XXXX to 33XXXX classification.

Regular Dealer

You may claim credit for 60 percent of the value of the materials or supplies purchased from a DBE regular dealer. Rules applicable to regular dealer status are contained in 49 CFR Part 26.55.e.2.

To be considered a regular dealer you must meet the following criteria:

- WSDOT considers and recognizes a regular dealer, as a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the Contract and described by the specifications of the Contract are bought, kept in stock and regularly sold or leased to the public in the usual course of business.

- Sixty percent (60%) of the cost of materials or supplies purchased from an approved regular dealer may be credited as DBE participation.

Regular dealer status is granted on a contract-by-contract basis. A firm wishing to be approved as a regular dealer for WSDOT contracted projects or Highways & Local Program administered projects must submit a request in writing to OEO for approval, no later than seven days prior to bid opening.

Once the OEO has received the request, an onsite review will be set up with the firm and a review conducted to determine the firm's qualifications. If it is determined that the firm qualifies as a regular dealer the OEO will list the firm on an Approved Regular Dealers List. The list may be accessed through the OEO Home website is at:

www.wsdot.wa.gov/equalopportunity.

Note: Requests to be listed as a regular dealer will only be processed if the requesting firm is certified by the Office of Minority and Women's Business Enterprises in a NAICS code that fall within the 42XXXX NAICS Wholesale code section.

Materials or Supplies Purchased from a DBE

With regard to materials or supplies purchased from a DBE who is neither a manufacturer nor a regular dealer you may claim credit for the following:

1. Fees or commissions charged for assistance in the procurement of the materials and supplies.

2. Fees or transportation charges for the delivery of materials or supplies.

In either case you may not take credit for any part of the cost of the materials and supplies.

Commercially Useful Function (CUF)

The Prime Contractor has a responsibility and must treat the working relationship with the DBE such that the DBE is performing a commercially useful function. The Prime Contractor may only take credit for Work performed by a DBE that is determined to be performing a commercially useful function.

- A DBE performs a commercially useful function when it is responsible for execution of a distinct element of Work and is carrying out its responsibilities by performing, managing and supervising the Work involved. The DBE must also be responsible with respect to materials and supplies used on the Contract. For example; negotiating price, determining quality, determining quantities, ordering, installing (if applicable) and paying for the material itself.

- A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, Contract, or project through which funds are passed.

Joint Checking Allowance

Prime Contractors and DBEs must receive pre-approval by the OEO before using a joint check. Joint check requests shall be submitted by the Prime Contractor to the Contracting Agency for approval.

When requesting approval for use of a joint checking allowance, the Contractor must distribute a written joint check agreement among the parties (including the suppliers involved) providing full and prompt disclosure of the expected use of the joint checks. The

agreement shall contain all the information concerning the parties' obligations and consequences or remedies if the agreement is not fulfilled or a breach occurs. The joint check request shall be submitted to the Contracting Agency for approval prior to signing the contract agreement.

The following are some general conditions that must be met by all parties regarding joint check use:

a. It is understood that the Prime Contractor acts solely as the guarantor of a joint check.

b. The DBE's own funds are used to pay supplier of materials. The Prime Contractor does not make direct payment to supplier. In order to be performing a Commercially Useful Function (CUF), the DBE must release the check to the supplier (paying for the materials it-self and not be an extra participant in a transaction).

c. If the Prime Contractor makes joint checks available to one DBE Subcontractor, the service must be made available to all Subcontractors (DBE and non-DBE).

d. The relationship between the DBE and its suppliers should be established independently of and without interference by the Prime Contractor. The DBE has final decision-making responsibility concerning the procurement of materials and supplies, including which supplier to use.

e. The Prime Contractor and DBE shall be able to provide receipts, invoices, cancelled checks and/or certification statements of payment if requested by the Contracting Agency.

f. The DBE remains responsible for all other elements of 49 CFR 26.55(c)(1).

Failure by the Prime Contractor to request and receive prior approval of a joint check arrangement will result in the joint check amount not counting towards the Prime Contractor's DBE goal.

Disadvantaged Business Enterprise Utilization Certification FORM # 272-056 EF

To be eligible for award of the Contract, the Bidder shall properly complete and submit a Disadvantaged Business Enterprise Utilization Certification with the Bidder's sealed Bid Proposal, as specified Section 1-02.9 Delivery of Proposal. The Bidder's Disadvantaged Business Enterprise Utilization Certification must clearly demonstrate how the Bidder intends to meet the DBE COA goal. A Disadvantaged Business Enterprise Utilization Certification (form # 272-056 EF) is included in your Proposal package for this purpose as well as instructions on how to properly fill out the form.

In the event of arithmetic errors in completing the Disadvantaged Business Enterprise Utilization Certification the amount listed to be applied towards the goal for each DBE shall govern and the DBE total amount shall be adjusted accordingly.

Note: The Contracting Agency shall consider as non-responsive and shall reject any Bid Proposal submitted that does not contain a Disadvantaged Business Enterprise Utilization Certification that accurately demonstrates how the Bidder intends to meet the COA goal.

Disadvantaged Business Enterprise (DBE) Written Confirmation Document(s) FORM # 422-031 EF

The Bidder shall submit a complete and accurate Disadvantaged Business Enterprise (DBE) Written Confirmation Document for each DBE firm listed in the Bidder's completed Disadvantaged Business Enterprise Utilization Certification as submitted with the bid. Failure to do so will result in the associated participation being disallowed, which may result in bid rejection.

A Disadvantaged Business Enterprise (DBE) Written Confirmation Document (form No. 422-031 EF) is included in your Proposal package for this purpose.

The form(s) shall be received as specified in the special provisions for Section 1-02.9 Delivery of Proposal.

It is prohibited for the Bidder to require a DBE to submit a Written Confirmation Document with any part of the form left blank. Should the Contracting Agency determine that a Written Confirmation Document was signed by a DBE that was not complete; the validity of the document comes into question and the associated DBE Participation may not receive credit.

Selection of Successful Bidder/Good Faith Efforts (GFE)

The successful Bidder shall be selected on the basis of having submitted the lowest responsive Bid, which demonstrates a good faith effort to achieve the DBE COA goal. Achieving the goal may be accomplished in one of two ways, as follows:

1. By meeting the goal
   The best indication of good faith efforts is to document, through submission of the Disadvantaged Business Enterprise Utilization Certification and supporting Disadvantaged Business Enterprise (DBE) Written Confirmation Document(s) that the Bidder has obtained enough DBE participation to meet or exceed the assigned DBE COA contract goal. That being the case no additional GFE documentation is required. Or;

2. By documentation that it made adequate GFE to meet the goal
   The Bidder may demonstrate a GFE in whole or part through GFE documentation ONLY IN THE EVENT a Bidder's efforts to solicit sufficient DBE participation have been unsuccessful. In this case, the Bidder must supply GFE documentation in addition to the Disadvantaged Business Enterprise Utilization Certification, and supporting Disadvantaged Business Enterprise (DBE) Written Confirmation document(s).

Note: In the case where the Bidder was awarded the contract based on demonstrating adequate GFE the advertised DBE goal will not be reduced to the Bidder's partial commitment. The Bidder shall demonstrate a GFE during the life of the Contract to attain the DBE Condition of Award (COA) Goal as assigned to the project.

Good Faith Efforts (GFE) Documentation

GFE documentation shall be received, as specified in the special provisions for Section 1-02.9 Delivery of Proposal.

Based upon all the relevant documentation submitted in Bid or as supplement to Bid, the Contracting Agency shall determine whether the Bidder has demonstrated a sufficient GFE to achieve DBE participation. The Contracting Agency will make a fair and reasonable judgment of whether a Bidder that did not meet the goal through participation, made adequate good faith efforts as demonstrated by the GFE documentation.

The following is a list of types of actions, which would be considered as part of the Bidder's GFE to achieve DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases:

1. Attendance by the Bidder at any pre-solicitation or pre-Bid meetings that were scheduled by the Contracting Agency to inform DBEs of contracting and subcontracting or material supply opportunities available on the project;
2. Contacting local Tribes, Tribal Employment Rights Offices (TERO) concerning the subcontracting or supply opportunities in sufficient time to allow the enterprises to participate effectively;
3. Selection by the Bidder of specific economically feasible units of the project to be performed by DBEs in order to increase the likelihood of participation by DBEs even if the Bidder preferred to perform these Work items as the Prime Contractor;
4. Advertising by the Bidder in general circulation, trade association minority and trade oriented, women focus publications, concerning the subcontracting or supply opportunities;
5. Providing written notice from the Bidder to a reasonable number of specific DBEs, identified from the OMWBE Directory of Certified DBE Firms for the selected subcontracting or material supply Work, in sufficient time to allow the enterprises to participate effectively;
6. Follow-up by the Bidder of initial solicitations of interest by contacting the DBEs to determine with certainty whether they were interested. Documentation of this kind of action shall include the information outlined below:
    a. The names, addresses, telephone numbers of DBEs who were contacted, the dates of initial contact, and whether initial solicitations of interest were followed-up by contacting the DBEs to determine with certainty whether the DBEs were interested;
    b. A description of the information provided to the DBEs regarding the plans, specifications, and estimated quantities for portions of the Work to be performed;
    c. Documentation of each DBE contacted but rejected and the reason(s) for that rejection;
7. Providing, to interested DBEs, adequate information about the plans, specifications, and requirements for the selected subcontracting or material supply Work;

8. Negotiating in good faith with the DBE firms, and not, without justifiable reason, rejecting as unsatisfactory, Bids that are prepared by any DBE. The DBE's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations - union vs. non-union employee status - are not legitimate causes for the rejection or non-solicitation of bids in the Prime Contractor's efforts to meet the project goal;

9. Advertising and making efforts to obtain DBE participation that were reasonably expected to produce a level of participation sufficient to meet the goal or requirements of the Contracting Agency;

10. Making any other efforts to obtain DBE participation that were reasonably expected to produce a level of participation sufficient to meet the goal or requirements of the Contracting Agency;

11. Using the services of minority community organizations, minority contractor groups, local, State, and federal minority business assistance offices and other organizations identified by WSDOT and advocates for disadvantaged, minority, and women businesses that provide assistance in the recruitment and placement of disadvantaged, minority, and women business enterprises; and

12. Using the WSDOT OEO DBE Supportive Services to assist you. For more information please contact the OEO by calling toll free at (888) 259-9143 or emailing dbess@wsdot.wa.gov.

Administrative Reconsideration of GFE Documentation

Any Bidder has the right to reconsideration but only for the purpose of reassessing their GFE documentation that was determined to be inadequate.

- The Bidder must request and schedule a reconsideration hearing within seven calendar days of notification of being nonresponsive or forfeit the right to reconsideration.

- The reconsideration decision on the adequacy of the Bidder’s GFE documentation shall be made by an official who did not take part in the original determination.

- The Bidder shall have the opportunity to meet in person with the official for the purpose of setting forth the Bidder’s position as to why the GFE documentation demonstrates a sufficient effort.

- The reconsideration official shall provide the Bidder with a written decision on reconsideration within five business days of the hearing explaining the basis for their finding.

Procedures between Award and Execution

After Award and prior to Execution the Bidder shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder’s Proposal bond or deposit.

1. Additional information for all successful DBE's as shown on the Disadvantaged Business Enterprise Utilization Certification:

   a. Correct business name, federal employee identification number (if available), and mailing address.

   b. List of all Bid items assigned to each successful DBE firm, including unit prices and extensions.

   c. Description of partial items (if any) to be sublet to each successful DBE firm specifying the distinct elements of Work under each item to be performed by the DBE and including the dollar value of the DBE portion.

      Total amounts shown for each DBE shall not be less than the amount shown on the Disadvantaged Business Enterprise Utilization Certification. A breakdown that does not conform to the Disadvantaged Business Enterprise Utilization Certification or that demonstrates a lesser amount of DBE participation than that included in the Disadvantaged Business Enterprise Utilization Certification will be returned for correction.

2. A list of all firms who submitted a Bid or quote in an attempt to participate in this project whether they were successful or not. Include the business name and a mailing address.

Note: The firms identified by the Prime Contractor may be contacted by the Contracting Agency to solicit general information as follows: age of the firm and average of its gross annual receipts over the past three-years.

Procedures after Execution

Crediting DBE Participation toward Meeting the Goal

Reporting

All DBE work whether COA or race neutral participation is reported. The Prime Contractor shall submit a Quarterly Report of Amounts Credited as DBE Participation form (422-102 EF) on a quarterly basis for any calendar quarter in which DBE has accomplished Work or upon completion of the project, as appropriate. The dollars are to be reported as specified herein.

In the event that the payments to a DBE have been made by an entity other than the Prime Contractor, as in the case of a lower-tier Subcontractor or supplier, then the Prime Contractor shall obtain the quarterly report, including the signed affidavit, from the paying entity and submit the report to the Contracting Agency.

Changes in DBE COA participation

Owner initiated Change Orders

The Prime Contractor shall demonstrate a GFE to substitute COA DBE participation when the Contracting Agency deletes Work items by change order that impact a COA DBE's Work.

When the Contract allows alternate Work methods which serve to delete or create under-runs in COA DBE Work then the Prime Contractor must provide documentation of negotiating the change with the DBE that was to perform the reduced Work and demonstrate a GFE to substitute other DBE COA participation.

Original Quantity Under runs
In the event that Work committed to a DBE firm as part of the COA under runs the original planned quantities the Prime Contractor shall demonstrate a GFE to substitute other DBE COA participation.

Contractor-Initiated Proposals—General
The Contractor cannot reduce the amount of work committed to a DBE firm at contract award without good cause and only with written concurrence from the OEO. Reducing a COA DBE's Work is viewed as a partial DBE termination, subject to the procedures below.

DBE Termination
A COA DBE Subcontractor may only be terminated in whole or part with the approval of the Contracting Agency (in coordination with OEO). Approval will be granted provided the Prime Contractor demonstrates that the termination is based on good cause.

Good cause typically includes situations where the DBE Subcontractor is unable or has failed to perform the work of its subcontract in accordance with normal industry standards. While not all inclusive, some examples of good cause include the following circumstances:

Good cause may exist if:

- The listed DBE Subcontractor fails or refuses to execute a written contract.
- The listed DBE Subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards.
- The listed DBE Subcontractor fails or refuses to meet the Prime Contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE Subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE Subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- The listed DBE Subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE is unable to complete its work on the contract.

Good cause does not exist if:

- The Prime Contractor seeks to terminate a COA DBE so that the Prime can self-perform the Work.

- The Prime Contractor seeks to terminate a COA DBE so the Prime Contractor can substitute another DBE or non-DBE after contract award.

- The failure or refusal of the DBE Subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Prime Contractor (e.g., the failure of the Prime Contractor to make timely payments or the unnecessary placing of obstacles in the path of the DBE's Work).

Prior to requesting termination, the Prime Contractor must give notice in writing to the DBE Subcontractor with a copy to the Contracting Agency of its intent to request to terminate DBE work and the reasons for doing so. The DBE Subcontractor shall have five (5) days to respond to the prime Contractor's notice. The DBE's response shall either support the termination or advise the Contracting Agency and the Prime Contractor of the reasons it objects to the termination of its subcontract.

When a COA DBE firm is "terminated" from a Contract (or fails to complete its Subcontract for any reason), the Prime Contractor shall make every good faith effort to substitute another DBE Firm (ref.to 49 CFR 26.53(g)).

Graduation
When a DBE firm "graduates" from the DBE program (during the course of an executed subcontract), the DBE participation of that firm "may" continue to count towards the contract DBE goal.

Decertification
When a COA DBE firm who has a signed subcontract in place with a Prime, later becomes "decertified" (during the course of that subcontract) – the DBE participation of that firm "may" continue to count towards the Contract DBE goal.

Counting payments
Payments to a DBE firm will count toward DBE goals only if the participation is in accordance with these specifications.

Prompt Payment
Prompt payment to all Subcontractors shall be in accordance with Section 1-08.1(1) of these Contract special provisions.

Payment
Compensation for all costs involved with complying with the conditions of this specification and any other associated DBE requirements is included in payment for the associated Contract items of Work.

Damages for Noncompliance
The Prime Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Prime Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of Contracts, which contain funding assistance from the United States Department of Transportation. Failure by the Prime Contractor to carry out these requirements is a

material breach of this Contract, which may result in the Termination of this Contract or such other remedy as the Contracting Agency deems appropriate.

If the Prime Contractor does not comply with any part of its Contract as required under 49 CFR part 26, and/or any other applicable law or regulation regarding DBE, the Contracting Agency may withhold payment, suspend the ability of the Prime Contractor to participate in future Contracting Agency contracts, impose sanctions or Terminate the Contract, and subject the Prime Contractor to civil penalties of up to ten percent of the amount of the Contract for each violation. In the case of WSDOT Contracts, prequalification may be suspended pursuant to WAC 468-16-180, and continuous violations (exceeding a single violation) may also disqualify the Prime Contractor from further participation in WSDOT Contracts for a period of up to three years.

An apparent low Bidder must be in compliance with these Contract Provisions as a condition precedent to the granting of a notice of award by the Contracting Agency. The Prime Contractor is entitled to request an adjudicative proceeding with respect to the Contracting Agency's determination of Contract violation and assessed penalties by filing a written application within thirty days of receipt of notification. The adjudicative proceeding, if requested, will be conducted by an administrative law judge pursuant to the procedures set forth in RCW 34.05 and Chapter 10.08 of the Washington Administrative Code.

1-07.12 Federal Agency Inspection

Section 1-07.12 is supplemented with the following:

(July 30, 2012)

Required Federal Aid Provisions

The Required Contract Provisions Federal Aid Construction Contracts (FHWA 1273) Revised May 1, 2012 supersede any conflicting provisions of the Standard Specifications and are made a part of this Contract; provided, however, that if any of the provisions of FHWA 1273 are less restrictive than Washington State Law, then the Washington State Law shall prevail.

The provisions of FHWA 1273 included in this Contract require that the Contractor insert the FHWA 1273 in each Subcontract, together with the wage rates which are part of the FHWA 1273. Also, a clause shall be included in each Subcontract requiring the Subcontractors to insert the FHWA 1273 thereto in any lower tier Subcontracts, together with the wage rates. The Contractor shall also ensure that this section, REQUIRED FEDERAL AID PROVISIONS, is inserted in each Subcontract for Subcontractors and lower tier Subcontractors. For this purpose, upon request to the Project Engineer, the Contractor will be provided with extra copies of the FHWA 1273, the applicable wage rates, and this Special Provision.

1-07.15, Temporary Water Pollution/Erosion Control

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

Section 1-07.15(1) is supplemented with the following:

(August 3, 2009)

The Contractor shall address the following items in the SPCC Plan in addition to the requirements of Section 1-07.15(1):

Mixing, Transfers, & Storage

1. All oil, fuel or chemical storage tanks or containers shall be diked and located on impervious surfaces so as to prevent spill from escaping.

2. All liquid products shall be stored and mixed on impervious surfaces in a secure water tight environment and provide containment to handle the maximum volume of liquid products on site at any given time.

3. Proper security shall be maintained to prevent vandalism.

4. Drip pans or other protective devices shall be required for all transfer operations.

Spills

Paint and solvent spills shall be treated as oil spills and shall be prevented from reaching storm drains or other discharges. No cleaning solvents or chemicals used for tool or equipment cleaning may be discharged to the ground or water.

Maintenance of Equipment

Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc, shall be checked regularly for drips or leaks and shall be maintained and stored properly to prevent spills into State waters.

Disposal

Spilled waste, chemicals or petroleum products shall be transported off site for disposal at a facility approved by the Department of Ecology. The materials shall not be discharged to any sanitary sewer without approval of the local sewer authority.

Reporting and Cleanup

The Contractor's designated person for managing and implementing the SPCC Plan shall report hazardous material spills as follows:

Spills into State water (including ponds, ditches, seasonally dry streams, and wetlands) – Immediately call all of the following:

National Response Center	1-800-424-8802
WA State Div. of Emergency Management (24 hr)	1-800-258-5990
Ecology Southwest Regional Office	(360) 407-6300

Spill to Soil (Including encounters of pre-existing contamination):

Ecology Southwest Regional Office	(360) 407-6300

Report immediately if threatening to health or environment (i.e., explosive, flammable, toxic vapors, shallow groundwater, nearby creek), otherwise within 90 days

1-07.17 Utilities And Similar Facilities

(April 2, 2007)

Section 1-07.17 is supplemented with the following:

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

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

Lewis County P.U.D. No. 1
321 NW Pacific
Chehalis, WA 98532
Marvin Keller
Telephone: (360) 748-9261

QWEST Field Engineering
711 Capitol Way south, STE 307
Olympia, WA 98501
Telephone No: (360) 754-5920

Sprint
Fiber Operation West
707 Koontz Road
Chehalis, WA 98532

Comcast Cable
440 Yauger Way SW
Olympia, WA 98502
Telephone: (206) 396-9334

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

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

(January 24, 2011 APWA GSP)

1-07.18(1) General Requirements

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

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

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Final

Completion or earlier termination of this contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

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

E. The Contractor's and all subcontractors' insurance coverage shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or insurance pool coverage.

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

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

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

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

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

1-07.18(2) Additional Insured

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

The Contracting Agency and its officers, elected officials, employees, agents, and volunteers

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

1-07.18(3) Subcontractors

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

1-07.18(4) Evidence of Insurance

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

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as Additional Insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement. A statement of additional insured status on an ACORD Certificate of Insurance shall not satisfy this requirement.
3. Any other amendatory endorsements to show the coverage required herein.

1-07.18(5) Coverages and Limits

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

1-07.18(5)A Commercial General Liability

A policy of Commercial General Liability Insurance, including:

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

Such policy must provide the following minimum limits:

$1,000,000	Each Occurrence
$2,000,000	General Aggregate
$1,000,000	Products & Completed Operations Aggregate
$1,000,000	Personal & Advertising Injury, each offence

Stop Gap / Employers' Liability

$1,000,000	Each Accident
$1,000,000	Disease - Policy Limit
$1,000,000	Disease - Each Employee

1-07.18(5)B Automobile Liability

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

$1,000,000 combined single limit

1-07.18(5)C Workers' Compensation

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

1-07.23, PUBLIC CONVENIENCE AND SAFETY

1-07.23(1) Construction Under Traffic

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

(January 2, 2012)

Work Zone Clear Zone

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

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

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

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

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

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

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

* or 2-feet beyond the outside edge of sidewalk

Minimum Work Zone Clear Zone Distance

1-08, PROSECUTION AND PROGRESS

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

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

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.

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

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

Add the following new section:

1-08.0(2) Hours of Work

(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

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

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 3 working days prior to the day(s) the Contractor is requesting to change the hours.

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

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

2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1-08.1 Subcontracting
(July 23, 2015 APWA GSP)

Delete the eighth paragraph and replace it with the following:

On all projects funded with federal assistance the Contractor shall submit "Quarterly Report of Amounts Credited as DBE Participation" (form 422-102 EF) on a quarterly basis, in which DBE Work is accomplished, for every quarter in which the Contract is active or upon completion of the project, as appropriate. The quarterly reports are due on the 20th of April, July, October, and January for the four respective quarters.

Section 1-08.1 is supplemented with the following:

(October 12, 1998)
Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to the Engineer a certification (WSDOT Form 420-004) that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed. This certification shall also guarantee that these subcontract agreements include all the documents required by the Special Provision **Federal Agency Inspection**.

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

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

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

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

Revise this section to read:

The Contractor shall submit $$ 3 $$ copies of a Type A Progress Schedule no later than one week before the preconstruction conference, or some other mutually agreed upon submittal time. The

schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

(******)
The Contractors schedule shall show all roadway under construction prelevel paved to finish grade by November 15 winter shutdown.

Contractor's Weekly Activities

(******)

The Contractor shall submit a weekly schedule to the Engineer. The schedule shall indicate the Contractor's proposed activities for the forthcoming week along with the hours of work. This will permit the Engineer to more effectively provide the contract engineering and inspection for the Contractor's operations.

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

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

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

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

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
(July 23, 2015 APWA GSP)

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

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

(******)
The Contractor shall on October 1, not excavate any more roadway than can be preleveled by the November 15, winter shutdown without written notice from the Engineer.

1-08.5 Time for Completion

(August 14, 2013 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

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

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

Revise the sixth paragraph to read:

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

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
   a. Certified Payrolls (per Section 1-07.9(5)).
   b. Material Acceptance Certification Documents
   c. Quarterly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification

e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
f. Property owner releases per Section 1-07.24

(******)
This project shall be physically completed within *** 180 *** working days.

1-08.9 Liquidated Damages

(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

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

1-09, MEASUREMENT AND PAYMENT

1-09.7 Mobilization

Section 1-09.7 is supplemented with the following:

(******)
The Contracting Agency will provide a temporary staging site during construction of the project. The area to be used shall be staked in the field prior to use. The Contractor shall restore this site to the condition it was found or as directed by the Engineer.

1-09.9 Payments

(March 13, 2012 APWA GSP)

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

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

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

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

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

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

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

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

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

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

1-09.9(1) Retainage

Section 1-09.9(1) content and title is deleted and replaced with the following:

(June 27, 2011)
Vacant

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction

(July 23, 2015 APWA GSP)

Revise this section to read*:*

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW

36.01.05 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

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

(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

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

1-09.13(3)A Administration of Arbitration

(July 23, 2015 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.05 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(4) Claims in Excess of $250,000

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

CLAIMS RESOLUTION
(******)

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

a) Unless the parties otherwise agree, all disputes subject to arbitration shall be heard in

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

1. The name, business address and contact telephone number of each witness who will testify at the hearing.

2. For each witness to be offered as an expert, a statement of the subject matter and a statement of the facts, resource materials (not protected by privilege) and learned treatises upon which the expert is expected to testify and render an opinion(s), synopsis of the basis for such opinion(s), and a resume of the expert detailing his/her qualifications as an expert and pursuant to rendering such opinion(s). A list of documents and other exhibits the party intends to offer in evidence at the arbitration hearing. Either party may request a copy of any document listed, and a copy or description of any other exhibit listed. The party receiving the request shall provide the copies or description within five (5) calendar days. The parties or arbitrator may subpoena parties in accordance with the Superior Court Mandatory Arbitration Rules (MAR) of Washington, Rule 4.3, and witness fees and costs shall be provided for under Rule 6.4, thereof. The arbitrator may permit a party to call a witness or offer a document or other exhibit not included in the statement of proof only upon a showing of good cause.

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

1-10, TEMPORARY TRAFFIC CONTROL

1-10.2 Traffic Control Management

1-10.2(1) General

(December 1, 2008)

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

(January 8, 2016)
Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

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

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778 or
(425) 814-3930

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

1-10.2(2) Traffic Control Plans

(******)
Section 1-10.2(2) is supplemented with the following:

The Contracting Agency has attached a Traffic Control Plan in Appendix F for temporary traffic control use on this project. Alternating one-way traffic shall be maintained by the Contractor provided Roadway Temporary Traffic Signal as shown in the Contract Plans. All signs required for this project (as shown on the Traffic Control Plan) shall be the Contractors responsibility to furnish, erect, and maintain. The Contractor shall adopt the Traffic Control Plan in writing to the Engineer or furnish a new plan. The Contractor shall conduct his operations on the roadway in a manner that one-way traffic is maintained at all times, unless otherwise directed by the Engineer.

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

1-10.2(3) Conformance to Established Standards

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

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

1-10.4 Measurement

1-10.4(1) Lump Sum Bid for Project (No Unit Items)
Section 1-10.4(1) is supplemented with the following:

(August 2, 2004)
The proposal contains the item "Project Temporary Traffic Control," lump sum. The provisions of Section 1-10.4(1) shall apply.

DIVISION 2
EARTHWORK

2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description
Section 2-01.1 is supplemented with the following:

(March 13, 1995)
Clearing and grubbing on this project shall be performed within the following limits:

This work consists of conserving Logs with Rootwad Clusters from eleven fir trees 12" diameter at breast height (dbh) and larger that are to be removed/felled as part of this project and transporting them to Lewis County Pleasant Valley Shop @ 111 Pleasant Valley Road, Winlock, WA. These fir trees have been marked with orange paint and pink and black striped flagging. These trees are depicted on the Riparian Buffer Mitigation Plan.

Two trees within the clearing and grubbing limits have been marked with red paint and red ribbon in the field and are to be protected (remain uncut). These trees are depicted on the Riparian Buffer Mitigation Plan.

*** The Right of Way limits and Construction Easements staked in the field by the Engineer prior to bid opening and/or as shown on the Contract Plans. The Contractor will be required to limit all construction operations to within the area staked to be cleared. No equipment will be allowed past the clearing limits unless directed by the Engineer. ***

2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description
Section 2-02.1 is supplemented with the following:

(March 13, 1995)
This work shall consist of removing miscellaneous traffic items.

2-02.3 Construction Requirements
Section 2-02.3 is supplemented with the following:

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

Make a vertical, full depth saw cut between any existing pavement that is to remain and the portion that is to be removed. Any damage to the vertical cut during construction operation shall be repaired to the satisfaction of the Engineer prior to paving.

Removing Miscellaneous Items

(March 13, 1995)
The following miscellaneous traffic items shall be removed and disposed of:

*** Existing Pipe ***
*** Existing Signs ***
*** Flexible Guide Post ***

2-02.4 Measurement

No specific unit of measurement will apply to the lump sum item of "Removal of Structure and Obstruction". Traffic signs to be adjusted or moved shall be considered incidental to this bid item. All signs shall remain the property of Lewis County.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

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

"Removal of Structure and Obstruction", lump sum.

If pavements, sidewalks, curbs, or gutters lie within an excavation area, their removal will be paid for as part of the quantity removed in excavation.

2-03, ROADWAY EXCAVATION AND EMBANKMENT

(******)

2-03.3 Construction Requirements

(******)
Pavement Grinding
As shown in the Contract Plans, all existing pavement shall be ground. Existing pavement shall be ground small enough to pass a 3-in. sieve, exclusive of gravel or stone retained on these sieves. All grinding of existing pavement shall be considered incidental to "Roadway Excavation Incl. Haul".

2-03.3(7) Disposal Of Surplus Material

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

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

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

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

2-03.4 Measurement

Section 2-03.4 is supplemented with the following:

(March 13, 1995)

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

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

Copies of the ground cross-section notes will be available for the bidder's inspection, before the opening of bids, at the County Engineer's office.

Upon award of the contract, copies of the original ground cross-sections will be furnished to the successful bidder on request to the Project Engineer.

DIVISION 3
PRODUCTION FROM QUARRY AND PIT SITES AND STOCKPILING

3-01, PRODUCTION FROM QUARRY AND PIT SITES

3-01.4 Contractor Furnished Material Sources

3-01.4(1) Acquisition and Development

(******)

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

No source has been provided for any materials necessary for the construction of this project.

DIVISION 4
BASES

4-04, BALLAST AND CRUSHED SURFACING

4-04.3 Construction Requirements

4-04.3(5) Shaping and Compacting

(******)

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

Shoulder Finishing

Shoulder finishing material shall not be placed until the abutting pavement has been completed, unless designated by the Engineer. Shoulder finishing material (Crushed Surfacing Top Course)

shall be placed by a spreader box in one lift. Processing of the shoulder finishing material on the roadway shall not be permitted.

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

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

4-04.4 Measurement

(******)

Section 4-04.4 is supplemented with the following:

"Shoulder Finishing" shall be measured per mile.

4-04.5 Payment

(******)

Section 4-04.5 is supplemented with the following:

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

DIVISION 5
SURACE TREATMENTS AND PAVEMENTS

5-04, HOT MIX ASPHALT

5-04.1 Description

(******)

Section 5-04.1 is supplemented with the following:

The term "Approach" shall include driveway approaches, driveways, and extensions.

Superintendents, Labor, and Equipment of Contractor

Section 5-04.1 is supplemented with the following:

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

One paving superintendent
One paver operator
Two screed operators
Three roller operators
Two rakers

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

The Contractor shall anticipate an extra mobilization to pave the wearing course to finish grade after winter shut down.

5-04.3 Construction Requirements
(******)
Section 5-04.3 is supplemented with the following:

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

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

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

5-04.3(3)A Material Transfer Device / Vehicle
(November 20, 2013 APWA GSP)

The first paragraph of this section is supplemented with the following;

A material transfer device or vehicle (MTD/V) is required for all mainline paving operations.

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

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

The maximum quantity of RAP allowable in the Hot Mix Asphalt for leveling course shall be 20%. No recyclable material will be allowed in the wearing course. The Engineer shall approve the RAP stockpile prior to use.

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

5-04.3(7)A2 Statistical or Nonstatistical Evaluation
(November 20, 2013 APWA GSP)

Delete this section and replace it with the following;

5-04.3(7)A2 Nonstatistical and Commercial Evaluation

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

- Be submitted to the Project Engineer on WSDOT Form 350-042
- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9- 03.8(2) and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with WSDOT Test Method T 718 or based on historic anti-strip and aggregate source compatibility from WSDOT lab testing. Anti-strip evaluation of HMA mix designs utilized that include RAP will be completed without the inclusion of the RAP.

At or prior to the preconstruction meeting, the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The proposed mix design indicated on a WSDOT mix design/anti-strip report that is within one year of the approval date
- The proposed HMA mix design submittal (Form 350-042) with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The proposed mix design by a qualified City or County laboratory mix design report that is within one year of the approval date.

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

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

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

5-04.3(8)A1, General
(November 20, 2013 APWA GSP)

Delete this section and replace it with the following:

5-04.3(8)A1, General

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

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Project

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

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

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

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

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

i. If test results are found to be within specification requirements, additional testing will be at the engineers discretion.
ii. If test results are found not to be within specification requirements, additional testing as needed to determine a CPF shall be performed.

5-04.3(8)A5 Test Results
(November 20, 2013 APWA GSP)

The first paragraph of this section is deleted.

5-04.3(8)A6 Test Methods
(November 20, 2013 APWA GSP)

Delete this section and replace it with the following;

5-04.3(8)A6 Test Methods

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

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

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

Sealing Joints and Feather Ends

After placement of the HMA Pavement, the Contractor will seal all joints, including approaches, or
any feather ends with PG64-22 liquid asphalt and sand.

All costs associated with providing and placing the liquid asphalt as specified above shall be Incidental to and included in the unit contract price per ton for " HMA Class ½" PG 64-22".

5-04.4 Measurement

Section 5-04.4 is supplemented with the following:

"Commercial HMA" shall be performed by force account as directed by the Engineer to pave any roadway not to final grade by winter shut down.

5-04.5(1) Quality Assurance Price Adjustment

(******)

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

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

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

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

(January 16, 2014 APWA GSP)

Delete this section and replace it with the following:

The maximum CPF of a compaction lot is 1.00.

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

(******)

The CPF shall be as follows:

Compaction	CPF
90.0% to 90.9%	95%
89.0% to 89.9%	90%
88.5% to 88.9%	80%
88.0% to 88.4%	75%
At or below 87.9%	Mix is removed

DIVISION 6
STRUCTURES

6-13 STRUCTURAL EARTH WALLS

6-13.1 Description

Section 6-13.1 is supplemented with the following:

(******)

The Contracting Agency for the purpose of Engineering and Design has elected to utilize Keystone® Retaining Wall Systems, Inc. block sizes and calculations in the contract plans for the purpose of providing a common proposal for bidders. The Contractor may at its own expense

provide engineered plans (Stamped by a Professional Engineer Licensed in the State of Washington) and specifications for a different block wall manufacturer as long as they meet the requirements of the Standard Specifications and follow the widths, lengths, and elevations shown in the contract Plans and meet the criteria shown in the general special provisions shown below. Plans must be submitted and approved by the Engineer before alternate system is allowed.

6-13.2 Materials

Section 6-13.2 is supplemented with the following:

(August 3, 2015)

Concrete Block Faced Structural Earth Wall Materials

General Materials

Concrete Block

Acceptability of the blocks will be determined based on the following:

1. Visual inspection.
2. Compressive strength tests, conforming to Section 6-13.3(4).
3. Water absorption tests, conforming to Section 6-13.3(4).
4. Manufacturer's Certificate of Compliance in accordance with Section 1-06.3.
5. Freeze-thaw tests conducted on the lot of blocks produced for use in this project, as specified in Section 6-13.3(4).
6. Copies of results from tests conducted on the lot of blocks produced for this project by the concrete block fabricator in accordance with the quality control program required by the structural earth wall manufacturer.

The blocks shall be considered acceptable regardless of curing age when compressive test results indicate that the compressive strength conforms to the 28-day requirements, and when all other acceptability requirements specified above are met.

Testing and inspection of dry cast concrete blocks shall conform to ASTM C 140, and shall include block fabrication plant approval by WSDOT prior to the start of block production for this project.

Mortar

Mortar shall conform to ASTM C 270, Type S, with an integral water repellent admixture as approved by the Engineer. The amount of admixture shall be as recommended by the admixture manufacturer. To ensure uniform color, texture, and quality, all mortar mix components shall be obtained from one manufacturer for each component, and from one source and producer for each aggregate.

Geosynthetic Soil Reinforcement

Geogrid reinforcement shall conform to Section 9-33.1, and shall be a product listed in Appendix D of the current WSDOT Qualified Products List (QPL). The values of T_{al} and T_{ult} as listed in the QPL for the products used shall meet or exceed the values required for the wall manufacturer's reinforcement design as specified in the structural earth wall design calculation and working drawing submittal.

The minimum ultimate tensile strength of the geogrid shall be a minimum average roll value (the average test results for any sampled roll in a lot shall meet or exceed the values shown in Appendix D of the current WSDOT QPL). The strength shall be determined in accordance with ASTM D 6637, for multi-rib specimens.

The ultraviolet (UV) radiation stability, in accordance with ASTM D 4355, shall be a minimum of 70 percent strength retained after 500 hours in the weatherometer.

The longitudinal (i.e., in the direction of loading) and transverse (i.e., parallel to the wall or slope face) ribs that make up the geogrid shall be perpendicular to one another. The maximum deviation of the cross-rib from being perpendicular to the longitudinal rib (skew) shall be no more than 1 inch in 5 feet of geogrid width. The maximum deviation of the cross-rib at any point from a line perpendicular to the longitudinal ribs located at the cross-rib (bow) shall be 0.5 inches.

The gap between the connector and the bearing surface of the connector tab cross-rib shall not exceed 0.5 inches. A maximum of 10 percent of connector tabs may have a gap between 0.3 inches and 0.5 inches. Gaps in the remaining connector tabs shall not exceed 0.3 inches.

The Engineer will take random samples of the geogrid materials at the job site. Approval of the geogrid materials will be based on testing of samples from each lot. A “lot” shall be defined as all geogrid rolls sent to the project site produced by the same manufacturer during a continuous period of production at the same manufacturing plant having the same product name. The Contracting Agency will require 14 calendar days maximum for testing the samples after their arrival at the WSDOT Materials Laboratory in Tumwater, WA.

The geogrid samples will be tested for conformance to the specified material properties. If the test results indicate that the geogrid lot does not meet the specified properties, the roll or rolls which were sampled will be rejected. Two additional rolls for each roll tested which failed from the lot previously tested will then be selected at random by the Engineer for sampling and retesting. If the retesting shows that any of the additional rolls tested do not meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot minus the roll(s) which failed will be accepted.

All geogrid materials which have defects, deterioration, or damage, as determined by the Engineer, will be rejected. All rejected geogrid materials shall be replaced at no expense to the Contracting Agency.

Except as otherwise noted, geogrid identification, storage and handling shall conform to the requirements specified in Section 2-12.2. The geogrid materials shall not be exposed to temperatures less than –20F and greater than 122F.

Drainage Geosynthetic Fabric

Drainage geosynthetic fabric shall be a non-woven geosynthetic conforming to the requirements in Section 9-33.1, for Construction Geotextile for Underground Drainage, Moderate Survivability, Class B.

Proprietary Materials

Allan Block Wall

Wall backfill material placed in the open cells of the precast concrete blocks and placed in the one to three foot zone immediately behind the precast concrete blocks shall be crushed granular material conforming to Section 9-03.9(3).

KeyGrid Wall

KeyStone connection pins shall be fiberglass conforming to the requirements of Keystone Retaining Wall Systems, Inc.

Landmark Retaining Wall

Lock bars shall be made of a rigid polyvinyl chloride polymer conforming to the following requirements:

Property	Value	Specification
Specific Gravity	1.4 minimum	ASTM D 792
Tensile Strength at yield	2,700 psi minimum	ASTM D 638

Lock bars shall remain sealed in their shipping containers until placement into the wall. Lock bars exposed to direct sunlight for a period exceeding two months shall not be used for construction of the wall.

Mesa Wall

Block connectors for block courses with geogrid reinforcement shall be glass fiber reinforced high-density polypropylene conforming to the following minimum material specifications:

Property	Specification	Value
Polypropylene	ASTM D 4101 Group 1 Class 1 Grade 2	73 ± 2 percent
Fiberglass Content	ASTM D 2584	25 ± 3 percent
Carbon Black	ASTM D 4218	2 percent minimum
Specific Gravity	ASTM D 792	1.08 ± 0.04
Tensile Strength at yield	ASTM D 638	8,700 ± 1,450 psi
Melt Flow Rate	ASTM D 1238	0.37 ± 0.16 ounces/10 min.

Block connectors for block courses without geogrid reinforcement shall be glass fiber reinforced high-density polyethylene (HDPE) conforming to the following minimum material specifications:

Property	Specification	Value
HDPE	ASTM D 1248 Type III Class A Grade 5	68 ± 3 percent
Fiberglass Content	ASTM D 2584	30 ± 3 percent
Carbon Black	ASTM D 4218	2 percent minimum
Specific Gravity	ASTM D 792	1.16 ± 0.06
Tensile Strength at yield	ASTM D 638	8,700 ± 725 psi
Melt Flow Rate	ASTM D 1238	0.11 ± 0.07 ounces/10 min.

Backfill for Concrete Block Faced Structural Earth Wall

All backfill material within the structural earth wall reinforced zone shall be free draining, free from organic or otherwise deleterious material.

Backfill material within the reinforced zone shall conform to Section 9-03.14(4) for geosynthetic reinforcement.

All material within the structural earth wall reinforced zone shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, portland cement concrete rubble, or asphaltic concrete rubble. The material shall meet the following aggregate durability requirements:

Property	Test Method	Allowable Test Value
Los Angeles Wear, 500 rev.	AASHTO T 96	35 percent max.
Degradation	WSDOT Test Method 113	15 percent min.

For walls with geogrid soil reinforcement, all material within the structural earth wall reinforced zone shall meet the following chemical requirements:

Property	Test Method	Allowable Test Value
pH	WSDOT Test Method 417	4.5 to 9

Wall backfill material satisfying these gradation, durability, and chemical requirements shall be classified as nonagressive.

(******)

Structural Earth wall blocks for permanent walls of heights greater than 4 feet and less than 12 feet shall be cast with Class 3000 concrete minimum (concrete class shall meet the criteria outlined in items 1 thru 6 of this provision) conforming to the air content requirements as recommended by the Manufacturer. Commercial concrete shall not be used. Structural Earth wall blocks for permanent walls of these heights will be accepted based on visual inspection, and conformance to Section 6-02.3(27) and the manufacturers specified concrete strength and air content requirements or as accepted by WSDOT's Qualified Products List.

6-13.3 Construction Requirements

Section 6-13.3 is supplemented with the following:

(August 3, 2015)

Concrete Block Faced Structural Earth Wall

Concrete block faced structural earth walls shall be constructed of only one of the following wall systems. The Contractor shall make arrangements to purchase the concrete blocks, soil reinforcement, attachment devices, joint filler, and all necessary incidentals from the source identified with each wall system:

Allan Block Wall

Allan Block Wall is a registered trademark of the Allan Block Corporation

Allan Block Corporation
7424 W 78th Street
Bloomington, MN 55439
(800) 899-5309

FAX (952) 835-0013
www.allanblock.com

Redi-Rock Positive Connection System
Redi-Rock Positive Connection System is a registered trademark of Redi-Rock International, LLC

Redi-Rock International, LLC
05481 US 31 South
Charlevoix, MI 49720
(866) 222-8400
FAX (231) 237-9521
www.redi-rock.com

Mesa Wall
Mesa Wall is a registered trademark of Tensar Corporation

Tensar Corporation
2500 Northwinds Parkway Suite 500
Atlanta, GA 30009
(770) 334-2090
FAX (678) 281-8546
www.tensarcorp.com

Landmark Retaining Wall System
Landmark Retaining Wall System is a registered trademark of Anchor Wall Systems, Inc.

Anchor Wall Systems, Inc.
5959 Baker Road, Suite 390
Minnetonka, MN 55345-5996
(877) 295-5415
FAX (952) 979-8454
www.anchorwall.com

KeyGrid Wall
KeyGrid is a registered trademark of Keystone Retaining Wall Systems, Inc.

Keystone Retaining Wall Systems, Inc.
4444 West 78th Street
Minneapolis, MN 55435
(800) 747-8971
FAX (952) 897-3858
www.keystonewalls.com

6-13.3(2) Submittals

Section 6-13.3(2) is supplemented with the following:

(******)
Working drawings shall be submitted as stated in this section.

6-13.3(5) Precast Concrete Facing Panel and Concrete Block Erection

Section 6-13.3(5) is supplemented with the following:

(April 2, 2012)
Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls

Landmark Retaining Wall
When placing each course of concrete blocks, the Contractor shall pull the blocks towards the front face of the wall until the male key of the bottom face of the upper block contacts and fits into the female key of the top face of the supporting block below.

A maximum gap of 1/8-inch is allowed between adjacent concrete blocks, except for the base course set of concrete blocks placed on the leveling pad. A maximum gap of 1-inch is allowed between adjacent base course concrete blocks, provided geosynthetic reinforcement for drains is in place over the gap at the back face of the concrete blocks.

Lock bars shall be installed in the female key of the top face of all concrete block courses receiving geogrid reinforcement. Gaps between adjacent lock bars in the key shall not exceed 3-inches. The lock bar shall be installed flat side up, with the angled side to the back of the concrete block, as shown in the shop drawings.

Geogrid reinforcement shall be placed and connected to concrete block courses specified to receive soil reinforcement. The leading edge of the geogrid reinforcement shall be maintained within 1-inch of the front face of the supporting concrete blocks below. Geogrid panels shall be abutted for 100 percent backfill coverage with less than a 4-inch gap between adjacent panels.

Backfill shall be placed and compacted level with the top of each course of concrete blocks, and geogrid reinforcement placed and connected to concrete block courses specified to receive soil reinforcement, before the Contractor may continue placing the next course of concrete blocks.

Mesa Wall
For all concrete block courses receiving geogrid reinforcement, the fingers of the block connectors shall engage the geogrid reinforcement apertures, both in the connector slot in the block, and across the block core. For all concrete block courses with intermittent geogrid coverage, a #3 steel reinforcing bar shall be placed, butt end to butt end, in the top block groove, with the butt ends being placed at a center of a concrete block.

6-13.4 Measurement
Section 6-13.4 is supplemented with the following:

(******)
The price per square foot for Structural Earth Wall shall include all materials, labor and equipment costs associated with; segmental blocks, leveling pad (including grout as shown in the Contract Plans), asphalt impregnated fiberboard, geogrid and geogrid reinforcing, geotextile materials and all other wall materials not specifically paid for elsewhere.

6-13.5 Payment
Section 6-13.5 is supplemented with the following:

"Structural Earth Wall", per square foot.

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

7-02 CULVERTS

7-02.2 Materials

Section 7-02.2 is supplemented with the following:

Where shown in the Plans or stated in the Proposal (shown as From Stockpile), Culvert Pipe and Storm Sewer Pipe shall be used from the Contracting Agency furnished Stockpile site at Area 3 Maintenance Shop located at 111 Pleasant Valley Road, Winlock. Availability to the stockpile site will be Monday thru Friday 7:00 am to 3:00 pm. The couplings, gaskets, or splices shall be purchased and provided by the Contractor and shall meet the provisions of Section 9-05 of the Standard Specifications for the material furnished.

7-02.3 Construction Requirements

Section 7-02.3 is supplemented with the following:

(******)

Raised Drainage Grate

Page 52 of 127 of the Contract Plans shows the Drainage Grate Detail. The Contractor shall include all materials shown and to be constructed for this Lump Sum bid item "Raised Drainage Grate"

(******)

Bioswale Special Structures

Page 54 of 127 of the Contract Plans shows special structures the Biofiltration Swale. The Contractor shall include all materials shown and to be constructed for this Lump Sum bid item "Bioswale Special Structures".

7-02.4 Measurement

Section 7-02.4 is supplemented with the following:

"Raised Drainage Grate" shall not be measured.

"Bioswale Special Structures" shall not be measured.

(April 2, 2007)

"Precast Reinf. Conc. Split Box Culvert 8' Span x 1'Rise" contains the following approximate quantities of materials and work:

*** This Contractor furnished Concrete culvert may be split or solid and must meet HL 93 load rating. All material, equipment, delivery, labor, and incidentals shall be included in this bid item and meet the lengths, line, and grade requirements as shown in the Contract Plans. ***

"Culvert Pipe and Storm Sewer Pipe as marked in the Proposal" (From Stockpile) will include all material, couplings, gaskets, or splices, equipment, delivery, labor, and incidentals in this bid item and meet the lengths, line, and grade requirements as shown in the Contract Plans.

7-02.5 Payment

Section 7-02.5 is supplemented with the following:

"Raised Drainage Grate" per Lump Sum shall include all materials, labor, equipment, and incidentals to complete the work as shown.

"Bioswale Special Structures" per Lump Sum shall include all materials, labor, equipment, and incidentals to complete the work as shown.

(April 2, 2007)
"Precast Reinf. Conc. Split Box Culvert 8' Span x 1' Rise", lump sum.
The lump sum contract price for "Precast Reinf. Conc. Split Box Culvert 8' Span x 1' Rise" shall be full pay for performing the work as specified, including designing, fabricating, and erecting the precast concrete elements for the culvert.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.2 Materials

(******)
Section 7-08.2 is supplemented with the following:

Crushed Surfacing Base Course shall be used for Pipe Zone Bedding as depicted in the Contract Plans for the Precast Reinf. Conc. Split Box Culvert. Crushed Surfacing Base Course shall meet the material requirements of Section 9-03.9(3).

Crushed Surfacing Base Course shall be used for Pipe Zone Bedding and pipe zone backfill. Crushed Surfacing Base Course shall meet the material requirements of Section 9-03.9(3).

Gravel Borrow for Structural Earth Wall Incl. Haul shall be used for the backfill for the Precast Reinf. Conc. Three Sided Structure as shown in the Contract Plans. Gravel Borrow for Structural Earth Wall shall meet the material requirements of Section 9-03.14(4).

DIVISION 8
MISCELLANEOUS CONSTRUCTION

8-01, EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.3 Construction Requirements

(April 3, 2006)
Section 8-01.3 is supplemented with the following:

Treatment of pH for Concrete Work
Stormwater or dewatering water that has come in contact with concrete rubble, concrete pours, concrete grindings or cement treated soils shall be maintained between pH 6.5 and pH 8.5 before it is allowed to enter surface waters and discharges shall not cause a receiving water pH change of more than 0.2 pH units.

The Contractor shall test runoff during each rain event causing runoff to leave the project site during concrete pouring, grinding, rubblizing activities, when soils are being treated with cement and during the first three storms following those activities. If discharging directly to surface waters or to a storm sewer system, the Contractor shall test the pH of the water, as a first order of work, at

the point of discharge, once the pour or grinding has begun for each shift, and periodically, as requested by the Engineer, thereafter. If a test indicates the pH is above 8.5, the Contractor shall immediately discontinue work and initiate treatment according to the plan to lower the pH.

Unless specific measures are identified in the Special Provisions, the pH of water may be reduced by infiltration, dispersion in vegetation or compost, or by pumping to a sanitary sewer system. If water is pumped to the sanitary sewer, the Contractor shall provide, at no cost to the Contracting Agency, a copy of permits and requirements for placing the material into a sanitary sewer system prior to beginning the work.

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

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

8-01.3(1) General

(April 3, 2006)

8-01.3(1)A Submittals

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

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

(******)

Erosion Control at Culvert Ends

See WSDOT Standard Plan I-30.20-00 for erosion control protection at culvert ends.

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

(******)

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

The Contractor shall retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator; or on-site review by the Department of Ecology or the local jurisdiction:

a. Site Log Book

A Certified ESC Lead shall be identified for the project and shall be present on-site or on-call at all times.

Site inspections shall include all areas disturbed by construction activities, all BMP's, and all stormwater discharge points. Stormwater shall be visually examined for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Certified ESC Lead shall evaluate the effectiveness of BMP's and determine if it is necessary to install, maintain, or

repair BMP's to improve the quality of the stormwater discharges. If such corrections are necessary, the Contractor shall implement the following procedure:

a. Fully implement and maintain appropriate source control and/or treatment BMP's as soon as possible, but no later than 10 days of the inspection;
b. Document BMP implementation and maintenance in the site log book.

The Certified ESC Lead shall summarize the results of each inspection in an inspection report or checklist. This report or checklist shall be entered into, or attached to, the site log book. At a minimum, each inspection report or checklist shall include:

a. Inspection date and time;
b. Weather information; general conditions during inspection and approximate amount of precipitation since the last inspection, and within the last 24 hours.
c. A summary of all BMP's which have been implemented, including observations of all erosion/sediment control structures or practices;
d. The following shall be noted:
    i. Locations of BMP's inspected;
    ii. Locations of BMP's that need maintenance;
    iii. The reason maintenance is needed;
    iv. Locations of BMP's that failed to operate as designed or intended;
    v. Locations where additional or different BMP's are needed, and the reasons why;
e. A description of stormwater discharged from the site. The certified ESC Lead shall note the presence of suspended sediment, turbid water, discoloration, and/or oil sheen, as applicable;
f. Any water quality monitoring performed during inspection;
g. A statement that, in the judgement of the certified ESC Lead conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the permits in place. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, as well as a schedule of Lead conducting the site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief".

The Contractor through the Certified ESC Lead will be responsible for conducting all stormwater sampling and monitoring required by Ecology. The Certified ESC Lead shall be responsible for the preparation of a monthly discharge monitoring report (DMR) to the Contracting Agency that will be forwarded to Department of Ecology. Prior to the beginning of construction the Certified ESC Lead, Project Inspector and Environmental Planner shall meet in the field to stake any monitoring points, as depicted on the TESC plans, as well as, associated points as which to collect background readings, if necessary. The Certified ESC Lead shall be responsible for the preparation of a monthly discharge monitoring report (DMR) and submission of these reports to Lewis County by the 5th day of the subsequent month. Lewis County will then enter this information into WebDMR and submit to Department of Ecology. The Contractor shall follow the instructions contained in the most recent version of the Department of Ecology's Publications - No. 99-37, and No. 06-10-020 in meeting these requirements.

(******)

As per the TESC Plan, the weekly Stormwater Site inspection form shall be turned in by the end of the next working day. Failure to submit accurate completed weekly forms or DMR forms as

required to the Engineer may result in project shutdown as determined by the Engineer, which includeds loss of workday.

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

8-01.3(2)B Seeding and Fertilizing

(******)

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

Seed Mix - Erosion Control Seed: Grass seed, of the following composition, proportion, and quality shall be applied at a rate of ***80*** pounds of pure live seed per acre on all areas requiring temporary and permanent seeding within the project limits, with the exeption of detention ponds and bioswales.

Kind and Variety of Seed in Mixture by Common Name and (Botanical name)	Pounds Pure Live Seed (PLS) Per Acre
Lolium perenne Perennial Rye	60
Festuca rubra Red Fescue	17
Trefolium repens White Dutch Clover (preinoculated)	3
Total Pounds PLS Per Acre	80

Seed Mix –Detention Pond Mix : Grass seed, of the following composition, proportion, and quality shall be applied at the rate of ***100 *** pounds of pure live seed per acre within all detention ponds and bioswales within the project limits.

Kind and Variety of Seed in Mixture by Common Name and (Botanical name)	Pounds Pure Live Seed (PLS) Per Acre
Agrostis exarata Spike bentgrass	6
E 5 Canada reed	
Carex obnupta Slough sedge	39
Deschampsia caespitosa Tufted hiargrass	17

Eleocharis palustris Spike rush	21
Glyceria occidentalis Western manna grass	15
Juncus ensifolius Daggerleaf rush	5
Total Pounds PLS Per Acre	100

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

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

Fertilizer (Seeding Operation)
The following shall be applicable to the following permanent seed mixes only: Erosion Control Seed.

Fertilizer shall not be applied to Temporary seed mixes.
The Contractor shall apply sufficient quantities of fertilizer to supply the following amounts of nutrients at the time of initial seeding:

- Total Nitrogen a N – 135 pounds per acre.
- Available Phosphoric Acid as P2O5 – 60 pounds per acre.
- Soluble Potash as K2O – 60 pounds per acre.

Ninety pounds of nitrogen applied per acre shall be derived from isobutylidene diurea (IBDU), cyclo-di-urea (CDU), or a time release, polyurethane coated source with a minimum release time of six months. The remainder may be derived from any source.

The fertilizer formulation and application rate shall be approved by the Engineer prior to use.

Note: The Contractor shall anticipate multiple mobilizations for application of seeding to meet the needs as outlined in Section 8-01.3(1) and Section 8-01.3(2)F of the Standard Specifications.

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

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

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

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

PAM shall be added to permanent erosion control and temporary seed mixes (including detention ponds and bioswales) at the time of hydraulic application. Application rates and methods shall conform to Section 8-01.3(2)E of the Standard Specifications.

8-01.3(3) Placing Biodegradable Erosion Control Blanket

(******)

Section 8-01.3(3) is supplemented with the following:

The Contractor shall place Biodegradable Erosion Control Blanket for bioswales (Section 9-14.5(2)B, 9-14.5(2)C, or 9-14.5(2)D of the Standard Specifications) where shown in the plans. Prior to placing Erosion Control Blanket the Contractor shall hand seed or hydroseed the area with seed mix as described in this Special Provision.

8-01.3(2)I Mowing

(******)

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

Mowing shall occur within the riparian buffer mitigation area, near the start of project (from Olequa Creek to Sta 3+00), in late September (between September 16th and September 23rd). If grass is at a height of greater than 3 inches prior to planting, an additional mowing shall occur within 2 weeks prior to planting.

8-01.5 Payment

(******)

Section 8-01.5 is supplemented with the following:

The unit contract price per Linear Foot (L.F.) for "Silt Fence" shall be full pay for all cost to obtain, install, maintain, and remove the fence as specified. Once removed, the fencing shall remain the property of the Contractor.

The contract unit bid price per day for "ESC Lead" shall be full compensation for all requirements necessary for the ESC Lead to achieve compliance with the specifications, SWPPP, SPCC Plan and TESC Plan and requirements and these special provisions, no additional compensation shall be allowed.

The unit contract price per acre for "Seeding, Fertilizing, and Mulching" shall be full pay for furnishing and installing the specified seed mix, mulch, and PAM, chemical weed and grass control/removal immediately prior to seeding to produce the specified surface conditions, scarification of compacted areas, minor filling of ruts, and all material and equipment necessary and incidental to the approved application of the specified seed.

The unit contract price per square yard for "Biodegradable Erosion Control Blanket" shall be full pay for furnishing and installing the specified Biodegradable Erosion Control Blanket and seed mix. The seed mix shall be considered incidental to this bid item.

8-02 ROADSIDE RESTORATION

8-02, ROADSIDE RESTORATION

8-02.1 Description

(******)
8-02.1 is supplemented with the following:

Riparian Buffer Mitigation
The riparian buffer mitigation areas are to include a 0.26 acre area surrounding detention pond 1, near the start of project (from Olequa Creek to Sta 3+00) as well as a 1.428 acre area adjacent to Highway 603 (from Sta 13+00 to Sta 19+50) as depicted in the TESC Plan and Riparian Buffer Mitigation Plan.

The work described in this section, regardless of the nature or type of the materials encountered, includes site preparation, seeding, and planting, as outlined Section 8-01 and 8.02 of these Special Provisions, and all work associated with the protection and maintenance of plants within riparian buffer mitigation areas as shown in the contract plans, staked in the field, and directed by the Engineer, and/or as outlined Section 8-02 of these Special Provisions. This work shall be accomplished in accordance with all environmental permits regulating the work.

8-02.3 Construction Requirements

8-02.3(1) Responsibility During Construction
(******)
8-02.3(1) is supplemented with the following:

The Contractor shall selectively clear, mow, seed, plant, and otherwise maintain areas as shown in the Contract Plans, staked in the field, and required by the Engineer. The planting of the riparian buffer mitigation sites shall be performed by a biologist, horticulturist, landscape architect or other similar professional certified and trained in the creation and planting of riparian buffers. The credentials of the supervisor of this work shall be approved by the Engineer prior to beginning work on this item.

8-02.3(3)A Planting Area Weed Control
(******)
Section 8-02.3(3)A is supplemented with the following:

The rirapiran buffer enhancement areas shall be cleared of invasive *Rubus armeniacus* (Himalayan blackberry), *Rubus laciniatu*s (evergreen blackberry) and *Cytisus scoparius* (Scotch broom) prior to planting. These areas shall be maintained so that the aforementioned invasive species do not exceed 25% coverage.

8-02.3(2)A Chemical Pesticides
Section 8-02.3(2)A is supplemented with the following:

(******)
No chemical pesticides shall be used within 100 feet of onsite streams, wetlands and Olequa Creek.

8-02.3(4)A Topsoil Type A
Section 8-02.3(4)A is supplemented with the following:

Soil Mix
The planting soil mix shall be a highly permeable soil with 65% to 70% loamy sand per USDA Soil Textural Classification and 30% to 35% compost; or a commercial compost or vegetable mix. Contractor shall provide name of soil mix and supplier, and provide a two cubic foot sample to the engineer.

On site soil mixing or placement is not allowed if soil is saturated or subject to water within 48 hours. The soil mixture should be uniform, free of stones, stumps, roots, or other man-made or natural objects larger than 2 inches. Manufactured inert material (plastic, concrete, ceramics, ect.) shall be less than 1% on a dry weight or volume basis.

Compost must meet the definition for "composted materials" in WAC 173-350, Section 220; and have a pH between 5.5 and 7.0. Metals shall be within the limits in the following table.

Metal	Limit (mg/kg Dry Weight)
Arsenic	≤ 20 ppm
Cadmium	≤ 10 ppm
Copper	≤ 750 ppm
Lead	≤ 150 ppm
Mercury	≤ 8 ppm
Molybdenum	≤ 9 ppm
Nickel	≤ 210 ppm
Selenium	≤ 18 ppm

8-02.3(5) Planting Area Preparation

Section 8-02.3(5) is supplemented with the following:

(******)

Prior to planting the riparian buffer mitigation area the area will be cleared of invasive blackberries and scotch broom.

8-02.3(7) Layout of Planting

(******)

8-02.3(7) is supplemented with the following:

All proposed planting shall be considered in the proposed planting layout. Plants shall be installed at 14-ft on center in the proposed planting layout. Within riparian buffer zone 1, the 0.26 acre site, surrounding detention pond 1 (from Olequa Creek to Sta 3+00), a mix of 55 deciduous and conifer species shall be planted. Within riparian buffer zone 2, adjacent to Highway 603 (Sta 13+00 to 19+50) 100 conifer trees shall be planted within stands of young alders and maples.

Planting zones shall be as follows:

Planting Zone	Scientific Name	Common Name	Type	Size of Plants (Material)	Planting Density (Spacing)	Proportion of Planting in Strata (%)	Number of Plants
Riparian Buffer Mitigation Zone 1	*Alnus rubra*	Red Alder	T	1 gallon container	14' centers	25	14
	Cornus sericea	Red Osier Dogwood	T	1 gallon container	14" centers	10	6
	Populus balsamifera	Black Cottonwood	T	1 gallon container	14" centers	25	14
	Pseudotsuga menziesii	Douglas Fir	T	1 gallon container	14' centers	20	11
	Thuja plicata	Western Red Cedar	T	1 gallon container	14' centers	20	10
Riparian Buffer Mitigation Zone 2	*Pseudotsuga menziesii*	Douglas Fir	T	2 gallon container	14' centers	40	40
	Thuja plicata	Western Red Cedar	T	2 gallon container	14' centers	60	60

To be included in the Mitigation Planting are 14 Arbor Vitae (eight feet tall above root ball) as shown on Contract Plan Sheet 4 of 127, Construction Note 6.

8-02.3(13) Plant Establishment

(******)

8-02.03(13) is supplemented with the following:

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

Plant Protectors shall be placed around all tree species. Plant protectors shall be made of solid flexible plastic and should be held in place with bamboo or wood stakes. Plant protectors shall be installed to a depth of three inches below the soil surface and extend nine to twelve inches above the surface. Stakes should extend a minimum two inches below and minimum two inches above the plant protector and be placed 2 to 3 inches away from the plant. Plant protectors shall be secured to stakes with a minimum of two zip ties or equivalent.

8-02.3(14) Plant Replacement

(******)

8-02.03(14) is supplemented with the following:

Monitoring stakes will be installed to a depth of 18 inches. Monitoring stakes should be three to six feet above grade. The top six inches of the monitoring stakes shall be painted, with permanent paint (anticipated to last a period of 5 years) using the table provided below, to aid in identification of dead and/or missing species.

ID	Species	Color
1	*Alnus rubra*	Red
2	*Cornus sericea*	Red w black line
3	*Populus balsamifera*	Black
4	*Pseudotsuga menziesii*	Green
5	*Thuja plicata*	Yellow

8-02.3(16)A Lawn Installation

(******)

8-02.03(16)A is supplemented with the following:

Topsoil Type A shall be placed 6-in. deep prior to placing sodded lawns.

8-02.4 Measurement

(******)

8-02.4 is supplemented with the following:

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

8-02.5 Payment

(******)
8-02.5 is supplemented with the following:

"Mitigation Planting" per Lump Sum.
The unit contract price per Lump Sum for "Mitigation Planting" for the Riparian Buffer Mitigation Construction shall be full compensation for selective clearing, mowing, seeding, furnishing and installing all plants, plant protectors, and monitoring stakes - as described in Special Provisions Section 8-01 and Section 8-02. Material descriptions and construction requirements are as described in this Special Provision and Sections 8-01, 8-02 of the Special Provisions and as shown in the Contract Plans. The long term monitoring and maintenance (after one-year plant guarantee period) shall be done by others.

8-11, GUARDRAIL

8-11.3 Construction Requirements

8-11.3(1) Beam Guardrail
Section 8-11.3(1) is supplemented with the following:

(April 5, 2010)
This project may contain a mixture of steel and wood posts. The bidder is advised that post selection shall be as detailed in the plans and these specifications.

8-23, TEMPORARY PAVEMENT MARKINGS

8-23.4 Measurement
(******)
Section 8-23.4 is revised to read:

No measurement will be made for Temporary Pavement Markings.

8-23.5 Payment
(******)
Section 8-23.5 is revised to read:

All costs for furnishing, installing, maintaining, and removing Temporary Pavement Markings shall be included in the cost of HMA Class ½" PG 64-22.

DIVISION 9
MATERIALS

9-03 AGGREGATES

(January 5, 2004)

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

ESAL's
The number of ESAL's for the design and acceptance of the HMA shall be *** 1.0 *** million.

9-03.8(7) HMA Tolerances and Adjustments

(******)

Delete item 1 and replace it with the following:

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

	Nonstatistical Evaluation	**Commercial Evaluation**
Aggregate, percent passing 1", ¾", ½", and 3/8" sieves	±6%	±8%
U.S. No. 4 sieve	±6%	±8%
U.S. No. 8 sieve	±4%	±8%
U.S. No. 16 sieve	±4%	±8%
U.S. No. 30 sieve	±4%	±8%
U.S. No. 50 sieve	±4%	±8%
U.S. No. 100 sieve	±4%	±8%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%
VMA	1.5% below minimum value in 9-03.8(2)	
VFA	min. and max. as listed in 9-03.8(2)	
Va	2.5% minimum and 5.5% maximum	

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

POWER EQUIPMENT

(******)

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

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

E-VERIFY

(******)

"Effective June 21st, 2010, all contracts with a value of ≥ $100,000 shall require that the awarded contractor register with the Department of Homeland Security E-Verify program. Contractors shall have sixty days after the execution of the contract to register and enter into a Memorandum of Understanding (MOU) with the Department of Homeland Security (DHS) E-Verify program. After completing the MOU the contractor shall have an additional sixty days to provide a written record on the authorized employment status of their employees and those of any sub-contractor(s) currently assigned to the

contract. Employees hired during the execution of the contract and after submission of the initial verification will be verified to the county within 30 days of hire, as reported from the E-Verify program. The contractor will continue to update the County on all corrective actions required and changes made during the performance of the contract."

BOND

(******)

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

LEWIS COUNTY ESTIMATES AND PAYMENT POLICY

(******)

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

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

Upon completion of all work described in this Contract, the Contracting Agency shall prepare a Final Progress Payment and Final Contract Voucher for approval by the Contractor and processing for final payment. Release of the Contract Bond will be 60 days following Contracting Agency Final Acceptance of Contract, provided the conditions of Section 1-03.4 and Section1-07.2 of these Special Provisions have been satisfied.

APPENDICES

(July 12, 1999)

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

****** APPENDIX A:
Washington State Prevailing Wage Rates
Wage Rate Supplement
Wage Rate Benefit Code Key
Federal Wage Rates

APPENDIX B:
Required Contract Provisions Federal-Aid Construction Contracts – FHWA 1273
Amendment Required Contract Provisions Federal-Aid Construction Contracts

APPENDIX C:
Bid Proposal Documents

APPENDIX D:
Contract Documents

APPENDIX E:
Permit Documents

APPENDIX F:
Temporary Traffic Control Plans

APPENDIX G:
Righr of Way agreements
Right of Way Plans

APPENDIX H:
Standard Plans
Contract Plans ******

(JANUARY 4, 2016)
STANDARD PLANS

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 15-048, effective August 3, 2015 is made a part of this contract.

The Standard Plans are revised as follows:

A-30.15
DELETED

A-50.10
Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20
Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

A-50.30
Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.10

B-10.20 and B-10.40
Substitute “step” in lieu of “handhold” on plan

B-15.60
Table, Maximum Knockout Size column, 120” Diam., 42” is revised to read; 96”

B-25.20
Add Note 7. See Standard Specification Section 8-04 for Curb and Gutter requirements

B-55.20
Metal Pipe elevation, title is revised to read; “Metal Pipe and Steel Rib Reinforced Polyethylene Pipe”

B-90.40
Offset & Bend details, add the subtitle, “Plan View” above titles

C-8b
Section A, callout, was – “Grout” is revised to read; “Grout ~ 2” (IN) MAX., callout, was – “Anchor Bolt (TYP.) ~ See Detail” is revised to read; “Anchor Bolt or Rod (TYP.) ~ See Detail”, Sheet 2, Detail “A”, callout, was – “Anchor Bolt (TYP.) ~ See Detail”, is revised to read; “Anchor Bolt or Rod (TYP) ~ See Detail”. Anchor Bolt Detail, DELETED – Headed Bolt DETAIL portion of the ANCHOR BOLT DETAIL. Dimension, “5 1/2" MIN. Threads” is deleted. Add dimension, “1” MAX.” from top of barrier to bottom of the nut, Callout, was – “1” Diam. Threaded Rod ~ ASTM A 419” is revised to read; “1” (IN) Diam. Threaded Full Length Rod or Bolt ~ ASTM F 1554, Grade 105”. Note (Below Title), was – “Galvanize Exposed Anchor Rod End 1’ – 9” Min.” is revised to read; “Galvanized Anchor Bolt Full Length according to ASTM F 2329”. Subtitle – was “Threaded Rod” is revised to read; “Threaded Rod or Bolt”, Sheet 2,

Anchor Plate detail, callout, was – 1" DIAM. HOLE (TYP.)" IS REVISED TO READ; "1 1/8" (IN) DIAM. HOLE (TYP.)" , callout, was – "/2" Plate" is revised to read;"1/2" (IN) Plate ~ ASTM A36

C-1
Assembly Detail, Steel Post, (post) callout – was - "W6 x 9 or W6 x 15" is revised to read; "W6 x 8.5 or W6 x 9 or W6 x 15"

C-10
General Note 1, first sentence, was – "Length of W8 x 35 and W6 x 9 shall be determined by measurement from top of ground to top of grout pad." Is revised to read; "Length of W8 x 35 and W6 x 8.5 or W6 x 9 shall be determined by measurement from top of ground to top of grout pad."
Sheet 1, Post Base Plate Detail, callout, was – "W6 x 9" is revised to read; "W6 x 8.5 or W6 x 9"
Sheet 1, Box Culvert Guardrail Steel Post Type 2 detail, callout, was – "W6 x 9 Steel Post" is revised to read;" "W6 x 8.5 or W6 x 9 Steel Post"
Sheet 1, Post Anchor Attachment Detail, callout, was – "W6 x 9 ~ See Note 1" is revised to read; "W6 x 8.5 or W6 x 9 ~ See Note 1"
Sheet 1, Detail A, callout, was – "W6 x 9 Steel Post ~ See Note 1" is revised to read; "W6 x 8.5 or W6 x 9 Steel Post ~ See Note 1"
Sheet 2, Box Culvert Guardrail Steel Post Type 1, callout, was – "W6 x 9 x 27.5" Steel Post" is revised to read; "W6 x 8.5 x 27.5" (IN) or W6 x 9 x 27.5" (IN) Steel Post"
Sheet 2, Detail B, callout, was – "W6 x 9 x 27.5" Steel Post" is revised to read; "W6 x 8.5 x 27.5" (IN) or W6 x 9 x 27.5" (IN) Steel Post"

C-16a
Note 1, reference C-28.40 is revised to C-20.10

C-16b
Note 3, reference C-28.40 is revised to C-20.10

C-22.14
Plan, callout, was – "Location of Post (Without Block) ~ W6 x 9 Steel Post Only" is revised to read; "Location of Post (Without Block) ~ W6 x 8.5 or W6 x 9 Steel Post Only"
Elevation, callout, was – "Location of Post (Without Block) ~ W6 x 9 Steel Post Only" is revised to read; "Location of Post (Without Block) ~ W6 x 8.5 or W6 x 9 Steel Post Only"

C-22.45
Note 1, was – "This Terminal is FHWA accepted at Test Level Two (TL-2) and may be used in applications with speeds of 40 MPH or less." Is revised to read: "This Terminal is FHWA accepted at Test Level Two (TL-2) and may be used in applications with speeds of 45 MPH or less." Plan Title, was – "Beam Guardrail Type 31 Non – Flared Terminal Steel Posts (Posted Speed ~ 40 MPH and Below)" is revised to read: "Beam Guardrail Type 31 Non – Flared Terminal Steel Posts (Posted Speed ~ 45 MPH and Below

D-10.10
Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in

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

D-10.15
Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.20
Wall Type 3 may be used in all cases. The last sentence of Note 6 on Wall Type 3 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

D-10.25
Wall Type 4 may be used in all cases. The last sentence of Note 6 on Wall Type 4 shall be revised to read: The seismic design of these walls has been completed using a site adjusted (effective) peak ground acceleration of 0.32g.

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

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

D-10.40
Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45
Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

D-15.10
STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls” are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.20
STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls” are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.30

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

F-10.12
Section Title, was – “Depressed Curb Section” is revised to read: “Depressed Curb and Gutter Section”

F-10.40
“EXTRUDED CURB AT CUT SLOPE”, Section detail - Deleted

F-10.42
DELETE – “Extruded Curb at Cut Slope” View

G-24.40
Sheet 1, Elevation (upper left corner), callout, was – “Sign Brace~ 36” (IN) or larger in width required (See Standard Plan G-50.10)” is revised to read; “Sign Brace (See Standard Plan G-50.10)” Sheet 3, Elevation (upper left corner), callout, was – “Sign Brace~ 36” (IN) or larger in width required (See Standard Plan G-50.10)” is revised to read; “Sign Brace (See Standard Plan G-50.10)”

H-70.20
Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

I-80.10
Stabilized Construction Entrance, Isometric View, add Note to read; “Note: At the discretion of the contractor, smaller rock may be used to fill in voids between the quarry spalls to create a walking pathway for crossing the construction entrance.”

J-3
DELETED

J-3b
DELETED

J-3C
DELETED

J-10.21
Note 18, was – “When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details.” Is revised to read; “When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details.”

J-10.22
Key Note 1, was – “Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305.” Is revised to read; “Meter base per serving utility

requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel."
Key Note 4, "Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt "T" rated). Is revised to read: "Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt "T" rated)."
Key Note 14, was – "Hinged dead front with ¼ turn fasteners or slide latch." Is revised to read; "Hinged dead front with ¼ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s)."
Key Note 15, was – "Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b." is revised to read; "Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details."

J-20.10
Add Note 5, "5. One accessible pedestrian signal assembly per pedestrian pushbutton post."

J-20.11
Sheet 2, Foundation Detail, Elevation, callout – "Type 1 Signal Pole" is revised to read: "Type PS or Type 1 Signal Pole"
Sheet 2, Foundation Detail, Elevation, add note below Title, "(Type 1 Signal Pole Shown)"
Add Note 6, "6. One accessible pedestrian signal assembly per pedestrian pushbutton post."

J-20.26
Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

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

J-21.10
Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR.. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.
Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.
Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.
Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

J-21.15
Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-21.16
Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15
Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0"
(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½" DIAM. is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-28.45
Steel Light Standard Elbow Detail, dimension, was – "1-1/2" MAX." is revised to read; 2" MAX.. callout, was – "1.00 – 8 UNC x 8" (IN) long bolt threaded full length (ASTM A325 or F1554 GR. 105) with two heavy hex nuts, two plate washers, and a round washer (Typ.) (Galvanized AASHTO M232)"is revised to read; "1.00 – 8 UNC x 8 1/2" (IN) long bolt threaded full length (ASTM A325 or F1554 GR. 105) with two heavy hex nuts, two plate washers, and a round washer (Typ.) (Galvanized per AASHTO F2329)". callout, was – "3/16" (IN) thick preformed "Fabreeka" fabric pad with 5" (IN) diam. hole ~ cement to flange plate and trim outside edge flush" is revised to read; "3/16" (IN) or 1/4" (IN) thick preformed "Fabreeka" fabric pad with 5" (IN) diam. hole ~ cement to flange plate and trim outside edge flush". Exploded Isometric View, callout, was – "1" (IN) Diam. Heavy Hex Bolt (Typ.)" is revised to read;1" Diam. Bolt (Typ.). Section B, callout, was – "3 1/2" (IN) x 3/16" (IN)(17" (IN)…" is revised to read; "4" (IN) x 3/16" (IN)(17" (IN)…". Typical Sections, two traffic barrier views, add dimension [from the top of the pole base plate to the bottom of the Hand Hole]"6" MIN.". all three views, callout, was – "1" (IN) Diam. H. S. bolt w/ hardened lock washer and nut (Typ.) (ASTM A325 or F1554 GR. 105)" is revised to read; "1" (IN) Diam. H. S. bolt w/ hardened lock washer and nut (Typ.) (ASTM A449 or F1554 GR. 105)".

J-28.50
Section D, callout, was – Backup Strip (ref. to key note 3) is revised to read; "Continuous Backup Strip (ref. to key note 3)"
Key Note 3, was – ¼" Thick, or No thinner than pole wall thickness. Tack weld or seal weld to Base plate. Is revised to read; "1/4" Thick, or No thinner than Pole wall thickness. Tack weld in root or continuous seal weld to Base plate or Pole wall."

J-28.60
Section B, callout, was – "Continuous Back-up ring – 1/4" or no thinner than pole wall thickness ~ tack weld to plate" is revised to read; "Continuous Back-up ring ~ 1/4" or no thinner than pole wall thickness ~ tack weld in root or continuous seal weld to base plate or pole wall"

J-28.70
Detail C, dimension, 2" MAX. is revised to read: 1" MAX.
Detail D, dimension, 2" MAX. is revised to read: 1" MAX.

J-29.10

Galvanized Welded Wire Mesh detail, callout – “Drill and Tap for ¼” Diam. Cap Screw, 3 Places, @ 9” center, all 4 edges S.S. Screw, ASTM F593 and washer”
Is revised to read;
“*Drill and Tap ¼” (IN) Diam. x 1” (IN) Cap Screw with washer ~ space approx.. 9” o.c. ~ Liberally coat threads with Anti-seize compound (TYP.)”

Add Boxed note: * Bolts, Nuts, and washers ~ ASTM F593 or A193 Type 304 or Type 316 Stainless Steel (S.S.)

J-29.15
Title, “Camera Pole Standard” is revised to read; “Camera Pole Standard Details”

J-29-16
Title, “Camera Pole Standard Details” is revised to read; “Camera Pole Details”

J-40.10
Sheet 2 of 2, Detail F, callout, “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 12” S. S. FLAT WASHER” is revised to read; “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 1/2” (IN) S. S. FLAT WASHER”

J-60.14
All references to J-16b (6x) are revised to read; J-60.11

J-90.10
Section B, callout, “Hardware Mounting Rack ~ S. S. 1-5/8” Slotted Channel” is revised to read: “Hardware Mounting Rack (Typ.) ~ Type 304 S. S. 1-5/8” Slotted Channel”

J-90.20
Section B, callout, “Hardware Mounting Rack (Typ.) ~ S. S. 1-5/8” Slotted Channel” is revised to read: “Hardware Mounting Rack (Typ.) ~ Type 304 S. S. 1-5/8” Slotted Channel”

K-80.10
Sign Installation (Fill Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Sidewalk and Curb Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Behind Traffic Barrier Section), Delete dimensions - 6’ TO 12’ MIN. and 6’ MIN.
Sign with Supplemental Plaque Installation (Fill Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN.
Sign Installation (Ditch Section), dimension, 6’ TO 12’ MIN. is revised to read: 12’ MIN. Delete dimension – 6’ MIN.

K-80.30
In the NARROW BASE, END view, the reference to Std. Plan C-8e is revised to Std. Plan K-80.35

M-11.10
Layout, dimension (from stop bar to “X”), was – 23’ is revised to read; 24’

M-20.30

Sheet 2, Plan View, One-Way Roadway Recessed Pavement Marker Details, ONE-WAY TRAFFIC arrow symbol, is revised to point in the opposite direction (towards the rpm)

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

A-10.10-00.....8/7/07
A-10.20-00.....10/5/07
A-10.30-00.....10/5/07
A-20.10-00.....8/31/07
A-30.10-00.....11/8/07
A-30.30-01.....6/16/11
A-30.35-00.....10/12/07
A-40.00-00.....8/11/09
A-40.10-03.....12/23/14
A-40.15-00.....8/11/09
A-40.20-03.....12/23/14
A-40.50-02.....12/23/14
A-50.10-00…....11/17/08
A-50.20-01…....9/22/09
A-50.30-00…....11/17/08
A-50.40-00…....11/17/08
A-60.10-03.....12/23/14
A-60.20-03.....12/23/14
A-60.30-00.....11/8/07
A-60.40-00.....8/31/07

B-5.20-01.....6/16/11
B-5.40-01.....6/16/11
B-5.60-01.....6/16/11
B-10.20-01.....2/7/12
B-10.40-00.....6/1/06
B-10.60-00.....6/8/06
B-15.20-01.....2/7/12
B-15.40-01.....2/7/12
B-15.60-01.....2/7/12
B-20.20-02.....3/16/12
B-20.40-03.....3/16/12
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