

November 20, 2023 GSP Official Update Package & 2023 Standard Specifications Publication

The following contains the GSPs that consist of the November 20, 2023 update package. Only the changed documents are included in this package and any unchanged sections from the last update are not included. To view all GSPs, please visit our website: <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/general-special-provisions-gsps>.

The package is set up with three parts. The first part is a memo containing a listing of the revisions to the Standard Specifications that are included in the 2023 publication, available for download at: <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/standard-specifications-road-bridge-and-municipal-construction>. The second part is an itemized list of the GSP file names, file types, and a brief description of the change. The third part is a memo detailing the changes in the GSPs, followed by track changes versions of the indexes and GSPs that are being updated. Please use the PDF bookmarks to navigate around this update package electronically.

If you choose to print this package, we suggest printing double sided to save paper and it is formatted to start new sub-sections on the right-hand page.

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2024 Standard Specifications Updates

Please note: The following is a brief description of the latest updates that are being published in the 2024 Standard Specifications. The updated Sections should be reviewed in depth to become completely knowledgeable of the full extent of the revisions. Any Sections not listed below are unchanged from the 2023 Standard Specifications.

The 2024 Standard Specifications Book is effective for all WSDOT projects advertised on or after Monday, November 20, 2023.

Minor changes are not listed. The following are considered minor changes:

- Fixing errors regarding capitalization, punctuation, and spelling
- Removing the word “any” when it is not needed
- Changing the word from “any” to “all” where applicable
- Changing the word from “which” to “that” where applicable.

DIVISION 1 – General Requirements

1-01.2(1) Abbreviations and Miscellaneous

Added an abbreviation for DMCS.

1-01.3 Definitions

Added a definition for Freeway, Pathway, and Trail. (Also these words were capitalized throughout the book)

1-02.6 Preparation of Proposal

The revisions to this section move the Delivery of DBE forms into GSP 1-02.6.OPT2.GR1.

1-02.13 Irregular Proposals

GSP 1-02.13.OPT1.2024.GR1, which added SVBE Forms into this section, is incorporated into the Standard Specifications. This GSP will also be subsequently deleted as part of this update package.

1-05.3 Working Drawings

Working Drawing Licensure WACs are updated to include WAC 308, which includes additional professions.

1-06.1(4) Fabrication Inspection Expense

In Table 1, the term *culvert* is revised to *Structures*. This revision aligns with a new Standard Plan for Buried Structures.

1-06.6 Recycled Materials

In the second paragraph, corrected the Section number reference to the Table for Maximum Allowable percent (By Weight) of Recycled Material.

1-07.7(2) Load-Limit Restrictions

The term *culvert* is revised to *Structures*. This change aligns with a new Standard Plan for Buried Structures.

1-07.18(1) Insurance Provider Requirements

GSP 1-07.18(1).OPT1.2024.GR1, which restricted the use of wrap up policies, is incorporated into the Standard Specifications. This GSP will also be subsequently deleted as part of this update package.

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1-07.23(1) Construction Under Traffic

Added new subsections **1-07.23(1)A, Drop-Offs** and **1-07.23(1)A1, General Requirements**. Item number 6 is moved under the new subsection **1-07.23(1)B, Open Trenches**, and addresses both general requirements and steel plate requirements. Subsections **1-07.23(1)B1, General Requirements, 1-07.23(1)B2, Steel Plates, 1-07.23(1)B3, Signing**, and **1-07.23(1)B4, Submittals** are added as well.

1-08.1(7)A Payment Reporting

This section is retitled from *Payment Certification* to *Payment Reporting* and is rewritten to reflect actual DMCS process. Added that a Contractor's report of actual amount paid is due no later than the 20th of the month for payments in the prior month.

1-08.3 Progress Schedule

Section on progress schedules is reorganized and the Type C schedule is incorporated into the Standard Specifications. Preliminary schedule due date is changed from 5 days after execution of Contract to 10 days after execution of contract.

1-08.8 Extensions of Time

In the third paragraph, item number 5(h) is added regarding extensions of time for changes to railroad restrictions. Previous item numbers 5(h), 5(i), and 5(j) become 5(i), 5(j), and 5(k), respectively.

1-09.1 Measurement of Quantities

This revises the reference from AASHTO M 32 to AASHTO M 336M.

1-09.2(1)A1 Equipment

The revision to this section no longer allows for photos of tickets.

1-09.6 Force Account

The revisions to this section update markups and allowable services.

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

GSP 1-10.3(3)K.OPT1.2024.GR1 is incorporated into the Standard Specifications. This GSP will also be subsequently deleted as part of this update package.

DIVISION 2 – Roadway Excavation and Embankment

2-09.2 Materials

Lean concrete and pea gravel are added to the materials. Additionally, a statement is added that pea gravel will be accepted by visual inspection.

2-09.3(1)E Backfilling

Added lean concrete Type 1 as an acceptable backfill material.

2-09.3(2) Classification of Structure Excavation

The term *culvert* is revised to *Structures*. This change aligns with a new Standard Plan for Buried Structures.

2-09.3(3)D Shoring and Cofferdams

Minor changes to wording to clarify throughout. Under construction requirements (in the shoring section), clarified the paragraph on backfill for drilled holes for soldier piles.

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2-09.4 Measurement

Revisions to the measurement for horizontal limits is included to better align with the new standard plans for buried structures.

DIVISION 3 – Acceptance of Aggregate

N/A

DIVISION 4 – Ballast and Crushed Surfacing

4-04.3(12) Permeable Ballast

This is a new subsection in the 2024 Standard Specifications. The construction requirements for permeable ballast were removed in the 2023 book as the language implied that the material was used as a shoulder finishing application. Permeable ballast is rarely used as a shoulder finishing application, however, the materials it often specified as a free draining material for other construction applications. The construction requirements for this material have been updated.

DIVISION 5 – Surface Treatments and Pavements

5-01.3(1)B Equipment for Panel Replacement

Changed reference from Section 6-09 to 6-22.

5-01.3(4)F Joints

Added clarification that this section applies to replaced concrete panels.

5-01.3(5) Partial Depth Spall Repair

The second to last paragraph is revised to change the cross reference the correct section in 5-03.

5-01.3(7) Sealing Existing Concrete Random Cracks

Added clarification that this section applies to cement concrete pavement.

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

Heading change to make transverse joints first. Added clarification that this section that it applies to cement concrete pavement.

5-01.5 Payment

Added paragraph in payment section cross referencing Section 5-03 for payment of all joint or crack sealing.

5-02.4 Measurement

Additional option for furnishing and placing crushed aggregate by the square yard.

5-02.5 Payment

Added new pay item “Furnishing and Placing Crushed (_____)”, per square yard.

5-03.2 Materials

Added Poured Rubber Joint Seal

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5-03.3 Construction Requirements, 5-03.4 Measurements, and 5-03.5 Payment

1. The Construction Requirements, Measurement, and Payment sections for Crack Sealing have been reorganized, and changes are made to improve clarity of: the connection between crack/joint type and scope of work; the connection between crack/joint type and acceptable sealant; and the connection between scope of work and the corresponding bid item.
2. Regarding fill heights for CCP crack/joint sealing - modified some tolerances and added some tolerances.
3. Renamed bid items related to crack sealing to be more descriptive for the types of cracks.

| OLD BID ITEM NAME | OLD SPEC SECTION | NEW BID ITEM NAME | NEW SPEC SECTION |
|---|-------------------------------|---|-------------------------------|
| Crack Sealing – FA | 5-03.3(2) 5-03.4 5-03.5 | Crack Sealing Bit Pvmt – FA | 5-03.3(2) 5-03.4 5-03.5 |
| Crack Sealing ¼ inch to 1 inch in width – LF | 5-03.3(2) 5-03.4 5-03.5 | Crack Sealing Bit Pvmt ¼ inch to 1 inch – LF | 5-03.3(2) 5-03.4 5-03.5 |
| Crack Sealing greater than 1 inch in width – LF | 5-03.3(2) 5-03.4 5-03.5 | Crack Sealing Bit Pvmt wider than 1 inch – LF | 5-03.3(2) 5-03.4 5-03.5 |
| Crack Sealing – CM | 5-03.3(2) 5-03.4 5-03.5 | Crack Sealing Bit Pvmt – CM | 5-03.3(2) 5-03.4 5-03.5 |
| Crack Sealing – LF | 5-03.3(2) 5-03.4 5-03.5 | Crack Sealing Bit Pvmt - LF | 5-03.3(2) 5-03.4 5-03.5 |

4. Renamed bid items related to bridge paving joint seals to provide a more intuitive connection between the bid item name and the scope of work. Made corresponding changes to Standard Plan A-40.20 by new GSP.

| OLD BID ITEM NAME | OLD SPEC SECTION | NEW BID ITEM NAME | NEW SPEC SECTION |
|--|---|---|--|
| HMA Sawcut And Seal | 5-03.3(2)C1 5-03.4 5-03.5 6-08.3(11) | HMA Joint Seal at Bridge End | 5-03.3(4)A 5-03.4 5-03.5 6-08.3(11) |
| Paved Panel Joint Seal | 5-03.3(2)C2 5-03.4 5-03.5 6-08.3(11) | HMA Joint Seal at Bridge Deck Panel Joint | 5-03.3(4)B 5-03.4 5-03.5 6-08.3(11) |
| Sealing Existing Longitudinal and Transverse Joint | 5-03.4 5-03.5 | Clean and Seal Bridge Deck Panel Joint | 5-03.3(5) 5-03.4 5-03.5 6-08.3(11) |

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5. Renamed three bid items related to CCP crack and joint sealing to provide a more intuitive connection between the bid item name and the scope of work.

| OLD BID ITEM NAME | OLD SPEC SECTION | NEW BID ITEM NAME | NEW SPEC SECTION |
|---|---|---|---|
| Sealing Existing Concrete Random Crack | 5-01.3(7) 5-03.3(3)A 5-03.4 5-03.5 | Sealing Existing CCP Random Crack | 5-01.3(7) 5-01.5 5-03.3(6)A 5-03.4 5-03.5 |
| Sealing Existing Transverse and Longitudinal Joint | 5-03.3(3)B | Sealing Existing CCP Transv and Longit Joint | 5-01.3(8) 5-01.4 5-01.5 5-03.3(6)B 5-03.4 5-03.5 |
| Sealing Existing Longitudinal and Transverse Joint | 5-01.3(8) 5-03.4 5-03.5 | | |
| Longitudinal Joint Seal | 5-03.3(2)B 5-03.4 5-03.5 | Sealing CCP to HMA Longit Joints | 5-01.4 5-01.5 5-03.3(7) 5-03.4 5-03.5 |

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

Adding conditions in which a reference mix design may be extended.

5-04.2(2)B Using HMA Additives

Revisions are included to the requirements for when additives are added to High RAP/Any RAS mix designs.

5-04.3(3)A Mixing Plant

GSP 5-04.3(3)A.OPT1.2024.GR5 is incorporated into item number 5, which corrected the test method. This GSP will also be subsequently deleted as part of this update package.

5-04.3(9)A Test Sections

Removed the minimum 600-ton requirement for test sections.

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

Modified footnote number one of Table 8, removed language requiring the reference test section to be produced from the same calendar year and plant.

5-04.3(9)B4 Mixture Statistical Evaluation – Pay Factors

The revisions to this section spell out upper and lower specification limits.

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

Section revised to allow the Contractor to take correlation cores.

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

Table 16 is replaced. Contractor Coring requirements are added along with other clarifications throughout the table.

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

Section revised to regarding the cost correlation cores to address either WSDOT or Contractor coring options.

5-04.3(12)A2 Longitudinal Joints

Revised last paragraph regarding sealing and sawing longitudinal joints.

5-04.4 Measurement

Measurement for roadway cores revised to reference new language in Section 5-04.3(10)C4 on Contractor cores.

5-04.5 Payment

Asphalt Fog Seal payment description is revised to cross reference Section 5-02.5. Temporary Pavement Marking payment description is revised to cross reference Section 8-23.5. Water payment description is revised to cross reference Section 2-07.5.

5-05.3(1) Concrete Mix Design for Paving

This revisions adds a requirement for unique identification for each mix design.

5-05.3(8)A Contraction Joints

The last paragraph is revised to cross reference Section 5-03 for joint and crack sealing.

5-05.3(8)C Construction Joints

References corrected and clarified that measurement/payment for Construction Joints are in accordance with Section 5-03.

DIVISION 6 – Structures

6-01.10 Utilities Supported by or Attached to Bridges

Moved sheet requirement from this section to Section 9-28.12.

6-02.2 Materials

Materials reference for Threaded Anchor Rods, Nuts, and Resin Bonding Materials is added.

6-02.3(2) Proportioning Materials

Lean Concrete & Pumpable Lean concrete are removed from the *Cementitious Requirement for Concrete* table.

6-02.3(2)A Contractor Mix Design

Contractor's mix designs now require a unique identification number. Lean Concrete - Type 2 is excluded from the mix design requirements.

6-02.3(2)D Lean Concrete

Lean concrete specifications are modified and adds a new table for lean concrete.

6-02.3(4) Ready-Mix Concrete

The revision to this section states that all concrete shall be batched, unless otherwise specified.

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6-02.3(9)B Casting

Early Release requirements are removed as part of plant certifications.

6-02.3(9)C Curing

The last three paragraphs of this section are aligned with item number 2, as they are part of said item.

6-02.3(16) Plans for Falsework and Formwork

Added in that plans are required for fixed form barriers regardless of the height.

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

The term *culvert* is revised to *Structures* when referring to buried structures.

6-02.3(18) Placing Anchor Bolts

This section is revised to distinguish between grouted anchors and resin bonded anchors.

6-02.3(18)A Resin Bonded Anchors

GSPs 6-02.3(18).OPT1.GR6 are incorporated into this new subsection 6-02.3(18)A. This GSP will also be subsequently deleted as part of this update package.

6-02.3(24)J1 Splicing Quality Control Manager

This new subsection is added; Section 6-02.3(24)J1 is renumbered to 6-02.3(24)J2 and Section 6-02.3(24)J2 is renumbered to 6-02.3(24)J3.

6-02.3(24)J3 Nondestructive Splice Tests

This section is revised to incorporate the new requirement for a Splicing Quality Control Manager.

6-02.3(26)A Post-Tensioning Materials

Changed reference from Section 6-09 to 6-21.

6-02.4 Measurement

The description of measurement for lean concrete is revised to include the new types.

6-02.5 Payment

Resin bonded anchor statement is added in. Payment for lean concrete is revised to include the new types.

6-03.3(33) Bolted Connections

The minimum bolt tensions are updated to current values shown in ASTM F3125.

6-05.3(15) Completion of Cast-In-Place Concrete Piles

The requirement to fill steel casings with Class 4000P concrete is changed to 5000P concrete to be consistent with the Bridge Design Manual.

6-07.3(2)D Hazardous Waste Containment, Collection, Testing, and Disposal Submittal Component

Additional information on containment system submittal requirement is added, as well as a new paragraph regarding hold times and permissible lead.

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6-07.3(3)C Quality Control and Quality Assurance During Hold Point Inspection

New section to add requirements for hold point inspection for containment of contaminants.

6-07.3(11)B1 Submittals

These revisions clarify submittal requirements for powder coating plans.

6-07.3(11)B3 Galvanized Surface Cleaning and Preparation

The revisions to this section correct an ASTM Section reference and modifies language that clarifying specifications apply to all galvanized surfaces.

6-07.3(11)B5 Testing

The revisions to this section correct an ASTM Section reference and also modifies language that clarifying specifications apply to all galvanized surfaces.

6-08.3(1) Definition

The term concrete box culvert is changed to concrete box structure to be consistent with the new Standard Plan for Buried Structures.

6-02.3(7)A Concrete Deck Preparation

Changed reference from Section 6-09 to 6-21.

6-08.3(8)C Placing Waterproof Membrane

Moved language from Section 6-08.3(11): *At expansion joints, the membrane shall be slack or folded to allow for Structure movements without stress to the membrane.*

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

The content of this section is replaced with a cross reference to Section 5-03 for bridge joints (with the exception of the language moved into Section 6-08.3(8)C).

6-09 Vacant

A complete rewrite is underway. Class M, microsilica, and fly ash deck overlays will be moved into Section 6-21 and latex modified deck overlays is being moved into Section 6-22. See 6-21/6-21 for a summary of changes. Section 6-09 is vacated.

6-11.1 Description

This was revised to take out language referring to L walls and counterfort walls.

6-11.3(1) Submittals

This section is revised to clarify the requirements of the wall working drawings, and also revised to require a complete submittal regardless of what combination of precast and cast-in-place components will be required.

6-11.3(3) Precast Reinforced Concrete Wall Stem Panels

Revision in this section are meant to clarify requirements; language is revised to use similar language used in the standard plan to make it easier to follow.

6-11.3(4) Cast-In-Place Concrete Construction

Time between the concrete placement operations is changed to 24 hours to be consistent with the Standard Plans.

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6-11.3(5) Backfill, Weepholes, and Gutters

Revised to say that the Cement concrete gutter shall be as shown in the Plans or Standard Plans, not just the Standard Plans.

6-11.4 Measurement

Traffic barrier/pedestrian barrier is removed.

6-11.5 Payment

The payment description for Conc. Class 4000 For Retaining Wall is revised. Additionally, the Barrier items are deleted, and Section 6-10 is referenced for payment.

6-13.3(1) Quality Assurance

The reference to the Materials Laboratory Geotechnical Services Branch is revised to read State Geotechnical Office

6-13.5 Payment

The payment description for Gravel Borrow for Structural Earth Walls is revised to include geosynthetic walls.

6-15.3(4) Preconstruction Conference

The reference to the Materials Laboratory Geotechnical Office is revised to read State Geotechnical Office.

6-15.3(6) Soil Nailing

Sentence has minor revision for clarity.

6-16.2 Materials

Lean Concrete is added.

6-16.3(5) Backfilling Shaft

The revisions to this section add a cross reference to the new information on lean concrete in Section 6-02.3(2)D.

6-16.3(6)D Installing Lagging and Permanent Ground Anchors

The revisions to this section divides the content into two sections (adding 6-16.3(6)E, Backfill Behind Lagging), rearranges the information for clarity, and is updated with a cross reference to the new information on lean concrete in Section 6-02.3(2)D.

6-17.3(4) Preconstruction Conference

The reference to the Materials Laboratory Geotechnical Services Branch is revised to read State Geotechnical Office.

6-18 Vacant

This Section, previously titled Shotcrete, is vacated. Projects requiring shotcrete specifications will use project specific provisions provided by the Bridge Office until 6-18 is updated in the 2025 Standard Specifications.

6-19.3(2)B Shaft Installation Narrative

The reference to the Geotechnical Division is revised to read State Geotechnical Office.

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6-19.3(3)B3 Temporary Shaft Casing

The first sentence is split into two sentences for clarity.

6-19.3(3)B5 Permanent Slip Casing

For clarity, “column shaft construction joint” is changed to read “shaft construction joint at the base of the shaft column splice zone”

6-19.3(7)B Concrete Placement Requirements

The last sentence of the first paragraph is deleted.

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

Revisions to this section add language to require that all liquid above the shaft construction joint is to be removed prior to removing the tremie.

6-19.3(7)F Shaft Construction Joint

This section is reworded for clarity.

6-19.3(9)F Contractor’s Investigation and Remedial Action Plan

This section is reworded for clarity.

6-19.5 Payment

Cleaning and preparing the shaft is added to list under “Constructing _Diam. Shaft”.

6-20 Buried Structures

Throughout this section the term *culvert* is either removed or replaced with the term *Structure*.

6-20.1 Description

Description of Work is revised to include Class 4000D concrete topping slabs.

6-20.1(1) Definitions

Definition for the Composite Arch System is removed. Definition for “Headwall” is revised. Definitions for “Wingwall”, “Class 4000D Concrete Topping Slab”, “Hydraulic Design Flood Elevation”, “Zone of Influence” are added.

6-20.2 Materials

Materials requirements are expanded to include Controlled Density Fill, Lean Concrete, NEPCOAT Qualified Product List B Primer, and Class 4000D concrete topping slab.

6-20.3(1)A Design Delivery Method

This section is revised to include a reference to the Standard Plans that are being published for buried structures.

6-20.3(1)A2 Contracting Agency Supplied Design

Contractor supplied design is revised to include a reference to the Standard Plans that are being published for buried structures. Additionally, the last two sections are revised to address the process for changing from regular rebar to welded wire reinforcement. Applies to all designs, not just the new standard plans.

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6-20.3(1)C General Design Criteria

In the first paragraph, additional publication references are added for tunnels. In the last paragraph, language is modified to be consistent with the Bridge Design Manual.

6-20.3(1)E Hydraulic Considerations

The last paragraph is revised to reference the Bridge Design Manual and take out specific requirement. Since scour requirements constantly evolving this will allow the update of the BDM without changing this section.

6-20.3(1)F Worker, Pedestrian and Bicycle Fall Protection

The revisions to this section update the title **Fall Protection** to **Worker, Pedestrian and Bicycle Fall Protection**. Additional modifications remove redundant design criteria.

6-20.3(1)H Concrete Structures

Changes to this section include modifications to the criteria for fill depth and the addition of requirements for Class 4000D concrete topping slab.

6-20.3(1)I Structural Plate Structures

The applicable chapter of the Bridge Design Manual is added to this Section. Additional requirements are added when using galvanized or zinc coated structural plate structures.

6-20.3(2)A Plans, Specifications and Calculations

For Contractor supplied Designs the working drawing requirement changes from a Type 3 to a Type 2E with a 30-day review period. There are extensive changes to this section including added components that are now required as part of this working drawing submittal.

6-20.3(2)B Load Rating Report

Design criteria for load rating is removed and replaced with the reference to the Bridge Design Manual. The last paragraph is added which removes the load rating requirements for structures conforming to the standard plan.

6-20.3(2)C Dewatering System

The previous section on fabrication shop drawings is deleted, as it has been incorporated into the section for working drawings. As a result, Section 6-20.3(2)D is renumbered to 6-20.3(2)C (Dewatering System), Section 6-20.3(2)E is renumbered to 6-20.3(2)D (Manufacturer's Installation Instructions), and 6-20.3(2)F is renumbered to 6-20.3(2)E (Installation Plan). Other minor revisions to these sections include language updates.

6-20.3(5) Excavation

Added in reference to 9-33.2(1). Modified reference from 6-20.3(2)C to 6-20.3(2)D.

6-20.3(6)A Bedding and Leveling

Title changed to read "Bedding and Leveling". Revision to paragraph clarify construction requirements for leveling materials.

6-20.3(7)A Precast Concrete Structures

Modified for clarity.

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6-20.3(8) Placement and Assembly

Minor revisions to placement and assembly to cover bedding and leveling and foreign materials.

6-20.3(8)A Precast Concrete Structures

Paragraph 2 is revised to include a cross reference to primer materials in Division 9. Paragraph 3 changes the term “tongue and groove joints” to “tongue and groove (ship lap) and butt joints”. The last paragraph changes the term “concrete deck” to “concrete topping slab”.

6-20.3(9)A Backfilling of Structural Plate Structures

The term “structural backfill envelope” is changed to “zone of influence”.

6-20.3(10) Wingwalls and Headwalls

100-year mean recurrence is revised to water surface of the Hydraulic Design Flood Elevation to be consistent with the Hydraulics Manual.

6-20.5 Payment

Payment for Class 4000D Concrete Topping Slab is to be included in the LS payment for the Contractor Designed Buried Structure.

6-21 Modified Concrete Overlay – Microsilica or Fly Ash &

6-22 Modified Concrete Overlay – Latex

These are new sections in the 2024 Standard Specifications:

1. Moved those portions of 6-09 related to microsilica modified concrete overlays and fly ash modified concrete overlays into new Section 6-21.
2. Moved those portions of Section 6-09 related to latex modified concrete overlays into new Section 6-22.
3. Created and defined new terms to improve clarity. (e.g., Idealized Existing Bridge Deck Surface Model”, “Top of Overlay Model”, “Process Wastewater”, and “Scarification Depth”.
4. Added blended hydraulic cement type 1L(X) as a 1:1 replacement option for portland cement type 1 or 2 in microsilica and fly ash modified concrete, and class M concrete.
5. Added a requirement to include the volume of concrete admixtures in the calculation of Water/Cementitious ratio.
6. Created a tolerance for excavating with a rotary milling machine. $\pm 0.10\%$, and $+0.01$, -0.02 .
7. Created a tolerance for excavating with a hydro-demolition machine. $\pm \frac{1}{4}$ inch of the scarification depth.
8. Increased the minimum pressure washer rating for “water-blasting” to 7,500 psi.
9. Clarified what excavation equipment is allowed versus required as scarification nears the “Scarification Depth”. (Hydro-demolishing is required for the last $\frac{1}{2}$ inch of scarification depth. Rotary milling is not allowed within 1 inch of rebar.)
10. Added requirement for the contractor to map and submit the size and location of deck repair areas.
11. Several changes to improve clarity on what work is associated with each pay item.
12. Added a requirement for the contractor to scan the bridge deck for shallow rebar before beginning scarification.

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13. Slightly different allocation of risk for damaging rebar. (Now addresses damage to epoxy coating, caused by Hydro-demolition, above the Scarification Depth – WSDOT cost.)
14. Several changes to better define what constitutes Type 1 versus Type 2 deck repair.
15. Clarified that “water-blasting” with a pressure-washer rated at a minimum of 7,500 psi (instead of sandblasting) is acceptable for final cleaning of the surface before placing the overlay.
16. Eliminated some instances of ambiguity caused by references to specs outside of Section 5-03, by incorporating the exact text into Section 5-03. (Paving machine, process water.)
17. Added responsibility for WSDOT Project Engineer to create the 3-dimensional model for (1) scarification and (2) top of overlay, using data collected by the contractor.
18. Several changes to clarify the required sequence of events.

DIVISION 7 – Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains and Conduits

7-02.2 Materials

Added steel rib reinforced polyethylene culvert and HDPE pipe as acceptable thermoplastic culvert pipe, and added butyl rubber sealant to acceptable joining materials.

7-08.3(1)C Bedding the Pipe

Edited paragraph two to remove placement in loose layers.

7-08.3(3) Backfilling

Changed restriction equipment operating above a pipe until backfill reaches 3 feet.

7-08.4 Measurement

Gravel backfill for foundation or gravel backfill for pipe zone beddings description of measurement is changed from, “when used for foundation” to, “when included in the proposal.”

DIVISION 8 – Miscellaneous Construction

8-01.2 Measurement

Permeable Ballast is removed from the list of materials as it is not used in Section 8-01.

8-02.3(2) Work Plans

Submittals for Roadside Work Plan and Weed and Pest Control Plan are to be submitted 15 days prior to earth disturbing plans. A Type 3 Working Drawing is required for both.

8-02.3(2)B Weed and Pest Control Plan

The requirements for the Weed and Pest Control Plan Number 2 are revised to required inclusion of a site-specific plan. Numbers 6 & 7 are added to capture the requirements of address aquatic invasive species.

8-02.3(2)C Plant Establishment Plan

Item number 3 is revised to require contact for the full duration of the contract.

2024 Standard Specifications Updates

8-02.3(3)A Chemical Pesticides

The website is updated in the first paragraph. The second paragraph is revised to expand upon and clarify the requirements of a licensed commercial applicator/operator.

8-02.3(3)B Roadside Seeding, Planting and Lawn Area Weed Control

Section is renamed (was Planting and Lawn Area Weed Control). Clarification is added to indicate that seeding is part of planting.

8-02.3(5)A Seeding Area Preparation

Item number 3 is changed from tilling slopes flatter than 2:1 (was 3:1).

8-02.3(5)C Planting Area Preparation

In item number 5, the term “cultivate” is changed to “till” and 3:1 is revised to 2:1.

8-02.3(8)A Dates and Conditions for Planting

In the eighth paragraph, “drought” is added to the list of unsuitable conditions in which planting is not allowed to occur.

8-02.5 Payment

Staking is added in the paragraph under “PSIPE__”.

8-03.3(7)B Irrigation Sleeves

Corrected section number.

8-03.3(9)F Cross-Connection Control Device Installation

Only licensed BAT inspectors are allowed do cross connection testing. Certified Water Works Operators are removed.

8-04.3(1) Concrete Curbs, Gutters, and Spillways

This section on curbs, gutters, and spillways is revised to allow opening to traffic after the curb reaches 2500 psi strength. This will allow some flexibility for progressing the work for short term projects such as roundabout construction.

8-07.1 Description

Description was modified for clarity.

8-07.3(1) Aggregates and Proportioning

Aggregates and proportioning of precast traffic curb are updated.

8-10 Guide Posts and Barrier Delineators

This entire Section is updated including the title to incorporate barrier delineators. There are also minor changes to flexible guideposts. The existing GSPs for barrier delineators are incorporated into this section, and they will also be subsequently deleted as part of this update package:

8-10.1.OPT1.GR8

8-10.3.OPT1.GR8

8-10.3.OPT2.GR8

8-10.4.OPT1.GR8

8-10.5.OPT1.GR8

2024 Standard Specifications Updates

8-11.3(1)A Erection of Posts

An incidental statement was added for the polymer modified asphalt mastic.

8-11.3(1)H Guardrail Construction Exposed to Traffic

Section is updated with correction to type of terminal end section to place at the end of each work shift.

8-11.4 Measurement

GSP 8-11.4.OPT5.2024.GR8 is incorporated into the Standard Specifications. Measurement of beam guardrail anchor Type 10 anchor is changed to Type 11. This GSP will also be subsequently deleted as part of this update package.

8-11.5 Payment

GSP 8-11.5.OPT3.2024.GR8 is incorporated into the Standard Specifications. Payment of beam guardrail anchor Type 10 anchor is changed to Type 11. This GSP will also be subsequently deleted as part of this update package.

8-14.3(5)C Surface Applied Detectable Warning Surfaces

In the first sentence, removed the word ramp since surface applied detectable warning surfaces are applied at other locations (i.e., Shoulders, splitter islands). Additionally, temperature requirements for applications of DWS are removed in lieu of manufacturer recommendations. Finally, the last sentence is revised to read, "Permanent installments of surface applied detectable warning surfaces shall be secured with mechanical fasteners." This is added to reinforce the idea that glue-only is not allowed for permanent installations (temporary are still able to use the glue down version of DWS).

8-17.3 Construction Requirements

This section is revised for clarity. Information on attenuator foundations and backstops is modified to rely on the manufacturer's installation procedures as some attenuator foundations and backstops do not require steel reinforcement.

8-20.3(2) Excavating and Backfilling

The second paragraph is revised to cross reference Section 8-20.3(5)E1, Open Trenching.

8-20.3(5)B Conduit Type

Corrected typo in the first paragraph, and RMC locations in item number 2 is revised for clarification.

8-20.3(5)E1 Open Trenching

Item number 5 is revised to allow lean concrete.

8-20.3(5)E2 Conduit Plowing

Plowing is revised to allow more options but clarifies that the critical issue is that the conduit not move in the trench. The second to last paragraph is revised address cover for multiple conduits.

8-20.3(10) Service, Transformer and ITS Cabinets

Minor clarification to aerial services. Added minimum burial depth for timber poles. Also added a new paragraph. With the increased use of remote metering, clarification is added that a service rated disconnect is needed downstream of the meter (customer side). In the last paragraph, a correction to this paragraph is made as only service cabinets use service

2024 Standard Specifications Updates

agreement numbers. All other cabinets use a 10-character identification code. Updated to match lettering requirements for light poles. Periodic questions came up regarding cabinet labeling, particularly regarding letter height.

8-20.3(11) Testing

A new paragraph is added regarding the location of cabinet testing.

8-20.3(12) Painting

Specification for slip base faying surfaces are added as bare galvanized steel (no color; letter LS-16).

8-20.3(13)A Light Standards

The last paragraph is revised to add a minimum burial depth of 6 feet for poles shorter than 30 feet.

8-20.3(14)D Test for Induction Loops and Lead-In Cable

GSP 8-20.3(14)D.OPT1.2024.GR8 is incorporated into the Standard Specifications, correcting Test D. This GSP will also be subsequently deleted as part of this update package.

8-21.3(9)B Erection of Steel Structures

Submittal requirements are added for erection of steel structures.

8-30 Water Crossings

New Section 8-30 Water Crossings is added. Previously this content was in 8-SA4.GR8, which will be deleted along with 8-SA(9-03.11).GR8 as part of this update package. Some information will be retained as a GSP. See the GSP memo for additional information.

8-31.3(2)B Plan Requirements

GSPs 8-31.3(2)B.OPT1.2024.GR8 and 8-31.3(2)B.OPT2.2024.GR8 are incorporated into the Standard Specifications. Item number 3(a) is revised to screen intake elements and other materials. Item number 3(g) is added, addressing stream diversion bags. Item number 8 is revised, water quality impacts is changed to read exceeding allowable water quality standards. These GSPs will also be subsequently deleted as part of this update package.

8-31.3(3)A Fish Exclusion Assistance

Title is changed to Fish Exclusion Assistance (was Contractor Provided Labor). Reference to FA item is removed as it included in the payment section.

8-31.3(4) Dewatering Work Areas

GSP 8-31.3(4).OPT1.2024.GR8 is incorporated into the Standard Specification. The last paragraph regarding fish screens is revised. This GSP will also be subsequently deleted as part of this update package.

8-31.3(5) Inspection and Maintenance

The last sentence of the last paragraph is deleted. This information appears in Payment.

8-31.3(7)A Contractor Provided Labor

The last sentence is deleted. This information appears in Payment.

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8-31.5 Payment

The Force account item description is revised to allow other assistance as required by the Engineer.

DIVISION 9 – Materials

9-02.1 Asphalt Material, General

Changed “approved” to “accepted” in second paragraph.

9-02.1(4) Performance Graded (PG) Asphalt Binder

Minor changes for clarification to the first paragraph.

9-02.1(6) Cationic Emulsified Asphalt

Fixed ASTM reference in second paragraph..

9-02.1(8) Flexible Bituminous Pavement Marker Adhesive

Flexible guide posts are added to the list of features that allow the use of this type of adhesive. Contractors are now limited to submission of 2 lots for adhesive. Testing for additional lots will be at the expense of the Contractor. The Flexibility test is updated to WSDOT T 432.

9-02.2(1) Certification of Shipment

Changed acceptance to be “will” rather than “may” to remove the option of other acceptance.

9-03.1(2)A Deleterious Substances

Clarified “fine” aggregate.

9-03.1(4)A Deleterious Substances

Clarified “coarse” aggregate.

9-03.1(4)C Grading

Modified last paragraph for clarification.

9-03.4(2) Grading and Quality

Modified sentence on coating for clarification.

9-03.5 Pea Gravel

Added a new section for pea gravel spec gradation.

9-03.8(2) HMA Test Requirements

Modified the last table to be greater than or equal to 3 on the last line of the table.

9-03.11 Streambed Aggregates

This section including the subsections have been updated. Streambed aggregates are updated. Limitations on deleterious materials are clarified for each gradation. Streambed gradation is changed. Streambed fine aggregate and streambed sand are added. Habitat boulders are deleted.

9-03.12(1)B Class B

Added that 9-03.10 should be for “Gravel Base”.

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9-03.21(1)E Steel Slag

Modified to clarify to “surface” waters of the state.

9-04.2(1) Hot Poured Joint Sealants

This section is modified by limiting to the number of lots allowed to be submitted for testing for hot poured sealants. Costs for additional testing of lots to be borne by the Contractor.

9-05.23 High-Density Polyethylene (HDPE) Pipe

Added “minimum” to specification for HDPE pipe cell classification.

9-05.51(3) Concrete Block

Removed ASTM reference, and cross-referenced Section 9-12.1 for Concrete Blocks.

9-05.51(4) Concrete Brick

Removed ASTM reference, and cross-referenced Section 9-12.2 for Concrete Bricks.

9-06.4 Resin Bonded Anchor System

Added new section for Resin Bonded Anchor System.

9-08.2 Powder Coating Materials for Coating Galvanized Surfaces

Correction of ASTM reference for Specific Gravity of Powder Coating Materials.

9-12.1 Concrete Blocks

Specification for concrete blocks for manholes is deleted.

9-14.1 Materials Submittals and Acceptance

Corrected references in table for Long Term Mulch, as well as references in table for Biodegradable Erosion Control Blanket and removed the requirement for lab results to be from NTPEP.

9-14.6(5) Wattles

Corrected cross reference for straw filler.

9-17.1(2) Reflective Sheeting

Removed type of reflective sheeting for guide posts and cross-referenced Section 9-28.12.

9-18 Barrier Delineators

This new section of the spec book is added for the materials for barrier delineation (tabs). This information was formerly located in GSP 8-10.2.OPT1.GR8, which will be deleted as part of this update package.

9-28.1 General

Sign sheeting requirements is updated to match the current Traffic Manual.

9-28.10 Digital Printing

Minor revision to change “department” to be “Contracting Agency”

9-28.12 Reflective Sheeting

Reflective sheeting table is updated. ATMS D4956 is referenced and duplicate information from the ASTM is deleted from Section 9-28.12.

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9-29.6 Light and Signal Standards

Testing standards for light, signal, and slip base hardware are updated.

9-29.6(1) Steel Light and Signal Standards

The third sentence is deleted, as testing standards referenced are only applicable to hardware.

9-29.6(3) Timber Light Standards, Timber Strain Poles, Timber Service Supports

This revision updates the treatment for timber poles.

9-29.6(5) Foundation Hardware

The last paragraph is deleted as it was a duplication of testing standards (see first paragraph).

9-29.13(10)D Cabinets for Type 2070 Controllers

GSP 8-20.2(9-29.13(10)D).OPT1.2024.GR8 is incorporated into the Standard Specifications, which made a correction to item number 1. This GSP will also be subsequently deleted as part of this update package.

9-29.13(12)

GSP 8-20.2(9-29.13(12)).OPT1.2024.GR8 is incorporated into the Standard Specifications, which made a correction to item number 3. This GSP will also be subsequently deleted as part of this update package.

9-32.1 Type 1 Mailbox Support

This revision retitles this section and adds the MASH requirement Type 1 mailbox supports.

9-32.7 Type 2 Mailbox Support

This revision removes the option of Type 2 mailbox supports meeting NCHRP 350.

9-35.3 Work Zone Sign Posts

This section's title, previously "Wood Sign Posts", is revised to "Work Zone Sign Posts". The new table has updated sizes for wood posts and now includes the option of using steel posts in work zones.

9-35.14 Portable Temporary Traffic Control Signal

GSP 1-10.3(3)K(9-35.14).OPT1.2024.GR1 is incorporated into the Standard Specifications. This GSP will also be subsequently deleted as part of this update package.

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Revisions to General Special Provisions Effective November 20, 2023

Please note: New revisions to WSDOT General Special Provisions are described below. Previous GSPs that are not revised in this package are still in effect. Special Provisions take precedence over the Standard Specifications in accordance with Section 1-04.2.

The following list is a brief description of the latest revisions, with an explanation of why each change was made. The actual provisions should be reviewed in depth to become completely knowledgeable of the full extent of the revisions. These provisions will be available at the following location:

<https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/general-special-provisions-gsps>

INTRODUCTION

INTRO.GR1

Changed to reference the 2024 Standard Specifications.

DIVISION 1 – General Requirements

There were minor revisions throughout the instructions which are not called out below. These changes fixed errors in the instruction or added a description for the GSP but did not change intent.

1-02.4(1).OPT1.FR1 - Revised use instructions only.

Instructions for when to use this GSP (reference information) have been modified to add electronic design files.

1-02.6.OPT1.FR1 – Renamed – was 1-02.6.OPT8.FR1

This GSP (maximum funds available) and the associated instructions were renamed and reordered. No changes to text were made. 1-02.6.INST4.GR1 was renamed to 1-02.6.INST1.GR1 as part of this change.

1-02.6.OPT2.GR1 – Revised and Renamed – was 1-02.6.OPT3.GR1

This GSP (subcontractor list not required) was revised to delete the fourth and fifth paragraph rather than the fifth and sixth due to changes in the 2024 Standard Specifications. It was also renamed and reordered.

1-02.6.OPT3.NEW.GR1 – New GSP

This GSP (delivery of DBE forms) was added. This replaces the paragraph which was removed from the 2024 Standard Specifications with instructions to only be used in Federal Aid Projects.

1-02.6.OPT4.GR1 – Renamed – was 1-02.6.OPT1.GR1

This GSP (SVBE) was renamed and reordered. No changes to text were made.

1-02.6.OPT5.NEW.FR1 – Renamed – was 1-02.6.OPT4.FR1

This GSP (Alternative Bids) was renamed and reordered. No changes to text were made.

1-02.6.OPT6 – Renamed – was 1-02.6.OPT5.FR1

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This GSP (Cumulative Alternative Bidding) was renamed and reordered. No changes to text were made.

1-02.9.OPT1.GR1 – Revised

This GSP (DBE document submittal) was revised for clarity and to add in missing form numbers. The trucking credit form was removed from this GSP and added to 5 days after Award in GSP 1-03.3.OPT2.GR1.

1-02.9.OPT2.GR1 – Revised

This GSP (SVBE document submittal) was revised for clarity.

1-02.13.OPT1.2024.GR1 – Deleted

This GSP (SVB plan and forms) and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-03.3.OPT2.GR1 – New

This new GSP (DBE trucking form) was added to change the DBE trucking forms submittal to 5 days after Award.

1-04.2.OPT1.GR1 – Revised

This GSP (Unifier) was revised for clarify that form needs to be submitted for new users throughout the life of the Contract.

1-07.11.OPT8.FR1 – Deleted

This GSP (FTA DBE) was deleted. FTA projects will now use 1-07.11.OPT3.FR1 instead when there is a Condition of Award.

1-07.12.OPT1.GR1 – Revised with interim GSP

The interim GSP dated 10/3/2023 was added to this package. This updated the Federal Aid Provision Form.

1-07.18(1).OPT1.2024.GR1 – Deleted

This GSP (no wrap up insurance policy) and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-07.18(5).OPT2.2025.GR1 – New GSP

This GSP (OCP) revised the supplemental insurance form to the correct form number.

1-07.18(5).OPT1.FR1 – Revised

This GSP (OCP) revised the supplemental insurance form to the correct form number.

1-07.28(8).OPT1.GR1 – Revised use instructions only

Instructions for when to use this GSP (Railroad flagging or protective services) was reworded to add clarity.

1-08.3(1).OPT1.GR1 – Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

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1-08.3(2).NEW.GR1 – Renamed – was 1-08.3(1).GR1

The General Requirement heading moved from Section 1-08.3(1) to 1-08.3(2) due to reordering of Section 1-08.3 in the 2024 Standard Specifications.

1-08.3(2).OPT2.FR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-08.3(2)B.OPT1.FR1 – Revised and Renamed – was 1-08.3(1).OPT2.FR1

This GSP and the associated instructions were renamed and revised due section number changes in the 2024 Standard Specifications.

1-08.3(2).OPT2.FR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-08.3(3).OPT1.GR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-08.3(4).OPT1.GR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-08.3(5).OPT1.GR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications. The Bid Item “Schedule Update” has also been deleted.

1-08.3(5).OPT2.GR1

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-08.9.INST2.GR1 – Deleted

This instruction statement was in error. All the Liquidated Damage Specs should be supplementing 1-08.9 rather than revising.

1-08.9.INST1.GR1 – Renamed – Was 1-08.9.INST3.GR1

The GSPs in 1-08.9 were reordered so the main GSP referenced in the Standard Specifications is first and then the supplemental ones.

1-08.9.OPT1.NEW.FR1 – Renamed – Was 1-08.9.OPT3.FR1

The GSPs in 1-08.9 were reordered so the main GSP referenced in the Standard Specifications is first and then the supplemental ones.

1-08.9.OPT2.NEW.FR1 – Renamed – Was 1-08.9.OPT1.FR1

The GSPs in 1-08.9 were reordered so the main GSP referenced in the Standard Specifications is first and then the supplemental ones.

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1-08.9.OPT3.NEW.FR1 – Renamed – Was 1-08.9.OPT2.FR1

The GSPs in 1-08.9 were reordered so the main GSP referenced in the Standard Specifications is first and then the supplemental ones.

1-09.2(1)A1.OPT1.2024.GR1 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications.

1-09.3.OPT1.GR1 – Revised use instructions only

Instructions for when to use this GSP (Fuel Cost Adjustment) was updated to include new fuel usage factors.

1-10 – Revised use instructions

Through Section 1-10 use instructions were revised to allow added items to be part of lump sum traffic control.

1-10.3(3).OPT3.FR1 - Revised

This GSP (smart work zone system) was revised to update the vendors.

1-10.3(3).OPT4.FR1 - Revised

This GSP (queue warning system) was revised to update the vendors.

1-10.3(3)B(9-35.4).OPT1.2025.GR1 – Renamed – was 1-10.3(3)B(9-35.4).OPT1.2024.GR1

This GSP (GPS and remote communication requirements for sequential arrow signs) was renamed since it was not included in the 2024 Standard Specifications.

1-10.3(3)K.OPT1.2024.GR1 - Deleted

This GSP (portable temporary traffic control signal) and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

1-10.3(3)K(9-35.14).OPT1.2024.GR1 - Deleted

This GSP (portable temporary traffic control signal) and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

1-10.5(2).OPT1.GR1 - Revised

This GSP (automated flagger assistance devices) was revised to remove operating from the payment. Operation is paid for by “Flaggers”.

DIVISION 2 – Roadway Excavation and Embankment

There were minor revisions throughout the instructions for use in the Index file which are not called out below. These changes fixed errors in the instruction or added a description for the GSP but did not change intent or when to use. A new Index is included in this package.

There were no revisions, deletions, or new GSPs added to Division 2.

DIVISION 3 – Acceptance of Aggregate

N/A – no changes to Division 3 GSPs

PEC:pec

Revisions to General Special Provisions Effective November 20, 2023

DIVISION 4 – Ballast and Crushed Surfacing

N/A – no changes to Division 4 GSPs

DIVISION 5 - Surface Treatments And Pavements

5-03.3(2)B.OPT1.2024.GR5 - Deleted

All crack and joint sealing GSPs have been deleted. GSP information was incorporated into the 2024 Standard Specifications.

5-03.3(3)C.OPT1.2024.GR5 - Deleted

All crack and joint sealing GSPs have been deleted. GSP information was incorporated into the 2024 Standard Specifications.

5-03.5.OPT1.2024.GR5 - Deleted

All crack and joint sealing GSPs have been deleted. GSP information was incorporated into the 2024 Standard Specifications.

5-04.2(1)A2.OPT1.2024.GR5 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

5-04.2(9-03.21(1)A).OPT1.2025.GR1 – Renamed – was 5-04.2(9-03.21(1)A).OPT1.2024.GR1

This GSP was renamed since it was not included in the 2024 Standard Specifications. No other changes were made to this GSP.

5-04.3(3)A.OPT1.2024.GR5 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

5-05.1.OPT1.GR5 – Revised use instructions only

A table for which GSPs to use for pigmented, textured, or both pigmented and textured concrete was added.

5-05.2.OPT1.GR5 – New

This is a new GSP for when color treated concrete will be “Brick Red”.

5-05.2.OPT2.FR5 – Renamed and revised – was 5-05.2.OPT1.FR5

This is a new GSP for when color treated concrete will be any color other than “Brick Red”.

5-05.3.OPT2.FR5 – Revised use instructions only

The tables for pattern manufactures were updated.

5-05.3(1).OPT8.GR5 – Revised

This was revised to add change to a combined aggregate for textured concrete.

DIVISION 6 – Structures

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6-02.2.OPT1.GR6 – Deleted

This GSP was deleted. Resin Bonded Anchor requirements were added to the Standard Specifications. References to use this GSP were deleted from the index.

6-02.2.OPT60(C).GB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-02.3.OPT8(L).GB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-02.3(5)G.OPT1.2025.GR6 – New

This GSP fixes an error in the frequency of concrete testing.

6-02.3(18).OPT1.GR6 – Deleted

This GSP and its associated instructions were deleted. Resin Bonded Anchor requirements were added to the Standard Specifications. References to use this GSP were deleted from the index.

6-02.3(25)L2.OPT1.2025.GR6 – New

This GSP fixes an error in the table for girder lateral stability and stress analysis.

6-06.2.OPT1.GB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-06.2.OPT8.FB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-06.3(2).OPT1.GB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-06.3(2).OPT7.GB6 – Revised

This GSP was revised to delete the resin bonded anchor reference to the Special Provisions.

6-09 – Deleted

All GSPs and their associated instructions for Section 6-09 were deleted. 6-09 is Vacant in the book. Modified Concrete Overlays are now Section 6-21 (microsilica or fly ash) or 6-22 (latex).

6-11 – NEW

6-11.2, 6-11.3, 6-11.4, and 6-11.5 GSPs are added including instructions to add in requirements for precast reinforced concrete retaining walls until they are added to the 2025 book.

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6-16.3(3).OPT1.2025.GR6 – New

This was revised to remove the word “minimum” before diameter. Too large of a diameter can also cause problems.

6-18.SA1.2025.GR6 – New

This adds back in Section 6-18 which was vacated in the 2024 Standard Specifications.

6-18.2.OPT1.GB6 – Deleted

This GSP has been incorporated into 6-18.SA1.2025.GR6.

6-18.3.OPT1.GB6 – Deleted

This GSP has been incorporated into 6-18.SA1.2025.GR6.

6-18.4.OPT1.GB6 – Deleted

This GSP has been incorporated into 6-18.SA1.2025.GR6. New measurement is by the square yard.

6-18.5.OPT1.GB6 – Deleted

This GSP has been incorporated into 6-18.SA1.2025.GR6. Payment has changed from “Shotcrete Facing For Rock/Soil Slope Stabilization”, per cubic yard to “Shotcrete Facing”, per square foot.

6-20.3(1).OPT1.2025.GR6 – NEW

This GSP was revised to clarify that the Contractor needs to supplement the Geotech report for any walls and foundations not covered.

DIVISION 7 – Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains and Conduits

N/A – no changes to Division 7 GSPs

DIVISION 8 - Miscellaneous Construction

8-10.1.OPT1.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

8-10.1.OPT1A.GR8 – New GSP

This is a new GSP with the description for linear delineation panels.

8-10.2.OPT1.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

8-10.2.OPT1A.GR8 – New GSP

This is a new GSP with the material requirements for linear delineation panels.

8-10.3.OPT1.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

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8-10.3.OPT2.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

8-10.3.OPT1A.GR8 – New GSP

This is a new GSP with the construction requirements for linear delineation panels.

8-10.4.OPT1.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

8-10.4.OPT1A.GR8 – New GSP

This is a new GSP with the measurement for linear delineation panels.

8-10.5.OPT1.GR8 - Deleted

This GSP (barrier delineators) was deleted as it has been incorporated into the 2024 Standard Specifications

8-10.5.OPT1A.GR8 – New GSP

This is a new GSP with the payment for linear delineation panels.

8-11.2.OPT2.FR8 – Revised GSP

This GSP (cable barrier) was revised to update to MASH-16 requirements rather than NCHRP 350.

8-11.3.OPT2.FR8 – Revised GSP

This GSP (cable barrier) was revised to add clarity. References for a 3-cable system were removed.

8-11.4.OPT5.2024.GR5 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-11.5.OPT3.2024.GR5 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-20.2(9-29.6(2)).OPT1.2025.GR8 – New GSP

This GSP and the associated instructions were added to allow the keeper plate to be either 28 or 26 gage due to procurement issues for the 28 gage.

8-20.2(9-29.6(2)).OPT1.2025.GR8 – New GSP

This GSP and the associated instructions were added to allow the use of pentachlorophenol treatment of timber poles until existing stock is used up or banned.

8-20.2(9-29.13(10)D).OPT1.2024.GR8 - Deleted

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This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-20.2(9-29.13(11)).OPT1.GR8 – Revised

This GSP was revised to update a supplier name and address.

8-20.2(9-29.13(12)).OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-20.3.OPT1.FR8 – New GSP

This GSP and the associated instructions were added to allow equipment being removed to stay the property of WSDOT.

8-20.3(14)D.OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-21.2(9-28.12).OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-31.3(2)B.OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-31.3(2)B.OPT2.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-31.3(4).OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

8-31.3(2)B.OPT1.2024.GR8 - Deleted

This GSP and the associated instructions were deleted as it has been incorporated into the 2024 Standard Specifications

DIVISION 9 - Materials

STDPLANS.GR9 – Revised

Revised to chapter changes with the new publication to the Standard Plans.

Revisions to General Special Provisions Effective November 20, 2023

Deleted GSPs

The following is a list of all GSPs that have been deleted as part of this package.

| | |
|-----------------------------------|-----------------------------------|
| 1-02.6.INST2.GR1 | 5-03.3(2)B.INST1.GR5 |
| 1-02.6.OPT1.GR1 | 5-03.3(2)B.OPT1.2024.GR5 |
| 1-02.6.OPT3.GR1 | 5-03.3(3)C.INST1.GR5 |
| 1-02.6.OPT4.FR1 | 5-03.3(3)C.OPT1.2024.GR5 |
| 1-02.6.OPT5.FR1 | 5-03.5.INST1.GR5 |
| 1-02.6.INST4.GR1 | 5-03.5.OPT1.2024.GR5 |
| 1-02.6.OPT8.FR1 | 5-04.2(1)A2.INST1.GR5 |
| 1-02.13.GR1 | 5-04.2(1)A2.OPT1.2024.GR5 |
| 1-02.13.INST1.GR1 | 5-04.2(9-03.21(1)A).OPT1.2024.GR5 |
| 1-02.13.OPT1.2024.GR1 | 5-04.3(3)A.INST1.GR5 |
| 1-07.11.OPT8.FR1 | 5-04.3(3)A.OPT1.2024.GR5 |
| 1-07.18(1).GR1 | 6-02.2.OPT1.GR6 |
| 1-07.18(1).INST1.GR1 | 6-02.3(18).INST1.GR6 |
| 1-07.18(1).OPT1.2024.GR1 | 6-02.3(18).OPT1.GR6 |
| 1-08.3(1).GR1 | 6-09.GR6 |
| 1-08.3(1).INST1.GR1 | 6-09.2.GR6 |
| 1-08.3(1).OPT1.GR1 | 6-09.2.OPT1.2025.GR6 |
| 1-08.3(1).INST2.GR1 | 6-09.2.INST1.GR6 |
| 1-08.3(1).OPT2.FR1 | 6-09.2.OPT8.BSP.GB6 |
| 1-08.3(2).GR1 | 6-09.3.GR6 |
| 1-08.3(2).INST3.GR1 | 6-09.3(1).GR6 |
| 1-08.3(2).OPT2.FR1 | 6-09.3(1).INST1.GR6 |
| 1-08.3(3).GR1 | 6-09.3(1).OPT1.BSP.GB6 |
| 1-08.3(3).INST1.GR1 | 6-09.3(2).GR6 |
| 1-08.3(3).OPT1.GR1 | 6-09.3(2).INST1.GR6 |
| 1-08.3(4).GR1 | 6-09.3(2).OPT1.BSP.GB6 |
| 1-08.3(4).INST1.GR1 | 6-09.3(3).GR6 |
| 1-08.3(4).OPT1.GR1 | 6-09.3(3).INST1.GR6 |
| 1-08.3(5).GR1 | 6-09.3(3).OPT1.GB6 |
| 1-08.3(5).INST1.GR1 | 6-09.3(3).OPT2.GB6 |
| 1-08.3(5).OPT1.GR1 | 6-09.3(3).OPT3.GB6 |
| 1-08.3(5).OPT2.GR1 | 6-09.3(3).OPT9.BSP.GB6 |
| 1-08.9.INST2.GR1 | 6-09.3(3).OPT10.BSP.GB6 |
| 1-09.2.GR1 | 6-09.3(3)A.GR6 |
| 1-09.2(1).GR1 | 6-09.3(3)A.INST1.GR6 |
| 1-09.2(1)A.GR1 | 6-09.3(3)A.OPT1.2025.GR6 |
| 1-09.2(1)A1.GR1 | 6-09.3(3)B.GR6 |
| 1-09.2(1)A1.INST1.GR1 | 6-09.3(3)B.INST1.GR6 |
| 1-09.2(1)A1.OPT1.2024.GR1 | 6-09.3(3)B.OPT1.2025.GR6 |
| 1-10.3(3)B(9-35.4).OPT1.2024.GR1 | 6-09.3(3)C.GR6 |
| 1-10.3(3)K.GR1 | 6-09.3(3)C.INST1.GR6 |
| 1-10.3(3)K.INST1.GR1 | 6-09.3(3)C.OPT1.2025.GR6 |
| 1-10.3(3)K.OPT1.2024.GR1 | 6-09.3(3)D.GR6 |
| 1-10.3(3)K(9-35.14).GR1 | 6-09.3(3)D.INST1.GR6 |
| 1-10.3(3)K(9-35.14).OPT1.2024.GR1 | 6-09.3(3)D.OPT1.2025.GR6 |

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| | |
|--------------------------|------------------------------------|
| 6-09.3(3)E.GR6 | 6-09.5.OPT8.BSP.GB6 |
| 6-09.3(3)E.INST1.GR6 | 6-09.5.OPT9.BSP.GB6 |
| 6-09.3(3)E.OPT1.2025.GR6 | 6-09.5.OPT11.GB6 |
| 6-09.3(4).GR6 | 6-18.2.OPT1.GB6 |
| 6-09.3(4).INST1.GR6 | 6-18.3.INST1.GR6 |
| 6-09.3(4).OPT1.BSP.GB6 | 6-18.3.OPT1.GB6 |
| 6-09.3(5).GR6 | 6-18.4.INST1.GR6 |
| 6-09.3(5).INST1.GR6 | 6-18.4.OPT1.GB6 |
| 6-09.3(5).OPT1.GB6 | 6-18.5.INST1.GR6 |
| 6-09.3(5).OPT2.GB6 | 6-18.5.OPT1.GB6 |
| 6-09.3(5).OPT7.GB6 | 8-10.1.OPT1.GR8 |
| 6-09.3(5).OPT8.BSP.GB6 | 8-10.2.OPT1.GR8 |
| 6-09.3(5).OPT9.BSP.GB6 | 8-10.3.OPT1.GR8 |
| 6-09.3(5).OPT10.BSP.GB6 | 8-10.3.OPT2.GR8 |
| 6-09.3(6).GR6 | 8-10.4.OPT1.GR8 |
| 6-09.3(6)B.GR6 | 8-10.5.OPT1.GR8 |
| 6-09.3(6)B.INST1.GR6 | 8-11.4.INST2.GR8 |
| 6-09.3(6)B.OPT1.GB6 | 8-11.4.OPT5.2024.GR8 |
| 6-09.3(6)C.GR6 | 8-11.5.INST1.GR8 |
| 6-09.3(6)C.INST1.GR6 | 8-11.5.OPT3.2024.GR8 |
| 6-09.3(6)C.OPT2.BSP.GB6 | 8-20.2(9-29.13(10)D).INST1.GR8 |
| 6-09.3(8).GR6 | 8-20.2(9-29.13(10)D).OPT1.2024.GR8 |
| 6-09.3(8).INST1.GR6 | 8-20.2(9-29.13(12)).INST1.GR8 |
| 6-09.3(8).OPT3.BSP.GB6 | 8-20.2(9-29.13(12)).OPT1.2024.GR8 |
| 6-09.3(8).OPT4.BSP.GB6 | 8-20.3(14)D.INST1.GR8 |
| 6-09.3(9).GR6 | 8-20.3(14)D.OPT1.2024.GR8 |
| 6-09.3(9).INST1.GR6 | 8-21.2(9-28.12).GR8 |
| 6-09.3(9).OPT2.BSP.GB6 | 8-21.2(9-28.12).OPT1.2024.GR8 |
| 6-09.3(10).GR6 | 8-31.3(2)B.INST1.GR8 |
| 6-09.3(10).INST1.GR6 | 8-31.3(2)B.OPT1.2024.GR8 |
| 6-09.3(10).OPT1.BSP.GB6 | 8-31.3(2)B.INST2.GR8 |
| 6-09.3(11).GR6 | 8-31.3(2)B.OPT2.2024.GR8 |
| 6-09.3(11).INST1.GR6 | 8-31.3(4).INST1.GR8 |
| 6-09.3(11).OPT2.BSP.GB6 | 8-31.3(4).OPT1.2024.GR8 |
| 6-09.3(12).GR6 | 8-SA4.FR8 |
| 6-09.3(12).INST1.GR6 | 8-SA4(9-03.11).GR8 |
| 6-09.3(12).OPT2.BSP.GB6 | |
| 6-09.3(13).GR6 | |
| 6-09.3(13).INST1.GR6 | |
| 6-09.3(13).OPT2.BSP.GB6 | |
| 6-09.3(14).GR6 | |
| 6-09.3(14).INST1.GR6 | |
| 6-09.3(14).OPT1.BSP.GB6 | |
| 6-09.4.GR6 | |
| 6-09.4.INST1.GR6 | |
| 6-09.4.OPT2.BSP.GB6 | |
| 6-09.5.GR6 | |
| 6-09.5.INST2.GR6 | |
| 6-09.5.OPT7.BSP.GB6 | |

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General Special Provisions (GSP) list of all revisions for the annual update package
 Effective date: November 20, 2023

| FILE | Type | Revision | Notes |
|--------------------------|-----------------|-------------------|------------------------------|
| 1-02.6.OPT2.GR1 | GSP Option | Rename and Revise | Was 1-02.6.OPT3.GR1 |
| 1-02.13.GR1 | GSP Heading | Delete | |
| 1-02.13.INST1.GR1 | GSP Instruction | Delete | |
| 1-02.13.OPT1.2024.GR1 | GSP Option | Delete | |
| 1-02.4(1).OPT1.FR1 | GSP Option | Index change only | |
| 1-02.6.INST1.GR1 | GSP Instruction | Rename | Was 1-02.6.INST4.GR1 |
| 1-02.6.INST2.GR1 | GSP Instruction | Delete | |
| 1-02.6.INST4.GR1 | GSP Instruction | Rename | Now 1-02.6.INST1.GR1 |
| 1-02.6.OPT1.FR1 | GSP Option | Rename | Was 1-02.6.OPT8.FR1 |
| 1-02.6.OPT1.GR1 | GSP Option | Rename | Now to 1-02.6.OPT4.GR1 |
| 1-02.6.OPT3.GR1 | GSP Option | Rename and Revise | Now to 1-02.6.OPT2.GR1 |
| 1-02.6.OPT3.NEW.GR1 | GSP Option | New | |
| 1-02.6.OPT4.FR1 | GSP Option | Rename | Now 1-02.6.OPT5.NEW.FR1 |
| 1-02.6.OPT4.GR1 | GSP Option | Rename | Was 1-02.6.OPT1.GR1 |
| 1-02.6.OPT5.FR1 | GSP Option | Rename | Now to 1-02.6.OPT6.FR1 |
| 1-02.6.OPT5.NEW.FR1 | GSP Option | Rename | Was 1-02.6.OPT4.FR1 |
| 1-02.6.OPT6.FR1 | GSP Option | Rename | Was 1-02.6.OPT5.FR1 |
| 1-02.6.OPT8.FR1 | GSP Option | Rename | Now 1-02.6.OPT1.FR1 |
| 1-02.9.OPT1.GR1 | GSP Option | Revise | |
| 1-02.9.OPT2.GR1 | GSP Option | Revise | |
| 1-03.3.OPT2.GR1 | GSP Option | New | |
| 1-04.2.OPT1.GR1 | GSP Option | Revise | |
| 1-07.11.OPT8.FR1 | GSP Option | Delete | Not in package sent in Sept. |
| 1-07.12.GR1 | GSP Heading | Revise | Sent as Interim on 10/3 |
| 1-07.18(1).GR1 | GSP Heading | Delete | |
| 1-07.18(1).INST1.GR1 | GSP Instruction | Delete | |
| 1-07.18(1).OPT1.2024.GR1 | GSP Option | Delete | |
| 1-07.18(5).OPT1.FR1 | GSP Option | Revise | |
| 1-07.18(5).OPT2.2025.GR1 | GSP Option | New | |
| 1-07.28(8).OPT1.GR1 | GSP Option | Index change only | |
| 1-08.3(1).GR1 | GSP Heading | Rename | Now 1-08.3(2).NEW.GR1 |
| 1-08.3(1).INST1.GR1 | GSP Instruction | Delete | |
| 1-08.3(1).INST2.GR1 | GSP Instruction | Rename and Revise | Now 1-08.3(2)B.INST1.GR1 |
| 1-08.3(1).OPT1.GR1 | GSP Option | Delete | |
| 1-08.3(1).OPT2.FR1 | GSP Option | Rename and Revise | Now 1-08.3(2)B.OPT1.FR1 |

| FILE | Type | Revision | Notes |
|----------------------------------|-----------------|-------------------|---|
| 1-08.3(2).GR1 | GSP Heading | Delete | |
| 1-08.3(2).INST3.GR1 | GSP Instruction | Delete | |
| 1-08.3(2).NEW.GR1 | GSP Heading | Rename | Was 1-08.3(1).GR1 |
| 1-08.3(2).OPT2.FR1 | GSP Option | Delete | |
| 1-08.3(2)B.GR1 | GSP Heading | New | |
| 1-08.3(2)B.INST1.GR1 | GSP Instruction | Rename and Revise | Was 1-08.3(1).INST2.GR1 |
| 1-08.3(2)B.OPT1.FR1 | GSP Option | Rename and Revise | Was 1-08.3(1).OPT2.FR1 |
| 1-08.3(3).GR1 | GSP Heading | Delete | |
| 1-08.3(3).INST1.GR1 | GSP Instruction | Delete | |
| 1-08.3(3).OPT1.GR1 | GSP Option | Delete | |
| 1-08.3(4).GR1 | GSP Heading | Delete | |
| 1-08.3(4).INST1.GR1 | GSP Instruction | Delete | |
| 1-08.3(4).OPT1.GR1 | GSP Option | Delete | |
| 1-08.3(5).GR1 | GSP Heading | Delete | |
| 1-08.3(5).INST1.GR1 | GSP Instruction | Delete | |
| 1-08.3(5).OPT1.GR1 | GSP Option | Delete | |
| 1-08.3(5).OPT2.GR1 | GSP Option | Delete | |
| 1-08.9.INST1.GR1 | GSP Instruction | Rename | Was 1-08.9.INST3.GR1 - Not in package sent in Sept. |
| 1-08.9.INST2.GR1 | GSP Instruction | Delete | Not in package sent in Sept. |
| 1-08.9.OPT1.NEW.FR1 | GSP Option | Rename | Was 1-08.9.OPT3.FR1. Not in package sent in Sept. |
| 1-08.9.OPT2.NEW.FR1 | GSP Option | Rename | Was 1-08.9.OPT1.FR1. Not in package sent in Sept. |
| 1-08.9.OPT3.NEW.FR1 | GSP Option | Rename | Was 1-08.9.OPT2.FR1. Not in package sent in Sept. |
| 1-09.2(1).GR1 | GSP Heading | Delete | |
| 1-09.2(1)A.GR1 | GSP Heading | Delete | |
| 1-09.2(1)A1.GR1 | GSP Heading | Delete | |
| 1-09.2(1)A1.INST1.GR1 | GSP Instruction | Delete | |
| 1-09.2(1)A1.OPT1.2024.GR1 | GSP Option | Delete | |
| 1-09.2.GR1 | GSP Heading | Delete | |
| 1-09.3.OPT1.FR1 | GSP Option | Index change only | |
| 1-10.1(1).OPT1.GR1 | GSP Option | Index change only | |
| 1-10.2(9-35).OPT1.GR1 | GSP Option | Index change only | |
| 1-10.3(3)(9-35.8).OPT1.GR1 | GSP Option | Index change only | |
| 1-10.3(3).OPT1.GR1 | GSP Option | Index change only | |
| 1-10.3(3).OPT2.GR1 | GSP Option | Index change only | |
| 1-10.3(3).OPT3.FR1 | GSP Option | Revise | |
| 1-10.3(3).OPT4.FR1 | GSP Option | Revise | |
| 1-10.3(3).OPT5.GR1 | GSP Option | Index change only | |
| 1-10.3(3)B(9-35.4).OPT1.2024.GR1 | GSP Option | Rename | Now 1-10.3(3)B(9-35.4).OPT1.2025.GR1 |

| FILE | Type | Revision | Notes |
|-----------------------------------|---------------------------|-------------------|---------------------------------------|
| 1-10.3(3)B(9-35.4).OPT1.2025.GR1 | GSP Option | Rename | Was 1-10.3(3)B(9-35.4).OPT1.2024.GR1 |
| 1-10.3(3)K(9-35.14).GR1 | GSP Heading & Instruction | Delete | |
| 1-10.3(3)K(9-35.14).OPT1.2024.GR1 | GSP Option | Delete | |
| 1-10.3(3)K.GR1 | GSP Heading | Delete | |
| 1-10.3(3)K.INST1.GR1 | GSP Instruction | Delete | |
| 1-10.3(3)K.OPT1.2024.GR1 | GSP Option | Delete | |
| 1-10.4(2).OPT1.GR1 | GSP Option | Index change only | |
| 1-10.4(2).OPT2.GR1 | GSP Option | Index change only | |
| 1-10.4(2).OPT3.GR1 | GSP Option | Index change only | |
| 1-10.4(2).OPT5.GR1 | GSP Option | Index change only | |
| 1-10.4(2).OPT7.GR1 | GSP Option | Index change only | |
| 1-10.4(2).OPT8.GR1 | GSP Option | Index change only | |
| 1-10.5(2).OPT1.GR1 | GSP Option | Revise | |
| 1-10.5(2).OPT2.GR1 | GSP Option | Index change only | |
| 1-10.5(2).OPT3.GR1 | GSP Option | Index change only | |
| 1-10.5(2).OPT4.GR1 | GSP Option | Index change only | |
| 1-10.5(2).OPT6.GR1 | GSP Option | Index change only | |
| 1-10.5(2).OPT7.GR1 | GSP Option | Index change only | |
| 5-03.3(2).GR5 | GSP Heading | Index change only | |
| 5-03.3(2)B.GR5 | GSP Heading | Index change only | |
| 5-03.3(2)B.INST1.GR5 | GSP Instruction | Delete | |
| 5-03.3(2)B.OPT1.2024.GR5 | GSP Option | Delete | |
| 5-03.3(3).GR5 | GSP Heading | Index change only | |
| 5-03.3(3)C.GR5 | GSP Heading | Index change only | |
| 5-03.3(3)C.INST1.GR5 | GSP Instruction | Delete | |
| 5-03.3(3)C.OPT1.2024.GR5 | GSP Option | Delete | |
| 5-03.3.GR5 | GSP Heading | Index change only | |
| 5-03.5.GR5 | GSP Heading | Index change only | |
| 5-03.5.INST1.GR5 | GSP Instruction | Delete | |
| 5-03.5.OPT1.2024.GR5 | GSP Option | Delete | |
| 5-03.GR5 | GSP Heading | Index change only | |
| 5-04.2(1).GR5 | GSP Heading | Index change only | |
| 5-04.2(1)A.GR5 | GSP Heading | Index change only | |
| 5-04.2(1)A2.GR5 | GSP Heading | Index change only | |
| 5-04.2(1)A2.INST1.GR5 | GSP Instruction | Delete | |
| 5-04.2(1)A2.OPT1.2024.GR5 | GSP Option | Delete | |
| 5-04.2(9-03.21(1)A).OPT1.2024.GR5 | GSP Option | Rename | Now 5-04.2(9-03.21(1)A).OPT1.2025.GR5 |
| 5-04.2(9-03.21(1)A).OPT1.2025.GR5 | GSP Option | Rename | Was 5-04.2(9-03.21(1)A).OPT1.2024.GR5 |

| FILE | Type | Revision | Notes |
|----------------------------|-----------------|-------------------|------------------------|
| 5-04.3(3)A.GR5 | GSP Heading | Index change only | |
| 5-04.3(3)A.INST1.GR5 | GSP Instruction | Delete | |
| 5-04.3(3)A.OPT1.2024.GR5 | GSP Option | Delete | |
| 5-05.1.OPT1.GR5 | GSP Option | Index change only | |
| 5-05.2.OPT1.FR5 | GSP Option | Rename and Revise | Now 5-05.2.OPT2.FR5 |
| 5-05.2.OPT1.GR5 | GSP Option | New | |
| 5-05.2.OPT2.FR5 | GSP Option | Rename and Revise | Was 5-05.2.OPT1.FR5 |
| 5-05.3(1).OPT2.GR5 | GSP Option | Rename and Revise | Was 5-05.3(1).OPT8.GR5 |
| 5-05.3(1).OPT8.GR5 | GSP Option | Rename and Revise | Now 5-05.3(1).OPT2.GR5 |
| 5-05.3.OPT1.GR5 | GSP Option | Index change only | |
| 5-05.3.OPT2.FR5 | GSP Option | Index change only | |
| 6-02.2.OPT1.GR6 | GSP Option | Delete | |
| 6-02.2.OPT60(C).GB6 | GSP Option | Revise | |
| 6-02.3(18).GR6 | GSP Heading | Index change only | |
| 6-02.3(18).INST1.GR6 | GSP Instruction | Delete | |
| 6-02.3(18).OPT1.GR6 | GSP Option | Delete | |
| 6-02.3(25).GR6 | GSP Heading | Index change only | |
| 6-02.3(25)L.GR6 | GSP Heading | Index change only | |
| 6-02.3(25)L2.GR6 | GSP Heading | New | |
| 6-02.3(25)L2.INST1.GR6 | GSP Instruction | New | |
| 6-02.3(25)L2.OPT1.2025.GR6 | GSP Option | New | |
| 6-02.3(5).GR6 | GSP Heading | Index change only | |
| 6-02.3(5)G.GR6 | GSP Heading | Index change only | |
| 6-02.3(5)G.INST1.GR6 | GSP Instruction | New | |
| 6-02.3(5)G.OPT1.2025.GR6 | GSP Instruction | New | |
| 6-02.3.OPT8(L).GB6 | GSP Option | Revise | |
| 6-06.2.OPT1.GB6 | GSP Option | Revise | |
| 6-06.2.OPT8.FB6 | GSP Option | Revise | |
| 6-06.3(2).OPT1.GB6 | GSP Option | Revise | |
| 6-06.3(2).OPT7.GB6 | GSP Option | Revise | |
| 6-09.2.GR6 | GSP Heading | Delete | |
| 6-09.2.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.2.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.2.OPT8.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(1).GR6 | GSP Heading | Delete | |
| 6-09.3(1).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(1).OPT1.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(10).GR6 | GSP Heading | Delete | |

| FILE | Type | Revision | Notes |
|--------------------------|-----------------|----------|-------|
| 6-09.3(10).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(10).OPT1.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(11).GR6 | GSP Heading | Delete | |
| 6-09.3(11).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(11).OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(12).GR6 | GSP Heading | Delete | |
| 6-09.3(12).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(12).OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(13).GR6 | GSP Heading | Delete | |
| 6-09.3(13).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(13).OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(14).GR6 | GSP Heading | Delete | |
| 6-09.3(14).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(14).OPT1.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(2).GR6 | GSP Heading | Delete | |
| 6-09.3(2).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(2).OPT1.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(3).GR6 | GSP Heading | Delete | |
| 6-09.3(3).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(3).OPT1.GB6 | GSP Option | Delete | |
| 6-09.3(3).OPT10.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(3).OPT2.GB6 | GSP Option | Delete | |
| 6-09.3(3).OPT3.GB6 | GSP Option | Delete | |
| 6-09.3(3).OPT9.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(3)A.GR6 | GSP Heading | Delete | |
| 6-09.3(3)A.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(3)A.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.3(3)B.GR6 | GSP Heading | Delete | |
| 6-09.3(3)B.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(3)B.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.3(3)C.GR6 | GSP Heading | Delete | |
| 6-09.3(3)C.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(3)C.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.3(3)D.GR6 | GSP Heading | Delete | |
| 6-09.3(3)D.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(3)D.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.3(3)E.GR6 | GSP Heading | Delete | |
| 6-09.3(3)E.INST1.GR6 | GSP Instruction | Delete | |

| FILE | Type | Revision | Notes |
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| 6-09.3(3)E.OPT1.2025.GR6 | GSP Option | Delete | |
| 6-09.3(4).GR6 | GSP Heading | Delete | |
| 6-09.3(4).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(4).OPT1.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(5).GR6 | GSP Heading | Delete | |
| 6-09.3(5).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(5).OPT1.GB6 | GSP Option | Delete | |
| 6-09.3(5).OPT10.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(5).OPT2.GB6 | GSP Option | Delete | |
| 6-09.3(5).OPT7.GB6 | GSP Option | Delete | |
| 6-09.3(5).OPT8.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(5).OPT9.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(6).GR6 | GSP Heading | Delete | |
| 6-09.3(6)B.GR6 | GSP Heading | Delete | |
| 6-09.3(6)B.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(6)B.OPT1.GB6 | GSP Option | Delete | |
| 6-09.3(6)C.GR6 | GSP Heading | Delete | |
| 6-09.3(6)C.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(6)C.OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(8).GR6 | GSP Heading | Delete | |
| 6-09.3(8).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(8).OPT3.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(8).OPT4.BSP.GB6 | GSP Option | Delete | |
| 6-09.3(9).GR6 | GSP Heading | Delete | |
| 6-09.3(9).INST1.GR6 | GSP Instruction | Delete | |
| 6-09.3(9).OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.3.GR6 | GSP Heading | Delete | |
| 6-09.4.GR6 | GSP Heading | Delete | |
| 6-09.4.INST1.GR6 | GSP Instruction | Delete | |
| 6-09.4.OPT2.BSP.GB6 | GSP Option | Delete | |
| 6-09.5.GR6 | GSP Heading | Delete | |
| 6-09.5.INST2.GR6 | GSP Instruction | Delete | |
| 6-09.5.OPT11.GB6 | GSP Option | Delete | |
| 6-09.5.OPT7.BSP.GB6 | GSP Option | Delete | |
| 6-09.5.OPT8.BSP.GB6 | GSP Option | Delete | |
| 6-09.5.OPT9.BSP.GB6 | GSP Option | Delete | |
| 6-09.GR6 | GSP Heading | Delete | |
| 6-11.2.GR6 | GSP Heading | Index change only | |

| FILE | Type | Revision | Notes |
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| 6-11.2.INST1.GR6 | GSP Instruction | New | |
| 6-11.2.OPT1.2025.GR6 | GSP Option | New | |
| 6-11.3.GR6 | GSP Heading | Index change only | |
| 6-11.3.INST1.GR6 | GSP Instruction | New | |
| 6-11.3.OPT1.2025.GR6 | GSP Option | New | |
| 6-11.4.GR6 | GSP Heading | Index change only | |
| 6-11.4.INST1.GR6 | GSP Instruction | New | |
| 6-11.4.OPT1.2025.GR6 | GSP Option | New | |
| 6-11.5.GR6 | GSP Heading | Index change only | |
| 6-11.5.INST1.GR6 | GSP Instruction | New | |
| 6-11.5.OPT1.2025.GR6 | GSP Option | New | |
| 6-11.GR6 | GSP Heading | Index change only | |
| 6-16.3(3).INST1.GR6 | GSP Instruction | New | Not in package sent in Sept. |
| 6-16.3(3).OPT1.2025.GR6 | GSP Instruction | New | Not in package sent in Sept. |
| 6-16.3.GR6 | GSP Heading | Index change only | Not in package sent in Sept. |
| 6-16.GR6 | GSP Heading | Index change only | Not in package sent in Sept. |
| 6-18.2.OPT1.GB6 | GSP Option | Delete | Not in package sent in Sept. |
| 6-18.3.GR6 | GSP Heading | Index change only | Not in package sent in Sept. |
| 6-18.3.INST1.GR6 | GSP Instruction | Index change only | Not in package sent in Sept. |
| 6-18.3.OPT1.GB6 | GSP Option | Index change only | Not in package sent in Sept. |
| 6-18.4.GR6 | GSP Heading | Index change only | Not in package sent in Sept. |
| 6-18.4.INST1.GR6 | GSP Instruction | Index change only | Not in package sent in Sept. |
| 6-18.4.OPT1.GB6 | GSP Option | Index change only | Not in package sent in Sept. |
| 6-18.5.GR6 | GSP Heading | Index change only | Not in package sent in Sept. |
| 6-18.5.INST1.GR6 | GSP Instruction | Index change only | Not in package sent in Sept. |
| 6-18.5.OPT1.GB6 | GSP Option | Index change only | Not in package sent in Sept. |
| 6-18.SA1.2025.GR6 | Standalone GSP | New | Not in package sent in Sept. |
| 6-20.3(1).GR6 | GSP Heading | New | |
| 6-20.3(1).INST1.GR6 | GSP Instruction | New | |
| 6-20.3(1).OPT1.2025.GR6 | GSP Option | New | |
| 8-10.1.OPT1.GR8 | GSP Option | Delete | |
| 8-10.1.OPT1.NEW.GR8 | GSP Option | New | |
| 8-10.2.OPT1.GR8 | GSP Option | Delete | |
| 8-10.2.OPT1.NEW.GR8 | GSP Option | New | |
| 8-10.3.OPT1.GR8 | GSP Option | Delete | |
| 8-10.3.OPT1.NEW.GR8 | GSP Option | New | |
| 8-10.3.OPT2.GR8 | GSP Option | Delete | |
| 8-10.4.OPT1.GR8 | GSP Option | Delete | |

| FILE | Type | Revision | Notes |
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| 8-10.4.OPT1.NEW.GR8 | GSP Option | New | |
| 8-10.5.OPT1.GR8 | GSP Option | Delete | |
| 8-10.5.OPT1.NEW.GR8 | GSP Option | New | |
| 8-11.2(9-16.3(4)).OPT1.GB8 | GSP Option | Revise | |
| 8-11.2.OPT2.FR8 | GSP Option | Revise | |
| 8-11.3.OPT2.FR8 | GSP Option | Revise | |
| 8-11.4.INST2.GR8 | GSP Instruction | Delete | |
| 8-11.4.OPT5.2024.GR8 | GSP Option | Delete | |
| 8-11.5.INST1.GR8 | GSP Instruction | Delete | |
| 8-11.5.OPT3.2024.GR8 | GSP Option | Delete | |
| 8-12.2.OPT6.GB8 | GSP Option | Revise | |
| 8-12.3.OPT1(B).GB8 | GSP Option | Revise | |
| 8-20.2(9-29.13(10)D).INST1.GR8 | GSP Instruction | Delete | |
| 8-20.2(9-29.13(10)D).OPT1.2024.GR8 | GSP Option | Delete | |
| 8-20.2(9-29.13(11)).OPT1.GR8 | GSP Option | Revise | |
| 8-20.2(9-29.13(12)).INST1.GR8 | GSP Instruction | Delete | |
| 8-20.2(9-29.13(12)).OPT1.2024.GR8 | GSP Option | Delete | |
| 8-20.2(9-29.6(2)).GR8 | GSP Heading & Instruction | New | |
| 8-20.2(9-29.6(2)).OPT1.2025.GR8 | GSP Option | New | |
| 8-20.2(9-29.6(3)).GR8 | GSP Heading & Instruction | New | |
| 8-20.2(9-29.6(3)).OPT1.2025.GR8 | GSP Option | New | |
| 8-20.3(1).GR8 | GSP Heading | Index change only | |
| 8-20.3(1).INST1.GR8 | GSP Instruction | New | |
| 8-20.3(1).OPT1.FR8 | GSP Option | New | |
| 8-20.3(14)D.GR8 | GSP Heading | Index change only | |
| 8-20.3(14)D.INST1.GR8 | GSP Instruction | Delete | |
| 8-20.3(14)D.OPT1.2024.GR8 | GSP Option | Delete | |
| 8-21.2(9-28.12).GR8 | GSP Heading | Delete | |
| 8-21.2(9-28.12).OPT1.2024.GR8 | GSP Option | Delete | |
| 8-21.3(9)E.OPT1.FB8 | GSP Option | Revise | |
| 8-30.1.INST1.GR8 | GSP Instruction | New | |
| 8-30.1.OPT1.GR8 | GSP Option | New | |
| 8-30.2(9-03.11).GR8 | GSP Heading & Instruction | New | |
| 8-30.2(9-03.11).OPT1.FR8 | GSP Option | New | |
| 8-30.2.GR8 | GSP Heading | New | |
| 8-30.3(1).GR8 | GSP Heading | New | |
| 8-30.3(1).INST1.GR8 | GSP Instruction | New | |
| 8-30.3(1).OPT1.FR8 | GSP Option | New | |

| FILE | Type | Revision | Notes |
|--------------------------|-----------------|-------------------|------------------------------|
| 8-30.3(3).GR8 | GSP Heading | New | |
| 8-30.3.GR8 | GSP Heading | New | |
| 8-30.5.GR8 | GSP Heading | New | |
| 8-30.5.INST1.GR8 | GSP Instruction | New | |
| 8-30.5.OPT2.GR8 | GSP Option | New | |
| 8-30.GR8 | GSP Heading | New | |
| 8-31.3(2).GR8 | GSP Heading | Index change only | |
| 8-31.3(2)B.GR8 | GSP Heading | Index change only | |
| 8-31.3(2)B.INST1.GR8 | GSP Instruction | Delete | |
| 8-31.3(2)B.INST2.GR8 | GSP Instruction | Delete | |
| 8-31.3(2)B.OPT1.2024.GR8 | GSP Option | Delete | |
| 8-31.3(2)B.OPT2.2024.GR8 | GSP Option | Delete | |
| 8-31.3(4).GR8 | GSP Heading | Index change only | |
| 8-31.3(4).INST1.GR8 | GSP Instruction | Delete | |
| 8-31.3(4).OPT1.2024.GR8 | GSP Option | Delete | |
| 8-SA4(9-03.11).GR8 | Standalone GSP | Delete | |
| 8-SA4.FR8 | Standalone GSP | Delete | |
| INTRO.GR1 | GSP Option | Revise | |
| STDPLANS.GR9 | GSP Option | Revise | Not in package sent in Sept. |
| Grand Total | | | |

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| 1 | INTRO.GR1 | Special Provisions |
| 2 | | (November 20, 2023) October 3, 2022) |
| 3 | | All Projects |
| 4 | | |
| 5 | DIVISION1.GR1 | General Requirements |
| 6 | | |
| 7 | DESWORK.GR1 | Description of Work |
| 8 | | |
| 9 | DESWORK1.FR1 | (Description of Work) |
| 10 | | (March 13, 1995) |
| 11 | | Use in all projects except those involving only painting of metal |
| 12 | | bridges. |
| 13 | | (1 fill-in) |
| 14 | | |
| 15 | DESWORK2.FB1 | (Description of Work - Bridge Painting) |
| 16 | | (August 3, 2015) |
| 17 | | Use in projects involving only the painting of metal bridges. |
| 18 | | (3 fill-ins) |
| 19 | | |
| 20 | 1-02.GR1 | Bid Procedures and Conditions |
| 21 | | |
| 22 | 1-02.1.GR1 | Prequalification of Bidders |
| 23 | | |
| 24 | 1-02.1.INST1.GR1 | (Section 1-02.1, including title, is deleted and replaced |
| 25 | | with the following) |
| 26 | | Must use one preceding any of the following: |
| 27 | | |
| 28 | 1-02.1.OPT1.GR1 | (Vacant) |
| 29 | | (April 2, 2018) |
| 30 | | Use in projects where all of the work will occur outside the |
| 31 | | highway right of way. |
| 32 | | Requires approval of HQ Contract Ad and Award Manager. |
| 33 | | |
| 34 | 1-02.4.GR1 | Examination of Plans, Specifications and Site of Work |
| 35 | | |
| 36 | 1-02.4(1).GR1 | General |
| 37 | | |
| 38 | 1-02.4(1).INST1.GR1 | (Section 1-02.4(1) is supplemented with the following) |
| 39 | | Must use once preceding any of the following: |
| 40 | | |
| 41 | 1-02.4(1).OPT1.FR1 | <u>(Reference information)</u> |
| 42 | | (September 3, 2019) |
| 43 | | Use in projects for which the Contracting Agency is |
| 44 | | providing Reference Information for the Contractor's |
| 45 | | use. |
| 46 | | (2 fill-ins) |
| 47 | | The first fill-in identifies the web address where the |
| 48 | | Reference Information is located: |
| 49 | | https://ftp.wsdot.wa.gov/contracts/ . The second fill-in |
| 50 | | lists the items available for the prospective bidder's |
| 51 | | review. Structural Reference Information should include |
| 52 | | bridge inspection reports for all bridges within the project |
| 53 | | limits and as-built plans for all bridges which are being |
| 54 | | modified as part of the Project scope including but not |
| 55 | | limited to widening, repair, retrofit (rail, seismic, etc.), |

1 painting, overlay and paving. Structural Reference
2 Information should be listed by bridge number. For
3 projects including culverts or bridges associated with
4 water crossings, include the Final Hydraulic Design
5 Report. When applicable, include the project electronic
6 design files.
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9 **1-02.6.GR1 Preparation of Proposal**

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11 1-02.6.INST41.GR1 (Item number 3 in the second paragraph of Section 1-02.6 is
12 supplemented with the following)
13 Must use once preceding any of the following:

14
15 1-02.6.OPT18.FR1 (Maximum Funds Available)
16 (September 3, 2019)
17 Use in Connecting Washington projects. Contact your
18 Region Program Management Office and CPDM to
19 determine whether to use this GSP and establish a
20 maximum funds available amount.
21 The list of Connecting Washington projects is available at
22 <http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/ConnectingWashington.pdf>.
23 Use of this GSP requires approval from the HQ Construction
24 Office.
25 (1 fill-in)
26 Fill-in #1 is the maximum funds available for this Contract.
27
28

29 ~~1-02.6.INST2.GR1~~ (The fourth paragraph of Section 1-02.6 is revised to read)
30 ~~Must use one preceding any of the following:~~

31
32 ~~1-02.6.OPT1.GR1~~ (Small and Veteran Owned Business Enterprises (SVBE)
33 and Minority and Women's Business Enterprises (MWBE)
34 Documentation)
35 (March 14, 2022)
36 ~~Use in all State funded (100%) projects with an estimated~~
37 ~~cost of \$250,000 or more and requiring the use of Small~~
38 ~~Business Enterprise (SBE) or Veteran Owned Business~~
39 ~~(VOB) enforceable COA goals and MWBE voluntary goals.~~
40 ~~Must use with 1-02.9.OPT2.GR1, 1-02.13.OPT1.2024.GR1,~~
41 ~~and 1-07.11.OPT6.FR1.~~
42

43 1-02.6.OPT32.GR1 (Subcontractor list not required with bid)
44 (The fourth and fifth and sixth paragraphs of Section 1-02.6 are
45 deleted)
46 (August 2, 2004 November 20, 2023)
47 Use in all projects with estimated cost of \$1,000,000 or less.
48

49 1-02.6.INST3.GR1 (Section 1-02.6 is supplemented with the following)
50 Must use once preceding any of the following:

51
52 1-02.6.OPT3.NEW.GR1 (Delivery of DBE forms)
53 (November 20, 2023)
54 Use in Federal Aid projects with DBE Condition of Award
55 (COA) goals.

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1-02.9.OPT2.GR1 ~~(SVBE document submittal)~~
~~(November 20, 2023)~~ ~~March 14, 2022)~~
Use in all State funded (100%) projects with an estimated cost of \$250,000 or more and requiring the use of Small Business Enterprise (SBE) or Veteran-Owned Business (VOB) enforceable COA goals and MWBE voluntary goals. Must use with **1-02.6.OPT1.GR1**, ~~1-02.13.OPT1.2024.GR1~~, and **1-07.11.OPT6.FR1**.

1-02.12.GR1 Public Opening of Proposal

1-02.12.INST1.GR1 (Section 1-02.12 is supplemented with the following)
Must use once preceding any of the following:

1-02.12.OPT1.FR1 (Date of Opening Bids)
(August 3, 2015)
Do not use in projects scheduled for Region bid openings. Use in all projects scheduled for bid openings in Olympia. Do not use with **1-02.12.OPT2.FR1**.
(1 fill-in)
Bid opening is held on Wednesday, except in the event of holidays. Should a holiday be observed on the Monday prior to bid opening, bid opening will be held on Thursday of that same week. Contact the HQ Contract Ad & Award Office if additional guidance is necessary.

1-02.12.OPT2.FR1 (Date of Opening Bids for Region Bid Openings)
(October 3, 2022)
Do not use in projects scheduled for bid opening in Olympia. Use in all projects scheduled for Region bid openings. Do not use with **1-02.12.OPT1.FR1**.
(3 fill-ins)
Fill-in #1 is the name of the facility where the bid opening will be held.
Fill-in #2 is the address of the facility where the bid opening will be held.
Fill-in #3 is the bid opening date.

~~**1-02.13.GR1 Irregular Proposals**~~

~~1-02.13.INST1.GR1 (Item number 1 of Section 1-02.13 is supplemented with the following)
Must use once preceding any of the following:~~

~~1-02.13.OPT1.2024.GR1 (SVB Plan and SVBE Forms)
(February 6, 2023)
Use in all State funded (100%) projects with an estimated cost of \$250,000 or more and requiring the use of Small Business Enterprise (SBE) or Veteran-Owned Business (VOB) enforceable COA goals and MWBE voluntary goals. Must use with **1-02.6.OPT1.GR1**, **1-02.9.OPT2.GR1**, and **1-07.11.OPT6.FR1.GR1**.~~

1-02.INST1.GR1 (Section 1-02 is supplemented with the following)

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Must use once preceding any of the following:

1-02.OPT1.GR1 (Protest Procedures)
(September 7, 2021)
Include in all contracts with Federal Transit Administration
(FTA) funding. Typically only applies to Ferry System and
Sound Transit projects.

1-03.GR1 Award and Execution Of Contract

1-03.2.GR1 Award of Contract

1-03.2.INST1.GR1 (The first sentence of Section 1-03.2 is revised to read)
Must use once preceding any of the following:

1-03.2.OPT1.GR1 (Rapid Award of Contract)
(April 7, 2008)
Use only in projects when the Regional Administrator has
declared an emergency, and the nature of the emergency
requires a rapid award and execution of the contract.
Requires approval of HQ Contract Ad and Award Manager.

1-03.3.GR1 Execution of Contract

1-03.3.INST1.GR1 (Section 1-03.3 is supplemented with the following)
Must use once preceding any of the following:

1-03.3.OPT1.GR1 (Execution of Contract)
(October 3, 2022)
Use in projects selected by the Region when it is desired to
have Escrow Bid Documentation established for the project.
The project must be of significant size and duration to extend
over multiple construction seasons.

Requires Region to set up banking facility for document
storage prior to advertisements.

1-03.3.OPT2.GR1 (DBE Trucking form)
(November 20, 2023)
Use in Federal Aid projects with DBE Condition of Award
(COA) goals.

Must use with 1-02.6.OPT3.NEW.GR1, 1-02.9.OPT1.GR1
and 1-07.11.OPT3.FR1

1-03.3.INST2.GR1 (The first paragraph of Section 1-03.3 is supplemented with the
following)
Must use once preceding any of the following:

1-03.3.OPT3.GR1 (Connecting Washington)
(January 4, 2016)
Use in the Connecting Washington projects listed at
<http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/ConnectingWashington.pdf>.

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|----|-------------------|--|
| 1 | 1-04.GR1 | Scope of the Work |
| 2 | | |
| 3 | 1-04.2.GR1 | Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda |
| 4 | | |
| 5 | | |
| 6 | 1-04.2.INST1.GR1 | (Section 1-04.2 is supplemented with the following) Must use once preceding any of the following: |
| 7 | | |
| 8 | | |
| 9 | 1-04.2.OPT1.GR1 | (Unifier) (March 9, 2023 November 20, 2023) |
| 10 | | Use in all projects unless approved for omission by Region Construction. |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | 1-04.5.GR1 | Procedure and Protest by the Contractor |
| 15 | | |
| 16 | 1-04.5.INST1.GR1 | (Section 1-04.5 is supplemented with the following) Must use once preceding any of the following: |
| 17 | | |
| 18 | | |
| 19 | 1-04.5.OPT1.GR1 | (Partnering) (January 13, 2021) |
| 20 | | Use in all projects with an Engineer's estimate of \$5 million or greater, and/or Contracts exceeding 200 working days. At the discretion of the Region, may be used in projects with lesser cost and duration where the project complexity, scope of work, or project conditions support the need to host a Project Specific Partnering workshop. Deletion of this item requires Region Construction Engineer approval. |
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| 29 | 1-05.GR1 | Control of Work |
| 30 | | |
| 31 | 1-05.3.GR1 | Working Drawings |
| 32 | | |
| 33 | 1-05.3.INST1.GR1 | (Section 1-05.3 is supplemented with the following) Must use once preceding any of the following: |
| 34 | | |
| 35 | | |
| 36 | 1-05.3.OPT2.GR1 | (Right/Left Designation) (October 3, 2022) |
| 37 | | Use in all WSF projects. |
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| 40 | 1-05.3.OPT3.GR1 | (Work Plan) (October 3, 2022) |
| 41 | | Use in all WSF projects. |
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| 44 | 1-05.4.GR1 | Conformity With and Deviations from Plans and Stakes |
| 45 | | |
| 46 | 1-05.4.INST1.GR1 | (Section 1-05.4 is supplemented with the following) Must use once preceding any of the following: |
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| 48 | | |
| 49 | 1-05.4.OPT1.GR1 | (Contractor Surveying - Structure) (February 6, 2023) |
| 50 | | Use in projects requiring the Contractor to do all surveying needed for bridges, buried structures, walls, or marine structures. May be edited to retain portions of surveying for WSDOT crews but editing to assign additional work to the Contractor requires HQ Construction Office approval. Do not |
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|----|-------------------|---|
| 1 | | use for bridge deck paving existing surfacing profile work |
| 2 | | (already covered by Section 6-08.3(2)). Do not use for |
| 3 | | concrete overlay existing surfacing profile work (already |
| 4 | | covered by Section 6-09.3(10)A). |
| 5 | | |
| 6 | 1-05.4.OPT2.GR1 | (Contractor Surveying - Roadway) |
| 7 | | (January 13, 2021) |
| 8 | | Use in projects requiring the Contractor to do all surveying |
| 9 | | needed for roadway items. May be edited to retain portions |
| 10 | | of surveying for WSDOT crews but editing to assign |
| 11 | | additional work to the Contractor requires HQ Construction |
| 12 | | Office approval. Must also use 2-03.4.OPT2.GR2 if roadway |
| 13 | | excavation or embankment is included in the project. |
| 14 | | |
| 15 | 1-05.4.OPT3.GR1 | (Licensed Surveyors) |
| 16 | | (April 4, 2011) |
| 17 | | Include in projects requiring the Contractor to supply |
| 18 | | professional land surveyors to establish right-of-way lines |
| 19 | | and other monuments. Use of this GSP for Local Agency |
| 20 | | projects requires the approval of the HQ Local Programs |
| 21 | | Office. |
| 22 | | |
| 23 | 1-05.4.OPT4.GR1 | (Contractor Surveying – ADA Features) |
| 24 | | (March 9, 2023) |
| 25 | | Use in all projects that require any ADA work. |
| 26 | | Must use with 8-14.3.OPT2.GR8 and 8-14.3.OPT3.GR8 . |
| 27 | | |
| 28 | 1-05.9.GR1 | Equipment |
| 29 | | |
| 30 | 1-05.9.INST1.GR1 | (Section 1-05.9 is supplemented with the following) |
| 31 | | Must use once preceding any of the following: |
| 32 | | |
| 33 | 1-05.9.OPT1.FR1 | <u>(Machine control grading)</u> |
| 34 | | (April 7, 2008) |
| 35 | | Use in eligible projects that require extensive grading if |
| 36 | | adequate design files have already been created during the |
| 37 | | design process. Eligible projects are those that require large |
| 38 | | areas of linear grading or mass quantities of roadway |
| 39 | | excavation, and are in locations where satellite signals are |
| 40 | | not obstructed by natural or manmade feature (such as |
| 41 | | highly mountainous areas or urban canyons). Requires |
| 42 | | approval of Region Construction Manager. |
| 43 | | |
| 44 | | Must also use 1-05.4.OPT2.GR1 (Contractor Surveying – |
| 45 | | Roadway). |
| 46 | | (2 fill-ins) The first fill-in describes the type of data to be |
| 47 | | provided (cross sections Sta. A to B, digital terrain model, |
| 48 | | etc.) and the file format of the electronic data. The second |
| 49 | | fill-in is the name and address of the Project Engineer |
| 50 | | administering the contract. |
| 51 | | |
| 52 | 1-05.9.OPT2.FR1 | (Class A Noxious Weeds) |
| 53 | | (March 9, 2023) |
| 54 | | RCW 17.10.145 requires state agencies to control Class A |
| 55 | | noxious weeds. Apply this GSP if the project’s SEPA |

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checklist and/or the Region Landscape Architect determine a Class A noxious weed is present in the upland. Fill-in #1 will contain the name of the noxious weed or aquatic invasive species. Fill-in #2 will contain the specific instructions how to clean the equipment prior to leaving the project site. (2 fill-ins)

1-05.14.GR1 Cooperation With Other Contractors

1-05.14.INST1.GR1 (Section 1-05.14 is supplemented with the following)
Must use once preceding any of the following:

1-05.14.OPT1.FR1 (Other contracts or other work)
(March 13, 1995)
Use when it is anticipated that other projects are, or will be, under construction during the life of this project within the limits of this project or when access to, or through adjacent projects may be necessary.
(1 fill-in)

1-05.14.OPT2.FR1 (Provide Access)
(March 13, 1995)
Use on structure contracts which are separate contracts when other contractors are required to haul past the structure being constructed.
(1 fill-in)

1-06.GR1 Control of Material

1-06.INST1.GR1 (Section 1-06 is supplemented with the following)
Must use once preceding any of the following:

1-06.OPT1.GR1 Buy America
Must use once preceding any of the following:

1-06.OPT1(A).GR1 (Buy America)
(August 6, 2012)
Specification will require the use of domestically sourced Steel and Iron in accordance with 23 CFR 635.410.

Must use if the Project or one of several Contracts from a Project has a NEPA decision and federal aid was used or anticipated to be used in any of the design, right of way, utilities. If the construction phase of this Contract or in any other Contracts has or will be federally funded use 1-06.OPT2(A).GR1.

Do not use if using **1-06.OPT1(C).FR1**

1-06.OPT1(B).FR1 (Buy America)
(August 6, 2012)
Specification used for providing a list of temporary steel or iron construction materials that are excluded from Buy America requirements.

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Use when steel or iron in both permanent and temporary installations will be required **AND** the Project or one of several Contracts from a Project that has a NEPA decision and federal aid was used or anticipated to be used in any of the design, right of way, utilities. If the construction phase of this Contract or in any other Contracts has or will be federally funded use 1-06.OPT2(B).FR1.

Must also use **1-06.OPT1(A).GR1**
(1 fill-in) List of temporary steel or iron construction materials.

1-06.OPT1(C).FR1 (Buy America)
(September 7, 2021)
May be used in any Contract at each Region's discretion.

Must use in all projects that require the use of structural steel when the use of foreign structural steel would result in a cost benefit approaching 25 percent of the cost of the total project **AND** the Project or one of several Contracts from a Project that has a NEPA decision and federal aid was used or anticipated to be used in any of the design, right of way, utilities. May not be used if the construction phases of this Contract or in any other Contracts is federal funded.

If the structural steel items constitute at least 60 percent of the estimated total project cost, alternate bids for domestic and foreign structural steel will be required. Format for alternate bid item is Item Name - Domestic Steel and Item Name - Foreign Steel.
(6 fill-ins) (\$1\$\$ and \$\$6\$\$ will be the same and \$\$2\$\$ and \$\$5\$\$ will be the same)

1-06.INST1.GR1 (Section 1-06 is supplemented with the following)
Must use once preceding any of the following:

1-06.OPT2.GR1 Build America/Buy America
Must use once preceding any of the following:

1-06.OPT2(A).GR1 (Build America/Buy America)
(June 6, 2023)
Specification will require the use of domestically sourced Steel, Iron, and Construction Materials in accordance with Public Law 117-58, div G §§70901-52.

Must use if the Project is federal funded for construction.

Do not use if using **1-06.OPT1(A).GR1**, **1-06.OPT1(B).GR1**, or **1-06.OPT1(C).FR1**.

1-06.OPT2(B).FR1 (Build America/Buy America)
(October 5, 2022)

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Specification used for providing a list of temporary steel, iron or other construction materials that are excluded from Build America/Buy America requirements.

Use when both permanent and temporary installations will be required **AND** the Project is federal funded for construction.

Must also use **1-06.OPT2(A).GR1**
(1 fill-in) List of temporary steel, iron or other construction materials.

1-06.1.GR1 Approval of Materials Prior to Use

1-06.1.INST1.GR1 (Section 1-06.1 is supplemented with the following)
Must use once preceding any of the following:

1-06.1.OPT1.GR1 (April 3, 2017)
May be used on any project with Construction Project Engineer, Region Construction Engineering Manager, or Assistant Regional Administrator approval. Should be considered on projects that contain large or numerous electrical or ITS components.

1-07.GR1 Legal Relations and Responsibilities to the Public

1-07.1.GR1 Laws to be Observed

1-07.1.INST1.GR1 (Section 1-07.1 is supplemented with the following)
Must use once preceding any of the following:

1-07.1.OPT1.GR1 Ferry Tolls and Service
(October 3, 2022)
Use in all WSF projects. At the discretion of the Region, may also be used in highway projects that have a close proximity to WSF Terminals.

1-07.1.OPT2.GR1 Ferry Terminal Access and Security
(October 3, 2022)
Use in all WSF projects. Provides access requirements and restrictions at WSF terminals such as Contractor employee ID lists and cards, parking, material delivery, and equipment identification.

1-07.1.OPT3.FR1 Confined Space
(April 3, 2006)
Must use when Contractor workers are required to enter a confined space and all other projects where confined spaces are known to exist. Use requires approval of the Region Safety Manager.

A confined space is a space that is ALL of the following:

- Large enough and arranged so an employee could fully enter the space and work.

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- Has limited or restricted entry or exit. Examples of spaces with limited or restricted entry are tanks, vessels, silos, storage bins, hoppers, vaults, excavations, and pits.
- Not primarily designed for human occupancy.

Examples of confined spaces include but are not limited to concrete or steel box girder structures, pontoons on floating bridges, existing stormwater/sewer conveyances and vaults, electrical or signal hubs.

Fill-in #1: Include each known confined space that the Contractor may enter to perform the work. Describe identified hazards and experience with each known confined space, if any. Must contact Region Safety office for fill-in information.

1-07.1.OPT4.FR1

Noise Exemption/Variance Conditions
(October 3, 2022)

Use in projects that have been issued a local agency noise variance or exemption and there is a requirement for notification of property owners by mail. Requires Region Construction Approval.

(6 fill-ins)

Fill-in #1 is the name of the local jurisdiction(s) issuing the exemption/variance

Fill-in #2 is the number of nights allowed

Fill-in #3 is the date the exemption/variance expires

Fill-in #4 is the distance from the project limits the nighttime notices are to be mailed

Fill-in #5 is any additional requirements added to the exemption/variance

Fill-in #6 is the number of days the notices need to be mailed before work starts

1-07.1.OPT5.FR1

Nighttime Construction Work Requirements
(October 3, 2022)

Use in projects when a local agency noise variance has not been obtained but restrictions are placed on the contract to mitigate nighttime construction noise. Requires Region Construction Approval.

(3 fill-ins)

Fill-in #1 is the distance from the project limits the nighttime notices are to be mailed to

Fill-in #2 is any additional requirements added to the project

Fill-in #3 is the number of days the notices need to be mailed before work starts

1-07.1.OPT6.FR1

Noise Exemption/Variance Conditions
(October 3, 2022)

Use in projects that have been issued a local agency noise variance or exemption. This can be used for rural (not heavily populated) areas and where notification of property owners is not required by mail.

(5 fill-ins)

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1-07.4(2).GR1 Health Hazards

1-07.4(2).INST1.GR1 (Section 1-07.4(2) is revised to read)
Must use once preceding any of the following:

1-07.4(2).OPT1.FR1 (Site cleanup of biological and physical hazards)
(August 7, 2017)
Use in all projects known to be inhabited by transients, and all projects known to contain biological or physical hazards such as drug paraphernalia, human excrement, etc.
(1 fill-in)

1-07.5.GR1 Environmental Regulations

1-07.5.INST1.GR1 (Section 1-07.5 is supplemented with the following)
Must use once preceding any of the following:

1-07.5.OPT1.GR1 Environmental Commitments
(September 20, 2010)
An Environmental Commitment Meeting is expected as outlined in Division 4 of the Plans Preparation Manual

Must use with **1-07.5.OPT2.GR1**. Must use once preceding any of the following Environmental Commitment GSPs:

1-07.5.OPT1(A).FR1 (Notification of ground disturbing activities)
(August 4, 2014)
Use if the project includes a requirement for Cultural Resource Monitoring.
(1 fill-in)
The fill-in can either be a station reference(s), plan sheet(s), or a certain depth below an elevation control point, etc.

1-07.5.OPT1(B).FR1 (Notification of work in sensitive areas)
(April 1, 2019)
Use if work is authorized in environmentally sensitive areas. Use the Environmental Commitment Meeting to determine applicability of this provision for the project.
(1 fill-in - choose the largest number of days noted in your permits/environmental documentation or 15 days, whichever is greater.)

1-07.5.OPT1(C).FR1 (Setback distance)
(April 1, 2019)
Use in projects applying either Programmatic Biological Assessment (or Individual BA), Hydraulic Project Approval, or local shoreline conditions where setbacks of certain work are required from sensitive areas like waters of the state, wetlands, or unique upland features.
(3 Fill-ins)
Fill-in #1 defines the contractor activity that is not allowed (e.g. staging, storing material, maintaining equipment, etc.)

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Fill-in #2 defines the minimum distance between the contractor activity and the sensitive area.
Fill-in #3 defines the sensitive area(s).

1-07.5.OPT2.GR1 Payment
(August 3, 2009)
Must use with **1-07.5.OPT1.GR1**.

1-07.5(1).GR1 General

1-07.5(1).INST1.GR1 (Section 1-07.5(1) is supplemented with the following)
Must use once preceding any of the following:

1-07.5(1).OPT1.FR1 In-Water Operations Along Marine Shorelines
(October 3, 2022)
Use in all WSF Projects, and any projects where floating equipment or vessels will be operating or mooring near marine shorelines.
(2 fill-ins)
Fill-in #1 is State or Federal Agency issuing permit or approval.
Fill in #2 is allowable work dates.

1-07.5(2).GR1 State Department of Fish And Wildlife

1-07.5(2).INST1.GR1 (Section 1-07.5(2) is supplemented with the following)
Must use once preceding any of the following:

1-07.5(2).OPT1.GR1 Hydraulic Project Approval
(April 2, 2018)
An Environmental Commitment Meeting (see Division 4 of the Plans Preparation Manual) is mandatory for all projects to determine the applicability of these requirements.

Must use with **1-07.5(2).OPT2.GR1**. Must use once preceding any of the following Hydraulic Project Approval GSPs:

1-07.5(2).OPT1(A).FR1 (Work window below ordinary high water)
(April 2, 2018)
Use in projects with an HPA and a “fish window.”
Fill-in #1 is the start date of the fish window.
Fill-in #2 is the end date.
Consider setting the work completion date one day less than permitted end date. This ensures WSDOT has time to remove the nets, which is technically in-water work.
(2 fill-ins)

1-07.5(2).OPT2.GR1 Payment
(April 2, 2018)
Must use with **1-07.5(2).OPT1.GR1**.

1-07.5(3).GR1 State Department of Ecology

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1-07.5(3).INST1.GR1 (Section 1-07.5(3) is supplemented with the following)
Must use once preceding any of the following:

1-07.5(3).OPT1.GR1 Water Quality and Resource Protection
(April 2, 2018)
An Environmental Commitment Meeting (see Division 4 of the Plans Preparation Manual) is mandatory for all projects to determine the applicability of these requirements.

Must use with **1-07.5(3).OPT2.GR1**. Must use once preceding any of the following Hydraulic Project Approval GSPs:

1-07.5(3).OPT1(A).FR1 (Mixing zone)
(August 3, 2009)
Use in projects having permitted work within waters of the United States and a mixing zone is allowed by the Washington State Department of Ecology.
(1 fill-in)
Fill in No. \$\$\$ choose a distance in feet based on either 173-201A of the Washington Administrative Code or the project specific 401 Water Quality Certification from the Washington State Department of Ecology.

1-07.5(3).OPT1(B).GR1 (Stormwater, dewatering water, and other non-storm water discharges)
(April 1, 2019)
Use with Contracting Agency owned NPDES Construction Stormwater General Permits (CSWGP). This GSP shall not be used on projects where CSWGP administration will be transferred to the Contractor prior to the start of construction. Additional planning, monitoring, sampling, and reporting requirements, beyond the scope of this GSP, may be required if the project is issued a CSWGP that covers discharges to impaired surface waters, such as those listed on the 303(d) list or in a Total Maximum Daily Load (TMDL) coverage area. Use the Environmental Commitment Meeting to determine applicability of this provision for the project.

1-07.5(3).OPT2.GR1 Payment
(April 2, 2018)
Must use with **1-07.5(3).OPT1.GR1**.

1-07.5(4).GR1 Air Quality

1-07.5(4)C.GR1 Asbestos Containing Materials

1-07.5(4)C.INST1.GR1 (Section 1-07.5(4)C is supplemented with the following)

Must use once preceding any of the following:

1-07.5(4)C.OPT1.FR1 (Asbestos containing material known or presumed)
(October 4, 2021)
Must use either OPT1 or OPT2 in all WSDOT projects.

Use in projects where the asbestos Good Faith Investigation (GFI) has determined that known and/or presumed, Asbestos Containing Material (ACM) will be disturbed by the work on the project. Must include the asbestos GFI as an appendix.

Must also use **2-02.1.OPT2.GR2**, **2-02.3.OPT4.GR2**, and **2-02.5.OPT11.GR2**.

(1 fill-in)
Fill-in is the appendix location for the GFI.

1-07.5(4)C.OPT2.FR1 (No known asbestos containing material)
(October 4, 2021)
Must use either OPT1 or OPT2 in all WSDOT projects.

Use in projects where an asbestos Good Faith Investigation (GFI) has determined that that no known, and/ or assumed, and/or reasonably likely Asbestos Containing Material (ACM) will be disturbed by the work on the project. Must include the asbestos GFI as an appendix.

Must also use **2-02.3.OPT5.GR2**.

(1 fill-in)
Fill-in is the Appendix location for the GFI.

1-07.5(5).GR1 U.S. Army Corps of Engineers

1-07.5(5).INST1.GR1 (Section 1-07.5(5) is supplemented with the following)
Must use once preceding any of the following:

1-07.5(5).OPT1.GR1 U.S. Army Corps Nationwide Permit
(April 2, 2018)
An Environmental Commitment Meeting (see Division 4 of the Plans Preparation Manual) is mandatory for all projects to determine the applicability of these requirements.

Must use with **1-07.5(5).OPT2.GR1**. Must use once preceding any of the following Hydraulic Project Approval GSPs:

1-07.5(5).OPT1(B).FR1 (Temporary fill restrictions)
(February 25, 2013)
Must use when the project requires a U.S. Army Corps of Engineers Nationwide Permit No. 33. The permit provides for temporary fills for up to six

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months (180 days). The designer must evaluate the length of time needed for temporary fills. Any duration in excess of six months must have received a waiver by the U.S. Army Corps of Engineers. Use the Environmental Commitment Meeting to determine applicability of this provision for the project.

(2-fill-ins)
Fill-in No. \$\$1\$\$ defines the location of temporary fill(s).
Fill-in No. \$\$2\$\$ is number of calendar days of the temporary fill(s) are permitted to be placed.

1-07.5(5).OPT1(C).GR1 (Maintaining normal downstream flows)
(February 25, 2013)
Must use when the project requires a U.S. Army Corps of Engineers Nationwide Permit No. 3, 13, 14, or 33.

1-07.5(5).OPT1(D).GR1 (Measures for heavy equipment)
(August 3, 2009)
Use if permits authorize heavy equipment operation in wetlands or mudflats.

1-07.5(5).OPT1(F).GR1 (Creosote timber, piling, and associated debris)
(February 6, 2023)
Use if the project involves disposing of creosoted materials.

1-07.5(5).OPT2.GR1 Payment
(April 2, 2018)
Must use with **1-07.5(5).OPT1.GR1**.

1-07.5(6).GR1 U.S. Fish and Wildlife Service and National Marine Fisheries Service

1-07.5(6).INST1.GR1 (Section 1-07.5(6) is supplemented with the following)
Must use once preceding any of the following:

1-07.5(6).OPT1.GR1 (Introduction paragraph for environmental commitments)
(April 2, 2018)
An Environmental Commitment Meeting (see Division 4 of the Plans Preparation Manual) is mandatory for all projects to determine the applicability of these requirements.

Must use with **1-07.5(6).OPT2.GR1**. Must use once preceding any of the following GSPs:

1-07.5(6).OPT1(B).GR1 (Temporary storage pile restrictions)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #8, where work will be performed between October 1 and June 1.

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| 1 | | If this GSP is used, please ensure that the Plans |
| 2 | | indicate where the 100 year floodplain is. |
| 3 | | Do not use for Emergency Projects. |
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| 5 | 1-07.5(6).OPT1(C).FR1 | <u>(Floating work platforms)</u> |
| 6 | | (April 2, 2018) |
| 7 | | Use in projects applying Programmatic Biological |
| 8 | | Assessment Minimization Measure #15. |
| 9 | | Fill-in #1 is the maximum number of days. Work |
| 10 | | with the Region Environmental Coordinator. |
| 11 | | (1 fill-in) |
| 12 | | |
| 13 | 1-07.5(6).OPT1(D).GR1 | <u>(Truck chute cleanout areas)</u> |
| 14 | | (April 2, 2018) |
| 15 | | Use in projects applying Programmatic Biological |
| 16 | | Assessment Minimization Measure #27. |
| 17 | | |
| 18 | 1-07.5(6).OPT1(E).GR1 | <u>(Creosote-treated wood restrictions)</u> |
| 19 | | (April 2, 2018) |
| 20 | | Use in projects applying Programmatic Biological |
| 21 | | Assessment Minimization Measure #69. |
| 22 | | |
| 23 | 1-07.5(6).OPT1(F).GR1 | <u>(Pile removal methods)</u> |
| 24 | | (April 2, 2018) |
| 25 | | Use in projects applying Programmatic Biological |
| 26 | | Assessment Minimization Measure #71. |
| 27 | | |
| 28 | 1-07.5(6).OPT1(G).GR1 | <u>(Removed pile requirements)</u> |
| 29 | | (April 2, 2018) |
| 30 | | Use in projects applying Programmatic Biological |
| 31 | | Assessment Minimization Measure #73. |
| 32 | | |
| 33 | | This GSP should pertain only to non-bridge |
| 34 | | projects (i.e., culverts) because treated wood |
| 35 | | containment for bridges is covered by Section 2- |
| 36 | | 02.3(2)A1 of the Standard Specifications. |
| 37 | | |
| 38 | 1-07.5(6).OPT1(H).FR1 | <u>(Pile driving sound pressure monitoring)</u> |
| 39 | | (April 2, 2018) |
| 40 | | Use in projects applying Programmatic Biological |
| 41 | | Assessment Minimization Measure #74. |
| 42 | | Fill-in #1 is the maximum decibel level. |
| 43 | | (1 fill-in) |
| 44 | | |
| 45 | 1-07.5(6).OPT1(I).FR1 | <u>(Temporary light restriction)</u> |
| 46 | | (April 2, 2018) |
| 47 | | Use in projects applying Programmatic Biological |
| 48 | | Assessment Minimization Measure #76. |
| 49 | | Fill-in #1 is the waterbody name that has ESA listed |
| 50 | | species. |
| 51 | | (1 fill-in) |
| 52 | | |
| 53 | 1-07.5(6).OPT1(J).FR1 | <u>(Night work required - 2 hrs after sunset to 2 hrs</u> |
| 54 | | <u>before sunrise)</u> |
| 55 | | (April 2, 2018) |

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Use in projects applying Programmatic Biological Assessment Minimization Measure #82.
Fill-in #1 is the Washington city nearest to the project location.
(1 fill-in)

1-07.5(6).OPT1(K).FR1 (Night work required - 1 hr after sunset to 1 hr before sunrise)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #83.
Fill-in #1 is the Washington city nearest to the project location.
(1 fill-in)

1-07.5(6).OPT1(L).FR1 (Night work required - cease work 2 hours before sunrise)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #84.
Fill-in #1 is the Washington city nearest to the project location.
(1 fill-in)

1-07.5(6).OPT1(M).FR1 (Night and day work – sunrise and sunset restrictions)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #85.
Fill-in #1 is the Washington city nearest to the project location.

1-07.5(6).OPT1(N).FR1 (Night and day work – sunrise restrictions only, no sunset restrictions)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #86.
Fill-in #1 is the Washington city nearest to the project location.

1-07.5(6).OPT1(O).GR1 (Trash and food waste collection plan)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #87.

1-07.5(6).OPT1(P).FR1 (Day work required April 1 through Sept 22)
(September 3, 2019)
Use in projects applying Programmatic Biological Assessment Minimization Measure #93.
Fill-in #1 is the type of visual or noisy work that is not allowed.
Fill-in #2 is the Washington city nearest to the project location.
(2 fill-ins)

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| 1 | 1-07.5(6).OPT1(Q).GR1 | <u>(Galvanizing and zinc coating restrictions)</u> |
| 2 | | (September 7, 2021) |
| 3 | | Restricts the use of Galvanized or Zinc Coatings |
| 4 | | below the 100-year water level. Contact Region |
| 5 | | Biologist for direction on use. |
| 6 | | |
| 7 | 1-07.5(6).OPT2.GR1 | Payment |
| 8 | | (April 2, 2018) |
| 9 | | Must use with 1-07.5(6).OPT1.GR1 . |
| 10 | | Assessment Report will be located |
| 11 | | |
| 12 | 1-07.5(6).OPT3.FR1 | <u>(Bird Protection and Monitoring)</u> |
| 13 | | (November 2, 2022) |
| 14 | | Use in projects that require a Project-specific Bird |
| 15 | | Protection Plan. Consult Region biologist for assistance. |
| 16 | | (2 fill-ins) |
| 17 | | Fill-in #1 defines the birds identified for protection. |
| 18 | | Fill-in #2 identifies the Appendix in which the MTBA |
| 19 | | Assessment Report will be located. |
| 20 | | |
| 21 | 1-07.6.GR1 | Permits and Licenses |
| 22 | | |
| 23 | 1-07.6.INST1.GR1 | (Section 1-07.6 is supplemented with the following) |
| 24 | | Must use once preceding any of the following: |
| 25 | | |
| 26 | 1-07.6.OPT1.FR1 | Permits and Licenses |
| 27 | | (January 2, 2018) |
| 28 | | An Environmental Commitment Meeting is expected as |
| 29 | | outlined in Division 4 of the Plans Preparation Manual. |
| 30 | | |
| 31 | | *This GSP requires editing the data located in the permit |
| 32 | | table located at: |
| 33 | | http://www.wsdot.wa.gov/publications/fulltext/projectdev/En |
| 34 | | vironmentalDocumentation/1-07.6.OPT2.FR1_Table.docx , |
| 35 | | copying and pasting the revised table inside this fill-in area. |
| 36 | | This needs to be edited prior to insertion and final printing to |
| 37 | | delete all permits that are not required for the project and |
| 38 | | insert additional permits not part of the original table. All |
| 39 | | permits will be attached as an Appendix. Include the |
| 40 | | Department of Ecology permit coverage letter with the |
| 41 | | CSWGP. If using a Nationwide Permit, attach the most |
| 42 | | recent U.S. Army Corps of Engineers Nationwide Permit |
| 43 | | Verification Letter, conditions, and permit drawings. |
| 44 | | |
| 45 | | (1 fill-in) |
| 46 | | |
| 47 | 1-07.6.OPT3.GB1 | United States Coast Guard |
| 48 | | Must use once preceding any of the following: |
| 49 | | |
| 50 | 1-07.6.OPT3(A).FB1 | <u>United States Coast Guard</u> |
| 51 | | (January 2, 2018) |
| 52 | | Use in projects over navigable waters when the Coast |
| 53 | | Guard is involved. |
| 54 | | (2 fill-ins) |
| 55 | | |

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| 1 | 1-07.6.OPT3(B).GB1 | United States Coast Guard |
| 2 | | (September 3, 2019) |
| 3 | | Use in all projects involving bridge work, including |
| 4 | | painting, in or near the navigable portion of a waterway |
| 5 | | when 1-07.6.OPT3(A).FB1 is not used. |
| 6 | | |
| 7 | 1-07.7.GR1 | Load Limits |
| 8 | | |
| 9 | 1-07.7.INST1.GR1 | (Section 1-07.7 is supplemented with the following) |
| 10 | | Must use once preceding any of the following: |
| 11 | | |
| 12 | 1-07.7.OPT3.FR1 | <u>(List of haul routes provided)</u> |
| 13 | | (March 13, 1995) |
| 14 | | Use when WSDOT provides a materials source and roads |
| 15 | | other than State highways are designated as the haul route. |
| 16 | | (4 fill-ins) |
| 17 | | |
| 18 | 1-07.7.OPT4.FR1 | <u>(Restrictions on provided haul routes)</u> |
| 19 | | (March 13, 1995) |
| 20 | | Use with 1-07.7.OPT3.FR1 when the agreement |
| 21 | | stipulates additional requirements. |
| 22 | | (1 fill-in) |
| 23 | | |
| 24 | 1-07.7.OPT5.GR1 | <u>(Contractor provides haul routes for material sources not</u> |
| 25 | | <u>designated to come from the provided source)</u> |
| 26 | | (March 13, 1995) |
| 27 | | Use in all projects where WSDOT provides a source of |
| 28 | | materials for part or all required materials. |
| 29 | | |
| 30 | 1-07.7.OPT6.GR1 | <u>(Contractor provides haul routes for material sources)</u> |
| 31 | | (March 13, 1995) |
| 32 | | Use in projects when no source of materials is provided. |
| 33 | | |
| 34 | 1-07.9.GR1 | Wages |
| 35 | | |
| 36 | 1-07.9(1).GR1 | General |
| 37 | | |
| 38 | 1-07.9(1).INST1.GR1 | (Section 1-07.9(1) is supplemented with the following) |
| 39 | | Must use once preceding any of the following: |
| 40 | | |
| 41 | 1-07.9(1).OPT1.GR1 | (January 9, 2023) |
| 42 | | Use in all Federally funded projects consisting of |
| 43 | | highway construction and/or landscaping. |
| 44 | | |
| 45 | | For the selection and application of multiple wage |
| 46 | | schedules see the U.S. Department of Labor 'ALL |
| 47 | | AGENCY MEMORANDUM NO. 130' dated 3/17/1978 at: |
| 48 | | https://www.dol.gov/whd/programs/dbra/docs/memo- |
| 49 | | 131.pdf. |
| 50 | | |
| 51 | 1-07.9(1).OPT2.FR1 | (January 9, 2023) |
| 52 | | Use in Federally funded projects consisting of both |
| 53 | | highway and building construction. |
| 54 | | (1 fill-in) |
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For the selection and application of multiple wage schedules see the U.S. Department of Labor 'ALL AGENCY MEMORANDUM NO. 130' dated 3/17/1978 at: <https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf>.

1-07.9(1).OPT3.FR1

(May 11, 2010)
Use in Federally funded projects consisting of only building construction.
(1 fill-in)

For the selection and application of multiple wage schedules see the U.S. Department of Labor 'ALL AGENCY MEMORANDUM NO. 130' dated 3/17/1978 at: <https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf>.

1-07.9(1).OPT5.FR1

(January 9, 2023)
Use in all Federally funded projects consisting of both highway and heavy construction.
(1 fill-in)

For the selection and application of multiple wage schedules see the U.S. Department of Labor 'ALL AGENCY MEMORANDUM NO. 130' dated 3/17/1978 at: <https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf>.

1-07.9(1).OPT6.FR1

(January 9, 2023)
Use in all Federally funded projects consisting of highway, heavy, and building construction.
(2 fill-ins)

For the selection and application of multiple wage schedules see the U.S. Department of Labor 'ALL AGENCY MEMORANDUM NO. 130' dated 3/17/1978 at: <https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf>.

1-07.9(3).GR1 Apprentices

1-07.9(3).INST1.GR1 (Section 1-07.9(3) is supplemented with the following)
Must use once preceding any of the following:

1-07.9(3).OPT1.GR1

Apprentice Utilization
(October 3, 2022)
Use only on projects advertised by the Washington State Department of Transportation. Use in projects with an Engineer's estimate of \$2 million and greater.

1-07.11.GR1 Requirements for Nondiscrimination

1-07.11.INST1.GR1 (Section 1-07.11 is supplemented with the following)
Must use once preceding any of the following:

| | | |
|----|------------------|--|
| 1 | 1-07.11.OPT1.GR1 | Requirement for Affirmative Action to Ensure |
| 2 | | Equal Employment Opportunity |
| 3 | | (October 3, 2022) |
| 4 | | Use in Federally funded projects exceeding \$10,000 in |
| 5 | | contract cost. |
| 6 | | |
| 7 | 1-07.11.OPT2.GR1 | Disadvantaged Business Enterprise (DBE) |
| 8 | | Participation |
| 9 | | (October 3, 2022) |
| 10 | | REQUIREMENTS PERTAINING TO "No DBE Goals" |
| 11 | | DO NOT USE UNTIL FURTHER NOTICE. |
| 12 | | |
| 13 | 1-07.11.OPT3.FR1 | Disadvantaged Business |
| 14 | | Enterprise (DBE) Participation |
| 15 | | (October 3, 2022) |
| 16 | | Requires a CONDITION-OF-AWARD GOAL |
| 17 | | Use in selected Federal Aid projects with DBE Condition of |
| 18 | | Award (COA) goals. The final COA DBE Goal is to be |
| 19 | | furnished or verified by the Office of Equity and Civil Rights. |
| 20 | | Use of Disadvantaged Business Enterprise Utilization |
| 21 | | Certification (DOT Form 272 056) and use of |
| 22 | | Disadvantaged Business Enterprise Written |
| 23 | | Confirmation Document (DOT Form 422-031) is required |
| 24 | | in the proposal. |
| 25 | | Must use with <u>1-02.6.OPT3.NEW.GR1</u> <u>1-02.9.OPT1.GR1</u> , |
| 26 | | <u>and 1-03.3.OPT2.GR1</u> |
| 27 | | (1 fill-in) The fill-in shall be one of the following formats: |
| 28 | | |
| 29 | | ___ percent (___ %) of the contract total; or |
| 30 | | ___ dollars for COA DBE goals |
| 31 | | Do not use in projects with Federal Transit Administration |
| 32 | | (FTA) funding, or where FTA is the lead funding agency (use |
| 33 | | 1-07.11.OPT8.FR1 instead). |
| 34 | | Do not use with 1-07.11.OPT7.GR1 or 1-07.11.OPT8.FR1. |
| 35 | | |
| 36 | 1-07.11.OPT4.FR1 | Special Training Provisions |
| 37 | | (November 2, 2022) |
| 38 | | Use in all Federal Aid projects with more than 50 working |
| 39 | | days that contain Training (Obtain Training Decision & Fill-in |
| 40 | | from the Office of Equity and Civil Rights). |
| 41 | | (1 fill-in) |
| 42 | | |
| 43 | | <i>Note: Fill-in is Total Hours.</i> |
| 44 | | |
| 45 | 1-07.11.OPT6.FR1 | Small and Veteran-Owned Business Enterprises (SVBE) |
| 46 | | and Minority and Women's Business Enterprise (MWBE) |
| 47 | | Participation |
| 48 | | (October 3, 2022) |
| 49 | | Use in all State funded (100%) projects with an estimated |
| 50 | | cost of \$250,000 or more. Contact the Office of Equity and |
| 51 | | Civil Rights at GoalRequests@wsdot.wa.gov for |
| 52 | | determination of goals. |
| 53 | | (2 fill-ins) |
| 54 | | Fill-in #1 is the enforceable COA Goal for Small Business |
| 55 | | Enterprises |

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Fill-in #2 is the enforceable COA Goal for Veteran-Owned Businesses
Must also include **1-02.6.OPT1.GR1, 1-02.9.OPT2.GR1, and 1-02.13.OPT1.2024.GR1.**

1-07.11.OPT7.FR1 Federal Small Business Enterprise (FSBE) Participation (October 3, 2022)
Use in selected Federal Aid projects with Federal Small Business Enterprise (FSBE) goals. The FSBE Goal is to be furnished or verified by the Office of Equity and Civil Rights. (1 fill-in) The fill-in shall be in the following format:

___ percent (___%) of the contract total for FSBE goals; or ___ dollars for FSBE goals

Do not use with 1-07.11.OPT3.FR1.

~~1-07.11.OPT8.FR1 Disadvantaged Business Enterprise (DBE) Condition of Award Participation (October 3, 2022)
Requires a CONDITION OF AWARD GOAL
Use in projects with Federal Transit Administration (FTA) funding, or where FTA is the lead funding agency, and the project contains DBE Condition of Award (COA) goals. The final COA DBE Goal is to be furnished or verified by the Office of Equity and Civil Rights.
Use of **Disadvantaged Business Enterprise Utilization Certification** (DOT Form 272-056) and use of **Disadvantaged Business Enterprise Written Confirmation Document** (DOT Form 422-031) is required in the proposal.
(1 fill-in) The fill-in shall be one of the following formats:~~

~~___ percent (___%) of the contract total for COA DBE goals; or~~

~~___ dollars for COA DBE goals~~

~~Do not use with 1-07.11.OPT3.FR1.~~

1-07.12.GR1 Federal Agency Inspection

1-07.12.INST1.GR1 (Section 1-07.12 is supplemented with the following)
Must use once preceding any of the following:

1-07.12.OPT1.GR1 (~~October 3, 2022~~ October 3, 2023)
Use in all Federally funded projects.

1-07.12.OPT2.FR1 Indian Preference and Tribal Ordinances (October 3, 2022)
Use in projects with any portion of the project on an Indian reservation.
(3 fill-ins) (\$\$1\$\$ is the Tribe or Reservation; \$\$2\$\$ is the Group(s) as shown on the Summary of Quantities where Work is performed on Tribal Lands, \$\$3\$\$ is the Tribal representative, telephone and address.)

- 1 **1-07.15.GR1 Temporary Water Pollution Prevention**
2
3 **1-07.15(1).GR1 Spill Prevention, Control, and Countermeasures Plan**
4
5 1-07.15(1).INST1.GR1 (Section 1-07.15(1) is supplemented with the following)
6 Must use once preceding any of the following:
7
8 1-07.15(1).OPT1.GR1 Notification Requirements
9 (October 3, 2022)
10 Use in all WSF projects.
11
12 **1-07.16.GR1 Protection and Restoration of Property**
13
14 **1-07.16(1).GR1 Private/Public Property**
15
16 **1-07.16(1)C.GR1 Private Property**
17
18 1-07.16(1)C.INST1.GR1 (Section 1-07.16(1)C is supplemented with the following)
19 Must use once preceding any of the following:
20
21 1-07.16(1)C.OPT1.GR1 (October 3, 2022)
22 Use on projects where the Contractor is expected
23 to be accessing R/W from adjacent properties. This
24 provision requires Contractor to obtain permission
25 to use adjacent properties and submit a Working
26 Drawing.
27
28 1-07.16(1)C.OPT2.GR1 (October 3, 2022)
29 Use in all WSF projects. Requires the Contractor
30 to obtain permission to use adjacent properties.
31
32 **1-07.16(2).GR1 Vegetation Protection and Restoration**
33
34 1-07.16(2).INST1.GR1 (Section 1-07.16(2) is supplemented with the following)
35 Must use once preceding any of the following:
36
37 1-07.16(2).OPT1.GR1 (August 2, 2010)
38 Use in projects to specify preservation of existing
39 desirable vegetation.
40
41 **1-07.16(4).GR1 Archaeological and Historical Objects**
42
43 1-07.16(4).INST1.GR1 (Section 1-07.16(4) is supplemented with the following)
44 Must use once preceding any of the following:
45
46 1-07.16(4).OPT1.GR1 (December 6, 2004)
47 Use in projects when reconnaissance studies indicate
48 that there is the probability of finding cultural remains
49 within the project limits which will require monitoring the
50 project area during clearing, grubbing or excavation
51 operations. Requires a pay item.
52
53 **1-07.17.GR1 Utilities and Similar Facilities**
54
55 1-07.17.INST1.GR1 (Section 1-07.17 is supplemented with the following)

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Must use once preceding any of the following:

1-07.17.OPT1.FR1 (April 2, 2007)
Use in projects where there are utilities within the R/W that will not be adjusted, replaced or constructed by the utility owner or its contractor during the prosecution of the work.
(1 fill-in)

(May use with **1-07.17.OPT2.FR1** if utilities other than those described in this provision will be adjusted, replaced or constructed by the utility owner during the prosecution of the work.)

1-07.17.OPT2.FR1 (October 3, 2022)
Use in projects where there are utilities within the R/W and those utilities will be adjusted, relocated or replaced by the utility owner or its contractor during the performance of the contract, or when the utility owner or its contractor will construct new utilities within the R/W during the performance of the contract.

(3 fill-ins) (\$1\$\$ is a description and location of the work the each utility owner or its contractor will complete, and the duration of that work or anticipated date of completion by each utility or its contractor. \$2\$\$ is the name of the utility company or companies, contact person, address, telephone number and e-mail address or other contact information as required to enable the Contractor to identify and contact each utility performing work during the life of the contract. \$3\$\$ is a description of any additional requirements that the contractor must perform in order to coordinate with the utility owner or its contractor, such as advance notifications to be provided to the utility for staged work.

(Use with **1-07.17.OPT1.FR1** if other utilities exist within the R/W that will not be adjusted, relocated or replaced by the utility owner.)

1-07.18.GR1 Public Liability and Property Damage Insurance

~~1-07.18(1).GR1 Insurance Provider Requirements~~

~~1-07.18(1).INST1.GR1 (Section 1-07.18(1) is supplemented with the following)
Must use once preceding any of the following:~~

~~1-07.18(1).OPT1.2024.GR1 (March 9, 2023)
Use in all projects.~~

1-07.18(5).GR1 Required Insurance Policies

1-07.18(5).INST1.GR1 (The first sentence of Item No. 1 of Section 1-07.18(5) is revised to read)
Must use once preceding any of the following:

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1-07.18(5).OPT2.2025.GR1 (Owners and Contractors Protective Insurance)
(November 20, 2023)
Use in all projects unless an increased insurance
requirement is required.
This corrects an error in the standard specifications
regarding the insurance form number.

Do not use with 1-07.18(5).OPT1.FR1.

1-07.18(5).OPT1.FR1 (Increased Insurance Requirement – Owners and Contractors Protective Insurance)
(~~September 7, 2021~~ November 20, 2023)
Use in projects when the Engineer's estimate is in excess of \$10 million or in projects under \$10 million when in the Engineer's judgment the project involves higher than normal risk(s). The project office should contact the Risk Management & Legal Services Division, Administrative Risk Manager (Office: (360) 704-6376, Cell: (360) 742-8501) to discuss the project's risks. The Administrative Risk Manager will advise the region as to the need to require the additional insurance, and if so, will provide the fill in amount. This GSP should not be used if the fill-in amounts match the values listed in the Standard Specifications.
(1 fill-in)

1-07.18(5).OPT2.GR1 (Reduced Insurance Requirement)
(September 7, 2021)
Use in projects when the Engineer's estimate is \$500,000 or less.
Do not use with 1-07.18(5).INST1.GR1 because this GSP deletes Item number 1 in Section 1-07.18(5).
Must use with **1-07.18(5).OPT3.GR1**.

1-07.18(5).INST2.GR1 (The first sentence of Item No. 2 of Section 1-07.18(5) is revised to read)
Must use once preceding any of the following:

1-07.18(5).OPT3.GR1 (Reduced Insurance Requirement)
(September 7, 2021)
Use in all projects when the Engineer's estimate is \$500,000 or less.
Must use with **1-07.18(5).OPT2.GR1**.

1-07.18(5).OPT4.FR1 (Increased Insurance Requirement - Commercial General Liability (CGL))
(September 7, 2021)
Use in projects when the Engineer's estimate is in excess of \$10 million or in projects under \$10 million when in the Engineer's judgment the project involves higher than normal risk(s). The project office should contact the Risk Management & Legal Services Division, Administrative Risk Manager (Office: (360) 704-6376, Cell: (360) 742-8501) to discuss the project's risks. The Administrative Risk Manager will advise the region as to

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the need to require the additional insurance, and if so, will provide the fill in amounts. This GSP should not be used if the fill-in amounts match the values listed in the Standard Specifications.
(1 fill-in)

1-07.18(5).INST3.GR1 (Section 1-07.18.(5) is supplemented with the following)
Must use once preceding any of the following:

1-07.18(5).OPT5.GR1 (Builders Risk Insurance)
(October 3, 2022)
Use in projects when in the Engineer's judgment the project facilities themselves may be exposed to significant damage. The Project Office should contact the Administrative Risk Manager (Office: (360) 704-6376, Cell: (360) 742-8501), at the Risk Management & Legal Services Division to discuss any high risk components of the project regarding damage to departmental owned/rented facilities or assets. The Administrative Risk Manager will advise the region as to the need to require the additional insurance.
CAUTION: Using this provision will result in significantly higher project costs.

1-07.18(5).OPT6.FR1 (Pollution Liability Insurance)
(October 3, 2022)
Use in all projects where in the Engineer's judgment the Work involves remediation of Environmental hazards, the Contractor shall obtain Contractor's Pollution Liability Insurance. The Project Office should contact the Administrative Risk Manager (Office: (360) 704-6376, Cell: (360) 742-8501), at the Risk Management & Legal Services Division, to discuss the Projects Environmental risks to determine if Contractor's Pollution Liability Insurance (CPL) is needed. The Administrative Risk Manager will advise the region as to the need to require the additional insurance, and if so, provide the fill in amount.
(1 fill-in)

1-07.23.GR1 Public Convenience and Safety

1-07.23(1).GR1 Construction Under Traffic

1-07.23(1).INST1.GR1 (Section 1-07.23(1) is supplemented with the following)
Must use once preceding any of the following:

1-07.23(1).OPT1.FB1 (Traffic Restrictions)
(March 13, 1995)
Use in bridge painting projects.
(1 fill-in)

1-07.23(1).OPT4.GR1 (Temporary Access Breaks)
(December 6, 2004)

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Use to allow temporary access to the traveled way at locations other than those defined in **Standard Specifications 1-07.23(1)**. Consider for use on all limited access facilities, and on non-interstate limited access.

Requires Region Approval for all projects. Requires FHWA Approval for use on limited access interstate facilities (allow 30 days minimum for approval). Requires Headquarters State Design Engineer approval for use on non-interstate limited access facilities. Region Project Development shall insure that site conditions meet the criteria contained in the provision. Region Construction and Traffic Offices should concur with projects selected for use. Contact Headquarters Design, Access and Hearings Engineer for guidance.

1-07.23(1).OPT5.FR1

(Lane Closure Restrictions)
(February 6, 2023)

Use in projects where traffic volumes require lane closures restrictions. Includes additional information for general restrictions, access, delays, special events and advance notifications.

(8 Fill-ins)

Fill-in #1 describes the specific facility or location and the hours that closures are allowed.

Fill-ins #2 and #3 designate the period of time over a holiday weekend when closures will not be allowed.

Fill-in #4 list special events.

Fill-in #5 describes the maximum delay at flagging or AFAD stations.

Fill-in #6, #7, and #8 provide information on delays when the Contracting Agency needs to make adjustments due to actual traffic conditions.

1-07.23(1).OPT6.GR1

(Accommodating Oversized Loads through the Work Zone)

(April 14, 2014)

Use in projects on the following routes:

I-5, I-405, I-90, I-82, I-182, SR 18, SR 167 and

US 395 (Tri-Cities to Spokane)

If there is the potential for the travelled way to be reduced to less than 16 feet

The designer is authorized to modify this specification as necessary to coordinate with the rest of the contract provisions that may contradict, provided the intent of the GSP is maintained. The intent being; provide a clear width of at least 16 feet to accommodate a wide load, provide windows of time to accommodate a wide load (if possible) and/or provide notice as described. Changes in this specification should be coordinated with Commercial Vehicle Services.

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This specification requires that the Engineer must approve any proposed reduction of the travelled way to a single lane with a clear width of less than 16 feet for duration of 4 calendar days or more.

1-07.23(1).OPT7.FR1 (Public Notification)
(October 3, 2022)
Use in projects where there are roadway, ramp, or other closures.
(3 fill-ins)
Fill-in #1 is the number of working days signs are to be installed for closures.
Fill-in #2 is the stakeholder(s) required to be notified. Suggested notifications include Washington State Patrol, Local fire/police/emergency services, city engineering departments, affected school or transit, or other stakeholder.
Fill-in #3 is the number of working days in advance that notification is to occur.

1-07.23(1).OPT8.FR1 (Maintenance and Protection of Ferry Traffic)
(October 3, 2022)
Use in single-slip offshore WSF projects.
(1 fill-in)
Fill-in #1 is the name of the ferry terminal

1-07.23(1).OPT9.GR1 (Maintenance and Protection of Ferry Traffic)
(October 3, 2022)
Use in multi-slip offshore WSF projects.

1-07.23(1).OPT10.GR1 (Fourth of July Holiday)
(October 3, 2022)
Use in projects where holiday travel volumes will not make it feasible to work on the day between the weekend and the 4th of July holiday.

1-07.24.GR1 Rights of Way

1-07.24.INST1.GR1 (Section 1-07.24 is supplemented with the following)
Must use once preceding any of the following:

1-07.24.OPT1.FR1 (March 13, 1995)
Use in projects when it is possible that the right of way will not be fully acquired at the time of award.
(2 fill-ins)

1-07.24.OPT2.GR1 (October 3, 2022)
Use in all WSF projects, or when the Sundry Site Plan is being included in the Contract.

1-07.28.GR1 Railroads

1-07.28.INST1.GR1 (Section 1-07.28 is supplemented with the following)
Must use once preceding any of the following:

| | | |
|----|-----------------------|--|
| 1 | 1-07.28.OPT1.FR1 | (Additional Requirements for Working with the Railroad) |
| 2 | | (October 3, 2022) |
| 3 | | Use in projects when the Contracting Agency Work is within |
| 4 | | 25 feet of the centerline of the tracks. Contact the |
| 5 | | Development Division Design Office, Railroad Liaison |
| 6 | | Engineer at (360) 705-7459 to determine if this GSP is |
| 7 | | necessary, and to obtain the fill-in information. |
| 8 | | (1 fill-in) |
| 9 | | Fill-in #1 is the name of the railroad company |
| 10 | | |
| 11 | 1-07.28.OPT2.FR1 | (October 3, 2022) |
| 12 | | Use in projects when the Contracting Agency has entered |
| 13 | | into an agreement with the Railroad Company the Work is |
| 14 | | within 25 feet of the centerline of the tracks. Contact the |
| 15 | | Development Division Design Office, Railroad Liaison |
| 16 | | Engineer at (360) 705-7459 to determine if this GSP is |
| 17 | | necessary, and to obtain the fill-in information. |
| 18 | | (1 fill-in) |
| 19 | | Fill-in #1 is the appendix number of the agreement. |
| 20 | | |
| 21 | 1-07.28.OPT3.FR1 | (Construction Work by Railroad Company) |
| 22 | | (October 3, 2022) |
| 23 | | Use when the Railroad Company is to provide work with the |
| 24 | | railroad company forces. Contact the Development Division |
| 25 | | Design Office, Railroad Liaison Engineer at (360) 705-7459 |
| 26 | | to determine if this GSP is necessary, and to obtain the fill- |
| 27 | | in information. |
| 28 | | (1 fill-in) |
| 29 | | Fill-in #1 is the work activities that will be provided by the |
| 30 | | railroad company. |
| 31 | | |
| 32 | 1-07.28(1).GR1 | General |
| 33 | | |
| 34 | 1-07.28(1).INST1.GR1 | (Section 1-07.28(1) is supplemented with the following) |
| 35 | | Must use once preceding any of the following: |
| 36 | | |
| 37 | 1-07.28(1).OPT1.FR1 | (Contractor's Right of Entry Agreement) |
| 38 | | (October 3, 2022) |
| 39 | | Use when the Contracting Agency has made a right of |
| 40 | | entry agreement with the Railroad. Contact the |
| 41 | | Development Division Design Office, Railroad Liaison |
| 42 | | Engineer at (360) 705-7459 to determine if this GSP is |
| 43 | | necessary, and to obtain the fill-in information. |
| 44 | | (2 fill-ins) |
| 45 | | Fill-in #1 is the Railroad Company's contact for the Right |
| 46 | | of Entry Agreement. |
| 47 | | Fill-in #2 is the appendix number for Contractor Right of |
| 48 | | Entry "SAMPLE". |
| 49 | | |
| 50 | 1-07.28(2).GR1 | Submittals and Working Drawings |
| 51 | | |
| 52 | 1-07.28(2).INST1.GR1 | (Section 1-07.28(2) is supplemented with the following) |
| 53 | | Must use once preceding any of the following: |
| 54 | | |
| 55 | 1-07.28(2).OPT1.FR1 | (October 3, 2022) |

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Use in projects that require submittal review by a Railroad. Projects with work occurring below the bridge deck, work adjacent to the tracks, or work requiring containment systems, falsework, or formwork typically require Railroad review. Deck planing, deck repair, and overlays would typically not require Railroad review as the work is confined between the bridge rails and the deck surface. Contact the Development Division Design Office, Railroad Liaison Engineer at (360) 705-7459 to determine if this GSP is necessary, and to obtain the fill-in information.

(2 fill-ins)

Fill-in #1 is the number of calendar days expected for each working drawing.

Fill-in #2 is the number of calendar days expected for a re-review of a working drawing.

1-07.28(6).GR1 Railroad Protective Services

1-07.28(6).INST1.GR1 (Section 1-07.28(6) is supplemented with the following)
Must use once preceding any of the following:

1-07.28(6).OPT1.FR1 (October 3, 2022)

Use when the Contracting Agency has made an agreement with the railroad for Railroad Flagging or other protective services. Contact the Development Division Design Office, Railroad Liaison Engineer at (360) 705-7459 to determine if this GSP is necessary, and to obtain the fill-in information.

(2 fill-ins)

Fill-in #1 is the minimum notification to Railroad Company or work within 25' of centerline of tracks.

Fill-in #2 is the Railroad Company contact for scheduling Railroad Flagging or other protective services.

1-07.28(8).GR1 Measurement and Payment

1-07.28(8).INST1.GR1 (Section 1-07.28(8) is revised to read)
Must use once preceding any ~~one~~ of the following:

1-07.28(8).OPT1.GR1 (Railroad flagging or protective services)
(October 3, 2022)

Use when railroad flagging or protective services are required for the project and Use when the Contracting Agency has made an agreement with the railroad for Railroad Flagging or other protective services.

Estimated Cost to be placed below the line in Ebase for the project office to make direct payments by invoice to the railroad. Contact the Development Division Design Office, Railroad Liaison Engineer at (360) 705-7459 to determine if this GSP is necessary. ~~Do not use with 1-~~

07.28(8).OPT2.GR1

1-08.GR1 Prosecution and Progress

1 **1-08.1.GR1 Subcontracting**
 2
 3 1-08.1.INST1.GR1 (Section 1-08.1 is supplemented with the following)
 4 Must use once preceding any of the following:
 5
 6 1-08.1.OPT1.GR1 (Subcontracting)
 7 (October 3, 2022)
 8 Use in all Federally funded projects.
 9
 10 1-08.1.OPT3.GR1 Qualifications Of Building Contractor
 11 (March 13, 1995)
 12 Use in road construction projects that also include building
 13 construction.
 14

15 **1-08.3.GR1 Progress Schedule**

16
 17 **1-08.3(42).NEW.GR1 General Requirements**

18
 19 ~~1-08.3(1).INST1.GR1 (The first sentence of Section 1-08.3(1) is revised to read)~~
 20 ~~Must use once preceding any of the following:~~
 21
 22 ~~1-08.3(1).OPT1.GR1 (August 7, 2006)~~
 23 ~~Include in complex or high impact projects, requiring the~~
 24 ~~use of a Type C Schedule, as described for GSP 1-~~
 25 ~~08.3(2).OPT2.FR1 at the discretion of the Region~~
 26 ~~Construction Manager. Use requires the approval of the~~
 27 ~~HQ Construction Office.~~
 28 ~~Must include with 1-08.3(2).OPT2.FR1, 1-~~
 29 ~~08.3(3).OPT1.GR1, 1-08.3(4).OPT1.GR1, 1-~~
 30 ~~08.3(5).OPT1.GR1, and 1-08.3(5).OPT2.GR1.~~
 31

32 **1-08.3(2)B.GR1 Type B Progress Schedules**

33 1-08.3(42)B.INST21.GR1 (Section 1-08.3(42) is supplemented with the following)
 34 Must use once preceding any of the following:
 35
 36 1-08.3(42)B.OPT21.FR1 (Additional Required Activities on Progress Schedule)
 37 (~~October 3, 2022~~ November 20, 2023)
 38 Use in projects with milestones and/or activities that
 39 need to be shown on the progress schedule for
 40 successful schedule management. This may not be
 41 Work items, but permits, procurement, or other activities
 42 known to have risk or drive the length of the schedule.
 43 Suggested items include Railroad Right of Entry
 44 Agreements and materials requiring long procurement or
 45 fabrication periods, such as signal or light poles,
 46 structural elements, or mechanical items. If you have a
 47 right of entry agreement with the railroad, contact the
 48 Development Division Design Office, Railroad Liaison
 49 Engineer at (360) 705-7459 to determine if this GSP is
 50 necessary, and to obtain the fill-in information.
 51 (1 fill-in)
 52 Fill-in #1 is milestones and/or activities.
 53

54 ~~1-08.3(2).GR1 Progress Schedule Types~~
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~~1-08.3(2).INST3.GR1 (Section 1-08.3(2) is supplemented with the following)
Must use once preceding any of the following:~~

~~1-08.3(2).OPT2.FR1 (Type C Progress Schedule)
(September 7, 2021)
Include in complex or high impact projects under the
following conditions:~~

~~The Engineers Estimate exceeds \$15 million or Time for
Completion exceeds 180 working days, and when the
project includes some or all of the following
characteristics: multiple traffic shifts and staged
construction is required; complete closure of ramps,
surface streets, or interstate is required; designated
detour routes require inter-agency agreements; state
supplied materials and resources require significant
advanced coordination; utility relocation by others is
dependent on staged construction; significant impacts to
businesses and communities require regular public
information reports; commitments to funding partners
(not legislative) for specific completion timeframes are
documented to exist.~~

~~Use requires concurrence of the Region Construction
Manager and the approval of the HQ Construction
Office. Must include with 1-08.3(1).OPT1.GR1, 1-
08.3(3).OPT1.GR1, 1-08.3(4).OPT1.GR1, 1-
08.3(5).OPT1.GR1, and 1-08.3(5).OPT2.GR1.
(1 fill-in)
Fill-in #1 is the current version of the scheduling
software.~~

1-08.3(3).GR1 Schedule Updates

~~1-08.3(3).INST1.GR1 (Section 1-08.3(3) is revised to read)
Must use once preceding any of the following:~~

~~1-08.3(3).OPT1.GR1 (June 6, 2022)
Include in complex or high impact projects requiring the
use of a Type C Schedule as described for GSP 1-
08.3(2).OPT2.FR1 at the discretion of the Region
Construction Manager. Use requires the approval of the
HQ Construction Office.
Must include with 1-08.3(1).OPT1.GR1, 1-
08.3(2).OPT2.FR1, 1-08.3(4).OPT1.GR1, 1-
08.3(5).OPT1.GR1, and 1-08.3(5).OPT2.GR1.~~

1-08.3(4).GR1 Measurement

~~1-08.3(4).INST1.GR1 (Section 1-08.3(4) is supplemented with the following)
Must use once preceding any of the following:~~

~~1-08.3(4).OPT1.GR1 (August 5, 2013)
Include in complex or high impact projects requiring the
use of a Type C Schedule as described for GSP 1-~~

~~08.3(2).OPT2.FR1 at the discretion of the Region Construction Manager. Use requires the approval of the HQ Construction Office. Must include with 1-08.3(1).OPT1.GR1, 1-08.3(2).OPT2.FR1, 1-08.3(3).OPT1.GR1, 1-08.3(5).OPT1.GR1, and 1-08.3(5).OPT2.GR1.~~

~~1-08.3(5).GR1~~ **Payment**

~~1-08.3(5).INST1.GR1 (Section 1-08.3(5) is supplemented with the following)
Must use once preceding any of the following:~~

~~1-08.3(5).OPT1.GR1 (Schedule Update)
(September 7, 2021)
Include in complex or high impact projects, requiring the use of a Type C Schedule, as described for GSP 1-08.3(2).OPT2.FR1 at the discretion of the Region Construction Manager. Use requires the approval of the HQ Construction Office. Must include with 1-08.3(1).OPT1.GR1, 1-08.3(2).OPT2.FR1, 1-08.3(3).OPT1.GR1, 1-08.3(4).OPT1.GR1, and 1-08.3(5).OPT2.GR1.~~

~~1-08.3(5).OPT2.GR1 (Progress Schedule)
(September 7, 2021)
Include in complex or high impact projects, requiring the use of a Type C Schedule, as described for GSP 1-08.3(2).OPT2.FR1 at the discretion of the Region Construction Manager. Use requires the approval of the HQ Construction Office. Must include with 1-08.3(1).OPT1.GR1, 1-08.3(2).OPT2.FR1, 1-08.3(3).OPT1.GR1, 1-08.3(4).OPT1.GR1 and 1-08.3(5).OPT1.GR1.~~

1-08.4.GR1 Prosecution of Work

1-08.4.INST1.GR1 (The first sentence of Section 1-08.4 is revised to read)
Must use once preceding any of the following:

1-08.4.OPT1.FR1 (Establish starting date for roadway operations)
(August 3, 2015)
Must also use **1-08.5.OPT9.FR1**.
At the discretion of the Region Administrator, use in short term projects when a delayed start is desirable to allow the Contractor some latitude in scheduling the work. Recommendation by the Region Construction Office is advised.
(1 fill-in)

1-08.4.OPT2.GR1 (Variable start: State controls start)
(August 7, 2006)
Use in contracts where the contractor shall start work immediately after a happening or event to avoid high impacts to the public. At the time of issuance of the contract the date of that event or happening is not known. Region

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|----|-------------------|--|
| 1 | | Construction Engineer, or equivalent, approval is required to |
| 2 | | use this provision. Must include 1-08.5.OPT1.FR1 and 1- |
| 3 | | 08.5.OPT7.FR1. |
| 4 | | |
| 5 | 1-08.4.OPT3.FR1 | (Fixed start: State controls start) |
| 6 | | (August 7, 2006) |
| 7 | | Use in contracts where the contractor shall start work |
| 8 | | immediately after a happening or event to avoid high |
| 9 | | impacts to the public. At the time of issuance of the contract |
| 10 | | the date of that event or happening is known. Region |
| 11 | | Construction Engineer, or equivalent, approval is required to |
| 12 | | use this provision. Must include 1-08.5.OPT2.FR1 and 1- |
| 13 | | 08.5.OPT7.FR1. |
| 14 | | (1 fill-in) |
| 15 | | |
| 16 | 1-08.5.GR1 | Time for Completion |
| 17 | | |
| 18 | 1-08.5.INST1.GR1 | (The third paragraph of Section 1-08.5 is revised to read) |
| 19 | | Must use once preceding any of the following: |
| 20 | | |
| 21 | 1-08.5.OPT1.FR1 | (Variable start: State controls start) |
| 22 | | (August 7, 2006) |
| 23 | | Use in contracts where the contractor shall start work |
| 24 | | immediately after a happening or event to avoid high |
| 25 | | impacts to the public. At the time of issuance of the contract |
| 26 | | the date of that event or happening is not known. Region |
| 27 | | Construction Engineer, or equivalent, approval is required to |
| 28 | | use this provision. Must include |
| 29 | | 1-08.4.OPT2.GR1 and 1-08.5.OPT7.FR1. |
| 30 | | (2 fill-ins) Fill-ins are contract start times. |
| 31 | | |
| 32 | 1-08.5.OPT2.FR1 | (Fixed start: State controls start) |
| 33 | | (August 7, 2006) |
| 34 | | Use in contracts where the contractor shall start work |
| 35 | | immediately after a happening or event to avoid high |
| 36 | | impacts to the public. At the time of issuance of the contract |
| 37 | | the date of that event or happening is known. Region |
| 38 | | Construction Engineer, or equivalent, approval is required to |
| 39 | | use this provision. Must include |
| 40 | | 1-08.4.OPT3.FR1 and 1-08.5.OPT7.FR1. |
| 41 | | (1 fill-in) Fill-in is contract start time. |
| 42 | | |
| 43 | 1-08.5.INST2.GR1 | (Section 1-08.5 is supplemented with the following) |
| 44 | | Must use once preceding any of the following: |
| 45 | | |
| 46 | 1-08.5.OPT7.FR1 | (Time for physical completion) |
| 47 | | (March 13, 1995) |
| 48 | | Use in all projects not requiring one of the following "TIME |
| 49 | | FOR COMPLETION" GSP's. |
| 50 | | (1 fill-in) |
| 51 | | |
| 52 | 1-08.5.OPT8.FR1 | (Time for physical completion) |
| 53 | | (March 13, 1995) |
| 54 | | Must also use 1-08.9.OPT1.FR1. |

| | | |
|----|-------------------|---|
| 1 | | Use in projects requiring an interim or temporary controller |
| 2 | | for early use of a signal system and where an intermediate |
| 3 | | physical completion time is required. |
| 4 | | (2 fill-ins) |
| 5 | | |
| 6 | 1-08.5.OPT9.FR1 | (Time for physical completion) |
| 7 | | (December 4, 2006) |
| 8 | | Must also use 1-08.4.OPT1.FR1 . |
| 9 | | (2 fill-ins) |
| 10 | | Fill-in #2 is the same as fill-in #1 for 1-08.4.OPT1.FR1 . |
| 11 | | |
| 12 | 1-08.5.OPT10.FR1 | (Time for physical completion) |
| 13 | | (March 13, 1995) |
| 14 | | Use in projects with signal work and the Contracting Agency |
| 15 | | furnishes the signal control equipment. |
| 16 | | (1 fill-in) |
| 17 | | |
| 18 | 1-08.5.OPT11.FR1 | Incentive For Early Completion |
| 19 | | (August 4, 2003) |
| 20 | | Use in projects requiring an incentive for early completion. |
| 21 | | Prior approval from the State Construction office is required |
| 22 | | for the use of this GSP. |
| 23 | | (4 fill-ins) |
| 24 | | \$\$1\$\$, \$\$2\$\$ and \$\$4\$\$ are substantial or physical, \$\$3\$\$ |
| 25 | | is dollar value established by the Region, must be justified |
| 26 | | by road user costs. |
| 27 | | |
| 28 | 1-08.6.GR1 | Suspension of Work |
| 29 | | |
| 30 | 1-08.6.INST1.GR1 | (Section 1-08.6 is supplemented with the following) |
| 31 | | Must use once preceding any of the following: |
| 32 | | |
| 33 | 1-08.6.OPT1.FR1 | (Procurement Suspension) |
| 34 | | (January 3, 2017) |
| 35 | | Requires approval of HQ Construction. Use in projects |
| 36 | | requiring materials that have long lead times for |
| 37 | | procurement or fabrication, or proprietary/specialized |
| 38 | | materials, HMA Mix Design evaluation, and procurement of |
| 39 | | the materials or HMA Design evaluation is a controlling |
| 40 | | factor in the time for completion. Not recommended if |
| 41 | | material procurement or mix design approval are not critical |
| 42 | | path items. Use 1-08.6.OPT2.FR1 instead, if project does |
| 43 | | not include HMA paving. |
| 44 | | |
| 45 | | Fill-in #1 identifies materials that are critical for timely |
| 46 | | completion and require fabrication or long lead times for |
| 47 | | procurement. Examples of critical materials may include Hot |
| 48 | | Mix Asphalt, landscaping (cultivated) items, permanent |
| 49 | | signing, steel guardrail posts, ITS equipment, modular |
| 50 | | expansion joints, bridge railing, hydraulic/electrical |
| 51 | | rehabilitation components, bridge girders, buried structures, |
| 52 | | steel jackets for seismic retrofits, castings, single-source |
| 53 | | drain pipe, signal controllers, light standards, or signal |
| 54 | | standards. |
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Fill-in #2 limits the duration of the suspension for acquisition of critical materials. The duration of the suspension should be appropriate for the work being performed and will vary according to the type of materials required.

The use of a short duration may be impossible to achieve or may raise the cost of the project.
(2 fill-ins)

1-08.6.OPT2.FR1

(Procurement Suspension
(February 6, 2023)

Use in projects requiring materials that have long lead times for procurement or fabrication, or proprietary/specialized materials, and procurement of the materials is a controlling factor in the time for completion. WSDOT’s preliminary schedule for calculating working days should include the estimated suspension duration as non-working.
(2 fill-ins)

Fill-in #1 identifies materials that are critical for timely completion and require fabrication or long lead times for procurement. Examples of critical materials may include: Landscaping (cultivated) items, permanent signing, steel guardrail posts, ITS equipment, modular expansion joints, bridge railing, hydraulic/electrical rehabilitation components, bridge girders, buried structures, steel jackets for seismic retrofits, castings, single source drain pipe, signal controllers, light standards, or signal standards.

Fill-in #2 limits the duration of the suspension for acquisition of critical materials. The duration of the suspension should be appropriate for the work being performed and will vary according to the type of materials required.

1-08.9.GR1 Liquidated Damages

~~1-08.9.INST2.GR1 (Section 1-08.9 is revised to read)~~

~~Must use once preceding any of the following:~~

~~1-08.9.OPT1.FR1 (Failure to complete temporary signal system)
(March 13, 1995)~~

~~Use in projects requiring an interim or temporary controller for early use of a signal system and where an intermediate physical completion time is required. The Region must determine the appropriate liquidated damages based on road user costs.~~

~~Must also use 1-08.5.OPT8.FR1 and 1-08.9.OPT3.FR1.
(1 fill-in)~~

~~1-08.9.OPT2.FR1 (Interim Completion Liquidated Damages)
(April 6, 2009)~~

~~Use in projects where an interim completion time is desired (such as the completion of a stage of work, lane closure, or ITS disruption), and the Region determines that user costs for failure to complete the specified portion of work, as~~

1 ~~calculated by the Transportation Data Office, are significant~~
2 ~~enough to warrant liquidated damages. Determination of the~~
3 ~~liquidated damage amount must adhere to Chapter 700.01~~
4 ~~of the Plans Prep Manual.~~
5 ~~(6 fill-ins) \$\$1\$\$ describes the work to be completed; \$\$2\$\$~~
6 ~~is the user cost; \$\$3\$\$ and \$\$4\$\$ is the unit of time~~
7 ~~(minutes, hours or days); \$\$5\$\$ is the smallest increment of~~
8 ~~time that will be measured; and \$\$6\$\$ is the contract~~
9 ~~provision that specifies the completion time.~~
10 ~~Must also use **1-08.9.OPT3.FR1.**~~

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12 1-08.9.INST~~3~~**1**.GR1 (Section 1-08.9 is supplemented with the following)
13 Must use once preceding any of the following:
14

15 1-08.9.OPT~~3~~**1.NEW**.FR1(Liquidated Damages)
16 (September 8, 2020)
17 Use in all projects.
18 (1 fill-in)
19 Fill-in shall be the amount determined by the Design
20 Liquidated Damages Calculation Sheet:
21 [http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/D](http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/DesignLiquidatedDamagesCalculationSheet.xlsm)
22 [esignLiquidatedDamagesCalculationSheet.xlsm](http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/DesignLiquidatedDamagesCalculationSheet.xlsm).

23
24 1-08.9.OPT2.NEW**4**.FR1 (Failure to complete temporary signal system)
25 (March 13, 1995)
26 Use in projects requiring an interim or temporary controller
27 for early use of a signal system and where an intermediate
28 physical completion time is required. The Region must
29 determine the appropriate liquidated damages based on
30 road user costs.
31 Must also use **1-08.5.OPT8.FR1** and **1-**
32 **08.9.OPT1.NEW3.FR1.**
33 (1 fill-in)

34
35 1-08.9.OPT~~23~~**3**.NEW.FR1(Interim Completion Liquidated Damages)
36 (April 6, 2009)
37 Use in projects where an interim completion time is desired
38 (such as the completion of a stage of work, lane closure, or
39 ITS disruption), and the Region determines that user costs
40 for failure to complete the specified portion of work, as
41 calculated by the Transportation Data Office, are significant
42 enough to warrant liquidated damages. Determination of the
43 liquidated damage amount must adhere to Chapter 700.01
44 of the Plans Prep Manual.
45 (6 fill-ins) \$\$1\$\$ describes the work to be completed; \$\$2\$\$
46 is the user cost; \$\$3\$\$ and \$\$4\$\$ is the unit of time
47 (minutes, hours or days); \$\$5\$\$ is the smallest increment of
48 time that will be measured; and \$\$6\$\$ is the contract
49 provision that specifies the completion time.
50 Must also use **1-08.9.OPT1.NEW3.FR1.**

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52 **1-09.GR1 Measurement and Payment**

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54 ~~**1-09.2.GR1 Weighing Equipment**~~

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~~1-09.2(1).GR1~~ ~~General Requirements for Weighing Equipment~~

~~1-09.2(1)A.GR1~~ ~~Electronic Delivery Management System (E-Ticketing)~~

~~1-09.2(1)A1.GR1~~ ~~Equipment~~

~~1-09.2(1)A1.INST1.GR1 (Item number 1 in the first paragraph of Section 1-09.2(1)A1 is revised to read)~~
~~Must use once preceding any of the following:~~

~~1-09.2(1)A1.OPT1.2024.GR1 (March 9, 2023)~~
~~Use in all projects.~~

1-09.3.GR1 Scope of Payment

1-09.3.INST1.GR1 (Section 1-09.3 is supplemented with the following)
Must use once preceding any of the following:

1-09.3.OPT1.FR1 Fuel Cost Adjustment
(~~August 7, 2017 Update~~ August 7, 2017)
Use requires Region Construction Manager Approval and concurrence from HQ Construction Office. At the Region's discretion, use in Design-Bid-Build projects with more than ~~200~~ 100 working days or high fuel use projects with an anticipated substantial completion date more than 6 months beyond the bid opening date (for jobs with early bid dates) that include any of the bid items that are eligible for adjustment. Include an estimated amount for the bid item "Fuel Cost Adjustment" in the Engineers Estimate. Only the items described below are eligible for adjustment.

(2 or more fill-ins) Fill-ins are the bid items that are eligible for adjustment, and fuel usage factors for those bid items.

To determine which Bid Items are eligible for Adjustment:
If the bid proposal contains items that fit the description of the items listed below, then those bid items are eligible for adjustment.

| | | |
|--|-----------------------------|-----------------------------|
| Eligible Bid Item | Fuel Usage Factor | |
| ___ Excavation Incl. Haul, per cubic yard | | 0.29 <u>0.70</u> |
| gal/cy | | |
| ___ Excavation Incl. Haul – | | |
| Area ___ per cubic yard | 0.29 <u>0.70</u> | gal/cy |
| ___ Borrow Incl. Haul, per cubic yard | 0.25 <u>0.68</u> | gal/cy |
| ___ Borrow Incl. Haul, per ton | 0.17 <u>0.45</u> | gal/ton |
| Structure Excavation Class ___ | | |
| Incl. Haul, per cubic yard | 0.25 <u>0.70</u> | gal/cy |
| Shoring or Extra Excavation Class A _____, | | |
| lump sum _____ | 0.04 | gal/dollar |
| Crushed Surfacing _____, | 0.70 | gal/ton |
| Crushed Surfacing _____, | 1.02 <u>1.20</u> | gal/cy |
| Processing and Finishing, per mile _____ | 270 | gal/mile |
| Agg. From Stockpile for BST, per cubic yard | | |

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0.61 gal/cy
 Furnishing and Placing Crushed _____,
 per cubic yard ~~1.02~~1.20 gal/cy
Furnishing and Placing Crushed _____ to No. 4,
per square yard 0.02 gal/sy
Furnishing and Placing Crushed Screening No. 4 to 0,
per square yard 0.002 gal/sy
Planing Bituminous Pavement, per square yard 0.09
gal/sy
 HMA Cl. _____ PG _____, per ton 0.90 gal/ton
 HMA for _____, per ton 0.90 gal/ton
 Commercial HMA, per ton 0.90 gal/ton
 Cement Concrete Pavement, per cubic yard ~~1.0~~1.2
 gal/cy
 Cement Concrete Pavement -
 Including Dowels, per cubic yard ~~1.0~~1.2 gal/cy
 Concrete Class _____, per cubic yard ~~1.0~~1.2 gal/cy
 Commercial Concrete, per cubic yard ~~1.0~~1.2 gal/cy
 Superstructure _____, lump sum ~~0.02~~0.005 gal/dollar
 St. Reinf. Bar, per pound ~~0.02~~0.004 gal/Lb
 Epoxy-Coated St. Reinf. Bar, per pound ~~0.02~~0.004
 gal/Lb

Determine the Engineers Estimate for the bid item “Fuel Cost Adjustment”:

Base Fuel Cost and Estimated Monthly Fuel Cost:

Obtain the most current Monthly fuel price from the U.S. Energy Information Administration website. The website location and directions are as follows:

- <http://www.eia.gov/petroleum/gasdiesel/>
- On the web page, click on the **West Coast less California**, listed under the heading **U.S On-Highway Diesel Fuel Prices*(dollar per gallon)** at the lower end of the web page.
- In the pull down box labeled **Period** pull down **Monthly**
- Click on the fuel price history found under the column heading **View History** for the line **Diesel (On-Highway) – All Types**.

Multiply the Base Fuel Cost by the appropriate Contract Duration Factor (below) to determine the Estimated Monthly Fuel Cost.

| Contract Duration | Contract Duration Factor |
|--|--------------------------|
| 200 Working days Up to 1 year | 1.12 1.10 |
| 1 to 2 years | 1.25 |
| 2 to 3 years | 1.37 |
| 3 to 4 years | 1.49 |
| 4 to 5 years | 1.62 |

Estimate the amount of the Adjustment:

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Use the formulas below.

$$\text{Adjustment} = (\text{Est. Monthly Fuel Cost} - (1.10 \times \text{Base Fuel Cost})) \times Q$$

Where $Q = \square ((\text{Fuel Usage Factor}) \times (\text{Total Quantity of each Eligible Bid Item}))$ for all Eligible Bid Items.

Sample Calculation:

My project is 300 working days. It contains 10,000 tons of HMA Cl. 1/2" PG 70-22, and 500 tons of CSBC.

HMA Cl. 1/2" PG 70-22 is Eligible for Adjustment.
Crushed Surfacing Base Course is Eligible for Adjustment.

From U.S. Energy Information Administration website :
most recent Monthly Fuel Price = 3.06 dollars per gallon.
This monthly price becomes the Base Fuel Cost.

Therefore:

$$\text{Base Fuel Cost} = 3.06 \text{ dollars/gal}$$

$$\text{Est. Monthly Fuel Cost} = \text{Base Fuel Cost} \times \text{Contract Duration Factor}$$

$$\text{Est. Monthly Fuel Cost} = 3.06 \times 1.25 = 3.825 \text{ dollars/gal}$$

$$Q = (0.70 \text{ gal/ton} \times 500 \text{ tons}) + (0.90 \text{ gal/ton} \times 10,000 \text{ tons})$$

$$Q = 9,350 \text{ gal}$$

$$\text{Adjustment} = (3.82 \text{ dollars/gal} - (1.10 \times 3.06 \text{ dollars/gal})) \times 9,350 \text{ gal}$$

$$\text{Adjustment} = \$4,291.65 - 5,675.45 = \$4,300.70$$

1-09.3.OPT2.FR1

Steel Cost Adjustments (August 6, 2018)

Use in all projects that use quantities of steel in excess of 50,000 pounds, including non-proprietary walls, pedestrian bridges and vehicular bridges.

Fill-in #1 is the initial cost basis of steel and should use a value of \$0.40/lb. Any deviation from the default value of \$0.40/lb requires approval of the HQ Construction Office.

Fill-in #2 is a list of the bid items that are eligible for steel cost adjustment. This can include bid items that are entirely composed of steel (e.g., Steel Reinforcing Bar for Bridge) and can also include lump sum items that use significant quantities of steel (e.g., Superstructure, Lump Sum). Contact the HQ Strategic Analysis and Estimating Unit for assistance preparing the Engineer's Estimate for the bid item "Steel Cost Adjustment."
(2 fill-ins)

| | | |
|----|----------------------|--|
| 1 | 1-09.8.GR1 | Payment for Material On Hand |
| 2 | | |
| 3 | 1-09.8.INST1.GR1 | (The last paragraph of Section 1-09.8 is revised to read) |
| 4 | | Must use once preceding any of the following: |
| 5 | | |
| 6 | 1-09.8.OPT1.GR1 | (August 3, 2009) |
| 7 | | Use in projects that are over \$2 million and have more than |
| 8 | | 120 working days. |
| 9 | 1-09.9.GR1 | Payments |
| 10 | | |
| 11 | 1-09.9(1).GR1 | Retainage |
| 12 | | |
| 13 | 1-09.9(1).INST1.GR1 | (Section 1-09.9(1) including title is deleted and replaced |
| 14 | | with the following) |
| 15 | | Must use once preceding any of the following: |
| 16 | | |
| 17 | 1-09.9(1).OPT1.GR1 | (Vacant) |
| 18 | | (June 27, 2011) |
| 19 | | Use in all Federally funded projects. |
| 20 | | |
| 21 | 1-10.GR1 | Temporary Traffic Control |
| 22 | | |
| 23 | 1-10.1.GR1 | General |
| 24 | | |
| 25 | 1-10.1.INST1.GR1 | (Section 1-10.1 is supplemented with the following) |
| 26 | | Must use once preceding any of the following: |
| 27 | | |
| 28 | 1-10.1.OPT1.FR1 | (Agency-Provided Traffic Control Resources) |
| 29 | | (April 1, 2013) |
| 30 | | Use on projects where the Region will be providing some |
| 31 | | labor, equipment or material resource to the Contractor. |
| 32 | | Typically will include signs, posts, pilot car drivers, etc. The |
| 33 | | decision to provide resources and the use of this provision |
| 34 | | requires the approval of the Region Construction Manager. |
| 35 | | |
| 36 | | The first fill-in is a detailed list of the resources to be |
| 37 | | provided. Include a description of the item, the quantity (if |
| 38 | | appropriate), its location and any special instructions to the |
| 39 | | Contractor for acquiring the item. Include a reference to the |
| 40 | | description of work provision where the resource is to be |
| 41 | | applied. The second fill-in is the number of working days you |
| 42 | | want the Contractor to notify the Engineer before each |
| 43 | | duration of use of the resources. |
| 44 | | |
| 45 | | (2 fill-ins) |
| 46 | | |
| 47 | 1-10.1.OPT2.FR1 | (Agency-Arranged Law Enforcement) |
| 48 | | (May 20, 2020) |
| 49 | | Use on projects where the use of WSP personnel is |
| 50 | | included in the Contract. The decision to use this provision |
| 51 | | requires the approval of the ARA for Construction or |
| 52 | | designee. |
| 53 | | (2 fill-ins) |
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Fill-in #1 is a list of the specific duties the WSP personnel may perform during active work zones. Refer to the WSDOT Traffic Manual (M 51-02) Chapter 5-19.C for a list of specific recommended assignments. WSP should not be shown on the traffic control plans and the duties should be independent from the traffic control installation, operation and removal.

Fill-in #2 is the number of hours that the Contracting Agency will pay the full cost of these WSP duties. This number may be zero if allowing the contractor to request the WSP duties at a 50/50 cost-sharing option during the project is determined acceptable.

1-10.1(1).GR1 Materials

1-10.1(1).INST1.GR1 (Section 1-10.1(1) is supplemented with the following)
Must use once preceding any of the following:

1-10.1(1).OPT1.GR1 (Automated Flagger Assistance Devices(AFAD))
(January 10, 2022)
Recommend using in projects utilizing one-way traffic control on two-lane routes with a posted speed of 55MPH or more, but may also be used on lower speed roadways. Near signalized intersections, flaggers should be used to control traffic.
Must use with **1-10.3(3).OPT1.GR1**, ~~1-10.4(2).OPT2.GR1~~, and ~~1-10.5(2).OPT1.GR1~~.

If AFAD is included in the lump sum cost for “Project Temporary Traffic Control,” do not use 1-10.4(2).OPT2.GR1 and 1-10.5(2).OPT1.GR1.

If AFAD will be paid for by the hour use with 1-10.4(2).OPT2.GR1 and 1-10.5(2).OPT1.GR1. Must also pay for flaggers by the hour.

If AFAD will be paid for by the hour and the project also contains “Project Temporary Traffic Control” also add to the reinstated items in 1-10.4(3).OPT1.FR1.

1-10.2.GR1 Traffic Control Management

1-10.2.INST1.GR1 (Section 1-10.2 is supplemented with the following)
Must use one preceding any of the following:

1-10.2.OPT1.GR1 (Work Zone Safety Contingency)
(November 2, 2022)
Use in all projects with traffic control.

For projects with item bids, use with **1-10.5(2).OPT7.GR1**.

For projects with lump sum plus reinstated bid items, use with **1-10.4(3).OPT1.FR1** and **1-10.5(2).OPT7.GR1**.

1-10.2(1).GR1 General

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1-10.2(1).INST1.GR1 (Section 1-10.2(1) is supplemented with the following)
Must use once preceding any of the following:

1-10.2(1).OPT1.GR1 (Acceptable TCS Training)
(October 3, 2022)
Include in all projects that include the bid item Traffic Control Supervisor, or include the bid item Project Temporary Traffic Control.

1-10.2(1).OPT2.GR1 (Traffic Control Supervisor)
(January 5, 2015)
May be used on projects with temporary traffic control where a greater experience level is desired for the primary Traffic Control Supervisor. Typical projects where use of the GSP would be considered may have complex traffic control plans, increased risk of worker safety, or impacts to the public.

1-10.2(9-35).GR1 (Temporary Traffic Control Materials)
(Section 9-35 is supplemented with the following)
Must use once preceding any of the following:

1-10.2(9-35).OPT1.GR1 (Temporary Portable Transverse Rumble Strips)
(October 3, 2022)
Use on projects that have flagging operations and speeds are 45mph or higher. Consult region traffic engineer for assistance.

Must use with **1-10.3(3).OPT5.GR1**, ~~1-1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.~~

If temporary portable transverse rumble strips are included in the lump sum cost for "Project Temporary Traffic Control," do not use 1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.

If temporary portable transverse rumble strips will be paid for by each use with 1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.

If temporary portable transverse rumble strips will be paid for by each and the project also contains "Project Temporary Traffic Control" also add to the reinstated items in 1-10.4(3).OPT1.FR1.

1-10.3.GR1 Traffic Control Labor, Procedures and Devices

1-10.3.INST1.GR1 (Section 1-10.3 is supplemented with the following)
Must use once preceding any of the following:

1-10.3.OPT1.FR1 (Contractor-Provided Uniformed Police Officers)
(May 20, 2020)

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Use on projects where the traffic control plans show Uniformed Police Officers performing traffic control-related duties.

(1 fill-in)
The fill-in should provide contact information for local law enforcement agencies that may be able to provide this service. The WSP district contact for the project location may also be provided.

Use with **1-10.4(2).OPT6.GR1** and **1-10.5(2).OPT5.GR1**.
For use on WSDOT projects only.

1-10.3(3).GR1 Traffic Control Devices

1-10.3(3).INST1.GR1 (Section 1-10.3(3) is supplemented with the following)
Must use once preceding any of the following:

1-10.3(3).OPT1.GR1 (Automated Flagger Assistance Devices)
(January 10, 2022)
Use in projects to include the Automated Flagger Assistance Devices (AFAD).
Must use with **1-10.1(1).OPT1.GR1**, ~~1-10.4(2).OPT2.GR1~~, and ~~1-10.5(2).OPT1.GR1~~.

If AFAD is included in the lump sum cost for “Project Temporary Traffic Control,” do not use with 1-10.4(2).OPT2.GR1 and 1-10.5(2).OPT1.GR1.

If AFAD will be paid for by the hour use with 1-10.4(2).OPT2.GR1 and 1-10.5(2).OPT1.GR1. Must also pay for flaggers by the hour.

If AFAD will be paid for by the hour and the project also contains “Project Temporary Traffic Control” also add to the reinstated items in 1-10.4(3).OPT1.FR1.

1-10.3(3).OPT2.GR1 (Radar Speed Display Signs)
(January 2, 2018)
Consider use on freeway projects when traffic will be reduced to a single lane with temporary traffic control and workers will be present in close proximity behind channelization devices. Consider a regulatory speed limit reduction when the single lane of traffic will be shifted onto the shoulder away from the work area. The Region Traffic Engineer will need to approve the speed limit reduction.
Must use with **1-10.3(3)(9-35).OPT1.GR1**, ~~1-10.4(2).OPT3.GR1~~, and ~~1-10.5(2).OPT2.GR1~~.

If radar speed display signs are included in the lump sum cost for “Project Temporary Traffic Control,” do not use with 1-10.4(2).OPT3.GR1 and 1-10.5(2).OPT2.GR1.

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If radar speed display signs will be paid for by the hour use with **1-10.4(2).OPT3.GR1** and **1-10.5(2).OPT2.GR1**.

If radar speed display signs will be paid for by the hour and the project also contains "Project Temporary Traffic Control" also add to the reinstated items in **1-10.4(3).OPT1.FR1**.

1-10.3(3).OPT3.FR1

(Smart Work Zone System)
~~(October 3, 2022)~~**(November 20, 2023)**
Consider including a smart work zone system (SWZS) for projects where long-term (4 or more days) temporary traffic control restrictions will cause regular or ongoing traffic congestion and delays in approximately the same location. This system is intended for queues up to 9 miles. Typical traffic control plans are available for 6-mile and 9-mile systems. Queue detection warning, dynamic lane merge, and travel delay offer work zone queue mitigation. Consult your region traffic engineer for assistance.

If the smart work zone system is included in the lump sum cost for "Project Temporary Traffic Control," do not use with **1-10.4(2).OPT5.GR1** and **1-10.5(2).OPT3.GR1**.

If the smart work zone system will be paid for by the hour use with **1-10.4(2).OPT5.GR1** and **1-10.5(2).OPT3.GR1**.

If radar speed display signs will be paid for by the hour and the project also contains "Project Temporary Traffic Control" also add to the reinstated items in **1-10.4(3).OPT1.FR1**.

~~If Project Temporary Traffic Control is lump sum (with reinstated items), use with **1-10.5(2).OPT3.GR1**.~~

~~If Project Temporary Traffic Control is not lump sum (item bids with lump sum for incidentals), use with **1-10.4(2).OPT5.GR1** and **1-10.5(2).OPT3.GR1**.~~

1-10.3(3).OPT4.FR1

(Queue Warning System)
~~(October 3, 2022)~~**(November 20, 2023)**
Consider including a queue warning system (QWS) for projects where daily, nightly, weekend, or durations up to one week where temporary traffic control restrictions will cause intermittent traffic congestion and delays in different locations as closures move with work operations (such as pavers) but also in the same location. This system is intended for queues of up to 3 miles. Freeway Typical Traffic Control Plans will soon be updated to include the Queue Warning System option (Sheet 1A). Queue detection warning and dynamic lane

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merge offer work zone queue mitigation. Consult region traffic engineer for assistance.

If the queue warning system is included in the lump sum cost for “Project Temporary Traffic Control,” do not use with 1-10.4(2).OPT7.GR1 and 1-10.5(2).OPT4.GR1.

If the queue warning system will be paid for by the hour use with 1-10.4(2).OPT7.GR1 and 1-10.5(2).OPT4.GR1.

If radar speed display signs will be paid for by the hour and the project also contains “Project Temporary Traffic Control” also add to the reinstated items in 1-10.4(3).OPT1.FR1.

~~If Project Temporary Traffic Control is lump sum (with reinstated items), use with 1-10.5(2).OPT4.GR1.~~

~~If Project Temporary Traffic Control is not lump sum (item bids with lump sum for incidentals), use with 1-10.4(2).OPT7.GR1 and 1-10.5(2).OPT4.GR1.~~

1-10.3(3).OPT5.GR1 (Temporary Portable Transverse Rumble Strips)
(October 3, 2022)
Use when a project has flagging operations and speeds are 45mph or higher. Consult region traffic engineer for assistance.

Must use with 1-10.2(9-35).OPT1.GR1.

If temporary portable transverse rumble strips are included in the lump sum cost for “Project Temporary Traffic Control,” do not use 1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.

If temporary portable transverse rumble strips will be paid for by each use with 1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.

If temporary portable transverse rumble strips will be paid for by each and the project also contains “Project Temporary Traffic Control” also add to the reinstated items in 1-10.4(3).OPT1.FR1.

~~If Project Temporary Traffic Control is lump sum (with reinstated items), use with 1-10.5(2).OPT4.GR1.~~

~~If Project Temporary Traffic Control is not lump sum (item bids with lump sum for incidentals), use with 1-10.2(9-35).OPT1.GR1, 1-10.4(2).OPT8.GR1 and 1-10.5(2).OPT6.GR1.~~

1-10.3(3)(9-35.8).GR1 (Section 9-35.8 is revised to read)
Must use once preceding any of the following:

1-10.3(3)(9-35.8).OPT1.GR1 (Radar Speed Display Signs)
(April 1, 2019)

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Use on projects that will be utilizing Radar Speed Display Signs. The Region Traffic Engineer will need to approve the speed limit reduction.

Must use with 1-10.3(3).OPT2.GR1.

If radar speed display signs are included in the lump sum cost for "Project Temporary Traffic Control," do not use with 1-10.4(2).OPT3.GR1 and 1-10.5(2).OPT2.GR1.

If radar speed display signs will be paid for by the hour use with 1-10.4(2).OPT3.GR1 and 1-10.5(2).OPT2.GR1.

If radar speed display signs will be paid for by the hour and the project also contains "Project Temporary Traffic Control" also add to the reinstated items in 1-10.4(3).OPT1.FR1.

~~Must use with 1-10.3(3).OPT2.GR1, 1-10.4(2).OPT3.GR1, and 1-10.5(2).OPT2.GR1.~~

1-10.3(3)B.GR1 Sequential Arrow Signs (Arrow Boards)

1-10.3(3)B(9-35.4).GR1 (Section 9-35.4 is supplemented with the following)
Must use once preceding any of the following:

1-10.3(3)B(9-35.4).OPT1.~~2024~~2025.GR1 (GPS and Remote Communication Requirements)
(October 3, 2022)
Use on all ~~interstate~~ Freeway projects where the traffic control plans show sequential arrow signs being used.

1-10.3(3)K.GR1 Portable Temporary Traffic Control Signal

~~1-10.3(3)K.INST1.GR1 (Section 1-10.3(3)K is revised to read)
Must use once preceding any of the following:~~

~~1-10.3(3)K.OPT1.~~2024~~.GR1 (Portable Temporary Traffic Control Signal)
(November 2, 2022)
Use on all projects requiring portable temporary traffic control signals.
Must use with 1-10.3(3)K(9-35.14).OPT1.~~2024~~.GR1.~~

~~1-10.3(3)K(9-35.14).GR1 (Section 9-35.14 is revised to read)
Must use once preceding any of the following:~~

~~1-10.3(3)K(9-35.14).OPT1.~~2024~~.GR1 (Portable Temporary Traffic Control Signal)
(November 2, 2022)
Use on all projects requiring portable temporary traffic control signals.
Must use with 1-10.3(3)K.OPT1.~~2024~~.GR1.~~

1-10.4.GR1 Measurement

One of these GSPs must be included in every project with traffic control: **1-10.4(2).OPT1.GR1** or **1-10.4(3).OPT1.FR1**.

1-10.4(2).GR1 Item Bids With Lump Sum for Incidentals

1-10.4(2).INST1.GR1 (Section 1-10.4(2) is supplemented with the following)
Must use once preceding any of the following:

1-10.4(2).OPT1.GR1 (Standard Items)
(August 2, 2004)
Use on projects that will be utilizing the Traffic Control Bid items referenced in the provisions. While there may be lump sum Bid items within that list, this is not a total-project lump sum bid.

Must use with **1-10.5(2).OPT7.GR1**.

Do not use with **1-10.4(3).OPT1.FR1**. If the bid item "Project Temporary Traffic Control." lump sum is included in the project use **1-10.4(3).OPT1.FR1** instead.

1-10.4(2).OPT2.GR1 (Automated Flagger Assistance Devices)
(January 10, 2022)
Use on projects that will be utilizing AFAD paid by the hour.—A separate flagger must operate each AFAD in accordance with the MUTCD, so the bid item Flagger must also be used.

Do not use if the AFAD is part of the lump sum cost for "Project Temporary Traffic Control."

Must use with **1-10.1(1).OPT1.GR1**, **1-10.3(3).OPT1.GR1**, and **1-10.5(2).OPT1.GR1**.

1-10.4(2).OPT3.GR1 (Radar Speed Display Signs)
(January 2, 2018)
Use on projects that will be utilizing Radar Speed Display Signs which will be paid by the hour. The Region Traffic Engineer will need to approve the speed limit reduction.

Do not use if the radar speed display sign is part of the lump sum cost for "Project Temporary Traffic Control."

Must use with **1-10.3(3).OPT2.GR1**, **1-10.3(3)(9-35).OPT1.GR1**, and **1-10.5(2).OPT2.GR1**.

1-10.4(2).OPT5.GR1 (Smart Work Zone System)
(September 7, 2021)
Use on projects when a Smart Work Zone System will be utilized which will be paid by the hour and ~~Project Temporary Traffic Control is not lump sum.~~

Do not use if the smart work zone system is part of the lump sum cost for "Project Temporary Traffic Control."

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Use with **1-10.3(3).OPT3.FR1** and **1-10.5(2).OPT3.GR1**.

1-10.4(2).OPT6.GR1 (Contractor Provided Uniformed Police Officer)
(May 20, 2020)
Use on projects where the traffic control plans show Uniformed Police Officers performing traffic control-related duties

Use with **1-10.3.OPT1.GR1** and **1-10.5(2).OPT5.GR1**.

1-10.4(2).OPT7.GR1 (Queue Warning System)
(September 7, 2021)
Use on projects when a Queue Warning System will be utilized and will be paid by the hour.~~Project Temporary Traffic Control is not lump sum.~~
Do not use if the queue warning system is part of the lump sum cost for "Project Temporary Traffic Control."

Use with **1-10.3(3).OPT4.FR1** & **1-10.5(2).OPT4.GR1**.

1-10.4(2).OPT8.GR1 (Temporary Portable Transverse Rumble Strips)
(October 3, 2022)
Use on projects with temporary portable transverse rumble strips that are paid per each.~~that have flagging operations and speeds are 45mph or higher. Consult region traffic engineer for assistance.~~

Do not use if the temporary portable transverse rumble strips are part of the lump sum cost for "Project Temporary Traffic Control."

~~If Project Temporary Traffic Control is not lump sum (item bids with lump sum for incidentals), u~~

Use with **1-10.2(9-35).OPT1.GR1**, **1-10.3(3).OPT5.GR1** and **1-10.5(2).OPT6.GR1**.

1-10.4(3).GR1 Reinstating Unit Items With Lump Sum Traffic Control

1-10.4(3).INST1.GR1 (Section 1-10.4(3) is supplemented with the following)
Must use once preceding any of the following:

1-10.4(3).OPT1.FR1 (Project Lump Sum)
(November 2, 2022)
Use on projects that will be total project lump sum with the required force account Work Zone Contingency item. Project may also include some other traffic control Bid items to be utilized on the project. Use of this provision requires the approval of the Region Construction Manager or designee.

This method of payment might be applied to a job that would be total project lump sum except that some part of the work is not readily predictable. The need for Flaggers might be unclear or there could be an indeterminate future need for public information utilizing Portable

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Changeable Message Signs. Smart work zone and queue warning systems may not be included in the lump sum item, and must be listed in the fill-in for unit items. Must also include **1-10.2.OPT1.GR1** and **1-10.5(2).OPT7.GR1**.

The fill-in for this provision is a list of the traffic control Bid items that are included according to **Sections 1-10.4(3)** and **1-10.5(3)**. Do not use with **1-10.4(2).OPT1.GR1**. If the only additional bid item is the required force account item "Work Zone Contingency", the fill-in will be blank.
(1 fill-in)

1-10.5.GR1 Payment

1-10.5(2).GR1 Item Bids with Lump Sum for Incidentals

1-10.5(2).INST1.GR1 (Section 1-10.5(2) is supplemented with the following)
Must use once preceding any of the following:

1-10.5(2).OPT1.GR1 (Automated Flagger Assistance Devices)
~~(January 10, 2022~~**(November 20, 2023)**
Use on projects that will be utilizing AFAD paid by the hour. A separate flagger must operate each AFAD in accordance with the MUTCD, so the bid item Flagger must also be used.

Do not use if the AFAD is part of the lump sum cost for "Project Temporary Traffic Control."

~~Use in projects utilizing AFAD.~~
Must use with **1-10.1(1).OPT1.GR1, 1-10.3(3).OPT1.GR1, and 1-10.4(2).OPT2.GR1.**

1-10.5(2).OPT2.GR1 (Radar Speed Display Signs)
(January 2, 2018)
Use on projects that will be utilizing Radar Speed Display Signs which will be paid by the hour. The Region Traffic Engineer will need to approve the speed limit reduction.

Do not use if the radar speed display sign is part of the lump sum cost for "Project Temporary Traffic Control."

~~Use in projects utilizing Radar Speed Display Signs. The Region Traffic Engineer will need to approve the speed limit reduction.~~

Must use with **1-10.3(3).OPT2.GR1, 1-10.3(3)(9-35).OPT1.GR1, and 1-10.4(2).OPT3.GR1.**

1-10.5(2).OPT3.GR1 (Smart Work Zone System)
(September 7, 2021)
Use in projects when a Smart Work Zone System will be utilized which will be paid by the hour.

Do not use if the Smart Work Zone System is part of the lump sum cost for "Project Temporary Traffic Control"

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~~When using Project Temporary Traffic Control with reinstated items, use with **1-10.3(3).OPT3.FR1.**~~

~~When using Bid items with lump sum for incidentals (no lump sum traffic control), Use with **1-10.3(3).OPT3.FR1** and **1-10.4(2).OPT5.GR1.**~~

1-10.5(2).OPT4.GR1

(Queue Warning System)
(September 7, 2021)
Use on projects when a Queue Warning System will be utilized and will be paid by the hour.

Do not use if the queue warning system is part of the lump sum cost for "Project Temporary Traffic Control."

~~Use on projects when a Queue Warning System will be utilized.~~

~~When using Project Temporary Traffic Control with reinstated items, use with **1-10.3(3).OPT4.FR1.**~~

~~When using Bid items with lump sum for incidentals (no lump sum traffic control), Use with **1-10.3(3).OPT4.FR1** and **1-10.4(2).OPT7.GR1.**~~

1-10.5(2).OPT5.GR1

(Contractor Provided Uniformed Police Officer)
(May 20, 2020)
Use on projects where the traffic control plans show Uniformed Police Officers performing traffic control-related duties.

Use with **1-10.3.OPT1.GR1** and **1-10.4(2).OPT6.GR1.**

1-10.5(2).OPT6.GR1

(Temporary Portable Rumble Strips)
(October 3, 2022)
Use when temporary portable rumble strips will be paid per each.

Do not use if the temporary portable transverse rumble strips are part of the lump sum cost for "Project Temporary Traffic Control."

~~a project has flagging operations and speeds are 45mph or higher. Consult region traffic engineer for assistance.~~

~~When using Project Temporary Traffic Control with reinstated items, Use with **1-10.2(9-35).OPT1.GR1, 1-10.3(3).OPT5.FR1** and **1-10.4(2).OPT8.GR1.**~~

1-10.5(2).OPT7.GR1

(Work Zone Safety Contingency)
(November 2, 2022)
Use on projects with traffic control.

For Work Zone Safety Contingency Estimate amount, use the following:

1

| Engineer's Estimate | Work Zone Safety Contingency |
|-----------------------------|--|
| Under \$3 million | 5% of total WZTC item cost (max \$25,000) |
| \$3 million to \$5 million | \$25,000 |
| \$5 million to \$10 million | \$50,000 |
| Over \$10 million | \$75,000 |

2

3

Must use with **1-10.2.OPT1.GR1**.

1 INTRO.GR1

2 INTRODUCTION

3
4 This Contract shall be constructed in accordance with the ~~2023~~2024 Standard Specifications
5 for Road, Bridge, and Municipal Construction.

6
7 SPECIAL PROVISIONS

8
9 Several types of Special Provisions are included in this contract; General, Region, Bridges
10 and Structures, and Project Specific. Special Provisions types are differentiated as follows:

| | | |
|----|-----------------------------|--|
| 11 | | |
| 12 | (date) | General Special Provision |
| 13 | (*****) | Notes a revision to a General Special Provision and also notes a Project Specific Special Provision. |
| 14 | | |
| 15 | | |
| 16 | (Regions ¹ date) | Region Special Provision |
| 17 | | |

18 **General Special Provisions** are similar to Standard Specifications in that they typically apply
19 to many projects, usually in more than one Region. Usually, the only difference from one
20 project to another is the inclusion of variable project data, inserted as a “fill-in”.

21
22 **Region Special Provisions** are commonly applicable within the designated Region. Region
23 designations are as follows:

| | | |
|----|----------------------------|-----------------------------------|
| 24 | | |
| 25 | <u>Regions¹</u> | |
| 26 | ER | Eastern Region |
| 27 | NCR | North Central Region |
| 28 | NWR | Northwest Region |
| 29 | OR | Olympic Region |
| 30 | SCR | South Central Region |
| 31 | SWR | Southwest Region |
| 32 | | |
| 33 | WSF | Washington State Ferries Division |
| 34 | | |

35 **Project Specific Special Provisions** normally appear only in the contract for which they were
36 developed.

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1 1-02.GR1
2 **Bid Procedures and Conditions**

3
4 1-02.1.GR1
5 **Prequalification of Bidders**

6
7 1-02.1.INST1.GR1
8 Section 1-02.1, including title, is deleted and replaced with the following:

9
10 1-02.1.OPT1.GR1
11 **(April 2, 2018)**
12 **Vacant**

13
14 1-02.4.GR1
15 **Examination of Plans, Specifications and Site of Work**

16
17 1-02.4(1).GR1
18 **General**

19
20 1-02.4(1).INST1.GR1
21 Section 1-02.4(1) is supplemented with the following:

22
23 1-02.4(1).OPT1.FR1
24 (September 3, 2019)
25 The Reference Information for this project is available for review by the bidder at the
26 following location:

27
28 *** \$\$1\$\$ ***

29
30 The Reference Information includes the following:

31
32 *** \$\$2\$\$ ***

33
34 1-02.6.GR1
35 **Preparation of Proposal**

36
37 ~~1-02.6.INST1.GR1~~ ~~1-02.6.INST4.GR1~~
38 Item number 3 in the second paragraph of Section 1-02.6 is supplemented with the following:

39
40 ~~1-02.6.OPT1.FR1~~ ~~1-02.6.OPT8.FR1~~
41 (September 3, 2019)
42 The successful Bidder will be the Bidder submitting the lowest responsive Bid that does
43 not exceed the maximum funds available. The maximum funds available for this Contract
44 is *** \$\$1\$\$ ***.

45
46 Submitting a Proposal that exceeds the maximum funds available will result in the
47 Proposal being declared irregular and shall cause the Bid to be rejected by the
48 Contracting Agency. Submitted Proposals that exceed the maximum funds available will
49 be opened publicly in accordance with Section 1-02.12 prior to being rejected.

50
51 ~~1-02.6.OPT2.GR1~~ ~~1-02.6.OPT3.GR1~~
52 **November 20, 2023** ~~(August 2, 2004)~~

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

2

3 1-02.6.INST3.GR1

4 Section 1-02.6 is supplemented with the following:

5

6 1-02.6.OPT3.NEW.GR1

7 **(November 20, 2023)**

8 The Bidder shall submit with the Bid the following:

9 1) Disadvantaged Business Enterprise Utilization Certification (WSDOT Form
10 272-056)

11 2) DBE Written Confirmation Form (WSDOT Form 422-031) - For each and every
12 DBE firm listed on the Bidder's completed Disadvantaged Business Enterprise
13 Utilization Certification, the Bidder shall submit written confirmation from that
14 DBE firm that the DBE is ~~revised~~ in agreement with the DBE participation
15 commitment that the Bidder has made in the Bidder's completed
16 Disadvantaged Business Enterprise Utilization Certification.

17 ~~4~~3) Good Faith Effort Documentation - Bidder must submit good faith effort
18 documentation with the Disadvantaged Business Enterprise Utilization
19 Certification ONLY In The Event the bidder's efforts to ~~read~~ solicit sufficient
20 DBE participation have been unsuccessful.

21 4) DBE Item Breakdown (WSDOT Form 272-054) The Bidder shall submit a DBE
22 Item Breakdown form defining the scope of work to be performed by each DBE
23 listed on the DBE Utilization Certification.

24 Directions for delivery of the Disadvantaged Business Enterprise, Written
25 Confirmation Documents, and Disadvantaged Business Enterprise Good Faith
26 Effort documentation are included in Sections 1-02.9 and 1-02.10.

27

28 1-02.6.OPT4.OPT4.GR1

29 (March 14, 2022)

30 The Bidder shall submit a completed Small and Veteran-Owned Business Plan (SVB
31 Plan, WSDOT Form 226-018) with the Bid, when required by the Special Provisions.

32

33 For each and every Small or Veteran-Owned Business firm listed on the Bidder's
34 completed SVB Plan, the Bidder shall submit a completed SVBE Subcontractor Written
35 Confirmation Form (WSDOT Form 226-017) that confirms the listed firm is in agreement
36 with the SVBE participation commitment that the Bidder has made in the Bidder's
37 completed SVB Plan. Bidder must submit good faith effort documentation only in the event
38 the Bidder's efforts to solicit sufficient participation have been unsuccessful.

39

40 Directions for delivery of the SVB Plan, SVBE Subcontractor Written Confirmation, and
41 good faith effort documentation are included in Section 1-02.9.

42

43 1-02.6.OPT5.NEW.FR1 ~~1-02.6.OPT4.FR1~~

44 **(September 7, 2021)**

45 **Alternative Bids**

46 The bidding proposal on this project permits the Bidder to submit a Bid on one or more
47 alternatives for the construction *** \$\$1\$\$ ***.

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Bid Proposal

The bid proposal is composed of the following parts: Base Bid and Alternatives ***
\$\$\$ i.e. A1, A2, etc.

The base bid includes all items that do not change as to quantity, dimension, or type
of construction, regardless of which alternative is Bid.

The Alternative portions of the bid proposal contain all items which change as to
quantity, dimension, or construction method, depending on which alternative is Bid.

Alternative A1

Alternative A1 is based on constructing the *** \$\$\$ ***.

The bid items for Alternative A1 are as listed in the bid proposal.

Alternative A2

Alternative A2 is based on constructing the *** \$\$\$ ***.

The bid items for Alternative A2 are as listed in the bid proposal.

Bidding Procedures

The Bidder shall submit a price on each and every item of Work included in the base
bid. The Bidder shall also submit prices on each and every item under the alternative
on which the Bidder chooses to bid, or, if the Bidder chooses to bid on more than one
alternative, the Bidder shall submit prices for each and every item under each
alternative chosen. If the Bidder chooses to bid on more than one alternative, the
Bidder shall submit their sealed Bid in the envelope provided by the Contracting
Agency using the Proposal Form provided. If the Bidder chooses to Bid on more than
one alternative, the Bid cannot be accepted electronically via AASHTOWare Project
Bids™ “BidExpress®.”

The successful Bidder will be determined by the lowest total of an alternative plus
the base bid. Award will be based on the lowest total subject to the requirements of
Section 1-03.

1-02.6. ~~OPT5~~ OPT6. FR1

(August 3, 2015)

Cumulative Alternates Bidding

The Bid Proposal for this Contract requires the Bidder to bid cumulative Alternates as part
of the bid. As such the Bidder is required to submit a Base Bid and a bid for each of the
Alternate(s).

Bid Proposal

The Bid Proposal includes the following:

1. Base Bid
The Base Bid shall include constructing all items included in the Proposal
except those items contained in the Alternate(s).
2. Alternate(s)
 - a. Alternate A1

- 1 Based on constructing (** \$1\$ \$ **)
- 2 The Bid items for Alternate A1 are as listed in the Bid Proposal.
- 3
- 4 b. Alternate A2
- 5 Based on constructing (** \$2\$ \$ **)
- 6 The Bid items for Alternate A2 are as listed in the Bid Proposal.
- 7
- 8 c. Alternate A3
- 9 Based on constructing (** \$3\$ \$ **)
- 10 The Bid items for Alternate A3 are as listed in the Bid Proposal.

Bidding Procedures

To be considered responsive the Bidder shall submit a price on each and every Bid item included in the Base Bid and all Alternate(s.)

The successful Bidder will be the Bidder submitting the lowest responsible Bid for the highest order Preference that is within the amount of available funds for the project. Available funds will be announced immediately prior to the opening of Bids. The following are listed in order from highest to lowest Preference:

1. Preference 1: Lowest total for Base Bid plus Alternate A1 plus Alternate A2 plus Alternate A3, plus etcetera.
2. Preference 2: Lowest total for Base Bid plus Alternate A1 plus Alternate A2 plus Alternate A3.
3. Preference 3: Lowest total for Base Bid plus Alternate A1 plus Alternate A2.
4. Preference 4: Lowest total for Base Bid plus Alternate A1.
5. Preference 5: Lowest total for Base Bid.

The Contracting Agency may, at their discretion, award a Contract for the Base Bid, without any additional Alternates, in the event that all Bids exceed the available funds announced. In any case, the award will be subject to the requirements of Section 1-03.

1-02.9.GR1

Delivery of Proposal

1-02.9.INST1.GR1

Section 1-02.9 is supplemented with the following:

1-02.9.OPT1.GR1

~~(September 7, 2021~~ **November 20, 2023)**

DBE Document Submittal Requirements

~~When a Proposal is submitted the following documents may be submitted as a supplement to the Proposal:~~

1 **4. General**

2 The Bidder shall submit supplemental documents that are identified with the Bidder's
3 company name, Project title, Bid date, and description of all contents. (ie, DBE
4 Utilization Certification (WSDOT Form 272-056);

5
6 2. DBE Written Confirmation Documents (WSDOT Form 422-031);

7
8 3. Good Faith Effort Documentation (GFE);

9
10 4. and DBE Bid Item Breakdown (WSDOT Form 272-054);

11
12 5. DBE Trucking Credit Form (WSDOT Form 272-058).

13
14 The Bidder shall submit these supplemental documents as follows:

15
16 Submissions must be made by one of the following methods:

17
18 1. Physically in a sealed envelope marked as "BID SUPPLEMENT" ~~and bearing~~
19 ~~the Bidder's company name, project title, Bid date, and description of all~~
20 ~~contents (i.e., DBE Utilization Certification, DBE Written Confirmation~~
21 ~~Documents, DBE Bid Item Breakdown Form, DBE Trucking Credit Form,~~
22 ~~and"/>, or DBE GFE Documentation); or~~

23
24 2. By facsimile to the following FAX number: 360-705-6966; or

25
26 3. By e-mail to the following e-mail address:
27 ~~DBEDoc@wsdot.wa.gov~~ DBEDoc@wsdot.wa.gov; or

28
29 4. Mailed to: Washington State Department of Transportation
30 Room 2D20
31 310 Maple Park Avenue SE
32 Olympia WA 98501-2361

33
34 The only documents that can be accepted after the 11:00:59 am time for delivery of
35 Proposal are the Written Confirmation Documentation, the DBE Bid Item Breakdown
36 Form, and a GFE (if applicable). Incomplete or inaccurate documents will be rejected,
37 except as detailed above for the DBE Bid Item Breakdown Form.

38
39 The Contracting Agency is not responsible for delayed, partial, failed, illegible or
40 partially legible FAX or e-mail document transmissions, and such documents may be
41 rejected as incomplete at the Bidder's risk.

42
43 **DBE Utilization Certification (WSDOT Form 272-056)**

44 The DBE Utilization Certification shall be received at the same location and no later
45 than the time required for delivery of the Proposal. The Contracting Agency will not
46 open or consider any Proposal when the DBE Utilization Certification is received after
47 the time specified for receipt of Proposals or received in a location other than that
48 specified for receipt of Proposals. The DBE Utilization Certification may be submitted
49 in the same envelope as the Bid deposit.
50

1 ~~NOTE: If the Bid is submitted electronically via AASHTOWare Project Bids™~~
2 ~~software, "BidExpress," the DBE Utilization Certification may be attached to the~~
3 ~~electronic bid or submitted as a supplemental document as defined above.~~

4
5 **DBE Written Confirmation (WSDOT form 422-031) and/or GFE**
6 **Documentation, (if applicable)**

7 The DBE Written Confirmation Documents and/or GFE Documents are not required to
8 be submitted with the Proposal. The DBE Written Confirmation Document(s) and/or
9 GFE (if any applicable) shall be received either with the Bid Proposal or as a
10 Supplement to the Bid. ~~The documents~~ Written confirmation and/or GFE shall be
11 received no later than 48 hours (not including Saturdays, Sundays and Holidays) after
12 the time for delivery of the Proposal. To be considered responsive, Bidders shall
13 submit Written Confirmation Documentation from each DBE firm listed on the Bidder's
14 completed DBE Utilization Certification and/or the GFE as required by Section 1-02.6.

15
16 **DBE Bid Item Breakdown and DBE Trucking Credit (WSDOT Form 272-**
17 **054)**

18 The DBE Bid Item Breakdown and the DBE Trucking Credit Forms (if applicable), shall
19 be received either with the Bid Proposal or as a Supplement to the Bid. The documents
20 shall be received no later than 48 hours (not including Saturdays, Sundays and
21 Holidays) after the time for delivery of the Proposal. ~~To be considered responsive,~~
22 ~~Bidders~~ The successful Bidder shall submit a completed DBE Bid Item Breakdown and
23 a DBE Trucking Credit Form for each DBE Trucking firm listed on the DBE Utilization
24 Certification, however, minor errors and corrections to DBE Bid Item Breakdown or
25 DBE Trucking Credit Forms will be returned for correction for a period up to five
26 calendar days (not including Saturdays, Sundays and Holidays) ~~after the time for~~
27 ~~delivery of the Proposal. A DBE Bid Item Breakdown or DBE Trucking Credit Forms~~
28 ~~that are still incorrect after the correction period will be determined to be non-~~
29 ~~responsive.~~

30
31 Although ~~the~~ The DBE Bid Item Breakdown and DBE Trucking Credit Form are required
32 as part of a responsive Bid Proposal, the information contained in these documents is
33 used solely for Award purposes and will not be included as part of the executed
34 Contract.

35
36 **NOTE: If the Bid is submitted electronically via AASHTOWare Project Bids™**
37 **software, "BidExpress," the DBE Utilization Certification may be attached to the**
38 **electronic bid or submitted as a supplemental document as defined above.**

39
40 ~~The only documents that can be accepted after the 11:00:59 am time for delivery of Proposal~~
41 ~~are the Written Confirmation Documentation, the DBE Bid Item Breakdown Form, the DBE~~
42 ~~Trucking Credit Form, and/or GFE. Incomplete or inaccurate documents will be rejected,~~
43 ~~except as detailed above for the DBE Bid Item Breakdown Form and DBE Trucking Credit~~
44 ~~Form. The Contracting Agency is not responsible for delayed, partial, failed, illegible or~~
45 ~~partially legible FAX or e-mail document transmissions, and such documents may be rejected~~
46 ~~as incomplete at the Bidder's risk.~~

47 1-02.9.OPT2.GR1

48 **(March 14, 2022 November 20, 2023)**

49 **SVBE Document Submittal Requirements**

50 **General**

51 The Bidder shall submit supplemental documents that are identified with the Bidder's
52 company name, Project title, Bid date, and description of all contents (i.e., Small and

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Veteran-Owned Business Plan, SVBE Subcontractor Written Confirmation Documents, and/or SVBE GFE Documentation).

Submissions must be made by one of the following methods:

1. Physically in a sealed envelope marked as "BID SUPPLEMENT"; or
2. By facsimile to the following FAX number: 360-705-6966; or
3. By e-mail to the following e-mail address: DBEDoc@wsdot.wa.gov; or
4. Mailed to: Washington State Department of Transportation
Room 2D20
310 Maple Park Avenue SE
Olympia WA 98501-2361

The Contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX or e-mail document transmissions, and such documents may be rejected as incomplete at the Bidder's risk.

Small and Veteran-Owned Business Plan (SVB Plan) (WSDOT Form 226-018)

The SVBE Plan shall be received no later than the time required for delivery of the Bid. The Contracting Agency will not open or consider any Bid when the SVBE Plan is received after the time specified for receipt of Bids or received as specified by this Special Provision. The SVBE Plan may be submitted in the same envelope as the Bid deposit.

SVBE Subcontractor Written Confirmation (WSDOT Form 226-017) and/or GFE Documentation

The SVBE Subcontractor Written Confirmation Documents and/or GFE Documents are not required to be submitted with the Bid. The SVBE Subcontractor Written Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays, and Holidays) after the time for delivery of the Bid. To be considered responsive, Bidders shall submit Written Confirmation Documentation from each SVBE firm listed on the Bidder's completed SVB Plan and/or the GFE as required by Section 1-02.6.

~~The Contracting Agency is not responsible for delayed, partial, failed, illegible or partially legible FAX or e-mail document transmissions, and such documents may be rejected as incomplete at the Bidder's risk.~~

NOTE: If the Bid is submitted electronically via AASHTOWare Project Bids™ software "BidExpress®", the SVB Plan may be attached to the electronic Bid or submitted as a supplemental document as defined above.

1-02.12.GR1

Public Opening of Proposals

1-02.12.INST1.GR1

Section 1-02.12 is supplemented with the following:

1 1-02.12.OPT1.FR1
2 **(August 3, 2015)**
3 **Date of Opening Bids**
4 The bid opening date for this project is *** \$\$1\$\$ ***. Bids received will be publicly opened
5 and read after 11:00:59 A. M. Pacific Time on this date.
6

7 1-02.12.OPT2.FR1
8 **(October 3, 2022)**
9 **Date of Opening Bids**
10 Proposals will be received by in-person delivery or by courier at the *** \$\$1\$\$ *** reception
11 desk located at the *** \$\$2\$\$ *** on the Bid opening day.
12
13 The Bid opening date for this project is *** \$\$3\$\$ ***. Bids received will be publicly opened
14 and read after 11:00:59 A.M. on this date.
15

16 ~~1-02.13.GR1~~
17 **Irregular Proposals**

18
19 ~~1-02.13.INST1.GR1~~
20 ~~Item number 1 of Section 1-02.13 is supplemented with the following:~~
21

- 22 ~~1-02.13.OPT1.2024.GR1~~
23 ~~(February 6, 2023)~~
24 ~~l. The Bidder fails to submit an SVB Plan (WSDOT Form #226-018) if applicable, as~~
25 ~~required in Section 1-02.6;~~
26 ~~m. The Bidder fails to submit Written Confirmations (WSDOT Form #226-017) from each~~
27 ~~SVBE firm listed on the Bidder's completed SVB Plan that they are in agreement with~~
28 ~~the Bidder's SVBE participation commitment, if applicable, as required in Section 1-~~
29 ~~02.6, or if the written confirmation that is submitted fails to meet the requirements of~~
30 ~~the Special Provisions;~~
31 ~~n. The Bidder fails to submit SVBE Good Faith Effort documentation, if applicable, as~~
32 ~~required in Section 1-02.6, or if the documentation that is submitted fails to~~
33 ~~demonstrate that a Good Faith Effort to meet the Condition of Award was made.~~
34

35 1-02.INST1.GR1
36 Section 1-02 is supplemented with the following:
37

38 1-02.OPT1.GR1
39 **(September 7, 2021)**
40 **Protest Procedures**
41 **Form and Substance**
42 All protests regarding any contents or portion of the bid proposal must be submitted
43 to the Contracting Agency as soon as possible after the protestant becomes aware
44 of the reason(s) for the protest. All protests must be in writing and signed by the
45 protestant or an authorized agent. Such writing must state all facts and arguments
46 on which the protestant is relying as the basis for its action. Such protestant shall
47 also attach, or supply on demand by the Contracting Agency, any relevant exhibits
48 referenced in the writing. Copies of all protests and exhibits shall be submitted by the
49 protestant to the Bidder against whom the protest is made (if any) at the same time
50 such protest and exhibits are submitted to the Contracting Agency. All protests shall
51 be emailed to CAA@wsdot.wa.gov.
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Pre-award Protests

To allow sufficient response time, all pre-award protests must be received by the Contracting Agency no later than 5:00 p.m. of the second business day after the bid opening date. If the protest is mailed after the bid opening date and before the pre-award protest deadline, the protestant shall immediately notify WSDOT's Manager, Contract Ad & Award by telephone, or some other means of rapid communication, that a protest has been made.

The Contracting Agency shall consider all the facts available to the protest, and issue a decision in writing within five (5) business days after receipt of the protest, unless, in the Contracting Agency's sole discretion, more time is needed. The protestant and the Bidder(s) against whom the protest is made will be notified if additional time is necessary; and if the additional time required affects the bid opening date or the award date, all bidders shall be notified.

The Contracting Agency's decision shall be final and conclusive. Selection of the successful Bidder, if one is to be made, will be postponed until after the Contracting Agency has issued its decision. The Contracting Agency shall provide the protestant with written notice of this decision no later than two full working days prior to execution of the contract.

Post-award Protests

The Contracting Agency shall immediately notify all unsuccessful Bidders of the Contracting Agency's award decision. Any decision made by the Contracting Agency regarding the award and execution of the contract or bid rejection shall be conclusive subject to the scope of the judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of Thurston County, Washington.

Protests which do not comply with the above-specified procedures will not be considered.

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1 1-03.GR1

2 **Award and Execution of Contract**

3

4 1-03.2.GR1

5 **Award of Contract**

6

7 1-03.2.INST1.GR1

8 The first sentence of Section 1-03.2 is revised to read:

9

10 1-03.2.OPT1.GR1

11 (April 7, 2008)

12 It is the Contracting Agency's intent to award the Contract within 24 hours of the bid
13 opening.

14

15 1-03.3.GR1

16 **Execution Of Contract**

17

18 1-03.3.INST1.GR1

19 Section 1-03.3 is supplemented with the following:

20

21 1-03.3.OPT1.GR1

22 ***(October 3, 2022)***

23 ***Escrow Bid Documentation***

24

24 **Scope and Purpose**

25 The purpose of this specification is to preserve the Contractor's bid documentation
26 for use by the Contracting Agency in any litigation between the Contracting Agency
27 and Contractor arising out of this Contract.

28

29 The Contractor shall submit a legible copy of all documentation used to prepare the
30 Bid for this Contract to a escrow institution designated by the Contracting Agency.
31 Such documentation shall be placed in escrow with the escrow institution and
32 preserved by that institution as specified in the following sections of this specification.

33

34 **Bid Documentation**

35 The term "bid documentation" as used in this specification means any writings,
36 working papers, computer printouts, charts, and any other data compilations which
37 contain or reflect all information, data, and calculations used by the Contractor to
38 determine the Bid in bidding for this project. The Contractor shall submit its
39 documentation in whatever format it was created and shall also provide electronic
40 copies. The term "bid documentation" includes but is not limited to Contractor
41 equipment rates, Contractor overhead rates, labor rates, efficiency or productivity
42 factors, arithmetic extensions, and quotations from subcontractors and material
43 providers to the extent that such rates and quotations were used by the Contractor
44 in formulating and determining the amount of the bid. The term "bid documentation"
45 also includes any manuals which are standard to the industry used by the Contractor
46 in determining the bid for this project. Such manuals (including year of publication)
47 may be included in the Bid Documentation by reference. The term does not include
48 bid documents provided by the Contracting Agency for use by the Contractor in
49 bidding on this project.

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Submittal of Bid Documentation

The Contractor shall submit the bid documentation to the escrow institution. The bid documentation shall be submitted to the escrow institution within seven calendar days after the Contract for this project has been executed by the Contracting Agency. The bid documentation shall be submitted in a sealed container. The container shall be clearly marked "Bid Documentation" and shall also show on the face of the container the Contractor's name, the date of submittal, the project title, and the contract number.

Affidavit

The sealed container shall contain, in addition to the bid documentation, an affidavit signed under oath by an individual authorized by the Contractor to execute bidding proposals. The affidavit shall list each bid document with sufficient specificity so a comparison can be made between the list and the bid documentation to ensure that all of the bid documentation listed in the affidavit has been enclosed in the sealed container. The affidavit shall show that the affiant has personally examined the bid documentation and that the affidavit lists all of the documents used by the Contractor to determine the Bid for this project and that all such bid documentation has been enclosed in the sealed container.

Verification

The escrow institution upon receipt of the sealed container shall place the container in a safety deposit box, vault, or other secure place, and immediately notify the Contracting Agency in writing that the container has been received. Upon receipt of such notice, the Contracting Agency will promptly notify the Contractor in writing that the Contracting Agency will open the sealed container to verify that the affidavit has been enclosed and to compare the bid documents listed in the affidavit with the bid documents enclosed in the container to ensure that all of the bid documentation has been submitted and that the copies are legible. The notification will advise the Contractor of the date and time the container will be opened and the name of the Contracting Agency employee who will verify the contents of the container. The Contracting Agency employee verifying the contents of the escrow container will not be involved or connected with the review, evaluation, or resolution of any claim by the Contractor made to the Contracting Agency in connection with the contract for which the verification was made. The Contractor may have representatives present at the opening.

Supplementation

Documents listed in the affidavit but not enclosed in the sealed container through error or oversight shall be submitted in a sealed container within five calendar days after the opening of the original container. Also, any bid documentation that is illegible shall be replaced with legible copies and furnished within five calendar days after the opening of the original container. The face of the container shall show the same information as the original container except the container shall be marked "Supplemental Bid Documentation". The same procedure used in verifying the contents of the original container shall be used in verifying the contents of the supplemental submittal.

Duration and Use

The bid documentation and affidavit shall remain in escrow during the life of the Contract and will be returned to the Contractor by the escrow institution, provided that the Contractor has signed the final contract voucher certification and has not

1 reserved any claims on the final contract voucher certification against the Contracting
2 Agency arising out of the Contract. In the event that claims against the Contracting
3 Agency are reserved on the final contract voucher certification, the bid
4 documentation and affidavit shall remain in escrow. If the claims are not resolved
5 and litigation ensues, the Contracting Agency may serve a request upon the
6 Contractor to authorize the escrow institution, in writing, to release the bid
7 documentation and affidavit in escrow to the Contracting Agency. The Contractor
8 shall respond to the request within 20 days after service of the request. If the
9 Contractor objects or does not respond to the request within 20 days after service of
10 the request, the Contracting Agency may file a motion under the Civil Rules
11 requesting the court to enter an order directing the escrow institution to deliver the
12 bid documentation and affidavit in escrow to the Contracting Agency. The Contractor
13 shall respond to the request within the time required by the then applicable Civil Court
14 Rules for the Superior Court of the State of Washington. If the Contractor objects or
15 does not respond to the request within the time required by the then applicable Civil
16 Rules, the Contracting Agency may file a motion pursuant to such rules requesting
17 the court to enter an order directing the escrow institution to deliver the bid
18 documentation and affidavit in escrow to the Contracting Agency. The escrow
19 institution shall release the bid documentation and affidavit as follows:

- 20
- 21 1. To the Contracting Agency upon receipt of a letter from the Contractor
22 authorizing the release;
- 23
- 24 2. To the Contracting Agency upon receipt of a certified copy of a court order
25 directing the release of the documents;
- 26
- 27 3. To the court for an in camera examination pursuant to a certified copy of a
28 court order;
- 29
- 30 4. The bid documentation and affidavit shall be returned to the Contractor if
31 litigation is not commenced within the time period prescribed by law.
- 32

33 The Contractor agrees that the sealed container placed in escrow and any
34 supplemental sealed container placed in escrow contain all of the bid documentation
35 used to determine the Bid and that no other bid documentation shall be utilized by
36 the Contractor in litigation over Certified Claims brought by the Contractor arising out
37 of this Contract unless otherwise ordered by the court.

38

39 **Remedies for Refusal or Failure to Provide Bid Documentation**

40 Failure or refusal to provide bid documentation shall be deemed a material breach of
41 this Contract. The Contracting Agency may at its option refuse to make payment for
42 progress estimates under Section 1-09.9 until the Contractor has submitted the bid
43 documentation required by this specification. The Contracting Agency may at its
44 option terminate the contract for default under Section 1-08.10. These remedies are
45 not exclusive and the Contracting Agency may take such other action as is available
46 to it under the law.

47

48 **Confidentiality of Bid Documentation**

49 The bid documentation and affidavit in escrow are and will remain the property of the
50 Contractor. The Contracting Agency has no interest in or right to the bid
51 documentation and affidavit other than to verify the contents and legibility of the bid
52 documentation unless litigation ensues between the Contracting Agency and

1 Contractor over Certified Claims brought by the Contractor arising out of this
2 Contract. In the event of such litigation, the bid documentation and affidavit may
3 become the property of the Contracting Agency for use in the litigation as may be
4 appropriate subject to the provisions of any court order limiting or restricting the use
5 or dissemination of the bid documentation and affidavit as provided in the preceding
6 section entitled Duration and Use.

7
8 **Cost and Escrow Instructions**
9 The cost of the escrow will be borne by the Contracting Agency. The Contracting
10 Agency will provide escrow instructions to the escrow institution consistent with this
11 specification.

12
13 1-03.3.OPT2.GR1
14 (November 20, 2023)
15 Within 5 calendar days of the Award date (not including Saturdays, Sundays and Holidays),
16 the successful Bidder shall provide DBE Trucking Credit Form(s) (WSDOT Form 272-058)
17 when trucking appears on the DBE Utilization Certificate (WSDOT Form 272-056). The DBE
18 Trucking Credit Form shall document how the DBE Trucking firm will be able to perform the
19 scope of work subcontracted to them.

20
21 Trucking forms will be returned for correction. Trucking Credit Form(s) will not be included as
22 part of the executed Contract.

23
24 DBE Trucking Credit Forms shall be submitted by:
25 1) E-mailed to: DBEDoc@wsdot.wa.gov or
26 2) Mailed to: Washington State Department of Transportation
27 Room 2D20
28 310 Maple Park Avenue SE
29 Olympia WA 98501-2361

30
31 1-03.3.INST2.GR1
32 The first paragraph of Section 1-03.3 is supplemented with the following:

33
34 1-03.3.OPT3.GR1
35 (January 4, 2016)
36 Within 20 calendar days after the Award date, the successful Bidder shall return WSDOT
37 Form 421-013 with the Contractor's costs for transit, bicycle and pedestrian Work.

1 1-04.GR1

2 **Scope of the Work**

3

4 1-04.2.GR1

5 **Coordination of Contract Documents, Plans, Special Provisions,**
6 **Specifications, and Addenda**

7

8 1-04.2.INST1.GR1

9 Section 1-04.2 is supplemented with the following:

10

11 1-04.2.OPT1.GR1

12 (~~March 9~~**November 20, 2023**)

13 **Document Control**

14

15 This specification applies to project documentation and correspondence that occurs after
16 execution of the Contract. The Contractor shall submit all project documentation and
17 correspondence for this Contract in electronic format utilizing the WSDOT Unifier system.
18 Documents that are received by means other than the WSDOT Unifier system will be
19 rejected, except as allowed by this special provision or specifically approved by the
20 Engineer.

21

22 The Engineer may reject documents that are deemed unsuitable. This includes
23 documents that are illegible, unreadable, locked, etc. Forms that require further
24 information from WSDOT must be unlocked.

25

26 The Contractor shall submit to the Contracting Agency a Unifier Access Request Form
27 (WSDOT Form 134-092) to WSDOT e-Construction Support ([e-
ConstructionSupport@wsdot.wa.gov](mailto:ConstructionSupport@wsdot.wa.gov)) designating all individuals requiring access to
28 WSDOT Unifier no later than 5 days following Contract Award. Training for WSDOT
29 Unifier will be provided by WSDOT at no cost to the Contractor. Throughout the life of the
30 Project, all changes to the Contractor's personnel who require access to the WSDOT
31 Unifier system shall be submitted on a Unifier Access Request Form.

32

33 All signed documents shall be in PDF format and will require an electronic signature. An
34 electronic signature is defined as a symbol, or process attached to or logically associated
35 with a record and executed or adopted by a person with the intent to sign the record. All
36 signed documents shall be in PDF format.

37

38 WSDOT has provided an application to be used to apply electronic signatures to the
39 following documents:

40

41 Change Orders that are not Minor Change Orders
42 421-009 Release – Retained Percentage (Except Landscaping)
43 134-146 Final Contract Voucher Certificate

44

45 When the Contract specifies that documentation is to be submitted through other web-
46 based systems, such as the Diversity Management and Compliance System, or email
47 addresses, the Contractor shall utilize those systems and email addresses accordingly.

48

49 Before a Completion Date will be established by the Contracting Agency, all contractor
50 active tasks in Unifier shall be closed out or acknowledged.

51

1 All costs for submitting project documentation electronically shall be included in the
2 Contract prices for the Bid items of Work involved.

3
4 1-04.5.GR1

5 **Procedure and Protest by the Contractor**

6

7 1-04.5.INST1.GR1

8 Section 1-04.5 is supplemented with the following:

9

10 1-04.5.OPT1.GR1

11 ***(January 13, 2021)***

12 ***Project Partnering***

13 The Engineer and the Contractor's Project Manager (PM) will plan and host a Project
14 Partnering workshop as soon as practical after Contract execution. The objective of this
15 Partnering workshop is to promote open lines of communication and teamwork between
16 the Contracting Agency and Contractor staff for the effective completion of the work, and
17 to the standard of quality that will be a source of pride to both the Contracting Agency and
18 the Contractor. Commitments made by both parties shall be memorialized in a Project
19 Partnering Agreement at the conclusion of the Partnering workshop. The Partnering
20 agreement will not affect the terms of the Contract. It is intended only to establish an
21 environment of cooperation and mutual understanding between the parties.

22

23 The planning and execution of the Partnering process is intended to be a collaborative
24 effort between the Engineer and the PM. The length of the partnering workshop should
25 be commensurate with the size and complexity of the project, and familiarity of the parties.
26 For simple projects an expanded pre-construction meeting may suffice. The partnering
27 workshop may be facilitated by the Engineer, the Engineer and PM, or a mutually
28 agreeable Partnering Facilitator (PF). Selection of a PF, dates and location of the
29 workshops, materials needed for the workshop, frequency and location for follow up
30 meetings, and estimated cost associated with this effort should be discussed and agreed
31 to prior to moving forward with the Partnering process.

32

33 An initial 1 day (or half day) facilitated Project Partnering workshop is recommended to
34 initiate the partnering agreement. After the initial Partnering workshop, quarterly follow
35 up meetings on projects with over 120 working days shall be scheduled to evaluate how
36 the Partnering process is working, acknowledge successes and opportunities for
37 improvement.

38

39 The cost to retain the services of a Partnering Facilitator (if mutually selected as the PF),
40 locate and rent a neutral location to hold the workshop (if held offsite), and any additional
41 materials needed to host the workshop, will be paid by the Contractor. The Partnering
42 Field Guide is available as a resource to the Engineer and PM to assist in the planning of
43 the Partnering session(s) at the following link:

44

45 [https://wsdot.wa.gov/publications/fulltext/construction/WSDOTProjects-Partnering-
46 FieldGuide.pdf](https://wsdot.wa.gov/publications/fulltext/construction/WSDOTProjects-Partnering-FieldGuide.pdf)

47

48 The Contracting Agency will reimburse invoice cost for the Contractor provided Partnering
49 Facilitator, facilities and materials at a rate of 50% under the Bid item, "Project Partnering".

50

51 ***Payment***

52 "Project Partnering", by calculation.

1 "Project Partnering" will be calculated and paid for as described above.

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1 1-07.GR1
2 **Legal Relations and Responsibilities to the Public**

3
4 1-07.1.GR1
5 **Laws to be Observed**

6
7 1-07.1.INST1.GR1
8 Section 1-07.1 is supplemented with the following:

9
10 1-07.1.OPT1.GR1
11 **(October 3, 2022)**
12 **Ferry Tolls and Service**

13 No gratuity of tolls or special service will be granted to the Contractor. Contractor use of
14 ferry service shall be in accordance with the published rates, tolls, and schedules for the
15 general public.

16
17 1-07.1.OPT2.GR1
18 **(October 3, 2022)**
19 **Ferry Terminal Access and Security**

20 The Contractor shall comply with the following access and security requirements when
21 performing the Work.

22
23 **Contractor Employee Identification Lists**

24 The Contractor shall submit to the Engineer a list of all personnel who will be working on
25 WSF property or within 300 feet of the WSF marine structures. This list shall contain the
26 Contract number, WSF property, contract description, date site work begins, company
27 name, main office phone number, contact person(s), contact phone number(s), on site
28 personnel employees' names and photo ID numbers.

29
30 **Contractor Employee I.D. Cards**

31 Contractor employees shall present photo identification to WSF Terminal personnel every
32 time they seek entry onto WSF property for the purpose of performing work or providing
33 services. The same Contractor employee shall be listed on the Contractor Employee
34 Identification List as submitted. The photo ID shall:

- 35
- 36 • Contain the full name of the individual.
 - 37
 - 38 • Contain a photograph clearly depicting the person's current facial features.
39 (Driver's license is not acceptable.)
 - 40
 - 41 • Contain the name of the issuing Contractor organization.
 - 42
 - 43 • Shall be laminated or constructed of material so as to be tamper resistant.
 - 44
 - 45 • Shall bear a photo ID number issued by the issuing Contractor's organization.
 - 46

47 Employees shall wear their photo ID in a visible location at all times while on WSF
48 properties or working area.

49

1 **Contractor Parking Pass**

2 If parking is allowed in the Contract, the Contractor will be issued a disposable parking
3 pass that allows the vehicle to be parked at a designated location at the terminal on the
4 day of issue and for the period during which services are provided. A pass shall be
5 obtained each day the Contractor’s vehicle enters the facility. Any vehicle not displaying
6 a parking pass is subject to being towed at the owner’s risk and expense. All vehicles
7 entering WSF facilities are subject to security screening and inspection by Washington
8 State Patrol (WSP) personnel.
9

10 **Restricted Areas and Employee Areas**

11 All areas on WSF terminals and vessels that are not considered public access areas will
12 be designated with conspicuous signs as “**Restricted Areas**” or “**Employee Only**
13 **Areas**”. Areas will be locked, barricaded, or otherwise physically delineated as needed.
14 Contractor employees who need to enter restricted or employee areas shall obtain
15 permission/direction from WSF personnel. “**Restricted Areas**” require that one person
16 for every five people be in possession of Transportation Workers Identification Card
17 (TWIC) issued by the Transportation Security Administration as required under the
18 Maritime Transportation Security Act. If the Contractor’s work will involve extended
19 amounts of time in these areas, they will be required to have personnel with TWIC
20 identification. An unauthorized person in a restricted area constitutes a reportable “Breach
21 of Security” that will be reported by the Contracting Agency to the U.S. Coast Guard
22 National Response Center in Washington, D.C.
23

24 Note: “**Restricted Areas**” are Terminal Supervisor’s office, security communication
25 rooms, vehicle slips and overhead loading when security gate is closed and vessel
26 is tied up.
27

28 Access to the vessel when the traffic arm is down is allowed only with permission from
29 WSF personnel.
30

31 **Material Delivery**

32 Material deliveries to WSF property shall be pre-arranged with the Engineer.
33

34 **Equipment Identification**

35 Contractor’s derricks, skiffs, and trailers shall be clearly identified with the company’s
36 name or logo. At the end of the work shift, all equipment and construction materials shall
37 be picked up and secured in a way that readily identifies the material as belonging to the
38 Contractor.
39

40 **Payment**

41 All costs associated with conforming to terminal ferry access security requirements shall
42 be included in the unit Contract prices for the associated items of Work.
43

44 1-07.1.OPT3.FR1

45 **(April 3, 2006)**

46 **Confined Space**

47 Confined spaces are known to exist at the following locations:
48

49 *** \$\$1\$\$ ***
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51 The Contractor shall be fully responsible for the safety and health of all on-site workers
52 and compliant with Washington Administrative Code (WAC 296-809).

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The Contractor shall prepare and implement a confined space program for each of the confined spaces identified above. The Contractors Confined Space program shall be sent to the Contracting Agency at least 30 days prior to the Contractor beginning work in or adjacent to the confined space. No work shall be performed in or adjacent to the confined space until the plan is submitted to the Engineer as required. The Contractor shall communicate with the Engineer to ensure a coordinated effort for providing and maintaining a safe worksite for both the Contracting Agency's and Contractor's workers when working in or near a confined space.

All costs to prepare and implement the confined space program shall be included in the bid prices for the various items associated with the confined space work.

1-07.1.OPT4.FR1

(October 3, 2022)

Noise Exemption/Variance Conditions

The jurisdiction(s) listed below has granted a nighttime noise exemption and/or variance to its respective noise control code and WAC 173-60 to allow Contracting Agency representatives to perform nighttime Work under the conditions as listed below.

| Jurisdiction | Nights | Expiration Date |
|-----------------|----------------|-----------------|
| *** \$1\$\$ *** | *** \$2\$\$*** | *** \$3\$\$ *** |

This exemption/variance allows the Contractor to exceed the local noise ordinance levels. All nighttime Work activities require approved noise exemptions or variances from the listed jurisdiction(s) including nighttime Work within the Contracting Agency's Right-of-Way.

The Contractor shall perform the following measures to minimize construction noise:

1. All trucks performing export haul shall have well maintained bed liners as inspected and accepted by the Engineer.
2. Truck tailgate banging is prohibited. All truck tailgates shall be secured to prevent excessive noise from banging.
3. A copy of the noise exemption and/or variance shall be kept on the project site at all times.
4. The Contractor shall mail Nighttime Work Mail Notifications to residents located within *** \$4\$\$ *** feet of Contracting Agency Right-of-Way within the nighttime Work zone.

*** \$5\$\$ ***

The Contracting Agency will provide the Nighttime Work Mail Notification, and the Contractor shall submit the following information to the Contracting Agency 20 working days prior to the start of nighttime Work:

- Start date and duration of the nighttime Work.
- List of the expected nighttime noise sources.

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- List of noise mitigation measures to be implemented.

The Contractor shall obtain the mailing distribution list of residents and property owners. The Contractor shall hire a Mailing Service to print and distribute by mail the Contracting Agency’s provided Nighttime Work Mail Notification to the required residences *** \$\$6\$\$ \$\$\$\$ working days prior to the start of the night Work.

The Contractor shall not proceed with nighttime Work unless all conditions listed in this Contract are in place and the Affidavit of Service by Mailing is received by the Contracting Agency 24 hours prior to the start of nighttime Work.

The Affidavit of Service by Mailing is a notarized document from the Mailing Service stating that the Nighttime Work Mail Notifications were mailed. A list of addresses obtained by the Contractor for the mailing shall be included with the Affidavit.

General

Failure of the Contractor to perform all obligations under this Special Provision will result in the suspension of all night Work until a corrective Work plan is accepted by the Engineer. Working days will continue to accrue during the period of suspension.

The Contractor shall be responsible for obtaining all exemptions or variances to perform nighttime Work outside the project limits such as staging areas. A copy of each exemption or variance obtained by the Contractor shall be provided to the Contracting Agency before proceeding with the nighttime Work.

Other noise mitigation measures may be required, and it is understood that the Contractor is responsible for devising methods that comply with all ordinances. Compliance with the above noise mitigation measures shall not be considered a warranty that the equipment or the activity will comply with all local regulations.

Payment

All costs to comply with the above noise exemption/variance requirements shall be included in the associated items of Work.

1-07.1.OPT5.FR1

(October 3, 2022)

Nighttime Construction Work Requirements

The Contractor shall perform nighttime Work within the Contracting Agency’s Right-of-Way under the measures listed below to minimize construction noise:

1. All trucks performing export haul shall have well maintained bed liners as inspected and accepted by the Engineer.
2. Truck tailgate banging is prohibited. All truck tailgates shall be secured to prevent excessive noise from banging.
3. The Contractor shall mail Nighttime Work Mail Notifications to residents located within *** \$\$1\$\$ \$\$\$\$ feet of Contracting Agency Right-of-Way within the nighttime Work zone.

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The Contracting Agency will provide the Nighttime Work Mail Notification and the Contractor shall submit the following information to the Contracting Agency 20 working days prior to the start of nighttime Work:

- Start date and duration of the nighttime Work.
- List of the expected nighttime noise sources.
- List of noise mitigation measures to be implemented.

The Contractor shall obtain the mailing distribution list of residents and property owners. The Contractor shall hire a Mailing Service to print and distribute by mail the Contracting Agency's provided Nighttime Work Mail Notification to the required residences *** \$\$\$\$\$ *** working days prior to the start of the night Work.

The Contractor shall not proceed with nighttime Work unless all conditions listed in this Contract are in place and the Affidavit of Service by Mailing is received by the Contracting Agency 24 hours prior to the start of nighttime Work.

The Affidavit of Service by Mailing is a notarized document from the Mailing Service stating that the Nighttime Work Mail Notifications were mailed. A list of addresses obtained by the Contractor for the mailing shall be included with the Affidavit.

General

Failure of the Contractor to perform all obligations under this Special Provision will result in the suspension of all night Work until a corrective Work plan is accepted by the Engineer. Working days will continue to accrue during the period of suspension.

The Contractor shall be responsible for obtaining all exemptions or variances to perform nighttime Work outside the project limits such as staging areas. A copy of each exemption or variance obtained by the Contractor shall be provided to the Contracting Agency before proceeding with the nighttime Work.

Other noise mitigation measures may be required, and it is understood that the Contractor is responsible for devising methods that comply with all ordinances. Compliance with the above noise mitigation measures shall not be considered a warranty that the equipment or the activity will comply with all local regulations.

Payment

All costs to comply with the above nighttime Work requirements shall be included in the associated items of Work.

1-07.1.OPT6.FR1

(October 3, 2022)

***** \$1\$\$ *** Noise Exemption/Variance Conditions**

The jurisdiction(s) listed below has granted a nighttime noise exemption and/or variance to its respective noise control code and WAC 173-60 to allow Contracting Agency representatives to perform nighttime Work under the conditions as listed below.

| Jurisdiction | Nights | Expiration Date |
|-------------------|------------------|-------------------|
| *** \$\$2\$\$ *** | *** \$\$3\$\$*** | *** \$\$4\$\$ *** |

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This exemption/variance allows the Contractor to exceed the local noise ordinance levels. All nighttime Work activities require approved noise exemptions or variances from the listed jurisdiction(s) including nighttime Work within the Contracting Agency's Right-of-Way.

The Contractor shall perform the following measures to minimize construction noise:

1. All trucks performing export haul shall have well maintained bed liners as inspected and accepted by the Engineer.
2. Truck tailgate banging is prohibited. All truck tailgates shall be secured to prevent excessive noise from banging.
3. A copy of the noise exemption and/or variance shall be kept on the project site at all times.

*** \$\$\$ \$ ***

General

Failure of the Contractor to perform all obligations under this Special Provision will result in the suspension of all night Work until a corrective Work plan is accepted by the Engineer. Working days will continue to accrue during the period of suspension.

The Contractor shall be responsible for obtaining all exemptions or variances to perform nighttime Work outside the project limits such as staging areas. A copy of each exemption or variance obtained by the Contractor shall be provided to the Contracting Agency before proceeding with the nighttime Work.

Other noise mitigation measures may be required, and it is understood that the Contractor is responsible for devising methods that comply with all ordinances. Compliance with the above noise mitigation measures shall not be considered a warranty that the equipment or the activity will comply with all local regulations.

Payment

All costs to comply with the above noise exemption/variance requirements shall be included in the associated items of Work.

1-07.1(2).GR1

Health and Safety

1-07.1(2).INST1.GR1

Section 1-07.1(2) is supplemented with the following:

1-07.1(2).OPT2.GR1

(October 3, 2022)

Diving and Workboat Safety Requirements

The Contractor shall comply with the requirements of WAC 296-37, "Standards for Commercial Diving Operations" and the requirements contained herein as applicable. The Contractor shall give the Engineer 24 hours advance notice of any planned diving or workboat activity.

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General Requirements for Communications and Safety

The following requirements shall be followed whenever diving or workboat activity is performed at the ferry terminal:

- Prior to diving and workboat activity, the Contractor shall obtain approval from the Engineer.
- Notification shall be made no less than one hour prior to the Diver entering the water.
- The Engineer or designee will be responsible for notifying each vessel of the upcoming day’s diving or workboat activity.
- The Engineer will request that the vessels depart under low power (slow bell) unless otherwise necessary due to weather conditions.
- The diving team and workboat operations shall not disrupt the ferry service schedule.
- Communications between the Diver and the Diver’s Tender shall be maintained at all times.
- The Engineer and Masters shall be notified at the completion of diving and workboat activity each day.

Slip-Specific Diving Requirements

The following safety rules shall be followed when diving activities are performed within the diving envelope of the ferry slip. The diving envelope is defined as occurring in an active ferry slip being used for vessel operations:

- It includes the area around all of the slip landing aid structures.
- A 50-yard by 50-yard box which is bisected by the centerline of the slip and runs from the off-shore portion of the apron toward shore.

A three-member minimum diving team will be required when diving within the diving envelope. The duties of the team members shall include:

- One member shall be diving.
- One member shall be in a skiff, on the trestle or on the transfer span acting as the Diver’s Tender. The Diver’s Tender shall maintain communication with the Diver, and the Safety Technician, at all times. In addition, the Diver’s Tender shall ensure that the diver has safely surfaced and cleared the diving area five minutes prior to the vessel landing, unless the Diver is outside the envelope.
- One member shall act as a Safety Technician. The Safety Technician shall be in a skiff or on shore and shall maintain constant communication with the Diver’s Tender.

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Upon completion of diving activity, the Safety Technician shall notify the Engineer and Masters. Once the diver has cleared the diving area, the Safety Technician shall directly radio the Master on each arriving vessel and relay the message "DIVER CLEAR". The Engineer will provide the Safety Technician a hand-held radio for this purpose.

Slip-Specific Workboat Requirements

The following safety rules shall be followed when operating workboats at the ferry terminal:

- The workboat shall not pass in front of a ferry vessel when it is closer than 500 yards from the terminal on approach (33 CFR 165.1317).
- While the ferry vessel is making the landing approach to the ferry terminal, workboats shall maintain a 100-yard distance unless moored to a larger anchored vessel or to a landing structure for other than the active slip (33 CFR 165.1317).
- Workboats shall maintain a 25-yard distance from any ferry vessel while ferry vessels are moored at the ferry terminal unless approved by the vessel Master (33 CFR 165.1317).
- Operators of workboats shall be aware of the slip and any vessels that are or will be using the slip.
- Operators of workboats shall be aware of the ferry schedule and when ferry vessels will be departing so that they can position their workboat in a safe operating location in compliance with the requirements noted above.
- The workboat **shall not** cross under the active occupied slip unless the Master has been notified and agrees.
- Workboats shall be moored in locations that will provide visibility to vessel approaches and/or protection from any prop wash that may occur by ferry vessel approaches and departures.

Payment

All costs to comply with this Special Provision covering diver and workboat safety shall be included in related items of Work.

1-07.1(2).OPT3.FR1

(March 9, 2023)

Lead Health Protection Program

The following Structural and non-structural materials located at the project site contain lead-based products:

*** \$\$1\$\$ ***

The Contractor shall be fully responsible for the safety and health of all on-site workers and maintain strict compliance with Washington Administrative Code (WAC 296-155-176). The Contractor's Lead Health Protection Program shall be submitted to the Contracting Agency as a Type 2 Working Drawing prior to the Contractor

1 beginning Work involving exposure to materials containing lead. The Contractor shall
2 communicate with the Engineer to ensure a coordinated effort for providing and
3 maintaining a safe worksite for both the Contracting Agency's and Contractor's
4 workers.

5
6 Contracting Agency personnel shall be given free and full access to all hygiene and
7 housekeeping facilities including, but not limited to, change areas, showers, and
8 handwashing and eating facilities.

9
10 **Payment**
11 All costs to comply with this Special Provision for the Lead Health Protection laws
12 and regulations are the responsibility of the Contractor and shall be included in
13 related items of work.

14
15 1-07.3.GR1
16 **Fire Prevention and Merchantable Timber Requirements**

17
18 1-07.3.INST1.GR1
19 Section 1-07.3 is supplemented with the following:
20
21 1-07.3.OPT1.GR1
22 (August 2, 2004)
23 The Forest Service Provisions, included in the Appendix to these Special Provisions, are
24 made a part of this contract. The Contractor shall comply with the requirements of these
25 Forest Service provisions at no additional cost to the Contracting Agency.

26
27 1-07.3(2).GR1
28 ***Merchantable Timber Requirements***

29
30 1-07.3(2).INST1.GR1
31 Section 1-07.3(2) is supplemented with the following:
32
33 1-07.3(2).OPT1.GR1
34 (April 7, 2008)
35 This project contains merchantable timber.

36
37 *Export Restrictions* - DOT Form 410-100, Purchaser Certification for Export
38 Restricted Timber, will be included when the contract is sent to the Contractor for
39 execution. The form shall be completed and signed by the Contractor. The
40 Contractor shall send the original signed form and one copy of the signed form
41 directly to the Washington State Department of Revenue at the address on the form.
42 The Contractor shall send one signed copy along with the other documents required
43 by Section 1-03.3 to the Contracting Agency with the executed contract.

44
45 *State Tax Requirements* - It shall be the Contractor's responsibility to pay to the State
46 Department of Revenue all taxes on harvested timber.

47
48 1-07.4.GR1
49 **Sanitation**

50

1 1-07.4(2).GR1

2 **Health Hazards**

3

4 1-07.4(2).INST1.GR1

5 Section 1-07.4(2) is revised to read:

6

7 1-07.4(2).OPT1.FR1

8 (August 7, 2017)

9 This project site is known to be occupied by transients and therefore contains
10 biological hazards and associated physical hazards. These may include, but not be
11 limited to violent and dangerous individuals, hypodermic needles, garbage, broken
12 glass, human and animal excrement, drug paraphernalia, and other hazards.

13

14 The Contractor shall take precautions and perform any necessary Work required to
15 provide and maintain a safe and healthful jobsite for all workers and the public for
16 the duration of the project in accordance with all applicable laws and contract
17 requirements.

18

19 The Contractor shall ensure that the public, including persons who may be non-
20 English speaking or those who may not be able to recognize potential safety and
21 health hazards within the project area, are not harmed by the Contractors activities.

22

23 Nothing required by this Specification shall operate as a waiver of the Contractor's
24 responsibility for taking all steps necessary to ensure the safety of the public under
25 Section 1-07.23 or responsibility for liability and damages under Section 1-07.14 or
26 for any other responsibility under the Contract or as may be required by law.

27

28 **Health and Safety Plan**

29 The Contractor shall prepare a written Health and Safety Plan. The plan shall
30 be prepared under the supervision of a certified industrial hygienist and shall
31 incorporate all required County, State, and Federal health and safety provisions.
32 The plan shall include requirements of the Federal Occupational Safety and
33 Health Act of 1970 (OSHA), all amendments, and all other applicable health
34 regulations.

35

36 Preparation of the Health and Safety Plan shall include an initial site assessment
37 by the industrial hygienist. The plan shall break initial cleanup of the project into
38 identifiable construction areas. The plan shall be submitted to the Engineer prior
39 to commencing cleanup Work. At least one copy of the plan shall be posted at
40 the work site while cleanup Work is in progress. The industrial hygienist shall
41 perform one or more follow-up site assessments as needed to approve the site
42 following completion of the initial site cleanup.

43

44 **Public Notification**

45 The Contractor shall furnish and install the "No Trespassing" signs shown in the
46 Plans at locations staked by the Engineer at least 72 hours prior to performing
47 site cleanup or any potentially hazardous Work (such as clearing or operating
48 equipment).

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50 At the same time that "No Trespassing" signs are posted, provide written
51 notification of the following to the Engineer and to the chief law enforcement
52 officer of the local governmental entity where the Work will occur:

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1. The precise location of each area that is posted “No Trespassing”;
2. The date and time that each site was posted “No Trespassing”;
3. The date, time, description and duration of the Work to be performed at each site.

At least 72 hours prior to performing site cleanup in Work areas containing encampments (such as tents, makeshift dwellings, sleeping sites, or accumulations of personal property that are not refuse), the Contractor shall post a notification at each encampment area. Each notice shall:

1. Be weather resistant, and written in both English and Spanish.
2. Be affixed to each dwelling or post mounted within 10-feet of each encampment;
3. State the Prime Contractor’s company name as the entity that performed the cleanup as required by the Washington State Department of Transportation;
4. Provide the date that the notice is posted;
5. Provide date(s) and time(s) that cleanup will occur;
6. Provide the telephone number, business hours and physical address of the location where stored personal property may be claimed.
7. State that personal property will be stored for 70-days from the date of removal, and if unclaimed within that time, will be disposed of.

At the same time that notifications are posted at encampment areas, provide written notification of the schedule to perform site cleanup to the Engineer and to the following advocacy groups:

\$\$1\$\$

Acceptance of signs and notifications will be based on visual inspection that the sign and notifications meet these requirements.

Site Cleanup of Biological and Physical Hazards

An initial cleanup of the site, including all preparatory work required to make the worksite sanitary and safe in accordance with applicable laws and with the Contract, shall be completed to remove all individuals, encampments, and personal property from areas signed “No Trespassing”, and to address all biological and associated physical hazards present on the project. Necessary worker training, on and off site preparations, and personal protective equipment shall be provided by the Contractor to complete this Work. If aggressive or violent individuals are encountered, the Contractor shall notify the local law enforcement agency to assist them in clearing the Work area.

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Site cleanup of individual areas identified in the Health and Safety Plan shall be performed no more than 30 days in advance of performing other Work in each area.

The refuse generated by the site cleanup shall become the property of the Contractor and shall be removed from the project. Personal property shall be handled as required by this Specification and applicable laws.

Removal, Storage and Return of Personal Property

Personal property may include radios, audio and video equipment, sleeping bags, tents, stoves and cooking utensils, lanterns, flashlights, bed rolls, tarps, foam, canvas, mats, blankets, pillows, medication, personal papers, photographs, books and other reading materials, luggage, backpacks or other storage containers, clothing, towels, shoes, toiletries and cosmetics, clocks and watches, and eye glasses. Personal property does not include building materials such as wood products, metal, or rigid plastic.

Personal property items that are not refuse, contaminated, illegal or hazardous shall be removed from the Work area and stored at a location near the project site for return to the property owner. Items shall be placed in large transparent plastic bags and stored in a manner that protects them from adverse weather and theft. Reasonable efforts shall be made to place all items from each encampment into a separate bag. Each bag shall be labeled with an inventory to include a brief description of the contents, a description of the location that it was removed from, and the date that it was removed from the Work area. The Contractor shall not open closed items of personal property unless, in its determination, it is necessary to do so to protect public safety.

The Contractor shall retain the property for 70-days.

If the name and contact information of the owner of a personal property item is identified on that item, then for a period of not less than 10-days after removing the property from the Work area, the Contractor shall attempt to notify the apparent owner of the property and make arrangements for the owner to claim the property.

The Contractor shall release the property to any individual who claims ownership provided they are able to establish ownership by identifying the property and its approximate location. The Contractor shall maintain a record of all property that is claimed. The record shall include a description of the property, the date claimed, and the name of the claimant.

If personal property is not claimed within 70-days of removal from the encampment, then the property shall become the property of the Contractor and shall be removed from the project.

Site Preservation

The Contractor shall preserve the site after initial cleanup of biological and physical hazards.

On a daily basis and prior to performing any Work in areas where pedestrians or encampments may be present, the Contractor shall verify that the Work area

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is cleared of all persons not associated with the project. Individuals may seek shelter in dumpsters, equipment, under blankets, or other places hidden from view. Individuals may be disabled, or under the influence of alcohol or drugs and it should not be assumed that loud construction noise will wake them.

If the worksite becomes unsanitary or unsafe due to new encampments or new biological and associated physical hazards after initial cleanup is completed, then the Contractor shall perform additional site assessment, additional notification and additional cleanup.

The Engineer may authorize additional site preservation measures. The nature and frequency of these measures will be as agreed to by the Engineer. Additional site preservation measures may include the use of fencing, lighting, or security, provided it is approved in advance by the Engineer. Work performed without Engineer authorization will not be eligible for payment.

Measurement

No trespassing signs will be measured per each.

Payment

Payment will be made for the following bid items when they are included in the proposal:

“No Trespassing Sign”, per each.
The unit contract price per each “No Trespassing Sign” shall be full payment for all Work required to furnish, install, maintain and remove the signs.

“Health and Safety Plan”, lump sum.

The lump sum unit contract price for “Health and Safety Plan” shall be full payment for all Work associated with the preparation and implementation of the Health and Safety Plan including the initial and follow up assessment(s) for initial site cleanup, worker training and personal protective equipment, and providing required notifications.

“FA-Site Cleanup of Bio. And Physical Hazards”, by force account as provided in Section 1-09.6.

Removal and disposal of biological and physical hazards; removal of individuals and encampments; removal, storage, and return of personal property; disposal of unclaimed personal property; additional site assessment, notifications, worker training and personal protective equipment required after the initial site cleanup is completed; and site preservation Work authorized by the Engineer will be paid for by force account in accordance with Section 1-09.6.

For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item “FA-Site Cleanup of Bio. And Physical Hazards” in the bid proposal to become a part of the total bid by the Contractor.

1 1-07.5.GR1

2 **Environmental Regulations**

3

4 1-07.5.INST1.GR1

5 Section 1-07.5 is supplemented with the following:

6

7 1-07.5.OPT1.GR1

8 **(September 20, 2010)**

9 **Environmental Commitments**

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

14

15 1-07.5.OPT1(A).FR1

16 (August 4, 2014)

17 The Contractor shall submit a written notification to the Engineer no later than 10
18 calendar days prior to beginning any ground disturbing activities *** \$\$1\$\$ **. The
19 Contractor shall not commence any such ground disturbing activities until the monitor
20 is present.

21

22 1-07.5.OPT1(B).FR1

23 (April 1, 2019)

24 The Contractor shall notify the Engineer a minimum of *** \$\$1\$\$ ** calendar days
25 prior to commencing any work in sensitive areas, mitigation areas, and wetland
26 buffers. Installation of construction fencing is excluded from this notice requirement.

27

28 1-07.5.OPT1(C).FR1

29 (April 1, 2019)

30 No *** \$\$1\$\$ ** is allowed within *** \$\$2\$\$ ** feet of *** \$\$3\$\$ **.

31

32 1-07.5.OPT2.GR1

33 **(August 3, 2009)**

34 **Payment**

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

38

39 1-07.5(1).GR1

40 **General**

41

42 1-07.5(1).INST1.GR1

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

44

45 1-07.5(1).OPT1.FR1

46 **(October 3, 2022)**

47 **In-Water Operations Along Marine Shorelines**

48 In-Water Operations along Marine Shorelines shall meet the requirements from ***
49 \$\$1\$\$ **.

50

51 The Contractor's vessels and equipment operating in support of the Work shall be in
52 adequate water depth and shall use the minimum required propulsion to prevent

1 impacts from propeller wash and grounding to seagrass, kelp, and forage fish
2 spawning beds as shown in the Plans. The Contractor shall not conduct activities
3 that may cause scouring within, or other types of sediment transfer out of or into the
4 seagrass, kelp, and forage fish spawning beds. At no time shall any vessel or
5 temporary floating work contact the ground.
6

7 The Contractor shall not deploy anchors or spuds in seagrass or kelp. The Contractor
8 shall maintain anchor cable tension, set and retrieve anchors vertically, and prevent
9 mooring cables from dragging to avoid impacts to seagrass and kelp.

10 To minimize shading of seagrass, the Contractor shall relocate vessels moored over
11 seagrass every fourth day when working within the allowed working dates listed in
12 *** \$\$2\$\$ ***.

13
14
15 The Contractor shall not allow debris or any type of fuel, solvent or lubricant to enter
16 the water.
17

18 1-07.5(2).GR1

19 **State Department of Fish And Wildlife**

20
21 1-07.5(2).INST1.GR1

22 Section 1-07.5(2) is supplemented with the following:
23

24 1-07.5(2).OPT1.GR1

25 (April 2, 2018)

26 The following Provisions summarize the requirements, in addition to those required
27 elsewhere in the Contract, imposed upon the Contracting Agency by the Washington
28 State Department of Fish and Wildlife. Throughout the work, the Contractor shall
29 comply with the following requirements:
30

31 1-07.5(2).OPT1(A).FR1

32 (April 2, 2018)

33 The Contractor may begin Work below the Ordinary High Water Line on ***
34 \$\$1\$\$ *** and must complete all the Work by *** \$\$2\$\$ ***.
35

36 1-07.5(2).OPT2.GR1

37 (April 2, 2018)

38 All costs to comply with this special provision are incidental to the Contract and are
39 the responsibility of the Contractor. The Contractor shall include all related costs in
40 the associated bid prices of the Contract.
41

42 1-07.5(3).GR1

43 **State Department of Ecology**

44
45 1-07.5(3).INST1.GR1

46 Section 1-07.5(3) is supplemented with the following:
47

48 1-07.5(3).OPT1.GR1

49 (April 2, 2018)

50 The following Provisions summarize the requirements, in addition to those required
51 elsewhere in the Contract, imposed upon the Contracting Agency by the Washington

1 State Department of Ecology. Throughout the work, the Contractor shall comply with
2 the following requirements:
3
4 1-07.5(3).OPT1(A).FR1
5 (August 3, 2009)
6 A mixing zone is established within which the turbidity standard is waived during
7 actual in-water work. The mixing zone is established to only temporarily allow
8 exceeding the turbidity criteria (such as a few hours or days) and is not
9 authorization to exceed the turbidity standard for the entire duration of the
10 construction. The mixing zone shall not exceed *** \$\$1\$\$ *** feet downstream
11 from the construction area.
12
13 1-07.5(3).OPT1(B).GR1
14 (April 1, 2019)
15 Stormwater, dewatering water, or other authorized non-stormwater discharges
16 that has come into contact with pH modifying substances such as concrete
17 rubble, cast concrete or amended soils, need to be maintained between 6.5 –
18 8.5 standard units (su). If pH exceeds 8.5 su, the Contractor shall immediately
19 discontinue work and initiate treatment to prevent discharges outside the
20 acceptable range from occurring. All neutralization methods used shall be in
21 accordance with the permit. Work may resume once treatment has been
22 implemented and pH of the stormwater or authorized non-stormwater discharge
23 is between 6.5 - 8.5 su or it can be demonstrated that high pH waters will not
24 discharge to surface waters.
25
26 Stormwater, dewatering water, and other authorized non-stormwater discharges
27 are monitored weekly for compliance with the turbidity benchmark (25
28 nephelometric turbidity units (ntu)) and the phone reporting trigger value (250
29 ntu) by the Contracting Agency. When the turbidity benchmark is breached, the
30 best management practices (BMPs) installed on-site are not working adequately
31 and need to be adapted, maintained or more BMPs shall be installed. When the
32 turbidity phone reporting trigger value is breached, immediate action is required
33 in order to lower the turbidity to ≤ 25 ntu or to eliminate the discharge. Daily
34 follow-up discharge samples will be collected at all locations where a discharge
35 of 250 ntu or higher was collected unless the discharge was stopped or
36 eliminated.
37
38 1-07.5(3).OPT2.GR1
39 (April 2, 2018)
40 All costs to comply with this special provision are incidental to the Contract and are
41 the responsibility of the Contractor. The Contractor shall include all related costs in
42 the associated bid prices of the Contract.
43
44 1-07.5(4).GR1
45 **Air Quality**
46
47 1-07.5(4)C.GR1
48 **Asbestos Containing Material**
49
50 1-07.5(4)C.INST1.GR1
51 Section 1-07.5(4)C is supplemented with the following:
52

- 1 1-07.5(4)C.OPT1.FR1
2 **(October 4, 2021)**
3 **Asbestos Good Faith Investigation**
4 An asbestos Good Faith Investigation (GFI) has been conducted for this project
5 and it has been determined that known Asbestos Containing Material (ACM),
6 and/or Presumed Asbestos Containing Material (PACM), will be disturbed by the
7 work on this project. The asbestos GFI has been provided in Appendix *** \$\$1\$\$
8 ***
9
- 10 1-07.5(4)C.OPT2.FR1
11 **(October 4, 2021)**
12 **Asbestos Good Faith Investigation**
13 An asbestos Good Faith Investigation (GFI) has been conducted for this project
14 and it has been determined to a reasonable certainty that no known Asbestos
15 Containing Material (ACM) will be disturbed by the work on this project. The
16 asbestos GFI has been provided as Appendix *** \$\$1\$\$ ***.
17
- 18 1-07.5(5).GR1
19 ***U.S. Army Corps of Engineers***
20
- 21 1-07.5(5).INST1.GR1
22 Section 1-07.5(5) is supplemented with the following:
23
- 24 1-07.5(5).OPT1.GR1
25 (April 2, 2018)
26 The following Provisions summarize the requirements, in addition to those required
27 elsewhere in the Contract, imposed upon the Contracting Agency by the U.S. Army
28 Corps of Engineers. Throughout the work, the Contractor shall comply with the
29 following requirements:
30
- 31 1-07.5(5).OPT1(B).FR1
32 (February 25, 2013)
33 Temporary fills at *** \$\$1\$\$ *** must be removed within *** \$\$2\$\$ *** calendar
34 days of beginning placement of these fills. This time period may be extended
35 with approval from the Engineer. Requests to extend must be received a
36 minimum of 45 days prior to the expiration of number of days listed above, since
37 the extension is subject to concurrence by the U.S. Army Corps of Engineers.
38
- 39 1-07.5(5).OPT1(C).GR1
40 (February 25, 2013)
41 Temporary structures and dewatering of areas under the jurisdiction of the U.S.
42 Army Corps of Engineers must maintain normal downstream flows and prevent
43 upstream and downstream flooding to the maximum extent practicable.
44
- 45 1-07.5(5).OPT1(D).GR1
46 (August 3, 2009)
47 Heavy equipment working in wetlands or mudflats must be placed on mats or
48 other measures taken to minimize soil disturbance as approved by the Engineer.
49
- 50 1-07.5(5).OPT1(F).GR1
51 (February 6, 2023)

1 The Contractor shall dispose of all creosoted timber, creosote piling and
2 associated debris as shown in the Plans in accordance with current federal,
3 state, and local regulations and provisions, and following Best Management
4 Practices. Handling shall meet the Minimum Functional Standards for Solid
5 Waste Handling, Chapter 173-304 WAC. Disposal shall be made in a landfill
6 which meets the liner and leachate standards of the Criteria for Municipal Solid
7 Waste Landfills, Chapter 173-351 WAC. The Contractor shall provide receipts
8 from the disposal facility to the Engineer. If the material is transported to a
9 transfer station, the Contractor shall obtain documentation indicating that final
10 disposal will comply with the standards referenced above.

11
12 1-07.5(5).OPT2.GR1

13 (April 2, 2018)

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

17
18 1-07.5(6).GR1

19 ***U.S. Fish and Wildlife Service and National Marine Fisheries Service***

20
21 1-07.5(6).INST1.GR1

22 Section 1-07.5(6) is supplemented with the following:

23
24 1-07.5(6).OPT1.GR1

25 (April 2, 2018)

26 The following Provisions summarize the requirements, in addition to those required
27 elsewhere in the Contract, imposed upon the Contracting Agency by the U.S.
28 Fish/Wildlife Services and the National Marine Fisheries Service. Throughout the
29 work, the Contractor shall comply with the following requirements:

30
31 1-07.5(6).OPT1(B).GR1

32 (April 2, 2018)

33 The Contractor shall place temporary storage piles of erosive materials outside
34 the 100-year floodplain during the rainy season (October 1 through June 1).
35 Material that will be used within 12 hours of deposition is exempt from this
36 requirement. The Contractor shall employ best management practices to
37 prevent sediment delivery to waterbodies, wetlands, or conveyances that drain
38 to such features.

39
40 1-07.5(6).OPT1(C).FR1

41 (April 2, 2018)

42 The Contractor shall not allow temporary floating work platforms to run aground.
43 Anchors and chains shall never contact fish spawning areas in freshwater or
44 eelgrass, kelp, macro algae, or intertidal wetlands as indicated in the Plans.
45 Shading eelgrass, kelp, or macro algae beds by work platforms shall not exceed
46 *** \$\$1\$\$ *** days.

47
48 1-07.5(6).OPT1(D).GR1

49 (April 2, 2018)

50 The Contractor shall provide concrete truck chute cleanout areas to contain
51 fresh concrete and wash water. The Contractor shall dispose of the waste
52 material at a facility permitted to take such waste.

- 1
2 1-07.5(6).OPT1(E).GR1
3 (April 2, 2018)
4 The Contractor shall not use creosote-treated wood below the Ordinary High
5 Water Mark.
6
7 1-07.5(6).OPT1(F).GR1
8 (April 2, 2018)
9 The Contractor shall remove piles by directly pulling, using vibratory devices, or
10 by cutting the piles below ground level to minimize localized turbidity. If use of a
11 clamshell bucket is necessary due to pile breakage, turbidity curtains will be
12 employed by the Contractor.
13
14 1-07.5(6).OPT1(G).GR1
15 (April 2, 2018)
16 The Contractor shall remove piles and place them directly into a receptacle that
17 prevents sediment or other material from entering waters of the state.
18
19 1-07.5(6).OPT1(H).FR1
20 (April 2, 2018)
21 Contracting Agency staff will monitor sound pressure during in-water pile driving
22 of steel piles, including H-piles, and sheet piles. Results that exceed *** \$\$1\$\$
23 *** will require the Contractor to adjust work methods or employ additional best
24 practices to safely proceed.
25
26 1-07.5(6).OPT1(I).FR1
27 (April 2, 2018)
28 The Contractor shall direct temporary lights for night work away from *** \$\$1\$\$
29 ***.
30
31 1-07.5(6).OPT1(J).FR1
32 (April 2, 2018)
33 The Contractor shall conduct night Work only during the period from 2 hours
34 after sunset to 2 hours before sunrise. Setting up and taking down traffic control
35 are exempt from these time restrictions. Refer to the following website, using the
36 City of *** \$\$1\$\$ *** for sunrise and sunset times:
37
38 <http://www.sunrisesunset.com/usa/washington.asp>
39
40 1-07.5(6).OPT1(K).FR1
41 (April 2, 2018)
42 The Contractor shall conduct night Work only during the period from 1 hour after
43 sunset to 1 hour before sunrise. Setting up and taking down traffic control are
44 exempt from these time restrictions. Refer to the following website, using the
45 City of *** \$\$1\$\$ *** for sunrise and sunset times:
46
47 <http://www.sunrisesunset.com/usa/washington.asp>
48
49 1-07.5(6).OPT1(L).FR1
50 (April 2, 2018)

1 The Contractor must cease Work 2 hours before sunrise. Setting up and taking
2 down traffic control are exempt from these time restrictions. Refer to the
3 following website, using the City of *** \$\$1\$\$ *** for sunrise times:

4
5 <http://www.sunrisesunset.com/usa/washington.asp>
6

7 1-07.5(6).OPT1(M).FR1
8 (April 2, 2018)
9 When night and day time Work is required, the Contractor shall not perform Work
10 from 1 hour before sunrise to 2 hours after sunrise and no Work from 2 hours
11 before sunset to 1 hour after sunset. Setting up and taking down traffic control
12 are exempt from these time restrictions. Refer to the following website, using the
13 City of *** \$\$1\$\$ *** for sunrise and sunset times:

14
15 <http://www.sunrisesunset.com/usa/washington.asp>
16

17 1-07.5(6).OPT1(N).FR1
18 (April 2, 2018)
19 When night and day time Work is required, the Contractor shall not perform Work
20 from 1 hour before sunrise to 2 hours after sunrise. Setting up and taking down
21 traffic control are exempt from these time restrictions. Refer to the following
22 website, using the City of *** \$\$1\$\$ *** for sunrise and sunset times:

23
24 <http://www.sunrisesunset.com/usa/washington.asp>
25

26 1-07.5(6).OPT1(O).GR1
27 (April 2, 2018)
28 The Contractor shall develop a Type 2 Working Drawing to ensure that trash and
29 food waste is collected daily and contained in secured garbage receptacles.
30

31 1-07.5(6).OPT1(P).FR1
32 (September 3, 2019)
33 Between April 1 and September 22, the Contractor *** \$\$1\$\$ *** are restricted
34 to between two hours after sunrise and two hours before sunset. Setting up and
35 taking down traffic control are exempt from these time restrictions. Refer to the
36 following website, using the City of *** \$\$2\$\$ *** for sunrise and sunset times:

37
38 <http://www.sunrisesunset.com/usa/washington.asp>
39

40 1-07.5(6).OPT1(Q).GR1
41 (September 7, 2021)
42 Galvanizing and zinc coatings shall not be used below the 100 year mean
43 recurrence interval water surface.
44

45 1-07.5(6).OPT2.GR1
46 (April 2, 2018)
47 All costs to comply with this special provision are incidental to the contract and are
48 the responsibility of the Contractor. The Contractor shall include all related costs in
49 the associated bid prices of the contract.
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1-07.5(6).OPT3.FR1

(November 2, 2022)

Bird Protection and Monitoring

Description

This Work includes preparing a Project-specific Bird Protection Plan, implementation of the Bird Protection Plan, updating the Bird Protection Plan, surveying, monitoring, and reporting of bird activity, actions required in the event nests and species are surveyed and encountered, and Contractor training.

Construction Requirements

No onsite Work may begin on the Project until the Bird Protection Plan has been accepted by the Engineer.

The Contractor shall maintain a copy of the Bird Protection Plan at the Work site and update as necessary to reflect the conditions as the Work progresses.

The Contractor shall take precautions to prevent birds from nesting on bridges, structures, equipment, or other nesting habitat that would be modified or disturbed by Project construction.

The Contractor shall conduct site monitoring and shall report the results of their inspections. From March 15 to September 15, the Contractor shall conduct, at minimum, three inspections during the work week; once on Monday, Wednesday, and Friday, to identify nest starts. The Contractor shall indicate their intended inspection schedule in their Bird Protection Plan.

The Contractor shall remove nest starts as soon as they are discovered in accordance with their Project-specific Bird Protection Plan. If an active nest (i.e., one that has eggs or chicks) is found, the Contractor must immediately stop all associated Work and contact the Engineer before implementing the relevant Project-specific Bird Protection Plan measures. Active nest removal shall not proceed prior to notifying to and receiving approval from the Engineer.

The Contractor shall notify the Engineer if a bird nest is discovered or suspected. The Contractor shall also notify the Engineer if a breeding raptor (or nest or nest start) is suspected or discovered. If a raptor nest (including unoccupied ones outside the breeding season) is found, it shall not be removed.

From September 16 to March 14, the Contractor may discontinue weekly inspections and reports, but shall remove old nests in accordance with the Project-specific Bird Protection Plan. In the rare instance that an active nest is discovered during this time, the Migratory Bird Treaty Act (MBTA) requirements apply and the Contractor must adhere to the Project-specific Bird Protection Plan and applicable Contract provisions. However, the Contractor shall not be responsible for the removal of active nests during this time period.

The Contractor shall train all project staff. The Contractor shall provide a list of training for all Project staff as part of their Bird Protection Plan. The Contractor training shall include an overview of the MBTA and the Bald and Golden Eagle Protection Act, how to identify nesting activity, and what to do if a nest is discovered.

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Submittals

The Contractor shall prepare a Project-specific Bird Protection Plan and submit it to the Engineer no later than 10 days after the execution of the Contract. The Plan shall be a Type 2 Working Drawing and apply to *** \$\$1\$\$ *** during the active nesting season described as March 15 to September 15.

The Contractor’s Project-specific Bird Protection Plan shall be prepared and implemented by a qualified biologist. The biologist shall be available to work during day or night to lead, direct, or carry out monitoring, inspection, and activities described in the Project-specific Bird Protection Plan. The Bird Protection Plan shall include the following information on the biologist:

1. Evidence of the qualification for the designated Biologist and a backup Biologist. The evidence of qualification will include at a minimum a bachelor’s degree in biology, zoology, natural resource management, environmental science, or a related degree with a science emphasis.
2. Resumé of each biologists’ work experience including:
 - a. Description of applicable projects over a five-year period to include a description of the work experience to identify birds and bird nests with the associated projects.
 - b. Duration of each project including start date and finish date.
 - c. Position held for each applicable project.
 - d. Location of each project to include 2 years in the Pacific Northwest.
 - e. References, including the name and contact information for each project.

The Project-specific Bird Protection Plan shall also include:

1. Bird species identified by the Contracting Agency in the MBTA Assessment Report (Appendix *** \$\$2\$\$ ***).
2. Precautions and timeframes taken or to be taken to prevent birds from nesting on bridges, structures, equipment or other nesting habitat that would be modified or disturbed by project construction.
3. Methods, materials, and equipment used to remove nest starts, which are described as partial or complete nests that don’t contain eggs or chicks.
4. Containment methods to prevent removed nesting materials from contributing to air or water pollution.
5. Disposal of nesting materials removed in accordance with Section 2-03.3(7)C.

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- 6. Communicating, notifying, and documenting:
 - a. Name and contact information of the Contractor’s qualified biologist and one qualified emergency back-up biologist.
 - b. Name and contact information of the Engineer.
 - c. Describe notification, communication, and documentation procedures to follow in the event an active nest (i.e., one that has eggs or chicks) or unanticipated species upon the discovery of a nest.
 - d. Describe notification to follow in the event a raptor nest (even unoccupied ones outside the breeding season) is discovered.
- 7. The list of Contractor employees that have received Bird Protection training.

Once a week, the Contractor shall submit a Type 1 Working Drawing to the Engineer, detailing their findings from the prior week’s inspections.

Payment

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

“Bird Protection and Monitoring”, Lump Sum.
The lump sum Contract price for “Bird Protection and Monitoring” shall be full pay for all the Work as specified.

1-07.6.GR1

Permits and Licenses

1-07.6.INST1.GR1

Section 1-07.6 is supplemented with the following:

1-07.6.OPT1.FR1

(January 2, 2018)

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. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology’s approval for any Work requiring additional approvals (e.g. Request for Chemical Treatment Form). 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.

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1-07.6.OPT3.GB1

United States Coast Guard

1-07.6.OPT3(A).FB1

(September 3, 2019)

The Contracting Agency has obtained a United States Coast Guard Bridge Permit ***
\$\$1\$\$ *** for this project.

The Contractor shall furnish, install, maintain, and remove all temporary navigation lights, signs, signals, and any other warning devices required by the Coast Guard and as required for public safety on all falsework, cofferdams, or other temporary structure in the waterway.

The Contractor shall comply with all Coast Guard requirements inclusive of the following Bridge Permit conditions:

1. The construction of falsework, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, 13th Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the District Commander's judgment the construction work has reached a point where such action should be taken, but in no case later than 90 calendar days after the bridge has been opened to traffic.
2. *** \$\$2\$\$ ***

The Contractor shall notify the Coast Guard in writing, with a copy to the Engineer, of the work start date at least seven calendar days before beginning any site work and shall at that time designate the Contractor's authorized representative, and work phone number, for coordination on matters that relate to Coast Guard approvals and requirements.

The Contractor's applications for required Coast Guard construction approvals for this project shall include, but not be limited to, cofferdams, falsework, temporary navigation lighting, work bridges, and other obstructions. These applications shall be submitted to the Coast Guard by the Contractor, with a copy to the Engineer, a minimum of 30 calendar days in advance of the scheduled work. A schedule of when the work is to be performed and when the obstructions are to be permanently removed shall be a part of the Contractor's application.

The Contractor shall provide the Coast Guard and the Engineer with prompt verbal notice, followed by written notice, of any subsequent changes to this proposed schedule.

A copy of all Coast Guard approvals shall be provided to the Engineer upon receipt but not later than prior to beginning work on the items of work involved.

1 By the 20th of each month, the Contractor shall furnish the Engineer a schedule of the
2 work expected to be performed in the next two months. The Engineer will transmit this
3 information through the Bridge and Structures Office to the Coast Guard so that interested
4 users of the waterway can be notified.

5
6 The Coast Guard contact is:

7
8 Bridge Administrator
9 Thirteenth Coast Guard District
10 915 Second Avenue Suite 3510
11 Seattle, WA 98174-1067
12 D13-pf-d13bridges@uscg.mil
13 Telephone: (206) 220-7282
14

15 All costs in connection with furnishing, installing, maintaining, and removing temporary
16 navigation lights, signs, signals, or other warning devices shall be included in the contract
17 prices for the items of work involved.

18
19 All costs incurred in obtaining the required Coast Guard approvals and in complying with
20 all requirements specified herein shall be included in the contract prices for the items of
21 work involved.

22
23 All costs in connection with delays in the construction caused by the Contractor's failure
24 to obtain the necessary Coast Guard approvals shall be at the Contractor's expense.

25
26 1-07.6.OPT3(B).GB1

27 (September 3, 2019)

28 The Contractor shall comply with all United States Coast Guard requirements.

29
30 The Contractor shall submit a Type 3 Working Drawing consisting of a Navigation Work
31 Plan at least 60-calendar days prior to beginning activities and operations affecting any
32 part of the waterway in the vicinity of the bridge work. The Navigation Work Plan shall
33 include, at a minimum, the following:

- 34
- 35 1. Lead Contractor contact for the project, with associated email and phone
36 number.
 - 37
 - 38 2. Scheduled on-site start work date and finish work date.
 - 39
 - 40 3. Days and times of operation over the nominal work week.
 - 41
 - 42 4. Dates and times of stages of work, as applicable for operations involving
43 sequential or staged activities.
 - 44
 - 45 5. Location of the Work by latitude and longitude, river mile, and geographic point
46 of land, with latitude and longitude expressed in degrees, minutes, seconds, and
47 thousandths of seconds.
 - 48
 - 49 6. Identification and description of barges, vessels and equipment present in the
50 waterway, if any, to facilitate operations. The description shall include vessel
51 type, vessel name (as applicable), means of voice contact (VHF frequencies,
52 cell phone number, etc.) to the vessel, means of anchoring and mooring the

- 1 vessel and the location of such anchoring and mooring, the extent to which the
2 vessel is encroaching into the defined navigation channel, and lighting support
3 vessels in accordance with the Coast Guard Rules of the Road as applicable.
4
5 7. Point of contact phone number available for 24-hour-seven-days-a-week
6 contact from local mariners through the duration of the project.
7
8 8. Detailed identification of work operation hazards to mariners, if any, created by
9 operations (cables, buoys, machinery, tools, tows, containment and platform
10 structures, falling debris, etc.), including details such as size, diameter, color as
11 applicable.
12
13 9. Precautions regarding the in-water vessels, equipment, and work operation
14 hazards, if any, affecting local mariners such as operating speed and wake,
15 clearance distance, etc.
16
17 10. Systems and equipment causing a reduction in the available vertical clearance
18 beneath the bridge, if any, such as containment and platform systems and
19 supports and the equipment necessary to install, maintain, and remove such
20 systems, and the identification of any falling debris hazard to waterway traffic.
21
22 11. Description of advisory signage and lighting to be implemented by the
23 Contractor to advise local mariners of the operations, reduced clearances, and
24 presence of work operation hazards, as applicable. The description shall
25 include the advisory message, and placement and orientation of the signage
26 and flashing amber lighting (4-seconds/15 per minute).
27

28 The Engineer will submit the Navigation Work Plan to the US Coast Guard contact
29 identified below for concurrent review. Approval from the US Coast Guard and the
30 Engineer is required prior to the US Coast Guard issuing a Local Notice to Mariners
31 advising of the operations, and allowing the operations to commence.
32

33 The Contractor shall contact the US Coast Guard for requirements related to the mooring
34 of barges, placement of log booms, and all other equipment that could be a hazard to
35 waterway users.
36

37 Provisions shall be made for the removal, on 2 hours notice, of all equipment that would
38 block or partially block, the navigable portion of the waterway.
39

40 The US Coast Guard contact is:

41
42 Bridge Administrator
43 Thirteenth Coast Guard District
44 915 Second Avenue Suite 3510
45 Seattle, WA 98174-1067
46 D13-pf-d13bridges@uscg.mil
47 Telephone: (206) 220-7282
48

49 All costs incurred in contacting the US Coast Guard and in complying with all the
50 requirements specified herein shall be included in the contract prices for the items of work
51 involved.
52

1 All costs in connection with delays in the construction caused by the Contractor's failure
2 to contact the US Coast Guard shall be at the Contractor's expense.

3
4 1-07.7.GR1

5 **Load Limits**

6
7 1-07.7.INST1.GR1

8 Section 1-07.7 is supplemented with the following:

9
10 1-07.7.OPT3.FR1

11 (March 13, 1995)

12 The State has made arrangements with *** \$\$1\$\$ *** for the Contractor's use of the ***
13 \$\$2\$\$ *** shown in the Plans as a haul route for materials coming from *** \$\$3\$\$ *** Site
14 *** \$\$4\$\$ *** and used on this project. The Contractor shall comply with all existing legal
15 restrictions.

16
17 If the Contractor selects different haul routes than those designated, the Contractor shall,
18 at the Contractor's expense, make all arrangements for the use of the haul routes.

19
20 1-07.7.OPT4.FR1

21 (March 13, 1995)

22 The Contractor shall also comply with the further restrictions imposed by the owner of the
23 roads as follows:

24
25 *** \$\$1\$\$ ***

26
27 1-07.7.OPT5.GR1

28 (March 13, 1995)

29 Whenever the Contractor obtains materials from a source other than that provided by the
30 Contracting Agency, or provides a source for materials not designated to come from a
31 source provided by the State and the location of the source necessitates hauling on other
32 than State Highways, the Contractor shall, at the Contractor's expense, make all
33 arrangements for the use of the haul routes.

34
35 1-07.7.OPT6.GR1

36 (March 13, 1995)

37 If the sources of materials provided by the Contractor necessitates hauling over roads
38 other than State Highways, the Contractor shall, at the Contractor's expense, make all
39 arrangements for the use of the haul routes.

40
41 1-07.9.GR1

42 **Wages**

43
44 1-07.9(1).GR1

45 **General**

46
47 1-07.9(1).INST1.GR1

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

49
50 1-07.9(1).OPT1.GR1

51 (January 9, 2023)

1 The Federal wage rates incorporated in this contract have been established by the
2 Secretary of Labor under United States Department of Labor General Decision No.
3 WA20230001.

4
5 The State rates incorporated in this contract are applicable to all construction
6 activities associated with this contract.

7
8 1-07.9(1).OPT2.FR1
9 (January 9, 2023)
10 The Federal wage rates for Highway Construction incorporated in this contract have
11 been established by the Secretary of Labor under United States Department of Labor
12 General Decision No. WA20230001. These rates are applicable to highway
13 construction.

14
15 The Federal wage rates for Building Construction incorporated in this contract have
16 been established by the Secretary of Labor under United States Department of Labor
17 General Decision No. *** \$\$1\$\$ **. These rates are applicable to building
18 construction.

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

22
23 1-07.9(1).OPT3.FR1
24 (May 11, 2010)
25 The Federal wage rates for Building Construction incorporated in this contract have
26 been established by the Secretary of Labor under United States Department of Labor
27 General Decision No. *** \$\$1\$\$ **. These rates are applicable to building
28 construction.

29
30 The State rates incorporated in this contract are applicable to all construction
31 activities associated with this contract.

32
33 1-07.9(1).OPT5.FR1
34 (January 9, 2023)
35 The Federal wage rates for Highway Construction incorporated in this contract have
36 been established by the Secretary of Labor under United States Department of Labor
37 General Decision No. WA20230001. These rates are applicable to highway
38 construction.

39
40 The Federal wage rates for Heavy Construction incorporated in this contract have
41 been established by the Secretary of Labor under United States Department of Labor
42 General Decision No. *** \$\$1\$\$ **. These rates are applicable to heavy construction.

43
44 The State rates incorporated in this contract are applicable to all construction
45 activities associated with this contract.

46
47 1-07.9(1).OPT6.FR1
48 (January 9, 2023)
49 The Federal wage rates for Highway Construction incorporated in this contract have
50 been established by the Secretary of Labor under United States Department of Labor
51 General Decision No. WA20230001. These rates are applicable to highway
52 construction.

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The Federal wage rates for Heavy Construction incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. *** \$\$1\$\$ ***. These rates are applicable to heavy construction.

The Federal wage rates for Building Construction incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. *** \$\$2\$\$ ***. These rates are applicable to building construction

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

1-07.9(3).GR1

Apprentices

1-07.9(3).INST1.GR1

Section 1-07.9(3) is supplemented with the following:

1-07.9(3).OPT1.GR1

(October 3, 2022)

Apprentice Utilization

This Contract includes an Apprentice Utilization Requirement. No less than 15 percent of project Labor Hours shall be performed by Apprentices.

Definitions

For the purposes of this specification the following definitions apply:

1. Apprentice is a person enrolled in a State-approved Apprenticeship Training Program.
2. Apprentice Utilization Requirement is the Apprentice labor hours expressed as a percentage of the project Labor Hours.
3. Good Faith Effort (GFE) is used if the Contractor doesn't meet the Apprentice Utilization Requirement. It describes the Contractor's efforts to meet the Apprentice Utilization Requirement including but not necessarily limited to the specific steps as described elsewhere in this specification.
4. Labor Hours are the total hours performed by all workers receiving an hourly wage who are directly employed upon the project including hours performed by workers employed by the Contractor and all subcontractors. Labor Hours do not include hours performed by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements.
5. State-approved Apprenticeship Training Program is an apprenticeship training program approved by the Washington State Apprenticeship Council.

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Electronic Reporting

The Contractor shall use the State L&I online Prevailing Wage Intent & Affidavit (PWIA) System to submit the “Apprentice Utilization Plan” and “Good Faith Effort” documentation. Reporting instructions are available in the application.

Apprentice Utilization Plan

The Contractor shall submit an “Apprentice Utilization Plan” by filling out the Apprentice Utilization Plan Form (WSDOT Form 424-004) within 30 calendar days of execution, demonstrating how and when they intend to achieve the Apprentice Utilization Requirement. The Plan shall be in sufficient detail for the Engineer to track the Contractor’s progress in meeting the utilization requirements and be updated and resubmitted as the Work progresses or when ordered by the Engineer.

If the Contractor is unable to demonstrate ability to meet the Apprentice Utilization Requirement in their Apprentice Utilization Plan, they must submit GFE documentation to the State L&I online PWIA System for review and comment with their Apprentice Utilization Plan. The Contractor shall actively seek out opportunities to meet the Apprentice Utilization Requirement during the construction Work.

Contacts

The Contractor may obtain information on State-approved Apprenticeship Training Programs by contacting the Department of Labor and Industries at:

Specialty Compliance And Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 or by phone at (360) 902-5320.

Compliance

In the event that the Contractor is unable to achieve the Apprentice Utilization Requirement, the Contractor shall submit to the State L&I online PWIA System GFE documentation for review and approval. The GFE documentation shall be submitted after Substantial Completion but no later than 30 days after Physical Completion. If GFE documentation was previously submitted as part of the Apprentice Utilization Plan, it shall be updated and resubmitted after Substantial Completion but no later than 30 days after Physical Completion.

If the Contractor fails to submit GFE documentation or if the Engineer does not approve the GFE, the Contractor will be subject to disciplinary actions as allowed under WAC 468-16-180.

Good Faith Efforts

The GFE shall describe in detail why the Contractor is not or was not able to attain the Apprentice Utilization Requirement. The GFE documentation shall address one or more of the following areas:

1. Correspondence on solicitation of Apprentices from a State-approved Apprenticeship Training Program(s), and the response from the solicited State-Approved Apprenticeship Training Program(s) when there is a lack of availability of Apprentices.
2. Provide documentation that shows Contract requirements for TERO, Special Training or Disadvantage Business Enterprise requirements affect the ability to obtain Apprentice Labor Hours on the Contract.

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- 3. Provide documentation demonstrating what efforts the Contractor has taken to require subcontractors to solicit and employ Apprentices. Documentation could be posters placed on site, emphasis in subcontracts about employing Apprentices, letters, memos or other correspondence from Contractor to subcontractor that put an emphasis on employing Apprentices.

Contractors may receive a GFE credit for graduated Apprentice hours through the end of the calendar year for all projects worked on as long as the Apprentice remains continuously employed with the same Contractor they were working for when they graduated. If an Apprentice graduates during employment on a project of significant duration, they may be counted towards a GFE credit for up to one year after their graduation or until the end of the project (whichever comes first). Determination of whether or not Contract requirements were met in good faith will be made by subtracting the hours from the journeyman total reported hours for the project and adding them to the apprentice hour total. If the new utilization percentage meets the Contract requirement, the Contractor will be reported as meeting the requirement in good faith.

Payment

All costs incurred by the Contractor for complying with this specification shall be included in the Contract prices for the Bid items of Work involved.

1-07.11.GR1

Requirements for Nondiscrimination

1-07.11.INST1.GR1

Section 1-07.11 is supplemented with the following:

1-07.11.OPT1.GR1

(October 3, 2022)

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)

| | | |
|----|--|-----|
| 1 | Spokane, WA: | |
| 2 | SMSA Counties: | |
| 3 | Spokane, WA | 2.8 |
| 4 | WA Spokane. | |
| 5 | Non-SMSA Counties | 3.0 |
| 6 | WA Adams; WA Asotin; WA Columbia; WA Ferry; WA Garfield; WA | |
| 7 | Lincoln, WA Pend Oreille; WA Stevens; WA Whitman. | |
| 8 | | |
| 9 | Richland, WA | |
| 10 | SMSA Counties: | |
| 11 | Richland Kennewick, WA | 5.4 |
| 12 | WA Benton; WA Franklin. | |
| 13 | Non-SMSA Counties | 3.6 |
| 14 | WA Walla Walla. | |
| 15 | | |
| 16 | Yakima, WA: | |
| 17 | SMSA Counties: | |
| 18 | Yakima, WA | 9.7 |
| 19 | WA Yakima. | |
| 20 | Non-SMSA Counties | 7.2 |
| 21 | WA Chelan; WA Douglas; WA Grant; WA Kittitas; WA Okanogan. | |
| 22 | | |
| 23 | Seattle, WA: | |
| 24 | SMSA Counties: | |
| 25 | Seattle Everett, WA | 7.2 |
| 26 | WA King; WA Snohomish. | |
| 27 | Tacoma, WA | 6.2 |
| 28 | WA Pierce. | |
| 29 | Non-SMSA Counties | 6.1 |
| 30 | WA Clallam; WA Grays Harbor; WA Island; WA Jefferson; WA Kitsap; | |
| 31 | WA Lewis; WA Mason; WA Pacific; WA San Juan; WA Skagit; WA | |
| 32 | Thurston; WA Whatcom. | |
| 33 | | |
| 34 | Portland, OR: | |
| 35 | SMSA Counties: | |
| 36 | Portland, OR-WA | 4.5 |
| 37 | WA Clark. | |
| 38 | Non-SMSA Counties | 3.8 |
| 39 | WA Cowlitz; WA Klickitat; WA Skamania; WA Wahkiakum. | |
| 40 | | |

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

46
47 The Contractor's compliance with the Executive Order and the regulations in 41 CFR
48 Part 60-4 shall be based on its implementation of the Equal Opportunity Clause,
49 specific affirmative action obligations required by the specifications set forth in 41
50 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female
51 employment and training must be substantially uniform throughout the length of the
52 contract, in each construction craft and in each trade, and the Contractor shall make

1 a good faith effort to employ minorities and women evenly on each of its projects.
2 The transfer of minority or female employees or trainees from Contractor to
3 Contractor or from project to project for the sole purpose of meeting the Contractor's
4 goal shall be a violation of the contract, the Executive Order and the regulations in
5 41 CFR Part 60-4. Compliance with the goals will be measured against the total
6 work hours performed.
7

- 8 3. The Contractor shall provide written notification to the Office of Federal Contract
9 Compliance Programs (OFCCP) within 10 working days of award of any construction
10 subcontract in excess of \$10,000 or more that are Federally funded, at any tier for
11 construction work under the contract resulting from this solicitation. The notification
12 shall list the name, address and telephone number of the subcontractor; employer
13 identification number of the subcontractor; estimated dollar amount of the
14 subcontract; estimated starting and completion dates of the subcontract; and the
15 geographical area in which the contract is to be performed. The notification shall be
16 sent to:

17
18 U.S. Department of Labor
19 Office of Federal Contract Compliance Programs Pacific Region
20 Attn: Regional Director
21 San Francisco Federal Building
22 90 – 7th Street, Suite 18-300
23 San Francisco, CA 94103(415) 625-7800 Phone
24 (415) 625-7799 Fax
25

- 26 4. As used in this Notice, and in the contract resulting from this solicitation, the Covered
27 Area is as designated herein.
28

29 Standard Federal Equal Employment Opportunity Construction Contract Specifications
30 (Executive Order 11246)
31

- 32 1. As used in these specifications:
33

- 34 a. Covered Area means the geographical area described in the solicitation
35 from which this contract resulted;
36
37 b. Director means Director, Office of Federal Contract Compliance Programs,
38 United States Department of Labor, or any person to whom the Director
39 delegates authority;
40
41 c. Employer Identification Number means the Federal Social Security number
42 used on the Employer's Quarterly Federal Tax Return, U. S. Treasury
43 Department Form 941;
44
45 d. Minority includes:
46
47 (1) Black, a person having origins in any of the Black Racial Groups
48 of Africa.
49
50 (2) Hispanic, a fluent Spanish speaking, Spanish surnamed person of
51 Mexican, Puerto Rican, Cuban, Central American, South
52 American, or other Spanish origin.

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- (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

1 training, subject to the availability of employment opportunities. Trainees must be
2 trained pursuant to training programs approved by the U.S. Department of Labor.
3

4 7. The Contractor shall take specific affirmative actions to ensure equal employment
5 opportunity. The evaluation of the Contractor's compliance with these specifications
6 shall be based upon its effort to achieve maximum results from its action. The
7 Contractor shall document these efforts fully, and shall implement affirmative action
8 steps at least as extensive as the following:
9

10 a. Ensure and maintain a working environment free of harassment,
11 intimidation, and coercion at all sites, and in all facilities at which the
12 Contractor's employees are assigned to work. The Contractor, where
13 possible, will assign two or more women to each construction project. The
14 Contractor shall specifically ensure that all foremen, superintendents, and
15 other on-site supervisory personnel are aware of and carry out the
16 Contractor's obligation to maintain such a working environment, with
17 specific attention to minority or female individuals working at such sites or
18 in such facilities.
19

20 b. Establish and maintain a current list of minority and female recruitment
21 sources, provide written notification to minority and female recruitment
22 sources and to community organizations when the Contractor or its unions
23 have employment opportunities available, and maintain a record of the
24 organizations' responses.
25

26 c. Maintain a current file of the names, addresses and telephone numbers of
27 each minority and female off-the-street applicant and minority or female
28 referral from a union, a recruitment source or community organization and
29 of what action was taken with respect to each such individual. If such
30 individual was sent to the union hiring hall for referral and was not referred
31 back to the Contractor by the union or, if referred, not employed by the
32 Contractor, this shall be documented in the file with the reason therefor,
33 along with whatever additional actions the Contractor may have taken.
34

35 d. Provide immediate written notification to the Director when the union or
36 unions with which the Contractor has a collective bargaining agreement has
37 not referred to the Contractor a minority person or woman sent by the
38 Contractor, or when the Contractor has other information that the union
39 referral process has impeded the Contractor's efforts to meet its obligations.
40

41 e. Develop on-the-job training opportunity and/or participate in training
42 programs for the area which expressly include minorities and women,
43 including upgrading programs and apprenticeship and trainee programs
44 relevant to the Contractor's employment needs, especially those programs
45 funded or approved by the U.S. Department of Labor. The Contractor shall
46 provide notice of these programs to the sources compiled under 7b above.
47

48 f. Disseminate the Contractor's EEO policy by providing notice of the policy
49 to unions and training programs and requesting their cooperation in
50 assisting the Contractor in meeting its EEO obligations; by including it in
51 any policy manual and collective bargaining agreement; by publicizing it in
52 the company newspaper, annual report, etc.; by specific review of the policy

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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.

1 efforts to ensure equal employment opportunity. If the Contractor fails to comply with
2 the requirements of the Executive Order, the implementing regulations, or these
3 specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
4

5 14. The Contractor shall designate a responsible official to monitor all employment
6 related activity to ensure that the company EEO policy is being carried out, to submit
7 reports relating to the provisions hereof as may be required by the government and
8 to keep records. Records shall at least include, for each employee, their name,
9 address, telephone numbers, construction trade, union affiliation if any, employee
10 identification number when assigned, social security number, race, sex, status (e.g.,
11 mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours
12 worked per week in the indicated trade, rate of pay, and locations at which the work
13 was performed. Records shall be maintained in an easily understandable and
14 retrievable form; however, to the degree that existing records satisfy this requirement,
15 the Contractors will not be required to maintain separate records.
16

17 15. Nothing herein provided shall be construed as a limitation upon the application of
18 other laws which establish different standards of compliance or upon the application
19 of requirements for the hiring of local or other area residents (e.g., those under the
20 Public Works Employment Act of 1977 and the Community Development Block Grant
21 Program).
22

23 16. Additional assistance for Federal Construction Contractors on contracts
24 administered by Washington State Department of Transportation or by Local
25 Agencies may be found at:
26

27 Washington State Dept. of Transportation
28 Office of Equal Opportunity
29 PO Box 47314
30 310 Maple Park Ave. SE
31 Olympia WA
32 98504-7314
33 Ph: 360-705-7090
34 Fax: 360-705-6801
35 <http://www.wsdot.wa.gov/equalopportunity/default.htm>
36

37 1-07.11.OPT2.GR1

38 **(October 3, 2022)**

39 ***Disadvantaged Business Enterprise Participation***

40 The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and
41 USDOT's official interpretations (i.e., Questions & Answers) apply to this Contract. As
42 such, the requirements of this Contract are to make affirmative efforts to solicit DBEs,
43 provide information on who submitted a Bid or quote and to report DBE participation
44 monthly as described elsewhere in these Contract Provisions. No preference will be
45 included in the evaluation of Bids/Proposals, no minimum level of DBE participation shall
46 be required as a Condition of Award and Bids/Proposals may not be rejected or
47 considered non-responsive on that basis.
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49 **DBE Abbreviations and Definitions**

50 **Broker** – A business firm that provides a bona fide service, such as professional,
51 technical, consultant or managerial services and assistance in the procurement
52 of essential personnel, facilities, equipment, materials, or supplies required for

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the performance of the Contract, or, persons/companies who arrange or expedite transactions.

Certified Business Description – Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

Certified Firm Directory – A database of all Minority, Women, and Disadvantaged Business Enterprises. The on-line Directory is available to Contractors for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: <https://omwbe.diversitycompliance.com>.

Commercially Useful Function (CUF)
49 CFR 26.55(c)(1) defines commercially useful function as: *“A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.”*

Contract – For this Special Provision only, this definition supplements Section 1-01.3. 49 CFR 26.5 defines contract as: *“... a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services) and the buyer to pay for them. For purposes of this part, a lease is considered to be a contract.”*

Disadvantaged Business Enterprise (DBE) – A business firm certified by the Washington State Office of Minority and Women’s Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification.

Force Account Work – Work measured and paid in accordance with Section 1-09.6.

Manufacturer (DBE) – A DBE 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 DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Regular Dealer (DBE) – A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE

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firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

DBE Goals

No DBE goals have been assigned as part of this Contract.

Affirmative Efforts to Solicit DBE Participation

The Contractor shall not discriminate on the grounds of race, color, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. DBE firms shall have an equal opportunity to compete for subcontracts in which the Contractor enters into pursuant to this Contract.

Contractors are encouraged to:

- 1. Advertise opportunities for subcontractors or suppliers in a timely and reasonably designed manner to provide notice of the opportunity to DBEs capable of performing the Work. All advertisements should include a Contract Provision encouraging participation by DBE firms. This may be accomplished through general advertisements (e.g. newspapers, journals, etc.) or by soliciting Bids/Proposals directly from DBEs.
- 2. Establish delivery schedules that encourage participation by DBEs and other small businesses.
- 3. Participate with a DBE as a joint venture.

DBE Eligibility/Selection of DBEs for Reporting Purposes Only

Contractor may take credit for DBEs utilized on this Contract only if the firm is certified for the Work being performed, and the firm performs a commercially useful function (CUF).

Absent a mandatory goal, all DBE participation that is attained on this project will be considered as "race neutral" participation and shall be reported as such.

Crediting DBE Participation

All DBE subcontractors shall be certified before the subcontract on which they are participating is executed.

Be advised that although a firm is listed in the directory, there are cases where the listed firm is in a temporary suspension status. The Contractor shall review the OMWBE Suspended DBE Firms list. A DBE firm that is included on this list may not enter into new contracts that count towards participation.

DBE participation is only credited upon payment to the DBE.

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The following are some definitions of what may be counted as DBE participation.

DBE Prime Contractor

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 Contractor performs with its own forces and is certified to perform.

DBE Subcontractor

Only take credit for that portion of the total dollar value of the subcontract equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor's payment to the DBE is not allowed.

If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be credited only if the DBE's Lower-Tier subcontractor is also a DBE. Work subcontracted to a non-DBE shall not be credited.

Count expenditures toward race/gender-neutral participation only if the DBE is performing a CUF on the contract.

DBE Subcontract and Lower Tier Subcontract Documents

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE. The subcontract agreement shall incorporate requirements of the primary Contract. Subcontract agreements of all tiers, including lease agreements shall be readily available at the project site for the Engineer review.

DBE Service Provider

The value of fees or commissions charged by a DBE Broker, a DBE behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as DBE participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

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Temporary Traffic Control

If the DBE firm is being utilized in the capacity of only “Flagging”, the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

If the DBE firm is being utilized in the capacity of “Traffic Control Services”, the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project. In addition, if the DBE firm utilizes the Contractor’s equipment, such as Transportable Attenuators and Portable Changeable Message Signs (PCMS) no DBE credit can be taken for supplying and operating the items.

Trucking

DBE trucking firm participation may only be credited as DBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the DBE’s work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling.

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit 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.

The DBE may lease additional trucks from another DBE firm. The Work that a DBE trucking firm performs with trucks it leases from other certified DBE trucking firms qualify for 100% DBE credit

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project. The DBE may lease trucks from a non-DBE truck leasing company, but can only receive credit as DBE participation if the DBE uses its own employees as drivers.

DBE credit for a truck broker is limited to the fee/commission that the DBE receives for arranging transportation services.

Truck registration and lease agreements shall be readily available at the project site for the Engineer review.

DBE Manufacturer and DBE Regular Dealer

One hundred percent (100%) of the cost of the manufactured product obtained from a DBE Manufacturer can count as DBE participation.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited as DBE participation. If the role of the DBE Regular Dealer is determined to be that of a pass-through, then no DBE credit will be given for its services. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or commission

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it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis.

Regular Dealer DBE firms must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT's Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. The Regular Dealer must submit the Regular Dealer Status Request form a minimum of five days prior to being utilized on the specific project.

Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count as DBE participation provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward as DBE participation.

Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women's Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.

Procedures Between Award and Execution

After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.

1. A list of all firms who submitted a Bid or quote in attempt to participate in this project whether they were successful or not. Include the business name and mailing address.

Note: The firms identified by the 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

Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform "all" of these functions on a furnish-and-install

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contract, it has not performed a CUF and the cost of materials cannot be counted toward DBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the Contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.
- The DBE shall with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE's payroll.
- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). 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 absolute priority for use of the leased truck.
- Leased trucks shall display the name and identification number of the DBE.

Joint Checking

A joint check is a check between a subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

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The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must “be responsible for negotiating price, determining quality and quantity, ordering the material and installing and paying for the material itself.” The Contractor shall submit DBE Joint Check Request Form for the Engineer approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier is not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE’s participation as it relates to the material cost.

Prompt Payment

Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt Payment requirements apply to progress payments as well as return of retainage.

Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this Contract.

Decertification

When a DBE is “decertified” from the DBE program during the course of the Contract, the participation of that DBE shall continue to count as DBE participation as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.

Consequences of Non-Compliance

Each contract with a Contractor (and each subcontract the Contractor signs with a subcontractor) must include the following assurance clause:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the 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 recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the Contractor from future bidding as non-responsible.

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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, except otherwise provided in the Specifications.

1-07.11.OPT3.FR1

(October 3, 2022)

Disadvantaged Business Enterprise Participation

The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and USDOT’s official interpretations (i.e., Questions & Answers) 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 resulting in rejection or other sanctions as provided by Contract.

DBE Abbreviations and Definitions

Broker – A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or, persons/companies who arrange or expedite transactions.

Certified Business Description – Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

Certified Firm Directory – A database of all Minority, Women, and Disadvantaged Business Enterprises currently certified by Washington State. The on-line Directory is available to Bidders for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: <https://omwbe.diversitycompliance.com>.

Commercially Useful Function (CUF) – 49 CFR 26.55(c)(1) defines commercially useful function as: *“A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.”*

Disadvantaged Business Enterprise (DBE) – A business firm certified by the Washington State Office of Minority and Women’s Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification.

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Force Account Work – Work measured and paid in accordance with Section 1-09.6.

Good Faith Efforts – Efforts to achieve the DBE COA Goal or other requirements of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Manufacturer (DBE) – A DBE 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 DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Reasonable Fee (DBE) – For purposes of Brokers or service providers a reasonable fee shall not exceed 5% of the total cost of the goods or services brokered.

Regular Dealer (DBE) – A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

DBE Commitment – The scope of work and dollar amount the Bidder indicates they will be subcontracting to be applied towards the DBE Condition of Award Goal as shown on the DBE Utilization Certification Form for each DBE subcontractor. This DBE Commitment will be incorporated into the Contract and shall be considered a Contract requirement. The Contractor shall utilize the COA DBEs to perform the work and supply the materials for which they are committed. Any changes to the DBE Commitment require the Engineer's prior written approval.

DBE Condition of Award (COA) Goal – An assigned numerical amount specified as a percentage of the Contract. Initially, this is the minimum amount that the Bidder must commit to by submission of the Utilization Certification Form and/or by Good Faith Effort (GFE).

DBE COA Goal
The Contracting Agency has established a DBE COA Goal for this Contract in the amount of: *** \$\$1\$\$ ***

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Crediting DBE Participation

Subcontractors proposed as COA must be certified prior to the due date for bids on the Contract. All non-COA DBE subcontractors shall be certified before the subcontract on which they are participating is executed.

DBE participation is only credited upon payment to the DBE.

The following are some definitions of what may be counted as DBE participation.

DBE Prime Contractor

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 Contractor performs with its own forces and is certified to perform.

DBE Subcontractor

Only take credit for that portion of the total dollar value of the subcontract that is equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces and is certified to perform. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor’s resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor’s payment to the DBE is not allowed.

When the subcontractor is part of a DBE Commitment, the following apply:

1. If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be counted toward the DBE COA Goal only if the lower-tier subcontractor is also a DBE.
2. Work subcontracted to a lower-tier subcontractor that is a DBE may be counted toward the DBE COA Goal only if the lower-tier subcontractor self performs a minimum of 30 percent of the Work subcontracted to them.
3. Work subcontracted to a non-DBE does not count towards the DBE COA Goal.

DBE Subcontract and Lower Tier Subcontract Documents

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE.

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DBE Service Provider

The value of fees or commissions charged by a DBE firm behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as DBE participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

Force Account Work

When the Bidder elects to utilize force account Work to meet the DBE COA Goal, as demonstrated by listing this force account Work on the DBE Utilization Certification Form, for the purposes of meeting DBE COA Goal, only 50% of the Proposal amount shall be credited toward the Bidder’s Commitment to meet the DBE COA Goal.

One hundred percent of the actual amounts paid to the DBE for the force account Work shall be credited towards the DBE COA Goal or DBE participation.

Temporary Traffic Control

If the DBE firm only provides “Flagging”, the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger(s), which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment for its employees (e.g. paddles, hard hats, and vests).

If the DBE firm provides “Traffic Control Services”, the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project.

Trucking

DBE trucking firm participation may only be credited as DBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier of those materials. In situations where the DBE’s work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit 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.

The DBE may lease additional trucks from another DBE firm. The DBE who leases additional trucks from another DBE firm receives credit for the value of the transportation services the lessee DBE provides on the Contract.

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project.

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The DBE may lease trucks from a truck leasing company (recognized truck rental center) but can only receive credit towards DBE participation if the DBE uses its own employees as drivers.

DBE Manufacturer and DBE Regular Dealer

One hundred percent (100%) of the cost of the manufactured product obtained from a DBE manufacturer may count towards the DBE COA Goal.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited toward the DBE Goal. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis.

DBE firms proposed to be used as a Regular Dealer must be approved before being listed as a COA/used on a project. The WSDOT Approved Regular Dealer list published on WSDOT’s Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. For purposes of the DBE COA Goal participation, the Regular Dealer must submit the Regular Dealer Status Request form a minimum of five calendar days prior to bid opening.

Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on the job site, may toward the DBE COA Goal provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward the DBE Goal.

Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women’s Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.

Disadvantaged Business Enterprise Utilization

To be eligible for award of the Contract, the Bidder shall properly complete and submit a Disadvantaged Business Enterprise (DBE) Utilization Certification with the Bidder’s sealed Bid Proposal, as specified in Section 1-02.9 Delivery of Proposal. The Bidder’s DBE Utilization Certification must clearly demonstrate how the Bidder intends to meet the DBE COA Goal. A DBE Utilization Certification (WSDOT Form 272-056) is included in the Proposal package for this purpose as well as instructions on how to properly fill out the form.

The Bidder is advised that the items listed below when listed in the Utilization Certification must have their amounts reduced to the percentages shown and those reduced amounts will be the amount applied towards meeting the DBE COA Goal.

- Force account at 50%
- Regular dealer at 60%

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In the event of arithmetic errors in completing the DBE Utilization Certification, the amount listed to be applied towards the DBE COA 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 DBE Utilization Certification Form that accurately demonstrates how the Bidder intends to meet the DBE COA Goal.

Disadvantaged Business Enterprise Written Confirmation Document(s)

The Bidder shall submit a Disadvantaged Business Enterprise (DBE) Written Confirmation Document (completed and signed by the DBE) for each DBE firm listed in the Bidder's completed DBE Utilization Certification submitted with the Bid. Failure to do so will result in the associated participation being disallowed, which may cause the Bid to be determined to be nonresponsive resulting in Bid rejection.

The Confirmation Documents provide confirmation from the DBEs that they are participating in the Contract as provided in the Bidder's Commitment. The Confirmation Documents must be consistent with the Utilization Certification.

A DBE Written Confirmation Document (WSDOT Form 422-031) is included in the 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 an incomplete Written Confirmation Document was signed by a DBE, the validity of the document comes into question. 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. The Contracting Agency, at any time during the selection process, may request a breakdown of the bid items and amounts that are counted towards the overall contract goal for any of the DBEs listed on the DBE Utilization Certification.

Achieving the DBE COA Goal may be accomplished in one of two ways:

1. By meeting the DBE COA Goal
Submission of the DBE Utilization Certification, supporting DBE Written Confirmation Document(s) showing the Bidder has obtained enough DBE participation to meet or exceed the DBE COA Goal, the DBE Bid Item Breakdown and the DBE Trucking Credit Form, if applicable.

2. By documentation that the Bidder made adequate GFE to meet the DBE COA 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. The Bidder must supply GFE

1 documentation in addition to the DBE Utilization Certification, supporting
2 DBE Written Confirmation Document(s), the DBE Bid Item Breakdown form
3 and the DBE Trucking Credit Form, if applicable.
4

5 Note: In the case where a Bidder is awarded the contract based on
6 demonstrating adequate GFE, the advertised DBE COA Goal will not
7 be reduced. The Bidder shall demonstrate a GFE during the life of the
8 Contract to attain the advertised DBE COA Goal.
9

10 GFE documentation, the DBE Bid Item Breakdown form, and the DBE Trucking
11 Credit Form, if applicable, shall be submitted as specified in Section 1-02.9.
12

13 The Contracting Agency will review the GFE documentation and will determine if the
14 Bidder made an adequate good faith effort.
15

16 **Good Faith Effort (GFE) Documentation**

17 GFE is evaluated when:

- 18 1. Determining award of a Contract that has COA goal,
- 19 2. When a COA DBE is terminated and substitution is required, and
20
- 21 3. Prior to Physical Completion when determining whether the Contractor has
22 satisfied its DBE commitments.
23

24 49 CFR Part 26, Appendix A is intended as general guidance and does not, in itself,
25 demonstrate adequate good faith efforts. The following is a list of types of actions,
26 which would be considered as part of the Bidder's GFE to achieve DBE participation.
27 It is not intended to be a mandatory checklist, nor is it intended to be exclusive or
28 exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
29

- 30 1. Soliciting through all reasonable and available means (e.g. attendance at
31 pre-bid meetings, advertising and/or written notices) the interest of all
32 certified DBEs who have the capability to perform the Work of the Contract.
33 The Bidder must solicit this interest within sufficient time to allow the DBEs
34 to respond to the solicitation. The Bidder must determine with certainty if
35 the DBEs are interested by taking appropriate steps to follow up initial
36 solicitations.
37
- 38 2. Selecting portions of the Work to be performed by DBEs in order to increase
39 the likelihood that the DBE COA Goal will be achieved. This includes, where
40 appropriate, breaking out contract Work items into economically feasible
41 units to facilitate DBE participation, even when the Bidder might otherwise
42 prefer to perform these Work items with its own forces.
43
- 44 3. Providing interested DBEs with adequate information about the Plans,
45 Specifications, and requirements of the Contract in a timely manner to
46 assist them in responding to a solicitation.
47
- 48 a. Negotiating in good faith with interested DBEs. It is the Bidder's
49 responsibility to make a portion of the Work available to DBE
50 subcontractors and suppliers and to select those portions of the Work
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1 or material needs consistent with the available DBE subcontractors
2 and suppliers, so as to facilitate DBE participation. Evidence of such
3 negotiation includes the names, addresses, and telephone numbers
4 of DBEs that were considered; a description of the information
5 provided regarding the Plans and Specifications for the Work selected
6 for subcontracting; and evidence as to why additional agreements
7 could not be reached for DBEs to perform the Work.
8

9 b. A Bidder using good business judgment would consider a number of
10 factors in negotiating with subcontractors, including DBE
11 subcontractors, and would take a firm's price and capabilities as well
12 as the DBE COA Goal into consideration. However, the fact that there
13 may be some additional costs involved in finding and using DBEs is
14 not in itself sufficient reason for a Bidder's failure to meet the DBE
15 COA Goal, as long as such costs are reasonable. Also, the ability or
16 desire of a Bidder to perform the Work of a Contract with its own
17 organization does not relieve the Bidder of the responsibility to make
18 Good Faith Efforts. Bidders are not, however, required to accept
19 higher quotes from DBEs if the price difference is excessive or
20 unreasonable.
21

- 22 4. Not rejecting DBEs as being unqualified without sound reasons based on a
23 thorough investigation of their capabilities. The Bidder's standing within its
24 industry, membership in specific groups, organizations, or associations and
25 political or social affiliations (for example union vs. non-union employee
26 status) are not legitimate causes for the rejection or non-solicitation of bids
27 in the Bidder's efforts to meet the DBE COA Goal.
28
- 29 5. Making efforts to assist interested DBEs in obtaining bonding, lines of credit,
30 or insurance as required by the recipient or Bidder.
31
- 32 6. Making efforts to assist interested DBEs in obtaining necessary equipment,
33 supplies, materials, or related assistance or services.
34
- 35 7. Effectively using the services of available minority/women community
36 organizations; minority/women contractors' groups; local, State, and
37 Federal minority/women business assistance offices; and other
38 organizations as allowed on a case-by-case basis to provide assistance in
39 the recruitment and placement of DBEs.
40
- 41 8. Documentation of GFE must include copies of each DBE and non-DBE
42 subcontractor quotes submitted to the Bidder when a non-DBE
43 subcontractor is selected over a DBE for Work on the Contract. (ref.
44 updated DBE regulations – 26.53(b)(2)(vi) & App. A)
45

46 **Administrative Reconsideration of GFE Documentation**

47 A Bidder has the right to request reconsideration if the GFE documentation submitted
48 with their Bid was determined to be inadequate.
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- 50 • The Bidder must request within 48 hours of notification of being
51 nonresponsive or forfeit the right to reconsideration.
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- 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.
- Only original GFE documentation submitted as a supplement to the Bid shall be considered. The Bidder shall not introduce new documentation at the reconsideration hearing.
- 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 working days of the hearing explaining the basis for their finding.

DBE Bid Item Breakdown

The Bidder shall submit a DBE Bid Item Breakdown Form (WSDOT Form 272-054) as specified in the Special Provisions for Section 1-02.9, Delivery of Proposal.

DBE Trucking Credit Form

The Bidder shall submit a DBE Trucking Credit Form (WSDOT Form 272-058), as specified in the Special Provisions for Section 1-02.9, Delivery of Proposal.

Note: The DBE Trucking Credit Form is only required for a DBE Firm listed on the DBE Utilization Certification as a subcontractor for "Trucking" or "Hauling" and are performing a part of a bid item. For example, if the item of Work is Structure Excavation including Haul, and another firm is doing the excavation and the DBE Trucking firm is doing the haul, the form is required. For a DBE subcontractor that is responsible for an entire item of work that may require some use of trucks, the form is not required.

Procedures between Award and Execution

After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.

1. A list of all firms who submitted a bid or quote in attempt to participate in this project whether they were successful or not. Include the business name and mailing address.

Note: The firms identified by the 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

Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the

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Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform “all” of these functions on a furnish-and-install contract, it has not performed a CUF and the cost of materials cannot be counted toward DBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be provided prior to the subcontractor beginning Work. Any use of the Contractor’s equipment by a DBE may not be credited as countable participation.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.
- The DBE itself shall own and operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE’s payroll.
- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). 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 absolute priority for use of the leased truck.
- Leased trucks shall display the name and identification number of the DBE.

Truck Unit Listing Log

In addition to the subcontracting requirements of Section 1-08.1, each DBE trucking firm shall submit supplemental information consisting of a completed Primary UDBE/DBE/FSBE Truck Unit Listing Log (WSDOT Form 350-077) and all Rental/Lease agreements (if applicable). The supplemental information shall be submitted in an electronic format to the Engineer prior to any trucking

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services being performed for DBE credit. Incomplete or incorrect supplemental information will be returned for correction. The corrected Primary Truck Unit Listing Log and any Updated Primary Truck Unit Listing Logs shall be submitted and accepted by the Engineer no later than ten calendar days of utilizing applicable trucks. Failure to submit or update the DBE Truck Unit Listing Log may result in trucks not being credited as DBE participation.

Each DBE trucking firm shall complete a Daily Truck Unit Listing Log for each day that the DBE performs trucking services for DBE credit. The Daily Truck Unit Listing Log forms shall be submitted by Friday of the week after the Work was performed by email to the following email address for the region administering the Contract:

- Eastern Region - ERRegionOEO@wsdot.wa.gov
- North Central Region - NCRRegionOEO@wsdot.wa.gov
- Northwest Region - NWRRegionOEO@wsdot.wa.gov
- Olympic Region - ORegionOEO@wsdot.wa.gov
- South Central Region - SCRegionOEO@wsdot.wa.gov
- Southwest Region - SWRegionOEO@wsdot.wa.gov
- Washington State Ferries - FerriesOEO@wsdot.wa.gov

Joint Checking

A joint check is a check between a subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must “be responsible for negotiating price, determining quality and quantity, ordering the material, installing and paying for the material itself.” The Contractor shall submit DBE Joint Check Request Form to the Engineer and be in receipt of written approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier are not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE’s participation as it relates to the material cost.

Prompt Payment

Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt payment requirements apply to progress payments as well as return of retainage.

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Subcontracts

Prior to a DBE performing Work on the Contract, an executed subcontract between the DBE and the Contractor shall be submitted to the Engineer. The executed subcontracts shall be submitted by email to the following email address for the region administering the Contract:

- Eastern Region – ERRegionOEO@wsdot.wa.gov
- North Central Region – NCRRegionOEO@wsdot.wa.gov
- Northwest Region – NWRRegionOEO@wsdot.wa.gov
- Olympic Region – ORRegionOEO@wsdot.wa.gov
- South Central Region – SCRegionOEO@wsdot.wa.gov
- Southwest Region – SWRegionOEO@wsdot.wa.gov
- Washington State Ferries – FerriesOEO@wsdot.wa.gov

Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this contract.

Changes in COA Work Committed to DBE

The Contractor shall utilize the COA DBEs to perform the work and supply the materials for which each is committed unless prior written approval by the Engineer has been received by the Contractor. The Contractor shall not be entitled to any payment for work or material completed by the Contractor or subcontractors that was committed to be completed by the COA DBEs in the DBE Utilization Certification form.

Owner Initiated Changes

In instances where the Engineer makes changes that result in changes to Work that was committed to a COA DBE, the Contractor may be directed to substitute for the Work.

Contractor Initiated Changes

The Contractor cannot change the scope or reduce the amount of work committed to a COA DBE without good cause. Reducing DBE Commitment is viewed as partial DBE termination, and therefore subject to the termination procedures below.

Original Quantity Underruns

In the event that Work committed to a DBE firm as part of the COA underruns the original planned quantities the Contractor may be required to substitute other remaining Work to another DBE.

Contractor Proposed DBE Substitutions

Requests to substitute a COA DBE must be for good cause (see DBE termination process below), and requires prior written approval of the Engineer. After receiving a termination with good cause approval, the Contractor may only replace a DBE with another certified DBE. When any changes between

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Contract Award and Execution result in a substitution of COA DBE, the substitute DBE shall be certified prior to the bid opening on the Contract.

DBE Termination

Termination of a COA DBE (or an approved substitute DBE) is only allowed in whole or in part for good cause and with prior written approval of the Engineer. If the Contractor terminates a COA DBE without the prior written approval of the Engineer, the Contractor shall not be entitled to payment for work or material committed to, but not performed/supplied by the COA DBE. In addition, sanctions may apply as described elsewhere in this specification.

Prior to requesting approval to terminate a COA DBE, the Contractor shall give notice in writing to the DBE with a copy to the Engineer of its intent to request to terminate DBE Work and the reasons for doing so. The DBE shall have five (5) days to respond to the Contractor’s notice. The DBE’s response shall either support the termination or advise the Engineer and the Contractor of the reasons it objects to the termination of its subcontract.

If the request for termination is approved, the Contractor is required to substitute with another DBE to perform at least the same amount of work as the DBE that was terminated (or provide documentation of GFE). A plan to replace the COA DBE Commitment amount shall be submitted to the Engineer within 2 days of the approval of termination. The plan to replace the Commitment shall provide the same detail as that required in the DBE Utilization Certification.

As mentioned above, the Contractor must have good cause to terminate a COA DBE.

Good cause typically includes situations where the DBE subcontractor is unable or unwilling to perform the work of its subcontract. Good cause may exist if:

- The DBE fails or refuses to execute a written contract.
- The DBE fails or refuses to perform the Work of its subcontract in a way consistent with normal industry standards.
- The DBE fails or refuses to meet the Contractor’s reasonable nondiscriminatory bond requirements.
- The DBE becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to federal law or applicable State law.
- The DBE is ineligible to receive DBE credit for the type of work involved.
- The DBE voluntarily withdraws from the project and provides written notice of its withdrawal.

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- The DBE’s work is deemed unsatisfactory by the Engineer and not in compliance with the Contract.
- The DBE’s owner dies or becomes disabled with the result that the DBE is unable to complete its Work on the Contract.

Good cause does not exist if:

- The Contractor seeks to terminate a COA DBE so that the Contractor can self-perform the Work.
- The Contractor seeks to terminate a COA DBE so the Contractor can substitute another DBE contractor or non-DBE contractor after Contract Award.
- The failure or refusal of the COA DBE to perform its Work on the subcontract results from the bad faith or discriminatory action of the Contractor (e.g., the failure of the Contractor to make timely payments or the unnecessary placing of obstacles in the path of the DBE’s Work).

Decertification

When a DBE is “decertified” from the DBE program during the course of the Contract, the participation of that DBE shall continue to count as DBE participation as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.

Consequences of Non-Compliance

Breach of Contract

Each contract with a Contractor (and each subcontract the Contractor signs with a subcontractor) must include the following assurance clause:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the 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 recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the Contractor from future bidding as non-responsible.

Notice

If the Contractor or any subcontractor, Consultant, Regular Dealer, or service provider is deemed to be in non-compliance, the Contractor will be informed in

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writing, by certified mail by the Engineer that sanctions will be imposed for failure to meet the UDBE COA Commitment and/or submit documentation of good faith efforts. The notice will state the specific sanctions to be imposed which may include impacting a Contractor or other entity's ability to participate in future contracts.

Sanctions

If it is determined that the Contractor's failure to meet all or part of the DBE COA Commitment is due to the Contractor's inadequate good faith efforts throughout the life of the Contract, including failure to submit timely, required Good Faith Efforts information and documentation, the Contractor may be required to pay DBE penalty equal to the amount of the unmet Commitment, in addition to the sanctions outlined in Section 1-07.11(5).

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, except otherwise provided in the Specifications.

1-07.11.OPT4.FR1
(November 2, 2022)

Special Training Provisions

General Requirements

The Contractor's equal employment opportunity, affirmative action program shall include the requirements set forth below. The Contractor shall provide on-the-job training aimed at developing trainees to journey-level status in the trades involved. The number of training hours shall be *** \$\$1\$\$ ***. Trainees shall not be assigned less than 400 hours per individual per Contract. The Contractor may elect to accomplish training as part of the work of a subcontractor, however, the Prime Contractor shall retain the responsibility for complying with these Special Provisions (achieving the training goal). When the Contractor's training plan includes trainees for subcontractors or lower-tier subcontractors, this special provision shall be included in the subcontract.

Trainee Approval

The Contractor shall make every effort to employ/enroll minority and women trainees to the extent such persons are available within a reasonable recruitment area. This training provision is not intended and shall not be used to discriminate against any applicant for training, whether that person is a minority, woman or otherwise. A non-minority male trainee or apprentice may be approved provided the following requirements are met:

1. The Contractor is otherwise in compliance with the contract's Equal Employment Opportunity (EEO) and On-the-Job Training (OJT) requirements and provides documentation of the efforts taken to fill the specific training position with either minorities or females
2. or, if not otherwise in compliance, furnishes evidence of his/her systematic and direct recruitment efforts in regard to the position in question and in promoting the enrollment and/or employment of minorities and females in the craft which the proposed trainee is to be trained

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3. and the Contractor has made a good faith effort towards recruiting of minorities and women. As a minimum good faith efforts shall consist of the following:
 - a. Distribution of written notices of available employment opportunities with the Contractor and enrollment opportunities with its unions. Distribution should include but not be limited to; minority and female recruitment sources, WSDOT's OJT Support Services Coordinator, and minority and female community organizations.
 - b. Records documenting the Contractor's efforts and the outcome of those efforts, to employ minority and female applicants and/or refer them to unions.
 - c. Records reflecting the Contractor's efforts in participating in developing minority and female on-the-job training opportunities, including upgrading programs and apprenticeship opportunities.
 - d. Distribution of written notices to unions and training programs disseminating the Contractor's EEO policy and requesting cooperation in achieving EEO and OJT obligations (and their written responses). For assistance in locating trainee candidates, the Contractor may call WSDOT's OJT Support Services Coordinator at (360) 705-7090 or email ojtssinfo@wsdot.wa.gov.

No employee shall be employed as a trainee in any classification in which the employee has successfully completed a training course leading to journey-level worker status or in which the employee has been employed as a journey-level worker. The Contractor's records shall document the methods for determining the trainee's status and findings in each case. When feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

For the purpose of this specification, acceptable training programs are those employing trainees/apprentices registered with the following:

1. Washington State Department of Labor & Industries — State Apprenticeship Training Council (SATC) approved apprenticeship agreement:
 - a. Pursuant to RCW 49.04.060, an apprenticeship agreement shall be;
 - i. an individual written agreement between an employer and apprentice
 - ii. a written agreement between (an employer or an association of employers) and an organization of employees describing conditions of employment for apprentices
 - iii. a written statement describing conditions of employment for apprentices in a plant where there is no bona fide employee organization.

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All such agreements shall conform to the basic standards and other provisions of RCW Chapter 49.04.

2. Apprentices must be registered with U.S. Department of Labor — Apprenticeship Training, Employer, and Labor Services (ATELS) approved program.

Or

3. Non-ATELS/SATC programs that have been submitted to the Contracting Agency for approval by the FHWA for the specific project.

Obligation to Provide Information

Upon starting a new trainee, the Contractor shall furnish the trainee a copy of the approved program the Contractor will follow in providing the training. Upon completion of the training, the Contractor shall provide the Contracting Agency with a certification showing the type and length of training satisfactorily completed by each trainee.

Training Program Approval

The Training Program shall meet the following requirements:

1. The Training Program (DOT Form 272-049) must be submitted to the Engineer for approval **prior to commencing contract work** and shall be resubmitted when modifications to the program occur.
2. The minimum length and type of training for each classification will be as established in the training program as approved by the Contracting Agency.
3. The Training Program shall contain the trades proposed for training, the number of trainees, the hours assigned to the trade and the estimated beginning work date for each trainee.
4. Unless otherwise specified, Training Programs will be approved if the proposed number of training hours equals the training hours required by contract and the trainees are not assigned less than 400 hours each.
5. After approval of the training program, information concerning each individual trainee and good faith effort documentation shall be submitted (on DOT Form 272-050).
6. Flagging programs will not be approved. Other programs that include flagging training will only be approved if the flagging portion is limited to an orientation of not more than 20 hours.
7. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower-level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Some off-site training is permissible as long as the training is an integral part of an approved training program.

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8. It is normally expected that a trainee will begin training on the project as soon as feasible after start of work, utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or the trainee reaches journey-level status. It is not required that all trainees be on board for the entire length of the contract. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

9. Wage Progressions: Trainees will be paid at least the applicable ratios or wage progressions shown in the apprenticeship standards published by the Washington State Department of Labor and Industries. In the event that no training program has been established by the Department of Labor and Industries, the trainee shall be paid in accordance with the provisions of RCW 39.12.021, which reads as follows:

Apprentice workers employed upon public works projects for whom an apprenticeship agreement has been registered and approved with the State Apprenticeship Council pursuant to RCW 49.04, must be paid at least the prevailing hourly rate for an apprentice of that trade. Any worker for whom an apprenticeship agreement has not been registered and approved by the State Apprenticeship Council shall be considered to be a fully qualified journey-level worker, and, therefore, shall be paid at the prevailing hourly rate for journey-level worker.

Compliance

In the event that the Contractor is unable to accomplish the required training hours but can demonstrate a good faith effort to meet the requirements as specified, then the Contracting Agency will adjust the training goals accordingly.

Noncompliance and Sanctions

When a contractor violates EEO provisions of the contract, the Contracting Agency may impose damages in accordance with WSDOT's Equal Opportunity Compliance Program and the FHWA 1273. These damages consist of additional administrative costs including, but not limited to, the inspection, supervision, engineering, compliance, and legal staff time and expenses necessary for investigating, reporting, and correcting violations, as well as loss of federal funding, if any. Damages attributable to a contractor's violations of the EEO provisions may be deducted from progress payments due the Contractor. Before any money is withheld, the Contractor will be provided with a notice of the basis of the violations, the amount to be withheld and provided an opportunity to respond. The monetary value of the sanction will be calculated on a case-by-case basis and based on the damages incurred by the Contracting Agency.

The Contracting Agency's decision to recover damages for an EEO violation does not limit its ability to suspend or revoke the contractor's pre-qualification status or seek other remedies as allowed by federal or state law. In appropriate circumstances, the Contracting Agency may also refer the Contractor to other state or federal authorities for additional sanctions.

1 **Requirements for Non ATELS/SATC Approved Training Programs**

2 Contractors who are not affiliated with a program approved by ATELS or SATC may
3 have their training program approved (by FHWA) provided that the program is
4 submitted for approval on DOT Form 272-049, and the following standards are
5 addressed and incorporated in the Contractor’s program:
6

- 7 1. The program establishes minimum qualifications for persons entering the
8 training program.
9
10 2. The program shall outline the work processes in which the trainee will
11 receive supervised work experience and training on-the-job and the
12 allocation of the approximate time to be spent in each major process. The
13 program shall include the method for recording and reporting the training
14 completed shall be stated.
15
16 3. The program shall include a numeric ratio of trainees to journey-level worker
17 consistent with proper supervision, training, safety, and continuity of
18 employment. The ratio language shall be specific and clear as to application
19 in terms of job site and workforce during normal operations (normally
20 considered to fall between 1:10 and 1:4).
21
22 4. The terms of training shall be stated in hours. The number of hours required
23 for completion to journey-level worker status shall be comparable to the
24 apprenticeship hours established for that craft by the SATC. The following
25 are examples of programs that are currently approved:

26

| CRAFT | HOURS |
|--------------------------|-------------|
| Laborer | 4,000 |
| Ironworker | 6,000 |
| Carpenter | 5,200-8,000 |
| Construction Electrician | 8,000 |
| Operating Engineer | 6,000-8,000 |
| Cement Mason | 5,400 |
| Teamster | 2,100 |

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- 36 5. The method to be used for recording and reporting the training completed
37 shall be stated.
38

39 **Measurement**

40 The Contractor may request that the total number of “training” hours for the contract
41 be increased subject to approval by the Contracting Agency. This reimbursement will
42 be made even though the Contractor receives additional training program funds from
43 other sources, provided such other sources do not prohibit other reimbursement.
44 Reimbursement to the Contractor for off-site training as indicated previously may only
45 be made when the Contractor does one or more of the following and the trainees are
46 concurrently employed on a Federal-aid project:

- 47
- 48 1. contributes to the cost of the training,
 - 49 2. provides the instruction to the trainee,
 - 50 3. pays the trainee’s wages during the off- site training period.
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Reimbursement will be made upon receipt of a certified invoice that shows the related payroll number, the name of trainee, total hours trained under the program, previously paid hours under the contract, hours due this estimate, and dollar amount due this estimate. The certified invoice shall show a statement indicating the Contractor's effort to enroll minorities and women when a new enrollment occurs. If a trainee is participating in a SATC/ATELS approved apprenticeship program, a copy of the certificate showing apprenticeship registration must accompany the first invoice on which the individual appears. Reimbursement for training occurring prior to approval of the training program will be allowed if the Contractor verbally notifies the Engineer of this occurrence at the time the apprentice/trainee commences work. A trainee/apprentice, regardless of craft, must have worked on the contract for at least 20 hours to be eligible for reimbursement.

Training hours that are not in compliance with the approved training plan will not be measured.

Payment

The Contractor will be reimbursed under the item "Training" per hour for each hour of approved training provided under the Contract.

1-07.11.OPT6.FR1

(October 3, 2022)

Small and Veteran-Owned Business Enterprises (SVBE) and Minority and Women's Business Enterprises (MWBE) Participation

General Statement

The participation of minority, small, veteran-owned, and women business enterprises are an important strategic objective for the State of Washington. Contractors shall not create barriers to open and fair opportunities for all businesses, including MWBEs and SVBEs, to participate in the Work on this Contract.

SVBE and MWBE Abbreviations and Definitions

Broker - A business firm that provides a bona fide service, that assists in the procurement of personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or persons/companies who arrange or expedite transactions (i.e., arranging a transaction or service but does not provide a work product or enhancement).

Commercially Useful Function (CUF) – A firm performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by performing, managing, and supervising the work involved. To perform a commercially useful function, the firm must also be responsible, with respect to materials and supplies used on the contract, for ordering, negotiating price, paying for, determining quality and quantity, and installing (where applicable) for the material itself.

The SVBE or MWBE firm does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or Project through which the funds are passed to obtain the appearance of SVBE or MWBE participation.

Good Faith Efforts – Efforts to achieve either the SVBE Condition of Award (COA) goals at the time of Bid or the SVBE Commitments in the SVB Plan at the completion

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of the project. The efforts will demonstrate, by their scope, intensity, and appropriateness to the objective, that the bidder can reasonably be expected to fulfill the program requirement.

Manufacturer (SVBE or MWBE) – An SVBE or MWBE 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 produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Minority Business Enterprise (MBE) – A minority owned business meeting the requirements of RCW 39.19 and WAC 326-20 and certified by the Washington State Office of Minority & Women’s Business Enterprises.

MWBE Goals (Voluntary) – Efforts to provide MWBE opportunities are encouraged in accordance with these Specifications and RCW 39.19.

Goals for voluntary MWBE participation have been established as a percentage of Contractor’s total Bid amount.

The Contracting Agency has established the following two voluntary goals:

| | |
|----------|-----|
| Minority | 10% |
| Women | 6% |

Small Business Enterprise (SBE) – Any business that is owned and operated independently from all other businesses, has either fifty or fewer employees or has a gross revenue of less than seven million dollars annually as listed on federal tax returns or with the Washington State Department of Revenue, and is self-certified through the Washington State Department of Enterprise Services and listed as a “small, mini or micro business” in its certification.

Small businesses can be located by searching the directories at:

<https://pr-webs-vendor.des.wa.gov/>

Information on how to search the WEBS directories is located at:

<https://www.des.wa.gov/services/contracting-purchasing/doing-business-state/webs-registration-search-tips>

SVBE COA Goals – At the time of bid, this is the minimum dollar amount of participation that the Bidder must commit to by submission of the SVB Plan and/or by Good Faith Effort (GFE). Each goal is expressed as a percentage of the Bid amount (as shown on the Proposal). There are two separate COA Goals that must be met: one for Small Business Enterprises and one for Veteran-Owned Businesses.

The Contracting Agency has established the following two enforceable COA Goals:

| | |
|--------------------------------------|------------------|
| Small Business Enterprise (SBE) Goal | *** \$1\$ \$ *** |
| Veteran-Owned Business (VOB) Goal | *** \$2\$ \$ *** |

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SVBE Commitment – The dollar amount and scope of work the Bidder indicates on each line of their Small and Veteran-Owned Business Plan (SVB Plan) (WSDOT Form 226-018) for each SBE or VOB firm. These Commitments will be incorporated into the Contract and shall be considered Contract requirements.

Subcontractor (SVBE or MWBE) – An individual, partnership, firm, corporation, or joint venture who meet the definition of a Minority, Small Business, Women or Veteran-Owned Business and who is sublet part of the Contract.

Supplier (SVBE or MWBE) – A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Supplier, the SVBE or MWBE firm must be an established business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Supplier in such items as steel, cement, gravel, stone, and petroleum products need not own, operate, or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of suppliers’ own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers’ representatives, or other persons who arrange or expedite transactions shall not be regarded as Suppliers within the meaning of this definition.

Veteran-Owned Business (VOB) – A veteran-owned business meeting the requirements of RCW 43.60A.010 and listed at: <https://pr-webs-vendor.des.wa.gov/>.

Information on how to search the WEBS directories is located at:

<https://www.des.wa.gov/services/contracting-purchasing/doing-business-state/webs-registration-search-tips>

Women Business Enterprise (WBE) – A women owned business meeting the requirements of RCW 39.19 and WAC 326-20 and certified by the Washington State Office of Minority & Women’s Business Enterprises.

Procedures Prior to Award

SVBE Goals (Enforceable)

SVBE COA Goals

The Contractor shall submit their SVB Plan (WSDOT Form 226-018) to demonstrate attainment of the SBE and VOB COA Goals. SBE and VOB Goals are independent. Work shown in the SVB Plan shall not apply to both SBE and VOB Goals. If the Contractor cannot meet these goals, a Good Faith Effort (GFE) is required.

Demonstrating compliance with the SBE and VOB COA Goals is a Condition of Award of this Contract. Failure to comply with these requirements may result in the Bid being found nonresponsive.

SVBE Commitment

The Contractor is required to utilize each SBE or VOB firm identified on their SVB Plan (WSDOT Form 226-018) for each scope of work and dollar amount listed. A firm that is registered as both a SBE and VOB may split the

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total commitment between VOB and SBE to attain the SBE and VOB COA Goals.

SVB Plan

To be eligible for award of the Contract, the Bidder shall properly complete and submit a Small and Veterans-Owned Business Plan. (SVB Plan). The SVB Plan shall be submitted on WSDOT Form 226-018. The Bidder’s SVB Plan shall be submitted as specified in Section 1-02.9. The SVB Plan must clearly demonstrate how the Bidder intends to meet both the SBE and VOB COA Goals. An SVB Plan (WSDOT Form 226-018) and instructions on how to properly fill out the form are included in the Proposal package.

When the Bidder elects to utilize force account Work to meet the SBE or VOB COA Goals, as shown on its SVB Plan, the Bidder shall not commit more than 50% of the force account bid item amount.

In the event of arithmetic errors in completing the SVB Plan, the amount listed to be applied towards the SBE or VOB Goals for each SVBE firm shall govern and the SVBE total amount shall be adjusted accordingly.

To be eligible for inclusion in the SVB Plan, SBE or VOB firms committed must be certified as described herein prior to the due date for bids on the Contract.

Written Confirmation

Prior to the award of the Contract and as specified in Section 1-02.9, the Contractor shall submit Subcontractor Written Confirmation Form (WSDOT Form 226-017) documentation from each SVBE firm listed on the SVB Plan confirming their participation on the Contract for each amount listed in the SVB Plan.

Selection of Successful Bidder/Good Faith Efforts (GFE)

The Contracting Agency will consider as non-responsive and will reject any Bid Proposal submitted that does not contain a properly completed SVB Plan that shows compliance with the SBE and VOB COA goals.

Compliance with the SVBE COA Goals requirements may be accomplished in one of two ways:

1. By meeting the SVBE COA Goals
Submission of the SVB Plan, showing the Bidder has obtained enough SBE or VOB participation to meet or exceed each of the SVBE COA Goals

2. By documentation that the Bidder made adequate GFE to meet the SVBE COA Goals

The Bidder may demonstrate a GFE in whole or part through GFE documentation ONLY IN THE EVENT a Bidder’s efforts to solicit sufficient SVBE participation have been unsuccessful. The Bidder must supply GFE documentation in addition to the SVB Plan.

GFE documentation shall be submitted as specified in Section 1-02.9.

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Document Submittal Requirements

The Contracting Agency will review the GFE documentation and will determine if the Bidder made an adequate GFE.

GFE Documentation Prior to Award

GFE is evaluated when determining award of a Contract that has SVBE COA Goals. The efforts employed by the Bidder should be commercially reasonable and demonstrate they are actively and aggressively trying to fulfill the established SVBE COA Goals. Mere pro forma efforts are not commensurate with a GFE.

The following is a list of types of actions, which would be considered as part of the Bidder's GFE to achieve SVBE 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. Soliciting through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified SVBE firms who have the capability to perform the Work of the Contract. The Bidder must solicit this interest within sufficient time to allow the SVBE to respond to the solicitation. The Bidder must determine with certainty if the SVBE firms are interested by taking appropriate steps to follow up initial solicitations.
2. Selecting portions of the Work to be performed by SVBEs to increase the likelihood that the SVBE COA Goals will be achieved. This includes, where appropriate, breaking out Contract Work items into economically feasible units to facilitate SVBE participation, even when the Bidder might otherwise prefer to perform these Work items with its own forces.
3. Providing interested SVBEs with adequate information about the Plans, Specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation.
 - a. Negotiating in good faith with interested SVBEs. It is the Bidder's responsibility to make a portion of the Work available to SVBEs and to select those portions of the Work or material needs consistent with the available SVBEs, to facilitate SVBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of SVBEs that were considered; a description of the information provided regarding the Plans and Specifications for the Work selected for subcontracting; and evidence as to why additional agreements could not be reached for SVBE firms to perform the Work.
 - b. A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including SVBE subcontractors, and would take a firm's price and capabilities as well as the SVBE COA Goals into consideration. However, the fact that there may be some additional costs involved in finding and

1 using SVBEs is not in itself sufficient reason for a Bidder's failure
2 to meet the SVBE COA Goals, as long as such costs are
3 reasonable. Also, the ability or desire of a Bidder to perform the
4 Work of a Contract with its own organization does not relieve the
5 Bidder of the responsibility to make a GFE. Bidders are not,
6 however, required to accept higher quotes from SVBE firms if the
7 price difference is excessive or unreasonable.
8

- 9 4. Not rejecting SVBE firms as being unqualified without sound reasons
10 based on a thorough investigation of their capabilities. The Bidder's
11 standing within its industry, membership in specific groups,
12 organizations, or associations and political or social affiliations (for
13 example union vs. non-union employee status) are not legitimate
14 causes for the rejection or non-solicitation of bids in the Bidder's
15 efforts to meet the SVBE COA Goals.
16
- 17 5. Making efforts to assist interested SVBE firms in obtaining bonding,
18 lines of credit, or insurance as required by the recipient or Bidder.
19
- 20 6. Making efforts to assist interested SVBE firms in obtaining necessary
21 equipment, supplies, materials, or related assistance or services.
22
- 23 7. Effectively using the services of available organizations as allowed on
24 a case-by-case basis to provide assistance in the recruitment and
25 placement of SVBE firms.
26
- 27 8. Documentation of GFE must include copies of each SVBE and non-
28 SVBE subcontractor quotes submitted to the Bidder when a non-
29 SVBE subcontractor is selected over a SVBE for Work on the
30 Contract.
31

32 **Administrative Reconsideration of GFE Documentation Prior to Award**

33 A Bidder has the right to request reconsideration if the GFE documentation
34 submitted with their Bid was determined to be inadequate:
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- 36 1. The Bidder must request within 48 hours of notification of being
37 nonresponsive or forfeit the right to reconsideration.
38
- 39 2. The reconsideration decision on the adequacy of the Bidder's GFE
40 documentation shall be made by an official who did not take part in
41 the original determination.
42
- 43 3. Only original GFE documentation submitted as a supplement to the
44 Bid shall be considered. The Bidder shall not introduce new
45 documentation at the reconsideration hearing.
46
- 47 4. The Bidder shall have the opportunity to meet in person with the
48 official for the purpose of setting forth the Bidder's position as to why
49 the GFE documentation demonstrates a sufficient effort.
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- 51 5. The reconsideration official shall provide the Bidder with a written
52 decision on reconsideration within five working days of the hearing

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explaining the basis for their finding and at least 48 hours prior to award.

Procedures After Execution

MWBE Plan

The Contractor shall submit a MWBE Participation Plan as a Type 2 Working Drawing within 21 days after execution. The plan shall include the information identified in the guidelines at:

<https://wsdot.wa.gov/sites/default/files/2021-10/OEOWSDOTParticipationPlanDraftingGuidelines.pdf>

The Contractor shall submit an updated MWBE Participation Plan annually on the date the original Participation Plan was submitted. The Contractor shall provide a 30-calendar day review period for WSDOT review and comment on all MWBE Participation Plan submittals.

Commercially Useful Function (CUF)

For SVBE and MWBE subcontractor and lower tier subcontractors, a valid subcontract must fully describe the Scope of Work committed to be performed by the firm. The subcontract shall incorporate requirements of the Contract. Subcontracts of all tiers, including lease agreements, shall be made available upon request.

The Contractor may only take credit for the payments made for work performed by a SVBE or MWBE that is determined to be performing a CUF. Payment must be commensurate with the work performed by the SVBE or MWBE. A SVBE or MWBE that does not perform all of its responsibilities on a contract has not performed a CUF and their work cannot be counted toward SVBE or MWBE Goals.

Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

For a SVBE or MWBE traffic control company to be considered to be performing a CUF, the firm must be in control of its work inclusive of supervision. The firm shall employ a Traffic Control Supervisor who is directly involved in the supervision of the traffic control employees and services.

Crediting Participation

Participation will be evaluated to determine if the Contractor has met both the SVBE Commitments and MWBE Goals at completion of the project.

All non-COA SVBE firms and MWBE firms shall be certified before the subcontract on which they are participating is executed.

When a SVBE or MWBE firm loses its certification, the participation of that SVBE or MWBE firm shall continue to count as SVBE or MWBE participation as long as the subcontract with the SVBE or MWBE firm was executed prior to the date the SVBE or MWBE firm lost its certification.

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Only take credit for that portion of the total dollar value of the work that is equal to the distinct, clearly defined portion of the Work that the SVBE or MWBE performs with its own forces. The value of work performed by the SVBE or MWBE includes the cost of supplies and materials purchased by the SVBE or MWBE and equipment leased by the SVBE or MWBE, for its work on the Contract. Supplies, materials, or equipment obtained by a SVBE or MWBE that are not utilized or incorporated in the Contract work by the SVBE or MWBE will not be eligible for SVBE or MWBE credit.

The supplies, materials, and equipment purchased or leased from the Prime Contractor or its affiliate, including any Contractor's resources available to SVBE or MWBE subcontractors at no cost, shall not be credited.

SVBE or MWBE credit will not be given in instances where the equipment lease includes the operator. The SVBE or MWBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the SVBE or MWBE, but payment is deducted from the Contractor's payment to the SVBE or MWBE is not allowed.

SVBE Commitment

Payments to each SBE or VOB firm shall demonstrate that the Commitments amounts have been met as shown on the SVB Plan.

Participation is credited to the SVBE Commitments upon payment to the SBE or VOB.

MWBE Goals

Amounts paid to a MWBE will be credited to every MWBE Goal for which they are eligible. Participation may be credited for more than one category.

Participation is credited to the MWBE Goals upon payment to the eligible MWBE.

Prime Contractor Credit for Participation (SVBE or MWBE)

Only take credit for that portion of the Work performed that the SVBE or MWBE Prime Contractor did not sublet to other firms.

Subcontractor Credit for Participation

When the Prime contractor, subcontractor or lower tier subcontractor are part of a SVB or MWBE Plan, the following apply:

1. If a Prime Contractor, subcontractor, or lower tier subcontractor subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be counted toward the SBE or VOB Commitments based on the following conditions:
 - a. If a SBE Prime Contractor, subcontractor, or lower tier subcontractor subcontracts to a SBE the value can count toward the SBE Commitment.

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- b. If a SBE Prime Contractor, subcontractor or lower tier subcontractor subcontracts to a non-SBE, the value cannot count toward the SBE Commitment.
 - c. If a VOB Prime Contractor, subcontractor, or lower tier subcontractor subcontracts with a VOB the value can count toward the VOB Commitment.
 - d. If a VOB Prime Contractor, subcontractor, or lower tier subcontractor subcontracts with a non-VOB the value cannot count toward the VOB Commitment.
 - e. Work subcontracted to a non-SVBE does not count towards the SVBE Commitments.
2. If a Prime Contractor, subcontractor, or lower tier subcontractor subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be counted toward the MWBE Goals based on the following conditions:
- a. Work subcontracted to a non-MWBE cannot be counted toward the MWBE goals.
 - b. Work subcontracted to another MWBE can be counted toward every MWBE goal for which the firm holds a certification.
 - c. Work subcontracted by a MWBE firm who also is a SVBE, will be credited toward the SVBE Commitment as described in section 1.
 - d. Work subcontracted to a non-MWBE cannot be counted toward the MWBE goals.

Broker Credit for Participation

When a SVBE or MWBE participates as a broker (i.e., arranging a transaction or service but does not provide a work product or enhancement), only the dollar value of the reasonable fee may count toward the SVBE Commitments or MWBE Goals. For purposes of SVBE or MWBE Brokers, a reasonable fee shall not exceed 5 percent of the total cost of the goods or services brokered.

Manufacturer and Supplier Credit for Participation

If materials or supplies are obtained from a SVBE or MWBE Manufacturer, one hundred percent (100%) of the cost of materials or supplies can count toward the SVBE Commitments or MWBE Goals.

One hundred percent (100%) of the cost of materials or supplies purchased from a SVBE or MWBE Supplier may be credited toward meeting the SVBE Commitments or MWBE Goals. If the role of the SVBE or MWBE Supplier is determined to be that of a pass-through, then no credit will be given for its services. If the role of the SVBE or MWBE Supplier is determined to be that of a Broker, then credit shall be limited to the fee or commission it

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receives for its services, subject to the provision listed in “Broker Credit for Participation.”

Force Account Work

One hundred percent (100%) of the actual amounts paid to a SVBE or MWBE shall count toward the SVBE Commitments or MWBE Goals.

Service Provider Credit for Participation

When a SVBE or MWBE participates as a service provider or consultant and provides a bona fide service such as professional, technical, consultant, or managerial services, 100% of the total cost counts toward the SVBE Commitments or MWBE Goals if the firm performs a CUF.

Trucking Credit for Participation

SVBE or MWBE trucking firm participation may only be credited as participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the firm’s work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine credit for hauling.

The SVBE or MWBE trucking firm must own and operate at least one licensed, insured, and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The firm receives credit 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.

The SVBE or MWBE firm may lease additional trucks from another SVBE or MWBE firm. The Work that a SVBE or MWBE trucking firm performs with trucks it leases from other certified trucking firms qualify for 100% credit.

The trucking Work subcontracted to any non-SVBE or MWBE trucking firm will not receive credit for Work done on the project. The SVBE or MWBE trucking firm may lease trucks from a non-SVBE or MWBE truck leasing company but can only receive credit as SVBE or MWBE participation if the SVBE or MWBE firm uses its own employees as drivers.

SVBE or MWBE credit for a truck broker is limited to the fee/commission that the firm receives for arranging transportation services, subject to the provision listed in “Broker Credit for Participation.”

Reporting Participation for Credit

The Contractor and any subcontractor, supplier, service provider, broker, or manufacturer of any tier that utilize SVBE or MWBE firms to perform Work on the project, shall maintain appropriate records that will enable the Engineer to verify SVBE and MWBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this contract. The Contractor shall report amounts paid in accordance with Section 1-08.1 in order to receive credit for participation.

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Changes in SVBE Commitment

The Contractor shall utilize the SVBE Commitment (COA) firms to perform all of the Work and supply all of the materials for which each is committed unless otherwise approved in writing by the Engineer. Any reduction in the Work committed to any SVBE Commitment (COA) firm, or performance of Work previously designated for a SVBE Commitment (COA) firm by any other firm or by the Contractor’s own forces, shall be considered a termination, and requires the prior written consent of the Engineer. Termination requests shall be submitted in writing to the Engineer, who shall either grant or deny such request in writing. No termination shall become effective unless and until the Engineer provides written approval. Changes to SVBE Commitments will be documented in accordance with Section 1-04.4 and shall be considered amendments to the Contractor’s SVB Plan.

Approval of SBE Termination

Termination of a SVBE Commitment (COA) firm is only allowed in whole or in part for good cause and with written approval of the Engineer. If a SVBE Commitment (COA) firm is terminated without the written approval of the Engineer, the Contractor shall not be entitled to payment for Work or material committed to, but not performed/supplied by, the SVBE Commitment (COA) firm. In addition, the Contractor may be subject to the remedies set forth elsewhere in this Special Provision.

Prior to requesting approval to terminate a SVBE Commitment (COA) firm, the Contractor shall give notice in writing to the SVBE Commitment (COA) firm with a copy to the Engineer of its intent to request to terminate SVBE Commitment (COA) Work and shall cite the cause for doing so, with supporting documentation. The SVBE Commitment (COA) firm shall have five (5) days to respond to the Contractor’s notice. The SVBE Commitment (COA) firm’s response shall either support the termination or advise the Engineer and the Contractor of the reasons it objects to the termination.

Cause for Termination

The Contractor must have good cause to terminate a SVBE Commitment (COA) firm. Good cause includes situations where the SVBE Commitment (COA) firm is unable or unwilling to perform the work of its subcontract. Good cause may exist if:

1. The SVBE Commitment (COA) firm fails or refuses to execute a written contract.
2. The SVBE Commitment (COA) firm fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards.
3. The SVBE Commitment (COA) firm fails or refuses to meet the Contractor’s reasonable nondiscriminatory bond requirements.
4. The SVBE Commitment (COA) firm becomes bankrupt, insolvent, or exhibits credit unworthiness.

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5. The SVBE Commitment (COA) firm is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to federal law or applicable State law.
6. The SVBE Commitment (COA) firm is ineligible to receive SVBE COA credit for the type of work involved.
7. The SVBE Commitment (COA) firm voluntarily withdraws from the project and provides written notice of its withdrawal.
8. The SVBE Commitment (COA) firm's work is deemed unsatisfactory by the Engineer and not in compliance with the Contract.
9. The SVBE Commitment (COA) firm's owner dies or becomes disabled with the result that the SVBE Commitment (COA) firm is unable to complete its work on the Contract.

Good cause does not exist if:

1. The Contractor seeks to terminate a SVBE Commitment (COA) firm so that the Contractor can self-perform the work.
2. The Contractor seeks to terminate a SVBE Commitment (COA) firm so the Contractor can substitute another SVBE firm or non-SVBE firm after Contract Award.
3. The failure or refusal of the SVBE Commitment (COA) firm to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor (e.g., the failure of the Contractor to make timely payments or the unnecessary placing of obstacles in the path of the SVBE Commitment (COA) firm's Work).

Owner-Initiated Changes

In instances where the Engineer makes changes that result in changes to Work that was part of a SVBE Commitment, the Contractor may be directed to substitute for the Work. The Contractor shall notify the Engineer if any owner-initiated change impacts the SVBE commitment, prior to any changes to the Contract. Changes will be addressed in accordance with Section 1-04.4.

Contractor-Initiated Changes

The Contractor cannot change the scope or reduce the amount of Work as part of a SVBE Commitment without good cause. Reducing a SVBE Commitment is viewed as a partial termination, and therefore subject to the termination procedures above.

Quantity Underruns

If a variation in estimated quantities occurs that affects a SVBE Commitment, that unmet Commitment will not be considered a termination, provided that the Contractor can demonstrate that the variation in quantities

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directly impacted the Commitment. The Contractor shall provide such documentation if requested by the Engineer.

The Contractor may be required to substitute other remaining Work to another SVBE firm to meet the dollar amounts committed to in their SVB Plan.

Good Faith Effort (GFE) Documentation After Execution

If the Contractor fails to fulfill the SVBE Commitment to in their SVB Plan, a Good Faith Effort shall be submitted for approval. GFE documentation shall follow the requirements for GFE Documentation Prior to Award.

In addition, the GFE shall address the impact of overruns and underruns on the ability of the Contractor to meet the dollar amounts committed to in their SVB Plan. Overruns and underruns may be considered a reason for not attaining the SVBE dollar amounts committed to in their SVB Plan. The GFE shall include enough information for the Engineer to evaluate the impact the overrun or underrun had on the SVBE participation.

Administrative Reconsideration of GFE Documentation After Execution

When the Contracting Agency's GFE documentation review determines a GFE has no merit, the Contractor has the right to request reconsideration of the Contracting Agency's determination.

1. The Contractor must request reconsideration within five (5) working days of notification of GFE documentation being deemed inadequate.
2. The reconsideration decision on the adequacy of the Contractor's GFE documentation shall be made by an official who did not take part in the original determination.
3. Only original GFE documentation submitted shall be considered. The Contractor shall not introduce new documentation at the reconsideration hearing.
4. The Contractor shall have the opportunity to meet in person with the official for the purpose of setting forth the Contractor's position as to why the GFE documentation demonstrates a sufficient effort.
5. The reconsideration official shall provide the Contractor with a written decision on reconsideration within five (5) working days of the hearing, explaining the basis for their finding.

Remedies for Failure to Meet SVBE Requirements

Upon completion of a project, a Prime Contractor Performance Report will document whether the Contractor met the Commitments in their SVB Plan or GFE. Failure to meet the Commitments in the SVB Plan or provide an acceptable GFE may lead to the following:

1. Suspension of a Contractor's prequalification; and/or

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- 2. Withholding from the Contractor of an amount up to the value of the un-met SBE or VOB Commitments

Failure to utilize the SVBE Commitment (COA) firms listed in the SVB Plan for the Work for which they were listed, unless termination was approved in writing by the Contracting Agency, will be reflected on the Prime Contractor Performance Report.

Payment

Compensation for all costs involved with complying with the conditions of this Special Provision and any other associated SVBE or MWBE requirements are included in payment for the associated Contract items of Work, except otherwise provided in the Specifications.

1-07.11.OPT7.FR1

(October 3, 2022)

Federal Small Business Enterprise Participation

The Federal Small Business Enterprise (FSBE) Program is an element of the Disadvantaged Business Enterprise (DBE) in accordance with the requirements of 49 CFR Part 26.39. Failure to comply with the requirements of this Specification may result in sanctions as provided by the Contract.

FSBE Abbreviations and Definitions

Broker – A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or, persons/companies who arrange or expedite transactions.

Certified Business Description – Specific descriptions of work the FSBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.

Certified Firm Directory – A database of all Minority, Women, and Disadvantaged Business Enterprises, including those identified as a FSBE, currently certified by Washington State. The on-line Directory is available to Bidders for their use in identifying and soliciting interest from FSBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page at: <https://omwbe.diversitycompliance.com>.

Firms certified by OMWBE as SBE, DBE can be used to fulfill the FSBE mandatory goal on a project.

Commercially Useful Function (CUF) – 49 CFR 26.55(c)(1) defines commercially useful function as: “A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine

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whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.”

FSBE – A firm certified by OMWBE as meeting Federal requirements of a small business enterprise. All firms on the OMWBE Certified Firm Directory with the designation of SBE or DBE are FSBEs.

Good Faith Efforts – Efforts to achieve the FSBE Goal or other requirements of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Manufacturer (FSBE) – A FSBE 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 FSBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.

Reasonable Fee (FSBE) – For purposes of Brokers or service providers a reasonable fee shall not exceed 5% of the total cost of the goods or services brokered.

Regular Dealer (FSBE) – A FSBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the FSBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers’ own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers’ representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.

FSBE Goal
The Contracting Agency has established a FSBE Goal for this Contract in the amount of: *** \$\$1\$\$ ***

Crediting FSBE Participation
All FSBE subcontractors shall be certified before the subcontract on which they are participating is executed.

FSBE participation is only credited upon payment to the FSBE.

The following are some definitions of what may be counted as FSBE participation.

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FSBE Prime Contractor

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 FSBE Prime Contractor performs with its own forces and is certified to perform.

FSBE Subcontractor

Only take credit for that portion of the total dollar value of the subcontract that is equal to the distinct, clearly defined portion of the Work that the FSBE performs with its own forces and is certified to perform. The value of work performed by the FSBE includes the cost of supplies and materials purchased by the FSBE and equipment leased by the FSBE, for its work on the contract. Supplies, materials or equipment obtained by a FSBE that are not utilized or incorporated in the contract work by the FSBE will not be eligible for FSBE credit.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to FSBE subcontractors at no cost, shall not be credited.

FSBE credit will not be given in instances where the equipment lease includes the operator. The FSBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the FSBE, but payment is deducted from the Contractor's payment to the FSBE is not allowed.

When the subcontractor is a FSBE, the following apply:

- 1. If a FSBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be counted toward the FSBE Goal only if the lower-tier subcontractor is also a FSBE.
- 2. Work subcontracted to a non-FSBE does not count towards the FSBE Goal nor FSBE participation.

FSBE Subcontract and Lower Tier Subcontract Documents

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the FSBE.

FSBE Service Provider

The value of fees or commissions charged by a FSBE firm behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited as FSBE participation, if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF.

Temporary Traffic Control

If the FSBE firm is being utilized in the capacity of only "Flagging", the FSBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the FSBE. The FSBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

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If the FSBE firm is being utilized in the capacity of “Traffic Control Services”, the FSBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project.

Trucking

FSBE trucking firm participation may only be credited as FSBE participation for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier of those materials. In situations where the FSBE’s work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine FSBE credit for hauling

The FSBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The FSBE receives credit 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.

The FSBE may lease additional trucks from another FSBE firm. The FSBE who leases additional trucks from another FSBE firm receives credit for the value of the transportation services the lessee FSBE provides on the Contract.

The trucking Work subcontracted to any non-FSBE trucking firm will not receive credit for Work done on the project.

The FSBE may lease trucks from a truck leasing company (recognized truck rental center), but can only receive credit towards FSBE participation if the FSBE uses its own employees as drivers.

FSBE Manufacturer and FSBE Regular Dealer

One hundred percent (100%) of the cost of the manufactured product obtained from a FSBE manufacturer can count as FSBE participation. If the manufacturer is a FSBE, participation may count towards the FSBE Goal.

Sixty percent (60%) of the cost of materials or supplies purchased from a FSBE Regular Dealer may be credited as FSBE Participation. If the role of the FSBE Regular Dealer is determined to be that of a Broker, then FSBE credit shall be limited to the fee or commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract-by-Contract basis. If the regular dealer is a FSBE, participation may count towards the FSBE Goal.

FSBE firms proposed to be used as a Regular Dealer must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT’s Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. For purposes of FSBE Goal participation, the Regular Dealer must submit the Regular Dealer Status Request form and receive approval prior to providing any equipment or materials or the signing of a purchase order, invoice, or subcontract.

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Purchase of materials or supplies from a FSBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count as FSBE participation provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the FSBE. The cost of the materials and supplies themselves cannot be counted toward as FSBE participation.

Good Faith Effort Documentation

GFE is evaluated prior to Physical Completion when determining whether the Contractor has satisfied its FSBE Goal.

The Contracting Agency will measure GFE using the guidance in 49 CFR Part 26, Appendix A. The following is a list of the types of actions which may be considered as part of the Contractor's GFE to achieve FSBE 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. Solicited through all reasonable and available means the interest of all certified FSBEs who had the capability to perform the Work of the Contract. The Contractor must have solicited this interest within sufficient time to allow the FSBEs to respond to the solicitation. The Contractor must have determined with certainty that the FSBEs were interested by taking appropriate steps to follow up initial solicitations with potential FSBEs.
2. Selected portions of the Work to be performed by FSBEs in order to increase the likelihood that the FSBE Goal would be achieved. This includes, where appropriate, breaking out contract Work items into economically feasible units to facilitate FSBE participation, even when the Contractor might otherwise prefer to perform these Work items with its own forces.
3. Provided interested FSBEs with adequate information about the Plans, Specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation.
 - a. Negotiated in good faith with interested FSBEs. It is the Contractor's responsibility to make a portion of the Work available to FSBE subcontractors and suppliers and to select those portions of the Work or material needs consistent with the available FSBE subcontractors and suppliers, so as to facilitate FSBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of FSBEs that were contacted; a description of the information provided regarding the Plans and Specifications for the Work selected for subcontracting; and evidence as to why additional agreements could not be reached for FSBEs to perform the Work.
 - b. A Contractor using good business judgment would consider a number of factors in negotiating with subcontractors, including FSBE subcontractors, and would take a firm's price and capabilities as well

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as the FSBE Goal into consideration. The fact that there may be some additional costs involved in finding and using FSBEs is not in itself sufficient reason for a Bidder's failure to meet the FSBE Goal, as long as such costs are reasonable. Also, the ability or desire of a Contractor to perform the Work of a Contract with its own organization does not relieve the Contractor of the responsibility to make Good Faith Efforts. Contractors are not, however, required to accept higher quotes from FSBEs if the price difference was excessive or unreasonable.

4. Not rejecting FSBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the FSBE Goal.
5. Made efforts to assist interested FSBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
6. Made efforts to assist interested FSBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
7. Effectively used the services of available minority/women community organizations; minority/women contractors' groups; local, State, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of FSBEs.
8. Documentation of GFE must include copies of each FSBE and non-FSBE subcontractor quotes submitted to the Bidder when a non-FSBE subcontractor is selected over a FSBE for Work on the Contract.

Procedures after Execution

Commercially Useful Function (CUF)

The Contractor may only take credit for the payments made for Work performed by a FSBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the FSBE. This applies to all FSBEs performing Work on a project, if the Contractor wants to receive credit for their participation. The Engineer will conduct CUF reviews to ascertain whether FSBEs are performing a CUF. A FSBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The FSBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a FSBE does not perform "all" of these functions on a furnish-and-install contract, it has not performed a CUF and the cost of materials cannot be counted toward FSBE Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be provided prior to the Subcontractor beginning Work. Any use of the Contractor's equipment by a FSBE may not be credited as countable participation.

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The FSBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of FSBE participation.

In order for a FSBE traffic control company to be considered to be performing a CUF, the FSBE must be in control of its work inclusive of supervision. The FSBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The following are some of the factors that the Engineer will use in determining whether a FSBE trucking company is performing a CUF:

- The FSBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.
- The FSBE itself shall own and operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the FSBE must be exclusively employed by the FSBE and reflected on the FSBE's payroll.
- Lease agreements for trucks shall indicate that the FSBE has exclusive use of and control over the truck(s). This does not preclude the leased truck from working for others provided it is with the consent of the FSBE and the lease provides the FSBE absolute priority for use of the leased truck.
- Leased trucks shall display the name and identification number of the FSBE.

Truck Unit Listing Log

In addition to the subcontracting requirements of Section 1-08.1, each FSBE trucking firm shall submit supplemental information consisting of a completed Primary UDBE/DBE/FSBE Truck Unit Listing Log (WSDOT Form 350-077) and all Rental/Lease agreements (if applicable). The supplemental information shall be submitted in an electronic format to the Engineer prior to any trucking services being performed for FSBE credit. Incomplete or incorrect supplemental information will be returned for correction. The corrected Primary Truck Unit Listing Log and any Updated Primary Truck Unit Listing Logs shall be submitted and accepted by the Engineer no later than ten calendar days of utilizing applicable trucks. Failure to submit or update the DBE Truck Unit Listing Log may result in trucks not being credited as FSBE participation.

Each FSBE trucking firm shall complete a Daily Truck Unit Listing Log for each day that the FSBE performs trucking services for FSBE credit. The Daily Truck Unit Listing Log forms shall be submitted by Friday of the week after the Work was performed by email to the following email address for the region administering the Contract:

- 1 Eastern Region - ERRegionOEO@wsdot.wa.gov
- 2 North Central Region - NCRRegionOEO@wsdot.wa.gov
- 3 Northwest Region - NWRRegionOEO@wsdot.wa.gov
- 4 Olympic Region - ORegionOEO@wsdot.wa.gov
- 5 South Central Region - SCRegionOEO@wsdot.wa.gov
- 6 Southwest Region - SWRegionOEO@wsdot.wa.gov
- 7 Washington State Ferries - FerriesOEO@wsdot.wa.gov

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Joint Checking

10 A joint check is a check between a subcontractor and the Contractor to the
11 supplier of materials/supplies. The check is issued by the Contractor as payer
12 to the subcontractor and the material supplier jointly for items to be incorporated
13 into the project. The FSBE must release the check to the supplier, while the
14 Contractor acts solely as the guarantor.

15

16 A joint check agreement must be approved by the Engineer and requested by
17 the FSBE involved using the DBE Joint Check Request Form (WSDOT Form
18 #272-053) prior to its use. The form must accompany the FSBE Joint Check
19 Agreement between the parties involved, including the conditions of the
20 arrangement and expected use of the joint checks.

21

22 The approval to use joint checks and the use will be closely monitored by the
23 Engineer. To receive FSBE credit for performing a CUF with respect to obtaining
24 materials and supplies, a FSBE must “be responsible for negotiating price,
25 determining quality and quantity, ordering the material, installing and paying for
26 the material itself.” The Contractor shall submit DBE Joint Check Request Form
27 for the Engineer approval prior to using a joint check.

28

29 Material costs paid by the Contractor directly to the material supplier are not
30 allowed. If proper procedures are not followed or the Engineer determines that
31 the arrangement results in lack of independence for the FSBE involved, no
32 FSBE credit will be given for the FSBE’s participation as it relates to the material
33 cost.

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Prompt Payment

35 Prompt payment to all subcontractors shall be in accordance with Section 1-
36 08.1. Prompt payment requirements apply to progress payments as well as
37 return of retainage.

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Subcontracts

40 Prior to a FSBE performing Work on the Contract, an executed subcontract
41 between the FSBE and the Contractor shall be submitted to the Engineer. The
42 executed subcontracts shall be submitted by email to the following email
43 address for the region administering the Contract:

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- 45 Eastern Region – ERRegionOEO@wsdot.wa.gov
- 46 North Central Region – NCRRegionOEO@wsdot.wa.gov
- 47 Northwest Region – NWRRegionOEO@wsdot.wa.gov
- 48 Olympic Region – ORegionOEO@wsdot.wa.gov
- 49 South Central Region – SCRegionOEO@wsdot.wa.gov
- 50 Southwest Region – SWRegionOEO@wsdot.wa.gov
- 51 Washington State Ferries – FerriesOEO@wsdot.wa.gov

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Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize FSBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify FSBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this contract.

Decertification

When a FSBE is “decertified” from the FSBE program during the course of the Contract, the participation of that FSBE shall continue to count as FSBE participation as long as the subcontract with the FSBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a FSBE does not have an executed subcontract agreement at the time of decertification.

Sanctions

If it is determined that the Contractor’s failure to meet all or part of the FSBE Goal is due to the Contractor’s inadequate good faith efforts throughout the life of the Contract, including failure to submit timely, required Good Faith Efforts information and documentation, the Contractor may be required to pay FSBE penalty equal to the amount of the unmet Goal, in addition to the sanctions outlined in Section 1-07.11(5).

Payment

Compensation for all costs involved with complying with the conditions of this Specification and any other associated FSBE requirements is included in payment for the associated Contract items of Work, except otherwise provided in the Specifications.

~~1-07.11.OPT8.FR1~~

~~**(October 3, 2022)**~~

~~**Disadvantaged Business Enterprise Participation**~~

~~The Disadvantaged Business Enterprise (DBE) requirements of 49 CFR Part 26 and USDOT’s official interpretations (i.e., Questions & Answers) 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 resulting in rejection or other sanctions as provided by Contract.~~

~~**DBE Abbreviations and Definitions**~~

~~**Broker**—A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or, persons/companies who arrange or expedite transactions.~~

~~**Certified Business Description**—Specific descriptions of work the DBE is certified to perform, as identified in the Certified Firm Directory, under the Vendor Information page.~~

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~~**Certified Firm Directory**—A database of all Minority, Women, and Disadvantaged Business Enterprises currently certified by Washington State. The on-line Directory is available to Contractors for their use in identifying and soliciting interest from DBE firms. The database is located under the Firm Certification section of the Diversity Management and Compliance System web page (<https://wsdot.diversitycompliance.com>).~~

~~**Commercially Useful Function (CUF)**~~

~~49 CFR 26.55(c)(1) defines commercially useful function as: “A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, you must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.”~~

~~**Contract**—For this provision only, this definition supplements Section 1-01.3. 49 CFR 26.5 defines contract as: “... a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services) and the buyer to pay for them. For purposes of this part, a lease is considered to be a contract.”~~

~~**Disadvantaged Business Enterprise (DBE)**—A business firm certified by the Washington State Office of Minority and Women’s Business Enterprises, as meeting the criteria outlined in 49 CFR 26 regarding DBE certification.~~

~~**DBE Commitment**—The dollar amount the Contractor indicates they will be subcontracting to be applied towards the DBE Condition of Award Goal as shown on the DBE Utilization Certification Form for each DBE subcontractor. This DBE Commitment amount will be incorporated into the Contract and shall be considered a Contract requirement. Any changes to the DBE Commitment shall require Engineer’s approval.~~

~~**DBE Condition of Award (COA) Goal**—An assigned numerical percentage of the Bid amount of the Contract. This is the minimum amount that the Bidder must commit to by submission of the Utilization Certification Form and/or by Good Faith Effort (GFE). The DBE COA Goal will also be applied to change orders associated with this Contract.~~

~~**Force Account Work**—Work measured and paid in accordance with Section 1-09.6.~~

~~**Good Faith Efforts**—Efforts to achieve the DBE COA Goal or other requirements of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.~~

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~~**Manufacturer (DBE)**—A DBE 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 DBE Manufacturer shall produce finished goods or products from raw or unfinished material or purchase and substantially alters goods and materials to make them suitable for construction use before reselling them.~~

~~**Regular Dealer (DBE)**—A DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of a Contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a Regular Dealer, the DBE firm must be an established regular business that engages in as its principal business and in its own name the purchase and sale of the products in question. A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum products need not own, operate or maintain a place of business if it both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long-term formal lease agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions shall not be regarded as Regular Dealers within the meaning of this definition.~~

~~**DBE COA Goal**~~

~~The Contracting Agency has established a COA Contract Goal in the amount of: ***
\$\$1\$\$ ***~~

~~**DBE Eligibility/Selection of DBEs**~~

~~In order to determine the distinct element(s) of work for which a DBE is certified, Contractors should refer to the Certified Business Description. The Contractor shall not use NAICS codes on the DBE Utilization Certification.~~

~~**Crediting DBE Participation**~~

~~Subcontractors proposed as COA must be certified prior to the due date for bids on the Contract. All non COA DBE subcontractors shall be certified before the subcontract on which they are participating is executed.~~

~~Be advised that although a firm is listed in the Certified Firm Directory, there are cases where the listed firm is in a temporary suspension status. The Contractor shall review the OMWBE Suspended DBE Firms list. A DBE firm that is included on this list may not enter into new contracts that count towards participation.~~

~~DBE participation cannot be counted toward the Contractor's contract goal until the amount being counted has actually been paid to the DBE including return of retainage.~~

~~In all cases the DBE must be certified in advance for the work being considered and performing a CUF during the execution of the Work. The following are some examples of what may be counted as DBE participation.~~

~~**DBE Prime Contractor**~~

~~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 Contractor performs with its own forces and is credited to perform.~~

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DBE Subcontractor

Only take credit for that portion of the total dollar value of the subcontract that is equal to the distinct, clearly defined portion of the Work that the DBE performs with its own forces. The value of work performed by the DBE includes the cost of supplies and materials purchased by the DBE and equipment leased by the DBE, for its work on the contract. Supplies, materials or equipment obtained by a DBE that are not utilized or incorporated in the contract work by the DBE will not be eligible for DBE credit unless the DBE is certified as a supplier or equipment leasing company.

The supplies, materials, and equipment purchased or leased from the Contractor or its affiliate, including any Contractor's resources available to DBE subcontractors at no cost, shall not be credited.

DBE credit will not be given in instances where the equipment lease includes the operator. The DBE is expected to operate the equipment used in the performance of its work under the contract with its own forces. Situations where equipment is leased and used by the DBE, but payment is deducted from the Contractor's payment to the DBE is not allowed.

If a DBE subcontracts a portion of the Work of its contract to another firm, the value of the subcontracted Work may be counted toward the DBE COA Goal only if the DBE's lower tier subcontractor is also a DBE. Work subcontracted to a non-DBE does not count towards the DBE COA Goal.

DBE Subcontract and Lower Tier Subcontract Documents

There must be a subcontract agreement that complies with 49 CFR Part 26 and fully describes the distinct elements of Work committed to be performed by the DBE. The subcontract agreement shall incorporate requirements of the primary Contract. Subcontract agreements of all tiers, including lease agreements shall be readily available at the project site for the Engineer's review.

DBE Service Provider

The value of fees or commissions charged by a DBE Broker, a DBE behaving in a manner of a Broker, or another service provider for providing a bona fide service, such as professional, technical, consultant, managerial services, or for providing bonds or insurance specifically required for the performance of the contract will only be credited towards meeting the DBE COA Goal if the fee/commission is determined by the Contracting Agency to be reasonable and the firm has performed a CUF. Documentation will be required to support the fee/commission charged by the DBE.

Force Account Work

When the Contractor elects to utilize force account Work to meet the DBE COA Goal, as demonstrated by listing this force account Work on the DBE Utilization Certification Form, for the purposes of meeting DBE COA Goal, only 50% of the Proposal amount shall be credited toward the Contractors Commitment to meet the DBE COA Goal.

One hundred percent of the actual amounts paid to the DBE for the force account Work shall be credited towards DBE COA Goal or DBE participation.

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Temporary Traffic Control

If the DBE firm is being utilized in the capacity of only “Flagging”, the DBE firm must provide a Traffic Control Supervisor (TCS) and flagger, which are under the direct control of the DBE. The DBE firm shall also provide all flagging equipment (e.g. paddles, hard hats, and vests).

If the DBE firm is being utilized in the capacity of “Traffic Control Services”, the DBE firm must provide a TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be in total control of all items in implementing the traffic control for the project. In addition if the DBE firm utilizes the Contractor’s equipment, such as Transportable Attenuators and Portable Changeable Message Signs (PCMS) no DBE credit can be taken for supplying and operating the items.

Trucking

DBE trucking firm participation may only be credited to the DBE COA Goal for the value of the hauling services, not for the materials being hauled unless the trucking firm is also certified as a supplier. In situations where the DBE’s work is priced per ton, the value of the hauling service must be calculated separately from the value of the materials in order to determine DBE credit for hauling.

The DBE trucking firm must own and operate at least one licensed, insured and operational truck on the contract. The truck must be of the type that is necessary to perform the hauling duties required under the contract. The DBE receives credit 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.

The DBE may lease additional trucks from another DBE firm.

The trucking Work subcontracted to any non-DBE trucking firm will not receive credit for Work done on the project. The DBE may lease trucks from a non-DBE truck leasing company, but can only receive credit towards DBE participation if the DBE uses its own employees as drivers.

DBE credit for a truck broker is limited to the fee/commission that the DBE receives for arranging transportation services.

Truck registration and lease agreements shall be readily available at the project site for the Engineer review.

DBE Manufacturer and DBE Regular Dealer

One hundred percent (100%) of the cost of the manufactured product obtained from a DBE manufacturer may count toward the DBE COA Goal. The DBE Manufacturer shall be certified as such by OMWBE.

Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited toward meeting the DBE COA Goal. If the role of the DBE Regular Dealer is determined to be that of a pass-through, then no DBE credit will be given for its services. If the role of the DBE Regular Dealer is determined to be that of a Broker, then DBE credit shall be limited to the fee or

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~~commission it receives for its services. Regular Dealer status and the amount of credit is determined on a Contract by Contract basis.~~

~~Regular Dealer DBE firms must be approved before being used on a project. The WSDOT Approved Regular Dealer list published on WSDOT's Office of Equal Opportunity (OEO) web site must include the specific project for which approval is being requested. For purposes of the DBE COA Goal participation, the Regular Dealer must submit the Regular Dealer Status Request form a minimum of five days prior to bid opening.~~

~~Purchase of materials or supplies from a DBE which is neither a manufacturer nor a regular dealer, (i.e. Broker) only the fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can count toward DBE COA Goal, provided the fees are not excessive as compared with fees customarily allowed for similar services. Documentation will be required to support the fee/commission charged by the DBE. The cost of the materials and supplies themselves cannot be counted toward DBE COA Goal.~~

~~Note: Requests to be listed as a Regular Dealer will only be processed if the requesting firm is a material supplier certified by the Office of Minority and Women's Business Enterprises in a NAICS code that falls within the 42XXXX NAICS Wholesale code section.~~

~~Disadvantaged Business Enterprise Utilization~~

~~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 in 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 (WSDOT Form 272-056) is included in your Proposal package for this purpose as well as instructions on how to properly fill out the form.~~

~~The Bidder is advised that the items listed below when listed in the Utilization Certification must have their amounts reduced to the percentages shown and those reduced amounts will be the amount applied towards meeting the DBE COA Goal.~~

- ~~• Force account at 50%~~
- ~~• Regular dealer at 60%~~

~~In the event of arithmetic errors in completing the Disadvantaged Business Enterprise Utilization Certification the amount listed to be applied towards the DBE COA 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 Form that accurately demonstrates how the Bidder intends to meet the DBE COA Goal.~~

1 **~~Disadvantaged Business Enterprise Written Confirmation Document(s)~~**

2 ~~The Bidder shall submit a Disadvantaged Business Enterprise Written Confirmation~~
3 ~~Document (completed and signed by the DBE) for each DBE firm listed in the~~
4 ~~Bidder's completed Disadvantaged Business Enterprise Utilization Certification~~
5 ~~submitted with the Bid. Failure to do so will result in the associated participation being~~
6 ~~disallowed, which may cause the Bid to be determined to be nonresponsive resulting~~
7 ~~in Bid rejection.~~

8
9 ~~The Confirmation Documents provide confirmation from the DBEs that they are~~
10 ~~participating in the Contract as provided in the Contractor's Commitment. The~~
11 ~~Confirmation Documents must be consistent with the Utilization Certification.~~

12
13 ~~A Disadvantaged Business Enterprise Written Confirmation Document (form No.~~
14 ~~422-031) is included in your Proposal package for this purpose.~~

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16 ~~The form(s) shall be received as specified in the special provisions for Section 1-02.9~~
17 ~~Delivery of Proposal.~~

18
19 ~~It is prohibited for the Bidder to require a DBE to submit a Written Confirmation~~
20 ~~Document with any part of the form left blank. Should the Contracting Agency~~
21 ~~determine that an incomplete Written Confirmation Document was signed by a DBE,~~
22 ~~the validity of the document comes into question. The associated DBE participation~~
23 ~~may not receive credit.~~

24
25 **~~Selection of Successful Bidder/Good Faith Efforts (GFE)~~**

26 ~~The successful Bidder shall be selected on the basis of having submitted the lowest~~
27 ~~responsive Bid, which demonstrates a good faith effort to achieve the DBE COA~~
28 ~~Goal. The Contracting Agency, at any time during the selection process, may request~~
29 ~~a breakdown of the bid items and amounts that are counted towards the overall~~
30 ~~contract goal for any of the DBEs listed on the DBE Utilization Certification.~~

31
32 ~~Achieving the DBE COA Goal may be accomplished in one of two ways:~~

33
34 ~~1. By meeting the DBE COA Goal~~

35 ~~Submission of the DBE Utilization Certification and supporting DBE Written~~
36 ~~Confirmation Document(s) showing the Bidder has obtained enough DBE~~
37 ~~participation to meet or exceed the DBE COA Goal.~~

38
39 ~~2. By documentation that the Bidder made adequate GFE to meet the DBE~~
40 ~~COA Goal~~

41 ~~The Bidder may demonstrate a GFE in whole or part through GFE~~
42 ~~documentation ONLY IN THE EVENT a Bidder's efforts to solicit sufficient~~
43 ~~DBE participation have been unsuccessful. The Bidder must supply GFE~~
44 ~~documentation in addition to the Disadvantaged Business Enterprise~~
45 ~~Utilization Certification, and supporting Disadvantaged Business Enterprise~~
46 ~~(DBE) Written Confirmation Document(s).~~

47
48 ~~Note: In the case where the Bidder was awarded the contract based on~~
49 ~~demonstrating adequate GFE the advertised DBE COA Goal will not be~~
50 ~~reduced. The Bidder shall demonstrate a GFE during the life of the~~
51 ~~Contract to attain the advertised DBE COA Goal.~~

1 ~~GFE documentation shall be received, as specified in the special provisions for~~
2 ~~Section 1-02.9 Delivery of Proposal.~~

3
4 ~~The Contracting Agency will review the GFE documentation and will determine if the~~
5 ~~Bidder made an adequate good faith effort.~~

6
7 **Good Faith Effort (GFE) Documentation**

8 GFE is evaluated when:

- 9
10 1. ~~Determining award of a Contract that has COA goal,~~
11
12 2. ~~When a COA DBE is terminated and substitution is required, and~~
13
14 3. ~~Prior to Physical Completion when determining whether the Contractor has~~
15 ~~satisfied its DBE commitments.~~

16
17 ~~49 CFR Part 26, Appendix A is intended as general guidance and does not, in itself,~~
18 ~~demonstrate adequate good faith efforts. The following is a list of types of actions,~~
19 ~~which would be considered as part of the Bidder's GFE to achieve DBE participation.~~
20 ~~It is not intended to be a mandatory checklist, nor is it intended to be exclusive or~~
21 ~~exhaustive. Other factors or types of efforts may be relevant in appropriate cases.~~

- 22
23 1. ~~Soliciting through all reasonable and available means (e.g. attendance at~~
24 ~~pre-bid meetings, advertising and/or written notices) the interest of all~~
25 ~~certified DBEs who have the capability to perform the Work of the Contract.~~
26 ~~The Bidder must solicit this interest within sufficient time to allow the DBEs~~
27 ~~to respond to the solicitation. The Bidder must determine with certainty if~~
28 ~~the DBEs are interested by taking appropriate steps to follow up initial~~
29 ~~solicitations.~~
30
31 2. ~~Selecting portions of the Work to be performed by DBEs in order to increase~~
32 ~~the likelihood that the DBE COA Goal will be achieved. This includes, where~~
33 ~~appropriate, breaking out contract Work items into economically feasible~~
34 ~~units to facilitate DBE participation, even when the Contractor might~~
35 ~~otherwise prefer to perform these Work items with its own forces.~~
36
37 3. ~~Providing interested DBEs with adequate information about the Plans,~~
38 ~~Specifications, and requirements of the Contract in a timely manner to~~
39 ~~assist them in responding to a solicitation.~~
40
41 a. ~~Negotiating in good faith with interested DBEs. It is the Bidder's~~
42 ~~responsibility to make a portion of the Work available to DBE~~
43 ~~subcontractors and suppliers and to select those portions of the Work~~
44 ~~or material needs consistent with the available DBE subcontractors~~
45 ~~and suppliers, so as to facilitate DBE participation. Evidence of such~~
46 ~~negotiation includes the names, addresses, and telephone numbers~~
47 ~~of DBEs that were considered; a description of the information~~
48 ~~provided regarding the Plans and Specifications for the Work selected~~
49 ~~for subcontracting; and evidence as to why additional agreements~~
50 ~~could not be reached for DBEs to perform the Work.~~
51

1 b. ~~A Bidder using good business judgment would consider a number of~~
2 ~~factors in negotiating with subcontractors, including DBE~~
3 ~~subcontractors, and would take a firm's price and capabilities as well~~
4 ~~as the DBE COA Goal into consideration. However, the fact that there~~
5 ~~may be some additional costs involved in finding and using DBEs is~~
6 ~~not in itself sufficient reason for a Bidder's failure to meet the DBE~~
7 ~~COA Goal, as long as such costs are reasonable. Also, the ability or~~
8 ~~desire of a Contractor to perform the Work of a Contract with its own~~
9 ~~organization does not relieve the Bidder of the responsibility to make~~
10 ~~Good Faith Efforts. Contractors are not, however, required to accept~~
11 ~~higher quotes from DBEs if the price difference is excessive or~~
12 ~~unreasonable.~~

13
14 4. ~~Not rejecting DBEs as being unqualified without sound reasons based on a~~
15 ~~thorough investigation of their capabilities. The Contractor's standing within~~
16 ~~its industry, membership in specific groups, organizations, or associations~~
17 ~~and political or social affiliations (for example union vs. non-union employee~~
18 ~~status) are not legitimate causes for the rejection or non-solicitation of bids~~
19 ~~in the Contractor's efforts to meet the DBE COA Goal.~~

20
21 5. ~~Making efforts to assist interested DBEs in obtaining bonding, lines of credit,~~
22 ~~or insurance as required by the recipient or Contractor.~~

23
24 6. ~~Making efforts to assist interested DBEs in obtaining necessary equipment,~~
25 ~~supplies, materials, or related assistance or services.~~

26
27 7. ~~Effectively using the services of available minority/women community~~
28 ~~organizations; minority/women contractors' groups; local, State, and~~
29 ~~Federal minority/women business assistance offices; and other~~
30 ~~organizations as allowed on a case by case basis to provide assistance in~~
31 ~~the recruitment and placement of DBEs.~~

32
33 8. ~~Documentation of GFE must include copies of each DBE and non-DBE~~
34 ~~subcontractor quotes submitted to the Bidder when a non-DBE~~
35 ~~subcontractor is selected over a DBE for Work on the Contract. (ref.~~
36 ~~updated DBE regulations—26.53(b)(2)(vi) & App. A)~~

37
38 **Administrative Reconsideration of GFE Documentation**

39 Any Bidder has the right to reconsideration but only for the purpose of reassessing
40 the GFE documentation that was originally submitted with their Bid, and determined
41 to be inadequate.

42
43 • ~~The Bidder must request within 48 hours of notification of being~~
44 ~~nonresponsive or forfeit the right to reconsideration.~~

45
46 • ~~The reconsideration decision on the adequacy of the Bidder's GFE~~
47 ~~documentation shall be made by an official who did not take part in the~~
48 ~~original determination.~~

49
50 • ~~Only original GFE documentation submitted as a supplement to the Bid~~
51 ~~shall be considered. The Bidder shall not introduce new documentation at~~
52 ~~the reconsideration hearing.~~

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- ~~• 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 working days of the hearing explaining the basis for their finding.~~

~~Procedures between Award and Execution~~

~~After Award and prior to Execution, the Contractor shall provide the additional information described below. Failure to comply shall result in the forfeiture of the Bidder's Proposal bond or deposit.~~

- ~~1. A DBE Bid Item Breakdown is required which shall contain the following information for all DBEs 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 DBE with a clear description of Work to be performed for each Bid item and the dollar value of the Work to be performed by the DBE.~~
 - ~~c. Description of partial items (if any) to be sublet to each DBE specifying the Work committed under each item to be performed and including the dollar value of the DBE portion.~~
 - ~~d. Total amounts shown for each DBE shall match the amount shown on the Disadvantaged Business Enterprise Utilization Certification. A DBE Bid Item Breakdown that does not conform to the Disadvantaged Business Enterprise Utilization Certification or that demonstrates a different 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 attempt to participate in this project whether they were successful or not. Include the business name and mailing address.~~

~~Note: The firms identified by the 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~~

~~Commercially Useful Function (CUF)~~

~~The Contractor may only take credit for the payments made for Work performed by a DBE that is determined to be performing a CUF. Payment must be commensurate with the work actually performed by the DBE. This applies to all DBEs performing Work on a project, whether or not the DBEs are COA, if the Contractor wants to receive credit for their participation. The Engineer will~~

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conduct CUF reviews to ascertain whether DBEs are performing a CUF. A DBE performs a CUF when it is carrying out its responsibilities of its contract by actually performing, managing, and supervising the Work involved. The DBE must be responsible for negotiating price; determining quality and quantity; ordering the material, installing (where applicable); and paying for the material itself. If a DBE does not perform "all" of these functions on a furnish and install contract, it has not performed a CUF and the cost of materials cannot be counted toward DBE COA Goal. Leasing of equipment from a leasing company is allowed. However, leasing/purchasing equipment from the Contractor is not allowed. Lease agreements shall be readily available for review by the Engineer.

In order for a DBE traffic control company to be considered to be performing a CUF, the DBE must be in control of its work inclusive of supervision. The DBE shall employ a Traffic Control Supervisor who is directly involved in the management and supervision of the traffic control employees and services.

The DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which the funds are passed in order to obtain the appearance of DBE participation.

The following are some of the factors that the Engineer will use in determining whether a DBE trucking company is performing a CUF:

- The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on the contract. The owner demonstrates business related knowledge, shows up on site and is determined to be actively running the business.
- The DBE shall with its own workforce, operate at least one fully licensed, insured, and operational truck used on the Contract. The drivers of the trucks owned and leased by the DBE must be exclusively employed by the DBE and reflected on the DBE's payroll.
- Lease agreements for trucks shall indicate that the DBE has exclusive use of and control over the truck(s). 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 absolute priority for use of the leased truck.
- Leased trucks shall display the name and identification number of the DBE.

DBE Utilization Plan

The DBE Bid Item Breakdown is the initial plan for Bid Item work committed to DBE firms. When a Contractor identifies a change in the plan, an update shall be submitted within 7 calendar days between Execution and Physical Completion. Plan updates shall not make changes to the Commitment or the DBE Utilization Certification.

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Joint Checking

A joint check is a check between a subcontractor and the Contractor to the supplier of materials/supplies. The check is issued by the Contractor as payer to the subcontractor and the material supplier jointly for items to be incorporated into the project. The DBE must release the check to the supplier, while the Contractor acts solely as the guarantor.

A joint check agreement must be approved by the Engineer and requested by the DBE involved using the DBE Joint Check Request Form (form # 272-053) prior to its use. The form must accompany the DBE Joint Check Agreement between the parties involved, including the conditions of the arrangement and expected use of the joint checks.

The approval to use joint checks and the use will be closely monitored by the Engineer. To receive DBE credit for performing a CUF with respect to obtaining materials and supplies, a DBE must "be responsible for negotiating price, determining quality and quantity, ordering the material, installing and paying for the material itself." The Contractor shall submit DBE Joint Check Request Form for the Engineer approval prior to using a joint check.

Material costs paid by the Contractor directly to the material supplier are not allowed. If proper procedures are not followed or the Engineer determines that the arrangement results in lack of independence for the DBE involved, no DBE credit will be given for the DBE's participation as it relates to the material cost.

Prompt Payment

Prompt payment to all subcontractors shall be in accordance with Section 1-08.1. Prompt payment requirements apply to progress payments as well as return of retainage.

Reporting

The Contractor and all subcontractors/suppliers/service providers that utilize DBEs to perform work on the project, shall maintain appropriate records that will enable the Engineer to verify DBE participation throughout the life of the project.

Refer to Section 1-08.1 for additional reporting requirements associated with this contract.

Changes in COA Work Committed to DBE

The Contractor shall utilize the COA DBEs to perform the work and supply the materials for which each is committed unless a change is approved by the Engineer. The Contractor shall not be entitled to any payment for work or material completed by the Contractor or subcontractors that was committed to be completed by the COA DBEs.

Owner Initiated Changes

Where the Engineer makes changes that result in changes to Work that was committed to a COA DBE. The Contractor may be directed to substitute for the Work in such instances.

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~~Contractor Initiated Changes~~

~~The Contractor cannot reduce the amount of work committed to a COA DBE without good cause. Reducing DBE Commitment is viewed as partial DBE termination, and therefore subject to the termination procedures below.~~

~~Original Quantity Underruns~~

~~In the event that Work committed to a DBE firm as part of the COA underruns the original planned quantities the Contractor may be required to substitute the remaining applicable Work to another DBE.~~

~~Contractor Proposed DBE Substitutions~~

~~Requests to substitute a COA DBE must be for good cause (see DBE termination process below), and requires prior written approval of the Engineer. After receiving a termination with good cause approval, the Contractor may only replace a DBE with another certified DBE. When any changes between Contract Award and Execution result in a substitution of COA DBE, the substitute DBE shall be certified prior to the bid opening on the Contract.~~

~~DBE Termination~~

~~Termination of a COA DBE (or an approved substitute DBE) is only allowed in whole or in part with prior written approval of the Engineer. If the Contractor terminates a COA DBE without the written approval of the Engineer, the Contractor shall not be entitled to credit towards the DBE COA Goal for any payment for work or material performed/supplied by the COA DBE. In addition sanctions may apply as described elsewhere in this specification.~~

~~The Contractor must have good cause to terminate a COA DBE.~~

~~Good cause typically includes situations where the DBE subcontractor is unable or unwilling to perform the work of its subcontract. Good cause may exist if:~~

- ~~• The DBE fails or refuses to execute a written contract.~~
- ~~• The DBE fails or refuses to perform the Work of its subcontract in a way consistent with normal industry standards.~~
- ~~• The DBE fails or refuses to meet the Contractor's reasonable nondiscriminatory bond requirements.~~
- ~~• The DBE becomes bankrupt, insolvent, or exhibits credit unworthiness.~~
- ~~• The DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to federal law or applicable State law.~~
- ~~• The DBE voluntarily withdraws from the project, and provides written notice of its withdrawal.~~
- ~~• The DBE's work is deemed unsatisfactory by the Engineer and not in compliance with the Contract.~~

- ~~• The DBE's owner dies or becomes disabled with the result that the DBE is unable to complete its Work on the Contract.~~

~~Good cause does not exist if:~~

- ~~• The Contractor seeks to terminate a COA DBE so that the Contractor can self-perform the Work.~~
- ~~• The Contractor seeks to terminate a COA DBE so the Contractor can substitute another DBE contractor or non-DBE contractor after Contract Award.~~
- ~~• The failure or refusal of the COA DBE to perform its Work on the subcontract results from the bad faith or discriminatory action of the Contractor (e.g., the failure of the Contractor to make timely payments or the unnecessary placing of obstacles in the path of the DBE's Work).~~

~~Prior to requesting termination, the Contractor shall give notice in writing to the DBE with a copy to the Engineer of its intent to request to terminate DBE Work and the reasons for doing so. The DBE shall have five (5) days to respond to the Contractor's notice. The DBE's response shall either support the termination or advise the Engineer and the Contractor of the reasons it objects to the termination of its subcontract.~~

~~When a COA DBE is terminated, or fails to complete its work on the Contract for any reason, the Contractor shall substitute with another DBE or provide documentation of GFE. A plan to achieve the COA DBE Commitment shall be submitted to the Engineer within 2 days of the approval of termination or the Contract shall be suspended until such time the substitution plan is submitted.~~

~~**Decertification**~~

~~When a DBE is "decertified" from the DBE program during the course of the Contract, the participation of that DBE shall continue to count towards the DBE COA Goal as long as the subcontract with the DBE was executed prior to the decertification notice. The Contractor is obligated to substitute when a DBE does not have an executed subcontract agreement at the time of decertification.~~

~~**Consequences of Non-Compliance**~~

~~**Breach of Contract**~~

~~Each contract with a Contractor (and each subcontract the Contractor signs with a subcontractor) must include the following assurance clause:~~

~~The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the 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 recipient deems appropriate, which may include, but is not limited to:~~

- ~~(1) Withholding monthly progress payments;~~

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~~(2) Assessing sanctions;~~

~~(3) Liquidated damages; and/or~~

~~(4) Disqualifying the Contractor from future bidding as non-responsible.~~

Notice

~~If the Contractor or any subcontractor, Consultant, Regular Dealer, or service provider is deemed to be in non-compliance, the Contractor will be informed in writing, by certified mail by the Engineer that sanctions will be imposed for failure to meet the DBE COA Commitment and/or submit documentation of good faith efforts. The notice will state the specific sanctions to be imposed which may include impacting a Contractor or other entity's ability to participate in future contracts.~~

Sanctions

~~If it is determined that the Contractor's failure to meet all or part of the DBE COA Commitment is due to the Contractor's inadequate good faith efforts throughout the life of the Contract, including failure to submit timely, required Good Faith Efforts information and documentation, the Contractor may be required to pay DBE penalty equal to the amount of the unmet Commitment, in addition to the sanctions outlined in Section 1-07.11(5).~~

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, except otherwise provided in the Specifications.~~

1-07.12.GR1

Federal Agency Inspection

1-07.12.INST1.GR1

Section 1-07.12 is supplemented with the following:

1-07.12.OPT1.GR1

~~(July 25, 2022~~**October 3, 2023)**

Required Federal Aid Provisions

The Required Contract Provisions Federal Aid Construction Contracts (FHWA 1273) Revised ~~July 5, 2022~~**October 23, 2023** and the amendments thereto 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, as amended, are less restrictive than Washington State Law, then the Washington State Law shall prevail.

The provisions of FHWA 1273, as amended, included in this Contract require that the Contractor insert the FHWA 1273 and amendments thereto in each subcontract, together with the wage rates which are part of the FHWA 1273, as amended. Also, a clause shall be included in each subcontract requiring the subcontractors to insert the FHWA 1273 and amendments 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

1 subcontractors. For this purpose, upon request to the Engineer, the Contractor will be
2 provided with extra copies of the FHWA 1273, the amendments thereto, the applicable
3 wage rates, and this Special Provision.
4

5 1-07.12.OPT2.FR1

6 **(October 3, 2022)**

7 ***Indian Preference and Tribal Ordinances***

8 This project is located on the *** \$\$1\$\$ ***. It is the Contractor's responsibility to contact
9 the person and/or office listed in this special provision to determine whether any tribal
10 laws or taxes apply. If the tribal laws and taxes do apply, the Contractor shall comply with
11 them in accordance with Section 1-07.1. For informational purposes only, the Work on
12 this project that falls within Tribal Lands is shown on the Summary of Quantities in
13 Group(s) *** \$\$2\$\$ ***.
14

15 Tribal Employment Rights Ordinances (TEROs) may utilize a variety of tools to encourage
16 Indian employment. These tools may include, but are not limited to, TERO fees, Indian
17 hiring preference, Indian-owned business subcontracting preference and/or an Indian
18 training requirement. Other requirements may be a Tribal business license, a required
19 compliance plan and/or employee registration requirements. Every tribe is different and
20 each may be willing to work cooperatively with the Contractor to develop a strategy that
21 works for both parties. For specific details, the Contractor should contact *** \$\$3\$\$ ***.
22

23 The state recognizes the sovereign authority of the tribe and supports the tribe's efforts
24 to enforce its rightful and legal ordinances and expects the Contractor to comply and
25 cooperate with the tribe. The costs related to such compliance shall be borne solely by
26 the Contractor, who is advised to contact the tribal representative listed above, prior to
27 submitting a bid, to assess the impact of compliance on the project.
28

29 Although Indian preference cannot be compelled or mandated by the Contracting Agency,
30 there is no limitation whereby voluntary Contractor or subcontractor-initiated preferences
31 are given, if otherwise lawful. 41 CFR 60-1.5(a)7 provides as follows:
32

33 Work on or near Indian reservations --- It shall not be a violation of the equal
34 opportunity clause for a construction or non-construction Contractor to extend a
35 publicly announced preference in employment to Indians living on or near an Indian
36 reservation in connection with employment opportunities on or near an Indian
37 reservation. The use of the word *near* would include all that area where a person
38 seeking employment could reasonably be expected to commute to and from in the
39 course of a work day. Contractors or subcontractors extending such a preference
40 shall not, however, discriminate among Indians on the basis of religion, sex, or tribal
41 affiliation, and the use of such a preference shall not excuse a Contractor from
42 complying with the other requirements as contained in the August 25, 1981
43 Department of Labor, Office of Federal Contract Compliance Programs, Government
44 Contractors Affirmative Actions Requirements.
45

46 1-07.15.GR1

47 **Temporary Water Pollution Prevention**

48
49 1-07.15(1).GR1

50 ***Spill Prevention, Control, and Countermeasures Plan***

51

1 1-07.15(1).INST1.GR1
2 Section 1-07.15(1) is supplemented with the following:
3
4 1-07.15(1).OPT1.GR1
5 (November 2, 2022)
6 The Contractor shall immediately notify the Engineer and the WSF Terminal
7 Supervisor of any spill, including, but not limited to, petroleum products, hydraulic
8 fluid, chemical materials or liquids, and sewage. If neither the Engineer nor the WSF
9 Terminal Supervisor is available, the Contractor shall immediately notify the WSF
10 Operations Center at (206) 515-3456.
11
12 1-07.16.GR1
13 **Protection and Restoration of Property**
14
15 1-07.16(1).GR1
16 ***Private/Public Property***
17
18 1-07.16(1)C.GR1
19 **Private Property**
20
21 1-07.16(1)C.INST1.GR1
22 Section 1-07.16(1)C is supplemented with the following:
23
24 1-07.16(1)C.OPT1.GR1
25 (October 3, 2022)
26 The Contractor shall not access the worksite from adjacent properties without
27 permission from the Engineer. The Contractor shall submit a Type 2 Working
28 Drawing to the Engineer in accordance with Section 1-05.3 prior to accessing
29 the project site from adjacent properties. The Working Drawing shall include the
30 methods, materials, equipment, and restoration measures used to access the
31 worksite.
32
33 1-07.16(1)C.OPT2.GR1
34 (October 3, 2022)
35 The Contractor is not to use adjoining property without first obtaining written
36 permission from adjacent property owner(s), and notifying the Engineer, in
37 writing, when such permission has been granted prior to occupying or using
38 adjoining property.
39
40 1-07.16(2).GR1
41 ***Vegetation Protection and Restoration***
42
43 1-07.16(2).INST1.GR1
44 Section 1-07.16(2) is supplemented with the following:
45
46 1-07.16(2).OPT1.GR1
47 (August 2, 2010)
48 Vegetation and soil protection zones for trees shall extend out from the trunk to a
49 distance of 1 foot radius for each inch of trunk diameter at breast height.
50
51 Vegetation and soil protection zones for shrubs shall extend out from the stems at
52 ground level to twice the radius of the shrub.

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

1-07.16(4).GR1

Archaeological and Historical Objects

1-07.16(4).INST1.GR1

Section 1-07.16(4) is supplemented with the following:

1-07.16(4).OPT1.GR1

(December 6, 2004)

The project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint. To protect these objects from damage or destruction, the Contracting Agency, at its discretion and expense, may monitor the Contractor's operations, conduct various site testing and perform recovery and removal of such objects when necessary.

The Contractor may be required to conduct its operations in a manner that will accommodate such activities, including the reserving of portions of the work area for site testing, exploratory operations and recovery and removal of such objects as directed by the Engineer. If such activities are performed by consultants retained by the Contracting Agency, the Contractor shall provide them adequate access to the project site.

Added work necessary to uncover, fence, dewater, or otherwise protect or assist in such testing, exploratory operations and salvaging of the objects as ordered by the Engineer shall be paid by force account as provided in Section 1-09.6. If the discovery and salvaging activities require the Engineer to suspend the Contractor's work, any adjustment in time will be determined by the Engineer pursuant to Section 1-08.8.

To provide a common basis for all bidders, the Contracting Agency has entered an amount for the item "Archaeological and Historical Salvage" in the Proposal to become a part of the total bid by the Contractor.

1-07.17.GR1

Utilities and Similar Facilities

1-07.17.INST1.GR1

Section 1-07.17 is supplemented with the following:

1-07.17.OPT1.FR1

(April 2, 2007)

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

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

*** \$\$1\$\$ ***

1 1-07.17.OPT2.FR1
2 (October 3, 2022)
3 Locations and dimensions shown in the Plans for existing facilities are in accordance with
4 available information obtained without uncovering, measuring, or other verification.
5

6 Public and private utilities, or their Contractors, will furnish all work necessary to adjust,
7 relocate, replace, or construct their facilities unless otherwise provided for in the Plans or
8 these Special Provisions. Such adjustment, relocation, replacement, or construction will
9 be done during the prosecution of the work for this project. It is anticipated that utility
10 adjustment, relocation, replacement, or construction within the project limits will be
11 completed as follows:

12 *** \$\$1\$\$ ***

13
14
15 The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer,
16 all affected subcontractors, and all utility owners and their Contractors prior to beginning
17 onsite work.
18

19 The following addresses and telephone numbers of utility companies or their Contractors
20 that will be adjusting, relocating, replacing or constructing utilities within the project limits
21 are supplied for the Contractor's use:
22

23 *** \$\$2\$\$ ***

24
25 *** \$\$3\$\$ ***
26

27 1-07.18.GR1
28 **Public Liability and Property Damage Insurance**
29

30 ~~1-07.18(1).GR1~~
31 ***Insurance Provider Requirements***
32

33 ~~1-07.18(1).INST1.GR1~~
34 ~~Section 1-07.18(1) is supplemented with the following:~~
35

36 ~~1-07.18(1).OPT1.2024.GR1~~
37 ~~(March 9, 2023)~~
38 ~~Under no circumstances shall a wrap up policy be obtained, for either initiating or~~
39 ~~maintaining coverage, to satisfy insurance requirements for any policy required~~
40 ~~under this section. A wrap up policy is defined as an insurance agreement or~~
41 ~~arrangement under which all the parties working on a specified or designated project~~
42 ~~are insured under one policy for liability arising out of that specified or designated~~
43 ~~project.~~
44

45 **1-07.18(5).GR1**
46
47 ***Required Insurance Policies***
48

49 1-07.18(5).INST1.GR1
50 The first sentence of Item No. 1 of Section 1-07.18(5) is revised to read:
51

- 1 1-07.18(5).OPT2.2025.GR1
- 2 (November 20, 2023)
- 3 1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and
- 4 property damage liability coverage, with limits of \$3,000,000 per occurrence and
- 5 per project in the aggregate for each policy period, which shall be written solely
- 6 on Insurance Services Office (ISO) form CG0009 1204, together with Washington
- 7 State Department of Transportation amendatory endorsement CG 2908 0999,
- 8 specifying the Contracting Agency, the State, the Governor, the Commission, the
- 9 Secretary, the Department, and all officers and employees of the State as named
- 10 insured.
- 11
- 12 1-07.18(5).OPT1.FR1
- 13 (~~September 7, 2021~~ November 20, 2023)
- 14 1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and
- 15 property damage liability coverage, with limits of *** \$\$1\$\$ *** per occurrence
- 16 and per project in the aggregate for each policy period, which will be written
- 17 solely on Insurance Services Office (ISO) form CG0009 1204, together with
- 18 Washington State Department of Transportation amendatory endorsement CG
- 19 2908 ~~11950999~~, specifying the Contracting Agency, the State, the Governor, the
- 20 Commission, the Secretary, the Department and all officers and employees of
- 21 the State as named insured.
- 22
- 23 1-07.18(5).OPT2.GR1
- 24 (September 7, 2021)
- 25 Item number 1 of Section 1-07.18(5) is deleted.
- 26
- 27 1-07.18(5).INST2.GR1
- 28 The first sentence of Item No. 2 of Section 1-07.18(5) is revised to read:
- 29
- 30 1-07.18(5).OPT3.GR1
- 31 (September 7, 2021)
- 32 2. Commercial General Liability (CGL) Insurance written under ISO Form CG0001
- 33 with minimum limits of \$1,000,000 per occurrence and in the aggregate for each
- 34 one-year policy period.
- 35
- 36 1-07.18(5).OPT4.FR1
- 37 (September 7, 2021)
- 38 2. Commercial General Liability (CGL) Insurance written under ISO Form CG0001
- 39 with minimum limits of *** \$\$1\$\$ *** per occurrence and in the aggregate for
- 40 each 1-year policy period.
- 41
- 42 1-07.18(5).INST3.GR1
- 43 Section 1-07.18(5) is supplemented with the following:
- 44
- 45 1-07.18(5).OPT5.GR1
- 46 **(October 3, 2022)**
- 47 **Builder's Risk Insurance**
- 48 Builder's Risk Insurance providing Broad Perils (All Risk) coverage upon any work at
- 49 the site, to the full insurable value thereof. This insurance shall include the
- 50 Contractor, its subcontractors of every tier, and the State of Washington as named
- 51 insured on the policy. Coverage shall be included for all materials and supplies to be

1 incorporated into the work at the jobsite, while in transit to the jobsite, or while stored
2 away from the jobsite.

3
4 1-07.18(5).OPT6.FR1
5 (October 3, 2022)

6 The Contractor shall obtain Contractor's Pollution Liability Insurance (CPL) with
7 minimum "per project" limits of *** \$\$1\$\$ *** per occurrence and in the aggregate for
8 claims, including investigation, defense, or settlement costs and expenses for bodily
9 injury and property damage (including natural resources damages and loss of use of
10 tangible property that has not been physically injured) arising out of:

11
12 a. Pollution conditions caused or made worse by the Contractor's
13 performance of the Work, including clean-up costs for a newly caused
14 condition or a historical condition that is made worse; and;

15
16 b. The vicarious liability of subcontractors of any tier.

17
18 The Contractor shall be Named Insured and the Contracting Agency, the State, the
19 Governor, the Commission, the Secretary, the Department, all officers and
20 employees of the State, and their respective members, directors, officers,
21 employees, agents, and consultants (collectively the "Additional Insureds") shall be
22 included as Additional Insureds, or, as appropriate, a Named Insured, under this
23 policy and coverage.

24
25 1-07.23.GR1

26 **Public Convenience and Safety**

27
28 1-07.23(1).GR1

29 ***Construction Under Traffic***

30
31 1-07.23(1).INST1.GR1

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

33
34 1-07.23(1).OPT1.FB1

35 (March 13, 1995)

36 During the hours that cleaning and painting operations are actually in progress, traffic
37 may be restricted as follows:

38
39 *** \$\$1\$\$ ***

40
41 Whenever the Contractor's operations require lane reductions restricting the flow of
42 traffic on multiple lanes in the same direction, the Contractor shall furnish, maintain,
43 and operate a sequential arrow sign, for each lane closure, as specified in the Special
44 Provision **SEQUENTIAL ARROW SIGN**.

45
46 If the Engineer determines that such lane restrictions are causing traffic congestion,
47 the Contractor shall open all lanes to traffic until the congestion is eliminated.

48
49 For movable span structures, the Contractor's operations shall be arranged to permit
50 the opening of the moveable span whenever required by marine traffic.

51
52 Bridge sidewalks shall be kept clear and open to maintain safe pedestrian traffic.

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1-07.23(1).OPT4.GR1

(December 6, 2004)

The portion of Section 1-07.16(1) that prohibits the merging of construction vehicles with public traffic from an access gained through adjacent properties is rescinded, provided the Contractor's submittal is approved as required below.

Access for Construction

The Contractor may enter and leave the traveled way, auxiliary lanes or shoulders at approved locations other than established legal movements. To obtain approval of such an access location, the Contractor shall submit a request to the Engineer. The Contractor's request shall be submitted to the Engineer at least 30 calendar days prior to the time the use of the access will be required. This submittal shall include a vicinity map indicating the interstate stationing at the centerline of the access, distances from the end of ramp tapers of existing interchanges and a traffic control plan conforming with the requirements specified in Section 1-10.2(2). The access shall meet the following requirements:

- Access to and from the worksite adjacent to a multi-lane facility will only be allowed to and from a closed lane.
- The merging point of construction vehicles and public traffic shall provide a Decision Sight Distance for the traveling public of 1,640 ft in urban areas and 1,360 ft in rural areas.
- In urban areas the access shall not be located within 3,280 ft of the end of a ramp taper, or the centerline of a road approach. In rural areas the access shall not be located within 2,720 ft of the end of a ramp taper or the centerline of a road approach.
- Median crossings within 1.5 miles of the access point shall not be used in conjunction with the access.
- No new median crossings shall be created for use in conjunction within 1.5 miles of the access point.
- Short-duration shoulder stops in the construction zone, utilizing light vehicles properly equipped with warning flashers, will be allowed without a lane closure.
- When in use the access location shall have traffic control in place as per Section 1-10. Unauthorized use of the access from adjacent property is to be prohibited by the use of signing and/or flaggers as conditions warrant.
- The continuity of the existing drainage system shall be maintained through the access site.
- Air borne particulates created as a result of using the access shall be effectively controlled.

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- The access location shall not adversely affect wetlands or other sensitive areas.

At the completion of the project, the Contractor shall restore the area of the access site to its original, pre-contract, condition. Any damage to the traveled way, shoulders, auxiliary lanes, side slopes or other items caused by the access shall be repaired. All work to comply with this provision or to build, maintain, provide erosion control, control airborne particulates, ensure that drainage continues through the access site, provide traffic control when necessary, remove the temporary access and restore the surrounding area when no longer required for use are the responsibility of the Contractor. The Contractor shall include all related costs in the bid prices of the contract.

1-07.23(1).OPT5.FR1
(February 6, 2023)

Lane, ramp, shoulder, and roadway closures are subject to the following restrictions:

*** \$\$1\$\$ ***

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

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

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After *** \$\$2\$\$ *** on the day prior to a holiday or holiday weekend, and
4. Before *** \$\$3\$\$ *** on the day after the holiday or holiday weekend.
5. The two-hour period prior to and the two-hour period after the following special events:

*** \$\$4\$\$ ***

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

Traffic Delays

When Automated Flagger Assistance Devices (AFADs) or flaggers are used to control traffic, traffic shall not be stopped for more than *** \$\$5\$\$ *** minutes at any time. All traffic congestion shall be allowed to clear before traffic is delayed again.

1 If the delay becomes greater than *** \$\$\$ \$\$\$\$ *** minutes, the Contractor shall
2 immediately begin to take action to cease the operations that are causing the delays.
3 If the *** \$\$\$ \$\$\$\$ *** minute delay limit has been exceeded, as determined by the
4 Engineer, the Contractor shall provide to the Engineer, a written proposal to revise
5 his work operations to meet the *** \$\$\$ \$\$\$\$ *** minute limit. This proposal shall be
6 accepted by the Engineer prior to resuming any work requiring traffic control.
7

8 There shall be no delay to medical, fire, or other emergency vehicles. The Contractor
9 shall alert all flaggers and personnel of this requirement.
10

11 **General Restrictions**

12 Construction vehicles using a closed traffic lane shall travel only in the normal
13 direction of traffic flow unless expressly allowed in an accepted traffic control plan.
14 Construction vehicles shall be equipped with flashing or rotating amber lights.
15

16 No two consecutive on-ramps, off-ramps, or intersections shall be closed at the same
17 time and only one ramp at an interchange shall be closed, unless specifically shown
18 in the Plans.
19

20 Roads or ramps that are designated as part of a detour shall not be closed or
21 restricted during the implementation of that detour, unless specifically shown in the
22 Plans.
23

24 **Controlled Access**

25 No special access or egress shall be allowed by the Contractor other than normal
26 legal movements or as shown in the Plans.
27

28 Contractor's vehicles of 10,000 GVW or greater shall not exit or enter a lane open to
29 public traffic except as follows:
30

31 Egress and ingress shall only occur during the hours of allowable lane closures,
32 and:
33

- 34 1. For exiting an open lane of traffic, by decelerating in a lane that is
35 closed during the allowable hours for lane closures.
36
- 37 2. For entering an open lane of traffic, by accelerating in a closed lane
38 during the allowable hours for lane closures.
39

40 Traffic control vehicles are excluded from the gross vehicle weight requirement. If
41 placing construction signs will restrict traveled lanes, then the work will be permitted
42 during the hours of allowable lane closures.
43

44 **Advance Notification**

45 The Contractor shall notify the Engineer in writing of any traffic impacts related to
46 lane closure, shoulder closure, sidewalk closure, or any combination for the week by
47 12:00 p.m. (noon) Wednesday the week prior to the stated impacts.
48

49 The Contractor shall notify the Engineer in writing ten working days in advance of
50 any traffic impacts related to full roadway closure, ramp closure, or both.
51

1 The Contractor shall notify the Engineer in writing of any changes to the stated traffic
2 impacts a minimum of 48 hours prior to the traffic impacts.
3
4 1-07.23(1).OPT6.GR1
5 (April 14, 2014)
6 Physical reductions of the width of thru travelling lanes are subject to the following
7 restrictions:
8
9 The Contractor shall not reduce the travelled way to a single lane with a clear
10 width of less than 16 feet for a duration that exceeds 4 calendar days without
11 prior approval of the Engineer. The Contractor shall submit a request for a width
12 reduction that exceeds 4 calendar days to the Engineer no later than 30 calendar
13 days prior to the start of the proposed width reduction. At a minimum, this
14 request shall include:
15
16 1. Schedule showing the planned beginning date and end date of the
17 width reduction.
18 2. Plans showing the limits and cross-sections showing the clear
19 distance provided during the width reduction.
20 3. Details of available detour routes.
21 4. Plan to provide temporary windows of a minimum 16 foot width
22 periodically during the width reduction, where possible.
23
24 The Engineer will reply, in writing, to the request within 7 calendar days. The
25 Contractor shall immediately notify the Engineer if there are any changes to the
26 schedule for the width reduction.
27
28 1-07.23(1).OPT7.FR1
29 **(October 3, 2022)**
30 **Public Notification**
31 The Contractor shall furnish and install information signs that provide advance
32 notification of a ramp closure, roadway closure, or both, a minimum of *** \$\$1\$\$ ***
33 working days prior to the closure. Sign locations, messages, letter sizes, and sign
34 sizes are shown in the Plans.
35
36 The Contractor shall notify *** \$\$2\$\$ ***; in writing, a minimum of *** \$\$3\$\$ ***
37 working days prior to each closure. The Contractor shall furnish copies of these
38 notifications to the Engineer.
39
40 1-07.23(1).OPT8.FR1
41 **(October 3, 2022)**
42 **Maintenance and Protection of Ferry Traffic**
43 *** \$\$1\$\$ *** is a single-slip terminal. The slip must remain fully operational during
44 all phases of construction.
45
46 The Contractor shall not interfere with terminal or vessel operations of the slips such
47 that ferries do not arrive or depart on time. Every effort shall be made to ensure that
48 construction materials and equipment remain within the bounds of designated
49 staging areas as outlined in the Special Provisions.
50
51 The Contractor shall promptly and diligently remove any equipment, workers, or
52 materials from the traveled way and shall promptly and diligently move any vessels,

1 equipment, materials, or workers from the slip a minimum of 10 minutes prior to the
2 scheduled or anticipated arrival of a ferry until 5 minutes subsequent to the departure
3 of the ferry.
4

5 A safe environment for ferry operations, including vessels, vehicles, Washington
6 State Ferries employees, and passengers — both offshore and on the dock — shall
7 be maintained at all times.
8

9 The Contractor shall shield welding activities from ferries to protect the vision of the
10 captains to the satisfaction of the Engineer. Welding activities shall be shielded to
11 protect the safety of all persons in the area. Shielding is defined as surrounding the
12 work area with a material through which light or spark are not transmitted.
13

14 The Contractor shall assign one employee to monitor approaching vessels and alert
15 other workers to evacuate the work area if required. The worker will be equipped with
16 an air horn or similar device suitable to warn workers and a radio capable of
17 communicating with the ferry vessel captains.
18

19 Temporary steel plates shall not be used on the vehicle or pedestrian traveled way
20 in any location for more than three calendar days.
21

22 **Payment**

23 All costs associated with maintenance and protection of traffic shall be incidental to
24 and included in all other items of work.
25

26 1-07.23(1).OPT9.GR1

27 **(October 3, 2022)**

28 **Maintenance and Protection of Ferry Traffic**

29 The Contractor shall maintain access to and from the ferry vessels for both
30 pedestrian and vehicular traffic at all times. The Contractor shall promptly and
31 diligently remove any equipment, employees, or materials that would impede or delay
32 ferry vessel arrivals or departures. The Contractor shall provide and maintain such
33 barriers, barricades, signs, and lighting necessary to protect and safeguard
34 pedestrians and vehicles as shown in the Plans. The Contractor shall keep all
35 sidewalks, crosswalks, and other pedestrian routes and access points open and clear
36 at all times unless permitted otherwise by the Engineer in an approved traffic control
37 plan.
38

39 Temporary steel plates shall not be used on the vehicle or pedestrian traveled way
40 in any location for more than three calendar days.
41

42 **Payment**

43 All costs associated with maintenance and protection of traffic shall be incidental to
44 and included in other items of work.
45

46 1-07.23(1).OPT10.GR1

47 **(October 3, 2022)**

48 If July 4 occurs on a Tuesday, the prior Monday and Friday are considered to be part
49 of a holiday weekend. If July 4 occurs on a Thursday, the following Friday and
50 Monday are considered to be part of a holiday weekend.
51

1 1-07.24.GR1

2 **Rights of Way**

3

4 1-07.24.INST1.GR1

5 Section 1-07.24 is supplemented with the following:

6

7 1-07.24.OPT1.FR1

8 (March 13, 1995)

9 The Contracting Agency has not completed the acquisition of title to the following
10 described property:

11

12 *** \$\$1\$\$ ***

13

14 The Contractor shall not perform any work within these limits until ordered to do so by the
15 Engineer. The Contracting Agency has estimated that the above described property will
16 be available *** \$\$2\$\$ ***.

17

18 1-07.24.OPT2.GR1

19 **(October 3, 2022)**

20 **Sundry Site Plan**

21 The Sundry Site Plan is included in the Plans for the benefit of the Contractor. It is meant
22 to give a graphical representation of the properties in the vicinity of the project site.

23

24 The Sundry Site Plan gives information necessary for locating Right-of-Way (R/W) lines,
25 construction permit boundaries and permanent or construction easements.

26

27 Areas identified within R/W are made available to the Contractor for use as indicated in
28 the Plans and Special Provisions.

29

30 1-07.28.GR1

31 **Railroads**

32

33 1-07.28.INST1.GR1

34 Section 1-07.28 is supplemented with the following:

35

36 1-07.28.OPT1.FR1

37 **(October 3, 2022)**

38 **Additional Requirements for Working with the Railroad**

39 The term Railroad Company shall be understood to mean each of the following railroad
40 companies:

41

42 *** \$\$1\$\$ ***

43

44 The Contractor shall keep the right of way and ditches of the Railroad Company open and
45 clean from any deposits or debris resulting from its operations. The Contractor shall be
46 responsible for the cost to clean and restore ballast of the Railroad Company which is
47 disturbed or becomes fouled with dirt or materials when such deposits or damage result
48 from the Contractor's operations, except as provided elsewhere.

49

50 The Contractor shall cooperate with the Railroad Company and so conduct operations
51 that the necessary reconstruction of its facilities and the removal of existing facilities can
52 be accomplished without interruption of service.

1
2 1-07.28.OPT2.FR1
3 (October 3, 2022)
4 The Contracting Agency has or will enter into an agreement with the Railroad Company
5 as specified in these provisions as contained in Appendix *** \$\$1\$\$ ***.
6
7 1-07.28.OPT3.FR1
8 **(October 3, 2022)**
9 **Construction Work by Railroad Company**
10 The work by the Railroad Company as described below will be performed by the Railroad
11 Company with its own forces at no cost to the Contractor:
12
13 *** \$\$1\$\$ ***
14
15 1-07.28(1).GR1
16 **General**
17
18 1-07.28(1).INST1.GR1
19 Section 1-07.28(1) is supplemented with the following:
20
21 1-07.28(1).OPT1.FR1
22 **(October 3, 2022)**
23 **Contractor's Right of Entry Agreement**
24 The Contractor shall obtain a Right of Entry Agreement from the railroad. For all
25 matters regarding the Contractor's Right of Entry Agreement, the Contractor shall
26 contact:
27
28 *** \$\$1\$\$ ***
29
30 The Contracting Agency has furnished a SAMPLE Contractor's Right of Entry
31 Agreement in Appendix *** \$\$2\$\$ ***. The SAMPLE Contractor's Right of Entry
32 Agreement is an example which represents the Contracting Agency's assessment of
33 the likely terms and conditions prior to Advertisement for Bids. The final terms and
34 conditions will be determined by the Railroad Company after Contract Execution.
35
36 The Contractor is at sole risk for the amount of time it takes to obtain the Right of
37 Entry Agreement from the Railroad Company. Delays in obtaining the right of entry
38 agreement shall not be eligible for a time extension or an equitable adjustment.
39
40 1-07.28(2).GR1
41 **Submittals and Working Drawings**
42
43 1-07.28(2).INST1.GR1
44 Section 1-07.28(2) is supplemented with the following:
45
46 1-07.28(2).OPT1.FR1
47 (October 3, 2022)
48 The Engineer will require up to *** \$\$1\$\$ *** calendar days from the date a Working
49 Drawing is received until it is returned to the Contractor. If a submittal is returned
50 unapproved and then resubmitted, then an additional review time for each
51 subsequent resubmittal of up to *** \$\$2\$\$ *** calendar days will be required.
52

1 1-07.28(6).GR1
2 **Railroad Protective Services**
3
4 1-07.28(6).INST1.GR1
5 Section 1-07.28(6) is supplemented with the following:
6
7 1-07.28(6).OPT1.FR1
8 (October 3, 2022)
9 The Contractor shall notify the Railroad Company a minimum of *** \$\$1\$\$ *** in
10 advance of whenever the Contractor is about to perform Work within Railroad
11 Company property or within 25 feet of the centerline of tracks to enable the Railroad
12 Company to provide flagging or other protective services.
13
14 The Railroad Company's contact to schedule flagging or other protective services is:
15
16 *** \$\$2\$\$ ***
17
18 1-07.28(8).GR1
19 **Measurement and Payment**
20
21 1-07.28(8).INST1.GR1
22 Section 1-07.28(8) is revised to read:
23
24 1-07.28(8).OPT1.GR1
25 (October 3, 2022)
26 The Contracting Agency will make payments to the Railroad for protective services
27 unless:
28
29 1. Such services result from the Contractor's failure to comply with the terms
30 and conditions of its contract with the Contracting Agency or with its
31 Contractor's Right of Entry Agreements with the Railroad Company.
32
33 2. The Contractor fails to obtain authorization from the Engineer prior to
34 coordinating with the Railroad Company for any flagging requiring overtime
35 payments as specified under Railroad Safety and Flagging.
36
37 3. The Contractor arranges for assignment of a railroad flagger and alters
38 project work so that a flagger is no longer needed, and adequate advance
39 notice is not provided to the Railroad Company of such change in the need
40 for a flagger (i.e., causing the Railroad Company to dispatch a flagger
41 billable to the project when one is not required).
42
43 4. The Contractor causes an emergency, as specified under Railroad
44 Operations.
45
46 5. Protective services are required as a result of a request to the Railroad
47 Company for the Contractor's convenience.
48
49 6. The Contract provides for a bid item in the Contract.
50

1 All costs to comply with this Section, unless otherwise stated, are incidental to the
2 Contract and are the responsibility of the Contractor. The Contractor shall include all
3 related costs in the unit Bid prices of the Contract.

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1 1-08.GR1

2 **Prosecution and Progress**

3

4 1-08.1.GR1

5 **Subcontracting**

6

7 1-08.1.INST1.GR1

8 Section 1-08.1 is supplemented with the following:

9

10 1-08.1.OPT1.GR1

11 (October 3, 2022)

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

18

19 A subcontractor or lower-tier subcontractor will not be permitted to perform any work
20 under the contract until the following documents have been completed and submitted to
21 the Engineer:

22

- 23 1. Request to Sublet Work (WSDOT Form 421-012), and
24 2. Contractor and Subcontractor or Lower Tier Subcontractor Certification for
25 Federal-aid Projects (WSDOT Form 420-004).

26

27 The Contractor shall submit a completed Monthly Retainage Report (WSDOT Form 272-
28 065) within 15 calendar days after receipt of every monthly progress payment until every
29 subcontractor and lower tier subcontractor's retainage has been released. This form shall
30 be submitted to the Engineer by email to the following email address for the region
31 administering the Contract:

32

- 33 Eastern Region – ERRegionOEO@wsdot.wa.gov
34 North Central Region – NCRegionOEO@wsdot.wa.gov
35 Northwest Region – NWRegionOEO@wsdot.wa.gov
36 Olympic Region – ORegionOEO@wsdot.wa.gov
37 South Central Region – SCRegionOEO@wsdot.wa.gov
38 Southwest Region – SWRegionOEO@wsdot.wa.gov
39 Washington State Ferries – FerriesOEO@wsdot.wa.gov

40

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

47

48 1-08.1.OPT3.GR1

49 **(March 13, 1995)**

50 **Qualifications of Building Contractor**

51

52 If the Contractor is not prequalified for building construction or cannot demonstrate
satisfactory experience in constructing the general type of building included in the project,

1 it will be mandatory that the building work be subcontracted to a firm which can meet one
2 or both of these criteria.

3
4 1-08.3.GR1

5 **Progress Schedule**

6

7 1-08.3(42).GR1

8 **General Requirements**

9

10 1-08.3(2)B.GR1

11 **Type B Progress Schedules**

12

13 ~~1-08.3(1).INST1.GR1~~

14 ~~The first sentence of Section 1-08.3(1) is revised to read:~~

15

16 ~~1-08.3(1).OPT1.GR1~~

17 ~~(August 6, 2006)~~

18 ~~The Contractor shall submit Type C Progress Schedules and Schedule Updates to the~~
19 ~~Engineer for approval.~~

20

21 ~~1-08.3(1).INST2.~~ 1-08.3(2)B.INST1.GR1

22 Section 1-08.3(1)~~(2)B~~ is supplemented with the following:

23

24 ~~1-08.3(1).OPT2~~ 1-08.3(2)B.OPT1.FR1

25 ~~(October 3, 2022~~ November 2, 2023)

26 In addition to information required in Items 1 through ~~6~~ 13, the Progress
27 Schedule shall include the following milestones and/or activities:

28

29 *** \$\$1\$\$ ***

30

31 ~~1-08.3(2).GR1~~

32 **~~Progress Schedule Types~~**

33

34 ~~1-08.3(2).INST3.GR1~~

35 ~~Section 1-08.3(2) is supplemented with the following:~~

36

37 ~~1-08.3(2).OPT2.FR1~~

38 ~~(September 7, 2021)~~

39 **~~Type C Progress Schedule~~**

40 ~~Type C progress schedules shall conform to all of the requirements of Section~~
41 ~~1-08.3(2)B and this Section.~~

42

43 ~~The Contractor shall submit an electronic copy of a preliminary Type C progress~~
44 ~~schedule no later than the first working day as defined in Section 1-08.5. The~~
45 ~~preliminary schedule shall comply with the requirements of this special provision~~
46 ~~and the requirements of Section 1-08.3(1), except that it may be limited to only~~
47 ~~those activities occurring within the first 60 working days of the project.~~

48

49 ~~The Contractor shall submit the Type C progress schedule for all Work no later~~
50 ~~than 60 calendar days after the date the contract is executed.~~

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~~Each time that a preliminary schedule, progress schedule, or schedule update is submitted, the Contractor shall provide the Engineer with an electronic copy (.XER or .XML file type extension) of that schedule. Each submitted progress and update schedule shall have a unique file name and date identifier. Regardless of the type of software used, the schedule data provided to the Engineer shall be submitted to the Engineer in a compatible format of Primavera Project Manager Enterprise P6.~~

~~The current version of Primavera Project Manager Enterprise P6 is *** \$\$1\$\$ ***.~~

~~Type C progress schedules shall display at least the following additional information:~~

- ~~1. A time scaled logic diagram.~~
- ~~2. Activities for traffic detours and closures.~~
- ~~3. Milestones for required delivery of State furnished materials, if any.~~
- ~~4. Activities for State furnished traffic control resources, if any.~~
- ~~5. Activities for fabrication of materials longer than 90 calendar days lead time.~~
- ~~6. Fixed constraints shall be identified on the activity listing, supplemented with a written narrative describing why the constraint exists.~~
- ~~7. Milestones for interim or stage completion dates.~~
- ~~8. Activities for scheduled outages on illumination systems, ITS systems, traffic signal systems and other electrical service outages.~~
- ~~9. Nighttime activities shall be so coded.~~
- ~~10. Activities for all submittals requiring State review, including the allowable review duration.~~

~~All calendars used shall be created as project calendars, not global or resource calendars. If multiple calendars are applied to the progress schedule, the Contractor shall submit a written narrative describing each one's purpose.~~

~~Schedule files shall not contain User Defined Fields (UDF's), all activity codes shall be project level, no resources shall be assigned to activities and no project codes shall be assigned.~~

~~If requested by the Engineer, the Contractor shall supplement the progress schedule with written explanations for each lead and lag time used, and a written explanation describing the assumed production rates and planned resource allocations to support the activity durations provided in the schedule. The written explanations shall be documented as a notebook topic under "Assumptions and Basis".~~

~~1-08.3(3).GR1~~

~~**Schedule Updates**~~

~~1-08.3(3).INST1.GR1~~

~~Section 1-08.3(3) is revised to read:~~

1 ~~1-08.3(3).OPT1.GR1~~

2 ~~(June 6, 2022)~~

3 ~~The Contractor shall submit an electronic copy of a Type C Schedule Update to the~~
4 ~~Engineer by the first business day of each month, starting the month after the~~
5 ~~Progress Schedule is accepted, or some other mutually agreed upon submittal time.~~

6
7 ~~In addition to the other requirements of this Section, Schedule Updates shall reflect~~
8 ~~at least the following information:~~

9
10 ~~1. The actual duration and sequence of as constructed work activities,~~
11 ~~including changed work.~~

12
13 ~~2. Approved time extensions.~~

14
15 ~~3. Any construction delays or other conditions that affect the progress of the~~
16 ~~work.~~

17
18 ~~4. Any modifications to the as planned sequence or duration of remaining~~
19 ~~activities, supplemented with a written narrative describing each change~~
20 ~~and the reason for the change.~~

21
22 ~~5. The physical completion of all remaining work in the remaining contract~~
23 ~~time.~~

24
25 ~~6. Progress on partially completed activities shall be indicated using percent~~
26 ~~complete.~~

27
28 ~~Activity numbers on Schedule Updates shall be the same as the Progress Schedule,~~
29 ~~with the exception of deleted or added activities.~~

30
31 ~~Unresolved requests for time extensions shall be reflected in the Schedule Update~~
32 ~~by assuming no time extension will be granted, and by showing the effects to follow~~
33 ~~on activities necessary to physically complete the project within the currently~~
34 ~~authorized time for completion.~~

35
36 ~~1-08.3(4).GR1~~

37 ~~**Measurement**~~

38
39 ~~1-08.3(4).INST1.GR1~~

40 ~~Section 1-08.3(4) is supplemented with the following:~~

41
42 ~~1-08.3(4).OPT1.GR1~~

43 ~~(August 5, 2013)~~

44 ~~Schedule Updates will be measured per each for each update submitted and~~
45 ~~approved per the requirements of Section 1-08.3(3). Schedule updates that are~~
46 ~~returned for correction will not be measured.~~

47
48 ~~1-08.3(5).GR1~~

49 ~~**Payment**~~

50
51 ~~1-08.3(5).INST1.GR1~~

52 ~~Section 1-08.3(5) is supplemented with the following:~~

1
2 ~~1-08.3(5).OPT1.GR1~~
3 ~~(September 7, 2021)~~
4 ~~Payment will be made for the following bid item when it is included in the proposal:~~
5
6 ~~“Schedule Update”, per each.~~
7 ~~The unit Contract price per each “Schedule Update” shall be full payment for all~~
8 ~~costs required to complete the work specified in Section 1-08.3(3).~~
9
10 ~~1-08.3(5).OPT2.GR1~~
11 ~~(September 7, 2021)~~
12 ~~Payment will be made for the following Bid item when it is included in the Proposal:~~
13
14 ~~“Type C Progress Schedule”, lump sum.~~
15
16 ~~The lump sum price shall be full pay for all costs for furnishing the Type C Progress~~
17 ~~Schedule and preliminary Type C Progress Schedule.~~
18
19 ~~Payment of 80 percent of the lump sum price will be made upon approval of the~~
20 ~~Progress Schedule.~~
21
22 ~~Payment will be increased to 100 percent of the lump sum price upon completion of~~
23 ~~80 percent of the original total Contract Award amount.~~

24
25 1-08.4.GR1
26 **Prosecution of Work**

27
28 1-08.4.INST1.GR1
29 The first sentence of Section 1-08.4 is revised to read:

30
31 1-08.4.OPT1.FR1
32 (August 3, 2015)
33 The Contractor shall commence onsite work on or before *** \$\$1\$\$ *** and shall notify
34 the Engineer in writing a minimum of 10 calendar days in advance of the date on which
35 the Contractor intends to begin work.

36
37 1-08.4.OPT2.GR1
38 (August 7, 2006)
39 The Contractor shall begin work no earlier than the begin work date stated in the written
40 notice provided by the Engineer. The Engineer will provide a minimum of 10 calendar
41 days written notice for the date identified as the first working day.

42
43 1-08.4.OPT3.FR1
44 (August 7, 2006)
45 The Contractor shall begin work no earlier than *** \$\$1\$\$ ***.

46
47 1-08.5.GR1
48 **Time for Completion**

49
50 1-08.5.INST1.GR1
51 The third paragraph of Section 1-08.5 is revised to read:

52

1 1-08.5.OPT1.FR1
2 (August 7, 2006)
3 Contract time shall begin on the date stated in the written notice provided to the
4 Contractor. In no case shall the beginning of contract time be prior to ***\$1\$\$*** or later
5 than *** \$\$2\$\$ ***.
6
7 1-08.5.OPT2.FR1
8 (August 7, 2006)
9 Contract time shall begin on the first working day. The first working day shall be *** \$1\$\$
10 ***.
11
12 1-08.5.INST2.GR1
13 Section 1-08.5 is supplemented with the following:
14
15 1-08.5.OPT7.FR1
16 (March 13, 1995)
17 This project shall be physically completed within *** \$1\$\$ *** working days.
18
19 1-08.5.OPT8.FR1
20 (March 13, 1995)
21 This project shall be physically completed in its entirety within *** \$1\$\$ *** working days
22 and the temporary traffic signal portion of the project shall be physically completed within
23 the first *** \$\$2\$\$ *** working days.
24
25 1-08.5.OPT9.FR1
26 (December 4, 2006)
27 This project shall be physically completed within *** \$1\$\$ *** working days.
28
29 Contract time shall begin on the first working day the Contractor starts onsite work or ***
30 \$\$2\$\$ *** , whichever occurs first.
31
32 1-08.5.OPT10.FR1
33 (March 13, 1995)
34 This project shall be physically completed within *** \$1\$\$ *** working days. Contract
35 time shall commence on the first working day:
36
37 1. Following 60 calendar days after contract execution; or,
38
39 2. That the Engineer and the Contractor agree to start work after approval of
40 construction materials is obtained, whichever occurs first.
41
42 The Contractor is allowed a maximum of 60 calendar days after execution of the contract
43 to obtain approvals for construction materials
44
45 1-08.5.OPT11.FR1
46 **(August 4, 2003)**
47 **Incentive for Early Completion**
48 It is essential that the Contracting Agency has full and unrestricted use of the facilities at
49 the earliest possible time. As an incentive to the Contractor, the Contracting Agency will
50 pay the Contractor *** \$1\$\$ *** for each working day remaining in the contract prior to
51 the established *** \$\$2\$\$ *** completion date, but not to exceed an amount equal to ***
52 \$\$3\$\$ ***.

1
2 The days eligible for the incentive will be calculated by subtracting the working days
3 elapsed through the date of *** \$\$4\$\$ *** completion from the total working days
4 established in the Special Provision **TIME FOR COMPLETION**.

5
6 1-08.6.GR1
7 **Suspension of Work**

8
9 1-08.6.INST1.GR1
10 Section 1-08.6 is supplemented with the following:

11
12 1-08.6.OPT1.FR1

13 (January 3, 2017)

14 Contract time may be suspended for the HMA mix design evaluation report or for
15 procurement of critical materials (Procurement Suspension). In order to receive a
16 Procurement Suspension, the Contractor shall within 21 calendar days after execution by
17 the Contracting Agency, submit all HMA mix designs not already on the QPL according to
18 Section 5-04.2(1) or place purchase orders for all materials deemed critical by the
19 Contracting Agency for Physical Completion of the Contract. The Contractor shall provide
20 a copy of the completed WSDOT Form 350-042 indicating the date the mix design was
21 submitted, or copies of purchase orders for the critical materials. Such purchase orders
22 shall disclose the purchase order date and estimated delivery dates for such critical
23 material.

24
25 The Contractor shall show the HMA mix design evaluation report or procurement of the
26 critical materials listed below as activities in the Progress Schedule. If the approved
27 Progress Schedule indicates that acceptance of the HMA mix designs or materials
28 procurement are critical activities, and if the Contractor has provided documentation that
29 purchase orders are placed for the critical materials within the prescribed 21 calendar
30 days, then Contract time will be suspended upon Physical Completion of all critical work
31 except that work dependent upon the below listed critical materials:

32
33 *** \$\$1\$\$ ***

34
35 Charging of Contract time will resume upon the Contractor's receipt of a WSDOT mix
36 design evaluation report or delivery of the critical materials to the Contractor, notification
37 that the critical materials are ready for delivery to the Contractor from the Contracting
38 Agency's Materials Laboratory, or *** \$\$2\$\$ *** calendar days after execution by the
39 Contracting Agency, whichever occurs first.

40
41 No additional Procurement Suspension will be provided if the Contractor's HMA mix
42 designs did not meet Contract requirements and are resubmitted.

43
44 1-08.6.OPT2.FR1

45 (February 6, 2023)

46 Contract time may be suspended for procurement of critical materials (Procurement
47 Suspension). In order to receive a Procurement Suspension, the Contractor shall within
48 21 calendar days after execution by the Contracting Agency, place purchase orders for
49 all materials deemed critical by the Contracting Agency for physical completion of the
50 contract. The Contractor shall provide copies of purchase orders for the critical materials.
51 Such purchase orders shall disclose the purchase order date and estimated delivery
52 dates for such critical material.

1
2 The Contractor shall show procurement of the materials listed below as activities in the
3 Progress Schedule. If the approved Progress Schedule indicates that the materials
4 procurement are critical activities, and if the Contractor has provided documentation that
5 purchase orders are placed for the critical materials within the prescribed 21 calendar
6 days, then contract time will be suspended upon physical completion of all critical work
7 except that work dependent upon the below listed critical materials:

8
9 *** \$\$1\$\$ ***

10
11 Charging of contract time will resume upon delivery of the critical materials to the
12 Contractor or *** \$\$2\$\$ *** calendar days after execution by the Contracting Agency,
13 whichever occurs first.

14
15 1-08.9.GR1

16 **Liquidated Damages**

17
18 ~~1-08.9.INST2.GR1~~

19 Section 1-08.9 is revised to read:

20
21 1-08.9.~~INST1~~~~INST3~~.GR1

22 Section 1-08.9 is supplemented with the following:

23
24 1-08.9.~~OPT1~~~~NEW~~~~OPT3~~.FR1

25 (September 8, 2020)

26 Liquidated damages in the amount of *** \$\$1\$\$ *** per working day will be assessed for
27 failure to physically complete the Contract within the physical completion time specified.

28
29 1-08.9.~~OPT2~~~~NEW~~~~OPT1~~.FR1

30 (March 13, 1995)

31 Liquidated damages in the amount of *** \$\$1\$\$ *** per working day will be assessed for
32 failure to physically complete the temporary traffic signal portion of the contract within the
33 physical completion time specified. Liquidated damages in an amount based upon the
34 original contract amount and original time, will be assessed for failure to physically
35 complete the entire project within the physical completion time specified. Such damages
36 will accrue separately for each phase or stage of work. In the event damages occur on a
37 concurrent date, the larger of the two damages will apply for such days.

38
39 1-08.9.~~OPT3~~~~NEW~~~~OPT2~~.FR1

40 (April 6, 2009)

41 Delayed completion of *** \$\$1\$\$ *** will result in impacts to the traveling public, increase
42 fuel consumption, increase vehicle operating costs, increase pollution, and cause other
43 inconveniences and harm.

44
45 Accordingly, the Contractor agrees:

- 46
47 1. To pay *** \$\$2\$\$ *** liquidated damages per *** \$\$3\$\$ *** for each *** \$\$4\$\$ ***
48 prorated to the nearest *** \$\$5\$\$ *** that the work is not completed as specified
49 in *** \$\$6\$\$ ***.
- 50
51 2. To authorize the Engineer to deduct these liquidated damages from any money
52 due or coming due the Contractor.

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1 1-09.GR1

2 **Measurement and Payment**

3

4 ~~1-09.2.GR1~~

5 **Weighing Equipment**

6

7 ~~1-09.2(1).GR1~~

8 ~~**General Requirements for Weighing Equipment**~~

9

10 ~~1-09.2(1)A.GR1~~

11 ~~**Electronic Delivery Management System (E-Ticketing)**~~

12

13 ~~1-09.2(1)A1.GR1~~

14 ~~**Equipment**~~

15

16 ~~1-09.2(1)A1.INST1.GR1~~

17 ~~Item number 1 in the first paragraph of Section 1-09.2(1)A1 is revised to read:~~

18

19 ~~1-09.2(1)A1.OPT1.2024.GR1~~

20 ~~(March 9, 2023)~~

21 ~~1. The ETS shall generate an E-ticket in PDF format meeting the requirements~~
22 ~~of 1-09.2(1)A2. The information shall be immediately uploaded to a~~
23 ~~designated site so the information can be accessed by the Inspector located~~
24 ~~at the material delivery site.~~

25

26 1-09.3.GR1

27 **Scope of Payment**

28

29 1-09.3.INST1.GR1

30 Section 1-09.3 is supplemented with the following:

31

32 1-09.3.OPT1.FR1

33 **(August 7, 2017)**

34 **Fuel Cost Adjustment**

35

36 **General**

37 The Contracting Agency will make a fuel cost adjustment, either a credit or a
38 payment, for qualifying changes in the index price of on-highway diesel fuel. The
39 adjustment will be applied to partial payments made according to Section 1-09.9.

40

41 The adjustment is not a guarantee of full compensation for fuel price changes. Any
42 adjustment provided by this provision shall not obligate the Contracting Agency for
43 any costs due solely to changes in fuel costs beyond the amount adjusted by this
44 provision. The Contracting Agency does not guarantee that fuel will be available at
45 the base fuel cost or monthly fuel cost. No additional adjustment will be made for
46 rates of fuel consumption or actual fuel types that differ from those specified for the
47 purpose of determining the adjustment.

48

49 For the purpose of calculating the adjustment, the Base Fuel Cost shall be the
50 Weekly fuel price from the **U.S. Energy Information Administration** website. The
51 website location and directions are as follows:

52

- <http://www.eia.gov/petroleum/gasdiesel/>

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- On the web page, click on the **West Coast less California**, listed under the heading **U.S On-Highway Diesel Fuel Prices*(dollar per gallon)** at the lower end of the web page.
- In the pull down box labeled **Period** pull down **Weekly**.
- Click on the fuel price history found under the column heading **View History** for the line **Diesel (On-Highway) – All Types**.
- On this web page obtain the nearest weekly fuel cost for the Monday occurring three weeks prior to the date that bids are opened. This weekly fuel cost becomes the Base Fuel Cost and is fixed for the duration of the Contract and will be used in calculating all adjustments.

The Monthly Fuel Cost shall be the most recent Monthly fuel price from the U.S. Energy Information Administration website. The website location and directions are as follows:

- <http://www.eia.gov/petroleum/gasdiesel/>
- On the web page, click on the **West Coast less California**, listed under the heading **U.S On-Highway Diesel Fuel Prices*(dollar per gallon)** at the lower end of the web page.
- In the pull down box labeled **Period** pull down **Monthly**.
- Click on the fuel price history found under the column heading **View History** for the line **Diesel (On-Highway) – All Types**.
- On this web page obtain the most current monthly fuel price.

If the specified index ceases to be available for any reason, the Contracting Agency at its discretion will select and begin using a substitute price source or index to establish the Monthly Fuel Cost.

Measurement

No adjustment will be made if the Monthly Fuel Cost is within 10 percent of the Base Fuel Cost. No adjustment will be made for work performed after the authorized Time for Completion.

If the Monthly Fuel Cost is greater than or equal to 110% of the Base Fuel Cost, then:

$$\text{Adjustment} = (\text{Monthly Fuel Cost} - (1.10 \times \text{Base Fuel Cost})) \times Q$$

If the Monthly Fuel Cost is less than or equal to 90% of the Base Fuel Cost, then:

$$\text{Adjustment} = (\text{Monthly Fuel Cost} - (0.90 \times \text{Base Fuel Cost})) \times Q$$

Where $Q = \sum ((\text{Fuel Usage Factor for each Eligible Bid Item}) \times (\text{Quantity paid in the current months progress estimate for each Eligible Bid Item}))$ for all Eligible Bid Items listed below:

| | |
|--------------------------|--------------------------|
| <u>Eligible Bid Item</u> | <u>Fuel Usage Factor</u> |
| *** \$1\$\$ *** | *** \$2\$\$ *** |
| *** \$3\$\$ *** | *** \$4\$\$ *** |

Payment

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

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“Fuel Cost Adjustment”, by calculation.

To provide a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the Contractor’s total bid.

1-09.3.OPT2.FR1

(August 6, 2018)

Steel Cost Adjustment

The Contractor may elect to participate in the steel cost adjustments for work permanently incorporated into this Contract. Steel cost adjustment is not a guarantee of full compensation for changes to the cost of steel items; not eligible for all items with steel; and any adjustment provided by this provision will not obligate the Contracting Agency for any costs beyond the amount adjusted by this provision.

This Special Provision provides the option to opt-in to steel cost adjustments for eligible Bid items. The Contractor is provided one opportunity to opt-in and there are no future opt-out provisions. The steel cost adjustment requirements of this Special Provision apply for the duration of the Contract.

General

The Contractor may select Bid items from the list below to be included in the steel cost adjustment. The Contractor is not obligated to select any Bid items or to participate in the steel cost adjustment program. The steel cost adjustment will apply only to the Bid items selected by the Contractor.

Prior to Contract execution the Contractor shall submit the Steel Cost Adjustment Opt-In Bid Item List, WSDOT Form 410-031, to the WSDOT Contract Ad and Award Office. The form is to be received at the WSDOT Bid Room, located at the Transportation Building, 310 Maple Park Avenue SE, Room 2D20, Olympia, WA 98501-2361 or may be submitted by facsimile to the following FAX number, (360) 705-6966. The Steel Cost Adjustment Opt-In Bid Item List shall be signed by an authorized representative of the Contractor. Should the Contractor fail to return this document as required no Bid items will be eligible for steel cost adjustment.

Steel Index Values

The Contracting Agency will use the Bureau of Labor Statistics (BLS) producer price index (PPI) series Id: WPUSISTEEL1 index value for steel cost adjustments.

The Base Steel Materials Index Value (BV) will be the most recent value published on the BLS website on the day of bid opening. This value will be fixed on the day of bid opening even if the BLS lists this as a preliminary value. The Monthly Steel Materials Index Value (MV) will be the final index value published on the BLS website for any month during the Contract.

Measurement

The Contracting Agency has determined the initial cost basis (ICB) of steel to be *** \$\$1\$\$ ***. This cost basis is reflected in the steel cost adjustment calculations below, is non-negotiable and will be taken as a fixed value for the duration of the Contract.

For each month that steel material is incorporated into the permanent Work of the Contract or paid for as Materials on Hand and the MV is more than 110 percent or

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less than 90 percent of the BV the Contractor shall provide the Engineer with the following for each eligible Bid item by the end of the following month:

1. The weight of steel material for the month, and
2. Documentation of the weight and shipment to the Contractor of the steel material by bills of lading, invoices, or purchase orders.

Should the Contractor not provide the required documentation as specified the following shall apply:

1. Steel material that has an MV that is more than 110 percent of the BV will not be eligible for a steel cost adjustment.
2. The steel cost adjustment for a Bid item with an MV that is less than 90 percent of the BV will be calculated using a weight of steel determined by the Engineer.

Steel materials will not be eligible for cost adjustments until all requirements of the Contract have been met. Steel added to a Contract as part of a Value Engineering Change Proposal will not be eligible for steel cost adjustment. Steel cost adjustments made in accordance with this Special Provision will not be reflected on payments made to the Contractor until after the index value required for the calculation becomes final. Preliminary index values may be used to establish the BV, but will not be used to establish the MV in calculations.

For each Bid Item selected by the Contractor on the Steel Cost Adjustment Opt-In Bid Item List form a cost adjustment evaluation will be made. A cost adjustment will only be made if the MV for the month the Work associated with the Bid Item is performed differs by more than ten-percent from the BV.

The steel cost adjustment will be determined as follows:

1. If the MV is within ten-percent of the BV, there will be no adjustment.
2. If the MV is more than 110-percent of the BV, then
3. If the MV is less than 90-percent of the BV, then

$$CA = (((MV - BV) \div BV) - 0.10) \times (ICB \times WS)$$

$$CA = (((MV - BV) \div BV) + 0.10) \times (ICB \times WS)$$

Where:

- CA = Cost Adjustment, dollars
- MV = Monthly Steel Materials Index Value from BLS for the month determined above
- BV = Base Steel Materials Index Value taken as the most recent value published on the BLS website on the day of bid opening.
- ICB = Initial Cost Basis of steel per pound
- WS = Weight of steel (in pounds) eligible for cost adjustment

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The following Bid Items are eligible for the steel cost adjustment program for this Project:

*** \$\$2\$\$ ***

Payment

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

“Steel Cost Adjustment”, by calculation.

To provide a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the Contractor’s total bid.

1-09.8.GR1

Payment For Material On Hand

1-09.8.INST1.GR1

The last paragraph of Section 1-09.8 is revised to read:

1-09.8.OPT1.GR1

(August 3, 2009)

The Contracting Agency will not pay for material on hand when the invoice cost is less than \$2,000. As materials are used in the work, credits equaling the partial payments for them will be taken on future estimates. Each month, no later than the estimate due date, the Contractor shall submit a letter to the Engineer that clearly states: 1) the amount originally paid on the invoice (or other record of production cost) for the items on hand, 2) the dollar amount of the material incorporated into each of the various work items for the month, and 3) the amount that should be retained in material on hand items. If work is performed on the items and the Contractor does not submit a letter, all of the previous material on hand payment will be deducted on the estimate. Partial payment for materials on hand shall not constitute acceptance. Any material will be rejected if found to be faulty even if partial payment for it has been made.

1-09.9.GR1

Payments

1-09.9(1).GR1

Retainage

1-09.9(1).INST1.GR1

Section 1-09.9(1) content and title is deleted and replaced with the following:

1-09.9(1).OPT1.GR1

(June 27, 2011)

Vacant

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1 1-10.GR1

2 **Temporary Traffic Control**

3

4 1-10.1.GR1

5 **General**

6

7 1-10.1.INST1.GR1

8 Section 1-10.1 is supplemented with the following:

9

10 1-10.1.OPT1.FR1

11 (April 1, 2013)

12 The Contracting Agency will provide the following labor, equipment and/or materials
13 resources to the Contractor for use on the project.

14

15 *** \$\$1\$\$ ***

16

17 The Contractor shall notify the Engineer when each resource is to be utilized and shall
18 provide a minimum of *** \$\$2\$\$ *** working days advance notice to allow any necessary
19 arrangements to be made.

20

21 1-10.1.OPT2.FR1

22 (May 20, 2020)

23 The Contracting Agency has arranged for the Washington State Patrol (WSP) to perform
24 the following tasks during the project:

25

26 *** \$\$1\$\$ ***

27

28 There shall be no entitlement for any impacts for any reason as a result of WSP personnel.

29

30 WSP personnel may not be used for any other work without prior acceptance from the
31 Engineer. The acceptance will identify the added work allowed, the terms under which the
32 WSP personnel may be used for the added work, and how the cost of the added work will
33 be shared by the Contractor and Contracting Agency.

34

35 This resource is provided at no additional cost to the Contractor for the initial *** \$\$2\$\$
36 *** hours and includes all costs (e.g., WSP labor, vehicle miles, etc.). Additional hours of
37 WSP personnel may be requested by the Contractor. If allowed by the Engineer, the cost
38 for these hours will be shared by the Contracting Agency and the Contractor. The
39 Contractor's share of the cost for additional hours will be one-half of the amount billed by
40 the law enforcement agency.

41

42 All costs for cancelled work due to unsuitable weather will be shared by the Contracting
43 Agency and the Contractor. The Contractor's share of the cost for cancelled work will be
44 one-half of the amount billed by the law enforcement agency, regardless of when the
45 actual work occurs. All costs for cancelled work for any other reason shall be the full
46 responsibility of the Contractor.

47

48 The Contractor's share of costs for additional hours of uniformed law enforcement
49 personnel will be credited to the Contracting Agency under the bid item "WSP
50 Reimbursement", by calculation.

51

1 1-10.1(1).GR1

2 **Materials**

3

4 1-10.1(1).INST1.GR1

5 Section 1-10.1(1) is supplemented with the following:

6

7 1-10.1(1).OPT1.GR1

8 **(January 10, 2022)**

9 **Automated Flagger Assistance Devices**

10 Automated Flagger Assistance Devices (AFADs) shall meet the requirements of the
11 MUTCD Red/Yellow Lens Automated Flagger Assistance Devices.

12

13 1-10.2.GR1

14 **Traffic Control Management**

15

16 1-10.2.INST1.GR1

17 Section 1-10.2 is supplemented with the following:

18

19 1-10.2.OPT1.GR1

20 **(November 2, 2022)**

21 **Work Zone Safety Contingency**

22 Enhancements to improve the effectiveness of the accepted traffic control plans to
23 increase the safety of the work zones shall be discussed on a weekly basis between the
24 Contractor and the Contracting Agency. Enhancements shall be mutually agreed upon by
25 the Contractor and Engineer prior to performing any Work to implement the enhancement.

26

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

31

32 The Contractor shall be solely responsible for submitting any traffic control plan revision
33 to implement the enhancement in accordance with Section 1-10.2(2).

34

35 1-10.2(1).GR1

36 **General**

37

38 1-10.2(1).INST1.GR1

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

40

41 1-10.2(1).OPT1.GR1

42 (October 3, 2022)

43 The Traffic Control Supervisor shall be certified by one of the following:

44

45 The Northwest Laborers-Employers Training Trust

46 27055 Ohio Ave.

47 Kingston, WA 98346

48 (360) 297-3035

49 <https://www.nwlett.edu>

50

51 Evergreen Safety Council

52 12545 135th Ave. NE

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Kirkland, WA 98034-8709
1-800-521-0778
<https://www.esc.org>

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

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

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

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

1-10.2(1).OPT2.GR1

(January 5, 2015)
The primary TCS shall have a minimum of 500 hours of experience providing traffic control as a TCS or traffic control labor on multilane highways with a speed limit of 55 mph or greater. The Contractor shall submit a certification of the TCS's experience with the TCS designation. Documentation of experience shall be available upon request by the Engineer.

1-10.2(9-35).GR1

Temporary Traffic Control Materials

Section 9-35 is supplemented with the following:

1-10.2(9-35).OPT1.GR1

(October 3, 2022)
Temporary portable transverse rumble strips must be either the black RoadQuake 2 or the black RoadQuake 2F Folding Temporary Portable Rumble Strip manufactured by Plastic Safety Systems, Inc., all black Traffix Alert High Speed Rumble Strip manufactured by Traffix Devices or an approved equal.

Devices submitted for approval shall meet the following criteria:

1. Length will be a minimum of 11 feet long.
2. Width will be a minimum of 10 inches.

- 1 3. Provides a bevel on leading edge.
- 2
- 3 4. Weighs a minimum of 100 lbs.
- 4
- 5 5. No greater than ¾-inch profile height.
- 6
- 7 6. Flexible along the length of the strip to facilitate conformity to the road
- 8 surface.
- 9
- 10 7. Withstands temperatures 0 to 180 degrees Fahrenheit without degradation
- 11 in deployment, use or safety.
- 12
- 13 8. Function on roads with posted speed limits up to 70 mph; and retain original
- 14 placement with minimal movement such that performance is not
- 15 compromised.
- 16
- 17 9. Deemed safe by the manufacturer for use by motorcycles.
- 18

19 1-10.3.GR1

20 **Traffic Control Labor, Procedures and Devices**

21

22 1-10.3.INST1.GR1

23 Section 1-10.3 is supplemented with the following:

24

25 1-10.3.OPT1.FR1

26 **(May 20, 2020)**

27 **Contractor Provided Uniformed Police Officers**

28 The Contractor shall provide, direct, and monitor Uniformed Police Officers having
29 jurisdiction to control traffic in accordance with the Plans. A uniformed police officer (UPO)
30 is a sworn police officer from a local law enforcement agency or a Washington State Patrol
31 officer. The UPO shall provide traffic control as shown in an accepted traffic control plan.

32

33 The following contact information for potential service providers is supplied for the
34 Contractor's convenience:

35

36 *** \$\$1\$\$ ***

37

38 1-10.3(3).GR1

39 **Traffic Control Devices**

40

41 1-10.3(3).INST1.GR1

42 Section 1-10.3(3) is supplemented with the following:

43

44 1-10.3(3).OPT1.GR1

45 **(January 10, 2022)**

46 **Automated Flagger Assistance Devices**

47 **General**

48 Where shown on an accepted traffic control plan, the Contractor shall provide,
49 operate and maintain AFADs.

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An AFAD is a self-contained, portable traffic control system that enables a flagger to avoid standing on the roadway while still controlling road users alternating through a single open lane.

AFAD Operation

Each AFAD shall be controlled only by a flagger who has been trained on the operation of the AFADs by a manufacturer or supplier representative in addition to the requirements in accordance with Section 1-10.3(1)A. The flagger shall be positioned to visually see both the AFAD and approaching traffic. When this is not feasible, digital alternatives are allowable. The flagger is prohibited from leaving the AFAD unattended at any time while the AFAD is in operation and controlling traffic.

If AFAD repairs are required, the Contractor shall control traffic with flaggers and stop/slow paddles and the AFAD shall be repaired or replaced within 48 hours.

AFAD Location and Use

An AFAD shall only be used in situations where there is only one lane of approaching traffic in the direction to be controlled. AFADs shall not be used within 1500 feet of existing or temporary traffic signals. When used at night, the AFAD location shall be illuminated in accordance with Section 1-10.3(1)A.

The AFAD may be positioned up to the edge of the open travel lane without any lateral clearance, but only the AFAD gate arm can be within the open travel lane when traffic is being stopped. The AFAD shall be delineated by at least 3 transverse channelization devices in advance when not within a closed lane or shoulder.

The “STOP HERE ON RED” R10-6 (24”x36”, B/W) or R10-6a (24”x36”, B/W) sign may be attached to the AFAD below the Red/Yellow lens. The AFAD may have a supplemental amber LED changeable message sign with minimum 10-inch characters attached to provide road users additional information, provided it does not block any signal display or signage.

The Engineer may order adjustments to the location as needed based on traffic and field conditions. The Contractor shall avoid placing the AFAD within or immediately following horizontal and/or vertical curves when feasible.

Setup and Takedown

During the setup and take down operation of the work area, the AFAD display shall be set to a yellow flash mode when the signal heads are deployed into normal operating position.

Except during setup prior to use and removal after use, the AFAD shall be removed from the work zone clear zone when not in use unless protected by barrier or guardrail.

1-10.3(3).OPT2.GR1

(January 2, 2018)

Radar Speed Display Sign

Where shown on an approved traffic control plan or where ordered by the Engineer, the Contractor shall provide, operate, and maintain radar speed display signs

1 (RSDS). A RSDS shall be placed with a minimum of 4 ft. of lateral clearance to edge
2 of a travelled lane and be delineated by channelization devices. The Contractor shall
3 remove the RSDS from the clear zone when not in use unless protected by barrier
4 or guardrail.

5
6 1-10.3(3).OPT3.FR1

7 **(October 3, 2022, 2023)**

8 **Smart Work Zone System**

9 Where shown on an approved traffic control plan, the Contractor shall provide,
10 operate, maintain, and remove a Smart Work Zone System. A Smart Work Zone
11 System (SWZS) uses portable roadside sensor information to display real-time
12 dynamic work zone traffic information and instructions to motorists on a series of
13 Portable Changeable Message Signs (PCMSs) approaching a work zone.

14
15 The SWZS shall be capable of communicating three types of work zone traffic
16 information:

- 17
18 1. **Queue detection warning** for slowed or queued traffic ahead.
19
20 2. **Dynamic lane merge** guidance to use all open lanes up to the lane closure
21 tapers and zipper merge instructions during times of congestion.
22
23 3. **Work zone travel delay** for current work zone delays in minutes.
24

25 In locations with multiple SWZS setups each setup shall be capable of operating
26 independently. One SWZS Technician may operate all systems concurrently.
27

28 **Vendor**

29 The Contractor shall select an independent vendor listed below to provide the SWZS
30 as shown on an approved SWZS Plan:
31

32
33 **Hill and Smith Inc.**

34 Phone: (302) 328-3220

35 Website: https://www.hillandsmith.com/portfolio_category/its-smart-work-zone/
36

37 **ICONE by ICONE Products**

38 Phone: (315) 626-6800

39 Website: <http://iconeproducts.com/>
40

41 **Road-Tech Safety Services, Inc.**

42 Phone: (888) 762-3832

43 Website: <https://www.road-tech.com/>
44

45 **Salander LLC**

46 Phone: (812) 777-5637

47 Website: <https://www.slndrtech.com/>

48 **Superior Traffic Services**

49 Phone: (509) 220-0339

50 Website: <https://www.superiortrafficservices.com>
51

52 **SolarTech**

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Phone: (610) 391-8600
Website: <http://solartechnology.com/>

Street Smart

Phone: (888) 653-6800
Website: <https://www.streetsmartrental.com/smart-work-zones/>

Superior Traffic Services
Phone: (888) 928-5999
<https://www.superiortrafficservices.com/>

Ver-Mac

Phone: (888) 488-7446
Website: <https://www.ver-mac.com/en/jamlogic-software/smart-work-zones>

WANCO

Phone: (800) 972-0755
Website: <https://www.wanco.com>

Devices and Communications

The Contractor and/or Vendor shall provide all devices necessary to operate the system in accordance with the accepted traffic control plans and these specifications.

The traffic sensors shown in the traffic control plans in advance of lane closure tapers are used to operate the SWZS by detecting vehicle speed approaching the lane closures, where queuing is expected. Typically, these traffic sensors use Doppler radar technology.

Separate side-fire traffic sensor(s), Wavetronix SmartSensor HD or similar accepted by the Engineer, shall be post-mounted or trailer-mounted to obtain traffic volume/speed data where shown in the traffic control plans. If not shown, then the side-fire traffic sensor shall be placed after the final lane closure taper but before lanes are reopened or any open on-ramps to measure the following:

1. Traffic volume, in vehicles per hour per open lane
2. Speed – time graph used to determine the median & 85th percentile speed in each open lane

The Contractor shall use and relocate as necessary side-fire traffic sensor(s) at locations compatible with lane closures. As an alternative, multiple side-fire traffic sensors can be used throughout the project limits provide the traffic volume/speed data remains accurate.

A vendor website or other wireless remote system is required for monitoring SWZS functions and remote management of PCMS messages.

Technician

The Vendor shall provide a technician skilled in the operation of all system equipment and software. The technician may be an employee of the Vendor or someone trained and authorized by the Vendor to operate the system. The technician shall be independent of the Contractor and Traffic Control Supervisor but shall collaborate

1 and coordinate as appropriate. The technician shall be on site while the SWZS is in
2 use and able to respond to system issues in person.

3
4 Duties of the Technician include, but are not limited to, the following:

- 5
6 1. Program the automated, real-time operation of the SWZS with traffic sensor
7 trigger speed thresholds and PCMS messages shown on the approved
8 SWZS Plan.
9
10 2. Service, debug, troubleshoot, and maintain all SWZS components.
11
12 3. Maintain SWZS equipment maintenance logs.
13
14 4. Collect and process system data and provide data as described below:
15
16 a. **System Data** – System data shall include:
17
18 i. Data in table format of traffic volume (vehicles per hour per each
19 open lane), 50th-percentile traffic speed of all open lanes, and
20 85th-percentile traffic speed of all open lanes for 15-minute
21 intervals organized by Day and Hour of day for each SWZS
22 implementation measured by the side-fire traffic sensor.
23
24 ii. Day and Hour of day each traffic sensor was triggered, and the
25 message displayed on each PCMS while the SWZS is in use.
26
27 b. **Agency Access to System Data** – Provide password protected
28 access to the Engineer and identified Agency personnel to the
29 System Data via a dedicated website or other wireless remote
30 system.
31
32 c. **Provide System Data to Agency** – At the completion of the Project,
33 provide System Data logs in an electronic format approved by the
34 Engineer.
35
36 5. Immediately respond to all system failures in accordance with the **Smart**
37 **Work Zone System Failure Protocol** section of these Specifications.
38

39 **Operation**

40 Operate the SWZS according to the following:

41
42 **Scheduled Use**

43 Use a dynamic lane merge, queue detection warning, and work zone travel
44 delay system on the following roadway(s), locations, and work operations:

45
46 *** \$\$1\$\$ ***
47

48 **Installation, Relocation, Removal, and Storage**

49 The Contractor shall store, install, relocate, and remove all the SWZS
50 components as follows:
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1. Install all components with the SWZS Technician’s concurrence at least 30 minutes prior to commencing the first lane closure
2. Relocate components as necessary with the SWZS Technician’s concurrence
3. Assist the Technician as needed when the Smart Work Zone System Failure Protocol occurs
4. Remove all components within the Work Zone Clear Zone within 60 minutes when no longer required unless components are placed behind guardrail or barrier.

Initial SWZS Turn-On Meeting

The Contractor shall arrange a meeting at least one week before the initial system turn-on.

The meeting shall include the Contractor, Traffic Control Manager, Traffic Control Supervisor, Alternative Traffic Control Supervisor (if applicable), SWZS Technician, and WSDOT Project Engineering Office staff.

During this meeting, the following topics should be discussed at a minimum:

1. Provide and review the approved traffic control plans, including lane closure plans and the associated SWZS plan that will be used.
2. Review roles and responsibilities for implementation of the SWZS.
3. Provide contact information for critical personnel.
4. Provide a schedule of the anticipated operation times, dates and durations for the initial operation.
5. Review Measurement and Payment for duties related to SWZS installation, operation, and removal.

SWZS Operation Coordination and Collaboration

The Contractor shall notify the Engineer at least 72 hours in advance of using the SWZS including providing a schedule of the anticipated operation times, dates and durations for each subsequent operation.

The Contractor’s Traffic Control Management shall coordinate and collaborate as needed for the successful implementation of the SWZS and associated lane closures. Any delays and associated costs due to implementing the SWZS shall be at the Contractor’s expense.

Smart Work Zone System Failure Protocol

In the event of a failure, perform the following protocol:

1. **SWZS Technician** – Upon discovery of the malfunction, perform the following:

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- a. Immediately notify Contractor Traffic Control Management.
 - b. Begin troubleshooting the SWZS to address the malfunction.
 - c. If the malfunction is not resolved within 15 minutes, notify Contractor Traffic Control Management. The SWZS shall be taken out of service and repaired within 12 hours of the malfunction.
2. **Contractor Traffic Management** – After receiving the initial notification of the malfunction, perform the following:
- a. Notify the Traffic Control Supervisor.
 - b. Prepare crews to immediately implement the Emergency PCMS Implementation if the malfunction is not resolved within 15 minutes.
 - c. Notify the Engineer of the malfunction and failure protocol status.
 - d. Collaborate with SWZS Technician to provide replacement parts needed to make repairs to the SWZS within 12 hours of the system or a system component malfunction.
3. **Emergency PCMS Implementation** – If the SWZS Technician has not resolved the issue within 15 minutes, perform following failure protocol:
- a. Install two PCMSs as described below until the SWZS is repaired, functioning properly, and back in service or until all lane closures have been reopened. The PCMSs may be from the SWZS if needed.
 - i. PCMS #1: Maintain positioned $0.5 \pm$ mile in advance of traffic queue, relocated as necessary, except when no traffic queue is present. PCMS #1 may be truck-mounted.

| | |
|----------------|----------------|
| <u>Phase 1</u> | <u>Phase 2</u> |
| SLOW OR | NEXT |
| STOPPED | # |
| TRAFFIC | MILES |

Where “#” is the approximate queue length rounded up to the nearest mile

- ii. PCMS #2: Place $1.5 \pm$ mile in advance of first lane closure taper. Program message as appropriate. Phase 1 is to describe the current lane closure in place. Phase 2 is to describe the distance ahead to the beginning of the first lane closure rounded up to the nearest 0.5 mile interval. For example, if a double right lane closure is 1.5 mile ahead, the PCMS message would be: “2 RIGHT LANES CLOSED” / “1.5 MILE AHEAD”.

1 1-10.3(3).OPT4.FR1
2 (~~October~~ **November 20, 2023**, 2022)

3 **Queue Warning System**

4 Where shown on an accepted traffic control plan, the Contractor shall provide,
5 operate, maintain, and remove a Queue Warning System. A Queue Warning System
6 (QWS) uses portable roadside sensor information to display real-time traffic queue
7 information to motorists on Portable Changeable Message Signs (PCMS)
8 approaching a work zone. QWS is a simplified smart work zone system intended for
9 work zone queues up to 2 miles, measured from the first lane closure taper, but may
10 be modified for queuing up to 3 miles by extending spacing between the two PCMSs
11 from 1± mile to 1.5 ± mile spacing and adjusting the PCMS messages. Traffic sensor
12 placement remains unchanged.

13
14 The QWS shall be capable of communicating two types of work zone traffic
15 information:

- 16
17 1. **Queue detection warning** for slowed or queued traffic ahead.
- 18
19 2. **Dynamic lane merge** guidance to use all open lanes up to the lane closure
20 tapers and to take turns at merges during times of congestion.

21
22 In locations with multiple QWS setups each setup shall be capable of operating
23 independently. One QWS Technician may operate all systems concurrently.

24
25 **Vendors**

26 The Contractor shall select an independent vendor listed below to provide a QWS as
27 shown on an accepted traffic control plan:

28
29 **Hill and Smith Inc.**

30 Phone: (302) 328-3220

31 Website: https://www.hillandsmith.com/portfolio_category/its-smart-work-zone/

32
33 **ICONE by ICONE Products**

34 Phone: (315) 626-6800

35 Website: <http://iconeproducts.com/>

36
37 **Road-Tech Safety Services, Inc.**

38 Phone: (888) 762-3832

39 Website: <https://www.road-tech.com/>

40
41 **Salander LLC**

42 Phone: (812) 777-5637

43 Website: <https://www.slndrtech.com/>

44 **Superior Traffic Services**

45 Phone: (509) 220-0339

46 Website: <https://www.superiortrafficservices.com>

47
48 **SolarTech**

49 Phone: (610) 391-8600

50 Website: <http://solartechnology.com/>

51
52 **Street Smart**

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Phone: (888) 653-6800
Website: <https://www.streetSMARTrental.com/smart-work-zones/>

Ver-Mac
Phone: (888) 488-7446
Website: <https://www.ver-mac.com/en/jamlogic-software/smart-work-zones>

WANCO
Phone: (800) 972-0755
Website: <https://www.wanco.com>

Devices and Communications

The Contractor and/or Vendor shall provide all devices necessary to operate the system in accordance with the accepted traffic control plans and these specifications.

The traffic sensors shown in the traffic control plans in advance of lane closure tapers are used to operate the SWZS by detecting vehicle speed approaching the lane closures, where queuing is expected. Typically, these traffic sensors use Doppler radar technology.

A vendor website or other wireless remote system is required for monitoring QWS functions and remote management of PCMS messages.

Technician

The Vendor shall provide a technician skilled in the operation of all system equipment and software. The technician may be an employee of the Vendor or someone trained and authorized by the Vendor to operate the system. The technician may be Contractor or subcontractor personnel, including the Traffic Control Supervisor. The technician is not required be on site while the QWS is in use but must be able to respond to any system issues remotely.

Duties of the Technician or trained traffic control personnel include, but are not limited to, the following:

1. Program the automated, real-time operation of the QWS with traffic sensor trigger speed thresholds and PCMS messages shown on the accepted traffic control plan or in these Specifications.
2. Service, debug, troubleshoot, and maintain all QWS components.
3. Maintain QWS equipment maintenance logs.
4. Immediately respond to all system failures in accordance with the **Queue Warning System Failure Protocol** section of these Specifications.

Operation

Operate the QWS according to the following:

Scheduled Use

Use the QWS on the following roadway(s), locations, and work operations:

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Installation, Relocation, Removal, and Storage

The Contractor or subcontractor shall store, install, relocate, and remove all the QWS components as follows:

- 1. Install all QWS components with the QWS Technician’s concurrence prior to commencing the first lane closure.
- 2. Relocate components as necessary with the QWS Technician’s concurrence.
- 3. Assist the Technician as needed when the Queue Warning System Failure Protocol occurs.
- 4. Remove all components within the Work Zone Clear Zone when no longer required unless components are placed behind guardrail or barrier.

QWS Operation Coordination and Collaboration

The Contractor shall notify the Engineer at least 72 hours in advance of using the QWS including providing a schedule of the anticipated operation times, dates and durations for each subsequent operation.

The Contractor’s Traffic Control Management shall coordinate and collaborate as needed for the successful implementation of the QWS and associated lane closures. Any delays and associated costs due to implementing the QWS shall be at the Contractor’s expense.

Queue Warning System Failure Protocol

In the event of a failure that is not resolved within 15 minutes, reprogram QWS PCMSs to display the following message for the remainder of the Scheduled Use duration:

| PCMS 1 | | PCMS 2 | |
|----------------|----------------|----------------|----------------|
| <u>Phase 1</u> | <u>Phase 2</u> | <u>Phase 1</u> | <u>Phase 2</u> |
| WATCH | NEXT | (Lane) | 1 |
| FOR SLOW | 2 | (Closure) | MILE |
| TRAFFIC | MILES | (Description) | AHEAD |
| 2.0 SEC | 2.0 SEC | 2.0 SEC | 2.0 SEC |

PCMS 1 placed 2± miles from first lane closure taper

PCMS 2 placed 1± mile from first lane closure taper

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(Lane Closure Description) message is similar to LEFT LANE CLOSED or LEFT 2 LANES CLOSED.

If the QWS as modified for queuing up to 3 miles, then modify the messaging as follows:

| PCMS 1 | | PCMS 2 | |
|----------------|----------------|----------------|----------------|
| <u>Phase 1</u> | <u>Phase 2</u> | <u>Phase 1</u> | <u>Phase 2</u> |

WATCH
FOR SLOW
TRAFFIC
2.0 SEC

NEXT
3
MILES
2.0 SEC

(Lane)
(Closure)
(Description)
2.0 SEC

1.5
MILES
AHEAD
2.0 SEC

PCMS 1 placed 3± miles from first lane
closure taper

PCMS 2 placed 1.5± miles from first lane
closure taper

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1-10.3(3).OPT5.GR1

(October 3, 2022)

Temporary Portable Transverse Rumble Strips

Where shown on a traffic control plan, the Contractor shall provide, install, and maintain temporary portable transverse rumble strips.

Temporary portable transverse rumble strips may be used on two-way, two-lane roadways in conditions requiring traffic to stop.

Do not place temporary portable transverse rumble strips on sharp horizontal or vertical curves, through pedestrian crossings or on bicycle routes. When placed on roadways used by bicyclists a minimum clear path of 4 feet shall be provided at each edge of the roadway or on each paved shoulder if feasible.

The Contractor shall remove the temporary portable transverse rumble strips in their entirety when they are no longer needed.

All damage caused by removing temporary portable transverse rumble strips shall be repaired by the Contractor at no additional cost to the Contracting Agency.

1-10.3(3)(9-35.8).GR1

Vacant

Section 9-35.8 is revised to read:

1-10.3(3)(9-35.8).OPT1.GR1

(April 1, 2019)

Radar Speed Display Sign

Radar Speed Display Signs (RSDS) shall consist of a fully self-contained see-through trailer with power supply and an LED speed indicator display with a one-direction radar. Above or below the display shall be the message "YOUR SPEED" or "YOUR SPEED IS" in letters of 5 to 8 inches in height. The lowest portion of the display shall be high enough to be visible over concrete barriers or safety drums and a 36"x48" speed limit sign as shown on the approved traffic control plan shall be mounted above the speed display.

The radar speed measurement shall provide a minimum detection distance of 1000 ft. and have an accuracy of +/- 1 mile per hour. The radar shall be mounted so detection will function when located behind concrete barrier or drums.

The numeric speed display range shall be 0 to 99 MPH with numerals of 18 inches in height minimum, amber in color with a black background with automatic dimming for nighttime operations.

1 The speed indicator display shall be equipped with a violation alert that flashes the
2 displayed detected speed when the work zone posted speed limit is exceeded. The
3 speed indicator shall have a maximum speed cutoff. Detected speeds more than 25
4 MPH over the posted speed shall not be displayed and speeds under 25 MPH shall
5 not be displayed.
6

7 The unit shall have traffic data collection capabilities. Traffic data shall be collected
8 and transmitted to the Engineer upon request.
9

10 1-10.3(3)B.GR1

11 **Sequential Arrow Signs (Arrow Boards)**

12
13 1-10.3(3)B(9-35.4).GR1

14 **Sequential Arrow Signs**

15 Section 9-35.4 is supplemented with the following:
16

17
18 1-10.3(3)B(9-35.4).OPT1.~~2024~~2025.GR1

19 **(October 3, 2022)**

20 **GPS and Remote Communications Requirements**

21 Sequential Arrow Signs (Arrow Boards) on this project shall also have the
22 following communication abilities:
23

- 24 1. Provide electronic Work Zone Data Exchange (WZDx) Specification
25 compliant data feeds to Contracting Agency from the arrow board or
26 the Arrow Boards central server.
27
- 28 2. Arrow Boards used on this project shall have the ability to transmit its
29 GPS coordinates (latitude and longitude) with an accuracy of 30-foot
30 diameter of its actual location.
31
- 32 3. Arrow Boards shall transmit its GPS coordinates and mode of
33 operation data to a compatible publicly accessible mapping app
34 service.
35
- 36 4. Arrow Boards shall transmit status and location as follows:
37
 - 38 a. Mode change within 2 minutes.
 - 39 b. Location (if moved more than 500 feet) within 2 minutes.
 - 40 c. Health checks every 30 minutes.
 - 41 d. Current "indication" posted on Board (e.g., left or right chevron,
42 arrow direction, four corner flash, etc.).
43
44
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46

47 If Arrow Board repairs are required, the Contractor shall control traffic with Arrow
48 Board without GPS and remote communication abilities, and the Arrow Board
49 needing repairs shall be repaired or replaced within 48 hours.
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51 Arrow Boards shall be deactivated immediately when the unit is not in use in
52 accordance with the accepted traffic control plan.

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Any data service costs for communications will be included in the unit cost per hour for Sequential Arrow Sign.

~~1-10.3(3)K.GR1~~
Portable Temporary Traffic Control Signal

~~1-10.3(3)K.INST1.GR1~~
Section 1-10.3(3)K is revised to read:

~~1-10.3(3)K.OPT1.2024.GR1~~

~~(November 2, 2022)
Where shown on a traffic control plan, the Contractor shall provide, operate, maintain, and remove a portable temporary traffic control signal system (PTSS) to provide automatic control of traffic through an intersection or alternating one-lane traffic operations on a two-way facility. A PTSS shall be defined as two or more traffic control units that operate together. The system shall be trailer-mounted, fully self-contained, and designed so that it can be easily transported and deployed at different locations.~~

~~The Contractor shall submit a Type 2 Working Drawing consisting of the manufacturer's specifications for the PTSS. A manufacturer's representative is required to demonstrate the capabilities of the PTSS prior to approval and provide training to Contractor personnel as necessary.~~

~~Remote manual control of the PTSS by the Traffic Control Supervisor (TCS) or a qualified operator may be allowed if necessitated by Work area or traffic conditions and as allowed by the Engineer.~~

~~Each PTSS shall provide two signal displays for all road approaches and driveways with existing signalization. Where signal displays are used for driveways between primary PTSS signal displays, only one signal display may be used. Where a PTSS controls a roadway with a through movement, one of the signal displays for that approach shall be overhead. Where a PTSS controls a roadway without a through movement, such as the stem of a tee intersection, the use of an overhead signal display is not required if there is not enough room for the trailer and approved by the Engineer. Maximum distance between signal display trailers shall be 1,500 feet, unless otherwise shown on the Plans or ordered by the Engineer in accordance with Section 1-04.4.~~

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

~~The TCS shall monitor and ensure that the PTSS is fully operational and maintained as specified by the manufacturer. This Work may include cleaning and replacing lamps and other routine maintenance as needed.~~

~~In the event repairs or adjustments are required, the Contractor shall respond immediately and replace the PTSS operations with flagger traffic control. Flagger control shall remain in operation until the Roadway can be safely~~

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~~reopened to traffic. PTSS repairs or PTSS replacement with backup units shall occur within 24 hours.~~

~~The Engineer will monitor PTSS operations and order adjustments as needed based on traffic conditions. Timing adjustments require the approval of the Engineer.~~

~~As shown on the traffic control plan, temporary stop bars and "STOP HERE ON RED" Signs (R10-6) shall be provided at the location traffic is expected to stop during the red display. The stop bar locations shall be illuminated at night. The illumination shall be the responsibility of the Contractor and shall be adjusted to ensure minimal glare to motorists.~~

~~When not in operation, remove signal heads from the view of traffic or cover signal heads with bags made of non-ripping material specifically designed for covering signal heads, including reflective backplates. Do not use trash bags of any type. Remove, cover, fold, or turn all inappropriate signs so that they are not readable by oncoming traffic.~~

~~The Contractor shall provide and install all field wiring to make a complete and operational PTSS and shall maintain the system throughout the life of the Contract.~~

~~PTSS shall not be installed within 300 feet of at-grade railroad crossing. PTSS shall not be installed where driveways or Roadway access points are located between the primary signal displays unless the intersecting roadways and driveways are controlled by another PTSS signal unit as part of the overall PTSS.~~

~~1-10.3(3)K(9-35.14).GR1~~

Portable Temporary Traffic Control

Section 9-35.14 is revised to read:

~~1-10.3(3)K(9-35.14).OPT1.2024.GR1~~

~~(November 2, 2022)~~

~~Portable temporary traffic control signal systems (PTSS) shall meet the requirements of the MUTCD and these specifications.~~

~~The PTSS shall be fully operational for traffic actuated, pre-timed, or manual control. The PTSS shall support the number of signal phases necessary to control traffic through the applicable work area.~~

~~Controllers shall be capable of controlling all displays required for each PTSS system. Controllers shall demonstrate conflict monitoring capability, consistent with the requirements of Section 9-29.13(2) item number 5, with a flashing red display in all directions. The controller shall be capable of terminating the all red clearance for the preceding movement, such that the previous movement can be repeated.~~

~~Signal head displays shall be either hard wired or controlled by radio signal. Manual operation will not require hardwiring or radio control except for the use of two-way radio communication by manufacturer trained qualified operators.~~

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~~The system shall be equipped with a means of informing the operator of signal indications, such as a light on the back of each signal head that illuminates when the signal displays a red indication, during manual operation.~~

~~Each PTSS shall include vehicle detection and shall be capable of operating either as fixed time or traffic actuated. The detection system shall provide presence detection (continuous call to the controller) while there is a vehicle, including bicycles, in the detection zone. When specified in the Contract, each designated PTSS shall include a pushbutton for bicycles that will extend the all-red time to accommodate bicycle travel through the applicable work area. Each pushbutton shall be placed such that it is accessible to bicycle users and include signing with instructions for bicyclists.~~

~~PTSS signal displays shall be trailer mounted. PTSS trailers with overhead signal displays shall provide two signal displays, with at least one display mounted overhead and the two displays at least 8 feet apart horizontally. The minimum vertical clearance to the traveled way for all overhead signal displays is 16.5 feet. Where there is no direct line of sight between stop line locations, each trailer shall include a digital timer display showing the time remaining to the next green indication; digits shall be a minimum of 6 inches in height. Ground mounted signal display trailers shall provide one signal display. Vertical height to the bottom of a single signal display shall be a minimum of 8 feet (10 feet preferable). Vehicular signal heads shall be of the conventional type with standard ITE approved, 12-inch ball or arrow LED displays, as appropriate. Tunnel visors shall be provided for all indications.~~

~~Back plates shall be furnished and attached to the signal heads. Back plates shall be constructed of 5-inch wide 0.050-inch thick corrosion resistant louvered aluminum, with a flat black finish. A 1-inch wide yellow strip of Type IV prismatic sheeting (tape) in accordance with Section 9-28.12 shall be placed around the perimeter of the face of all vehicle signal backplates to project a rectangular image at night toward oncoming traffic.~~

~~Trailers shall have a leveling jack installed at all four corners. The crank for the leveling jacks and trailer hitch shall be locked. The signal pole and mast arm assemblies shall be of the collapsible type, which can be erected and extended at the job site. The mast arm assemblies shall be firmly attached to the trailer to form a stable unit, which can withstand an 80-mph design wind speed with a 1.3 gust factor.~~

~~The PTSS shall be powered using a self-contained battery system capable of providing over 12 days of continuous operations without solar array assistance. A supplemental solar panel array will be allowed.~~

1-10.4.GR1
Measurement

1-10.4(2).GR1
Item Bids With Lump Sum for Incidentals

- 1 1-10.4(2).INST1.GR1
2 Section 1-10.4(2) is supplemented with the following:
3
- 4 1-10.4(2).OPT1.GR1
5 (August 2, 2004)
6 The bid proposal does not contain the item "Project Temporary Traffic Control," lump
7 sum. The provisions of Section 1-10.4(2) shall apply.
8
- 9 1-10.4(2).OPT2.GR1
10 (January 10, 2022)
11 "Automated Flagger Assistance Device" will be measured by the hour for the time
12 that each AFAD is operating as shown on the accepted traffic control plan.
13
- 14 1-10.4(2).OPT3.GR1
15 (January 2, 2018)
16 "Radar Speed Display Sign" will be measured by the hour for the time that each sign
17 is operating as shown on an approved Traffic Control Plan.
18
- 19 1-10.4(2).OPT5.GR1
20 (September 7, 2021)
21 "Operation of Smart Work Zone System" will be measured by the hour the system is
22 actively operating as defined in Section 1-10.3(3) as supplemented in these special
23 provisions. When the smart work zone system malfunctions for longer than 15-
24 minutes or if the smart work zone system is not used in accordance with the
25 applicable approved Smart Work Zone System traffic control plan, no measurement
26 will be made for the smart work zone system for that hour. Payment for all other Work
27 to implement and decommission the SWZS will be made under the applicable items
28 shown in the Proposal.
29
- 30 1-10.4(2).OPT6.GR1
31 (May 20, 2020)
32 "Contractor Provided Uniformed Police Officer" will be measured by the hour.
33
- 34 1-10.4(2).OPT7.GR1
35 (September 7, 2021)
36 "Operation of Queue Warning System" will be measured by the hour each system is
37 actively operating as defined in Section 1-10.3(3) as supplemented in these special
38 provisions. When the Queue Warning System malfunctions for longer than 15
39 minutes or is not used in accordance with the applicable accepted traffic control plan,
40 no measurement will be made for the queue warning system for that hour. Payment
41 for all other Work to implement and decommission the Queue Warning System will
42 be made under the applicable items shown in the Proposal.
43
- 44 1-10.4(2).OPT8.GR1
45 (October 3, 2022)
46 "Temporary Portable Transverse Rumble Strips" will be measured per each one time
47 for each array consisting of three rumble strips in operation at any one time. This
48 price shall include installation, maintaining, and relocating throughout the life of the
49 project and final removal from the project site.
50

1 1-10.4(3).GR1
2 **Reinstating Unit Items With Lump Sum Traffic Control**
3

4 1-10.4(3).INST1.GR1
5 Section 1-10.4(3) is supplemented with the following:
6

7 1-10.4(3).OPT1.FR1
8 (November 2, 2022)
9 The bid proposal contains the item "Project Temporary Traffic Control," lump sum and
10 the additional temporary traffic control items listed below. The provisions of Section
11 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.
12

13 "Work Zone Safety Contingency", by force account.
14

15 *** \$\$1\$\$ ***
16

17 1-10.5.GR1
18 **Payment**
19

20 1-10.5(2).GR1
21 **Item Bids with Lump Sum for Incidentals**
22

23 1-10.5(2).INST1.GR1
24 Section 1-10.5(2) is supplemented with the following:
25

26 1-10.5(2).OPT1.GR1
27 (~~January 10, 2022~~ **November 20, 2023**)
28 "Automated Flagger Assistance Device", per hour.
29 The unit Contract price, when applied to the number of hours measured for this item
30 in accordance with Section 1-10.4(2), shall be full pay to provide, ~~operate,~~ maintain
31 and remove the AFAD as described including transporting, installing and resetting
32 the devices.
33

34 All costs for controlling AFADs shall be included in the unit Contract price per hour
35 for "Flaggers".
36

37 1-10.5(2).OPT2.GR1
38 (January 2, 2018)
39 "Radar Speed Display Sign", per hour.
40 The unit Contract price, when applied to the number of units measured for this item
41 in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred
42 by the Contractor in performing the Work for procuring all radar speed display signs
43 required for the project and for transporting these signs to and from the project.
44

45 1-10.5(2).OPT3.GR1
46 (September 7, 2021)
47 "Operation of Smart Work Zone System", per hour.
48 The unit Contract price, when applied to the number of units measured for this item
49 in accordance with Section 1-10.4(2) shall be full compensation for all costs incurred
50 by the Contractor, SWZS Vendor, and SWZS Technician for mobilizing and
51 demobilizing the smart work zone system components; the hardware, software,
52 traffic sensors, and other required equipment; maintenance data logs; traffic data

1 logs; Contracting Agency access to Smart Work Zone System data; and wireless
2 system operations including Contracting Agency access. Payment for all other Work
3 to implement and decommission the SWZS will be made under the applicable items
4 shown in the Proposal.

5
6 1-10.5(2).OPT4.GR1
7 (September 7, 2021)
8 "Operation of Queue Warning System", per hour.
9 The unit Contract price, when applied to the number of units measured for this item
10 in accordance with Section 1-10.4(2) shall be full compensation for all costs incurred
11 by the Contractor, Vendor, and/or Queue Warning System Technician for mobilizing
12 and demobilizing the queue warning system components; the hardware, software,
13 traffic sensors, and other required Queue Warning System equipment; maintenance
14 data logs; traffic data logs; and wireless system operations including Contracting
15 Agency access. Payment for all other Work to implement and decommission the
16 Queue Warning System will be made under the applicable items shown in the
17 Proposal.

18
19 1-10.5(2).OPT5.GR1
20 (May 20, 2020)
21 "Contractor Provided Uniformed Police Officer", per hour.
22
23 The unit Contract price per hour for "Contractor Provided Uniformed Police Officer"
24 shall be full pay for performing the Work as specified and as shown in the Plans,
25 including all costs for arrangement for and supervision of a uniformed law
26 enforcement personnel and vehicles to participate in the Contractor's traffic control
27 activities.

28
29 1-10.5(2).OPT6.GR1
30 (October 3, 2022)
31 "Temporary Portable Transverse Rumble Strips", per each.
32 The unit Contract price, when applied to the number of units measured for this item
33 in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred
34 by the Contractor in performing the Work as described.

35
36 1-10.5(2).OPT7.GR1
37 (November 2, 2022)
38 "Work Zone Safety Contingency", by force account.

39
40 All costs as authorized by the Engineer will be paid for by force account as specified
41 in Section 1-09.6.

42
43 For purpose of providing a common proposal for all bidders, the Contracting Agency
44 has entered an amount for the item "Work Zone Safety Contingency" in the Proposal
45 to become a part of the Contractor's total bid.

46
47 The Engineer may choose to use existing bid items for the implementation of the
48 agreed upon enhancement.

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| 1 | DIVISION2.GR2 | Earthwork |
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| 3 | 2-01.GR2 | Clearing, Grubbing, and Roadside Cleanup |
| 4 | | |
| 5 | 2-01.1.GR2 | Description |
| 6 | | |
| 7 | 2-01.1.INST1.GR2 | (Section 2-01.1 is supplemented with the following) Must use once preceding any of the following: |
| 8 | | |
| 9 | | |
| 10 | 2-01.1.OPT1.FR2 | (Clearing and Grubbing) (March 13, 1995) Use when the payment for clearing and grubbing is either lump sum or included in other work. (1 fill-in) (Fill-in describes the longitudinal and lateral limits of clearing and grubbing) |
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| 17 | 2-01.3.GR2 | Construction Requirements |
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| 19 | 2-01.3(1).GR2 | Clearing |
| 20 | | |
| 21 | 2-01.3(1).INST1.GR2 | (Item number 1 of Section 2-01.3(1) is revised to read) Must use once preceding any of the following: |
| 22 | | |
| 23 | | |
| 24 | 2-01.3(1).OPT1.GR2 | (April 2, 2018) Use in projects applying Programmatic Biological Assessment Minimization Measure #88. |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | 2-01.3(4).GR2 | Roadside Cleanup |
| 29 | | |
| 30 | 2-01.3(4).INST1.GR2 | (Section 2-01.3(4) is supplemented with the following) Must use once preceding any of the following: |
| 31 | | |
| 32 | | |
| 33 | 2-01.3(4).OPT1.FR2 | (Roadside Cleanup) (January 5, 1998) Use if additional work is required under the item "Roadside Cleanup". (fill-ins) |
| 34 | | |
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| 39 | 2-01.5.GR2 | Payment |
| 40 | | |
| 41 | 2-01.5.INST1.GR2 | (The first and second paragraphs of Section 2-01.5 are revised to read) Must use once preceding any of the following: |
| 42 | | |
| 43 | | |
| 44 | | |
| 45 | 2-01.5.OPT1.FR2 | (Clearing and Grubbing) (August 7, 2017) Must be used with 2-01.1.OPT1.FR2 when the payment for clearing and grubbing is included in other work. (1 fill-in) |
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| 51 | 2-02.GR2 | Removal of Structures and Obstructions |
| 52 | | |
| 53 | 2-02.1.GR2 | Description |

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2-02.1.INST1.GR2 (Section 2-02.1 is supplemented with the following)
Must use once preceding any of the following:

2-02.1.OPT1.GR2 (Removal of Misc. Traffic Items)
(March 13, 1995)
Must also use **2-02.3.OPT2.FR2** and **2-02.5.OPT8.GR2**
Use in projects requiring the removal of minor quantities of miscellaneous traffic items such as traffic islands, traffic curb, lane markers, plastic traffic buttons, guide posts, etc. when there is no pay item for Removal of Structures and Obstructions and the cost of removing each type of item is under \$10,000.

2-02.1.OPT2.GR2 (Removal and Disposal of Asbestos Material)
(October 4, 2021)
Must also use **1-07.5(4)C.OPT1.FR1**, **2-02.3.OPT4.GR2** and **2-02.5.OPT11.GR2**.
Use in projects when asbestos removal is required.
(1 fill-in)

2-02.1.OPT3.GR2 (Removing Portions of Existing Box Culvert)
(March 13, 1995)
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with **2-02.3(2).OPT12.GR2**, **6-02.2.OPT2.GB6**, **6-02.3(24)C.OPT1.GB6**, **6-02.3(24)C.OPT2.GR6**, **6-02.5.OPT5.GB6**, and **2-02.5.OPT12.GR2**.

2-02.1.OPT5.GR2 (Decommissioning Wells)
(February 25, 2021)
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with **2-02.2.OPT1.GR2**, **2-02.3.OPT7.GR2**, and **2-02.5.OPT2.GR2**.

2-02.2.GR2 Materials

2-02.2.INST1.GR2 (Section 2-02.2 is supplemented with the following)
Must use once preceding any of the following:

2-02.2.OPT1.GR2 (Decommissioning Wells)
(February 25, 2021)
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with **2-02.1.OPT5.GR2**, **2-02.3.OPT7.GR2**, and **2-02.5.OPT2.GR2**.

2-02.3.GR2 Construction Requirements

2-02.3.INST1.GR2 (Section 2-02.3 is supplemented with the following)
Must use once preceding any of the following:

| | | |
|----|-----------------|--|
| 1 | 2-02.3.OPT1.FR2 | (Removal of Obstructions) |
| 2 | | (September 7, 2021) |
| 3 | | Use <i>except</i> when the combined cost of all obstruction |
| 4 | | removal is \$5,000 or less and payment is to be included in |
| 5 | | other payment items. |
| 6 | | |
| 7 | | Removal of obstructions that are readily measurable and |
| 8 | | for which the cost of removal is \$5,000 or less per |
| 9 | | obstruction may be included in this pay item. |
| 10 | | |
| 11 | | Removal of obstructions that are not readily measurable, |
| 12 | | such as foundations, may be included in this item |
| 13 | | regardless of the removal cost. |
| 14 | | |
| 15 | | List all items and approximate quantities to be removed |
| 16 | | under "Removal of Structure and Obstruction". |
| 17 | | (1 fill-in) |
| 18 | | |
| 19 | 2-02.3.OPT2.FR2 | (Removing Miscellaneous Traffic Items) |
| 20 | | (March 13, 1995) |
| 21 | | Must include with 2-02.1.OPT1.GR2 . |
| 22 | | |
| 23 | 2-02.3.OPT3.FR2 | (Removal and Disposal of Hazardous Material) |
| 24 | | (June 6, 2022) |
| 25 | | Must also use 2-02.4.OPT1.GR2 and 2-02.5.OPT7.GR2 . |
| 26 | | Use only for subsurface removal of known or suspected |
| 27 | | hazardous or contaminated material. Fill-in is for type of |
| 28 | | material, depth of contamination in soil, and depth of |
| 29 | | contamination in water. Fill-in information is to be provided |
| 30 | | by the Region Environmental Staff. |
| 31 | | (1 fill-in) |
| 32 | | |
| 33 | 2-02.3.OPT4.GR2 | (Removal and Disposal of Asbestos Material) |
| 34 | | (October 4, 2021) |
| 35 | | Must include with 1-07.5(4)C.OPT1.FR1 , 2- |
| 36 | | 02.1.OPT2.GR2 , and 2-02.5.OPT11.GR2 . |
| 37 | | |
| 38 | 2-02.3.OPT5.GR2 | (Removal and Disposal of Asbestos Material) |
| 39 | | (October 4, 2021) |
| 40 | | Must include with 1-07.5(4)C.OPT2.FR1 . |
| 41 | | |
| 42 | 2-02.3.OPT6.FB2 | (Salvage of Removed Structure Items) |
| 43 | | (June 26, 2000) |
| 44 | | Use when removal items are to remain the property of the |
| 45 | | Contracting Agency. The first fill-in specifies the salvaged |
| 46 | | items. The second fill-in specifies the name and address |
| 47 | | (street address or highway milepost) of the material storage |
| 48 | | site. Include with either |
| 49 | | 2-02.3(2).OPT1.FB2 , 2-02.3(2).OPT2.FB2 , or 2- |
| 50 | | 02.3(2).OPT3.FB2 , and 2-02.3(2).OPT10(B).FB2 . |
| 51 | | (2 fill-ins) |
| 52 | | |
| 53 | 2-02.3.OPT7.GR2 | (Well Decommissioning) |

(February 25, 2021)
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract.
Use with **2-02.1.OPT5.GR2**, **2-02.2.OPT1.GR2**, and **2-02.5.OPT2.GR2**.

2-02.3(2).GB2 Removal of Bridges, Box Culverts, and other Drainage Structures

2-02.3(2).INST1.GB2 (Section 2-02.3(2) is supplemented with the following)
Must use once preceding any of the following:

2-02.3(2).OPT1.FB2 (Removing Existing Bridge)
(June 26, 2000)
Use in projects requiring the removal of existing bridge(s) in one stage. The first fill-in specifies the bridge(s). The second fill-in specifies where traffic is directed (onto the detour route or bridge, onto the new bridge, etc.). Include with **2-02.3(2).OPT10(B).FB2**. **Include with 1-07.1(2).OPT23.FR1** if the bridge being removed has steel members with lead paint.
(2 fill-ins)

2-02.3(2).OPT2.FB2 (Removing Existing Bridge)
(June 26, 2000)
Use in projects requiring the removal of existing bridge(s) in two or more stages. The fill-in specifies the bridge(s). Include with **1-07.1(2).OPT23.FR1** if the bridge being removed has steel members with lead paint.
(1 fill-in)

2-02.3(2).OPT3.FB2 (Removing Portion of Existing Bridge)
(June 26, 2000)
Use in projects requiring the removal of portions of existing bridge(s). The first fill-in specifies the bridge(s). The second fill-in specifies the portions being removed. Include with **1-07.1(2).OPT23.FR1** if the bridge being partially removed has steel members with lead paint.
(2 fill-ins)

2-02.3(2).OPT7.FB2 (Removal in Water)
(June 26, 2000)
Use in projects requiring the removal of existing bridge(s) when removal involves piers within the wetted perimeter of a stream, lake or bay. The first fill-in specifies the bridge(s). The second and fourth fill-ins specify the body of water. The third fill-in specifies the elevation of the removal level. Include with **either 2-02.3(2).OPT1.FB2, 2-02.3(2).OPT2.FB2, or 2-02.3(2).OPT3.FB2, and 2-02.3(2).OPT10(B).FB2**.

2-02.3(2).OPT10.GB2 (Use of Explosives)

Must use once preceding any of the following:

2-02.3(2).OPT10(B).FB2 (Structure Removal By Explosives)
(January 2, 2018)
Use in projects requiring removal of existing bridges only if explosives may be used. The fill-in specifies the bridge where the use of explosives is permitted for removal operations. Include with **2-02.3(2).OPT1.FB2**. Include with **1-07.1(2).OPT23.FR1** if the bridge involved has steel members with lead paint.
(1 fill-in)

2-02.3(2).OPT11.GB2 (Requirements for Closing Bridge Prior to Removal)
(January 2, 2018)
Use in projects requiring removal of existing bridges when it is necessary to close the bridge to traffic in order to complete removal as soon as possible. Include with **2-02.3(2).OPT1.FB2**, and **2-02.3(2).OPT10(B).FB2**. Include with **1-07.1(2).OPT23.FR1** if the bridge involved has steel members with lead paint.

2-02.3(2).OPT12.GR2 (Removing Portions of Existing Box Culvert)
(June 26, 2000)
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with **2-02.1.OPT3.GR2**, **6-02.2.OPT2.GB6**, **6-02.3(24)C.OPT1.GB6**, **6-02.3(24)C.OPT2.GR6**, and **6-02.5.OPT5.GB6**, and either **2-02.5.OPT12.GR2** or **2-02.5.OPT15.GR2**.

2-02.3(3).GR2 Removal of Pavement, Sidewalks, Curbs, and Gutters

2-02.3(3).INST1.GR2 (Section 2-02.3(3) is supplemented with the following)
Must use once preceding any of the following:

2-02.3(3).OPT1.FR2 (September 8, 1997)
Include in projects when removal of pavement is outside the limits of roadway excavation, and the removal is to be paid by the square yard.
Must also use **2-02.4.OPT2.GR2** and **2-02.5.OPT13.FR2**.
(2 fill-ins)

2-02.4.GR2 Measurement

2-02.4.INST1.GR2 (Section 2-02.4 is supplemented with the following)
Must use once preceding any of the following:

2-02.4.OPT1.GR2 (Removal and Disposal of Hazardous Material)
(December 4, 2006)
Must include with **2-02.3.OPT3.FR2** and **2-02.5.OPT7.GR2**.

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2-02.4.OPT2.GR2 (Pavement Removal)
(September 8, 1997)
Must include with **2-02.3(3).OPT1.FR2..**

2-02.4.OPT3.GR2 (Sidewalk Removal)
(October 25, 1999)
Include in projects when removal of sidewalk is outside the limits of roadway excavation, and the removal is to be paid by the square yard.
Must include with **2-02.5.OPT16.FR2.**

2-02.4.OPT4.GR2 (Curb Removal)
(September 8, 1997)
Include in projects when removal of curb is outside the limits of roadway excavation, and the removal is to be paid by the linear foot.
Must include with **2-02.5.OPT17.FR2.**

2-02.5.GR2 Payment

2-02.5.INST1.GR2 (Section 2-02.5 is revised by the following)
Must use once preceding any of the following:

2-02.5.OPT1.FR2 (Removal of structures and obstructions included in other work)
(August 1, 2017)
(1 fill-in)

2-02.5.INST2.GR2 (Section 2-02.5 is supplemented with the following)
Must use once preceding any of the following:

2-02.5.OPT2.GR2 (Decommissioning Wells)
(February 25, 2021)
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract.
Use with **2-02.1.OPT5.GR2, 2-02.2.OPT1.GR2, and 2-02.3.OPT7.GR2.**

2-02.5.OPT7.GR2 (Removal and Disposal of Hazardous Material)
(December 4, 2006)
*Must include with **2-02.3.OPT3.FR2 and 2-02.4.OPT1.GR2.***

2-02.5.OPT8.GR2 (Removing Miscellaneous Traffic Items)
(September 30, 1996)
*Must include with **2-02.1.OPT1.GR2.***

2-02.5.OPT11.GR2 (Removal and Disposal of Asbestos Material)
(September 30, 1996)
Must include with **1-07.5(4)C.OPT1.FR1, 2-02.1.OPT.GR2, and 2-02.3.OPT4.GR2.**

| | | |
|----|----------------------|---|
| 1 | 2-02.5.OPT12.GR2 | (Removing Portion of Conc. Box Culvert) (June 26, 2000) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24).C.OPT1.GB6, 6-02.3(24).C.OPT2.GR6, and 6-02.5.OPT5.GB6. |
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| 9 | 2-02.5.OPT13.FR2 | (Pavement Removal) (September 30, 1996) Must include with 2-02.3(3).OPT1.FR2. (1 fill-in) |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | 2-02.5.OPT15.GR2 | (Removal of portions of box culvert) (June 26, 2000) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24).C.OPT1.GB6, 6-02.3(24).C.OPT2.GR6, and 6-02.5.OPT5.GB6. |
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| 22 | 2-02.5.OPT16.FR2 | (Sidewalk Removal) (November 3, 1999) Must include with 2-02.4.OPT3.GR2 (1 fill-in) |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | 2-02.5.OPT17.FR2 | (Removal of portions of Curb) (September 8, 1997) Must include with 2-02.4.OPT4.GR2. (1 fill-in) |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| 32 | 2-03.GR2 | Roadway Excavation and Embankment |
| 33 | | |
| 34 | 2-03.3.GR2 | Construction Requirements |
| 35 | | |
| 36 | 2-03.3(2).GR2 | Rock Cuts |
| 37 | | |
| 38 | 2-03.3(2).INST1.GR2 | (Section 2-03.3(2) is supplemented with the following) Must use once preceding any of the following: |
| 39 | | |
| 40 | | |
| 41 | 2-03.3(2).OPT1.GR2 | (Rock Slope Scaling and Removal and Disposal of Rock Slope Scaling Debris) (September 7, 2021) Use in projects with rock slope scaling. Include with 2-03.4.OPT4.GR2 and 2-03.5.OPT3.GR2. |
| 42 | | |
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| 45 | | |
| 46 | | |
| 47 | 2-03.3(7).GR2 | Disposal of Surplus Material |
| 48 | | |
| 49 | 2-03.3(7).INST1.GR2 | (Section 2-03.3(7) is supplemented with the following) Must use once preceding any of the following: |
| 50 | | |
| 51 | | |
| 52 | 2-03.3(7).OPT1.FR2 | (Contracting Agency furnished waste site) (March 13, 1995) |
| 53 | | |

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|----|------------------------|--|
| 1 | | Use in projects with Contracting Agency provided waste sites. |
| 2 | | (1 fill-in) |
| 3 | | |
| 4 | | |
| 5 | 2-03.3(7).OPT2.FR2 | (Waste material by embankment widening) |
| 6 | | (March 13, 1995) |
| 7 | | Use in projects where the Contracting Agency specifies embankments to be widened. |
| 8 | | (2 fill-ins) |
| 9 | | |
| 10 | | |
| 11 | 2-03.3(7).OPT3.GR2 | (Contracting Agency provided sites are not mandatory) |
| 12 | | (March 13, 1995) |
| 13 | | Use, when applicable, with 2-03.3(7).OPT1.FR2 |
| 14 | | or 2-03.3(7).OPT2.FR2. |
| 15 | | |
| 16 | 2-03.3(7).OPT4.GR2 | (Contracting Agency provided sites are not of sufficient size) |
| 17 | | (March 13, 1995) |
| 18 | | Use, when applicable, with 2-03.3(7).OPT1.FR2 |
| 19 | | or 2-03.3(7).OPT2.FR2 . |
| 20 | | |
| 21 | | |
| 22 | 2-03.3(14).GR2 | Embankment Construction |
| 23 | | |
| 24 | 2-03.3(14)C.GR2 | Compacting Earth Embankments |
| 25 | | |
| 26 | 2-03.3(14)C.INST1.GR2 | (Section 2-03.3(14)C is supplemented with the following) |
| 27 | | Must use once preceding any of the following: |
| 28 | | |
| 29 | | |
| 30 | 2-03.3(14)C.OPT1.GR2 | (March 13, 1995) |
| 31 | | Use in projects when no payment for embankment compaction (Method A) is included. |
| 32 | | |
| 33 | | |
| 34 | 2-03.3(14)I.GB2 | Embankments At Bridge And Trestle Ends. |
| 35 | | |
| 36 | 2-03.3(14)I.INST1.GB2 | (Section 2-03.3(14)I is supplemented with the following) |
| 37 | | Must use once preceding any of the following: |
| 38 | | |
| 39 | | |
| 40 | 2-03.3(14)I.OPT1.FB2 | (March 13, 1995) |
| 41 | | Use in projects when the bridge approach embankments must be constructed before the end piers. |
| 42 | | (2 fill-ins) |
| 43 | | |
| 44 | | |
| 45 | | |
| 46 | 2-03.4.GR2 | Measurement |
| 47 | | |
| 48 | 2-03.4.INST1.GR2 | (Section 2-03.4 is supplemented with the following) |
| 49 | | Must use once preceding any of the following: |
| 50 | | |
| 51 | 2-03.4.OPT1.GR2 | (Embankment In Place) |
| 52 | | (March 13, 1995) |
| 53 | | Must also include 2-03.5.OPT1.GR2 . |

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| 1 | | Use in projects that require embankment widening for beam guardrail and no other grading pay items are included in the contract to construct the widening. |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | 2-03.4.OPT2.GR2 | (Measurement of roadway excavation and embankment) |
| 6 | | (March 13, 1995) |
| 7 | | Must include with 1-05.4.OPT2.GR1 , Contractor surveying |
| 8 | | - roadway. May be used without Contractor surveying. |
| 9 | | |
| 10 | 2-03.4.OPT3.GR2 | (Measurement of roadway excavation and embankment) |
| 11 | | (March 13, 1995) |
| 12 | | Use in minor grading projects when the original cross- |
| 13 | | sections are satisfactory for construction payment. |
| 14 | | |
| 15 | 2-03.4.OPT4.GR2 | (Rock Slope Scaling and Rock |
| 16 | | Slope Scaling Debris Removal Including Haul) |
| 17 | | (April 5, 2010) |
| 18 | | Use in projects with rock slope scaling. Include with |
| 19 | | 2-03.3(2).OPT1.GR2 and 2-03.5.OPT3.GR2. |
| 20 | | |
| 21 | 2-03.5.GR2 | Payment |
| 22 | | |
| 23 | 2-03.5.INST1.GR2 | (Section 2-03.5 is supplemented with the following) |
| 24 | | Must use once preceding any of the following: |
| 25 | | |
| 26 | 2-03.5.OPT1.GR2 | (Embankment In Place) |
| 27 | | (September 30, 1996) |
| 28 | | Must include with 2-03.4.OPT1.GR2. |
| 29 | | |
| 30 | 2-03.5.OPT2.FR2 | (Preparation of waste sites) |
| 31 | | (March 13, 1995) |
| 32 | | Use in projects when the preparation of waste sites is |
| 33 | | included in other work. |
| 34 | | (1 fill-in) |
| 35 | | |
| 36 | 2-03.5.OPT3.GR2 | (Rock Slope Scaling and Rock Slope Scaling |
| 37 | | Debris Removal Including Haul) |
| 38 | | (April 5, 2010) |
| 39 | | Use in projects with rock slope scaling. Include with 2- |
| 40 | | 03.3(2).OPT1.GR2 and 2-03.4.OPT4.GR2. |
| 41 | | |
| 42 | 2-06.GR2 | Subgrade Preparation |
| 43 | | |
| 44 | 2-06.3.GR2 | Construction Requirements |
| 45 | | |
| 46 | 2-06.3(1).GR2 | Subgrade For Surfacing |
| 47 | | |
| 48 | 2-06.3(1).INST1.GR2 | (Section 2-06.3(1) is supplemented with the following) |
| 49 | | Must use once preceding any of the following: |
| 50 | | |
| 51 | 2-06.3(1).OPT1.GR2 | (Subgrade trimmer required) |
| 52 | | (March 13, 1995) |

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Use in projects where a treated base or pavement will be placed directly on the subgrade.
The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming.

2-06.3(1).OPT2.GR2 (Subgrade trimmer not required)
(March 13, 1995)

Use in grading-only projects where a treated base is planned for construction on a future project.
The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming. The position of the future treated base is to shown on the plans.

2-09.GR2 Structure Excavation

2-09.3.GR2 Construction Requirements

2-09.3(1).GR2 General Requirements

2-09.3(1)C.GR2 Removal Of Unstable Base Material

2-09.3(1)C.INST1.GR2 (Section 2-09.3(1)C is supplemented with the following)
Must use once preceding any of the following:

2-09.3(1)C.OPT1.FB2 (Soils Prone to Disturbance)
(September 8, 2020)
Use in bridge projects in where soil in the bottom of footing excavation is susceptible to disturbance and may become unsuitable. Use at the recommendation of the Geotechnical office.
(1 fill-in)
Fill-in #1 is the location of the soils prone to disturbance.

2-09.3(3).GR2 Construction Requirements, Structure Excavation, Class A

2-09.3(3)B.GR2 Excavation Using Open Pits – Extra Excavation

2-09.3(3)B.INST1.GR2 (Section 2-09.3(3)B is supplemented with the following)
Must use once preceding any of the following:

2-09.3(3)B.OPT1.FB2 (Extra Excavation and Open Pit Excavation Not Allowed)
(September 7, 2021)
Use in projects where extra excavation and open pit excavation is not allowed at specific

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locations. The fill-in specifies the location(s) where extra excavation and open pit excavation is not allowed.
(1 fill-in)

2-09.3(3)B.OPT2.FR2 (Extra Excavation and Open Pit Excavation)
(April 1, 2019)
Use in projects where temporary excavation slopes are located beneath structures, critical facilities, or where recommended by the Geotechnical Office. The fill-in specifies the location(s) where extra excavation and open pit excavation is allowed.
(1 fill-in)

2-09.3(3)D.GR2 Shoring And Cofferdams

2-09.3(3)D.INST1.GR2 (Section 2-09.3(3)D is supplemented with the following)
Must use once preceding any of the following:

2-09.3(3)D.OPT1.GB2 (Protecting existing pavement)
(March 13, 1995)
Use in projects when bridges are over or adjacent to existing highways.

2-09.3(3)D.OPT2.GB2 (Protecting RR tracks)
(August 2, 2010)
Use in projects when bridges are over or adjacent to existing railroad tracks.

2-09.3(3)D.OPT3.FB2 (March 13, 1995)
Use with **2-09.3(3)D.OPT2.GB2** when construction is required near railroad tracks, or structures which require extensive shoring.
(3 fill-ins)

2-09.4.GR2 Measurement

2-09.4.INST1.GR2 (The subsection **Lower Limits** of Section 2-09.4 is supplemented with the following)
Must use once preceding any of the following:

2-09.4.OPT1.GB2 (January 4, 2010)
(Additional structure excavation under girders at end piers)
Use in projects where excavation is required outside of normal structure excavation limits for end pier footings.

2-12.GR2 Construction Geosynthetic

2-12.1.GR2 Description

- 1 2-12.1.INST1.GR2 (Section 2-12.1 is supplemented with the following)
- 2 Must use once preceding any of the following:
- 3
- 4 2-12.1.OPT1.GR2 Geosynthetic Reinforced Slope
- 5 (November 17, 1997)
- 6 Use in projects requiring geosynthetic reinforced slopes.
- 7 Slope design should be performed by the Olympia Service
- 8 Center Materials Laboratory or a geotechnical consultant.
- 9 Use details from DETAILS.CEL Library; D225, D229, D230,
- 10 and D230A or D230B.
- 11
- 12 **2-12.2.GR2 Materials**
- 13
- 14 2-12.2(9-03.14).GR2 (Borrow)
- 15 (Section 9-03.14 is supplemented with the following)
- 16 Must use once preceding any of the following:
- 17
- 18 2-12.2(9-03.14).OPT1.FR2 (Borrow for Geosynthetic Reinforced Slopes)
- 19 (November 17, 1997)
- 20 Use in projects requiring geosynthetic reinforced
- 21 slopes.
- 22 (1 fill-in)
- 23
- 24 2-12.2(9-07.7).GR2 (Welded Wire Reinforcement)
- 25 (Section 9-07.7 is supplemented with the following)
- 26 Must use once preceding any of the following:
- 27
- 28 2-12.2(9-07.7).OPT1.GR2 (Welded Wire Reinforcement)
- 29 (February 6, 2023)
- 30 Use in projects where welded wire faced geosynthetic
- 31 reinforced slopes are specified.
- 32
- 33 2-12.2(9-33.2(2)).GR2 (Geosynthetic Properties for Retaining Walls and
- 34 Reinforced Slopes)
- 35 (Section 9-33.2(2) is supplemented with the following)
- 36 Must use once preceding any of the following:
- 37
- 38 2-12.2(9-33.2(2)).OPT1.FR2 (Geosynthetic Properties for Reinforced
- 39 Slopes)
- 40 (January 2, 2012)
- 41 Use in projects requiring geosynthetic reinforced
- 42 slopes. The slope class must be identified in fill-in 6
- 43 based on the following: Class 1 is typically reinforced
- 44 slopes which support bridge abutments, buildings,
- 45 critical utilities, or other facilities which the
- 46 consequences of poor performance or failure would be
- 47 severe. In general, slopes greater than 30 feet in height.
- 48 Class 2 is all reinforced slopes not categorized as Class
- 49 1.
- 50 (6 fill-ins)
- 51
- 52 2-12.2(9-33.2(2)).OPT2.GR2 (Geosynthetic Properties for Turf
- 53 Reinforcement Mat)

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(April 5, 2004)
Use in projects where geosynthetic reinforced slopes
with a turf reinforcement mat facing are specified.

2-12.2(9-33.4(1)).GR2 (Source Approval)
(Section 9-33.4(1) is supplemented with the following)
Must use once preceding any of the following:

2-12.2(9-33.4(1)).OPT1.GR2 (Geosynthetic Reinforced Slope)
Primary Reinforcement
(April 5, 2004)
Use in projects requiring geosynthetic reinforced
slopes.

2-12.2(9-33.4(1)).OPT2.GR2 (Geosynthetic Reinforced Slope)
Secondary Reinforcement
(April 5, 2004)
Use in projects where geosynthetic reinforced slopes
with secondary reinforcement are specified.

2-12.2(9-33.4(1)).OPT3.GR2 (Geosynthetic Reinforced Slope)
Turf Reinforcement Mat
(November 17, 1997)
Use in projects where geosynthetic reinforced slopes
with turf reinforcement mat facing are specified.

2-12.2(9-33.4(3)).GR2 (Acceptance Samples)
(Section 9-33.4(3) is supplemented with the following)
Must use once preceding any of the following:

2-12.2(9-33.4(3)).OPT1.GR2 (Geosynthetic Reinforced)
Slope Primary Reinforcement
(November 17, 1997)
Use in projects requiring geosynthetic reinforced
slopes.

2-12.2(9-33.4(3)).OPT2.GR2 (Geosynthetic Reinforced Slope)
Secondary Reinforcement
(April 5, 2004)
Use in projects where geosynthetic reinforced slopes
with secondary reinforcement are specified.

2-12.2(9-33.4(3)).OPT3.GR2 (Geosynthetic Reinforced Slope Turf)
Reinforcement Mat
(November 17, 1997)
Use in projects where geosynthetic reinforced slopes
with turf reinforcement mat facing are specified.

2-12.2(9-33.4(4)).GR2 (Acceptance by Certificate of Compliance)
(Section 9-33.4(4) is supplemented with the following)
Must use once preceding any of the following:

1 2-12.2(9-33.4(4)).OPT1.GR2 (Reinforced Slope)
2 (November 17, 1997)
3 Use in projects requiring geosynthetic reinforced
4 slopes.

5
6 **2-12.3.GR2 Construction Requirements**

7
8 2-12.3.INST1.GR2 (Supplemental Instructions)
9 (Section 2-12.3 is supplemented with the following)
10 Must use once preceding any of the following:

11
12 2-12.3.OPT1.GR2 (Geosynthetic Reinforced Slope Construction
13 Requirements)
14 (November 17, 1997)
15 Use in projects requiring geosynthetic reinforced slopes.
16 Slope facing options which include vegetative cover should
17 only be used at sites where the average annual
18 precipitation is 20 inches or more.

19
20 2-12.3.OPT2.FR2 (Turf Reinforced Mat Facing Construction)
21 (August 2, 2010)
22 Use in projects requiring geosynthetic reinforced slopes
23 with turf reinforcement mat facing. In general, use for
24 slopes no steeper than 1.2H:1V.
25 (2 fill-ins)

26
27 2-12.3.OPT3.GR2 (Geosynthetic Wrapped Slope Facing Construction)
28 (November 17, 1997)
29 Use in projects requiring geosynthetic reinforced slopes
30 with geosynthetic wrapped facing. Because of planting
31 requirements, do not use this option for sites where the
32 elevation is over 1500 feet. In general, use for slopes no
33 steeper than 1H:1V.

34
35 2-12.3.OPT4.GR2 (Welded Wire Facing Construction)
36 (November 17, 1997)
37 Use in projects requiring geosynthetic reinforced slopes
38 with welded wire facing. In general, use for slopes no
39 steeper than 1H:2V.

40
41 2-12.3.OPT5.GR2 (Installing Guardrail Posts in Geosynthetic)
42 Reinforced Slopes
43 (November 17, 1997)
44 Use in projects requiring guardrail on geosynthetic
45 reinforced slopes.

46
47 **2-12.4.GR2 Measurement**

48
49 2-12.4.INST1.GR2 (Supplemental Instructions)
50 (Section 2-12.4 is supplemented with the following)
51 Must use once preceding any of the following:

52
53 2-12.4.OPT1.FR2 (Geosynthetic Reinforced Slope)

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(January 5, 1998)
Use in projects requiring geosynthetic reinforced slopes.
(1 fill-in)

2-12.5.GR2 Payment

2-12.5.INST1.GR2 (Supplemental Instructions)
(Section 2-12.5 is supplemented with the following)
Must use once preceding any of the following:

2-12.5.OPT1.FR2 (Geosynthetic Reinforced Slope)
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes.
(1 fill-in)

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DIVISION5.GR5 Surface Treatments and Pavements

5-01.GR5 Cement Concrete Pavement Rehabilitation

5-01.1.GR5 Description

5-01.1.INST1.GR5 (Section 5-01.1 is supplemented with the following)
Must use once preceding any of the following:

5-01.1.OPT1.GR5 (Partial Depth Spall Repair)
(September 7, 2021)
Use in projects that have the Bid item “Partial Depth Spall
Repair”, by force account.
Must also use **5-01.2.OPT1.GR5 & 5-01.3(5).OPT1.GR5.**

5-01.2.GR5 Materials

5-01.2.INST1.GR5 (Section 5-01.2 is supplemented with the following)
Must use once preceding any of the following:

5-01.2.OPT1.GR5 (Partial Depth Spall Repair)
(September 7, 2021)
Use in projects that have the Bid item “Partial Depth Spall
Repair”, by force account.
Must also use **5-01.1.OPT1.GR5 & 5-01.3(5).OPT1.GR5.**

5-01.3.GR5 Construction Requirements

5-01.3(5).GR5 Partial Depth Spall Repair

5-01.3(5).INST1.GR5 (Section 5-01.3(5) is revised to read)
Must use once preceding any of the following:

5-01.3(5).OPT1.GR5 (Partial Depth Spall Repair)
(September 7, 2021)
Use in projects that have the Bid item “Partial Depth
Spall Repair”, by force account.
Must also use **5-01.1.OPT1.GR5 & 5-01.2.OPT1.GR5.**

5-01.3(9).GR5 Portland Cement Concrete Pavement Grinding

5-01.3(9).INST1.GR5 (Section 5-01.3(9) is supplemented with the following)
Must use once preceding any of the following:

5-01.3(9).OPT1.GR5 (April 1, 2013)
Use in projects that require 10,000 or more square
yards of cement concrete pavement grinding.

5-01.3(10).GR5 Pavement Smoothness

5-01.3(10).INST1.GR5 (Section 5-01.3(10) is supplemented with the following)
Must use once preceding any of the following:

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5-01.3(10).OPT1.GR5 (February 6, 2023)
Use in projects where Weigh-in-Motion (WIM) weight sensors are being installed in pavement where Section 5-01 applies. Must include a WIM Site Index Station in the Plans.

5-02.GR5 Bituminous Surface Treatment

5-02.3.GR5 Construction Requirements

5-02.3(3).GR5 Application Of Asphalt Emulsion and Aggregate

5-02.3(3).INST1.GR5 (Section 5-02.3(3) is supplemented with the following)
Must use once preceding any of the following:

5-02.3(3).OPT1.FR5 (BST New Construction)
(August 5, 2013)
May use with **5-02.3(3).OPT2.FR5.**
Use in projects requiring a Bituminous Surface Treatment on a newly constructed roadway.
(2 fill-ins)

5-02.3(3).OPT2.FR5 (BST Seal Coat)
(August 5, 2013)
May use with **5-02.3(3).OPT1.FR5.**
Use in projects requiring a Bituminous Surface Treatment seal coat on an existing roadway.
(1 fill-in)

5-02.4.GR5 Measurement

5-02.4.INST1.GR5 (Section 5-02.4 is supplemented with the following)
Must use once preceding any of the following:

5-02.4.OPT2.GR5 (BST existing road approaches)
(March 13, 1995)
Must also use **5-02.5.OPT2.GR5.**
Use in BST projects when there are a substantial number of existing road approaches to be paved and the extra cost of labor for paving approaches becomes a factor in determining the bid price for BST.

5-02.5.GR5 Payment

5-02.5.INST1.GR5 (Section 5-02.5 is supplemented with the following)
Must use once preceding any of the following:

5-02.5.OPT2.GR5 (Bituminous Surface Treatment For Road Approach)
(February 5, 2001)
Must include with **5-02.4.OPT2.GR5.**
Use in BST projects when there are a substantial number of existing road approaches to be paved and the extra cost

of labor for paving approaches becomes a factor in determining the bid price for BST.

5-02.5.OPT3.GR5 (CRS-2P Cost Price Adjustment Payment)
(August 5, 2013)
Include in all BST projects.
Must include **standard item #5294**.
To determine the Engineer's Estimate for this bid item, refer to the guidance at: <https://wsdot.wa.gov/engineering-standards/project-management-training/project-management/cost-risk-assessment>

5-02.5.OPT4.GR5 (AC-15P Cost Price Adjustment Payment)
(January 3, 2017)
Include in all BST projects.
Must include **standard item #5280**.

5-03.GR5 — **Crack and Joint Sealing**

5-03.3.GR5 — **Construction Materials**

5-03.3(2).GR5 — **Sealing Bituminous Pavement**

5-03.3(2)B.GR5 — **Longitudinal Joint Seal**

~~5-03.3(2)B.INST1.GR5 (Section 5-03.3(2)B is revised to read)
Must use once preceding any of the following:~~

~~5-03.3(2)B.OPT1.2024.GR5 (November 2, 2022)
Use in all projects placing HMA adjacent to
cement concrete paving.~~

5-03.3(3).GR5 — **Sealing Cement Concrete Pavement**

5-03.3(3)C.GR5 — **Sealing Sawed Contraction Joints**

~~5-03.3(3)C.INST1.GR5 (Section 5-03.3(3)C is revised to read)
Must use once preceding any of the following:~~

~~5-03.3(3)C.OPT1.2024.GR5 (February 6, 2023)
Use in all projects that seal joints in cement
concrete pavement.~~

5-03.5.GR5 — **Payment**

~~5-03.5.INST1.GR5 (In Section 5-03.5, the Bid item "Crack Sealing CM", per
centerline mile, and the following paragraph, is revised to
read:
Must use once preceding any of the following:~~

~~5-03.5.OPT1.2024.GR5 (Crack Sealing Payment)
(February 6, 2023)~~

1 Use in all HMA or BST projects that contain Standard Item
2 #5704.

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4 **5-04.GR5 Hot Mix Asphalt**

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6 **5-04.2.GR5 Materials**

7
8 ~~5-04.2(1).GR5 How to Get an HMA Mix Design on the QPL~~

9
10 ~~5-04.2(1)A.GR5 Mix Designs Containing Rap and/or RAS~~

11
12 ~~5-04.2(1)A2.GR5 High Rap/Any RAS - Mix Design Submittals for~~
13 ~~Placement on QPL~~

14
15 ~~5-04.2(1)A2.INST1.GR5 (Section 5-04.2(1)A2 is revised to read)~~
16 ~~Must use once preceding any of the following:~~

17
18 ~~5-04.2(1)A2.OPT1.2024.GR5 (April 27, 2022)~~
19 ~~Include in all projects using HMA.~~

20
21 **5-04.2(2).GR5 Mix Design – Obtaining Project Approval**

22
23 5-04.2(2).INST1.GR5 (Section 5-04.2(2) is supplemented with the following)
24 Must use once preceding any of the following:

25
26 5-04.2(2).OPT1.FR5 (HMA Test Requirements)
27 (January 3, 2011)
28 Include in all projects using HMA.
29 Fill-in (number of ESAL's) is included in the pavement
30 design report.
31 (1 fill-in)

32
33 5-04.2(9-03.8(7)).GR5 (HMA Tolerances, Specification Limits and Adjustments)
34 (The second paragraph of item number 1 of Section 9-
35 03.8(7) is revised to read:)
36 Must use once preceding any of the following:

37
38 5-04.2(9-03.8(7)).OPT1.GR5 (September 8, 2020)
39 Include in all projects using HMA.

40
41 5-04.2(9-03.21(1)A).GR5 (Reclaimed Asphalt Shingles)
42 (Section 9-03.21(1)A, including title, is revised to read:)
43 Must use once preceding any of the following:

44
45 5-04.2(9-03.21(1)A).OPT1.2024⁵.GR5 (April 27, 2022)
46 Include in all projects using HMA.

47
48 **5-04.3.GR5 Construction Requirements**

49
50 5-04.3.INST1.GR5 (Section 5-04.3 is supplemented with the following)
51 Must use once preceding any of the following:

52
53 5-04.3.OPT4.FR5 (Asphalt Binder Revision)

(January 3, 2017)
Use in projects when the Contracting Agency provides a source of aggregate for HMA.
Must use with **5-04.5.OPT3.GR5**.

5-04.3(1).GR5 Weather Limitations

5-04.3(1).INST1.GR5 (The first sentence of Section 5-04.3(1) is revised to read)
Must use once preceding any of the following:

5-04.3(1).OPT1.FR5 (August 3, 2009)
Use in projects when it is anticipated that paving will be conducted in the Fall.
(1 fill-in) (Fill-in to be provided by Region Materials Engineer)

5-04.3(3).GR5 Equipment

~~5-04.3(3)A.GR5 Mixing Plant~~

~~5-04.3(3)A.INST1.GR5 (In the first paragraph of Section 5-04.3(3)A, item number 5 is revised to read)
Must use once preceding any of the following:~~

~~5-04.3(3)A.OPT1.2024.GR5 (November 2, 2022)
Include in all projects using HMA.~~

5-04.3(3)C.GR5 Pavers

5-04.3(3)C.INST1.GR5 (Section 5-04.3(3)C is supplemented with the following)
Must use once preceding any of the following:

5-04.3(3)C.OPT1.GR5 (Reference line required for paver)
(March 13, 1995)
Use in projects with a 70 MPH or higher design speed, except when the paving will be done under traffic.

5-04.3(3)D.GR5 (Material Transfer Device/Vehicle)

5-04.3(3)D.OPT1.GR5 (August 3, 2009)
(Section 5-04.3(3)D is deleted in its entirety)
Use in projects containing Hot Mix Asphalt when the Region Materials Lab recommends that a MTD/V not be used. Use requires approval of the Region Construction Office. MTD/V's are not recommended for projects with small quantities of HMA or when the paving is limited to areas where there is insufficient room for the MTD/V in the paving train.

5-04.3(3)D.INST1.GR5 (Section 5-04.3(3)A including title is revised to read)

1 Must use once preceding any of the following:
2

3 5-04.3(3)D.OPT2.GR5 (Material Transfer Vehicle)
4 (August 1, 2011)
5 Use in projects containing Hot Mix Asphalt when
6 only an MTV is to be used (no MTD). Use requires
7 approval of the Region Construction Office.
8

9 **5-04.3(9).GR5 HMA Mixture Acceptance**

10 5-04.3(9).INST1.GR5 (Section 5-04.3(9) is supplemented with the following)
11 Must use once preceding any of the following:
12

13 5-04.3(9).OPT1.FR5 Visual Evaluation
14 (August 1, 2016)
15 Use in projects where the area that visual evaluation of
16 hot mix asphalt is to be used is not identified in the
17 Standard Specifications
18 (1 fill-in)
19

20 **5-04.3(10).GR5 HMA Compaction Acceptance**

21 5-04.3(10).INST1.GR5 (The column in Table 14 of Section 5-04.3(10), titled
22 "Statistical Evaluation of HMA Compaction is Required for:",
23 is supplemented with the following)
24 Must use once preceding any of the following:
25

26 5-04.3(10).OPT1.GR5 HMA Shoulder Compaction
27 (April 3, 2017)
28 Use in projects to add compaction control on the
29 shoulders.
30

31 **5-04.3(10)D.GR5 HMA Compaction – Visual Evaluation**

32 5-04.3(10)D.INST2.GR5 (The last sentence of Section 5-04.3(10)D is revised to
33 read)
34 Must use once preceding any of the following:
35

36 5-04.3(10)D.OPT1.GR5 (HMA Prelevel Compaction)
37 (August 3, 2009)
38 Use in projects to require a pneumatic tire roller
39 for the compaction of all prelevel.
40

41 **5-04.3(12).GR5 Joints**

42 5-04.3(12).INST1.GR5 (Section 5-04.3(12) is supplemented with the following)
43 Must use once preceding any of the following:
44

45 5-04.3(12).OPT1.GR5 (Feathering Hot Mix Asphalt)
46 (January 5, 2004)
47 Use in projects requiring the feathering of hot mix
48 asphalt. May be used with the recommendation of the
49 Region Construction Engineer.
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2 **5-04.3(13).GR5** **Surface Smoothness**
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4 5-04.3(13).INST1.GR5 (The first four paragraphs of Section 5-04.3(13) are revised
5 to read)

6 Must use once preceding any of the following:
7

8 5-04.3(13).OPT1.FR5 (Surface Smoothness)
9 (January 5, 2015)

10 Use in all projects that contain HMA paving at the
11 discretion of the Region Construction Manager. Paving
12 must be a minimum of one mile in length. For accurate
13 measurements, the HQ Materials Lab profiler must be
14 able to move through the sections to be measured
15 unimpeded at a minimum speed of 35 MPH. Notification
16 must be made to HQ Materials Lab Pavements section
17 in order to schedule the post paving IRI determination.
18 Fill-ins #1-6 are to be provided by the HQ Materials Lab
19 Pavements section. Use with **5-04.5.OPT1.FR5**. Do
20 not use with **5-04.3(13).OPT2.FR5** or **5-**
21 **04.3(13).OPT3.GR5**.

22
23 (6 fill-ins) Contact
24 MLPavementProfileTest@wsdot.wa.gov to schedule
25 the IRI determination and to complete the fill-ins.
26

27 5-04.3(13).INST2.GR5 (The second sentence of Section 5-04.3(13) is deleted
28 and replaced with the following)

29 Must use once preceding any of the following:
30

31 5-04.3(13).OPT2.FR5 (Smoothness requirements)
32 (March 13, 1995)

33 Use at the discretion of the Region Construction
34 Manager in projects with roadways to be paved that
35 have a combination of posted speeds both greater than
36 and less than 45 MPH. Do not use with **5-**
37 **04.3(13).OPT1.FR5**.

38 (1 fill-in is for sections of roadway with a posted speed
39 limit less than 45 mph)
40

41 5-04.3(13).INST3.GR5 (The second sentence of Section 5-04.3(13) is revised to
42 read)

43 Must use once preceding any of the following:
44

45 5-04.3(13).OPT3.GR5 (Smoothness requirements)
46 (January 5, 2004)

47 Use at the discretion of the Region Construction
48 Manager in projects where all roadways to be paved are
49 posted less than 45 MPH. Do not use with **5-**
50 **04.3(13).OPT1.FR5**.

51
52 5-04.3(13).INST4.GR5 (Section 5-04.3(13) is supplemented with the following)

53 Must use once preceding any of the following:

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5-04.3(13).OPT4.GR5 (February 6, 2023)
Use in projects where Weigh-in-Motion (WIM) weight sensors are being installed in pavement where Section 5-04 applies. Must include a WIM Site Index Station in the Plans.

5-04.3(14).GR5 Planing Bituminous Pavement

5-04.3(14).INST1.GR5 (Section 5-04.3(14) is supplemented with the following)
Must use once preceding any of the following:

5-04.3(14).OPT1.FR5 (January 5, 2004)
Use in projects when it is necessary to control the time the planed area will be open and exposed to traffic prior to paving.
(1 fill-in)

5-04.3(14).OPT2.GR5 (Requires test section and smoothness requirements)
(January 5, 2004)
Use in projects with large quantities of planing. When using this GSP consider the need to control the amount of time the planed area is open to traffic by adding **5-04.3(14).OPT1.FR5** where appropriate.

5-04.3(14).OPT3.GR5 (Vertical Edge Planing)
(March 13, 1995)
Use in projects when planed lanes shall be paved prior to being open to traffic.

5-04.3(14).OPT4.GR5 (Beveled Edge Planing)
(August 3, 2009)
Use in projects when a beveled edge is required on a planed lane that will be opened to traffic prior to paving. The GSP is required for depths greater than 0.20 feet and may be used with the recommendation of the Region Construction Engineer for depths up to 0.20 feet. When using this GSP consider the need to control the amount of time the planed area is open to traffic by adding **5-04.3(14).OPT1.FR5** where appropriate.

5-04.5.GR5 Payment

5-04.5.INST2.GR5 (Section 5-04.5 is supplemented with the following)
Must use once preceding any of the following:

5-04.5.OPT1.FR5 (Surface Smoothness)
(January 5, 2015)
Must include with **5-04.3(13).OPT1.FR5**.

Fill-in is the appropriate Pay Adjustment Schedule as determined using the criteria below.

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Pay Adjustment Schedule 1 = Interstate highways, new pavement construction or multiple lift pavement overlays (at least one (1) leveling course + wearing course).

Note: Pre-leveling allowances are not to be counted as a leveling course paving lift with respect to this definition.

Pay Adjustment Schedule 2 = Single lift pavement overlays with allowance for surface variance corrections with smoothness averaging devices (paving skis) or full width pavement milling (including shoulder) with single lift replacement overlay.

Note: Sufficient preleveling and/or pavement thickness variance allowances should be included to repair obvious existing deficiencies (humps, valleys, ruts etc.).

Pay Adjustment Schedule 3 = Smoothness will be difficult to attain or when risk associated with meeting a smoothness criteria is unknown. Examples include matching to existing concrete gutter lines; sections with multiple surface utility structures; intersections; multiple skip sections resulting in short paving lengths; and milling/replacement paving where both the shoulder and adjacent lane is not also milled. Bonus incentives are applied to encourage maximum effort to obtain smooth pavements in difficult applications.
(1 fill-in)

5-04.5.OPT2.GR5 (Asphalt Cost Price Adjustment)
(January 13, 2021)
Include in all projects **containing Hot Mix Asphalt. Must include standard item 5837.**
To determine the Engineer’s Estimate for this bid item, refer to the guidance at:
<https://wsdot.wa.gov/engineering-standards/project-management-training/project-management/cost-risk-assessment>

5-04.5.OPT3.GR5 (Asphalt Binder Revision)
(August 3, 2009)
Must include with **5-04.3.OPT4.FR5.**

5-05.GR5 Cement Concrete Pavement

5-05.1.GR5 Description

5-05.1.INST1.GR5 (Section 5-05.1 is supplemented with the following)
Must use once preceding any of the following:

5-05.1.OPT1.GR5 (Use when cement concrete pavement has pigmented or textured cement concrete ~~in roundabout locations~~)

(August 6, 2012)
 Use in projects requiring color treatment, textured treatment or both for roundabout truck aprons, splitter islands, and mainline crossings.
 Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a landscape architect.

~~Use with 5-05.2.OPT1.FR5, 5-05.3.OPT1.GR5 or 5-05.3.OPT2.FR5 or both.~~ **Use the following table to determine the correct combination of GSPs to include for pigmented or textured concrete:**

| | |
|---------------------------|--|
| <u>5-05.1.OPT1.GR5</u> | <u>Description for all pigment/textured concrete.</u> |
| <u>5-05.2.OPT1.GR5</u> | <u>Use for "Brick Red" Pigment.</u> |
| <u>5-05.2.OPT2.FR5</u> | <u>Use for other pigments specified by LA.</u> |
| <u>5-05.3.OPT1.GR5</u> | <u>Use to add a test panel for pigments and textures.</u> |
| <u>5-05.3.OPT2.FR5</u> | <u>Use to specify a pattern or texture for concrete.</u> |
| <u>5-05.3(1).OPT8.GR5</u> | <u>Use to limit aggregate size for texture concrete.</u> |
| <u>5-05.4.OPT1.GR5</u> | <u>Measurement for all pigmented or textured concrete.</u> |
| <u>5-05.5.OPT2.GR5</u> | <u>Payment for pigmented, only, concrete.</u> |
| <u>5-05.5.OPT3.GR5</u> | <u>Payment for textured, only, concrete.</u> |
| <u>5-05.5.OPT4.GR5</u> | <u>Payment for both pigmented and textured concrete.</u> |

5-05.2.GR5 Materials

5-05.2.INST1.GR5 (Section 5-05.2 is supplemented with the following)
 Must use once preceding the following:

5-05.2.OPT1.GR5 ("Brick Red" pigmented cement concrete pavement) ~~in roundabouts~~
 _____ ~~locations~~

(~~August 6, 2012~~ November 20, 2023)
 Use in projects requiring ~~color treatment~~ brick red in roundabout truck aprons, splitter islands, and mainline crossings. Concrete color must contrast with pavement color.

~~Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a landscape architect.~~
 (1 fill ins)

~~Get Primary Pigment from Region Landscape Architect or the HQ Roadside and Site Development Manager and then list all the Manufactures and Pigment Color for that Primary Pigment as fill-in information from list shown below:~~

Primary Pigment – Brick:

| Manufacturer | Pigment Color |
|---------------------|-----------------------------|
| BASF | "Red River Clay", RC5006 |
| Bomanite | "Brick Red" |

| | |
|-----------------|------------------|
| Davis Colors | "Brick Red", 160 |
| Increte Systems | "Brick Red" |
| Solomon Colors | Brick", 417 |

Primary Pigment – Brown:

| Manufacturer | Pigment Color |
|---------------------|----------------------|
| Davis Colors | "River Bank" |
| Scotfield | "Sand Buff" |
| Solomon Colors | "306 Canvas" |

Primary Pigment – Dark Gray:

| Manufacturer | Pigment Color |
|---------------------|------------------------------|
| Davis Colors | "Dark Gray (iron oxide)-860" |
| Increte Systems | "Dark Gray" |
| Solomon Colors | "Onyx", 920 |

Use with ~~5-05.1.OPT1.GR5, 5-05.3.OPT1.GR5, 5-05.3.OPT2.FR5~~ (if textured pattern also needed) and ~~5-05.4.OPT1.GR5.~~

5-05.2.OPT2.FR5

(Other pigments for cement concrete pavement (November 20, 2023)

Use in projects requiring color treatment in roundabout truck aprons, splitter islands, and mainline crossings. Concrete color must contrast with pavement color.

Requires approval by the Region Landscape Architect or the State Landscape Architect for regions without a landscape architect.

(1 fill-ins)

Get Primary Pigment from Region Landscape Architect or the HQ Roadside and Site Development Manager and then list all the Manufactures and Pigment Color for that Primary Pigment as fill-in information from list shown below:

Primary Pigment – Brown:

| <u>Manufacturer</u> | <u>Pigment Color</u> |
|----------------------------|-----------------------------|
| <u>Davis Colors</u> | <u>"River Bank"</u> |
| <u>Scotfield</u> | <u>"Sand Buff"</u> |
| <u>Solomon Colors</u> | <u>"306 Canvas"</u> |

Primary Pigment – Dark Gray:

| <u>Manufacturer</u> | <u>Pigment Color</u> |
|----------------------------|-------------------------------------|
| <u>Davis Colors</u> | <u>"Dark Gray (iron oxide)-860"</u> |
| <u>Increte Systems</u> | <u>"Dark Gray"</u> |

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5-05.3.GR5 Construction Requirements

5-05.3.INST1.GR5 (Section 5-05.3 is supplemented with the following)
Must use once preceding any of the following:

~~5-05.3.OPT1.GR5 (Use when cement concrete pavement has pigmented color in roundabout locations Test Panel) (August 6, 2012)
Use in projects requiring pigmented colored cement concrete pavement in roundabout truck aprons, splitter islands and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager State r for regions without a landscape architect.
Use with ~~5-05.1.OPT1.GR5, 5-05.2.OPT1.FR5, 5-05.3.OPT2.FR5~~ (if textured pattern also needed) and ~~5-05.4.OPT1.GR5.~~~~

~~5-05.3.OPT2.FR5 (Use when cement concrete pavement has textured pattern in roundabout locations Textured Patterns for Concrete) (August 6, 2012)
Use in projects requiring textured cement concrete pavement -patterns on roundabouts, truck aprons, splitter islands and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager State Landscape Architect for regions without a landscape architect.
(1 fill-in)
Get the Primary Pattern from Region Landscape Architect or the HQ Roadside and Site Development Manager and then list all the Manufactures and Patterns for that Primary Pattern as fill-in information from list below:~~

Primary Pattern - Ashlar Stone :

| <u>Manufacturer</u> | <u>Pattern</u> |
|---------------------------------|------------------------------------|
| <u>Bomanite</u> | <u>"Mountain Granite Ashlar A"</u> |
| <u>Brickform/Solomon Colors</u> | <u>"Grand Ashlar, FM-3675"</u> |
| <u>Butterfield Color</u> | <u>"Majestic Ashlar"</u> |
| <u>Euclid chemical</u> | <u>"Ashlar Slate"</u> |
| <u>Matcrete</u> | <u>"Grand Ashler Slate"</u> |

| | |
|------------------------------|-----------------------|
| <u>Renew Crete Systems</u> | <u>"Ashler Slate"</u> |
| <u>Increte Systems, Inc.</u> | <u>"Ashlar Slate"</u> |
| <u>Renew Crete Systems</u> | <u>"Royal Ashlar"</u> |
| <u>Bomanite</u> | <u>"Flagstone"</u> |

Primary Pattern - Brick

| <u>Manufacturer</u> | <u>Pattern</u> |
|---------------------------------|--|
| <u>Bomanite</u> | <u>"Running Bond Belgian Block or Running Bond Used Brick"</u> |
| <u>Brickform/Solomon Colors</u> | <u>"Running Bond Used Brick"</u> |
| <u>Butterfield Color</u> | <u>"Pennsylvania Avenue Brick Running Bond"</u> |
| <u>Euclid Chemical</u> | <u>Running Bond Paver</u> |
| <u>Matcrete</u> | <u>"Old Brick Running Bond"</u> |
| <u>Bomanite</u> | <u>"Running Bond Cobblestone"</u> |
| <u>Brickform</u> | <u>"Pennsylvania Cobble-Sanded Joint", TM820-</u> |
| <u>Increte Systems, Inc</u> | <u>"Euro Cobble Running Bond", SECR S001</u> |
| <u>Matcrete</u> | <u>"Large Cobblestone", P-16</u> |
| <u>Renew Crete Systems</u> | <u>"London Cobblestone"</u> |
| <u>Scofield</u> | <u>"Old Belgium Stone-Running Bond" (4530)</u> |

Primary Pattern - River Rock

| <u>Manufacturer</u> | <u>Pattern</u> |
|------------------------|-------------------------|
| <u>Bomanite.</u> | <u>River Rock</u> |
| <u>Increte Systems</u> | <u>Savanah Stone</u> |
| <u>Matcrete</u> | <u>Large River Rock</u> |

~~Use with 5-05.1.OPT1.GR5, 5-05.2.OPT1.FR5 (if pigmented color also needed), 5-05.3(1).OPT8.GR5 and 5-05.4.OPT1.GR5.~~

5-05.3(1).GR5

Concrete Mix Design for Paving

5-05.3(1).INST1.GR5

(Item number 1 of Section 5-05.3(1) is supplemented with the following:)

Must use once preceding any of the following:

1
2 5-05.3(1).OPT1.GR5 (Cement Concrete Pavement)
3 (January 2, 2018)
4 Use in projects that include reconstruction of the
5 concrete pavement with a recommendation from the
6 State Pavements Engineer.
7

8 5-05.3(1).INST2.GR5 (Section 5-05.3(1) is supplemented with the following)
9 Must use once preceding any of the following:
10

11 5-05.3(1).OPT2.GR5 (Aggregate size for textured cement concrete
12 pavement)
13 (November 20, 2023~~August 6, 2012~~~~September 5, 2023~~)
14 Use when textured cement concrete pavement patterns
15 are needed in roundabouts, truck aprons, splitter
16 islands and ~~mainline crossings~~ mainline crossings.
17 Provides aggregate requirements for textured cement
18 concrete pavement patterns.
19

20 Requires approval by the Region Landscape Architect
21 or the HQ Roadside and Site Development Manager for
22 regions without a Landscape Architect.

23 ~~Use with 5-05.1.OPT1.GR5, GSP 5-05.3.OPT2.FR5, and GSP 5-05.4.OPT1.GR5..~~
24

25
26 **5-05.3(12).GR5 Surface Smoothness**
27

28 5-05.3(12).INST1.GR5 (The third paragraph of Section 5-05.3(12) is replaced with
29 the following)
30 Must use once preceding any of the following:
31

32 5-05.3(12).OPT1.GR5 (Surface Smoothness)
33 (January 7, 2019)
34 Use in projects where concrete paving will occur in
35 multiple short segments or in projects where paving will
36 occur in multiple seasons.
37

38 5-05.3(12).INST2.GR5 (Section 5-05.3(12) is supplemented with the following)
39 Must use once preceding any of the following:
40

41 5-05.3(12).OPT2.GR5 (February 6, 2023)
42 Use in projects where Weigh-in-Motion (WIM) weight
43 sensors are being installed in pavement where Section
44 5-05 applies. Must include a WIM Site Index Station in
45 the Plans.
46

47 **5-05.3(17).GR5 Opening to Traffic**
48

49 5-05.3(17).INST2.GR5 (Section 5-05.3(17) is revised to read)
50 Must use once preceding any of the following:
51

52 5-05.3(17).OPT1.GR5 (Maturity Testing for Concrete Pavement)
53 (August 7, 2017)

1 Use in all projects where the Portland Cement Concrete
2 Pavement (PCCP) or the Replacement of Portland
3 Cement Concrete Panels are required to be opened to
4 traffic within 24 hours of placement. Requires the
5 approval of State Pavement Engineer or Headquarters
6 Construction Office.

7 Use with **5-05.5.OPT5.GR5**.

8
9 **5-05.4.GR5 Measurement**

10
11 5-05.4.INST1.GR5 (Section 5-05.4 is supplemented with the following)
12 Must use once preceding any of the following:

13
14 5-05.4.OPT1.GR5 (August 6, 2012)
15 (Textured and pigmented cement concrete pavement per
16 square yard.)
17 ~~Use with 5-05.5.OPT2.GR5, GSP 5-05.5.OPT3.GR5 or 5-~~
18 ~~05.5.OPT4.GR5.~~

19
20 **5-05.5.GR5 Payment**

21
22 5-05.5.INST1.GR5 (Section 5-05.5 is supplemented with the following)
23 Must use once preceding any of the following:

24
25 5-05.5.OPT2.GR5 (August 6, 2012)
26 Pigmented cement concrete pavement per square yard.
27 ~~Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.~~

28
29 5-05.5.OPT3.GR5 (August 6, 2012)
30 Textured cement concrete pavement per square yard. Use
31 with
32 ~~Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.~~

33
34 5-05.5.OPT4.GR5 (August 6, 2012)
35 Textured and pigmented cement concrete pavement per
36 square yard.
37 ~~Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.~~

38
39 5-05.5.OPT5.GR5 (August 5, 2013)
40 Maturity Testing for Concrete Pavement incidental to bid
41 items Cement Conc. Pavement or Replacement Cement
42 Concrete Panel.
43 Use with **5-05.3(17).OPT1.GR5**.

44
45 **5-SA1.FR5 Just in Time Training**

46 (August 7, 2017)

47 Use in all projects with cement concrete pavement unless approved by
48 the ASCE or State Pavement Engineer.

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1 All the GSPs in Section 5-03 were deleted.

2

3 ~~5-03.GR5~~

4 **Crack and Joint Sealing**

5

6 ~~5-03.3.GR5~~

7 **Construction Materials**

8

9 ~~5-03.3(2).GR5~~

10 **Sealing Bituminous Pavement**

11

12 ~~5-03.3(2)B.GR5~~

13 **Longitudinal Joint Seal**

14

15 ~~5-03.3(2)B.INST1.GR5~~

16 Section 5-03.3(2)B is revised to read:

17

18 ~~5-03.3(2)B.OPT1.2024.GR5~~

19 (November 2, 2022)

20 When HMA is placed adjacent to cement concrete pavement, the Contractor
21 shall construct longitudinal joints between the HMA and the cement concrete
22 pavement. The joint shall be sawed to the dimensions shown on Standard Plan
23 A-40.10 and filled with joint sealant meeting the requirements of Section 9-
24 04.2(1)A.

25

26 ~~5-03.3(3).GR5~~

27 **Sealing Cement Concrete Pavement**

28

29 ~~5-03.3(3)C.GR5~~

30 **Sealing Sawed Contraction Joints**

31

32 ~~5-03.3(3)C.INST1.GR5~~

33 Section 5-03.3(3)C is revised to read:

34

35 ~~5-03.3(3)C.OPT1.2024.GR5~~

36 (February 6, 2023)

37 Sawed contraction joints shall be filled with a joint sealant conforming to the
38 requirements of Section 9-04.2(1)A1. Sealant shall be a poured rubber joint
39 sealer conforming to Section 9-04.2(2) when the Plans show a closed cell
40 backer rod. The joint sealant shall be applied in two or more layers, if necessary.
41 The joint sealant shall be applied under sufficient pressure to fill the groove from
42 bottom to top and the cured joint sealant shall be between $\frac{1}{4}$ and $\frac{5}{8}$ inch below
43 the top surface of the concrete.

44

45 ~~5-03.5.GR5~~

46 **Payment**

47

48 ~~5-03.5.INST1.GR5~~

49 In Section 5-03.5, the Bid item "Crack Sealing CM", per centerline mile, and the following
50 paragraph, is revised to read:

51

1 ~~5-03.5.OPT1.2024.GR5~~
2 ~~(February 6, 2023)~~
3 ~~“Crack Sealing-CM”, per centerline mile.~~
4 ~~The unit contract price per centerline mile for “Crack Sealing-CM” shall be full payment~~
5 ~~for all costs for sealing cracks of all widths as described in Section 5-03 including all lanes,~~
6 ~~paved shoulders, road approaches, gores, and irregularly shaped areas.~~
7

1 5-04.GR5
2 **Hot Mix Asphalt**

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4 5-04.2.GR5
5 **Materials**

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7 ~~5-04.2(1).GR5~~
8 ~~**How to Get an HMA Mix Design on the QPL**~~

9
10 5-04.2(1)A.GR5
11 ~~**Mix Designs Containing RAP and/or RAS**~~

12
13 ~~5-04.2(1)A2.GR5~~
14 ~~**High RAP/Any RAS – Mix Design Submittals for Placement on QPL**~~

15
16 ~~5-04.2(1)A2.INST1.GR5~~
17 ~~Section 5-04.2(1)A2 is revised to read:~~

18
19 ~~5-04.2(1)A2.OPT1.2024.GR5~~

20 ~~(April 27, 2022)~~

21 ~~For High RAP/Any RAS mix designs, comply with the following additional~~
22 ~~requirements:~~

23
24 ~~1. All RAS will be manufactured waste RAS only.~~

25
26 ~~2. For mix designs with any RAS, test the RAS stockpile (and RAP~~
27 ~~stockpile if any RAP is in the mix design) in accordance with Table~~
28 ~~3.~~

29
30 ~~3. For High RAP mix designs with no RAS, test the RAP stockpile in~~
31 ~~accordance with Table 3.~~

32
33 ~~4. For mix designs with High RAP/Any RAS, construct a single~~
34 ~~stockpile for RAP and a single stockpile for RAS and isolate~~
35 ~~(sequester) these stockpiles from further stockpiling before~~
36 ~~beginning development of the mix design. Test the RAP and RAS~~
37 ~~during stockpile construction as required by item 1 and 2 above.~~
38 ~~Use the test data in developing the mix design and report the test~~
39 ~~data to the Contracting Agency on WSDOT Form 350-042 as part~~
40 ~~of the mix design submittal for approval on the QPL. Account for~~
41 ~~the reduction in asphalt binder contributed from RAS in~~
42 ~~accordance with AASHTO PP 78. Do not add RAP or RAS to the~~
43 ~~sequestered stockpiles after starting the mix design process,~~
44 ~~unless measures have been taken:~~

45
46 ~~a. Test samples of the RAP or RAS to be added to the~~
47 ~~sequestered stockpile in accordance with Table 3. A minimum~~
48 ~~of 5 tests of the RAP or RAS will be required each time~~
49 ~~additional material is added to the sequestered stockpiles.~~

50
51 ~~b. Evaluate and compare the test results from Section 4a to the~~
52 ~~results from the original sequestered stockpile properties~~

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from the mix design. Develop a written plan defining how the RAP/RAS will be incorporated into the sequestered stockpile without materially changing the binder grade or aggregate gradation properties of the sequestered stockpile. Submit the test results and incorporation plan to the Engineer for approval.

| Table 3 Test Frequency of RAP/RAS During RAP/RAS Stockpile Construction for Approving a High RAP/Any RAS Mix Design for Placement on the QPL | | |
|---|--|---|
| Test Frequency¹ | Test for | Test Method |
| 1/1000 tons of RAP (minimum of 10 per mix design) and 1/100 tons of RAS (minimum of 10 per mix design) | Asphalt Binder Content and Sieve Analysis of Fine and Coarse Aggregate | FOP for AASHTO T 308 and FOP for AASHTO T 30 |
| 1/400 tons of RAS (minimum of 5 per mix design) | Asbestos content <0.1% | PLM Test Method EPA/600/R-93/116 (1000 Point Count) See Section 9-03.21(1)A |
| 1/200 tons of RAS (minimum of 5 per mix design) | Asbestos-Containing Material (ACM) <1.0% | PLM Test Method EPA/600/R-93/116 See Section 9-03.21(1)A |
| ¹ "tons", in this table, refers to tons of the reclaimed material before being incorporated into HMA. | | |

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

| Table 4 Maximum Amount of RAP and/or RAS in HMA Mixture | |
|--|------------------|
| Maximum Amount of Binder Contributed from: | |
| RAP | RAS |
| 40% ¹ minus contribution of binder from RAS | 20% ² |
| ¹ Calculated as the weight of asphalt binder contributed from the RAP as a percentage of the total weight of asphalt binder in the mixture. ² Calculated as the weight of asphalt binder contributed from the RAS as a percentage of the total weight of asphalt binder in the mixture. | |

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6. Develop the mix design including RAP, RAS, recycling agent, and new binder.

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

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- ~~a. Perform the asphalt extraction in accordance with AASHTO T 164 or ASTM D 2172 using reagent grade solvent.~~
 - ~~b. Perform the asphalt recovery in accordance with AASHTO R 59 or ASTM D 1856.~~
 - ~~c. Test the recovered asphalt residue in accordance with AASHTO R 29 to determine the asphalt binder grade in accordance with Section 9-02.1(4).~~
 - ~~d. After determining the recovered asphalt binder grade, determine the percent of recycling agent and/or grade of new asphalt binder in accordance with ASTM D 4887.~~
 - ~~e. Test the final blend of recycling agent, binder recovered from the RAP and RAS, and new asphalt binder in accordance with AASHTO R 29. The final blended binder shall meet but not exceed the performance grade of asphalt binder required by the Contract and comply with the requirements of Section 9-02.1(4).~~
- ~~8. Include the following test data with the mix design submittal:~~
- ~~a. All test data from RAP and RAS stockpile construction.~~
 - ~~b. A Safety Data Sheet (SDS) and documentation that no asbestos has been added during production of the manufactured waste shingles as detailed in Section 9-03.21(1).~~
 - ~~c. All data from testing the recovered and blended asphalt binder.~~
- ~~9. Include representative samples of the following with the mix design submittal:~~
- ~~a. RAP and RAS.~~
 - ~~b. 150 grams of recovered asphalt residue from the RAP and RAS that are to be used in the HMA production.~~

5-04.2(2).GR5

Mix Design – Obtaining Project Approval

5-04.2(2).INST1.GR5

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

5-04.2(2).OPT1.FR5

**(January 3, 2011)
ESAL's**

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

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5-04.2(9-03.8(7)).GR5

HMA Tolerances, Specification Limits and Adjustments

The second paragraph of item number 1 of Section 9-03.8(7) is revised to read:

5-04.2(9-03.8(7)).OPT1.GR5

(September 8, 2020)

These tolerance and specification 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, except the No. 8 tolerance is $\pm 4\%$ from the JMF, the No. 200 tolerance is $\pm 2.0\%$ from the JMF with a minimum of 2% and a maximum of 8.0% passing the No. 200 sieve, other tolerance limits for sieves designated as 100 percent passing will be 99-100.

5-04.2(9-03.21(1)A).GR5

Reclaimed Asphalt Shingles

Section 9-03.21(1)A, including title, is revised to read:

5-04.2(9-03.21(1)A).OPT1.~~2024~~2025.GR5

(April 27, 2022)

Recycled Asphalt Shingles

Recycled asphalt shingles shall be manufactured waste shingles and shall be non-asbestos containing material (ACM) as defined in 40 CFR 61 Subpart M and tested in accordance with 40 CFR part 763, subpart E, appendix E, Section 1, Polarized Light Microscopy (PLM) Test Method EPA/600/R-93/116 by a certified testing laboratory. The PLM Test Method to determine ACM content will be the standard PLM Test Method to determine ACM less than 1.0%. Additionally, the PLM 1000 Point Count Test Method to determine asbestos less than 0.1% is required. At a minimum, the laboratory testing for asbestos content will be certified by one or more the following: National Voluntary Laboratory Accreditation Program (NVLAP), American Industrial Hygiene Association IH Laboratory Accreditation, or Washington State Department of Ecology for analysis of asbestos in bulk material. The Contractor shall keep all ACM and asbestos test results on file and provide copies to the Engineer when submitting a HMA mix design for approval in accordance with Section 5-04. The Contractor shall provide the testing and certification for toxicity characteristics in accordance with Section 9-03.21(1) prior to delivery and placement of the recycled asphalt shingles and use of the RAS in HMA. The Contractor shall also provide a Safety Data Sheet (SDS) of the RAS specifically detailing all ingredients of the manufactured waste shingles. The ingredients list needs to include the amount of asbestos as well as all types of fibrous materials.

5-04.3.GR5

Construction Requirements

5-04.3.INST1.GR5

Section 5-04.3 is supplemented with the following:

5-04.3.OPT4.FR5

(January 3, 2017)

The expected percentage of new asphalt binder in the HMA is *** \$\$1\$\$ ***. Should the actual percentage of new asphalt binder required by the job mix formula for HMA produced with Agency-provided aggregate vary by more than plus or minus 0.3-percent

1 an adjustment in payment will be made. The adjustment in payment (plus or minus) will
2 be based on the invoice cost to the Contractor. When RAP and/or RAS are used in the
3 production of HMA the adjustment will be reduced by the percentage of RAP and/or RAS
4 asphalt binder. No adjustment will be made when the Contractor elects not to use a
5 Contracting Agency provided source.
6

7 5-04.3(1).GR5

8 **Weather Limitations**
9

10 5-04.3(1).INST1.GR5

11 The first sentence of Section 5-04.3(1) is revised to read:
12

13 5-04.3(1).OPT1.FR5

14 (August 3, 2009)

15 HMA for wearing course shall not be placed on any travelled way from *** \$\$1\$\$ ***
16 and through March 31st of the following year without written approval from the
17 Engineer.
18

19 5-04.3(3).GR5

20 **Equipment**
21

22 ~~5-04.3(3)A.GR5~~

23 ~~Mixing Plant~~
24

25 ~~5-04.3(3)A.INST1.GR5~~

26 ~~In the first paragraph of Section 5-04.3(3)A, item number 5 is revised to read:~~
27

28 ~~5-04.3(3)A.OPT1.2024.GR5~~

29 ~~(November 2, 2022)~~

30 ~~5. Provide HMA sampling equipment that complies with FOP for AASHTO~~
31 ~~R97:~~
32

33 ~~• Use a mechanical sampling device accepted by the Engineer, or~~
34

35 ~~• Platforms or devices to enable sampling from the truck transport~~
36 ~~without entering the truck transport for sampling HMA.~~
37

38 ~~5-04.3(3)C.GR5~~

39 **Pavers**
40

41 5-04.3(3)C.INST1.GR5

42 Section 5-04.3(3)C is supplemented with the following:
43

44 5-04.3(3)C.OPT1.GR5

45 (April 4, 2016)

46 Reference lines will be required for both outer edges of the traveled way for
47 each mainline roadway for vertical control in accordance with Section 5-
48 04.3(3)C.
49

50 5-04.3(3)D.GR5

51 **Material Transfer Device or Material Transfer Vehicle**
52

1 5-04.3(3)D.OPT1.GR5
2 (April 4, 2016)
3 Section 5-04.3(3)D is deleted in its entirety.
4

5 5-04.3(3)D.INST1.GR5
6 Section 5-04.3(3)D including title is revised to read:
7

8 5-04.3(3)D.OPT2.GR5
9 **(August 1, 2011)**
10 **Material Transfer Vehicle**

11 Direct transfer of HMA from the hauling equipment to the paving machine will
12 not be allowed in the top 0.30-feet of the pavement section of hot mix asphalt
13 (HMA) used in traffic lanes with a depth of 0.08-feet or greater. A material
14 transfer vehicle (MTV) shall be used to deliver the HMA from the hauling
15 equipment to the paving machine. HMA placed in irregularly shaped and minor
16 areas such as road approaches, tapers, and turn lanes are excluded from this
17 requirement.
18

19 The MTV shall mix the HMA after delivery by the hauling equipment and prior to
20 lay down by the paving machine. Mixing of the HMA shall be sufficient to obtain
21 a uniform temperature throughout the mixture.
22

23 5-04.3(9).GR5
24 **HMA Mixture Acceptance**

25
26 5-04.3(9).INST1.GR5
27 Section 5-04.3(9) is supplemented with the following:
28

29 5-04.3(9).OPT1.FR5
30 **(August 1, 2016)**
31 **Visual Evaluation**

32 The following HMA will be accepted by visual evaluation:
33

34 *** \$\$1\$\$ ***
35

36 5-04.3(10).GR5
37 **HMA Compaction Acceptance**

38
39 5-04.3(10).INST1.GR5
40 The column in Table 14 of Section 5-04.3(10), titled "Statistical Evaluation of HMA
41 Compaction is Required for", is supplemented with the following:
42

43 5-04.3(10).OPT1.GR5
44 (April 3, 2017)
45 • Any HMA for which the specified course thickness is greater than 0.10 feet and
46 the HMA is placed in the shoulder.
47

48 5-04.3(10)D.GR5
49 **HMA Compaction – Visual Evaluation**

50
51 5-04.3(10)D.INST2.GR5
52 The last sentence in Section 5-04.3(10)D is revised to read:

1
2 5-04.3(10)D.OPT1.GR5
3 (April 4, 2016)
4 HMA that is used for preleveling shall be compacted with a pneumatic tire
5 roller unless otherwise approved by the Engineer.
6

7 5-04.3(12).GR5
8 **Joins**
9

10 5-04.3(12).INST1.GR5
11 Section 5-04.3(12) is supplemented with the following:
12

13 5-04.3(12).OPT1.GR5
14 (January 5, 2004)
15 The HMA overlay shall be feathered to produce a smooth riding connection to the
16 existing pavement.
17

18 HMA utilized in the construction of the feathered connections shall be modified by
19 eliminating the coarse aggregate from the mix at the Contractor's plant or the
20 commercial source or by raking the joint on the roadway, to the satisfaction of the
21 Engineer.
22

23 5-04.3(13).GR5
24 **Surface Smoothness**
25

26 5-04.3(13).INST1.GR5
27 The first four paragraphs of Section 5-04.3(13) are revised to read:
28

29 5-04.3(13).OPT1.FR5
30 (January 5, 2015)
31 Pavement surface smoothness for this project will include International Roughness
32 Index (IRI) testing that will be completed by the Contracting Agency. The Contracting
33 Agency will perform the IRI testing on each through lane, climbing lane, and passing
34 lane, greater than one mile in length and these lanes will be subject to
35 incentive/disincentive adjustments. IRI testing for a lane will be reported every 0.01
36 mile by averaging the IRI data for the left and right wheelpath within the section.
37

38 Bridge approaches and bridge decks that are located within the lanes specified to be
39 tested and are paved with HMA will be included in the IRI testing. Bridge structures,
40 approach slabs and 0.02 miles on either side of the bridge structures and approach
41 slabs will be eligible for price adjustment incentives and excluded from disincentive
42 adjustments.
43

44 Ramps, shoulders and tapers will not be included in IRI testing for pavement
45 smoothness and will not be subject to incentive adjustments. They will be subject to
46 parallel and transverse 10-foot surface requirements, corrective work and
47 disincentive adjustments.
48

49 Upon completion of the paving operation the Contractor shall notify the Engineer that
50 the roadway is ready for IRI testing. Notification shall not take place until the following
51 conditions are met for all lanes to be tested on the project:
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1. All lanes are open to traffic, unrestricted and in their final configuration.
2. All permanent pavement markings are in place or temporary pavement markings to the satisfaction of the Engineer.

If requested by the Engineer the Contractor shall sweep the roadway immediately prior to testing. If the sweeping is needed as a result of the Contractor's operation it shall be the responsibility and expense of the Contractor. Should the Contracting Agency not be able to complete the testing as a result of the Contractor's Work the testing will be rescheduled and any additional costs to the Contracting Agency will be deducted from monies due or that may become due the Contractor.

It is the intent that the testing will be completed and the results provided to the Contractor within 30 calendar days of the Contractor's notification that the roadway is ready for testing. If weather or other conditions exist which are determined by the Engineer to be unsuitable for IRI testing of the pavement then the testing will be deferred until favorable conditions are available and the 30 calendar days extended.

Provided that all other Work required for Substantial Completion has been completed; the day following the Contractor's notification that the roadway is ready for IRI testing through the day the IRI data is provided to the Contractor will be nonworking days in accordance with Section 1-08.5.

Corrective work for pavement smoothness may be taken by the Contractor prior to IRI testing. After completion of the IRI testing the Contractor shall measure the smoothness of each 0.01 mile section with an IRI greater than 125 with a 10-foot straightedge within 14 calendar days or as approved by the Engineer. The Contractor shall identify all locations that require corrective work and provide the straight edge measurements at each location that exceeds the allowable limit to the Engineer. If all measurements in a 0.01 section comply with the smoothness requirements the Contractor shall provide the maximum measurement to the Engineer and a statement that corrective work is not required. Unless approved by the Engineer, corrective work shall be taken by the Contractor for pavement identified by the Contractor or Engineer that does not meet the following requirements:

1. The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds.
2. The completed surface of the wearing course shall not vary more than 1/8 inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline.
3. The completed surface of the wearing course shall vary not more than 1/4 inch in 10 feet from the rate of transverse slope shown in the Plans.

All corrective work shall be completed at no additional expense, including traffic control, to the Contracting Agency. Pavement shall be repaired by one or more of the following methods:

1. Diamond grinding; repairs shall not reduce pavement thickness by more than 1/4 inch.

1 5-04.3(13).INST3.GR5
2 The second sentence of Section 5-04.3(13) is revised to read:
3
4 5-04.3(13).OPT3.GR5
5 (January 5, 2004)
6 The completed surface of the wearing course shall not vary more than 1/4 inch from
7 the lower edge of a 10-foot straightedge placed on the surface parallel to centerline.
8
9 5-04.3(13).INST4.GR5
10 Section 5-04.3(13) is supplemented with the following:
11
12 5-04.3(13).OPT4.GR5
13 (February 6, 2023)
14 This Contract includes Weigh-in-Motion (WIM) sensors and additional surface
15 smoothness requirements within the WIM evaluation area.
16
17 The WIM evaluation area is 400 feet in length, beginning 275 feet before the WIM
18 Site Index Station. The width of the WIM evaluation area includes all lanes where
19 sensors are present and extends 0.75 feet beyond the edge of the lane(s).
20
21 The completed surface shall be sufficiently smooth such that a 6-inch diameter
22 circular plate, 0.125 inches thick, cannot be passed beneath a 16-foot straightedge
23 placed on the surface parallel to the centerline of the roadway, when evaluated as
24 described in ASTM E1318-09 (2017), Section 6.1.5.
25
26 Deviations within the WIM evaluation area that are in excess of these requirements
27 will not be accepted and shall be corrected by one of the following methods:
28
29 1. Remove and replace the final roadway surface layer, or
30
31 2. Remove material from high places by grinding with an accepted grinding
32 machine, or
33
34 3. By other method accepted by the Engineer.
35
36 Correct defects until there are no deviations anywhere within the WIM evaluation
37 area that are greater than allowable tolerances.
38
39 5-04.3(14).GR5
40 ***Planing Bituminous Pavement***
41
42 5-04.3(14).INST1.GR5
43 Section 5-04.3(14) is supplemented with the following:
44
45 5-04.3(14).OPT1.FR5
46 (January 5, 2004)
47 The Contractor shall perform the planing operations no more than *** \$\$1\$\$ ***
48 calendar days ahead of the time the planed area is to be paved with HMA, unless
49 otherwise allowed by the Engineer in writing.
50
51 5-04.3(14).OPT2.GR5
52 (January 5, 2004)

1 At the start of the planing operation the Contractor shall plane a 500 foot test section
2 to be evaluated by the Engineer for compliance with the surface tolerance
3 requirements. The test section shall have a minimum width of 10 feet. If the planing
4 is in accordance with the surface tolerance requirements, the Contractor may begin
5 production planing. If the planing is not in conformance with the surface tolerance
6 requirements, the Contractor shall make adjustments to the planing operation and
7 then plane another test section.

8
9 If at any time during the planing operation the Engineer determines the required
10 surface tolerance is not being achieved, the Contractor shall stop planing. Planing
11 shall not resume until the Engineer is satisfied that specification planing can be
12 produced or until successful completion of another test section. The forward speed
13 during production planing shall not exceed the speed used for the test section.

14
15 The completed surface after planing and prior to paving shall not vary more than 1/4
16 inch from the lower edge of a 10-foot straightedge placed on the surface parallel or
17 transverse to the centerline. The planed surface shall have a matted texture and the
18 difference between the high and low of the matted surface shall not exceed 1/8 inch.

19
20 Pavement repair operations, when required, shall be accomplished prior to planing.

21
22 5-04.3(14).OPT3.GR5
23 **(March 13, 1995)**
24 **Vertical Edge Planing**
25 During planing of bituminous pavement in the travelled lanes, the Contractor shall
26 coordinate the planing and paving operations such that the planed roadway surface
27 shall not remain unpaved at the end of the work day. The Contractor shall have a
28 contingency plan to ensure that no planed areas remain unpaved due to equipment
29 breakdown or other emergency.

30
31 5-04.3(14).OPT4.GR5
32 **(August 3, 2009)**
33 **Beveled Edge Planing**
34 A beveled edge shall be constructed in areas that will not be paved during the same
35 work shift.

36
37 The Contractor shall use a beveled cutter on the mandrel of the planing equipment,
38 or other approved method(s), to eliminate the vertical edge(s). The beveled edge(s)
39 shall be constructed at a 4:1 slope.

40
41 5-04.5.GR5
42 **Payment**

43
44 5-04.5.INST2.GR5
45 Section 5-04.5 is supplemented with the following:

46
47 5-04.5.OPT1.FR5
48 (January 5, 2015)
49 "Smoothness Compliance Adjustment" by calculation.

50
51 **Smoothness Compliance Adjustments**
52 Section 5-04.5(1) is supplemented with the following:

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Smoothness Compliance Adjustments will be based on the requirements in Section 5-04.3(13) and the following calculations:

1. Final IRI acceptance and incentive/disincentive payments for pavement smoothness will be calculated on an IRI value per 0.10 mile in accordance with the price adjustment schedule.
 - a. For sections of a lane that are a minimum of 0.01 mile and less than 0.10 mile, the price adjustment will be calculated using the average of the 0.01 mile IRI values and the price adjustment prorated for the length of the section.
 - b. For bridges, approach slabs and 0.02 miles on either side the price adjustment will be calculated independently from other measured lanes.
 - c. IRI values per 0.01 miles that were measured prior to corrective work will be included in the 0.10 mile price adjustment for sections with corrective work.
2. A smoothness compliance adjustment will be calculated in the sum of minus \$250.00 for each and every section of single traffic lane 0.01 miles in length in that does not meet the 10-foot straight edge requirements in Section 5-04.3(13).

The price adjustment schedule for this contract shall be *** \$1\$ \$***.

Price Adjustment Schedule

| IRI for each 0.10 mi. section | Pay Adjustment Schedule 1 | Pay Adjustment Schedule 2 | Pay Adjustment Schedule 3 |
|-------------------------------|---------------------------|---------------------------|---------------------------|
| in. / mi. | \$ / 0.10 mi. | \$ / 0.10 mi. | \$ / 0.10 mi. |
| < 30 | 600 | 600 | 600 |
| 30 | 600 | 600 | 600 |
| 31 | 580 | 580 | 580 |
| 32 | 560 | 560 | 560 |
| 33 | 540 | 540 | 540 |
| 34 | 520 | 520 | 520 |
| 35 | 500 | 500 | 500 |
| 36 | 480 | 480 | 480 |
| 37 | 460 | 460 | 460 |
| 38 | 440 | 440 | 440 |
| 39 | 420 | 420 | 420 |
| 40 | 400 | 400 | 400 |
| 41 | 380 | 380 | 380 |
| 42 | 360 | 360 | 360 |
| 43 | 340 | 340 | 340 |
| 44 | 320 | 320 | 320 |
| 45 | 300 | 300 | 300 |

| | | | |
|----|------|------|-----|
| 46 | 280 | 280 | 280 |
| 47 | 260 | 260 | 260 |
| 48 | 240 | 240 | 240 |
| 49 | 220 | 220 | 220 |
| 50 | 200 | 200 | 200 |
| 51 | 180 | 180 | 180 |
| 52 | 160 | 160 | 160 |
| 53 | 140 | 140 | 140 |
| 54 | 120 | 120 | 120 |
| 55 | 100 | 100 | 100 |
| 56 | 80 | 80 | 80 |
| 57 | 60 | 60 | 60 |
| 58 | 40 | 40 | 40 |
| 59 | 20 | 20 | 20 |
| 60 | 0 | 0 | 0 |
| 61 | 0 | 0 | 0 |
| 62 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 |
| 65 | 0 | 0 | 0 |
| 66 | -20 | 0 | 0 |
| 67 | -40 | 0 | 0 |
| 68 | -60 | 0 | 0 |
| 69 | -80 | 0 | 0 |
| 70 | -100 | 0 | 0 |
| 71 | -120 | 0 | 0 |
| 72 | -140 | 0 | 0 |
| 73 | -160 | 0 | 0 |
| 74 | -180 | 0 | 0 |
| 75 | -200 | 0 | 0 |
| 76 | -220 | -20 | 0 |
| 77 | -240 | -40 | 0 |
| 78 | -260 | -60 | 0 |
| 79 | -280 | -80 | 0 |
| 80 | -300 | -100 | 0 |
| 81 | -320 | -120 | 0 |
| 82 | -340 | -140 | 0 |
| 83 | -360 | -160 | 0 |
| 84 | -380 | -180 | 0 |
| 85 | -400 | -200 | 0 |
| 86 | -420 | -220 | 0 |
| 87 | -440 | -240 | 0 |
| 88 | -460 | -260 | 0 |
| 89 | -480 | -280 | 0 |
| 90 | -500 | -300 | 0 |
| 91 | -520 | -320 | 0 |
| 92 | -540 | -340 | 0 |
| 93 | -560 | -360 | 0 |
| 94 | -580 | -380 | 0 |
| 95 | -600 | -400 | 0 |

| | | | |
|------|-------|-------|---|
| 96 | -620 | -420 | 0 |
| 97 | -640 | -440 | 0 |
| 98 | -660 | -460 | 0 |
| 99 | -680 | -480 | 0 |
| 100 | -700 | -500 | 0 |
| 101 | -720 | -520 | 0 |
| 102 | -740 | -540 | 0 |
| 103 | -760 | -560 | 0 |
| 104 | -780 | -580 | 0 |
| 105 | -800 | -600 | 0 |
| 106 | -820 | -620 | 0 |
| 107 | -840 | -640 | 0 |
| 108 | -860 | -660 | 0 |
| 109 | -880 | -680 | 0 |
| 110 | -900 | -700 | 0 |
| 111 | -920 | -720 | 0 |
| 112 | -940 | -740 | 0 |
| 113 | -960 | -760 | 0 |
| 114 | -980 | -780 | 0 |
| 115 | -1000 | -800 | 0 |
| 116 | -1020 | -820 | 0 |
| 117 | -1040 | -840 | 0 |
| 118 | -1060 | -860 | 0 |
| 119 | -1080 | -880 | 0 |
| 120 | -1100 | -900 | 0 |
| 121 | -1120 | -920 | 0 |
| 122 | -1140 | -940 | 0 |
| 123 | -1160 | -960 | 0 |
| 124 | -1180 | -980 | 0 |
| ≥125 | -1200 | -1000 | 0 |

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5-04.5.OPT2.GR5

(January 13, 2021)
Asphalt Cost Price Adjustment

The Contracting Agency will make an Asphalt Cost Price Adjustment, either a credit or a payment, for qualifying changes in the reference cost of asphalt binder. The adjustment will be applied to partial payments made according to Section 1-09.9 for the following bid items when they are included in the proposal:

- “HMA Cl. ___ PG ___”
- “HMA for Approach Cl. ___ PG ___”
- “HMA for Preleveling Cl. ___ PG ___”
- “HMA for Pavement Repair Cl. ___ PG ___”
- “Commercial HMA”

The adjustment is not a guarantee of full compensation for changes in the cost of asphalt binder. The Contracting Agency does not guarantee that asphalt binder will be available at the reference cost.

1 The Contracting Agency will establish asphalt binder reference costs twice each month
2 and post the information on the Agency website at: [https://wsdot.wa.gov/business-
3 wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-
4 reference-cost](https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-reference-cost). The reference cost will be determined using posted prices furnished by
5 Poten & Partners, Inc. If the selected price source ceases to be available for any reason,
6 then the Contracting Agency will select a substitute price source to establish the reference
7 cost.

8
9 Price adjustments will be calculated one time per month. No price adjustment will be made
10 if the Current Reference Cost is within +/-5% of the Base Cost. Reference costs for
11 projects located in Eastern versus Western Washington shall be selected from the column
12 in the WSDOT website table labeled “Eastern”, or “Western”, accordingly. The adjustment
13 will be calculated as follows:

14
15 If the reference cost is greater than or equal to 105% of the base cost, then
16 Asphalt Cost Price Adjustment = (Current Reference Cost – (1.05 x Base Cost)) x (Q
17 x 0.056).

18
19 If the reference cost is less than or equal to 95% of the base cost, then
20 Asphalt Cost Price Adjustment = (Current Reference Cost – (0.95 x Base Cost)) x (Q
21 x 0.056).

22
23 Where: **Current Reference Cost** is selected from the website table based on
24 the “Date Effective” that immediately precedes the current month’s
25 progress estimate end date. For work completed after all authorized
26 working days are used, the adjustment will be based on the posted
27 reference cost during which contract time was exhausted.

28
29 **Base Cost** is selected from the website table based on the “Date
30 Effective” that immediately precedes the contract bid opening date, and
31 shall be a constant for all monthly adjustments.

32
33 **Q** = total tons of all classes of HMA paid in the current month’s progress
34 payment.

35
36 “Asphalt Cost Price Adjustment”, by calculation.

37 “Asphalt Cost Price Adjustment” will be calculated and paid for as described in this
38 section. For the purpose of providing a common proposal for all bidders, the Contracting
39 Agency has entered an amount in the proposal to become a part of the total bid by the
40 Contractor.

41
42 5-04.5.OPT3.GR5

43 (April 4, 2016)

44 “Asphalt Binder Revision” by calculation.

45 “Asphalt Binder Revision” shall be calculated and paid for as described in Section 5-04.3.

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1 5-05.GR5

2 **Cement Concrete Pavement**

3

4 5-05.1.GR5

5 **Description**

6

7 5-05.1.INST1.GR5

8 Section 5-05.1 is supplemented with the following:

9

10 5-05.1.OPT1.GR5

11 (August 6, 2012)

12 This Work consists of furnishing and placing pigmented, textured, or textured and
13 pigmented cement concrete pavement at the locations and depth as shown in the Plans.

14

15 5-05.2.GR5

16 **Materials**

17

18 5-05.2.INST1.GR5

19 Section 5-05.2 is supplemented with the following:

20

21 5-05.2.OPT1.GR5

22 (November 20, 2023)

23 Pigment color for "brick red" cement concrete pavement shall match SAE AMS-STD-595
24 Color #32169. The pigment shall be incorporated in accordance with the manufacturer's
25 recommendations.

26

27 5-05.2.OPT2.FR5~~5-05.2.OPT1.FR5~~

28 (November 20, 2023)~~(August 6, 2012)~~

29 Pigment color for cement concrete pavement shall match SAE-AMS-STD-595 Color #~~be~~
30 ~~one chosen from the manufacturers and colors listed below:~~

31 *** \$\$1\$\$ ***

32

33 The pigment shall be incorporated in accordance with the manufacturer's
34 recommendations.

35

36 5-05.3.GR5

37 **Construction Requirements**

38

39 5-05.3.INST1.GR5

40 Section 5-05.3 is supplemented with the following:

41

42 5-05.3.OPT1.GR5

43 **(August 6, 2012)**

44 ***Pigmented Cement Concrete***

45 Curing shall be in accordance with Section 5-05.3(13) and be applied to the surface in
46 accordance with the manufacturer's recommendations. If liquid membrane-forming
47 concrete curing compound is used it shall meet the requirements of ASTM C 309 Type 1-
48 D.

49

50 The Contractor shall provide a 2 foot by 2 foot sample panel, that has been cured a
51 minimum seven days, showing the color of cement concrete to the Engineer for
52 acceptance before placing any pigmented cement concrete pavement.

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5-05.3.OPT2.FR5

(August 6, 2012)

Textured Cement Concrete

Textured cement concrete pavement pattern shall be one chosen from the manufactures and patterns listed below:

*** \$\$1\$\$ ***

A mat or stamp shall be used to imprint the pattern into the concrete surface.

Curing shall be in accordance with Section 5-05.3(13) and be applied to the surface in accordance with the manufacturer's recommendations. If liquid membrane-forming concrete curing compound is used it shall meet the requirements of ASTM C 309 Type 1-D.

5-05.3(1).GR5

Concrete Mix Design for Paving

5-05.3(1).INST1.GR5

Item number 1 of Section 5-05.3(1) is supplemented with the following:

5-05.3(1).OPT1.GR5

(January 2, 2018)

Coarse aggregate derived from the recycling of Cement Concrete Pavement removed from the project may be used as coarse aggregate or blended with coarse aggregate for Cement Concrete Pavement. The Contractor shall remove all bituminous material, joint sealant and backer material from the existing pavement prior to removal for recycling. The recycled concrete aggregates shall meet the requirements of Section 9-03.21(1)B. Cement Concrete Pavement experiencing carbonate silica reaction, sulfate reaction, D cracking or any other conditions that may affect concrete durability shall not be used. Cement Concrete Pavement mix designs using recycled concrete aggregates will require the use of Low Alkali Cement or 25 percent Class F fly ash by total weight of the cementitious materials or the Contractor shall submit evidence that other ASR mitigating measures control expansion in accordance with Section 9-03.1(1).

5-05.3(1).INST2.GR5

Section 5-05.3(1) is supplemented with the following:

5-05.3(1).~~OPT2.GR5~~~~OPT8.GR5~~

~~(August 6, 2012)~~

(November 20, 2023)

Aggregate for Textured Cement Concrete Pavement

~~Coarse aggregate for Textured Cement Concrete Pavement shall conform to Section 9-03.1(4), AASHTO grading No. 7. An alternate for combined gradation for Textured Cement Concrete Pavement conforming to Section 9-03.1(5) may be proposed, that has a nominal maximum aggregate size of 1/2 inch sieve.~~

Fine aggregate and coarse aggregate shall be a combined gradation in accordance with Section 9-03.1(5) and have a nominal maximum aggregate size equal to a 1/2-inch, 3/4-inch, 1-inch, or 1-1/2-inch sieve.

1 The Contractor shall select the nominal maximum aggregate size that allows the
2 specified textured cement concrete pavement pattern to be imprinted into the
3 concrete surface to the depth specified for the textured pattern. If the textured
4 concrete pattern is unsatisfactory, the Contractor shall remove and replace
5 the concrete pavement at no expense to the Contracting Agency.
6

7 5-05.3(12).GR5

8 **Surface Smoothness**
9

10 5-05.3(12).INST1.GR5

11 The third paragraph of Section 5-05.3(12) is replaced with the following:
12

13 5-05.3(12).OPT1.GR5

14 (January 7, 2019)

15 Operate the inertial profiler in accordance with AASHTO R 57. Collect two
16 longitudinal traces, one in each wheel path. Collect profile data in a continuous pass
17 including areas excluded from pay adjustments for each section paved. The
18 Contractor shall determine when each section is to be tested except that the
19 minimum length to be tested shall be 528 feet unless accepted by the Engineer.
20 Where a completed section of concrete pavement abuts a segment to be completed
21 later in the project, the 50 feet adjacent to uncompleted section shall be included in
22 the testing and incentive/disincentive for the uncompleted segment. Provide seven
23 calendar days notice to the Engineer prior to testing.
24

25 5-05.3(12).INST2.GR5

26 Section 5-05.3(12) is supplemented with the following:
27

28 5-05.3(12).OPT2.GR5

29 (February 6, 2023)

30 This Contract includes Weigh-in-Motion (WIM) sensors and additional surface
31 smoothness requirements within the WIM evaluation area.
32

33 The WIM evaluation area is 400 feet in length, beginning 275 feet before the WIM
34 Site Index Station. The width of the WIM evaluation area includes all lanes where
35 sensors are present and extends 0.75 feet beyond the edge of the lane(s).
36

37 The completed surface shall be sufficiently smooth such that a 6-inch diameter
38 circular plate, 0.125 inches thick, cannot be passed beneath a 16-foot straightedge
39 placed on the surface parallel to the centerline of the roadway, when evaluated as
40 described in ASTM E1318-09 (2017), Section 6.1.5.
41

42 Deviations within the WIM evaluation area that are in excess of these requirements
43 will not be accepted and shall be corrected by one of the following methods:
44

- 45 1. Remove and replace the final roadway surface layer, or
- 46 2. Remove material from high places by grinding with an accepted grinding
47 machine, or
- 48 3. By other method accepted by the Engineer.
49
50
51

1 Correct defects until there are no deviations anywhere within the WIM evaluation
2 area that are greater than allowable tolerances.
3
4 5-05.3(17).GR5
5 **Opening to Traffic**
6
7 5-05.3(17).INST2.GR5
8 Section 5-05.3(17) is revised to read:
9
10 5-05.3(17).OPT1.GR5
11 **(August 7, 2017)**
12 **Maturity Testing for Concrete Pavement**
13 The pavement shall not be opened to traffic until the Strength-Maturity Relationship
14 (SMR) demonstrates the pavement has a minimum compressive strength of 2,500
15 psi and approval of the Engineer. The pavement shall be cleaned prior to opening
16 to traffic.
17
18 The Contractor shall establish a Maturity Value on the approved concrete mix through
19 the use of a testing program following the WSDOT Maturity Method Test Procedure
20 for estimating concrete strength.
21
22 The Contractor shall establish the SMR at least 14 calendar days prior to the
23 production pours. The Contractor shall notify the Engineer 7 days prior to performing
24 the SMR as to the time, date and location where the SMR will be performed. The
25 Contractor shall allow WSDOT the opportunity to place maturity loggers in the test
26 cylinders in order to calibrate the WSDOT maturity meter. A SMR shall be developed
27 for each mix used on the project. Referenced SMRs from previous projects will not
28 be allowed.
29
30 The Contractor shall be responsible for the installation of the maturity logger/sensors
31 within the concrete pavement pour area. For panel replacements performed under
32 Section 5-01, place a minimum of four loggers/sensors at two different locations. Two
33 in one of the first few panel replacements and two in the last panel replacement of
34 the day, each day. For continuous concrete paving operations performed under
35 Section 5-05, place a minimum of four loggers/sensors, two at the beginning and two
36 at the end of the concrete pour, each day. The Contractor shall maintain the integrity
37 of the logger/sensors and wires during concrete pouring, finishing and curing
38 operations or until the maturity information is no longer needed.
39
40 The Contractor shall perform the Quality Control Procedure to Verify the Strength-
41 Maturity Relationship on days 1 and 2 of concrete placement as indicated in the test
42 procedure.
43
44 The Contractor shall develop a Quality Control Plan based on the Strength-Maturity
45 Relationship to monitor and provide remedial action to ensure the concrete meets
46 design strengths.
47
48 Any alteration in mix proportions or source or type of any material, in excess of those
49 tolerable by batching variability shall require the development of a new SMR prior to
50 its use at the Contractors time and expense. Alterations include a change in type,
51 source, or proportion of cement, fly ash, coarse aggregate, fine aggregate, or

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admixtures. A change in water-to-cementitious material ratio greater than 5.0 percent requires the development of a new SMR.

Maturity Method Test Procedure

This test method provides a procedure for estimating concrete strength by means of the maturity method. The maturity method is based on strength gain as a function of temperature and time. This method is a modification of ASTM C1074 covering the procedures for estimating concrete strength by means of the maturity method.

The maturity method consists of three steps:

- Develop Strength-Maturity Relationship
- Estimate in-place strength
- Verify Strength-Maturity Relationship.

The Nurse-Saul “temperature-time factor (TTF)” maturity index shall be used in this test method, with a datum temperature of 0 °C (32 °F).

Apparatus

- If the maturity meter has input capability for datum temperature, verify that the proper value of the datum temperature has been selected prior to each use.
- Intellirock maturity system (or approved equivalent). This system shall include the logger/sensor, handheld reader, and software.
- The data obtained from the maturity meter shall be unalterable and un-interruptible.
- The same brand and type of maturity meters shall be used in the field as those used to develop and verify the strength-maturity relationship.
- Logger/sensor wire grade shall be larger than or equal to 20 awg.

Contractors Procedure to Develop Strength-Maturity Relationship

| Step | Action |
|------|---|
| 1 | For every concrete design that will be evaluated by the maturity method, prepare a minimum of 21 cylinders in accordance with FOP for AASHTO T 23. Additional cylinders should be cast to avoid having to repeat the procedure. The mixture proportions and constituents of the concrete shall be the same as those of the job concrete whose strength will be estimated using this practice. The minimum size of each batch shall be approximately 3 m ³ (4 yd ³). A mobile mixer may be used for batching provided it is to be used on the project. Calibration documentation shall be provided to the Engineer prior to batching. |
| 2 | Fresh concrete testing for each batch shall include concrete placement temperature, slump, and air content in accordance with FOP for AASHTO T 309, FOP for AASHTO T 119, and FOP for AASHTO T 152. |
| 3 | Embed loggers/sensors in at least two cylinders. Loggers/sensors shall be placed 2-4 inches from any surface. Activate the loggers/sensors. |
| 4 | Cure the cylinders in accordance with FOP for AASHTO T 23. |

| | |
|---|---|
| 5 | <p>Perform compression strength tests in accordance with FOP for AASHTO T 22 to target 2,500 psi for opening to traffic. In targeting the opening to traffic requirement and to properly characterize and validate the maturity calibration curve at least three target cylinder breaks must be broken prior to 2,500 psi. Test three cylinders at each age and compute the average strength. The cylinders with loggers/sensors may be tested if additional cylinders are needed.</p> <p>If a cylinder is obviously defective (for example, out of round, not square, damaged due to handling), the cylinder shall be discarded. If an individual cylinder strength is greater than 10 percent outside the average of three cylinders, the cylinder can be considered defective and be discarded. When two of the three cylinders are defective, a new batch must be evaluated unless additional acceptable cylinders are available.</p> |
| 6 | <p>At each test age, record the individual and average values of maturity and strength for each batch on a permanent data sheet</p> |
| 7 | <p>Plot the average strengths as a function of the average maturity values, with data points shown. Using a computer spreadsheet program such as Microsoft Excel, calculate a point-to-point interpolation through the data. The resulting curve is the strength-maturity relationship to be used for estimating the strength of the concrete mixture placed in the field.</p> <p>When developing the SMR, the spreadsheet software allows the Contractor to develop the corresponding maturity equation, which defines the SMR. The Engineer should carefully examine the data for “outliers”, faulty cylinder breaks, or faulty maturity readings. The Engineer should use judgment to determine if certain points should be discarded, or retested, or whether the entire SMR should be regenerated.</p> |

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Contractors Procedure to Estimate In-Place Strength

| Step | Action |
|------|--|
| 1 | <p>Prior to or at the time of concrete placement, install loggers/sensors at the frequency specified. Loggers/sensors shall be placed a minimum of 2 ft. from a panel edge 4 to 5 inches from the panel surface. Loggers/sensors may be tied to reinforcing steel, but should not be in direct contact with the reinforcing steel or formwork.</p> |
| 2 | <p>As soon as practical after concrete placement, connect and activate the maturity meter(s).</p> |
| 3 | <p>The Contractor shall provide to the Engineer, prior to opening the pavement to traffic, encrypted data files (with software to read the files) of the maturity data from the loggers/sensors. Data shall be provided until the maturity is at a value that is equal to or greater than the required strength for that concrete mixture, as determined by the SMR. Additionally, data shall be provided on a record log.</p> |

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Contractors Quality Control Procedure to Verify Strength-Maturity Relationship

| Step | Action |
|------|--|
| 1 | At the specified verification interval make three cylinders in accordance with FOP for AASHTO T 23. |
| 2 | Embed a logger/sensor in one cylinder. Loggers/sensors shall be placed 2-4 inches from any surface. Activate the logger/sensor as soon as possible. |
| 3 | Cure the cylinders in accordance with FOP for AASHTO T 23. |
| 4 | Perform compression strength tests on all three of the cylinders in accordance with FOP for AASHTO T 22 to verify strength and time to reach 2,500 psi for opening to traffic. Compute the average strength of the cylinders. If a cylinder is obviously defective (for example, out of round, not square, damaged due to handling), the cylinder shall be discarded. If any individual cylinder strength is greater than 10 percent outside the average of three cylinders, that cylinder will be considered defective and be discarded. When two of the three cylinders are defective, the verification procedure will have to be repeated starting at step 1. |
| 5 | Record on a permanent data sheet the maturity value at the time of compression testing and individual and average strengths established from the cylinder breaks. Also record the predicted strength based on the SMR established for that particular concrete design, and the percent difference between average and predicted values. The SMR is verified when the predicted strength established from the average SMR and the cylinder breaks are within 10 percent. A copy of the data sheet and an encrypted file for the maturity data shall be provided to the Engineer on a daily basis. |

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5-05.4.GR5

Measurement

5-05.4.INST1.GR5

Section 5-05.4 is supplemented with the following:

5-05.4.OPT1.GR5

(August 6, 2012)

Pigmented, textured, or textured and pigmented cement concrete pavement will be measured by the square yard placed.

5-05.5.GR5

Payment

5-05.5.INST1.GR5

Section 5-05.5 is supplemented with the following:

1 5-05.5.OPT2.GR5
2 (August 6, 2012)
3 "Pigmented Cement Concrete Pavement", per square yard
4 The unit Contract price per square yard for Pigmented Cement Concrete Pavement shall
5 be full pay for all costs incurred to perform the Work in this Specification.
6

7 5-05.5.OPT3.GR5
8 (August 6, 2012)
9 "Textured Cement Concrete Pavement", per square yard
10 The unit Contract price per square yard for Textured Cement Concrete Pavement shall
11 be full pay for all costs incurred to perform the Work in this Specification.
12

13 5-05.5.OPT4.GR5
14 (August 6, 2012)
15 "Textured and Pigmented Cement Concrete Pavement", per square yard
16 The unit Contract price per square yard for Textured and Pigmented Cement Concrete
17 Pavement shall be full pay for all costs incurred to perform the Work in this Specification.
18

19 5-05.5.OPT5.GR5
20 (August 5, 2013)
21 All costs in connection with conducting concrete pavement maturity testing and surface
22 cleaning prior to opening to traffic shall be included in the unit Contract price per cubic
23 yard for "Cement Conc. Pavement" and per square yard for "Replace Cement Concrete
24 Panel", if either or both of the items are included in the Contract.
25

26 5-SA1.FR5
27 **(August 7, 2017)**
28 **JUST IN TIME TRAINING**

29 **Description**

30 Just In Time Training (JITT) is a formal class for the joint training of Contractor and Contracting
31 Agency employees that will be associated with the construction or rehabilitation of Cement
32 Concrete Pavement.
33

34 **Construction Requirements**

35 ***Training***

36 The Contractor shall provide a JITT instructor who is experienced with the specified
37 pavement construction methods, materials, and tests. The instructor shall not be an
38 employee of the Contractor or the Contracting Agency. JITT shall be at a facility provided
39 by the Contractor unless otherwise agreed to by the Engineer.
40

41 The following personnel are required to attend the JITT:
42

- 43 1. Representing the Contractor: The Superintendent, foremen and key
44 construction personnel associated with the work.
- 45 2. Representing the Contracting Agency: Up to ***\$1\$*** Contracting Agency
46 staff selected by the Engineer.
47

48 JITT shall meet the following requirements:
49

- 50 1. At least 4 hours long or a length agreed to by the Engineer.

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2. Cover all aspects of work methods, equipment and materials the Contractor is proposing to use.
 3. Conducted within 3 miles of the job site or at a mutually agreed to location.
 4. Completed before the start of paving.
 5. Conducted during normal working hours.
 6. At the Contractors option, JITT may be an extension of a prepaving conference.

8 **Submittals**

9 A minimum of 5 calendar days before JITT the Contractor shall submit to the Engineer
10 the instructor's name and qualifications, the JITT facility's location, and 1 copy each of
11 any course, handout, and presentation materials.
12

13 **Payment**

14 Payment will be made for each of the following items that are included in the Proposal:

15
16 "Just In Time Training", lump sum.
17

18 The lump sum Contract payment shall be full compensation for all costs incurred by the
19 Contractor in providing "Just In Time Training".

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| 1 | DIVISION 6.GR6 | Structures |
| 2 | | |
| 3 | 6-01.GR6 | General Requirements For Structures |
| 4 | | |
| 5 | 6-01.5.GR6 | Work Access and Temporary Structures |
| 6 | | |
| 7 | 6-01.5.INST1.GR6 | (Section 6-01.5 is re-titled and revised to read: Must use once preceding any of the following: |
| 8 | | |
| 9 | | |
| 10 | 6-01.5.OPT1.FB6 | (Work Access) (April 1, 2019) Use in projects requiring the Contractor to construct work access to perform structure removal and construction, including work trestle construction for work within or above an environmentally sensitive area as required by resource agency environmental permits and restrictions. The fill-in specifies the name of the environmentally sensitive area or waterway. Include with 6-01.5.OPT1(B).GB6 . Must use once preceding any of the following: (1 fill-in) |
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| 22 | 6-01.5.OPT1(A).FB6 | (Waterway Clearance Requirements) (April 6, 2015) Use in projects requiring the Contractor to construct the work access structure to conform to navigation clearance requirements of the USCG. The first fill-in specifies the minimum horizontal clearance required for the channel span. The second fill-in specifies the minimum elevation required for the bottom of the work access structure superstructure. Include with 6- 01.5.OPT1.FB6 and 6-01.5.OPT1(B).GB6 . (2 fill-ins) |
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| 34 | 6-01.5.OPT1(B).GB6 | (Payment) (April 6, 2015) Use in projects requiring the Contractor to construct work access to perform structure removal and construction, including work trestle construction for work within or above an environmentally sensitive area as required by resource agency environmental permits and restrictions. Include with 6-01.5.OPT1.FB6 . |
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| 43 | 6-01.5.OPT2.FB6 | (Temporary Bridge) (August 6, 2018) Use in projects requiring construction of a temporary bridge. The first fill-in specifies the minimum overall length of the temporary bridge, and can also be used to specify requirements for number of spans and lengths of specific spans, if necessary. The second fill-in specifies the minimum roadway width required between barriers or railings. The third fill-in specifies the minimum vertical clearance dimension to the roadway, body of water, or surface, specified in the fourth fill-in. If the length, width or |
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1 vertical clearance of the temporary bridge is shown in the
2 plans, the specific geometric requirement item text in the
3 specification can be deleted (or if all are shown in the plans,
4 the entire geometric requirements paragraph can be
5 deleted).
6 (4 fill-ins)
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8 **6-02.GR6 Concrete Structures**

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10 **6-02.2.GR6 Materials**

11
12 6-02.2.INST1.GR6 (Section 6-02.2 is supplemented with the following)
13 Must use once preceding any of the following:
14

15 ~~6-02.2.OPT1.GR6 (Resin Bonded Anchors)~~
16 ~~(April 1, 2013)~~
17 ~~Include in projects requiring resin bonded anchors for~~
18 ~~attaching and anchoring items to concrete structures. Must~~
19 ~~also include 6-02.3(18).OPT1.GR6.~~

20
21 6-02.2.OPT2.GB6 (Epoxy Bonding Agent For Surfaces And For Steel
22 Reinforcing Bar Dowels)
23 (September 8, 2020)
24 Use in projects when epoxy resin is required for setting
25 steel reinforcing bars into holes drilled into concrete.
26 Include with **6-02.3(24).OPT1.GB6**.

27
28 6-02.2.OPT4.GB6 (Epoxy Crack Sealing)
29 (November 2, 2022)
30 Use in projects which require sealing cracks in existing
31 concrete with injected epoxy resin. Include with **6-**
32 **02.3.OPT1.GB6** and **6-02.5.OPT49.GB6**.
33

34 6-02.2.OPT26.GB6 (Rapid Cure Silicone Sealant)
35 (April 6, 2015)
36 Use in projects where rapid cure silicone sealant is used for
37 expansion joint modification. Include with **6-**
38 **02.3(13).OPT7(C).GB6**, either **6-02.3(13).OPT7(I).GB6** or
39 **6-02.3(13).OPT7(J).GB6**, **6-02.4.OPT8.FB6** and **6-**
40 **02.5.OPT33.GB6**, and all other applicable expansion joint
41 modification GSPs supplementing Sections 6-02.2 and 6-
42 02.3(13).
43

44 6-02.2.OPT27.GB6 (Polyester Concrete)
45 (April 6, 2015)
46 Use in projects where polyester concrete is required.
47 Include with **6-02.3.OPT9.GB6**.
48

49 6-02.2.OPT28.GB6 (Elastomeric Concrete)
50 (April 6, 2015)
51 Use in projects where elastomeric concrete is required.
52 Include with **6-02.3.OPT10.GB6**.
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- 6-02.2.OPT46.GB6 (Bridge Supported Utilities)
Must use once preceding any of the following:
- 6-02.2.OPT46(A).GB6 (June 26, 2000)
Use in projects with bridge supported utilities when the supports include concrete inserts. Include with **6-02.3.OPT2(A).GB6**, **6-02.4.OPT1.FB6**, and **6-02.5.OPT26.FB6**.
- 6-02.2.OPT46(B).GB6 (Bridge Supported Utilities)
(September 3, 2019)
Use in projects with bridge supported utilities when the supports include steel rods, bars, and plates. Include with **6-02.2.OPT46(A).GB6**, **6-02.3.OPT2(A).GB6**, and **6-02.5.OPT92.FB6**, and either **6-02.3.OPT2(B).GB6**, or **6-02.3.OPT2(C).GB6** and **6-02.5.OPT93.GB6**.
- 6-02.2.OPT46(C).GB6 (Bridge Supported Utilities)
(September 3, 2019)
Use in projects with bridge supported utilities when the supports include transverse braces. Include with **6-02.2.OPT46(A).GB6**, **6-02.2.OPT46(B).GB6**, **6-02.3.OPT2(A).GB6**, and **6-02.5.OPT92.FB6**, and either **6-02.3.OPT2(B).GB6**, or **6-02.3.OPT2(C).GB6** and **6-02.5.OPT93.GB6**.
- 6-02.2.OPT46(D).GB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the supports include pipe rolls or pipe saddles. Include with **6-02.5.OPT92.FB6** and other applicable bridge supported utility material and construction requirement GSP's.
- 6-02.2.OPT46(E).GB6 (Bridge Supported Utilities)
(September 3, 2019)
Use in projects with bridge supported utilities in concrete box girder bridges when the utilities are supported on anchor blocks on the bottom slab. Include with **6-02.5.OPT92.FB6** and other applicable bridge supported utility material and construction requirement GSP's.
- 6-02.2.OPT48.GB6 (Bridge Drain Risers)
(April 30, 2001)
Use in projects requiring the raising of bridge drains prior to asphalt or modified concrete overlay work on bridge decks. Include with **6-02.3(10)D.OPT3.GB6**. Also include with **6-02.3(10)D.OPT4.GB6** if the bridge deck is overlaid with membrane waterproofing and ACP. Include with **6-02.5.OPT53.FB6** if the work is included in the cost of the membrane waterproofing or modified concrete overlay. Include with **6-02.4.OPT26.GB6** and **6-02.5.OPT51.GB6** if

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the unit contract bid item "Modify Bridge Drain" is used to pay for the work.

6-02.2.OPT58.GB6 (Core Drilled Bridge Deck Drain)
(September 8, 2020)
Use in projects with core drilled bridge deck drains. Include with **6-02.3(10)D.OPT12.GB6**, and either **6-02.4.OPT32.GB6** and **6-02.5.OPT58.GB6**, or **6-02.5.OPT59.FB6**.

6-02.2.OPT60.GB6 (Seismic Retrofit Materials)
(April 6, 2015)
Use in projects with seismic retrofit construction.
Must use once preceding any of the following:

6-02.2.OPT60(B).GB6 (Steel and PVC Pipe)
(April 6, 2015)
Use in projects with seismic retrofit work when steel and/or PVC pipe are used as materials. Include with **6-02.4.OPT44.FB6** and **6-02.5.OPT72.GB6**, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.2.OPT60(C).GB6 (Structural Steel and Steel Fastening Hardware)
(~~September 8, 2020~~ November 20, 2023)
Use in projects with seismic retrofit work when structural steel and steel fastening hardware are used as materials. Include with **6-02.4.OPT44.FB6** and **6-02.5.OPT72.GB6**, and all applicable other seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.2.OPT60(D).GB6 (High-Strength Steel Rods)
(September 8, 2020)
Use in projects with seismic retrofit work requiring the installation of longitudinal seismic restrainer assemblies. Include with **6-02.3.OPT8(L).GB6**, **6-02.4.OPT44.FB6** and **6-02.5.OPT72.GB6**, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.2.OPT60(F).GB6 (Column Jacketing Materials)
(September 8, 2020)
Use in projects with seismic retrofit work when column jacketing is required. Include with **6-02.3.OPT8(C).GB6**, **6-02.3.OPT8(D).GB6**, **6-02.3.OPT8(E).GB6**, **6-02.3.OPT8(M).GB6**, **6-02.4.OPT45.FB6**, **6-02.5.OPT73.GB6**, and **6-03.3(30).OPT1.FB6**. Include with **6-02.3.OPT8(F).FB6** when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

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6-02.2.OPT61.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-02.3(9)A.OPT6.GB6**, **6-02.3(9)E.OPT6.GB6**, **6-02.3(9)F.OPT1.GB6**, **6-02.3(9)G.OPT6.GB6** and **6-02.3(9)I.OPT6.GB6**.

6-02.3.GR6 Construction Requirements

6-02.3.INST1.GR6 (Section 6-02.3 is supplemented with the following)
Must use once preceding any of the following:

6-02.3.OPT1.GB6 (Epoxy Crack Sealing)
(September 7, 2021)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with **6-02.2.OPT4.GB6**, **6-02.4.OPT24.GB6**, and **6-02.5.OPT49.GB6**.

6-02.3.OPT2.GB6 (Bridge Supported Utilities)
Must use once preceding any of the following:

6-02.3.OPT2(A).GB6 (Bridge Supported Utilities)
(August 3, 2015)
Use in projects with bridge supported utilities when the supports include concrete inserts. Include with **6-02.2.OPT46.GB6**, **6-02.4.OPT1.FB6**, and **6-02.5.OPT26.FB6**.

6-02.3.OPT2(B).GB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the Contractor furnishes and installs the supports and the utility pipe or conduit pipe. Include with **6-02.5.OPT92.FB6** and other applicable bridge supported utility material GSP's. Include with **6-02.2.OPT46(A).GB6**, **6-02.3.OPT2(A).GB6**, **6-02.4.OPT1.FB6**, and **6-02.5.OPT26.FB6** when the supports include concrete inserts.

6-02.3.OPT2(C).FB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the Utility Company furnishes, or furnishes and installs, some of the supports and pipe for the utilities. The first fill-in specifies the items to be furnished and installed by the Utility Company. The second and third fill-ins specify the items to be installed by the Contractor which are furnished by either the Utility Company or the Contractor. Include with **6-02.5.OPT92.FB6** and **6-02.5.OPT93.GB6**, and other applicable bridge supported utility material GSP's. Include with **6-**

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02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and 6-02.5.OPT26.FB6 when the supports include concrete inserts.
(3 fill-ins)

6-02.3.OPT8.GB6

(Seismic Retrofit)

Must use once preceding one of the following:

6-02.3.OPT8(B).GB6

(Seismic Retrofit Demolition Plan)

(April 6, 2015)

Use in seismic retrofit projects where removal of portions of existing concrete and steel reinforcing bars, or cleaning and preparing of existing concrete surfaces is required. Include with **6-02.4.OPT44.FB6, 6-02.3.OPT8(H).GB6, and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.**

6-02.3.OPT8(C).GB6

(Column Jacket Installation Plan)

(April 6, 2015)

Use in projects with column jacketing of existing bridges. Include with **6-02.2.OPT60(F).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include with 6-02.3.OPT8(F).FB6** when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.3.OPT8(D).GB6

(Column Jacket Shop Drawings)

(April 6, 2015)

Use in projects with column jacketing of existing bridges. Include with **6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6.** Include with **6-02.3.OPT8(F).FB6** when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.3.OPT8(E).GB6

(Field Measuring Existing Bridge Columns)

(September 8, 2020)

Use in projects where field measuring of existing bridge columns is required. Include with **6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include with 6-02.3.OPT8(F).FB6** when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.3.OPT8(F).FB6

(Field Measuring Waiver for Specific

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Existing Bridge Columns)
(April 6, 2015)
Use in projects where the requirement of pre-fabrication field measuring of specific existing bridge columns is waived. The fill-in specifies the bridge(s) and pier(s) where the column receiving the waiver is located. Include with **6-02.2.OPT60(F).GB6**, **6-02.3.OPT8(C).GB6**, **6-02.3.OPT8(D).GB6**, **6-02.3.OPT8(E).GB6**, **6-02.3.OPT8(M).GB6**, **6-02.4.OPT45.FB6**, **6-02.5.OPT73.GB6**, and **6-03.3(30).OPT1.FB6**.
(1 fill-in)

6-02.3.OPT8(G).FB6 (Field Measuring for Seismic Retrofit Components)
(April 6, 2015)
Use in projects where field measuring of existing bridge members is required for seismic retrofit components. The first fill-in specifies the bridge(s) where the field measuring work is required. The second fill-in specifies the members or components to be measured. Include with **6-02.4.OPT44.FB6** and **6-02.5.OPT72.GB6**, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.
(2-fill-ins)

6-02.3.OPT8(H).GB6 (Removing Portions of Existing Concrete)
(April 6, 2015)
Use in seismic retrofit projects where removal of portions of existing concrete and steel reinforcing bars, or cleaning and preparing of existing concrete surfaces is required. Include with **6-02.3.OPT8(B).GB6**, **6-02.4.OPT44.FB6** and **6-02.5.OPT72.GB6**, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(J).GB6 (Drilling Holes and Setting Steel Reinf. Bars, and Placing Concrete)
(April 6, 2015)
Use in seismic retrofit projects requiring the construction of catcher blocks, girder stops, and other concrete appendages. Include with **6-02.3.OPT8(B).GB6**, **6-02.3.OPT8(H).GB6**, **6-02.3(24)C.OPT1.GB6**, **6-02.4.OPT44.FB6**, and **6-02.5.OPT72.GB6**, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(K).GB6 (Installing and Tensioning High-Strength Steel Bar Reinforcement)
(April 6, 2015)
Use in seismic retrofit projects requiring the installation, stressing, and grouting of high-strength steel bar

joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(5).GR6 Acceptance of Concrete

6-02.3(5)G.GR6 Sampling and Testing for Temperature, Consistency, and Air Content

6-02.3(5)G.INST1.GR6 (The second paragraph of Section 6-02.3(5)G is revised to read:
Must use preceding the following:

6-02.3(5)G.OPT1.2025.GR6 (Sampling and testing frequency)
(November 20, 2023)
Use in All projects with concrete testing (This GSP changes the frequency of testing to match the Construction Manual).

6-02.3(6).GR6 Placing Concrete

6-02.3(6)B.GR6 Placing Concrete in Foundation Seals

6-02.3(6)B.INST1.GR6 (Section 6-02.3(6)B is supplemented with the following)
Must use once preceding any of the following:

6-02.3(6)B.OPT1.GB6 (Concrete Seals)
(June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is to be lowered to bottom of seal.

6-02.3(6)B.OPT2.GB6 (Concrete Seals)
(June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is not to be lowered.

6-02.3(9).GR6 Precast Concrete Panels

6-02.3(9)A.GR6 Shop Drawings

6-02.3(9)A.INST2.GR6 (The list included in the third paragraph of Section 6-02.3(9)A is supplemented with the following)
Must use once preceding any of the following:

6-02.3(9)A.OPT6.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-02.2.OPT61.GB6, 6-02.3(9)E.OPT6.GB6, 6-02.3(9)F.OPT1.GB6, 6-02.3(9)G.OPT6.GB6 and 6-02.3(9)I.OPT6.GB6.**

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6-02.3(9)E.GR6 Finishing

6-02.3(9)E.INST1.GR6 (Section 6-02.3(9)E is supplemented with the following)
Must use once preceding any of the following:

6-02.3(9)E.OPT6.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-02.2.OPT61.GB6, 6-02.3(9)A.OPT6.GB6, 6-02.3(9)F.OPT1.GB6, 6-02.3(9)G.OPT6.GB6 and 6-02.3(9)I.OPT6.GB6.**

6-02.3(9)F.GR6 Tolerances

6-02.3(9)F.INST1.GR6 (Section 6-02.3(9)F is supplemented with the following)
Must use once preceding any of the following:

6-02.3(9)F.OPT1.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-02.2.OPT61.GB6, 6-02.3(9)A.OPT6.GB6, 6-02.3(9)E.OPT6.GB6, 6-02.3(9)G.OPT6.GB6 and 6-02.3(9)I.OPT6.GB6.**

6-02.3(9)G.GR6 Handling and Storage

6-02.3(9)G.INST1.GR6 (Section 6-02.3(9)G is supplemented with the following)
Must use once preceding any of the following:

6-02.3(9)G.OPT6.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-02.2.OPT61.GB6, 6-02.3(9)A.OPT6.GB6, 6-02.3(9)E.OPT6.GB6, 6-02.3(9)F.OPT1.GB6 and 6-02.3(9)I.OPT6.GB6.**

6-02.3(9)I.GR6 Erection

6-02.3(9)I.INST1.GR6 (Section 6-02.3(9)I is supplemented with the following)
Must use once preceding any of the following:

6-02.3(9)I.OPT6.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)
Use in projects with precast prestressed concrete stay-in-place panels. Include with **6-**

02.2.OPT61.GB6, 6-02.3(9)A.OPT6.GB6, 6-02.3(9)E.OPT6.GB6, 6-02.3(9)F.OPT1.GB6 and 6-02.3(9)G.OPT6.GB6.

6-02.3(10).GR6 Bridge Decks and Bridge Approach Slabs

6-02.3(10)D.GR6 Concrete Placement, Finishing, and Texturing

6-02.3(10)D.INST1.GR6 (Section 6-02.3(10)D is supplemented with the following)
Must use once preceding any of the following:

6-02.3(10)D.OPT1.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Sidewalk) (August 4, 2008)
Use in projects when existing curbs or sidewalks are to be removed and the portion of the slab under the curb or sidewalk that is to remain exposed will be within two feet from the traffic lane.

6-02.3(10)D.OPT2.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Railbase) (August 4, 2008)
Use in projects when existing curbs or railbases are to be removed and the portion of the slab under the curb or railbase that is to remain exposed will be more than two feet from the traffic lane.

6-02.3(10)D.OPT3.GB6 (Bridge Drain Risers) (August 3, 2015)
Use in projects requiring the raising of bridge drains prior to asphalt or modified concrete overlay work on bridge decks. Include with **6-02.2.OPT48.GB6**. Include with **6-02.3(10)D.OPT4.GB6** if the bridge deck is overlaid with membrane waterproofing and ACP. Include with **6-02.5.OPT53.FB6** if the work is included in the cost of the membrane waterproofing or modified concrete overlay. Include with **6-02.4.OPT26.GB6** and **6-02.5.OPT51.GB6** if the unit contract bid item "Modify Bridge Drain" is used to pay for the work.
Must use once preceding any of the following:

6-02.3(10)D.OPT3(A).GB6 (Bridge Drain Risers) (August 4, 2008)
Use in projects requiring the raising of bridge drains prior to membrane waterproofing and asphalt overlay work. Include with **6-02.2.OPT48.GB6** and **6-**

1 **02.3(10)D.OPT3.GB6.** Include with **6-**
2 **02.5.OPT53.FB6** if the work is included in
3 the cost of the membrane waterproofing.
4 Include with **6-02.4.OPT26.GB6** and **6-**
5 **02.5.OPT51.GB6** if the unit contract bid item
6 “Modify Bridge Drain” is used to pay for the
7 work.

8
9 6-02.3(10)D.OPT5.GB6 (Plugging Existing Bridge Drain)
10 (August 3, 2015)
11 Use in projects requiring plugging of bridge drains.
12 Include with **6-02.5.OPT53.FB6** if the work is
13 included in the cost of the membrane
14 waterproofing or modified concrete overlay.
15 Include with **6-02.4.OPT27.GB6** and **6-**
16 **02.5.OPT52.GB6** if the unit contract bid item
17 “Plugging Existing Bridge Drain” is used to pay for
18 the work.

19
20 6-02.3(10)D.OPT12.GB6 (Core Drilled Bridge Deck Drain)
21 (April 6, 2015)
22 Use in projects with core drilled bridge deck
23 drains. Include with **6-02.2.OPT58.GB6**, and
24 either **6-02.4.OPT32.GB6** and **6-**
25 **02.5.OPT58.GB6**, or **6-02.5.OPT59.FB6**.

26
27 **6-02.3(10)F.GR6 Bridge Approach Slab Orientation and Anchors**

28
29 6-02.3(10)F.INST1.GR6 (Section 6-02.3(10)F is supplemented with
30 the following)
31 Must use once preceding any of the following:

32
33 6-02.3(10)F.OPT2.GB6 (Construct pavement end of approach
34 slabs parallel to pavement seat)
35 (August 4, 2008)
36 Use in projects when the pavement ends of all
37 approach slabs are constructed parallel to the
38 pavement seat.

39
40 6-02.3(10)F.OPT3.FB6 (Construct pavement end of approach
41 slabs both
42 normal to the roadway centerline and parallel to
43 pavement seat)
44 (August 4, 2008)
45 Use in projects when the pavement ends of the
46 approach slabs are constructed both normal to the
47 roadway centerline and parallel to the pavement
48 seat.
49 (2 fill-ins)

50
51 **6-02.3(13).GR6 Expansion Joints**

52
53 6-02.3(13).INST1.GR6 (Section 6-02.3(13) is supplemented with the

following)

Must use once preceding any of the following:

6-02.3(13).OPT7.GB6 Expansion Joint Modification

6-02.3(13).OPT7(B).GB6 (Expansion Joint Demolition Plan)

(April 6, 2015)

Use in projects where removal of portions of the existing bridge expansion joint assembly, and/or adjacent concrete and steel reinforcing bars, is required. Include with **6-02.3(13).OPT7(E).FB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(C).GB6 (Joint Preparation and Installation Procedure)

(April 6, 2015)

Use in projects where rapid cure silicone sealant is used for expansion joint modification. Include with **6-02.2.OPT26.GB6, either 6-02.3(13).OPT7(I).GB6 or 6-02.3(13).OPT7(J).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(D).FB6 (Field Measuring Existing Expansion Joint)

(April 6, 2015)

Use in projects where field measuring of the existing expansion joint is required. The fill-in specifies the bridge(s) included in the field measuring requirement. Include with **6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

(1 fill-in)

6-02.3(13).OPT7(E).FB6 (Removing Portions of Existing Bridge Expansion Joints)

(April 6, 2015)

Use in projects where removal of portions of the existing bridge expansion joint assembly, and/or adjacent concrete and steel reinforcing bars, is required. The fill-in specified the bridge(s) where the expansion joint removal work is required. Include with **6-02.3(13).OPT7(B).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification**

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*GSPs supplementing Sections 6-02.2 and 6-02.3(13).
(1-fill-in)*

6-02.3(13).OPT7(F).GB6 (Drilling Holes and Setting St. Reinf. Bars)
(April 6, 2015)
Use in projects with expansion joint modification where drilling holes and setting steel reinforcing bar dowels are required. Include with **6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(G).GB6(Placing Polyester Concrete or Elastomeric Concrete Headers)
(April 6, 2015)
Use in projects when the headers for modified bridge expansion joints are made of either polyester concrete or elastomeric concrete. Include with either **6-02.2.OPT27.GB6 and 6-02.3.OPT9.GB6, or 6-02.2.OPT28.GB6 and 6-02.3.OPT10.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(H).GB6 (Placing Concrete Headers)
(September 8, 2020)
Use in projects where the headers for modified bridge expansion joints are made of concrete. Include with **6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(13).OPT7(F).GB6, 6-02.3(2).OPT1.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(I).GB6 (Placing Expansion Joint Sealant)
(September 8, 2020)
Use in projects where rapid cure silicone sealant is used for modified bridge expansion joints with concrete or polymer concrete or polyester concrete or elastomeric concrete headers. Include with **6-02.2.OPT26.GB6, 6-02.3(13).OPT7(C).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

6-02.3(13).OPT7(J).GB6 (Placing Expansion Joint Sealant)
(September 8, 2020)

1 Use in projects where rapid cure silicone sealant
2 is used for modified bridge expansion joints with
3 modified concrete overlay headers. To be used
4 only for bridges with low ADT, and only with the
5 approval of the Bridge and Structures Office
6 Bearing and Expansion Joint Specialist. Include
7 with **6-02.2.OPT26.GB6**, **6-**
8 **02.3(13).OPT7(C).GB6**, **6-02.4.OPT8.FB6** and **6-**
9 **02.5.OPT33.GB6**, and all other applicable
10 expansion joint modification GSPs supplementing
11 Sections 6-02.2 and 6-02.3(13) and the pertinent
12 modified concrete overlay GSP's.

13
14 **6-02.3(13)C.GR6 Modular Expansion Joint System**

15
16 6-02.3(13)C.INST1.GR6 (Section 6-02.3(13)C is supplemented with
17 the following)
18 Must use once preceding any of the following:

19
20 6-02.3(13)C.OPT1.FB6 (Acceptable Manufacturers)
21 (September 8, 2020)
22 Include in projects requiring a modular expansion
23 joint system. The fill-in specifies the percentage of
24 the amplified vertical load range to be used for the
25 horizontal load range for the fatigue design. The
26 fill-in value shall be 20-percent except for
27 installations at locations subject to significant
28 braking and acceleration forces or subject to
29 particularly large movement ranges where the fill-
30 in value shall be 50-percent. Coordination with the
31 Bridge and Structures Office Bridge Bearing and
32 Expansion Joint Specialist is required.
33 Include with **6-02.4.OPT3.FB6** and **6-**
34 **03.3(30).FB6**.
35 (1-fill-in)

36
37 **6-02.3(14).GR6 Finishing Concrete Surfaces**

38
39 **6-02.3(14)C.GR6 Pigmented Sealer for Concrete Surfaces**

40
41 6-02.3(14)C.INST1.GR6 (Section 6-02.3(14)C is supplemented with
42 the following)
43 Must use once preceding any of the following:

44
45 6-02.3(14)C.OPT1.GB6 (Washington Gray Pigmented Sealer)
46 (April 6, 2009)
47 Use in projects requiring application of pigmented
48 sealer to concrete surfaces, with Washington Gray
49 being the sole color.

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51 6-02.3(14)C.OPT2.GB6 (Mt. St. Helens Gray Pigmented Sealer)
52 (April 6, 2009)

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Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. St. Helens Gray being the sole color.

6-02.3(14)C.OPT3.GB6 (Mt. Baker Gray Pigmented Sealer)
(April 6, 2009)

Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. Baker Gray being the sole color.

6-02.3(14)C.OPT4.GB6 (Cascade Green Pigmented Sealer)
(April 6, 2009)

Use in projects requiring application of pigmented sealer to concrete surfaces, with Cascade Green being the sole color.

6-02.3(14)C.OPT5.FB6 (Multiple Color Pigmented Sealer)
(April 6, 2009)

Use in projects requiring application of pigmented sealer to concrete surfaces, with two or more colors specified. Each fill-in pair is to be used to specify the structural features receiving a specific color of pigmented sealer.
(2 fill-ins)

6-02.3(17).GR6 Falsework and Formwork

6-02.3(17)C.GR6 Falsework and Formwork at Special Locations

6-02.3(17)C.INST1.GR6 (Section 6-02.3(17)C is supplemented with the following)
Must use once preceding any of the following:

6-02.3(17)C.OPT1.FB6 (Falsework Adjacent to or over Railroad Tracks)
(October 3, 2022)

Use in bridge projects requiring falsework adjacent to or over railroad tracks.
(1 fill-in)
Contact the Railroad Liaison Engineer (360) 705-7271 for the fill in information.

6-02.3(17)K.GR6 Concrete Forms on Steel Spans

6-02.3(17)K.INST1.GR6 (The first paragraph of Section 6-02.3(17)K is revised to read as follows)
Must use once preceding any of the following:

6-02.3(17)K.OPT1.GB6 (Stay-in-place Metal forms for Steel Box Girders)
(August 3, 2015)

Use in projects with steel box girder bridges when stay-in-place metal forms are allowed by the Bridge and Structures Office Steel Specialist.

1 Include with **6-02.4.OPT1.FB6**, **6-**
2 **02.5.OPT26.FB6**, **6-03.3(28)B.OPT1.GB6**, **6-**
3 **03.3(30).OPT1.FB6**, **6-03.3(39).OPT1.GB6**, and
4 **6-03.4.OPT1.FB6**.

5
6 **~~6-02.3(18).GR6~~ Placing Anchor Bolts**

7
8 ~~6-02.3(18).INST1.GR6~~ (Section ~~6-02.3(18)~~ is supplemented with the
9 following)
10 Must use once preceding any of the following:

11
12 ~~6-02.3(18).OPT1.GR6~~ (January 3, 2011)
13 Include in projects requiring resin bonded anchors for
14 attaching and anchoring items to concrete structures.
15 Must also include ~~6-02.2.OPT1.GR6~~.

16
17 **6-02.3(24).GR6 Reinforcement**

18
19 **6-02.3(24)C.GR6 Placing and Fastening**

20
21 6-02.3(24)C.INST1.GR6 (Section 6-02.3(24)C is supplemented with
22 the following)
23 Must use once preceding any of the following:

24
25 6-02.3(24)C.OPT1.GB6 (Drilling Holes for, and Setting, Steel Reinforcing
26 Bar Dowels)
27 (September 8, 2020)
28 Use in projects where holes are drilled into
29 existing concrete and steel reinforcing bar dowels
30 are set with epoxy resin. Include with **6-**
31 **02.2.OPT2.GB6**. Include the above with **2-**
32 **02.1.OPT3.GR2**, **2-02.3(2).OPT12.GR2**, and **2-**
33 **02.5.OPT7.GR2** when extending a conc. box
34 culvert.

35
36 **6-02.3(25).GR6 Prestressed Concrete Girders**

37
38 **6-02.3(25)L.GR6 Handling and Storage**

39
40 **6-02.3(25)L2.GR6 Girder Lateral Stability and Stress Analysis**

41
42 6-02.3(25)L2.INST1.GR6 (The table in Item No. 4 in the first paragraph of
43 Section 6-02.3(25)L2 is revised to read:
44 Must use preceding the following:

45
46 6-02.3(25)L2.OPT1.2025.GR6 (Stability and Stress Analysis Table)
47 (November 20, 2023)
48 Use in All projects with prestressed concrete
49 girders.

50
51 **6-02.3(26).GR6 Cast-in-Place Prestressed Concrete**

52
53 6-02.3(26).INST1.GR6 (The third paragraph of Section 6-02.3(26) is

revised to
read as follows)
Must use once preceding any of the following:

6-02.3(26).OPT1.GB6 (Cast-in-Place Prestressed Concrete)
(January 4, 2010)
Use in projects with segmental post-tensioned
structures. Check with the Region Construction
Engineer to see if testing equipment is available.

6-02.4.GR6 Measurement

6-02.4.INST1.GR6 (Section 6-02.4 is supplemented with the following)
Must use once preceding any of the following:

6-02.4.OPT1.FB6 (Summary of Quantities for Superstructure and Bridge
Deck)
(September 8, 2020)
Use in bridge construction projects with lump sum items for
superstructure or bridge deck. The first and third fill-in
specify the appropriate bid item name (“Superstructure -
_____” or “Bridge Deck - _____”). The second fill-in
itemizes the approximate quantities included. Include with
6-02.5.OPT26.FB6 when the “Bridge Deck - _____” bid
item is used.
(3 fill-ins)

6-02.4.OPT3.FB6 (Modular Expansion Joint System)
(September 8, 2020)
Include in projects requiring a modular expansion joint
system. The fill-in is to itemize the quantities of work and
materials included in the lump sum item. Coordination with
the Bridge and Structures Office Bearing and Expansion
Joint Specialist is required. Include with **6-
02.3(13)C.OPT1.FB6 and 6-03.3(30).OPT1.FB6.**
(1 fill-in)

6-02.4.OPT8.FB6 (Expansion Joint Modification)
(September 8, 2020)
Use in projects with lump sum item for expansion joint
modification. The fill-in specifies the approximate quantities
included. Include with **6-02.5.OPT33.GB6** and all
applicable expansion joint modification GSPs
supplementing Sections 6-02.2 and 6-02.3(13).
(1 fill-in)

6-02.4.OPT24.GB6 (Epoxy Crack Sealing)
(August 6, 2012)
Use in projects which require sealing cracks in existing
concrete with injected epoxy resin. Include with **6-
02.2.OPT4.GB6, 6-02.3.OPT1.GB6, and 6-
02.5.OPT49.GB6.**

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| 1 | 6-02.4.OPT26.GB6 | (Modifying Bridge Drain) (June 26, 2000) Use in projects where modifying bridge drains is a stand-alone bid item. Include with 6-02.2.OPT48.GB6 , 6-02.3(10)D.OPT3.GB6 , and 6-02.5.OPT51.GB6 with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 with membrane waterproofing and ACP overlay projects. |
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| 10 | 6-02.4.OPT27.GB6 | (Plugging Existing Bridge Drain) (June 26, 2000) Use in projects where plugging existing bridge drains is a stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 and 6-02.5.OPT52.GB6 . |
| 11 | | |
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| 15 | | |
| 16 | 6-02.4.OPT32.GB6 | (Core Drilled Bridge Deck Drain) (April 6, 2015) Use in projects where core drilled bridge deck drain is a stand-alone bid item. Include with 6-02.2.OPT58.GB6 , 6-02.3(10)D.OPT12.GB6 , and 6-02.5.OPT58.GB6 . |
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| 22 | 6-02.4.OPT43.GB6 | (Longitudinal Seismic Restrainer) (April 6, 2015) Use in projects where longitudinal seismic restrainer is a stand-alone bid item. Include with 6-02.2.OPT60(B).GB6 , 6-02.2.OPT60(C).GB6 , 6-02.2.OPT60(D).GB6 , 6-02.3.OPT8(L).GB6 , 6-02.3(18).OPT1.GR6 , 6-02.5.OPT71.GB6 and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3. |
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| 31 | 6-02.4.OPT44.FB6 | (Seismic Retrofit) (September 8, 2020) Use in projects with a lump sum item for seismic retrofit. The fill-in specifies the approximate quantities included. Include with 6-02.5.OPT72.GB6 and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3. (1 fill-in) |
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| 40 | 6-02.4.OPT45.FB6 | (Column Jacketing) (September 8, 2020) Use in projects with a lump sum item for column jacketing. The fill-in specifies the approximate quantities included. Include with 6-02.2.OPT60(F).GB6 , 6-02.3.OPT8(C).GB6 , 6-02.3.OPT8(D).GB6 , 6-02.3.OPT8(E).GB6 , 6-02.3.OPT8(M).GB6 , 6-02.5.OPT73.GB6 , and 6-03.3(30).OPT1.FB6 . Include with 6-02.3.OPT8(F).FB6 when the pre-fabrication field measuring requirements for specific existing bridge columns are waived. (1 fill-in) |
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| 52 | 6-02.5.GR6 | Payment |
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| 1 | 6-02.5.INST3.GR6 | (The fifth and sixth bid items under Section 6-02.5 are supplemented with the following) |
| 2 | | Must use once preceding any of the following: |
| 3 | | |
| 4 | | |
| 5 | 6-02.5.OPT20.GB6 | (Epoxy-coated St. Reinf. Bar for Bridge) |
| 6 | | (April 6, 2015) |
| 7 | | Use in projects with small amounts of epoxy-coated steel |
| 8 | | reinforcing bar in bridge substructure which is included in |
| 9 | | the quantity for "St. Reinf. Bar for Bridge" in lieu of a |
| 10 | | separate stand-alone bid item. |
| 11 | | |
| 12 | 6-02.5.INST4.GR6 | (Section 6-02.5 is supplemented with the following) |
| 13 | | Must use once preceding any of the following: |
| 14 | | |
| 15 | 6-02.5.OPT26.FB6 | (Bridge Deck) |
| 16 | | (August 2, 2010) |
| 17 | | Use in steel bridge construction projects with lump sum |
| 18 | | items for bridge deck. The fill-in specifies work items |
| 19 | | included in the bid item. Include with 6-02.4.OPT1.FB6 . |
| 20 | | (1 fill-in) |
| 21 | | |
| 22 | 6-02.5.OPT33.GB6 | (Expansion Joint Modification) |
| 23 | | (April 6, 2015) |
| 24 | | Use in projects where expansion joint modification is a lump |
| 25 | | sum item. Include with 6-02.4.OPT8.FB6 and all applicable |
| 26 | | expansion joint modification GSPs supplementing Sections |
| 27 | | 6-02.2 and 6-02.3(13). |
| 28 | | |
| 29 | 6-02.5.OPT49.GB6 | (Epoxy Crack Sealing) |
| 30 | | (August 1, 2011) |
| 31 | | Use in projects which require sealing cracks in existing |
| 32 | | concrete with injected epoxy resin. Include with 6- |
| 33 | | 02.2.OPT4.GB6 , 6-02.3.OPT1.GB6 , and 6- |
| 34 | | 02.4.OPT24.GB6 . |
| 35 | | |
| 36 | 6-02.5.OPT51.GB6 | (Modify Bridge Drain) |
| 37 | | (June 26, 2000) |
| 38 | | Use in projects where modifying bridge drains is a stand- |
| 39 | | alone bid item. Include with 6-02.2.OPT48.GB6 , 6- |
| 40 | | 02.3(10)D.OPT3.GB6 , and 6-02.4.OPT26.GB6 with |
| 41 | | modified concrete overlay projects. Include the above with |
| 42 | | 6-02.3(10)D.OPT4.GB6 with waterproof membrane and |
| 43 | | HMA overlay projects. |
| 44 | | |
| 45 | 6-02.5.OPT52.GB6 | (Plugging Existing Bridge Drain) |
| 46 | | (June 26, 2000) |
| 47 | | Use in projects where plugging existing bridge drains is a |
| 48 | | stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 |
| 49 | | and 6-02.4.OPT27.GB6 . |
| 50 | | |
| 51 | 6-02.5.OPT53.FB6 | (Modifying or Plugging Existing Bridge Drain) |
| 52 | | (June 26, 2000) |

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Use in projects where payment for modifying or plugging existing bridge drains is included under either “Waterproof Membrane” or “Finishing and Curing Modified Conc. Overlay”. The first fill-in specifies whether the work is modifying or plugging existing bridge drains. The second fill-in specifies appropriate pay item for the work. Include with **6-02.2.OPT48.GB6**, and **6-02.3(10)D.OPT3.GB6** for modifying bridge drains with modified concrete overlay projects. Include the above with **6-02.3(10)D.OPT4.GB6** for modifying bridge drains with waterproof membrane and HMA overlay projects. Include with **6-02.3(10)D.OPT5.GB6** for plugging existing bridge drains.
(2 fill-ins)

6-02.5.OPT58.GB6 (Core Drilled Bridge Deck Drain)
(April 6, 2015)
Use in projects where core drilled bridge deck drain is a stand-alone bid item. Include with **6-02.2.OPT58.GB6**, **6-02.3(10)D.OPT12.GB6**, and **6-02.4.OPT32.GB6**.

6-02.5.OPT59.FB6 (Core Drilled Bridge Deck Drain)
(April 6, 2015)
Use in projects where core drilled bridge deck drain is included in a separate bid item. The fill-in specifies the bid item including this work. Include with **6-02.2.OPT58.GB6** and **6-02.3(10)D.OPT12.GB6**.
(1 fill-in)

6-02.5.OPT71.GB6 (Longitudinal Seismic Restrainer)
(April 6, 2015)
Use in projects where longitudinal seismic restrainer is a stand-alone bid item. Include with **6-02.2.OPT60(B).GB6**, **6-02.2.OPT60(C).GB6**, **6-02.2.OPT60(D).GB6**, **6-02.3.OPT8(L).GB6**, ~~6-02.3(18).OPT1.GR6~~, **6-02.4.OPT43.GB6** and all applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.5.OPT72.GB6 (Seismic Retrofit)
(April 6, 2015)
Use in projects with seismic retrofit of bridges. Include with **6-02.4.OPT44.FB6** and all applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.5.OPT73.GB6 (Column Jacketing)
(April 6, 2015)
Use in projects with column jacketing of bridges. Include with **6-02.2.OPT60(F).GB6**, **6-02.3.OPT8(C).GB6**, **6-02.3.OPT8(D).GB6**, **6-02.3.OPT8(E).GB6**, **6-02.3.OPT8(M).GB6**, **6-02.4.OPT45.FB6**, and **6-03.3(30).OPT1.FB6**. Include with **6-02.3.OPT8(F).FB6** when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

1 Use in projects where girder launching may be
2 used as an erection method.

3
4 6-03.3(7)A.OPT2.GB6 (Hand-held Drilling and Reaming)
5 (April 6, 2015)
6 Use in projects where drilling and reaming
7 operations with hand-held devices is permissible.
8 Include with **6-03.3(27)B.OPT1.FB6**.
9 (1 fill-in)

10
11 **6-03.3(25).GR6 Welding and Repair Welding**

12
13 6-03.3(25).INST1.GR6 (Section 6-03.3(25) is supplemented with the following)
14 Must use once preceding any of the following:

15
16 6-03.3(25).OPT2.GB6 (Narrow Gap Improved-Electroslag Welding
17 (NGI-ESW) Procedure)
18 (April 6, 2015)
19 Use in projects with steel plate girder bridges and box
20 girder bridges primarily with Grades 50 and 50W steel.
21 Accompanying details are required in the Plans for NGI-
22 ESW test joint configurations for WPS qualification and
23 charpy v-notch test specimens.

24
25 **6-03.3(27).GR6 High Strength Bolt Holes**

26
27 **6-03.3(27)B.GR6 Reamed and Drilled Holes**

28
29 6-03.3(27)B.INST1.GR6 (The second sentence of the first paragraph of Section
30 6-03.3(27)B is revised to read)
31 Must use once preceding any of the following:

32
33 6-03.3(27)B.OPT1.FB6 (Hand-held Drilling and Reaming)
34 (September 8, 2020)
35 Use in projects where drilling and reaming
36 operations with hand-held devices is permissible.
37 The first fill-in specifies the members and items
38 being drilled and reamed, and the second fill-in
39 specifies the bridge(s) where the work is being
40 done. Include with **6-03.3(7)A.OPT2.GB6**.
41 (2 fill-ins)

42
43 **6-03.3(28).GR6 Shop Assembly**

44
45 **6-03.3(28)A.GR6 Method of Shop Assembly**

46
47 6-03.3(28)A.INST1.GR6 (Section 6-03.3(28)A is supplemented with the
48 following)
49 Must use once preceding any of the following:

50
51 6-03.3(28)A.OPT1.GB6 (Progressive Transverse Shop Assembly)
52 (August 5, 2013)

1 Use in projects with new steel girder bridges that
2 have curved or skewed geometry, with the
3 concurrence of the Bridge and Structures Office
4 Steel Specialist. Include with **6-**
5 **03.3(28)B.OPT1.GB6**, **6-03.3(30).OPT1.FB6**, **6-**
6 **03.3(39).OPT1.GB6**, **6-03.4.OPT1.FB6**, and **6-**
7 **03.5.OPT1.GB6**.

8
9 **6-03.3(28)B.GR6 Check of Shop Assembly**

10 6-03.3(28)B.INST1.GR6 (Section 6-03.3(28)B is supplemented with the
11 following)
12 Must use once preceding any of the following:

13
14
15 6-03.3(28)B.OPT1.GB6 (Check of Shop Assembly)
16 (August 3, 2015)
17 Use in projects with new steel bridges. Include
18 with **6-03.3(30).OPT1.FB6**, **6-**
19 **03.3(39).OPT1.GB6**, **6-03.4.OPT1.FB6**, and **6-**
20 **03.5.OPT1.GB6**.

21
22 **6-03.3(30).GR6 Painting**

23
24 6-03.3(30).INST1.GR6 (Section 6-03.3(30) is supplemented with the following)
25 Must use once preceding any of the following:

26
27 6-03.3(30).OPT1.FB6 (Color of Finish Coat)
28 (August 3, 2009)
29 Use in projects with new steel bridges and steel
30 members to cover paint color requirements by
31 specifying the SAE AMS Standard 595 Color Number,
32 or the color name if no number. Include with **6-**
33 **03.3(28)B.OPT1.GB6**, **6-03.3(39).OPT1.GB6**, **6-**
34 **03.4.OPT1.FB6**, and **6-03.5.OPT1.GB6**.

35
36 Also include in projects with new minor steel items such
37 as steel expansion joints (**6-02.3(13).OPT3.FB6**, **6-**
38 **02.4.OPT3.FB6**, **6-02.5.OPT28.GB6**, and **6-**
39 **02.2.OPT22.GB6**) and bearings (**6-**
40 **02.3(19)B.OPT1.GB6**).
41 (1 fill-in)

42
43 6-03.3(30).OPT6.FB6 (Painting Galvanized Seismic Retrofit Components)
44 (April 6, 2015)
45 Use in seismic retrofit projects where galvanized steel
46 components are attached to painted members of
47 existing steel bridges to cover paint color requirements.
48 The first fill-in specifies the galvanized components to
49 be painted. The second fill-in specifies the SAE AMS
50 Standard 595 Color Number, or the color name if no
51 number.
52 (2 fill-ins)

53
54 **6-03.3(38).GR6 Placing Superstructure**

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6-03.3(38).INST1.GR6 (Section 6-03.3(38) is supplemented with the following)
Must use once preceding any of the following:

6-03.3(38).OPT1.GB6 (Concrete Protection)
(August 3, 2015)
Use within projects with bridges having weathering steel superstructure members which remain unpainted at completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface. Include with **6-03.5.OPT7.FB6**.

6-03.3(39).GR6 Swinging the Span

6-03.3(39).INST1.GR6 (Section 6-03.3(39) is supplemented with the following)
Must use once preceding any of the following:

6-03.3(39).OPT1.GB6 (Girder Camber Field Measurements)
(June 26, 2000)
Use in projects with new steel bridges. Include with **6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6**.

6-03.4.GR6 Measurement

6-03.4.INST1.GR6 (Section 6-03.4 is supplemented with the following)
Must use once preceding any of the following:

6-03.4.OPT1.FB6 (Structural Low Alloy Quantities)
(August 6, 2007)
Use in projects with new steel bridges. Include with **6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, and 6-03.3(39).OPT1.GB6**. Include with **6-03.5.OPT1.GB6** when the steel girder includes a pipe railing.
(2 fill-ins)

6-03.5.GR6 Payment

6-03.5.INST1.GR6 (The second bid item under Section 6-03.5 is supplemented with the following)
Must use once preceding any of the following:

6-03.5.OPT1.GB6 (Payment for Steel Girder Railing)
(August 6, 2007)
Use in projects with new steel bridges when the steel girder includes a pipe railing. Include with **6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, and 6-03.4.OPT1.FB6**.

6-03.5.INST2.GR6 (Section 6-03.5 is supplemented with the following)
Must use once preceding any of the following:

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6-03.5.OPT7.FB6 (Payment for Concrete Protection)
(June 26, 2000)
Use in projects with bridges having weathering steel members which remain unpainted at the completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface. Include with **6-03.3(38).OPT1.GB6**.
(1 fill-in)

6-04.GR6 Timber Structures

6-04.3.GR6 Construction Requirements

6-04.3(1).GR6 Storing and Handling Material

6-04.3(1).INST1.GR6 (Section 6-04.3(1) is supplemented with the following)
Must use once preceding any of the following:

6-04.3(1).OPT1.GB6 (Fire Prevention)
(March 6, 2000)
Use in all timber bridge construction and timber deck replacement projects. Include with **6-04.5.OPT1.FB6**.

6-04.3(1).OPT2.GB6 (Top Flange Treatment)
(January 2, 2018)
Include in timber redecking projects. Include with **6-04.3(1).OPT1.GB6, 6-04.5.OPT1.FB6, and 6-04.5.OPT2.FB6**.

6-04.5.GR6 Payment

6-04.5.INST1.GR6 (Section 6-04.5 is supplemented with the following)
Must use once preceding any of the following:

6-04.5.OPT1.FB6 (Fire Protection)
(March 6, 2000)
Use in all timber bridge construction and timber deck replacement projects. Include with **6-04.3(1).OPT1.GB6**.
(1 fill-in)

6-04.5.OPT2.FB6 (Top Flange Treatment)
(March 6, 2000)
Use in timber deck replacement projects. Include with **6-04.3(1).OPT1.GB6, 6-04.3(1).OPT2.GB6, and 6-04.5.OPT1.FB6**.
(1 fill-in)

6-05.GR6 Piling

6-05.2.GR6 Materials

6-05.2.INST1.GR6 (Section 6-05.2 is supplemented with the following)

Must use once preceding any of the following:

6-05.2.OPT1.GB6 Micropiles
(April 6, 2015)
Use in projects where micropiles are required. Include with
6-05.3.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-05.5.OPT6.GB6.

6-05.3.GR6 Construction Requirements

6-05.3.INST1.GR6 (Section 6-05.3 is supplemented with the following)
Must use once preceding any of the following:

6-05.3.OPT1.FB6 Micropiles
(October 3, 2022)
Use in projects where micropiles are required. The first fill-in specifies the top elevation of the micropile bond zone. The second fill-in specified the permanent casting minimum tip elevations. The third fill-in specifies the location(s) of micropile verification tests. Include with **6-05.2.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-05.5.OPT6.GB6.**
(Three fill-ins)

6-05.3(5).GR6 Manufacture of Steel Piles

6-05.3(5).INST1.GR6 (Section 6-05.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-05.3(5).OPT1.GB6 (Furnishing St. Piling)
(September 8, 2020)
Use in projects with steel piling where the piling consists of hollow steel pipe that may or may not be filled with concrete and steel reinforcing bars for a portion of its length. Include with **6-05.3(6).OPT1.GB6**

6-05.3(6).GR6 Splicing Steel Casings and Steel Piles

6-05.3(6).INST1.GR6 (Section 6-05.3(6) is supplemented with the following)
Must use once preceding any of the following:

6-05.3(6).OPT1.GB6 (Furnishing St. Piling)
(September 8, 2020)
Use in projects with steel piling where the piling consists of hollow steel pipe that may or may not be filled with concrete and steel reinforcing bars for a portion of its length. Include with **6-05.3(5).OPT1.GB6.**

6-05.3(10).GR6 Test Piles

6-05.3(10).INST1.GR6 (Section 6-05.3(10) is supplemented with the following)

Must use once preceding any of the following:

6-05.3(10).OPT1.FB6 (Furnishing and Driving Test Piles)
(March 6, 2000)
Include in projects having test piles, as recommended by the Materials Laboratory Geotechnical Branch. The first, third, and fourth fill-ins specify the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier).
(4 fill-ins)

6-05.3(11).GR6 Driving Piles

6-05.3(11)D.GR6 Achieving Minimum Tip Elevation and Bearing

6-05.3(11)D.INST1.GR6 (Section 6-05.3(11)D is supplemented with the following)
Must use once preceding any of the following:

6-05.3(11)D.OPT2.GB6 (Vibration From Pile Driving)
(August 3, 2015)
Include in projects where minimizing vibration from driving piles is critical, as recommended by the Materials Laboratory Geotechnical Branch.

6-05.3(11)D.OPT3.FB6 (Preboring Piles)
(August 3, 2015)
Include in projects where preboring of piles is required to prevent downdrag from settlement, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with **6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.**
(3 fill-ins)

6-05.3(11)D.OPT4.FB6 (Preboring Piles)
(August 3, 2015)
Include in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with **6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.**
(3 fill-ins)

6-05.3(11)D.OPT9.FB6 (Overdriving)

(April 6, 2015)

Include in projects where overdriving of piles is anticipated in order to reach the minimum tip elevation, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the general location(s) (bridge and pier) of the anticipated pile overdriving. The second fill-in specifies the approximate magnitude of expected overdriving.

(2 fill-ins)

6-05.4.GR6 Measurement

6-05.4.INST1.GR6 (Section 6-05.4 is supplemented with the following)
Must use once preceding any of the following:

6-05.4.OPT1.FB6 (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. The fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). Include with **6-05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-05.5.OPT1.FB6.**
(1 fill-in)

6-05.4.OPT6.GB6 Micropiles
(April 6, 2015)
Use in projects where micropiles are required. Include with **6-05.2.OPT1.FB6, 6-05.3.OPT1.FB6, and 6-05.5.OPT6.GB6.**

6-05.5.GR6 Payment

6-05.5.INST1.GR6 (Section 6-05.5 is supplemented with the following)
Must use once preceding any of the following:

6-05.5.OPT1.FB6 (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. Both fill-ins specify the pile type (cast-in-place conc., steel, timber, etc.). Include with **6-05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-05.4.OPT1.FB6.**
(2 fill-ins)

6-05.5.OPT6.GB6 Micropiles
(April 6, 2015)
Use in projects where micropiles are required. Include with **6-05.2.OPT1.FB6, 6-05.3.OPT1.FB6, and 6-05.4.OPT6.GB6.**

6-06.GR6 Bridge Railings

1
2 **6-06.2.GR6**

3 **Materials**

4 6-06.2.INST1.GR6 (Section 6-06.2 is supplemented with the following)
5 Must use once preceding any of the following:

6
7 6-06.2.OPT1.GB6 (Bridge Railing Type Chain Link Fence)
8 (~~January 5, 2004~~ **November 20, 2023**)
9 Use in projects with Bridge Railing Type Chain Link Fence.
10 Include with **6-02.2.OPT1.GR6**, ~~6-02.3(18).OPT1.GR6~~,
11 **and 6-06.3(2).OPT1.GB6**. Also include **6-06.5.OPT1.FB6** if
12 the work is included as part of a separate bid item such as
13 “Superstructure - ____”, or “Roadway Deck - ____”.

14
15 6-06.2.OPT2.GB6 (Bridge Railing Type Chain Link Fence)
16 (March 6, 2000)
17 Use in projects with Bridge Railing Type Chain Link Fence
18 where the posts are set into blockouts with epoxy resin.
19 Include with **6-02.2.OPT1.GR6**, ~~6-02.3(18).OPT1.GR6~~, **6-**
20 **06.2.OPT1.GB6 and 6-06.3(2).OPT2.GB6**. Also include **6-**
21 **06.5.OPT1.FB6** if the work is included as part of a separate
22 bid item such as “Superstructure - ____”, or “Roadway Deck
23 - ____”.

24
25 6-06.2.OPT7.GB6 (Tamper Proof Nuts for steel Bridge Railing
26 Type BP)
27 (April 6, 2015)
28 Use in projects where steel Bridge Railing Type BP is used.

29
30 6-06.2.OPT8.FB6 (Bridge Railing Type Snow Fence and Bridge
31 Railing Type Wire Fabric Fence)
32 (~~May 28, 2020~~ **November 20, 2023**)
33 Use in projects with Bridge Railing Type Snow Fence or
34 Bridge Railing Type Wire Fabric Fence. The fill-in specifies
35 the Federal Standard 595 Color Number, or the color name
36 if no number.
37 Include with **6-06.3(2).OPT7.GB6**.
38 (1 fill-in)

39
40 **6-06.3.GR6**

41 **Construction Requirements**

42 **6-06.3(2).GR6**

43 **Metal Railings**

44 6-06.3(2).INST1.GR6 (Section 6-06.3(2) is supplemented with the
45 following)
46 Must use once preceding any of the following:

47
48 6-06.3(2).OPT1.GB6 (Bridge Railing Type Chain Link Fence)
49 (~~March 6, 2000~~ **November 20, 2023**)
50 Use in projects with Bridge Railing Type Chain Link
51 Fence where the posts are fastened into position with
52 anchor bolts or resin bonded anchors. Include with **6-**
53 **02.2.OPT1.GR6**, ~~6-02.3(18).OPT1.GR6~~, **and 6-**

1 **06.2.OPT1.GB6**. Also include **6-06.5.OPT1.FB6** if the
2 work is included as part of a separate bid item such as
3 “Superstructure - ____”, or “Roadway Deck - ____”.
4

5 6-06.3(2).OPT2.GB6 (Bridge Railing Type Chain Link Fence)
6 (March 6, 2000)
7 Use in projects with Bridge Railing Type Chain Link
8 Fence where the posts are set into blockouts with epoxy
9 resin. Include with **6-02.2.OPT1.GR6**, ~~6-~~
10 ~~02.3(18).OPT1.GR6~~, **6-06.2.OPT1.GB6** and **6-**
11 **06.2.OPT2.GB6**. Also include **6-06.5.OPT1.FB6** if the
12 work is included as part of a separate bid item such as
13 “Superstructure - ____”, or “Roadway Deck - ____”.
14

15 6-06.3(2).OPT7.GB6 (Bridge Railing Type Snow Fence and
16 Bridge Railing Type Wire Fabric Fence)
17 (~~November 20, 2023~~ ~~May 28, 2020~~)
18 Use in projects with Bridge Railing Type Snow Fence or
19 Bridge Railing Type Wire Fabric Fence. Include with **6-**
20 **06.2.OPT8.FB6**.
21

22 **6-06.5.GR6** **Payment**

23
24 6-06.5.INST1.GR6 (Section 6-06.5 is supplemented with the following)
25 Must use once preceding any of the following:
26

27 6-06.5.OPT1.FB6 (Bridge Railing)
28 (March 6, 2000)
29 Use in projects with bridge railing where the work is
30 included as part of a separate bid item such as
31 “Superstructure - ____”, or “Roadway Deck - ____”. The first
32 fill-in specifies the bridge railing type. The second fill-in
33 specifies the bid item name.
34 (2 fill-ins)
35

36 **6-07.GR6** **Painting**

37
38 **6-07.1.GR6** **Description**

39
40 6-07.1.INST1.GR6 (Section 6-07.1 is supplemented with the following)
41 Must use once preceding any of the following:
42

43 6-07.1.OPT1.FB6 (Scope of Work)
44 (August 3, 2009)
45 Include in projects with cleaning and painting of existing
46 steel bridge(s). Use to define limits of cleaning and painting
47 by using the second fill-in to specify surfaces that are not to
48 be painted (light fixtures, utilities, bridge attachments, etc.).
49 Include with **6-07.3(10)D.OPT1.FB6** and/or **6-**
50 **07.3(10)E.OPT1.FB6** as appropriate for the surface
51 preparation requirements. Include with **DESWORK2.FB1**
52 and **6-07.3(10)I.OPT1.FB6**. Include with **1-**
53 **07.1(2).OPT23.FR1** if the existing bridge(s) contain lead

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paint. Include with **1-07.6.OPT4.GB1** if the bridge(s) cross a navigable waterway.
(2 fill-ins)

6-07.1.OPT2.FB6

(Scope of Work)
(August 3, 2009)
Include in projects with cleaning and painting of existing timber bridge(s). Use to define limits of cleaning and painting by using the second fill-in to specify the surfaces to be painted (railing, rail posts, wheelguards, etc.). Include with **1-07.1(2).OPT2.FR1** if the existing bridge(s) contain lead paint. Project specific Special Provisions supplementing Section 6-07.3(13) may be required to specify specific primer and top coat paint requirements.
(2 fill-ins)

6-07.3.GR6 Construction Requirements

6-07.3(10).GR6 Painting Existing Steel Structures

6-07.3(10).INST1.GR6 (Section 6-07.3(10) is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10).OPT1.FB6 (Utility Conduits)
(August 3, 2009)
Include only when utility conduits are attached to the existing bridge(s) being painted. Fill-in to read "shall or "shall not". Include with **DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6**.
(1 fill-in)

6-07.3(10).OPT2.GB6 (Light Fixtures)
(August 3, 2009)
Include only when light fixtures are attached to existing bridge(s) being painted. Include with **DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6**.

6-07.3(10).OPT4.GB6 (Cleaning Grid Deck)
(August 3, 2015)
Use with **DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-07.3(10)I.OPT1.FB6, and 6-07.3(10)N.OPT1.GB6** if the bridge has a grid roadway deck or steel grid catwalks which require cleaning and painting.

6-07.3(10)A.GR6 Containment

6-07.3(10)A.INST1.GR6 (Section 6-07.3(10)A is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)A.OPT1.GB6 (Protection of Existing Structure)
(August 3, 2009)

1 Use only when the bridge has mechanical
2 equipment to protect such as a draw bridge.
3 Include with **DESWORK2.FB1, 6-07.1.OPT1.FB6**
4 **and 6-07.3(10)I.OPT1.FB6**.

5
6 6-07.3(10)A.OPT2.FB6 (Containment System)
7 (September 7, 2021)

8 Use when a paint removal containment system
9 must be removed from a bridge when winds at the
10 site exceed a wind speed/gust threshold.
11 Fill-in #1 specifies the bridge(s) that have wind
12 speed/gust thresholds.
13 Fill-in #2 specifies the wind speed/gust threshold.
14 (2 fill-ins)

15
16 **6-07.3(10)D.GR6 Surface Preparation Prior to Overcoat Painting**

17
18 6-07.3(10)D.INST1.GR6 (Section 6-07.3(10)D is supplemented with
19 the following)
20 Must use once preceding any of the following:

21
22 6-07.3(10)D.OPT1.FB6 (Surfaces Requiring Overcoat Painting
23 Surface Preparation)
24 (April 6, 2015)

25 Use in bridge painting projects with bridges and
26 bridge members requiring surface preparation for
27 overcoat painting. Include with **DESWORK2.FB1,**
28 **6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.**
29 Include with **6-07.3(10)E.OPT1.FB6** if the
30 bridge(s) also have bridge members requiring full
31 paint removal. Include with **1-07.1(2).OPT23.FR1**
32 if the existing bridge(s) contain lead paint. Include
33 with **1-07.6.OPT4.GB1** if the bridge(s) cross a
34 navigable waterway. The first fill-in specifies the
35 bridge(s) requiring overcoat painting surface
36 preparation. The second fill-in specifies the bridge
37 members requiring overcoat painting surface
38 preparation.
39 (2 fill-ins)

40
41 **6-07.3(10)E.GR6 Surface Preparation – Full Paint Removal**

42
43 6-07.3(10)E.INST1.GR6 (Section 6-07.3(10)E is supplemented with
44 the following)
45 Use once preceding any of the following:

46
47 6-07.3(10)E.OPT1.FB6 (Surfaces Requiring Full Paint Removal
48 Surface)
49 Preparation)
50 (April 5, 2010)

51 Use in bridge painting projects with bridges and
52 bridge members requiring surface preparation for
53 full paint removal. Include with **DESWORK2.FB1,**

1 **6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.**
2 Include with **6-07.3(10)D.OPT1.FB6** if the
3 bridge(s) also have bridge members requiring
4 overcoat painting. Include with **1-**
5 **07.1.OPT2(2).OPT3.FR1** if the existing bridge(s)
6 contain lead paint. Include with **1-07.6.OPT4.GB1**
7 if the bridge(s) cross a navigable waterway. The
8 first fill-in specifies the bridge(s) requiring full paint
9 removal surface preparation. The second fill-in
10 specifies the bridge members requiring full paint
11 removal surface preparation.
12 (2 fill-ins)

13
14 **6-07.3(10)I.GR6 Paint Color**

15
16 6-07.3(10)I.INST1.GR6 (Section 6-07.3(10)I is supplemented with the
17 following)
18 Must use once preceding any of the following:

19
20 6-07.3(10)I.OPT1.FB6 (Color of Top Coat)
21 (August 3, 2009)
22 Use in projects with existing steel bridges and
23 bridge members to cover paint color requirements
24 by specifying the SAE AMS Standard 595 Color
25 Number, or the color name if no number. Use with
26 **DESWORK2.FB1**, and **6-07.1.OPT1.FB6**.
27 Include with **6-07.3(10)D.OPT1.FB6 and/or 6-**
28 **07.3(10)E.OPT1.FB6** as appropriate for the
29 surface preparation requirements. Include with **1-**
30 **07.1(2).OPT23.FR1** if the existing bridge(s)
31 contain lead paint. Include with **1-07.6.OPT4.GB1**
32 if the bridge(s) cross a navigable waterway.
33 (1 fill-in)

34
35 **6-07.3(10)N.GR6 Field Coating Application Methods**

36
37 6-07.3(10)N.INST1.GR6 (Section 6-07.3(10)N is supplemented with
38 the following)
39 Must use once preceding any of the following:

40
41 6-07.3(10)N.OPT1.GB6 (Painting Grid Deck)
42 (August 3, 2009)
43 Use with **DESWORK2.FB1**, **6-07.1.OPT1.FB6**, **6-**
44 **07.3(10).OPT4.GB6 and 6-07.3(10)I.OPT1.FB6** if
45 the bridge has a grid roadway deck or steel grid
46 catwalks which require painting.

47
48 **6-07.3(11).GR6 Painting or Powder Coating of Galvanized Surfaces**

49
50 6-07.3(11).INST1.GR6 (Section 6-07.3(11) is supplemented with the
51 following)
52 Must use once preceding any of the following:

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6-07.3(11).OPT1.FB6 (Coating Color)
(August 3, 2009)
Use in projects requiring coating of galvanized surfaces with either paint or powder coating. The fill-in specifies the SAE AMS Standard 595 color number, or the color name if no number.
(1 fill-in)

6-08.GR6 Bituminous Surfacing on Structure Decks

6-08.3.GR6 Construction Requirements

6-08.3.INST1.GR6 (Section 6-08.3 is supplemented with the following)
Must use once preceding the following:

6-08.3.OPT1.FB6 (Surfacing Removal and Paving Equipment Load and Spacing Restrictions)
(October 29, 2020)
Use in bridge deck paving projects where specific bridges are subject to surfacing removal and paving equipment load and spacing restrictions as shown and specified in the Plans. The fill-in specifies the Bridge Number(s) of the bridge(s) affected by these restrictions.
(1-fill-in)

6-08.3(2).GR6 Contractor Survey for Grade-Controlled Structure Decks

6-08.3(2).INST1.GR6 (Section 6-08.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-08.3(2).OPT1.FB6 (Contractor Structure Survey Not Applicable)
(January 3, 2017)
Use in projects where the Contracting Agency performs the Structure survey for Grade Controlled Structure Decks, and the Contract Plans were adjusted for Final Grade Profile and Adjusted Removal Depth as needed. The fill-in specifies the Bridge number(s) where the Contracting Agency is performing the survey.
(1 fill-in)

6-08.3(5).GR6 Full Depth Removal of Bituminous Pavement from Bridge Decks

6-08.3(5).INST1.GR6 (Section 6-08.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-08.3(5).OPT1.FB6 (Rotary milling/planing equipment prohibited)
(January 2, 2018)
Use in bridge deck paving projects where equipment used to perform full depth removal of existing surfacing from specific Grade Controlled bridges is restricted to

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exclude rotary milling/planing equipment. Bridges in this category are generally identified in the Bridge Condition Report (BCR) prepared for the project by the Bridge Asset Management unit of the Bridge and Structures Office and provided to the Region Design PE Offices as part of the site data at the beginning of the project design phase. The fill-in specifies the Bridge Number(s) of the bridges affected by these restrictions. (1 fill-in)

6-08.3(5).OPT2.FB6 (Rotary milling/planing equipment restricted to upper layer of existing surfacing) (January 2, 2018)
Use in bridge deck paving projects where equipment used to perform full depth removal of existing surfacing from specific Grade Controlled bridges is restricted to allow rotary milling/planing equipment for the upper layer 0.10-feet above the bridge deck. Existing surfacing thicknesses at these bridges shall be 0.20-foot minimum. The fill-in specifies the Bridge Number(s) of the bridges affected by these restrictions. (1 fill-in)

~~6-09.GR6 Modified Concrete Overlays~~

~~6-09.2.GR6 Materials~~

~~6-09.2.OPT1.2025.GR6 (The second, third, fourth, and fifth paragraphs are deleted from Section 6-09.2) (February 6, 2023)
Use in all FMC, LMC, and MMC deck overlay projects. Must use with ~~6-09.3(3)A.OPT1.2025.GR6, 6-09.3(3)B.OPT1.2025.GR6, 6-09.3(3)C.OPT1.2025.GR6, 6-09.3(3)D.OPT1.2025.GR6, and 6-09.3(3)E.OPT1.2025.GR6.~~~~

~~6-09.2.INST1.GR6 (Section 6-09.2 is supplemented with the following)
Must use once preceding any of the following:~~

~~6-09.2.OPT8.BSP.GB6 (Materials For Polyester Concrete) (*****)
Use in projects where polyester concrete is required. Include with ~~6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6 and 6-09.5.OPT9.BSP.GB6.~~~~

1 **6-09.3.GR6** **Construction Requirements**

2
3 **6-09.3(1).GR6** **Equipment**

4
5 **6-09.3(1).INST1.GR6** (Section 6-09.3(1) is supplemented with the
6 following)
7 Must use once preceding any of the following:

8
9 **6-09.3(1).OPT1.BSP.GB6** (Mobile Mixer for Polyester Concrete)
10 (*****)
11 Use in projects where polyester concrete is required.
12 Include with **6-09.2.OPT8.BSP.GB6**, **6-**
13 **09.3(2).OPT1.BSP.GB6**, **6-09.3(3).OPT9.BSP.GB6**, **6-**
14 **09.3(3).OPT10.BSP.GB6**, **6-09.3(4).OPT1.BSP.GB6**,
15 **6-09.3(5).OPT8.BSP.GB6**, **6-09.3(5).OPT9.BSP.GB6**,
16 **6-09.3(5).OPT10.BSP.GB6**, **6-**
17 **09.3(6).C.OPT2.BSP.GB6**, **6-09.3(8).OPT3.BSP.GB6**,
18 **6-09.3(8).OPT4.BSP.GB6**, **6-09.3(9).OPT2.BSP.GB6**,
19 **6-09.3(10).OPT1.BSP.GB6**, **6-**
20 **09.3(11).OPT2.BSP.GB6**, **6-09.3(12).OPT2.BSP.GB6**,
21 **6-09.3(13).OPT2.BSP.GB6**, **6-**
22 **09.3(14).OPT1.BSP.GB6**, **6-09.4.OPT2.BSP.GB6**, **6-**
23 **09.5.OPT7.BSP.GB6**, **6-09.5.OPT8.BSP.GB6** and **6-**
24 **09.5.OPT9.BSP.GB6**.

25
26 **6-09.3(2).GR6** **Submittals**

27
28 **6-09.3(2).INST1.GR6** (Section 6-09.3(2) is supplemented with the
29 following)
30 Must use once preceding any of the following:

31
32 **6-09.3(2).OPT1.BSP.GB6** (Submittals for Polyester Concrete)
33 (*****)
34 Use in projects where polyester concrete is required.
35 Include with **6-09.2.OPT8.BSP.GB6**, **6-**
36 **09.3(1).OPT1.BSP.GB6**, **6-09.3(3).OPT9.BSP.GB6**, **6-**
37 **09.3(3).OPT10.BSP.GB6**, **6-09.3(4).OPT1.BSP.GB6**,
38 **6-09.3(5).OPT8.BSP.GB6**, **6-09.3(5).OPT9.BSP.GB6**,
39 **6-09.3(5).OPT10.BSP.GB6**, **6-**
40 **09.3(6).C.OPT2.BSP.GB6**, **6-09.3(8).OPT3.BSP.GB6**,
41 **6-09.3(8).OPT4.BSP.GB6**, **6-09.3(9).OPT2.BSP.GB6**,
42 **6-09.3(10).OPT1.BSP.GB6**, **6-**
43 **09.3(11).OPT2.BSP.GB6**, **6-09.3(12).OPT2.BSP.GB6**,
44 **6-09.3(13).OPT2.BSP.GB6**, **6-**
45 **09.3(14).OPT1.BSP.GB6**, **6-09.4.OPT2.BSP.GB6**, **6-**
46 **09.5.OPT7.BSP.GB6**, **6-09.5.OPT8.BSP.GB6**, and **6-**
47 **09.5.OPT9.BSP.GB6**.

48
49 **6-09.3(3).GR6** **Concrete Overlay Mixes**

50
51 **6-09.3(3).INST1.GR6** (Section 6-09.3(3) is supplemented with the
52 following)
53 Must use once preceding any of the following:

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~~6-09.3(3).OPT1.GB6~~ (FMC, LMC, and MMC)
(January 7, 2002)
Use in modified concrete overlay projects where all three concrete overlay mixes are allowed. Include with either ~~6-09.3(5).OPT2.GB6~~ or ~~6-09.3(5).OPT1.GB6~~.

~~6-09.3(3).OPT2.GB6~~ (FMC or LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only fly ash modified concrete or latex modified concrete overlay mixes are allowed. Include with either ~~6-09.3(5).OPT2.GB6~~ or ~~6-09.3(5).OPT1.GB6~~.

~~6-09.3(3).OPT3.GB6~~ (LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only latex modified concrete overlay mixes are allowed. Include with either ~~6-09.3(5).OPT2.GB6~~ or ~~6-09.3(5).OPT1.GB6~~.

~~6-09.3(3).OPT9.BSP.GB6~~ (Polyester Concrete)
(*****)
Use in projects where polyester concrete is required. Include with ~~6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6).OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(3).OPT10.BSP.GB6~~ (Deck Repair Concrete for Polyester Concrete Overlays)
(*****)
Use in projects where polyester concrete is required. Include with ~~6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6).OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6,~~

~~09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(3)A.GR6~~ — ~~General~~

~~6-09.3(3)A.INST1.GR6~~ (Section ~~6-09.3(3)A~~ is revised to read)
Must use once preceding any of the following:

~~6-09.3(3)A.OPT1.2025.GR6~~ (Mix Designs)
(February 6, 2023)
Use in all deck overlay projects. Must use with ~~6-09.2.OPT1.2025.GB6,~~
~~6-09.3(3)B.OPT1.2025.GR6,~~
~~6-09.3(3)C.OPT1.2025.GR6,~~
~~6-09.3(3)D.OPT1.2025.GR6,~~ and ~~6-09.3(3)E.OPT1.2025.GR6.~~

~~6-09.3(3)B.GR6~~ — ~~Concrete Class M~~

~~6-09.3(3)B.INST1.GR6~~ (Section ~~6-09.3(3)B~~ is revised to read)
Must use once preceding any of the following:

~~6-09.3(3)B.OPT1.2025.GR6~~ (Mix Designs)
(February 6, 2023)
Use in all FMC, LMC, and MMC deck overlay projects. Must use with ~~6-09.2.OPT1.2025.GB6,~~
~~6-09.3(3)A.OPT1.2025.GR6,~~
~~6-09.3(3)C.OPT1.2025.GR6,~~
~~6-09.3(3)D.OPT1.2025.GR6,~~ and ~~6-09.3(3)E.OPT1.2025.GR6.~~

~~6-09.3(3)C.GR6~~ — ~~Fly Ash Modified Concrete~~

~~6-09.3(3)C.INST1.GR6~~ (Section ~~6-09.3(3)C~~ is revised to read)
Must use once preceding any of the following:

~~6-09.3(3)C.OPT1.2025.GR6~~ (Mix Designs)
(February 6, 2023)
Use in all deck overlay projects where FMC is allowed. Must use with ~~6-09.2.OPT1.2025.GB6,~~
~~6-09.3(3)A.OPT1.2025.GR6,~~
~~6-09.3(3)B.OPT1.2025.GR6,~~
~~6-09.3(3)D.OPT1.2025.GR6,~~ and ~~6-09.3(3)E.OPT1.2025.GR6.~~

~~6-09.3(3)D.GR6~~ — ~~Microsilica Modified Concrete~~

~~6-09.3(3)D.INST1.GR6~~ (Section ~~6-09.3(3)D~~ is revised to read)
Must use once preceding any of the following:

~~6-09.3(3)D.OPT1.2025.GR6~~ (Mix Designs)
(February 6, 2023)

1 Use in all deck overlay projects where MMC is
2 allowed. Must use with ~~6-09.2.OPT1.2025.GB6,~~
3 ~~6-09.3(3)A.OPT1.2025.GR6,~~ ~~6-~~
4 ~~09.3(3)B.OPT1.2025.GR6,~~ ~~6-~~
5 ~~09.3(3)C.OPT1.2025.GR6,~~ and ~~6-~~
6 ~~09.3(3)E.OPT1.2025.GR6.~~

7
8 **~~6-09.3(3)E.GR6~~ Latex Modified Concrete**

9
10 ~~6-09.3(3)E.INST1.GR6~~ (Section ~~6-09.3(3)E~~ is revised to read)
11 Must use once preceding any of the following:

12
13 ~~6-09.3(3)E.OPT1.2025.GR6~~ (Mix Designs)
14 (February 6, 2023)
15 Use in all deck overlay projects where LMC is
16 allowed. Must use with ~~6-09.2.OPT1.2025.GB6,~~
17 ~~6-09.3(3)A.OPT1.2025.GR6,~~ ~~6-~~
18 ~~09.3(3)B.OPT1.2025.GR6,~~ ~~6-~~
19 ~~09.3(3)C.OPT1.2025.GR6,~~ and ~~6-~~
20 ~~09.3(3)D.OPT1.2025.GR6.~~

21
22 **~~6-09.3(4).GR6~~ Storing and Handling**

23
24 ~~6-09.3(4).INST1.GR6~~ (Section ~~6-09.3(4)~~ is supplemented with the
25 following)
26 Must use once preceding any of the following:

27
28 ~~6-09.3(4).OPT1.BSP.GB6~~ (Storing and Handling of Polyester-
29 Concrete Materials)
30 (*****)
31 Use in projects where polyester concrete is required.
32 Include with ~~6-09.2.OPT8.BSP.GB6,~~ ~~6-~~
33 ~~09.3(1).OPT1.BSP.GB6,~~ ~~6-09.3(2).OPT1.BSP.GB6,~~ ~~6-~~
34 ~~09.3(3).OPT9.BSP.GB6,~~ ~~6-09.3(3).OPT10.BSP.GB6,~~
35 ~~6-09.3(5).OPT8.BSP.GB6,~~ ~~6-09.3(5).OPT9.BSP.GB6,~~
36 ~~6-09.3(5).OPT10.BSP.GB6,~~ ~~6-~~
37 ~~09.3(6)C.OPT2.BSP.GB6,~~ ~~6-09.3(8).OPT3.BSP.GB6,~~
38 ~~6-09.3(8).OPT4.BSP.GB6,~~ ~~6-09.3(9).OPT2.BSP.GB6,~~
39 ~~6-09.3(10).OPT1.BSP.GB6,~~ ~~6-~~
40 ~~09.3(11).OPT2.BSP.GB6,~~ ~~6-09.3(12).OPT2.BSP.GB6,~~
41 ~~6-09.3(13).OPT2.BSP.GB6,~~ ~~6-~~
42 ~~09.3(14).OPT1.BSP.GB6,~~ ~~6-09.4.OPT2.BSP.GB6,~~ ~~6-~~
43 ~~09.5.OPT7.BSP.GB6,~~ ~~6-09.5.OPT8.BSP.GB6,~~ and ~~6-~~
44 ~~09.5.OPT9.BSP.GB6.~~

45
46 **~~6-09.3(5).GR6~~ Scarifying Concrete Surface**

47
48 ~~6-09.3(5).INST1.GR6~~ (Section ~~6-09.3(5)~~ is supplemented with the
49 following)
50 Must use once preceding any of the following:

51
52 ~~6-09.3(5).OPT1.GB6~~ (Rotary Mill, Hydro-Demolisher, or Shot-
53 Blaster)

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(January 7, 2002)
Include in modified concrete overlay projects where all three types of scarifying machines are allowed. Include with ~~either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6.~~

~~6-09.3(5).OPT2.GB6 (Hydro-Demolisher or Shot Blaster Only)
(January 7, 2002)
Include in modified concrete overlay projects where only hydro-demolisher or shot blaster scarifying machines are allowed. Include with either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6.~~

~~6-09.3(5).OPT7.GB6 (Hydro-Demolisher Only)
(April 6, 2015)
Use in modified concrete overlay projects where only hydro-demolisher scarifying machines are allowed.~~

~~6-09.3(5).OPT8.BSP.GB6 (Shot Blaster Only)
(*****)
Use in modified concrete overlay projects where only shot blaster scarifying machines are allowed. Required for all polyester concrete overlay projects.~~

~~6-09.3(5).OPT9.BSP.GB6 (Scarification Depth for Polyester Concrete Overlay)
(*****)
Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(5).OPT10.BSP.GB6 (Epoxy-coated St. Reinf. Bars for Bridge Deck Repair)
(*****)
Use in projects where epoxy coated steel reinforcing bars are required for bridge deck repair. Required for all polyester concrete overlay projects.~~

~~6-09.3(6).GR6 Further Deck Preparation~~

1 **6-09.3(6)B.GR6** ——— **Deck Repair Preparation**

2
3 ~~6-09.3(6)B.INST1.GR6~~ (Section ~~6-09.3(6)B~~ is supplemented with the
4 following)
5 Must use ~~once preceding any of the following:~~

6
7 ~~6-09.3(6)B.OPT1.GB6~~ (Forms For Full Depth Deck Repair)
8 (April 6, 2015)
9 Use in ~~modified concrete overlay projects where~~
10 ~~the anticipated depth required for bridge deck~~
11 ~~repair following scarification of concrete surface~~
12 ~~may be full depth of the bridge deck. Include with~~
13 ~~6-09.5.OPT11.GB6.~~

14
15 **6-09.3(6)C.GR6** ——— **Placing Deck Repair Concrete**

16
17 ~~6-09.3(6)C.INST1.GR6~~ (Supplemental Instructions)
18 Must use ~~once preceding any of the following:~~

19
20 ~~6-09.3(6)C.OPT2.BSP.GB6~~ (Placing Patching Concrete For Polyester
21 Concrete Overlay)
22 (*****)
23 Use in ~~projects where polyester concrete is~~
24 ~~required. Include with ~~6-09.2.OPT8.BSP.GB6, 6-~~~~
25 ~~09.3(1).OPT1.BSP.GB6, 6-~~
26 ~~09.3(2).OPT1.BSP.GB6, 6-~~
27 ~~09.3(3).OPT9.BSP.GB6, 6-~~
28 ~~09.3(3).OPT10.BSP.GB6, 6-~~
29 ~~09.3(4).OPT1.BSP.GB6, 6-~~
30 ~~09.3(5).OPT8.BSP.GB6, 6-~~
31 ~~09.3(5).OPT9.BSP.GB6, 6-~~
32 ~~09.3(5).OPT10.BSP.GB6, 6-~~
33 ~~09.3(8).OPT3.BSP.GB6, 6-~~
34 ~~09.3(8).OPT4.BSP.GB6, 6-~~
35 ~~09.3(9).OPT2.BSP.GB6, 6-~~
36 ~~09.3(10).OPT1.BSP.GB6, 6-~~
37 ~~09.3(11).OPT2.BSP.GB6, 6-~~
38 ~~09.3(12).OPT2.BSP.GB6, 6-~~
39 ~~09.3(13).OPT2.BSP.GB6, 6-~~
40 ~~09.3(14).OPT1.BSP.GB6, 6-~~
41 ~~09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-~~
42 ~~09.5.OPT8.BSP.GB6, and 6-~~
43 ~~09.5.OPT9.BSP.GB6.~~

44
45 **6-09.3(8).GR6** ——— **Quality Assurance**

46
47 ~~6-09.3(8).INST1.GR6~~ (Section ~~6-09.3(8)~~ is supplemented with the
48 following)
49 Must use ~~once preceding any of the following:~~

50
51 ~~6-09.3(8).OPT3.BSP.GB6~~ (Quality Assurance For Polyester
52 Concrete Overlay)
53 (*****)

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~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(8).OPT4.BSP.GB6 (Polyester Concrete Trial Overlay)
(*****)~~

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

6-09.3(9).GR6 — Mixing Concrete for Concrete Overlay

~~6-09.3(9).INST1.GR6 (Section 6-09.3(9) is supplemented with the following)
Must use once preceding any of the following:~~

~~6-09.3(9).OPT2.BSP.GB6 (Mixing Polyester Concrete)
(*****)~~

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

6-09.3(10).GR6 — Overlay Profile and Screed Rails

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~~6-09.3(10).INST1.GR6 (Section 6-09.3(10) is supplemented with the following)
Must use once preceding any of the following:~~

~~6-09.3(10).OPT1.BSP.GB6 (Polyester Concrete Overlay Thickness)
(*****)~~

~~Use in projects where polyester concrete is required.
Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(11).GR6 Placing Concrete Overlay~~

~~6-09.3(11).INST1.GR6 (Section 6-09.3(11) is supplemented with the following)
Must use once preceding any of the following:~~

~~6-09.3(11).OPT2.BSP.GB6 (Placing Polyester Concrete Overlay)
(*****)~~

~~Use in projects where polyester concrete is required.
Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(12).GR6 Finishing Concrete Overlay~~

~~6-09.3(12).INST1.GR6 (Section 6-09.3(12) is supplemented with the following)
Must use once preceding any of the following:~~

~~6-09.3(12).OPT2.BSP.GB6 (Finishing Polyester Concrete Overlay)
(*****)~~

~~Use in projects where polyester concrete is required.
Include with 6-09.2.OPT8.BSP.GB6, 6-~~

~~09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(13).GR6~~ — ~~Curing Concrete Overlay~~

~~6-09.3(13).INST1.GR6~~ (Section ~~6-09.3(13)~~ is supplemented with the following)
Must use once preceding any of the following:

~~6-09.3(13).OPT2.BSP.GB6~~ (Curing Polyester Concrete)

~~(*****)~~

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.3(14).GR6~~ — ~~Checking For Bond~~

~~6-09.3(14).INST1.GR6~~ (Section ~~6-09.3(14)~~ is supplemented with the following)
Must use once preceding any of the following:

~~6-09.3(14).OPT1.BSP.GB6~~ (Checking Polyester Concrete For Bond)

~~(*****)~~

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6,~~

~~6-09.4.OPT2.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.4.GR6~~ Measurement

~~6-09.4.INST1.GR6~~ (Section 6-09.4 is supplemented with the following)
Must use once preceding any of the following:

~~6-09.4.OPT2.BSP.GB6~~ (Polyester Concrete Overlay)
(*****)

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.5.OPT7.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

~~6-09.5.GR6~~ Payment

~~6-09.5.INST2.GR6~~ (Section 6-09.5 is supplemented with the following)
Must use once preceding any of the following:

~~6-09.5.OPT7.BSP.GB6~~ (Polyester Concrete Trial Overlay)
(*****)

~~Use in projects where polyester concrete is required. Include with 6-09.2.OPT8.BSP.GB6, 6-09.3(1).OPT1.BSP.GB6, 6-09.3(2).OPT1.BSP.GB6, 6-09.3(3).OPT9.BSP.GB6, 6-09.3(3).OPT10.BSP.GB6, 6-09.3(4).OPT1.BSP.GB6, 6-09.3(5).OPT8.BSP.GB6, 6-09.3(5).OPT9.BSP.GB6, 6-09.3(5).OPT10.BSP.GB6, 6-09.3(6)C.OPT2.BSP.GB6, 6-09.3(8).OPT3.BSP.GB6, 6-09.3(8).OPT4.BSP.GB6, 6-09.3(9).OPT2.BSP.GB6, 6-09.3(10).OPT1.BSP.GB6, 6-09.3(11).OPT2.BSP.GB6, 6-09.3(12).OPT2.BSP.GB6, 6-09.3(13).OPT2.BSP.GB6, 6-09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6, 6-09.5.OPT8.BSP.GB6, and 6-09.5.OPT9.BSP.GB6.~~

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~~6-09.5.OPT8.BSP.GB6 (Force Account Grinding Polyester
Conc. Overlay)
(*****)
Use in projects where polyester concrete is
required. Include with ~~6-09.2.OPT8.BSP.GB6, 6-
09.3(1).OPT1.BSP.GB6, 6-
09.3(2).OPT1.BSP.GB6, 6-
09.3(3).OPT9.BSP.GB6, 6-
09.3(3).OPT10.BSP.GB6, 6-
09.3(4).OPT1.BSP.GB6, 6-
09.3(5).OPT8.BSP.GB6, 6-
09.3(5).OPT9.BSP.GB6, 6-
09.3(5).OPT10.BSP.GB6, 6-
09.3(6)C.OPT2.BSP.GB6, 6-
09.3(8).OPT3.BSP.GB6, 6-
09.3(8).OPT4.BSP.GB6, 6-
09.3(9).OPT2.BSP.GB6, 6-
09.3(10).OPT1.BSP.GB6, 6-
09.3(11).OPT2.BSP.GB6, 6-
09.3(12).OPT2.BSP.GB6, 6-
09.3(13).OPT2.BSP.GB6, 6-
09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6,
6-09.5.OPT7.BSP.GB6 and 6-
09.5.OPT9.BSP.GB6.~~~~

~~6-09.5.OPT9.BSP.GB6 (Polyester Concrete Overlay)
(*****)
Use in projects where polyester concrete is
required. Include with ~~6-09.2.OPT8.BSP.GB6, 6-
09.3(1).OPT1.BSP.GB6, 6-
09.3(2).OPT1.BSP.GB6, 6-
09.3(3).OPT9.BSP.GB6, 6-
09.3(3).OPT10.BSP.GB6, 6-
09.3(4).OPT1.BSP.GB6, 6-
09.3(5).OPT8.BSP.GB6, 6-
09.3(5).OPT9.BSP.GB6, 6-
09.3(5).OPT10.BSP.GB6, 6-
09.3(6)C.OPT2.BSP.GB6, 6-
09.3(8).OPT3.BSP.GB6, 6-
09.3(8).OPT4.BSP.GB6, 6-
09.3(9).OPT2.BSP.GB6, 6-
09.3(10).OPT1.BSP.GB6, 6-
09.3(11).OPT2.BSP.GB6, 6-
09.3(12).OPT2.BSP.GB6, 6-
09.3(13).OPT2.BSP.GB6, 6-
09.3(14).OPT1.BSP.GB6, 6-09.4.OPT2.BSP.GB6,
6-09.5.OPT7.BSP.GB6, and 6-
09.5.OPT8.BSP.GB6.~~~~

~~6-09.5.OPT11.GB6 (Forms For Full Depth Deck Repair)
(April 6, 2015)~~

1 Use in projects where the anticipated depth required
2 for bridge deck repair following scarification of
3 concrete surface may be full depth of the bridge
4 deck. Include with ~~6-09.3(6)B.OPT1.GB6~~.

5
6 **6-10.GR6 Concrete Barrier**

7
8 **6-10.3.GR6 Construction Requirements**

9
10 **6-10.3(5).GR6 Temporary Barrier**

11
12 6-10.3(5).INST1.GR6 (The first paragraph of Section 6-10.3(5) is revised to read)
13 Must use once preceding any of the following:

14
15 6-10.3(5).OPT1.GR6 (Type F Temporary Barrier)
16 (February 3, 2020)
17 Use in projects that have less than 1,000 linear feet of
18 temporary barrier.

19
20 **6-10.5.GR6 Payment**

21
22 6-10.5.INST1.GR6 (Section 6-10.5 is supplemented with the following)
23 Must use once preceding any of the following:

24
25 6-10.5.OPT1.GR6 (Temporary barrier delineators)
26 (August 1, 2016)
27 Use in projects that require temporary barrier to be placed
28 adjacent to a travelled lane.

29
30 6-10.5.OPT2.FB6 (Bridge Concrete Barrier)
31 (March 6, 2000)
32 Use in projects with concrete barrier on bridges only where
33 the barrier is included as part of a separate bid item such
34 as "Superstructure - ____", or "Roadway Deck - ____". The
35 first fill-in specifies the barrier type (traffic barrier, traffic-
36 pedestrian barrier, pedestrian barrier, etc.). The second fill-
37 in specifies the bid item name.
38 (2 fill-ins)

39
40 **6-11.GR6 Reinforced Concrete Walls**

41
42 **6-11.2.GR6 Materials**

43
44 6-11.2.INST1.GR6 (Section 6-11.2 is supplemented with the following)
45 Must use preceding the following:

46
47 6-11.2.OPT1.2025.GR6 (Reinforced Concrete Retaining Walls)
48 (November 20, 2023)
49 Use in projects with reinforced concrete retaining walls.

50
51 **6-11.3.GR6 Construction Requirements**

52
53 6-11.3.INST1.GR6 (Section 6-11.3 is replaced in its entirety with the following:)

Must use preceding the following:

6-11.3.OPT1.2025.GR6 (Reinforced Concrete Retaining Walls)
(November 20, 2023)
Use in projects with reinforced concrete retaining walls.

6-11.4.GR6 Measurement

6-11.4.INST1.GR6 (Section 6-11.4 is replaced with the following):
Must use preceding the following:

6-11.4.OPT1.2025.GR6 (Reinforced Concrete Retaining Walls)
(November 20, 2023)
Use in projects with reinforced concrete retaining walls.

6-11.5.GR6 Payment

6-11.5.INST1.GR6 (Section 6-11.5 is replaced with the following):
Must use preceding the following:

6-11.5.OPT1.2025.GR6 (Reinforced Concrete Retaining Walls)
(November 20, 2023)
Use in projects with reinforced concrete retaining walls.

6-12.GR6 Noise Barrier Walls

6-12.2.GR6 Materials

6-12.2.INST1.GR6 (Section 6-12.2 is supplemented with the following)
Must use once preceding any of the following:

6-12.2.OPT1.GB6 (Precast Concrete Noise Barrier Walls)
(September 8, 2020)
Use in projects with noise barrier walls of precast concrete panels. Include with **6-12.3(6).OPT1.FB6 and all other applicable noise barrier wall GSP's.**

6-12.2.OPT2.FB6 (Masonry Noise Barrier Walls)
(September 8, 2020)
Use in projects with noise barrier walls of masonry block panels. The fill-in describes the surface texture and color requirements for the field, cap, accent, and other CMU blocks used for the masonry wall. Include with **6-12.3(7).OPT1.GB6 and all other applicable noise barrier wall GSP's.**
(1 fill-in)

6-12.3.GR6 Construction Requirements

6-12.3(1).GR6 Submittals

6-12.3(1).INST1.GR6 (Section 6-12.3(1) is supplemented with the following)

Must use once preceding any of the following:

6-12.3(1).OPT1.GB6 (Noise Barrier Wall Existing Groundline Field Survey)
(August 3, 2015)
Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with **1-05.4.OPT1.GR1, 6-12.5.OPT1.GB6, and all other applicable noise barrier wall GSP's.**

6-12.3(6).GR6 Precast Concrete Panel Fabrication and Erection

6-12.3(6).INST1.GR6 (Section 6-12.3(6) is supplemented with the following)
Must use once preceding any of the following:

6-12.3(6).OPT1.FB6 (Precast Concrete Panel Surface Finish Requirements)
(April 5, 2004)
Use in projects with noise barrier walls of precast concrete panels. The fill-ins specify the type or name of the formed finish on the traffic side and on the residential side of the precast concrete panels. Include with **6-12.2.OPT1.GB6 and all other applicable noise barrier wall GSP's.**
(2 fill-ins)

6-12.3(7).GR6 Masonry Wall Construction

6-12.3(7).INST1.GR6 (Section 6-12.3(7) is supplemented with the following)
Must use once preceding any of the following:

6-12.3(7).OPT1.GB6 (Masonry Noise Barrier Wall Construction Requirements)
(August 3, 2015)
Use in projects with noise barrier walls of masonry block panels. Include with **6-12.2.OPT2.FB6 and all other applicable noise barrier wall GSP's.**

6-12.5.GR6 Payment

6-12.5.INST1.GR6 (Section 6-12.5 is supplemented with the following)
Must use once preceding any of the following:

6-12.5.OPT1.GB6 (Payment for Noise Barrier Wall Groundline Field Survey)
(April 5, 2004)
Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with **1-**

05.4.OPT1.GR1, 6-12.3(1).OPT1.GB6, and all other applicable noise barrier wall GSP's.

6-13.GR6 Structural Earth Walls

6-13.2.GR6 Materials

6-13.2.INST1.GR6 (Section 6-13.2 is supplemented with the following)
Must use once preceding any of the following:

6-13.2.OPT1.GB6 (Welded Wire Faced Structural Earth Wall Materials)
(February 6, 2023)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with **6-13.3.OPT1.GB6 and 6-13.3(2).OPT1.FB6.**

6-13.2.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall Materials)
(February 6, 2023)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with **6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6.**

6-13.2.OPT2(A).GB6 (Lock + Load Retaining Wall System Wall Materials)
(August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.
Include with **6-13.2.OPT2.GB6, 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3.OPT2(A).GB6, 6-13.3(4).OPT1.GB6, 6-13.3(4).OPT1(A).GB6, and 6-13.3(7).OPT1.GB6.**

6-13.2.OPT3.GB6 (Concrete Block Faced Structural Earth Wall Materials)
(January 2, 2018)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with **6-13.3.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.**

6-13.3.GR6 Construction Requirements

6-13.3.INST1.GR6 (Section 6-13.3 is supplemented with the following)
Must use once preceding any of the following:

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6-13.3.OPT1.GB6 (Welded Wire Faced Structural Earth Wall)
(April 4, 2011)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with **6-13.2.OPT1.GB6 and 6-13.3(2).OPT1.FB6.**

6-13.3.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall)
(January 10, 2022)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with **6-13.2.OPT2.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(4).OPT1.GB6.**

6-13.3.OPT2(A).GB6 (Lock + Load Retaining Wall System Walls)
(August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.
Include with **6-13.2.OPT2.GB6, 6-13.2.OPT2(A).GB6, 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6, 6-13.3(4).OPT1(A).GB6, and 6-13.3(7).OPT1.GB6.**

6-13.3.OPT3.GB6 (Concrete Block Faced Structural Earth Wall)
(January 2, 2018)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with **6-13.2.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.**

6-13.3(2).GR6 Submittals

6-13.3(2).INST1.GR6 (Section 6-13.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(2).OPT1.FB6 (Structural Earth Wall Geotechnical Design Parameters)
(January 3, 2011)
Use in projects with structural earth walls. The first fill-in identifies the wall by name or number, and the remaining fill-ins specify the values for various geotechnical design parameters as specified in the geotechnical report prepared for the project. The table

1 may be repeated as necessary for additional walls with
2 differing geotechnical design parameters.
3 (13 fill-ins)
4

5 **6-13.3(4).GR6** **Precast Concrete Facing Panel and Concrete Block**
6 **Fabrication**
7

8 6-13.3(4).INST1.GR6 (Section 6-13.3(4) is supplemented with the
9 following)
10 Must use once preceding any of the following:
11

12 6-13.3(4).OPT1.GB6 (Specific Fabrication Requirements for
13 Precast Concrete Panel Faced Structural Earth Walls)
14 (April 3, 2017)
15 Use in projects with structural earth walls where precast
16 concrete panel faced walls are an acceptable
17 alternative. Include with **6-13.2.OPT2.GB6**, **6-**
18 **13.3.OPT2.GB6**, **6-13.3(2).OPT1.FB6**, and **6-**
19 **13.3(5).OPT1.GB6**.
20

21 6-13.3(4).OPT1(A).GB6 (Lock + Load Retaining Wall System Walls)
22 (August 3, 2015)
23 Use in projects with structural earth walls only
24 when the following conditions apply:
25 1. Both precast concrete panel faced
26 structural earth walls AND precast
27 concrete block faced structural earth walls
28 are included in the project as acceptable
29 alternatives.
30 2. Lock + Load retaining wall system shall be
31 constructed in areas where the wall will be
32 constructed above the water table.
33 Include with **6-13.2.OPT2.GB6**, **6-**
34 **13.2.OPT2(A).GB6**, **6-13.3.OPT2.GB6**, **6-**
35 **13.3.OPT2(A).GB6**, **6-13.3(2).OPT1.FB6**, **6-**
36 **13.3(4).OPT1.GB6**, and **6-13.3(7).OPT1.GB6**.
37

38 **6-13.3(5).GR6** **Precast Concrete Facing Panel and Concrete**
39 **Block Erection**
40

41 6-13.3(5).INST1.GR6 (Section 6-13.3(5) is supplemented with the
42 following)
43 Must use once preceding any of the following:
44

45 6-13.3(5).OPT2.GB6 (Specific Erection Requirements for
46 Precast Concrete
47 Block Faced Structural Earth Walls)
48 (April 2, 2012)
49 Use in projects with structural earth walls where
50 concrete block faced walls are an acceptable
51 alternative. Include with **6-13.2.OPT3.GB6** **6-**
52 **13.3.OPT3.GB6**, and **6-13.3(2).OPT1.FB6**.
53

6-13.3(7).GR6 **Backfill**

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6-13.3(7).INST1.GR6 (Section 6-13.3(7) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(7).OPT1.GB6 (Specific Backfill Requirements for Precast Concrete Panel Faced Structural Earth Walls) (August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.
Include with **6-13.2.OPT2.GB6, 6-13.2.OPT2(A).GB6, 6-13.3.OPT2.GB6, 6-13.3.OPT2(A).GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6, and 6-13.3(4).OPT1(A).GB6**

6-14.GR6 Geosynthetic Retaining Walls

6-14.2.GR6 Materials

6-14.2(9-33.2(2)).GR6 (Geosynthetic Properties For Retaining Walls and Reinforced Slopes)
(Section 9-33.2(2) is supplemented with the following)
Must use once preceding any of the following:

6-14.2(9-33.2(2)).OPT1.FB6 (Geosynthetic Properties For Temporary Geosynthetic Retaining Walls) (August 7, 2006)
Use in projects with temporary geosynthetic retaining walls. The first fill-in identifies the wall location. The second fill-in specifies the reinforcement layer vertical spacing. The third fill-in specifies the dimension from the top of wall to the reinforcement layer. The fourth fill-in specifies the geosynthetic tensile strength.
(4 fill-ins)

6-15.GR6 Soil Nail Walls

6-15.2.GR6 Materials

6-15.2.INST1.GR6 (Section 6-15.2 is supplemented with the following)
Must use once preceding any of the following:
6-15.2.OPT1.GB6 (Permanent Soil Nail Materials and Components) (August 3, 2015)

1 Use in projects with soil nail retaining walls. Include with **6-**
2 **18.SA1.2025.GR62.OPT1.GB6** and **6-**
3 **15.3(8)A.OPT1.FB6**.

4
5 **6-15.3.GR6 Construction Requirements**

6
7 **6-15.3(8).GR6 Soil Nail Testing And Acceptance**

8
9 **6-15.3(8)A.GR6 Verification Testing**

10
11 6-15.3(8)A.INST1.GR6 (Section 6-15.3(8)A is supplemented with the
12 following)

13 Must use once preceding any of the following:

14
15 6-15.3(8)A.OPT1.FB6 (Soil Nail Verification Test Locations)
16 (April 5, 2004)

17 Use in projects with soil nail retaining walls. The
18 fill-ins specify the soil nail verification test
19 locations and the number of successful tests
20 required at each location. Include with **6-**
21 **15.2.OPT1.GB6** and **6-**
22 **18.SA1.2025.GR62.OPT1.GB6**.
23 (3 fill-ins)

24 **6-16.GR6 Soldier Pile and Soldier Pile Tieback Walls**

25
26 **6-16.3.GR6 Construction Requirements**

27
28 **6-16.3(3).GR6 Shaft Excavation**

29
30 **6-16.3(3).INST1.GR6 (The second sentence in the first paragraph of Section**
31 **6-16.3(3) is revised to read:**

32 **Must use once preceding the following:**

33
34 **6-17.3(3).OPT1.2025.GR6 (Shaft Excavation Diameter)**
35 **(November 20, 2023)**

36 **Use in all projects with soldier pile walls.**

37
38 **6-17.GR6 Permanent Ground Anchors**

39
40 **6-17.1.GR6 Description**

41
42 6-17.1.INST1.GR6 (Section 6-17.1 is supplemented with the following)
43 Must use once preceding any of the following:

44
45 6-17.1.OPT1.GB6 (Rock Bolts and Rock Dowels)
46 (January 7, 2013)

47 Use in projects with rock bolts and/or rock dowels. Include
48 with **6-17.2.OPT2.GB6**, **6-17.3.OPT1.GB6**, **6-**
49 **17.3(8).OPT1.GB6**, **6-17.4.OPT1.GB6** and **6-**
50 **17.5.OPT1.GB6**.

51
52 **6-17.2.GR6 Materials**

| | | |
|----|-----------------------|---|
| 1 | 6-17.2.INST1.GR6 | (Section 6-17.2 is supplemented with the following) Must use once preceding any of the following: |
| 2 | | |
| 3 | | |
| 4 | 6-17.2.OPT1.GB6 | (Permanent Ground Anchor Materials and Components) (November 2, 2022) Use in projects with walls using permanent ground anchors. |
| 5 | | |
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| 9 | 6-17.2.OPT2.GB6 | (Rock Bolt and Rock Dowel Materials) (January 7, 2013) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6 , 6-17.3.OPT1.GB6 , 6- 17.3(8).OPT1.GB6 , 6-17.4.OPT1.GB6 and 6- 17.5.OPT1.GB6 . |
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| 16 | 6-17.3.GR6 | Construction Requirements |
| 17 | | |
| 18 | 6-17.3.INST1.GR6 | (Section 6-17.3 is supplemented with the following) Must use once preceding any of the following: |
| 19 | | |
| 20 | | |
| 21 | 6-17.3.OPT1.GB6 | (Rock Bolt and Rock Dowel Construction Requirements) (September 8, 2020) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6 , 6-17.2.OPT2.GB6 , 6- 17.3(8).OPT1.GB6 , 6-17.4.OPT1.GB6 and 6- 17.5.OPT1.GB6 . |
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| 29 | 6-17.3(8).GR6 | Testing And Stressing |
| 30 | | |
| 31 | 6-17.3(8).INST1.GR6 | (Section 6-17.3(8) is supplemented with the following) Must use once preceding any of the following: |
| 32 | | |
| 33 | | |
| 34 | | |
| 35 | 6-17.3(8).OPT1.GB6 | Rock Bolt and Rock Dowel Testing (January 7, 2013) Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6 , 6-17.2.OPT2.GB6 , 6- 17.3.OPT1.GB6 , 6-17.4.OPT1.GB6 and 6- 17.5.OPT1.GB6 . |
| 36 | | |
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| 41 | | |
| 42 | 6-17.3(8)A.GR6 | Verification Testing |
| 43 | | |
| 44 | 6-17.3(8)A.INST1.GR6 | (Section 6-17.3(8)A is supplemented with the following) Must use once preceding any of the following: |
| 45 | | |
| 46 | | |
| 47 | | |
| 48 | 6-17.3(8)A.OPT1.GB6 | (August 3, 2015) Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include |
| 49 | | |
| 50 | | |
| 51 | | |
| 52 | | |
| 53 | | |

with **6-17.3(8)B.OPT1.GB6** and **6-17.3(8)C.OPT1.GB6**.

6-17.3(8)B.GR6 Performance Testing

6-17.3(8)B.INST1.GR6 (The performance test schedule following the second paragraph of Section 6-17.3(8)B is revised to read) Must use once preceding any of the following:

6-17.3(8)B.OPT1.GB6 (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with **6-17.3(8)A.OPT1.GB6** and **6-17.3(8)C.OPT1.GB6**.

6-17.3(8)C.GR6 Proof Testing

6-17.3(8)C.INST1.GR6 (The proof test schedule following the first paragraph of Section 6-17.3(8)C is revised to read) Must use once preceding any of the following:

6-17.3(8)C.OPT1.GB6 (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with **6-17.3(8)A.OPT1.GB6** and **6-17.3(8)B.OPT1.GB6**.

6-17.4.GR6 Measurement

6-17.4.INST1.GR6 (Section 6-17.4 is supplemented with the following) Must use once preceding any of the following:

6-17.4.OPT1.GB6 (Rock Bolts and Rock Dowels) (January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with **6-17.1.OPT1.GB6**, **6-17.2.OPT2.GB6**, **6-17.3.OPT1.GB6**, **6-17.3(8).OPT1.GB6**, and **6-17.5.OPT1.GB6**.

6-17.5.GR6 Payment

6-17.5.INST1.GR6 (Section 6-17.5 is supplemented with the following) Must use once preceding any of the following:

6-17.5.OPT1.GB6 (Rock Bolts and Rock Dowels) (January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with **6-17.1.OPT1.GB6**, **6-17.2.OPT2.GB6**, **6-**

1 17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, and 6-
2 17.4.OPT1.GB6.
3
4

5 **6-18.SA1.2025.GR6 Shotcrete Facing**

6 (November 20, 2023)

7 Use in all projects with shotcrete. Section 6-18 was deleted in the
8 2024 Standard Specifications. This GSP adds back in Section 6-18.
9

10 **6-18.GR6 Shotcrete Facing**

11
12 **6-18.2.GR6 Materials**

13
14 6-18.2.INST1.GR6 (Section 6-18.2 is supplemented with the following)
15 Must use once preceding any of the following:

16
17 ~~6-18.2.OPT1.GB6~~ (Shotcrete Facing)
18 (August 1, 2005)
19 Use in projects with shotcrete facing. Include with ~~6-~~
20 ~~15.2.OPT1.GB6 and 6-15.3(8)A.OPT1.FB6~~ for all soil nail
21 retaining wall projects. Include with ~~6-18.2.OPT2.GB6, 6-~~
22 ~~18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6~~
23 ~~and 6-18.5.OPT1.GB6~~ for all projects with shotcrete facing
24 for rock/soil slope stabilization.
25

26 6-18.2.OPT2.GB6 (Coloration for Shotcrete Facing Finishing
27 Alternative C)
28 (August 3, 2015)
29 Use in projects with shotcrete facing where tinting of the
30 finish coating of shotcrete is required. ~~Include with 6-~~
31 ~~15.2.OPT1.GB6, 6-15.3(8)A.OPT1.FB6, and 6-~~
32 ~~18.2.OPT1.GB6~~ for all soil nail retaining wall projects with
33 such requirements. Include with ~~6-18.2.OPT1.GB6, 6-~~
34 ~~18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6~~
35 ~~and 6-18.5.OPT1.GB6~~ for all projects with shotcrete facing
36 for rock/soil slope stabilization.
37 Must also use with 6-18.SA1.2025.GR6.

38
39 6-18.2.OPT3.GB6 (Fiber Reinforcement for Shotcrete Facing)
40 (August 3, 2015)
41 Use in projects with shotcrete facing where fiber
42 reinforcement in the shotcrete is specified. ~~Include with 6-~~
43 ~~18.2.OPT1.GB6. Include with 6-18.2.OPT2.GB6, 6-~~
44 ~~18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6~~
45 for all projects with shotcrete facing for rock/soil slope
46 stabilization.
47 Must also use with 6-18.SA1.2025.GR6.
48

49 ~~6-18.3.GR6~~ **Construction Requirements**

50
51 ~~6-18.3.INST1.GR6~~ (Section 6-18.3 is supplemented with the following)
52 Must use once preceding any of the following:
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~~6-18.3.OPT1.GB6~~ (Shotcrete Facing For Rock/Soil Slope Stabilization)
(August 3, 2015)
Use in projects with shotcrete facing for rock/soil slope
stabilization. Include with ~~6-18.2.OPT1.GB6, 6-
18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.4.OPT1.GB6 and
6-18.5.OPT1.GB6.~~

~~6-18.4.GR6~~ ——— **Measurement**

~~6-18.4.INST1.GR6~~ (Section 6-18.4 is supplemented with the following)
Must use once preceding any of the following:

~~6-18.4.OPT1.GB6~~ (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope
stabilization. Include with ~~6-18.2.OPT1.GB6, 6-
18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6
and 6-18.5.OPT1.GB6.~~

~~6-18.5.GR6~~ ——— **Payment**

~~6-18.5.INST1.GR6~~ (Section 6-18.5 is supplemented with the following)
Must use once preceding any of the following:

~~6-18.5.OPT1.GB6~~ (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope
stabilization. Include with ~~6-18.2.OPT1.GB6, 6-
18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6
and 6-18.4.OPT1.GB6.~~

6-19.GR6 Shafts

6-19.2.GR6 Materials

6-19.2(9-36.2(2)).GR6 Synthetic Slurry
(Section 9-36.2(2) is supplemented with the following)
Must use once preceding any of the following:

~~6-19.2(9-36.2(2)).~~OPT1.GB6 (Fresh Water for Synthetic Slurry)
(January 2, 2012)
Use in projects with shafts constructed in salt
water when the geotechnical report specifies that
the use of fresh water for synthetic slurry is
feasible and when the Contracting Agency
restricts the water for synthetic slurry to fresh
water only. Include with **6-19.4.OPT3.GB6** and **6-
19.5.OPT2.GB6.**

6-19.2(9-36.4).GR6 (Access Tubes and Caps)
(The first paragraph of Section 9-36.4 is revised to read)
Must use once preceding any of the following:

1 6-19.2(9-36.4).OPT1.GR6 (Shaft Related Materials)
2 (October 3, 2022)
3 Use in projects that contain shaft construction and
4 crosshole sonic log testing is required.

5
6 **6-19.3.GR6 Construction Requirements**

7
8 **6-19.3(3).GR6 Shaft Excavation**

9
10 6-19.3(3).INST1.GR6 (Section 6-19.3(3) is supplemented with the following)
11 Must use once preceding any of the following:

12
13 6-19.3(3).OPT1.GB6 (Variations In Bearing Layer Elevations)
14 (January 2, 2012)
15 Use in projects where shaft embedment to a minimum
16 penetration into a bearing layer is required, and where
17 the bearing layer elevation cannot be accurately
18 specified with certainty. Include with **6-**
19 **19.3(5).OPT1.GB6.**

20
21 **6-19.3(3)B.GR6 Temporary and Permanent Shaft Casing**

22
23 6-19.3(3)B.INST1.GR6 (Section 6-19.3(3)B is supplemented with
24 the following)
25 Must use once preceding any of the following:

26
27 6-19.3(3)B.OPT2.GB6 (Rotating/Oscillating Method Required)
28 (January 2, 2012)
29 Use in projects where the geotechnical report for
30 the project recommends, and the ADSC/WSDOT
31 Shaft Task Force concurs, that site conditions
32 dictate the use of the rotating/oscillating method
33 for shaft excavation.

34
35 **6-19.3(3)B4.GR6 Temporary Telescoping Shaft Casing**

36
37 6-19.3(3)B4.INST1.GR6 (The second paragraph of Section 6-19.3(3)B4
38 is revised to read as follows)
39 Must use once preceding any of the following:

40
41 6-19.3(3)B4.OPT1.GB6 (Temp. Telescoping Casing Not Allowed
42 At End Piers)
43 (January 2, 2012)
44 Use in projects where design conditions exist
45 where the option of temporary telescoping casing
46 for shafts at bridge end piers is not appropriate for
47 the overall design behavior of the overall bridge.

48
49 **6-19.3(3)I.GR6 Required Use of Slurry in Shaft Excavation**

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51 6-19.3(3)I.INST1.GR6 (Section 6-19.3(3)I is supplemented with the following)
52 Must use once preceding any of the following:
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6-19.3(3).I.OPT1.GB6 (Exception For Casing Sealed Against Influx Of Water Into Excavation) (August 3, 2015)
Use in projects where the geotechnical conditions, as documented in the geotechnical report for the project, allow the possibility of performing shaft excavation in a cased hole beneath the water table level without the need for slurry to ensure the stability of the bottom of the excavation.

6-19.3(4).GR6 Slurry Installation Requirements

6-19.3(4)A.GR6 Slurry Technical Assistance

6-19.3(4)A.INST1.GR6 (Section 6-19.3(4)A is supplemented with the following)
Must use once preceding any of the following:

6-19.3(4)A.OPT1.FB6 (Slurry Manufacturer's Representative's Presence Required At Specific Shaft Sites) (January 2, 2012)
Use in projects where the geotechnical conditions vary enough from one shaft site to another to affect how the slurry is used at each shaft site. The fill-in identifies the specific shaft locations where the presence of the slurry manufacturer's representative is required.
(1 fill-in)

6-19.3(5).GR6 Assembly and Placement of Reinforcing Steel

6-19.3(5).INST1.GR6 (Section 6-19.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(5).OPT1.GB6 (Variations In Bearing Layer Elevations) (August 1, 2016)
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately specified with certainty. Include with **6-19.3(3).OPT1.GB6**.

6-19.3(6).GR6 Contractor Furnished Accessories for Nondestructive QA Testing

6-19.3(6)E.GR6 Thermal Wire and Thermal Access Points (TAPs)

6-19.3(6)E.INST1.GR6 (Section 6-19.3(6)E is supplemented with the following)
Must use once preceding any of the following:

6-19.3(6)E.OPT1.GB6 (Thermal Wire and Associated Couplers) (January 2, 2018)

1 Use in projects that include shaft construction
2 requiring nondestructive testing. This includes all
3 bridge foundation shafts, but may or may not
4 include other shafts such as sign bridges,
5 cantilever sign structures, signal standards, etc.
6

7 **6-19.3(7).GR6 Placing Concrete**

8
9 **6-19.3(7)D.GR6 Requirements for Placing Concrete Underwater**

10 6-19.3(7)D.INST1.GR6 (Section 6-19.3(7)D is supplemented with
11 the following)

12 Must use once preceding any of the following:

13
14
15 6-19.3(7)D.OPT1.GB6 (Tremie Allowed As An Alternative To Concrete
16 Pump)

17 (January 2, 2012)

18 Use in projects where the construction site is at a
19 remote location where it may be difficult to make
20 arrangements to have a concrete pump at the site.
21

22 **6-19.4.GR6 Measurement**

23
24 6-19.4.INST2.GR6 (Section 6-19.4 is supplemented with the following)

25 Must use once preceding any of the following:

26
27 6-19.4.OPT3.GB6 (Fresh Water For Synthetic Slurry)

28 (January 2, 2012)

29 Use in projects with shafts constructed in salt water when
30 the geotechnical report specifies that the use of fresh water
31 for synthetic slurry is feasible and when the Contracting
32 Agency restricts the water for synthetic slurry to fresh water
33 only. Include with **6-19.2(9-36.2(2)).OPT1.GB6** and **6-
34 19.5.OPT2.GB6.**
35

36 **6-19.5.GR6 Payment**

37
38 6-19.5.INST1.GR6 (Section 6-19.5 is supplemented with the following)

39 Must use once preceding any of the following:

40
41 6-19.5.OPT2.GB6 (Fresh Water for Synthetic Slurry)

42 (January 2, 2012)

43 Use in projects with shafts constructed in salt water when
44 the geotechnical report specifies that the use of fresh water
45 for synthetic slurry is feasible and when the Contracting
46 Agency restricts the water for synthetic slurry to fresh water
47 only. Include with **6-19.2(9-36.2(2)).OPT1.GB6** and **6-
48 19.4.OPT3.GB6.**
49

50 **6-20.GR6 Buried Structures**

51
52 **6-20.1.GR6 Description**
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1 6-02.GR6
2 **Concrete Structures**

3
4 6-02.2.GR6
5 **Materials**

6
7 6-02.2.INST1.GR6
8 Section 6-02.2 is supplemented with the following:

9
10 ~~6-02.2.OPT1.GR6~~

11 ~~(April 1, 2013)~~

12 ~~**Resin Bonded Anchors**~~

13 ~~The resin bonded anchor system shall include the nut, washer, and threaded anchor rod~~
14 ~~which is installed into hardened concrete with a resin bonding material.~~

15
16 ~~Resin bonding material used in overhead and horizontal application shall be specifically~~
17 ~~recommended by the resin manufacturer for those applications.~~

18
19 ~~Resin bonding material used in submerged liquid environment shall be specifically~~
20 ~~recommended by the resin manufacturer for this application.~~

21
22 ~~The resin bonded anchor system shall conform to the following requirements:~~

23
24 ~~1. Threaded Anchor Rod and Nuts~~

25 ~~Threaded anchor rods shall conform to ASTM A 193 Grade B7 or ASTM A 449,~~
26 ~~except as otherwise noted, and be fully threaded. Threaded anchor rods for~~
27 ~~stainless steel resin bonded anchor systems shall conform to ASTM F 593 and~~
28 ~~shall be Type 304 unless otherwise specified.~~

29
30 ~~Nuts shall conform to ASTM A 563, Grade DH, except as otherwise noted. Nuts~~
31 ~~for stainless steel resin bonded anchor systems shall conform to ASTM F 594~~
32 ~~and shall be Type 304 unless otherwise specified.~~

33
34 ~~Washers shall conform to ASTM F 436 and shall meet the same requirements~~
35 ~~as the supplied anchor rod, except as otherwise noted. Washers for stainless~~
36 ~~steel resin bonded anchor systems shall conform to ASTM A 240 and the~~
37 ~~geometric requirements of ASME B18.21.1 and shall be Type 304 Stainless~~
38 ~~Steel unless otherwise specified.~~

39
40 ~~Nuts and threaded anchor rods, except those manufactured of stainless steel,~~
41 ~~shall be galvanized in accordance with AASHTO M 232. Galvanized threaded~~
42 ~~anchor rods shall be tested for embrittlement after galvanizing, in accordance~~
43 ~~with Section 9-29.6(5).~~

44
45 ~~Threaded anchor rods used with resin capsules shall have the tip of the rod~~
46 ~~chiseled in accordance with the resin capsule manufacturer's recommendations.~~
47 ~~Galvanized threaded rods shall have the tip chiseled prior to galvanizing.~~

48
49 ~~2. Resin Bonding Material~~

50 ~~Resin bonding material shall be a two component epoxy resin conforming to~~
51 ~~Type IV ASTM C 881 or be one of the following:~~

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a. ~~Vinyl ester resin.~~

b. ~~Polyester resin.~~

c. ~~Methacrylate resin.~~

3. ~~Ultimate Anchor Tensile Capacity~~

~~Resin bonded anchors shall be tested in accordance with ASTM E 488 to have the following minimum ultimate tensile load capacity when installed in concrete having a maximum compressive strength of 6000 pounds per square inch (psi) at the embedment specified below:~~

| Anchor Diameter (inch) | Tensile Capacity (lbs.) | Embedment (inch) |
|-------------------------------|--------------------------------|-------------------------|
| 3/8 | 7,800 | 3-3/8 |
| 1/2 | 12,400 | 4-1/2 |
| 5/8 | 19,000 | 5-5/8 |
| 3/4 | 27,200 | 6-3/4 |
| 7/8 | 32,000 | 7-7/8 |
| 1 | 41,000 | 9 |
| 1-1/4 | 70,000 | 11-1/4 |

13

~~The Contractor shall submit items 1 and 2 below to the Engineer for all resin bonded anchor systems. If the resin bonded anchor system and anchor diameter are not listed in the current WSDOT Qualified Products List, the Contractor shall also submit item 3 below to the Engineer.~~

14

~~For resin bonded anchor systems that are installed in a submerged liquid environment the Contractor shall submit items 1, 2, and 4 below. If the resin bonded anchor system and anchor diameter are not listed in the current WSDOT Qualified Products List, the Contractor shall also submit item 3 below to the Engineer.~~

15

1. ~~The resin manufacturer's written installation procedure for the anchors.~~

16

2. ~~The manufacturer's certificate of compliance for the threaded anchor rod certifying that the anchor rod meets these requirements.~~

17

3. ~~Test results by an independent laboratory certifying that the threaded anchor rod system meets the ultimate anchor tensile load capacity specified in the above table. The tests shall be performed in accordance with ASTM E 488.~~

18

4. ~~For threaded anchors intended to be installed in submerged liquid environments the Contractor shall submit tests performed by an independent laboratory within the past 24 months which certifies that anchors installed in a submerged environment meet the strength requirements specified in the above table.~~

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6-02.OPT2.GB6

(September 8, 2020)

Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels

Epoxy bonding agent for surfaces shall be Type II, as specified in Section 9-26.1. Epoxy bonding agent for steel reinforcing bar dowels shall be either Type I or Type IV, as

38

39

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41

42

1 specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as
2 recommended by the resin manufacturer.

3
4 6-02.2.OPT4.GB6

5 **(November 2, 2022)**

6 **Epoxy Crack Sealing Materials**

7 Epoxy sealing paste shall be a thixotropic compound.

8
9 Epoxy injection resin shall be a moisture-insensitive, two-component material capable of
10 restoring the structural integrity of a structure by structurally bonding cracks,
11 delaminations and hollow planes. Resin formulations shall be hydrophilic with variable
12 viscosity to allow full depth penetration in cracks having a width of 6 mils and greater.

13
14 Epoxy injection resin, when mixed with the hardener in accordance with the
15 manufacturer's written instructions, shall cure to a non-shrink solid material. The material
16 shall be capable of curing in less than 24 hours.

17
18 Epoxy injection resin shall have the following physical properties:

| | | |
|----|---|------------|
| 19 | | |
| 20 | Solids Content, by weight (minimum) | 98 percent |
| 21 | | |
| 22 | Viscosity (maximum) at 77F (Brookfield) | 700 cps |
| 23 | | |
| 24 | Compressive Yield Strength (minimum) | 12,000 psi |
| 25 | | |
| 26 | Minimum Flexural Strength (ASTM D 790) | 10,000 psi |
| 27 | | |
| 28 | Bond Strength (minimum) | 500 psi |
| 29 | | |

30 The Contractor shall submit a Type 2 Working Drawing consisting of sample of the
31 material of the epoxy sealing paste and epoxy injection resin together with sufficient
32 directions and technical data for its use.

33
34 The Contractor shall submit a Type 1 Working Drawing consisting of the Safety Data
35 Sheet (SDS) for each type of epoxy sealing paste and epoxy injection resin.

36
37 6-02.2.OPT26.GB6

38 **(April 6, 2015)**

39 **Rapid Cure Silicone Sealant**

40 Rapid cure silicone sealant shall be Dow Corning 902 RCS Joint Sealant.

41
42 The Contractor shall deliver the joint sealant to the job site in the sealant manufacturer's
43 original sealed container. Each container shall be marked with the sealant manufacturer's
44 name and lot or batch number. Each lot or batch shall be accompanied by the
45 manufacturer's Safety Data Sheet (SDS), and Manufacturer's Certificate of Compliance,
46 identifying the lot or batch number, and certifying that the materials conform to the
47 properties stated on the product data sheet.

48
49 The backer rod shall be closed cell expanded polyethylene foam as recommended by the
50 sealant manufacturer. The diameter of the backer rod shall be as recommended by the
51 sealant manufacturer for the expansion joint opening at the time of installation.

52

1 6-02.2.OPT27.GB6

2 **(April 6, 2015)**

3 **Polyester Concrete**

4 **Polyester Resin Binder**

5 The resin shall be an unsaturated isophthalic polyester-styrene co-polymer.

6
7 Prior to adding the initiator, the resin shall conform to the following requirements:

8
9

| | | | |
|----|-------------------|---|-------------|
| 10 | Viscosity: | 75 to 200 cps (20 rpm at 77F, RVT No. 1 spindle) | ASTM D 2196 |
| 11 | | | |
| 12 | Specific Gravity: | 1.05 to 1.10 at 77F | ASTM D 1475 |
| 13 | | | |
| 14 | Styrene Content: | 45% to 50% by weight of polyester styrene resin | ASTM D2369 |
| 15 | | | |

16

17 The hardened resin shall conform to the following requirements:

18

| | | | |
|----|-------------------|---|------------|
| 19 | Elongation: | 35% minimum w/ thickness 0.25" ± 0.04" | ASTM D 638 |
| 20 | | | |
| 21 | | | |
| 22 | Tensile Strength: | 2,500 psi minimum w/ thickness 0.25" ± 0.04" | ASTM D 638 |
| 23 | | | |
| 24 | | | |
| 25 | Conditioning | 18 hours/77F/50% + 5 hours/158F | ASTM D 618 |
| 26 | | | |
| 27 | Silane Coupler: | 1.0% minimum (by weight of polyester-styrene resin) | |
| 28 | | | |

29 The silane coupler shall be an organosilane ester, gammamethacryloxypropyltrimethoxysilane. The promoter/hardeners shall be compatible with suitable methyl ethyl ketone peroxide (MEKP) and cumene hydroperoxide (CHP) initiators. MEKP and CHP initiators shall be used as recommended by the manufacturer.

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34
35 Polyester resin binder will be accepted based on submittal to the Engineer of a
36 Manufacturer's Certificate of Compliance.

37
38 **High Molecular Weight Methacrylate (HMWM) Resin**

39 In addition to the viscosity and density properties, and the promoter/initiator system,
40 specified in Section 6-09.2, the HMWM resin for polyester concrete shall conform to
41 the following requirements:

42

| | | | |
|----|-----------------|---------------------|---------------------|
| 43 | Flash Point: | 180F minimum | ASTM D 3278 |
| 44 | | | |
| 45 | Tack-Free Time: | 400 minutes maximum | California Test 551 |
| 46 | | | |

47 Prior to adding initiator, the HMWM resin shall have a maximum volatile content of
48 30 percent, when tested in conformance with ASTM D 2369.

49
50 HMWM resin will be accepted based on submittal to the Engineer of a Manufacturer's
51 Certificate of Compliance.

1 **Aggregate**
2 The aggregate shall be from a WSDOT approved pit site and shall be thoroughly
3 washed and kiln dried.
4
5 The aggregate shall conform to Section 9-03.1(5)B for either 1/2-inch or 3/8-inch
6 maximum nominal aggregate size.
7
8 The combined aggregate shall have a maximum of 45 percent crushed particles.
9 Fine aggregate shall conform to Section 9-03.13.
10
11 Aggregate absorption shall not exceed 1.0 percent. The moisture content of the
12 aggregate shall not exceed one half of the aggregate absorption at the time of mixing
13 with the polyester resin binder. The aggregate temperature shall be between 45F
14 and 100F at the time of mixing.
15
16 **Sand for Abrasive Finish**
17 The sand for abrasive finish shall conform to Section 6-09.2, and the aggregate
18 moisture content requirements specified above.
19
20 6-02.2.OPT28.GB6
21 **(April 6, 2015)**
22 **Elastomeric Concrete**
23 Elastomeric concrete shall be one of the following three products:
24
25 BASF/Watson Bowman Acme Wabo Crete II
26
27 D. S. Brown Delcrete
28
29 R. J. Watson Poly-Tron
30
31 The elastomeric concrete aggregate shall be as specified, gradated, and packaged by
32 the elastomeric concrete manufacturer.
33
34 The primer shall be as recommended by the elastomeric concrete manufacturer.
35
36 The Contractor shall deliver the elastomeric concrete components to the job site in the
37 elastomeric concrete manufacturer's original sealed containers. Each container shall be
38 marked with the sealant manufacturer's name and lot or batch number. Each lot or batch
39 shall be accompanied by the manufacturer's Safety Data Sheet (SDS), and
40 Manufacturer's Certificate of Compliance, identifying the elastomeric concrete
41 manufacturer and the lot or batch number, and certifying that the materials conform to the
42 properties stated in the product data sheet.
43
44 6-02.2.OPT46.GB6
45 **Bridge Supported Utilities**
46
47 6-02.2.OPT46(A).GB6
48 (June 26, 2000)
49 Inserts shall be of the type and model specified in the Plans. Inserts shall be galvanized
50 in accordance with AASHTO M 111.
51

1 6-02.2.OPT46(B).GB6
2 (September 3, 2019)
3 Hanger rods, and associated nuts and washers, shall conform to Section 9-06.5(1), and
4 shall be galvanized in accordance with ASTM F2329.
5
6 Steel bars and plates shall conform to ASTM A 36 and shall be galvanized in accordance
7 with AASHTO M 111.
8
9 6-02.2.OPT46(C).GB6
10 (September 3, 2019)
11 Horizontal strut bolts or threaded rods, and associated nuts and washers, shall conform
12 to Section 9-06.5(1), and shall be galvanized in accordance with ASTM F2329.
13
14 Pre-formed fabric pads shall be composed of multiple layers of duck, impregnated and
15 bound with high quality oil resistant synthetic rubber, compressed into resilient pads. The
16 pre-formed fabric pads shall conform to latest edition of MIL C 882 and the following
17 requirements. The number of plies shall be as required to produce the specified
18 thickness, after compression and vulcanizing.
19
20 Pre-formed fabric pads shall have a shore A hardness of 90±5 in accordance with ASTM
21 D 2240.
22
23 Pre-formed fabric pads for bridge utility supports will be accepted based on the
24 Manufacturer's Certificate of Compliance that the material furnished conforms to these
25 specifications.
26
27 6-02.2.OPT46(D).GB6
28 (June 26, 2000)
29 Pipe rolls or pipe saddles shall be of the type and model specified in the Plans.
30
31 6-02.2.OPT46(E).GB6
32 (September 3, 2019)
33 Anchor straps shall conform to ASTM A 36 and shall be galvanized after fabrication in
34 accordance with AASHTO M 111.
35
36 Anchor bolts, and associated nuts and washers, shall conform to Section 9-06.5(4), and
37 shall be galvanized in accordance with ASTM F2329.
38
39 6-02.2.OPT48.GB6
40 **(April 30, 2001)**
41 **Bridge Drain Risers**
42 Spacer bars and riser bars for the drain riser assembly shall conform to ASTM A 36.
43
44 6-02.2.OPT58.GB6
45 **(September 8, 2020)**
46 **Core Drilled Bridge Deck Drain**
47 Bridge deck drain pipe sleeve shall be any smooth wall, non-perforated, PVC pipe of the
48 diameter and minimum wall thickness specified in the Plans.
49
50 Epoxy bonding agent shall be Type II conforming to Section 9-26.1. The grade and class
51 of the epoxy bonding agent shall be as recommended by the bonding agent manufacturer.
52

1 6-02.2.OPT60.GB6
2 **(April 6, 2015)**
3 **Seismic Retrofit Materials**
4 Components fabricated and constructed for seismic retrofit work shall conform to the
5 following requirements:
6
7 6-02.2.OPT60(B).GB6
8 (April 6, 2015)
9 Steel pipe shall conform to ASTM A 53, Grade B, Type E or S, galvanized. The pipe
10 shall be Schedule 40, except as otherwise specified in the Plans.
11
12 PVC pipe shall be any smooth wall, non-perforated, PVC pipe of the diameter and
13 minimum wall thickness or Schedule specified in the Plans.
14
15 6-02.2.OPT60(C).GB6
16 (~~September 8, 2020~~ **November 20, 2023**)
17 Steel bars, plates and shapes shall conform to ASTM ~~A-36~~ **A36** except that structural
18 shapes may conform to ASTM ~~A-992~~ **A992**.
19
20 Epoxy bonding agent, where shown in the Plans for bonding steel components to
21 concrete, shall be Type II as specified in Section 9-26.1. The grade and class of
22 epoxy bonding agent shall be as recommended by the bonding agent manufacturer.
23
24 All steel components and assemblies for seismic restrainers, except as otherwise
25 specified, shall be galvanized after fabrication in accordance with AASHTO M 111.
26
27 Bolts, nuts, and washers shall conform to Section 9-06.5(3), and shall be galvanized
28 after fabrication in accordance with ASTM F2329.
29
30 Resin bonded anchors shall conform to ~~Section~~ **Sections** 6-02.2 as supplemented in
31 ~~these Special Provisions~~ **3(18)A and 9-06.4**. Additionally, the threaded anchor rods
32 for seismic retrofit elements shall conform to either ASTM ~~A-193~~ **A193** Grade B7 or
33 ASTM ~~F-1554~~ **F1554** Grade 105, and shall conform to the appropriate supplemental
34 requirements for grade and manufacturer's identification, and charpy impact testing
35 (15-foot-pounds minimum at 40F). Results of the charpy impact testing for the
36 production lot(s) including the anchor rods furnished for seismic retrofit components
37 and assemblies shall be submitted to the Engineer along with the Manufacturer's
38 Certificate of Compliance.
39
40 6-02.2.OPT60(D).GB6
41 (September 8, 2020)
42 High-strength steel rods for longitudinal seismic restrainer assemblies shall conform
43 to ASTM F 1554 Grade 105, including Supplemental Requirements S2, S3, and S5.
44 Nuts, and couplers if required, shall conform to ASTM A 563 Grade DH. Washers
45 shall conform to ASTM F 436.
46
47 High-strength steel rods and associated couplers, nuts and washers shall be
48 galvanized after fabrication in accordance with ASTM F2329.
49

1 6-02.2.OPT60(F).GB6
2 **(September 8, 2020)**
3 **Column Jacketing Materials**
4 All metal components shall conform to ASTM A 36, and shall be painted in
5 accordance with Section 6-07.3(9), and Section 6-03.3(30) as supplemented in these
6 Special Provisions. Metal surfaces in contact with grout shall be considered in
7 contact with concrete for the purposes of Section 6-07.3(9).
8
9 Grout shall conform to the requirements of Section 9-20.3(4) and the following
10 requirements:
11
12 The grout shall be a pumpable mix capable of filling the annulus between the
13 concrete column and steel column jacket assembly. The grout shall be free of
14 lumps and undispersed cement, and shall not show any visible signs of
15 separation of water and cement during pumping operations.
16
17 Aggregate conforming to Section 9-03.1(5) with a maximum aggregate size of 3/8
18 inch may be used to extend the grout. Mortar shall conform to Section 9-20.4(2).
19
20 Epoxy bonding agent for filling grout voids shall be Type II, as specified in Section 9-
21 26.1. The grade and class of epoxy bonding agent shall be as recommended by the
22 bonding agent manufacturer.
23
24 6-02.2.OPT61.GB6
25 **(September 8, 2020)**
26 **Precast Prestressed Concrete Stay-In-Place Panels**
27 Concrete shall have an initial strength at strand release of at least 5,000 psi, and a 28
28 day minimum compressive strength as specified in the Plans.
29
30 Prestressing reinforcement strand shall conform to Section 9-07.10, except that the
31 diameter shall be as specified in the Plans. The strand shall be provided by a
32 manufacturer and facility capable of producing 1/2" diameter strand with an average bond
33 pull-out force of 16.0 kips when tested in accordance with ASTM A1081. Test reports for
34 ASTM A1081 shall be submitted with the Manufacturer's Certificate of Compliance, and
35 testing shall have been performed on strand produced within the previous 36 months.
36
37 Grout shall conform to Section 9-20.3(2).
38
39 Leveling bolts shall conform to Section 9-06.5(1), and shall be galvanized after fabrication
40 in accordance with AASHTO M 232.
41
42 Backer rod shall be closed cell expanded polyethylene foam.
43
44 6-02.3.GR6
45 **Construction Requirements**
46
47 6-02.3.INST1.GR6
48 Section 6-02.3 is supplemented with the following:
49

1 6-02.3.OPT1.GB6

2 **(September 7, 2021)**

3 ***Epoxy Crack Sealing***

4 The materials being used may be dermatetic. The Contractor's contact with and use of
5 the materials shall conform to the requirements specified in the SDS for each material,
6 and all personnel shall be provided with appropriate clothing and protective garments.

7
8 All materials shall be stored and protected from ignition sources as recommended by the
9 material manufacturer.

10
11 The cracks shall be cleaned of efflorescence, deteriorated concrete and other surface
12 debris, by vacuuming, flushing, routing, sawing or other means as required.

13
14 Entry ports shall consist of tubes, tees or other valve devices as recommended by the
15 resin manufacturer. The ports shall be placed at intervals along each crack in accordance
16 with the manufacturer's written instructions for the resin being used. The holes for the
17 entry ports shall be drilled with a hollow bit with an attached vacuum chuck to prevent
18 concrete dust from becoming embedded in the crack.

19
20 The exposed crack surfaces and the areas around the entry ports shall be sealed with
21 epoxy sealing paste and cured in accordance with the resin manufacturer's written
22 instructions, to attain a seal capable of withstanding the applied injection pressures.

23
24 The Contractor shall furnish the services of a factory trained technical representative to
25 perform the epoxy crack sealing injection.

26
27 Injection shall be accomplished with a pressure or injection machine compatible with the
28 resin selected for use and shall begin at the lowest port and continue until there is
29 evidence of the resin at the entry port directly above and adjacent to the port being
30 pumped. When material travel is indicated, the nozzle shall be moved to the port that
31 shows resin. The previously pumped port shall be sealed. Injection shall continue until
32 the crack is completely filled. On wide cracks where resin travel between ports will be
33 rapid, two or more ports may be pumped simultaneously. On exceptionally large cracks,
34 a formulation (dependent upon crack width, ambient temperature, modulus requirements
35 and other variables) of epoxy resin and fine sands shall be used as recommended by the
36 resin manufacturer.

37
38 After all ports have been pumped and the crack is full, the epoxy resin shall be cured
39 without disturbance in accordance with the resin manufacturer's written instructions as
40 necessary to ensure development of the full bond capacity of the material.

41
42 After the epoxy has cured completely, the epoxy sealing paste and port stems shall be
43 ground flush with the original surface of the concrete.

44
45 At the discretion of the Engineer, cores shall be taken after the repair is completed to
46 confirm penetration and bonding. The number and locations of such cores will be as
47 specified by the Engineer. These cores shall be submitted to the Engineer for testing in
48 the State Materials Laboratory. The Contractor shall submit a Working Drawing for repair
49 of core holes in accordance with Section 6-01.16.

50

1 6-02.3.OPT2.GB6
2 **Bridge Supported Utilities**
3
4 6-02.3.OPT2(A).GB6
5 (August 3, 2015)
6 The Contractor shall furnish and install inserts for the bridge utility supports as shown in
7 the Plans. The Contractor shall verify that the hanger rods freely hang plumb in their
8 inserts, and shall make adjustments to the inserts as necessary and as accepted by the
9 Engineer prior to utility installation.
10
11 6-02.3.OPT2(B).GB6
12 (June 26, 2000)
13 The Contractor shall furnish and install the bridge utility supports, and the utility pipe or
14 conduit pipe, as shown in the Plans.
15
16 6-02.3.OPT2(C).FB6
17 (June 26, 2000)
18 The Utility Company will furnish material for and install *** \$\$1\$\$ **. The Contractor shall
19 install *** \$\$2\$\$ ** furnished by the *** \$\$3\$\$ **.
20
21 The Contractor shall notify the utility company a sufficient time in advance and shall
22 cooperate with the utility company in order that the utility furnished items may be installed
23 in the structure.
24
25 6-02.3.OPT8.GB6
26 **Seismic Retrofit**
27
28 6-02.3.OPT8(B).GB6
29 **(April 6, 2015)**
30 **Seismic Retrofit Demolition Plan**
31 The Contractor shall submit Type 2 Working Drawings showing the method of
32 removing the specified portions of the existing bridges required by the seismic retrofit
33 work. The Working Drawings shall show the sequence of demolition and removal,
34 the type of equipment to be used in all demolition and removal operations, and details
35 of the methods and equipment used for containment, collection, and disposal of all
36 debris. The Working Drawings shall show all stages of demolition.
37
38 6-02.3.OPT8(C).GB6
39 **(April 6, 2015)**
40 **Column Jacket Installation Plan**
41 The Contractor shall submit Type 2E Working Drawings describing the column jacket
42 installation plan. The submittal shall include at a minimum, the following:
43
44 1. Step by step installation procedure.
45
46 2. The methods of cleaning and preparing the existing column surfaces prior
47 to installing the column jacket assembly.
48
49 3. The methods of containing, collecting, and disposing of the debris
50 generated by cleaning and preparing the existing column surfaces.
51

- 1 4. The methods of containing, collecting, and disposing of all excess grout
2 generated during the grouting process.
3
- 4 5. The locations of grout injection valves, and the methods and materials used
5 to remove them following use, and to fill the void following removal.
6
- 7 6. The method of sealing the gap between the existing column surface and
8 the column jacket assembly prior to grouting.
9
- 10 7. The method and materials used to clamp and brace the column jacket
11 assembly in place during field assembly and grouting.
12
- 13 8. The proposed grout mix with manufacturer's data sheets.
14
- 15 9. The equipment used to pump the grout and monitor the grout pressure and
16 the quantity of grout injected.
17
- 18 10. The method, materials, and equipment used to fill grout voids within the
19 column jacket assembly, and to finish the exposed surface flush after repair.
20
- 21 11. The method, materials, and equipment used to field repair all damaged
22 primer coatings, and to field apply the intermediate and finish coats of paint.
23

24 6-02.3.OPT8(D).GB6

25 **(April 6, 2015)**

26 **Column Jacket Shop Drawings**

27 The Contractor shall submit column jacket shop drawings as Type 2 Working
28 Drawings. The shop drawings shall include, at a minimum, the following:
29

- 30 1. Plan, elevation, and sections of the jacket system and all components, with
31 all dimensions and tolerances.
32
- 33 2. Field measurements of the existing column(s).
34
- 35 3. All material designations.
36
- 37 4. Location of horizontal and vertical splices.
38
- 39 5. Location of spacers and method of attachment.
40
- 41 6. Welds and welding procedures.
42

43 6-02.3.OPT8(E).GB6

44 **(September 8, 2020)**

45 **Field Measuring Existing Bridge Columns**

46 The Contractor shall field measure the dimensions (diameter, or width and thickness,
47 as appropriate for column shape) of the existing bridge columns receiving column
48 jackets prior to preparing column jacket assembly shop drawings. The following
49 locations shall be field measured as a minimum for each column:
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- 51 1. Top of footing or footing pedestal.
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2. Bottom of crossbeam.
3. Mid-height of column.

The Contractor shall field measure the column height from top of footing or footing pedestal to bottom of crossbeam for each column.

The Contractor shall tabulate these field measured dimensions and submit them to the Engineer along with the column jacket assembly shop drawings.

Where site conditions, such as traffic control requirements or deeply buried foundations, create difficulties for field measuring buried portions of the bridge columns, the Contractor may request a waiver of the pre-fabrication field measuring requirements for specific columns. If the Engineer concurs with the Contractor's request for a waiver of the pre-fabrication field measuring requirement for specific columns, and for columns identified in the Special Provisions as already designated with a waiver, the Contractor shall:

1. Field measure the diameter, or width and thickness, as appropriate for the column shape, of the above ground portion of the column receiving the waiver.
2. Fabricate the column jacket to a length exceeding the column height (2'-0" or ten percent of the estimated column height, whichever is greater) based on the original plans and other available site data. The shop drawing details shall specify the column jacket fabrication length, and the assumed column height based on the available information.
3. Submit the method, template, and equipment used to field cut the top of the column jacket assembly at installation.

The Contractor shall submit the request for a waiver of the pre-fabrication field measuring requirement prior to preparing column jacket assembly shop drawings, and shall not submit shop drawings until receiving the Engineer's confirmation of the waiver request and completing all field measurements still required.

6-02.3.OPT8(F).FB6
(April 6, 2015)

The column(s) at the Bridge and Pier location(s) specified below has (have) received a waiver of the pre-fabrication field measuring requirement, and no separate waiver request from the Contractor is required for this (these) specific column(s):

*** \$\$1\$\$ ***

However, the Contractor shall conform to all other requirements specified above for columns receiving a waiver of the pre-fabrication field measuring requirement.

- 1 6-02.3.OPT8(G).FB6
2 **(April 6, 2015)**
3 **Field Measuring for Seismic Retrofit Components**
4 The Contractor shall field measure dimensions of existing items and members of
5 Bridge No(s). *** \$\$1\$\$ *** prior to preparing shop drawings for fabricated steel
6 components and assemblies.
7
8 The Contractor shall field measure dimensions of the following items:
9
10 *** \$\$2\$\$ ***
11
12 The Contractor shall tabulate these field measured dimensions and submit them to
13 the Engineer along with the shop drawing submittals for the corresponding steel
14 components and assemblies.
15
- 16 6-02.3.OPT8(H).GB6
17 **(April 6, 2015)**
18 **Removing Portions of Existing Concrete**
19 The Contractor shall remove portions of existing concrete required by the seismic
20 retrofit work in accordance with Section 2-02.3(2)A2 and as shown in the Plans.
21
22 The Contractor shall dispose of all materials removed by the demolition operations
23 in accordance with Section 2-02.3.
24
25 The Contractor shall roughen, clean, and saturate the existing concrete surfaces
26 bonding to the fresh concrete in accordance with Section 6-02.3(12).
27
- 28 6-02.3.OPT8(J).GB6
29 **(April 6, 2015)**
30 **Drilling Holes and Setting Steel Reinforcing Bars, and Placing Concrete**
31 The Contractor shall drill holes for, and set, steel reinforcing bars into the existing
32 concrete as shown in the Plans in accordance with Section 6-02.3(24)C as
33 supplemented in these Special Provisions.
34
- 35 6-02.3.OPT8(K).GB6
36 **(April 6, 2015)**
37 **Installing and Tensioning High-Strength Steel Bar Reinforcement**
38 The Contractor shall furnish and install high-strength steel bars as shown in the
39 Plans. The hole through existing concrete shall be core drilled. The concrete surface
40 in contact with the high-strength steel bar bearing plate shall be coated with epoxy
41 bonding agent just prior to stressing the high-strength steel bar. After stressing, the
42 high-strength steel bar shall be grouted in accordance with Section 6-02.3(26)H.
43
- 44 6-02.3.OPT8(L).GB6
45 **(~~April 6, 2015~~ November 20, 2023)**
46 **Longitudinal Seismic Restrainers**
47 The Contractor shall submit Type 1 Working Drawings consisting of shop drawings
48 of the steel components of the longitudinal seismic restrainer assemblies in
49 accordance with Section 6-03.3(7).
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The Contractor shall core drill holes through the pier diaphragm for the high-strength steel bar as shown in the Plans. The Contractor shall set the PVC pipe in place with epoxy bonding agent as shown in the Plans.

Holes for the resin bonded anchors for the longitudinal seismic restrainer anchorages shall be located and drilled in accordance with Section 6-02.3(18)-~~as supplemented in these Special Provisions~~^A, and as follows:

1. The bottom layer of steel reinforcing bars in the slab in the vicinity of the longitudinal seismic restrainer anchorage as shown in the Plans shall be located and marked on the concrete surface.
2. Using the anchorage assembly as a template, the Contractor shall align and slightly shift the anchorage assembly as required so that the holes avoid the existing steel reinforcing bars.
3. The Contractor shall drill holes for the resin bonded anchors with the anchorage assembly in position as a template.
4. If, after shifting the anchorage assembly, conflicts still exist between hole locations and existing steel reinforcing bars, the Contractor may, with the Engineer's approval, core drill holes at the conflict locations.

The surface of the concrete in contact with the anchorage assembly shall be coated with Type II epoxy bonding agent conforming to Section 9-26.2, with the grade and class as recommended by the epoxy bonding agent manufacturer. The longitudinal seismic restrainer anchorage assembly shall be set in place within the set time specified in the manufacturer's data sheet for the epoxy bonding agent.

All longitudinal seismic restrainers at a pier shall be installed so that the free end (the end with the gap as shown in the Plans) shall be on the same side of the pier.

6-02.3.OPT8(M).GB6
(September 8, 2020)
Column Jacketing

The steel column jacket assembly for each column shown in the Plans shall be fabricated in accordance with the shop drawings.

The Contractor shall excavate and shore as required to expose the column surface below ground to the top of the existing footing or footing pedestal. Dirt, debris and any surface attachments shall be removed from the surface of the column in accordance with the Contractor's column jacket installation plan.

For specific columns for which the Engineer confirms a waiver of the pre-fabrication field measuring of the column height dimension, the Contractor shall field measure the column height upon completion of the excavation. The Contractor shall field cut the top of the column jacket assembly using the method, template, and equipment as specified in the pre-fabrication field measuring waiver request submittal.

The Contractor shall position the steel column jacket around the existing column using spacers to center the assembly. The spacers may be welded to the inside of the jacket and, if used, shall be placed and attached as shown in the shop drawings.

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Field welded complete penetration groove welds of the column jacket assemblies shall be inspected in accordance with Section 6-03.3(25)A. Field weld inspection shall be performed by a certified welding inspector (CWI). The Contractor shall not begin welding until receiving acceptance of the joint fit-up from the CWI. The CWI shall randomly monitor the intermediate stages of welding. The CWI's daily reports and nondestructive testing reports indicating compliance with contract requirements shall be submitted as a Type 1 Working Drawing upon completion of the last column jacket in the Contract.

The Contractor shall install external grout injection valves for use in filling the cavity with grout. The valves shall be spaced such that the grout will uniformly fill the gap between the jacket assembly and the column surface. The grout pump shall be equipped with a pressure gauge to monitor grout pressures. The grouting equipment shall be sized to enable the grout to be pumped in one continuous operation. The mixer shall be capable of continuously agitating the grout.

The production grout compressive strength shall be measured using four inch diameter by eight inch cylinders, cast and cured in accordance with Section 6-02.3(5)H. The cylinders shall attain a 7-day minimum compressive strength of 4,000 psi.

The gap between the column jacket assembly and the existing column surface at the base of the assembly shall be sealed in accordance with the column jacket installation plan.

The grouting operation shall conform to Section 6-02.3(6)A.

The grouting operation shall begin from the base of the assembly and from the base of each successive lift. The Contractor shall pump grout into the assembly while maintaining a uniform level grout head around the column.

The Contractor shall limit the height of each lift of grout to minimize undulations and displacements of the surface of the column jacket assembly during grouting. For column jacket assemblies of circular (constant radius) cross section, the height of each lift of grout shall be limited to 20 feet maximum, except as otherwise accepted by the Engineer. For column jacket assemblies with cross sections of all other shapes, the height of each lift of grout shall be limited to 8 feet maximum, except as otherwise accepted by the Engineer.

The Contractor may restrain the column jacket assembly within the specified tolerances during grouting operations by using a bracing system in accordance with the column jacket installation plan. Except as otherwise shown in the Plans, restraints for the bracing system shall not pass through the column. Except when a bracing system is used, placement of the next grout lift shall not begin until the previous grout lift has hardened.

The Contractor shall contain and collect all grout outside the column jacket assembly.

When the assembly is completely grouted to the top, the Contractor shall place mortar conforming to Section 9-20.4(2) over the top of the grout at the top of the assembly, and shall slope the mortar to drain.

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All clamps, valves, injection ports, lifting ears, and other attachments shall be removed not less than 24 hours after completing grouting operations at the column. The Contractor shall fill all voids with mortar conforming to Section 9-20.4(2), and shall finish them flush with the exterior surface of the column jacket assembly. The Contractor shall not remove the attachments by flame cutting.

Seven calendar days after completing the grouting of a column jacket assembly, the Engineer will inspect the assembly for voids between the steel casing and the grout. The Contractor shall completely fill all voids detected by the Engineer by injecting epoxy bonding agent into the lowest point of each void and venting at the highest point. The exposed epoxy bonding agent shall be finished flush with the exterior surface of the column jacket assembly.

After inspection for voids and epoxy injection of voids is complete, steel surfaces with damaged primer coat shall be repaired with field primer in accordance with Section 6-07.3(9). The primer repair shall be followed by application of the intermediate and finish field coats of paint to all exposed steel surfaces in accordance with Section 6-07.3(9) and Section 6-03.3(30) as supplemented in these Special Provisions.

Backfill shall not be placed against the column jacket assembly until the finish coat of paint is completely cured, based on the cure duration recommended by the paint manufacturer. The Contractor shall fill and compact the excavation with native backfill, except as otherwise specified in the Plans, in accordance with Section 2-09.3(1)E.

6-02.3.OPT9.GB6

(January 7, 2019)
Polyester Concrete

Manufacturer’s Technical Representative

The Contractor shall have the services of a qualified polyester concrete manufacturer’s technical representative physically present at the job site. The manufacturer’s technical representative shall assist the Contractor in training the Contractor’s personnel and providing technical assistance in preparing the header blockout surface, applying primer, and mixing, placing, and curing the polyester concrete.

Mix Design

Polyester concrete shall be composed of the following three components – polyester resin binder, high molecular weight methacrylate (HMWM) resin, and aggregate, in accordance with Section 6-02.2 as supplemented in these Special Provisions.

The Contractor shall prepare and submit a Type 1 Working Drawing consisting of the polyester concrete design mix and mixing procedure. The mix design shall include a recommended initiator percentage for the expected application temperature, and the recommended amount of polyester resin binder as a percentage of the dry weight of aggregate. The amount of peroxide initiator used shall result in a polyester concrete set time between 30 and 120 minutes during placement as determined by California Test 551, Part 2, “Method of Test For Determination of Set Time of Concrete Overlay and Patching Materials”, by Gilmore Needles. Accelerators or inhibitors may be required as recommended by the polyester resin binder supplier.

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Delivery and Storage of Materials

All materials shall be delivered in their original containers bearing the manufacturer's label, specifying date of manufacturing, batch number, trade name brand, and quantity. Each shipment of polyester resin binder and HMWM resin shall be accompanied by a Safety Data Sheet (SDS).

The material shall be stored in accordance with the manufacturer's recommendations.

Sufficient material to perform the entire polyester concrete application shall be in storage at the site prior to any field preparation.

Equipment and Containment

The Contractor shall submit a Type 1 Working Drawing consisting of all equipment for cleaning the concrete and steel surfaces, and mixing and applying the polyester concrete.

The HMWM resin, and abrasive blasting materials, shall be contained and restricted to the surface receiving the polyester concrete only, and shall not escape to the surrounding environment. The Contractor shall submit a Type 1 Working Drawing consisting of the method and materials used to collect and contain the HMWM resin, and abrasive blasting materials.

Surface Preparation

The concrete and steel surfaces shall be prepared by removing all material which may act as a bond breaker between the surface and the polyester concrete. Surface cleaning shall be by abrasive blasting. Precautions shall be taken to ensure that no dust or debris leaves the bridge deck and that all traffic is protected from rebound and dust.

If the concrete or steel surfaces become contaminated, the contaminated areas shall be recleaned by abrasive blasting.

Application of Prime Coat

Application of the HMWM prime coat and the polyester concrete shall not begin if rain is forecast within 12-hours of completion of the Work. The area receiving the prime coat shall be dry and had no rain within the past 12 hours. Immediately prior to applying the prime coat, the surfaces shall be cleaned to remove accumulated dust and any other loose material.

The concrete bridge deck surface shall be between 50F and 85F when applying the prime coat.

The Contractor shall apply one coat of promoted/initiated wax-free HMWM resin to the prepared concrete and steel surfaces immediately before placing the polymer concrete. The promoted/initiated resin shall be worked into the concrete in a manner to assure complete coverage of the area receiving polyester concrete. A one pint sample of each batch of promoted/initiated HMWM resin shall be retained and submitted to the Engineer at the time of primer application.

The prime coat shall cure for 30 minutes minimum before beginning placement of the polyester concrete. Placement of the polymer concrete shall not proceed until the

1 Engineer verifies that the HMWM resin was properly promoted and initiated, as
2 evidenced by the HMWM batch sample.
3
4 If the primed surface becomes contaminated, the contaminated area shall be cleaned
5 by abrasive blasting and reprimed.
6
7 **Mixing Equipment for Polyester Concrete**
8 Polyester concrete shall be mixed in mechanically operated mixers in accordance
9 with the mix design as approved by the Engineer. The mixer size shall be limited to
10 a nine cubic yard maximum capacity, unless otherwise approved by the Engineer.
11
12 The aggregate and resin volumes shall be recorded for each batch along with the
13 date of each recording. A printout of the recordings shall be furnished to the Engineer
14 at the end of each work shift.
15
16 The Contractor shall prevent any cleaning chemicals from reaching the polyester mix
17 during the mixing operations.
18
19 **Mixing Components**
20 The polyester resin binder in the polyester modified concrete shall be approximately
21 12 percent by weight of the dry aggregate. The Contractor shall specify the exact
22 percentage in the mix design Working Drawing submittal.
23
24 The polyester resin binder shall be initiated and thoroughly blended just prior to
25 mixing the aggregate and binder. The polyester concrete shall be thoroughly mixed
26 prior to placing.
27
28 **Polyester Concrete Placement**
29 The polyester concrete shall be placed within two hours of placing the prime coat.
30
31 Polyester concrete shall be placed within 15 minutes following initiation. Polyester
32 concrete that is not placed within this time shall be discarded.
33
34 The surface temperature of the area receiving the polyester concrete shall be the
35 same as specified above for the HMWM prime coat.
36
37 The polyester concrete shall be consolidated in accordance with the manufacturer's
38 recommendations.
39
40 **Finished Polyester Concrete Surface**
41 The finished surface of the polyester concrete shall be smooth and uniform as to
42 crown and grade in accordance with Section 6-02.3(10)D3.
43
44 Finishing equipment used shall strike off the polyester concrete to the established
45 grade and cross section.
46
47 The polyester concrete shall receive an abrasive sand finish. The sand finish shall
48 be applied by hand immediately after strike-off and before gelling occurs. Sand shall
49 be broadcast onto the surface to affect a uniform coverage of a minimum of 0.8
50 pounds per square yard.
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Curing

The polyester concrete shall be cured in accordance with the manufacturer's recommendations. The Contractor shall measure the compressive strength of the cured polyester concrete with a rebound hammer in accordance with ASTM C 805. The readings of the rebound hammer used shall be correlated to the compressive strength of the polyester concrete product in accordance with ASTM C 805 Section 5.4, and the Contractor shall submit a Type 1 Working Drawing of this correlation.

Traffic and equipment shall not be permitted on the polyester concrete until it achieves a compressive strength of 2500 psi based on the rebound hammer readings and the correlation chart for the rebound hammer used.

6-02.3.OPT10.GB6

(January 7, 2019)

Elastomeric Concrete

Elastomeric concrete shall be composed of the following three components – two-component polyurethane resin binder, and aggregate, in accordance with Section 6-02.2 as supplemented in these Special Provisions.

Manufacturer's Technical Representative

The Contractor shall have the services of a qualified elastomeric concrete manufacturer's technical representative physically present at the job site. The manufacturer's technical representative shall assist the Contractor in training the Contractor's personnel and providing technical assistance in preparing the header blockout surface, applying primer, and mixing, placing, and curing the elastomeric concrete.

Delivery and Storage of Materials

All materials shall be delivered in their original containers bearing the manufacturer's label, specifying date of manufacturing, batch number, trade name brand, and quantity. Each shipment of polyurethane resin binder shall be accompanied by a Safety Data Sheet (SDS).

The materials shall be stored in accordance with the manufacturer's recommendations.

Sufficient material to perform the entire elastomeric concrete application shall be in storage at the site prior to any field preparation.

Equipment and Containment

The Contractor shall submit a Type 1 Working Drawing consisting of all equipment for cleaning the concrete and steel surfaces, and mixing and applying the elastomeric concrete.

The abrasive blasting materials shall be contained and restricted to the surface receiving the elastomeric concrete only and shall not escape to the surrounding environment. The Contractor shall submit a Type 1 Working Drawing consisting of the method and materials used to collect and contain the abrasive blasting materials.

Surface Preparation

The concrete and steel surfaces shall be prepared by removing all material which may act as a bond breaker between the surface and the elastomeric concrete,

1 including the removal of all loose, deteriorated, or otherwise unsound concrete. Steel
2 surfaces shall be cleaned and prepared to an SSPC SP-10 surface condition.
3 Surface cleaning shall be by abrasive blasting.
4
5 Precautions shall be taken to ensure that no dust or debris leaves the bridge deck
6 and that all traffic is protected from rebound and dust.
7
8 If the concrete or steel surfaces become contaminated, the contaminated areas shall
9 be recleaned by abrasive blasting.
10
11 Freshly placed concrete shall be cured for a minimum of 14 calendar days before
12 application of primer and elastomeric concrete.
13
14 **Application of Prime Coat**
15 Application of the prime coat and the elastomeric concrete shall not begin if rain is
16 forecast within 12-hours of completion of the Work. The area receiving the prime coat
17 shall be dry and had no rain within the past 12 hours. Immediately prior to applying
18 the prime coat, the surfaces shall be cleaned to remove accumulated dust and any
19 other loose material.
20
21 The concrete bridge deck surface shall be between 50F and 85F when applying the
22 prime coat.
23
24 The Contractor shall apply primer in accordance with the elastomeric concrete
25 manufacturer's recommendations and shall limit the extent of primer application to
26 that surface area that can be covered by a layer of elastomeric concrete before
27 primer cure.
28
29 If the primed surface becomes contaminated, the contaminated area shall be cleaned
30 by abrasive blasting and reprimed.
31
32 **Mixing Components**
33 The Contractor shall mix the elastomeric concrete components and the resultant
34 mixture in accordance with the equipment and procedure recommended by the
35 elastomeric concrete manufacturer.
36
37 **Elastomeric Concrete Placement**
38 The elastomeric concrete shall be placed on the liquid prime coat within the time
39 limits specified by the manufacturer. Elastomeric concrete shall be placed in layers
40 not to exceed the maximum depth recommended by the elastomeric concrete
41 manufacturer. At locations deep enough to require placement of multiple layers of
42 elastomeric concrete, each layer shall be cured, and the top of the previous layer
43 roughened, as recommended by the elastomeric concrete manufacturer before
44 placement of the next layer.
45
46 Elastomeric concrete shall be placed within five minutes of initiation.
47
48 The surface temperature of the area receiving the elastomeric concrete shall be the
49 same as specified above for the prime coat.
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Finished Elastomeric Concrete Surface

The finished surface of the elastomeric concrete shall be smooth and uniform as to crown and grade in accordance with Section 6-02.3(10)D3.

Finishing tools or equipment used shall strike off the elastomeric concrete to the established grade and cross section.

The finished surface of elastomeric concrete shall receive an abrasive sand finish. The sand finish shall be applied by hand immediately after strike-off and before gelling occurs. Sand shall be broadcast onto the surface to affect a uniform coverage of a minimum of 0.8 pounds per square yard.

Curing

The elastomeric concrete shall be cured in accordance with the manufacturer's recommendations. The Contractor shall measure the compressive strength of the cured elastomeric concrete with a rebound hammer in accordance with ASTM C805. The readings of the rebound hammer used shall be correlated to the compressive strength of the elastomeric concrete product in accordance with ASTM C805 Section 5.4, and the Contractor shall submit a Type 1 Working Drawing of this correlation.

Traffic and equipment shall not be permitted on the elastomeric concrete until it achieves a compressive strength of 2500 psi based on the rebound hammer readings and the correlation chart for the rebound hammer used.

6-02.3(2).GR6

Proportioning Materials

6-02.3(2).INST1.GR6

Section 6-02.3(2) is supplemented with the following:

6-02.3(2).OPT1.GB6

(September 8, 2020)

Expansion Joint Header Concrete

Expansion joint header concrete shall have a minimum compressive strength of 4,000 psi at 28 days. Unless the Plans or Special Provisions specify a different strength, the concrete shall achieve a minimum compressive strength of 2,500 psi based on early break cylinders prior to allowing traffic to pass across the expansion joint.

Type III cement conforming to Section 9-01.2(1) may be used.

The nominal maximum size aggregate shall be 1-1/2 inch.

Section 6-02.3(3) notwithstanding, non-chloride accelerating admixtures conforming to the following specifications may be used:

| Admixture | Specifications |
|-----------------------------|-----------------------|
| Accelerating | Section 9-23.6(4) |
| Water Reducing/Accelerating | Section 9-23.6(6) |

1 6-02.3(5).GR6

2 **Acceptance of Concrete**

3
4 6-02.3(5)G.GR6

5 **Sampling and Testing for Temperature, Consistency, and Air Content**

6
7 6-02.3(5)G.INST1.GR6

8 The second paragraph of Section 6-02.3(5)G is revised to read:

9
10 6-02.3(5)G.OPT1.2025.GR6

11 (November 20, 2023)

12 Sampling and testing will be performed before concrete placement from the first
13 load and then randomly performed from one load for every 100 cubic yards.
14 Concrete shall not be placed until all tests have been completed by the Engineer,
15 and the results indicate that the concrete is within acceptable limits. If at any
16 time the concrete is not within acceptable limits, sampling and testing will
17 continue before concrete placement for each load until two successive loads
18 meet all of the applicable acceptance requirements. After two successive tests
19 indicate that the concrete is within specified limits, the testing frequency may
20 decrease to one for every 100 cubic yards. Sampling shall be performed in
21 accordance with FOP for WAQTC TM 2 and random samples shall be selected
22 in accordance with WSDOT T 716. After the first acceptable load of concrete, up
23 to ½ cubic yard may be placed from subsequent loads to be tested prior to
24 testing for acceptance.

25
26 6-02.3(6).GR6

27 **Placing Concrete**

28
29 6-02.3(6)B.GR6

30 **Placing Concrete in Foundation Seals**

31
32 6-02.3(6)B.INST1.GR6

33 Section 6-02.3(6)B is supplemented with the following:

34
35 6-02.3(6)B.OPT1.GB6

36 (June 26, 2000)

37 If, in the opinion of the Engineer, water conditions at the time of construction do
38 not require seals for footing construction, the Engineer may specify that the
39 seals be omitted. In such a case the Contractor shall lower and construct the
40 footing, as shown in the Plans, at the elevation shown in the Plans for the bottom
41 of seal. The height of the pier shaft or columns shall be adjusted accordingly.

42
43 No adjustment will be allowed in the unit contract prices for concrete, steel
44 reinforcing bar, and excavation by reason of any increase or decrease in
45 quantities involved due to the deletion of seals.

46
47 6-02.3(6)B.OPT2.GB6

48 (June 26, 2000)

49 If, in the opinion of the Engineer, water conditions at the time of construction do
50 not require seals for construction, the Engineer may specify that the seals be
51 omitted. In such a case, the Contractor shall excavate only to the bottom of
52 footing elevation and shall construct the footing as shown in the Plans.

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No adjustment will be allowed in the unit contract prices for concrete, steel reinforcing bar, and excavation by reason of any increase or decrease in quantities involved due to the deletion of seals.

6-02.3(9).GR6

Precast Concrete Panels

6-02.3(9)A.GR6

Shop Drawings

6-02.3(9)A.INST2.GR6

The list included in the third paragraph of Section 6-02.3(9)A is supplemented with the following:

6-02.3(9)A.OPT6.GB6

(September 8, 2020)

7. Construction sequence and method of forming the precast prestressed concrete stay-in-place panels.
8. Details of additional reinforcement, if any, provided at lifting and support locations.
9. Method and equipment used to support the precast prestressed concrete stay-in-place panels during storage, transporting, and erection.
10. Method used to identify the precast prestressed concrete stay-in-place panel's location for calculating its position accounting for profile grade and transverse slope, and for ensuring correct placement during erection.
11. Erection sequence, including the method of lifting the panels, placing and adjusting the panels to proper alignment and grade, and supporting the panels during leveling and grouting operations.
12. Method for forming the grout pad on the exterior face of the prestressed concrete girder flange, if an alternative method is proposed, and at the interior face of the stay-in-place panel to the dimensions detailed in the Plans.

6-02.3(9)E.GR6

Finishing

6-02.3(9)E.INST1.GR6

Section 6-02.3(9)E is supplemented with the following:

6-02.3(9)E.OPT6.GB6

(September 8, 2020)

The Contractor shall furnish a Class 2 surface finish, as specified in Section 6-02.3(14)B, on all surfaces of the precast prestressed concrete stay-in-place panels, except as otherwise noted. The top surface of all panels shall be textured using a metal tined comb. It shall leave striations in the fresh concrete ¼-inch deep by at least 1/8-inch wide, spaced at 2 to 3 times the groove width

1 apart, and oriented perpendicular to the prestressing strand. The timing and
2 method used shall produce the required texture without displacing larger
3 particles of aggregate. Areas of mortar buildup more than 1/4 inch above the top
4 surface of the panel shall be removed.
5

6 6-02.3(9)F.GR6

7 **Tolerances**

8
9 6-02.3(9)F.INST1.GR6

10 Section 6-02.3(9)F is supplemented with the following:

11
12 6-02.3(9)F.OPT1.GB6

13 (September 8, 2020)

14 The precast prestressed concrete stay-in-place panels shall not exceed the
15 following scalar tolerances:

| | | |
|----|--|------------------|
| 16 | | |
| 17 | Length (perpendicular to strands): | ± 3/16 inch |
| 18 | | |
| 19 | Width (parallel to strands): | ± 1/4 inch |
| 20 | | |
| 21 | Thickness: | + 1/4, -1/8 inch |
| 22 | | |
| 23 | Squareness (difference in diagonal lengths): | ± 1/4 inch |
| 24 | | per 5 feet, |
| 25 | | ± 1/2" max. |
| 26 | | |
| 27 | Vertical location of strand group C.G.: | ± 1/16 inch |
| 28 | | |
| 29 | Vertical location of individual strands: | ± 1/8 inch |
| 30 | | |
| 31 | Horizontal location of strands: | ± 1/4 inch |
| 32 | | |
| 33 | Strand or bar projection from ends: | ± 1/2 inch |
| 34 | | |
| 35 | Camber (either upward or downward) | ± 1/4 inch |
| 36 | at time of placement on structure: | per ten feet |
| 37 | | |

38 Precast prestressed concrete stay-in-place panels with tolerances exceeding
39 those specified above, or with hairline cracks visibly apparent radiating from the
40 strand at the end of the panel and extending more than three inches along the
41 panel will be subject to evaluation by the Engineer for possible rejection.
42

43 6-02.3(9)G.GR6

44 **Handling and Storage**

45
46 6-02.3(9)G.INST1.GR6

47 Section 6-02.3(9)G is supplemented with the following:

48
49 6-02.3(9)G.OPT6.GB6

50 (September 8, 2020)

51 Precast prestressed concrete stay-in-place panels shall be maintained in a flat
52 and level position, without any twisting, at all times. Supports shall be oriented

1 transverse to the prestressed strands, extend the full width of the panel, and be
2 located in a manner to minimize elastic and time-dependent deformation of the
3 panels.
4
5 Unloading and reloading at a site other than the bridge site will be permitted only
6 under the direct supervision of the Engineer. The panels shall not be stacked,
7 unless otherwise allowed by the Engineer. If such permission is granted, the
8 panel supports shall be in the same vertical plane and shall be of sufficient height
9 to prevent damage to the lifting bar loops. The Contractor shall have received
10 the Engineer's verification that the bottom panel of the stack is flat and level,
11 without any twisting, prior to stacking additional panels. The Contractor shall
12 not stack panels on top of adjacent girders of the structure.

13
14 6-02.3(9)I.GR6

15 **Erection**

16

17 6-02.3(9)I.INST1.GR6

18 Section 6-02.3(9)I is supplemented with the following:

19

20 6-02.3(9)I.OPT6.GB6

21 (September 8, 2020)

22 The precast prestressed concrete stay-in-place panels shall be at least 60 days
23 old at the time of placing bridge deck concrete. The Contractor shall place the
24 panels atop the prestressed girders as shown in the Plans, adjusting the leveling
25 bolts as required to match the level of adjacent panels and accommodate
26 camber.

27

28 The grout pad shall be placed after the panels have been fully adjusted for grade
29 and camber. The exposed portion of the grout pad forms that are intended to
30 be left in place permanently shall be tinted to match the color of the adjacent
31 concrete surfaces and shall be secured with an accepted adhesive or other
32 method as accepted by the Engineer.

33

34 Prior to placing the bridge deck steel reinforcing bars and concrete, the
35 Contractor shall place a backer rod at the intersection between panels as shown
36 in the Plans. All intersections between panels shall be sealed to prevent leakage
37 during concrete placement. Prior to placing the bridge deck concrete, the
38 surface of the panels shall be cleaned of all foreign materials and saturated with
39 water for a minimum of 4 hours before fresh concrete is placed.

40

41 6-02.3(10).GR6

42 ***Bridge Decks and Bridge Approach Slabs***

43

44 6-02.3(10)D.GR6

45 **Concrete Placement, Finishing, and Texturing**

46

47 6-02.3(10)D.INST1.GR6

48 Section 6-02.3(10)D is supplemented with the following:

49

- 1 6-02.3(10)D.OPT1.GB6
2 **(August 4, 2008)**
3 **Repairing Slab Left Exposed After Removing Existing Curb or Sidewalk**
4 The concrete exposed by the removal of the existing curb or sidewalk shall be
5 removed to a depth of 1-inch below finished grade or to the top of the existing
6 roadway deck steel reinforcing bars, whichever is less. The Contractor shall not
7 remove concrete below the top of the existing steel reinforcing bars. The
8 Contractor shall not damage the bond between the existing steel reinforcing bars
9 and the concrete.
10
11 After roughening, cleaning and wetting the surface in accordance with Section
12 6-02.3(12), the Contractor shall place concrete over the surface to the finish
13 grade of the adjacent concrete roadway deck using a modified Class 4000
14 concrete mix. The maximum aggregate size in the modified Class 4000
15 concrete mix shall be 3/8 inch. The finished portion of the deck shall have the
16 same texture, slope and grade as that of the existing deck.
17
18 6-02.3(10)D.OPT2.GB6
19 **(August 4, 2008)**
20 **Repairing Slab Left Exposed After Removing Existing Curb and Railbase**
21 After roughening and cleaning the concrete exposed by the removal of the
22 existing curb and railbase, that portion of the exposed surface not covered by
23 the new traffic barrier shall be coated with epoxy mortar and finished to have the
24 same texture, slope and grade as that of the existing deck.
25
26 6-02.3(10)D.OPT3.GB6
27 **(August 3, 2015)**
28 **Bridge Drain Risers**
29 The Contractor shall submit a Type 2 Working Drawing consisting of the method
30 of removing the bridge drain grate nipple extrusion, the method of grinding the
31 existing curb as necessary for bridge drain riser installation, and the method of
32 cleaning the existing drain casting surfaces in contact with the drain risers. The
33 shop drawings and weld procedures for the drain riser assemblies shall be
34 submitted in accordance with Sections 6-03.3(7) and 6-03.3(25).
35
36 The existing bridge drain grate bolt, debris from removing the nipple extrusion
37 and cleaning the drain casting contact surfaces, and all debris in the bridge drain
38 cavity, shall be disposed of in accordance with Section 2-02.3.
39
40 After cleaning the bridge drain casting contact surfaces, the Contractor shall
41 install the spacer bars and riser bars of the bridge drain riser assembly as shown
42 in the Plans.
43
44 All exposed surfaces of the spacer bars and riser bars following installation shall
45 be painted with two coats of paint conforming to Section 9-08.1(2)F. Each coat
46 shall have a minimum dry film thickness of two mils.
47
48 6-02.3(10)D.OPT3(A).GB6
49 **(August 4, 2008)**
50 A minimum of four slotted holes, each 2 inches long and 3/4 inches high, shall
51 be provided on each bridge drain riser. The slotted holes shall be located at the
52 bottom of the riser, two on the traffic side of the assembly and one each on the

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short ends of the assembly. Risers shall be installed to be flush with the proposed roadway profile and shall maintain uniform contact with the existing drain. This portion of work shall be completed prior to the installation of the membrane waterproofing.

The membrane waterproofing shall extend to the bottom of and all around the bridge drain riser, except that the Contractor shall ensure that the slotted holes of the bridge drain riser assembly remain open and unplugged by the membrane waterproofing. Water seeping under the overlay shall be allowed to drain through the slotted holes and into the bridge drains.

After all the items of work on this project have been completed, the Contractor shall clean and flush all the bridge drains.

6-02.3(10)D.OPT5.GB6
(August 3, 2015)
Plugging Existing Bridge Drain

The Contractor shall submit a Type 2 Working Drawing consisting of the method and materials used to plug the existing bridge drains specified in the Plans to be plugged. The submittal shall include the following:

1. Material used to plug the drain outlet, and method of securing the plug in position.
2. The type of concrete material used to fill the drain cavity.
3. The method used to remove the exposed drainpipe, if removal is specified in the Plans.

All cut, damaged, and exposed metal surfaces to remain, including the drain outlet plug if metal components are used, shall be painted with two coats of paint conforming to Section 9-08.1(2)F. Each coat shall have a minimum dry film thickness of two mils.

When the removal of exposed drainpipe is specified in the Plans, the Contractor shall remove the embedded anchors a minimum of one inch beneath the existing concrete surface. The void left by removal of the embedded anchors shall be filled with mortar conforming to Section 9-20.4(2). The mortar shall match the color of the existing concrete surface as near as practicable.

All materials removed from the bridge drains specified in the Plans to be plugged shall be disposed of as specified in Section 2-02.3.

6-02.3(10)D.OPT12.GB6
(April 6, 2015)
Core Drilled Bridge Deck Drain

The Contractor shall core drill drain holes through the bridge deck of the bridges and in the locations shown in the Plans. The Contractor shall grind the concrete bridge deck to provide a taper at the top of the cored hole if shown in the Plans. The Contractor shall contain, collect and dispose of the concrete cores and debris in accordance with Section 2-02.3.

1 The Contractor shall coat the surfaces of the cored holes with epoxy bonding
2 agent, and shall set a bridge deck drain pipe sleeve in place as shown in the
3 Plans. The Contractor shall ensure that the void between the cored hole surface
4 and the outside of the pipe sleeve is completely filled with epoxy bonding agent.
5 The Contractor shall take appropriate measures to prevent the epoxy bonding
6 agent from escaping from the void and shall secure the pipe sleeve in position
7 until the epoxy bonding agent is cured.

8
9 6-02.3(10)F.GR6
10 **Bridge Approach Slab Orientation and Anchors**

11
12 6-02.3(10)F.INST1.GR6
13 Section 6-02.3(10)F is supplemented with the following:

14
15 6-02.3(10)F.OPT2.GB6
16 (August 4, 2008)
17 The pavement end of the bridge approach slab shall be constructed parallel to
18 the pavement seat.

19
20 6-02.3(10)F.OPT3.FB6
21 (August 4, 2008)
22 The pavement end of the bridge approach slab shall be constructed parallel to
23 the pavement seat for bridge(s) No. *** \$\$1\$\$ **. The pavement end of the
24 bridge approach slab shall be constructed normal to the roadway center line for
25 bridge(s) No. *** \$\$2\$\$ **.

26
27 6-02.3(13).GR6
28 **Expansion Joints**

29
30 6-02.3(13).INST1.GR6
31 Section 6-02.3(13) is supplemented with the following:

32
33 6-02.3(13).OPT7.GB6
34 **Expansion Joint Modification**

35
36 6-02.3(13).OPT7(B).GB6
37 **(April 6, 2015)**
38 **Expansion Joint Demolition Plan**
39 The Contractor shall submit Type 2 Working Drawings showing the method of
40 removing the specified portions of the existing bridge expansion joints. The
41 Working Drawings shall show the sequence of demolition and removal, the type
42 of equipment to be used in all demolition and removal operations, and details of
43 the methods and equipment used for containment, collection, and disposal of all
44 debris. The Working Drawings shall show all stages of demolition.

45
46 6-02.3(13).OPT7(C).GB6
47 **(April 6, 2015)**
48 **Joint Preparation and Installation Procedure**
49 The Contractor shall submit a Type 1 Working Drawing consisting of the sealant
50 manufacturer's recommended joint preparation and installation procedure.

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6-02.3(13).OPT7(D).FB6

(April 6, 2015)

Field Measuring Existing Bridge Expansion Joints

The Contractor shall field measure the following dimensions of the existing bridge expansion joints of Bridge No(s). *** \$\$\$ **:

1. Length along the roadway surface and the horizontal and vertical surfaces of the concrete curb.
2. Opening width at both curb lines and at the centerline of the roadway surface.

The Contractor shall submit a Type 1 Working Drawing consisting of the field measured dimensions.

6-02.3(13).OPT7(E).FB6

(April 6, 2015)

Removing Portions of Existing Bridge Expansion Joints

The Contractor shall remove all concrete, expansion joint materials, overlay, dirt and debris at the bridge expansion joints of Bridge No(s). *** \$\$\$ ** within the blockout dimensions shown in the Plans.

Concrete removal shall conform to Section 2-02.3(2)A2 and the following restriction on power driven tools:

1. Jack hammers no heavier than the nominal 30 pound class.
2. Chipping hammers no heavier than the nominal 15 pound class.

No other power driven equipment shall be used to remove concrete in the vicinity of the bridge expansion joints. The power driven tools shall be operated at angles less than 45 degrees as measured from the surface of the deck to the tool.

The Contractor shall dispose of all materials removed from the bridge expansion joints in accordance with Section 2-02.3.

For polyester concrete headers, or elastomeric concrete headers, the Contractor shall clean and prepare all existing concrete surfaces bonding to the header in accordance with the **Polyester Concrete** or **Elastomeric Concrete** subsection, respectively, to Section 6-02.3 as supplemented in these Special Provisions. For concrete headers, the Contractor shall clean and prepare all existing concrete surfaces bonding to the header in accordance with Section 6-02.3(12)B.

6-02.3(13).OPT7(F).GB6

(April 6, 2015)

Drilling Holes and Setting Steel Reinforcing Bars

The Contractor shall drill holes for, and set, steel reinforcing bars into the existing concrete as shown in the Plans in accordance with Section 6-02.3(24)C as supplemented in these Special Provisions.

1 6-02.3(13).OPT7(G).GB6
2 **(April 6, 2015)**
3 **Placing Polyester Concrete or Elastomeric Concrete Headers**
4 The Contractor shall form the polyester concrete or the elastomeric concrete
5 headers in accordance with either the **Polyester Concrete** or the **Elastomeric**
6 **Concrete** subsection to Section 6-02.3 as supplemented in these Special
7 Provisions. The Contractor shall remove all forms from the bridge expansion
8 joints after casting and curing the polyester concrete or the elastomeric concrete
9 headers.

10
11 6-02.3(13).OPT7(H).GB6
12 **(September 8, 2020)**
13 **Placing Concrete Headers**
14 The Contractor shall form, cast, and cure, the concrete headers in accordance
15 with Section 6-02.3 and as shown in the Plans. Unless the Plans or Special
16 Provisions specify a different strength, the concrete headers shall have attained
17 a minimum compressive strength of 2,500 psi before the Contractor may allow
18 traffic to pass across the expansion joint.

19
20 6-02.3(13).OPT7(I).GB6
21 **(September 8, 2020)**
22 **Placing Expansion Joint Sealant**
23 The Contractor shall have the services of a qualified sealant manufacturer's
24 technical representative physically present at the job site to assist in assuring
25 the proper installation of the rapid cure silicone sealant, provide technical
26 assistance for the use of the joint sealant, train the Contractor's personnel
27 installing the joint sealant, and to observe and inspect the installation of at least
28 the first complete joint.

29
30 The joint sealant shall not be placed against concrete until at least seven days
31 after concrete placement. The joint sealant shall not be placed against polyester
32 concrete or elastomeric concrete until a time period recommended by the
33 sealant manufacturer.

34
35 The Contractor shall clean the bridge expansion joints of all forms, dirt, form oil,
36 grease, and other deleterious material. The Contractor shall clean and prepare
37 the entire joint surface receiving the joint sealant in accordance with the
38 manufacturer's joint preparation procedure, and as recommended by the
39 sealant manufacturer's technical representative, including two stage abrasive
40 blasting surface preparation and compressed air cleaning. All steel surfaces to
41 be in contact with the joint sealant shall be cleaned to an SSPC-SP10 condition.
42 The joint receiving the sealant shall be sound, clean, dry, and frost free.

43
44 After the cleaned and prepared joint has received the Engineer's acceptance for
45 joint dimensions, alignment, and preparation, the Contractor shall apply the
46 primer, as recommended by the sealant manufacturer, to all surfaces to be in
47 contact with the joint sealant. The primer shall dry and cure for the time period
48 recommended by the sealant manufacturer for the surface type.

49
50 After the primer is cured, the Contractor shall place the backer rod, and place
51 the rapid cure silicone sealant in accordance with the joint installation procedure.
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If the joint width at the time of installation is less than 1-inch or greater than three inches, the Contractor shall not proceed with the expansion joint modification until the installation procedure is revised as recommended by the sealant manufacturer's technical representative.

After installing the rapid cure silicone sealant, the Contractor shall flood the joint area with water. If leakage is detected, the bridge expansion joint system shall be repaired by the Contractor, as recommended by the sealant manufacturer.

6-02.3(13).OPT7(J).GB6

(September 8, 2020)
Placing Expansion Joint Sealant

The Contractor shall have the services of a qualified sealant manufacturer's technical representative physically present at the job site to assist in assuring the proper installation of the rapid cure silicone sealant, provide technical assistance for the use of the joint sealant, train the Contractor's personnel installing the joint sealant, and to observe and inspect the installation of at least the first complete joint.

Prior to scarifying the concrete deck for the modified concrete overlay, the Contractor shall remove all expansion joint materials and debris from the existing expansion joints, and shall dispose of these materials and debris as specified in Section 2-02.3.

Prior to placing the modified concrete overlay, the Contractor shall install a temporary form as shown in the Plans to fill the expansion joint gap. The temporary form shall preserve the expansion joint gap during the modified concrete overlay placement, and shall not damage the joint or the concrete overlay upon removal. The Contractor shall submit Type 2 Working Drawing consisting of the type of temporary form material, and the method of installation and removal.

The joint sealant shall not be placed against concrete (including concrete overlay except for polyester concrete overlay) until at least seven days after concrete placement.

After placing the modified concrete overlay and rounding the corner of the overlay at the joints with a 3/8 inch radius, the Contractor shall clean the bridge expansion joints of all temporary forms, dirt, form oil, grease, and other deleterious material. The Contractor shall clean and prepare the entire joint surface receiving the joint sealant in accordance with the manufacturer's joint preparation procedure, and as recommended by the sealant manufacturer's technical representative, including two stage abrasive blasting surface preparation and compressed air cleaning. All steel surfaces to be in contact with the joint sealant shall be cleaned to an SSPC-SP10 condition. The joint receiving the sealant shall be sound, clean, dry, and frost free.

After the cleaned and prepared joint has received the Engineer's acceptance for joint dimensions, alignment, and preparation, the Contractor shall apply the primer, as recommended by the sealant manufacturer, to all surfaces to be in contact with the joint sealant. The primer shall dry and cure for the time period recommended by the sealant manufacturer for the surface type.

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After the primer is cured, the Contractor shall place the backer rod, and place the rapid cure silicone sealant in accordance with the joint installation procedure.

If the joint width at the time of installation is less than 1-inch or greater than three inches, the Contractor shall not proceed with the expansion joint modification until the installation procedure is revised as recommended by the sealant manufacturer's technical representative and as approved by the Engineer.

After installing the rapid cure silicone sealant, the Contractor shall flood the joint area with water. If leakage is detected, the bridge expansion joint system shall be repaired by the Contractor, as recommended by the sealant manufacturer.

6-02.3(13)C.GR6

Modular Expansion Joint System

6-02.3(13)C.INST1.GR6

Section 6-02.3(13)C is supplemented with the following:

6-02.3(13)C.OPT1.FB6

**(September 8, 2020)
Acceptable Manufacturers**

The following manufacturers are known to have prequalified modular expansion joint system details by successfully completing fatigue testing in accordance with Section 6-02.3(13)C:

1. The D.S. Brown Company
P.O. Box 158
300 E. Cherry Street
North Baltimore, Ohio 45872-0158
Tel. (419) 257-3561
Fax (419) 257-2200
www.dsbrown.com

2. Watson Bowman ACME Corporation
95 Pineview Drive
Amherst, New York 14228-2166
Tel. (716) 691-7566
Fax (716) 691-9239
www.wbacorp.com

3. Mageba USA, LLC
575 Lexington Ave FI-4
New York, New York 10022-6146
Tel. (212) 644-3335
Fax (212) 644-3339
www.magebausa.com

Design Axle Loads and Impact Factors

The vertical load range for fatigue design shall be a 32.0 kip tandem. This tandem shall be taken as two 16.0 kip axles spaced four feet apart. Only one of these tandem axles must be considered in the design, unless the joint opening

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exceeds four feet. The load range shall be increased by the dynamic load allowance (Impact Factor) of 75%. Load factors shall be applied in accordance with Table 3.4.1-1 of the AASHTO LRFD Bridge Design Specifications, current edition and latest interims.

The vertical load for strength design shall be a 50.0 kip tandem. This tandem shall be taken as two 25.0 kip axles spaced four feet apart. Only one of these tandem axles must be considered in the design, unless the joint opening exceeds four feet. This load shall be increased by the dynamic load allowance (Impact Factor) of 75%. Load factors shall be applied in accordance with Table 3.4.1-1 of the AASHTO LRFD Bridge Design Specifications, current edition and latest interims.

The horizontal load range for fatigue design shall be *** \$\$1\$\$ ** percent of the amplified vertical load range (LL+IM) specified above. For modular expansion joint systems installed on vertical grades in excess of five percent, the horizontal component of the amplified vertical load range (LL+IM) specified above shall be added to this horizontal load range.

The horizontal load for strength design shall be 20 percent of the amplified vertical load (LL+IM) specified above. For modular expansion joint systems installed on vertical grades in excess of five percent, the horizontal component of the amplified vertical load (LL+IM) specified above shall be added to this horizontal load.

Fatigue Testing Laboratory

The following facilities are known to be capable of performing the fatigue testing specified in Section 6-02.3(13)C:

1. Structural Engineering Testing Laboratory (SETL)
University of Washington
Seattle, WA
SETL Director:
 Dr. Dawn Lehman: (206) 715-2108
SETL Manager
 Vince Chaijaroen: (206) 543-7433

2. Bowen Laborabory
Purdue University
West Lafayette, IN
Director of Bowen Laboratory:
 Dr. Amit Varma: (765) 496-3419

3. ATLSS Engineering Research Center
Lehigh University
Bethlehem, PA
ATLSS Engineering Research Center Director:
 Dr. Richard Sause: (610) 758-3565
ATLSS Engineering Research Center Administrative Director:
 Dr. Chad Kusco: (610) 758-5299

1 6-02.3(14).GR6
2 **Finishing Concrete Surfaces**
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4 6-02.3(14)C.GR6
5 **Pigmented Sealer for Concrete Surfaces**
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7 6-02.3(14)C.INST1.GR6
8 Section 6-02.3(14)C is supplemented with the following:
9
10 6-02.3(14)C.OPT1.GB6
11 (April 6, 2009)
12 The color of the pigmented sealer shall be Washington Gray.
13
14 6-02.3(14)C.OPT2.GB6
15 (April 6, 2009)
16 The color of the pigmented sealer shall be Mt. St. Helens Gray.
17
18 6-02.3(14)C.OPT3.GB6
19 (April 6, 2009)
20 The color of the pigmented sealer shall be Mt. Baker Gray.
21
22 6-02.3(14)C.OPT4.GB6
23 (April 6, 2009)
24 The color of the pigmented sealer shall be Cascade Green.
25
26 6-02.3(14)C.OPT5.FB6
27 (April 6, 2009)
28 The color for the following structure feature(s) shall match the specified color(s):
29
30

| | |
|-----------------------|------------------------|
| Structure and Feature | Pigmented Sealer Color |
| *** \$\$1\$\$ *** | *** \$\$2\$\$ *** |

31
32
33 6-02.3(17).GR6
34 **Falsework and Formwork**
35
36 6-02.3(17)C.GR6
37 **Falsework and Formwork at Special Locations**
38
39 6-02.3(17)C.INST1.GR6
40 Section 6-02.3(17)C is supplemented with the following:
41
42 6-02.3(17)C.OPT1.FB6
43 (October 3, 2022)
44 Falsework opening over railroad tracks shall be approved by the Railroad
45 Company in accordance with Section 1-07.28 and the Special Provisions. The
46 Contractor shall notify the Railroad Company at least *** \$\$1\$\$ *** working days
47 prior to erecting falsework over a track, and shall include the dimensions of the
48 opening and the duration of the restricted clearance in the submittal.
49
50 6-02.3(17)K.GR6
51 **Concrete Forms on Steel Spans**
52

1 6-02.3(17)K.INST1.GR6
2 The first paragraph of Section 6-02.3(17)K is revised to read as follows:
3

4 6-02.3(17)K.OPT1.GB6
5 (August 3, 2015)

6 Except as otherwise specified, concrete forms on all steel structures shall be
7 removable and shall not remain in place. Where needed, the forms shall have
8 openings for truss or girder members. Each opening shall be large enough to
9 leave at least 1-1/2 inches between the concrete and steel on all sides of the
10 steel member after the forms have been removed. Unit contract prices cover all
11 costs related to these openings.
12

13 Permanent metal forms may be used to form that portion of the concrete slab
14 inside the webs of the steel box girders, subject to the following requirements:
15

- 16 1. Metal forms shall be 18 gage minimum thickness, zinc coated, steel
17 sheet conforming to ASTM A 653 Coating Designation G 210. All
18 accessories shall conform to ASTM A 36 or Section 9-06.1 with a zinc
19 coating of 2.0 ounces per square foot.
20
- 21 2. Forms shall be designed by the Contractor to support the plastic
22 concrete, metal forms, steel reinforcing bars, and a construction live
23 load of 60 pounds per square foot. Deflection of the metal form shall
24 not exceed 1/360 of the span. Camber of the metal form shall not
25 exceed the anticipated deflection. The working unit stress shall not
26 exceed 0.725 of the specified yield strength of the metal form
27 material.
28
- 29 3. The metal forms shall provide for the full depth of the deck slab above
30 the uppermost portions of the form. Bottom transverse steel
31 reinforcing bars of the deck slab shall be at least 1 inch clear of the
32 metal forms at all points. Forms or supports shall not be welded to
33 girder flanges.
34
- 35 4. The bridge deck concrete shall be placed continuously between the
36 transverse construction joints shown in the Plans, except in an
37 emergency when the Engineer authorizes an interruption in the
38 concrete placement. In such an emergency, the Contractor shall
39 construct a transverse joint at the bottom of a flute and shall field drill
40 1/4 inch weep holes through the metal form at 12 inch centers along
41 the line of the joint.
42
- 43 5. All zinc coating on exposed metal form damaged or removed during
44 construction shall be repaired with one coat of paint conforming to
45 Section 9-08.1(2)B, two mils minimum dry film thickness.
46
- 47 6. Should the Engineer determine that inspection of the underside of the
48 hardened slab is warranted, the Contractor shall remove at least one
49 section of metal form in each span at no extra cost to the Contracting
50 Agency. If excessive honeycomb or other defects are found, the
51 Contractor shall, if required by the Engineer, remove additional form
52 sections at no additional expense to the Contracting Agency, and

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shall revise concrete placing methods as required to produce sound concrete. All unacceptable concrete shall be removed or repaired.

- 7. Complete layout, details, and a description of materials, for the permanent metal forms shall be included in the Contractor's falsework and formwork submittal as specified in Section 6-02.3(16).
- 8. No adjustment will be made to the lump sum contract price for "Bridge Deck - ____" for additional quantities of materials required because of the use of the permanent forms.

~~6-02.3(18).GR6~~
Placing Anchor Bolts

~~6-02.3(18).INST1.GR6~~
 Section 6-02.3(18) is supplemented with the following:

~~6-02.3(18).OPT1.GR6~~
(January 3, 2011)
Resin Bonded Anchors

~~The embedment depth of the anchors shall be as specified in the Plans. If the embedment depth of the anchor is not specified in the Plans then the embedment depth shall be as specified in the table of minimum and maximum torque below.~~

~~The anchors shall be installed in accordance with the resin manufacturer's written procedure.~~

~~Holes shall be drilled as specified in the Plans. Holes may be drilled with a rotary hammer drill when core drilling is not specified in the Plans. If holes are core drilled, the sides of the holes shall be roughened with a rotary hammer drill after core drilling.~~

~~Holes shall be prepared in accordance with the resin manufacturer's recommendations and shall meet the minimum requirements as specified herein. Holes drilled into concrete shall be thoroughly cleaned of debris, dust, and laitance prior to installing the threaded rod and resin bonding material. Holes shall not have any standing liquid at the time of installation of the threaded anchor rod~~

~~The anchor nuts shall be tightened to the following torques when the embedment equals or exceeds the minimum embedment specified.~~

| Anchor Diameter (inch) | Minimum Torque (ft-lbs) | Maximum Torque (ft-lbs) | Minimum Embedment (Inch) |
|----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|
| 3/8 | 12 | 18 | 3-3/8 |
| 1/2 | 22 | 35 | 4-1/2 |
| 5/8 | 55 | 80 | 5-5/8 |
| 3/4 | 106 | 140 | 6-3/4 |
| 7/8 | 165 | 190 | 7-7/8 |
| 1 | 195 | 225 | 9 |

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| 1-1/4 | 370 | 525 | 11-1/4 |
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When the anchor embedment depth is less than the minimum values specified, the anchor nuts shall be tightened to the torque values specified in the Plans, or as recommended by the resin bonded anchor system manufacturer and approved by the Engineer.

6-02.3(24).GR6

Reinforcement

6-02.3(24)C.GR6

Placing and Fastening

6-02.3(24)C.INST1.GR6

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

6-02.3(24)C.OPT1.GB6

(September 8, 2020)

Drilling Holes for, and Setting, Steel Reinforcing Bar Dowels

Where called for in the Plans, holes shall be drilled into existing concrete to the size and dimension shown in the Plans. The Contractor may use any method for drilling the holes provided the method selected does not damage the concrete and the steel reinforcing bar that is to remain. Core drilling will be required when specifically noted in the Plans.

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

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

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

6-02.3(25).GR6

Prestressed Concrete Girders

6-02.3(25)L.GR6

Handling and Storage

6-02.3(25)L2.GR6

Girder Lateral Stability and Stress Analysis

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6-02.3(25)L2.INST1.GR6

The table in Item No. 4 in the first paragraph of Section 6-02.3(25)L2 is revised to read:

6-02.3(25)L2.OPT1.2025.GR6

(November 20, 2023)

| <u>Condition</u> | <u>Stress</u> | <u>Location</u> | <u>Allowable Stress (ksi)</u> |
|--|--------------------|---|--|
| <u>Temporary Stress at Transfer and Lifting from Casting Bed</u> | <u>Tensile</u> | <u>In areas without bonded reinforcement sufficient to resist the tensile force in the concrete</u> | $0.0948\lambda\sqrt{f'_{ci}} \leq 0.2$ |
| | | <u>In areas with bonded reinforcement sufficient to resist the tensile force in the concrete</u> | $0.24\lambda\sqrt{f'_{ci}}$ |
| | <u>Compressive</u> | <u>All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered</u> | $0.7f'_{ci}$ |
| | | <u>In areas with bonded reinforcement sufficient to resist the tensile force in the concrete</u> | $0.24\lambda\sqrt{f'_{ci}}$ |
| | <u>Compressive</u> | <u>All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered</u> | $0.7f'_{ci}$ |
| <u>Final Stresses at Service Load</u> | <u>Tensile</u> | <u>Precompressed tensile zone</u> | 0.0 |
| | <u>Compressive</u> | <u>Effective prestress and permanent loads</u> | $0.45f'_c$ |
| | | <u>Effective prestress, permanent loads and transient (live) loads</u> | $0.60f'_c$ |
| <u>Final Stresses at Fatigue Load</u> | <u>Compressive</u> | <u>Fatigue I Load Combination plus one-half effective prestress and permanent loads</u> | $0.40f'_c$ |

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6-02.3(26).GR6

Cast-in-Place Prestressed Concrete

6-02.3(26).INST1.GR6

The third paragraph of Section 6-02.3(26) is revised to read as follows:

6-02.3(26).OPT1.GB6

(January 4, 2010)

Before tensioning, the Contractor shall remove all side forms from the girders. The Contractor shall not release the falsework supporting the superstructure, and shall not place construction loads and other live loads on the superstructure, until the job-cured 2-inch grout cubes, fabricated in accordance with WSDOT TM 813, reach a minimum compressive strength of 800 psi in accordance with WSDOT FOP for AASHTO T 106.

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6-02.4.GR6

Measurement

6-02.4.INST1.GR6

Section 6-02.4 is supplemented with the following:

6-02.4.OPT1.FB6

(September 8, 2020)

*** \$\$1\$\$ *** contains the following approximate quantities of materials and work:

*** \$\$2\$\$ ***

The quantities are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for accepted changes will be made in the lump sum Contract price for *** \$\$3\$\$ *** even though the actual quantities required may deviate from those listed.

6-02.4.OPT3.FB6

(September 8, 2020)

“Modular Expansion Joint System___” contains the following approximate quantities of materials and work:

*** \$\$1\$\$ ***

The quantities are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for accepted changes will be made in the applicable modular expansion joint system lump sum Contract price for “Modular Expansion Joint System___” even though the actual quantities required may deviate from those listed.

6-02.4.OPT8.FB6

(September 8, 2020)

Expansion joint modification contains the following approximate quantities of materials and work:

*** \$\$1\$\$ ***

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

6-02.4.OPT24.GB6

(August 6, 2012)

Epoxy crack sealing will be measured by the linear foot along the sealed crack at the concrete surface.

- 1 6-02.4.OPT26.GB6
2 (June 26, 2000)
3 Modify bridge drain will be measured per each for each bridge drain modified.
4
- 5 6-02.4.OPT27.GB6
6 (June 26, 2000)
7 Plugging existing bridge drain will be measured per each for each bridge drain plugged.
8
- 9 6-02.4.OPT32.GB6
10 (April 6, 2015)
11 Core drilled bridge deck drain will be measured per each for each bridge deck drain core
12 drilled and completed with a PVC pipe sleeve.
13
- 14 6-02.4.OPT43.GB6
15 (April 6, 2015)
16 Longitudinal seismic restrainer will be measured per each.
17
- 18 6-02.4.OPT44.FB6
19 (September 8, 2020)
20 Seismic retrofit contains the following approximate quantities of materials and work:
21
22 *** \$\$1\$\$ ***
23
- 24 The quantities are listed only for the convenience of the Contractor in determining the
25 volume of work involved and are not guaranteed to be accurate. The prospective bidders
26 shall verify these quantities before submitting a bid. No adjustments other than for
27 accepted changes will be made in the lump sum Contract price for "Seismic Retrofit -
28 _____" even though the actual quantities required may deviate from those listed.
29
- 30 6-02.4.OPT45.FB6
31 (September 8, 2020)
32 Column jacketing contains the following approximate quantities of materials and work:
33
34 *** \$\$1\$\$ ***
35
- 36 The quantities are listed only for the convenience of the Contractor in determining the
37 volume of work involved and are not guaranteed to be accurate. The prospective bidders
38 shall verify these quantities before submitting a bid. No adjustments other than for
39 accepted changes will be made in the lump sum Contract price for "Column Jacketing -
40 _____" even though the actual quantities required may deviate from those listed.
41
- 42 6-02.5.GR6
43 **Payment**
44
- 45 6-02.5.INST3.GR6
46 The fifth and sixth bid items under Section 6-02.5 are supplemented with the following:
47
- 48 6-02.5.OPT20.GB6
49 (April 6, 2015)
50 The contract quantity specified for "Steel Reinf. Bar for Bridge" includes the quantity for
51 the epoxy-coated steel reinforcing bars located in the substructure of the bridge(s)
52 included in this project.

1
2 6-02.5.INST4.GR6
3 Section 6-02.5 is supplemented with the following:
4
5 6-02.5.OPT26.FB6
6 (August 2, 2010)
7 "Bridge Deck - _____", lump sum.
8 The lump sum contract price for "Bridge Deck - _____" shall be full pay for constructing
9 the reinforced concrete portions of the steel bridge superstructure, including *** \$\$1\$\$
10 ***.
11
12 6-02.5.OPT33.GB6
13 (April 6, 2015)
14 "Expansion Joint Modification ____", lump sum.
15
16 6-02.5.OPT49.GB6
17 (August 1, 2011)
18 "Epoxy Crack Sealing", per linear foot.
19
20 Payment for taking and submitting cores to the Engineer for testing, as specified by the
21 Engineer, will be by force account in accordance with Section 1-09.6. For the purpose of
22 providing a common Proposal for all Bidders, the Contracting Agency has entered an
23 amount for the item "Force Account Epoxy Crack Sealing Cores" in the bid proposal to
24 become a part of the total bid by the Contractor.
25
26 6-02.5.OPT51.GB6
27 (June 26, 2000)
28 "Modify Bridge Drain", per each.
29
30 6-02.5.OPT52.GB6
31 (June 26, 2000)
32 "Plugging Existing Bridge Drain", per each.
33
34 6-02.5.OPT53.FB6
35 (June 26, 2000)
36 All costs in connection with *** \$\$1\$\$ *** bridge drains as specified shall be included in
37 the unit contract price per square yard for *** \$\$2\$\$ ***.
38
39 6-02.5.OPT58.GB6
40 (April 6, 2015)
41 "Core Drilled Bridge Deck Drain", per each.
42
43 6-02.5.OPT59.FB6
44 (April 6, 2015)
45 All costs in connection with constructing the core drilled bridge deck drains as specified
46 shall be included in the ***\$\$1\$\$***.
47
48 6-02.5.OPT71.GB6
49 (April 6, 2015)
50 "Longitudinal Seismic Restrainer", per each.
51

1 6-02.5.OPT72.GB6
2 (April 6, 2015)
3 "Seismic Retrofit - _____", lump sum.
4

5 6-02.5.OPT73.GB6
6 (April 6, 2015)
7 "Column Jacketing - _____", lump sum.
8

9 6-02.5.OPT91.FB6
10 **(June 26, 2000)**

11 ***Bridge and Structures Minor Items***

12 For the purpose of payment, such bridge and structures items as *** \$\$1\$\$ *** etc., for
13 which there is no pay item included in the proposal, are considered as bridge and
14 structures minor items. All costs in connection with furnishing and installing these bridge
15 and structures minor items as shown and noted in the Plans and as outlined in these
16 specifications and in the Standard Specifications shall be included in the *** \$\$2\$\$ ***
17

18 6-02.5.OPT92.FB6
19 **(June 26, 2000)**

20 ***Bridge Supported Utilities***

21 All costs in connection with placing *** \$\$1\$\$ *** through the superstructure of *** \$\$2\$\$
22 *** as shown in the Plans, including all *** \$\$3\$\$ *** , shall be included in the *** \$\$4\$\$.
23 ***
24

25 6-02.5.OPT93.GB6
26 (June 26, 2000)

27 No additional compensation will be made by reason of any delay or other expense to the
28 Contractor caused by coordination with the utility company or by installing utility company
29 furnished items. However, any unavoidable delays to the Contractor caused by
30 coordination with the utility company or resulting from installing utility company furnished
31 items will be adjusted in accordance with Section 1-08.8.
32

1 6-06.GR6
2 **Bridge Railings**

3
4 6-06.2.GR6
5 **Materials**

6
7 6-06.2.INST1.GR6
8 Section 6-06.2 is supplemented with the following:

9
10 6-06.2.OPT1.GB6
11 (~~January 5, 2004~~ November 20, 2023)
12 Chain link fence fabric shall conform to the Section 9-16.1(1)B requirements for Type 1
13 fence.

14
15 Fittings, fabric bands, stretcher bars, tie wire, and other fence hardware, shall conform to
16 Section 9-16.1.

17
18 Pipe for posts and longitudinal members shall conform to ASTM A 53, Grade B, Type E
19 or S, galvanized, and shall be Schedule 40 unless otherwise shown in the Plans.

20
21 Steel bars, plates, and shapes shall conform to ASTM ~~A-36~~ A36, and shall be galvanized
22 in accordance with AASHTO M 111, except that structural shapes may conform to ASTM
23 ~~A-992~~ A992.

24
25 Bolts, nuts, and washers shall conform to Section 9-06.5(3~~7~~) and shall be galvanized after
26 fabrication in accordance with AASHTO M 232.

27
28 Resin bonded anchors shall conform to Section 6-02.2 ~~as supplemented in these Special~~
29 ~~Provisions~~ 3(18)A and 9-06.4.

30
31 6-06.2.OPT2.GB6
32 (March 6, 2000)
33 Epoxy resin shall conform to Section 9-26.1.

34
35 6-06.2.OPT7.GB6
36 **(April 6, 2015)**
37 ***Tamper Proof Nuts for steel Bridge Railing Type BP***

38 Tamper proof nuts for steel Bridge Railing Type BP shall be one of the following products
39 from one of the following manufacturers:

40
41 Vandlgard-Nut VCN151-6 (zinc)
42 Manufactured by Local Supplier
43 Simi Fastening Systems Northwest Fasteners Inc.
44 4615 Industrial St. Bldg. No. 1-P 15127 Washington Avenue SW
45 Simi Valley, CA 93063 Lakewood, WA 98498
46 (800) 959-8256 (253) 582-1671
47 FAX (805) 581-9162 FAX (253) 581-3131
48 www.simifast.com

49
50 Tricroove Nut ZTRN37C (Zamak 5 zinc alloy AC41A)
51 Breakaway Nut ZNB37C (Zamak 5 zinc alloy AC41A)
52 Manufactured by Local Supplier

1 Screw & Supply Inc. Tacoma Screw Products Inc.
2 1712 Church Street 2001 Center Street
3 Holbrook, NY 11741 Tacoma, WA 98409
4 (800) 223-1316 (800) 562-8192
5 FAX (631) 567-3057 FAX (253) 272-2719
6 www.screwsupply.com

7
8 Spanner Nut 1N.386 (zinc alloy)
9 Manufactured by
10 TamperProof Screw Company Inc.
11 30 Laurel Street
12 Hicksville, NY 11801
13 (516) 931-1616
14 FAX (516) 931-1654
15 www.tamperproof.com

16
17 Trident Tamper Resistant Nut 37CNTNZ (Zamak 5 zinc alloy AC41A)
18 Breakaway Nut 37CNBAWZ (Zamak 5 zinc alloy AC41A)
19 Breakaway Nut 37CNBAWS (stainless steel alloy 304)
20 Manufactured by
21 Tanner Bolt & Nut Company
22 4302 Glenwood Road
23 Brooklyn, NY 11210
24 (800) 456-2658
25 FAX (888) 434-3215
26 www.tannerbolt.com

27
28 6-06.2.OPT8.FB6

29 ~~(May 28, 2020~~ **November 20, 2023)**

30 **Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric**
31 **Fence**

32 Wire fabric shall be 8 gage diameter, 2 inch square wire mesh conforming to ASTM ~~F~~
33 ~~2453~~ **F2453** Type 2 and galvanized after fabrication in accordance with AASHTO M 111.

34
35 HSS tubes shall conform to ASTM ~~A-500~~ **A500**, Grade B.

36
37 Steel bars, plates, and shapes shall conform to either ASTM ~~A-36~~ **A36** or ASTM ~~A~~
38 ~~992~~ **A992**.

39
40 The railing assembly shall be galvanized after fabrication in accordance with AASHTO M
41 111.

42
43 Anchor rods shall be fully threaded, conforming to ASTM F593 Type 302. Washers shall
44 conform to ASTM A193 Grade B7, galvanized in accordance with AASHTO M 232. Nuts
45 shall be tamper proof, as one of the following products from one of the associated
46 manufacturers:

47
48 Vandlgard-Nut VCN151-6 (zinc)
49 Manufactured by Local Supplier
50 Simi Fastening Systems Northwest Fasteners Inc.
51 4615 Industrial St. Bldg. No. 1-P 15127 Washington Avenue SW
52 Simi Valley, CA 93063 Lakewood, WA 98498

1 (800) 959-8256 (253) 582-1671
2 FAX (805) 581-9162 FAX (253) 581-3131
3 www.simifast.com
4
5 Tricroove Nut ZTRN37C (Zamak 5 zinc alloy AC41A)
6 Breakaway Nut ZNB37C (Zamak 5 zinc alloy AC41A)
7 Manufactured by Local Supplier
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24 Trident Tamper Resistant Nut 37CNTNZ (Zamak 5 zinc alloy AC41A)
25 Breakaway Nut 37CNBAWZ (Zamak 5 zinc alloy AC41A)
26 Breakaway Nut 37CNBAWS (stainless steel alloy 304)
27 Manufactured by
28 Tanner Bolt & Nut Company
29 4302 Glenwood Road
30 Brooklyn, NY 11210
31 (800) 456-2658
32 FAX (888) 434-3215
33 www.tannerbolt.com

34
35 Resin bonded anchors shall conform to Section 6-02.2 ~~as supplemented in these Special~~
36 ~~Provisions~~ 3(18)A and Section 9-06.4.

37
38 The railing assembly shall be shop painted or powder coated after galvanizing in
39 accordance with Section 6-07.3(11). The color of the finish coat, when dry, shall match
40 the color *** \$\$1\$\$ ***.

41
42 6-06.3.GR6
43 **Construction Requirements**

44
45 6-06.3(2).GR6
46 ***Metal Railings***

47
48 6-06.3(2).INST1.GR6
49 Section 6-06.3(2) is supplemented with the following:
50

1 6-06.3(2).OPT1.GB6
2 ~~(March 6, 2000~~**November 20, 2023)**
3 **Bridge Railing Type Chain Link Fence**
4 The Contractor shall install anchor bolts for each post anchorage as shown in the
5 Plans. Alternatively, the Contractor may install resin bonded anchors at each post
6 anchorage, in accordance with Section 6-02~~-as supplemented in these Special~~
7 ~~Provisions~~**3(18)A and 9-06.4.**
8
9 Longitudinal members shall be connected to the steel posts as shown in the Plans.
10
11 The Contractor shall install the chain link fence fabric in accordance with Section 8-
12 12.3(1)D, except as otherwise noted. The chain link fence fabric shall be fastened
13 to the posts and longitudinal members at a maximum spacing of 14 inches.
14
15 6-06.3(2).OPT2.GB6
16 ~~(March 6, 2000)~~
17 **Bridge Railing Type Chain Link Fence**
18 The post blockouts shall be formed with a steel sleeve of the diameter and thickness
19 specified in the Plans. The steel sleeve shall be galvanized after fabrication in
20 accordance with AASHTO M 111. The Contractor shall fill the bottom portion of the
21 railing post with expanded polystyrene as shown in the Plans.
22
23 The Contractor shall install the steel posts in the post blockouts as shown in the
24 Plans. The posts shall be installed vertically, set in position with epoxy resin, and
25 braced to maintain the vertical position until the epoxy resin hardens.
26
27 Longitudinal members shall be connected to the steel posts as shown in the Plans.
28
29 The Contractor shall install the chain link fence fabric in accordance with Section 8-
30 12.3(1)D, except as otherwise noted. The chain link fence fabric shall be fastened
31 to the posts and longitudinal members at a maximum spacing of 14 inches.
32
33 6-06.3(2).OPT7.GB6
34 ~~(May 28, 2020~~**November 20, 2023)**
35 **Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric Fence**
36 The railing shall be fabricated and installed in accordance with the shop drawings.
37 The railing panels shall be installed parallel to the top of the associated concrete
38 surface and the railing posts shall be installed perpendicular to the associated
39 concrete surface.
40
41 The Contractor shall install anchor bolts for each post anchorage as shown in the
42 Plans. Alternatively, the Contractor may install resin bonded anchors at each post
43 anchorage, in accordance with Section 6-02.3(18)~~-as supplemented in these Special~~
44 ~~Provisions~~**A and Section 9-06.4.**
45
46 After completing erection, the Contractor shall repair all metal surfaces with damaged
47 paint or powder coatings and exposed metal with a field repair coating in accordance
48 with Section 6-07.3(9)I and Section 6-07.3(11)A (for paint) or Section 6-07.3(11)B (for
49 powder coating). The color of the finish coat of the field repair coating, when dry,
50 shall match the color specified in Section 6-06.2~~-as supplemented in these Special~~
51 ~~Provisions.~~
52

1 6-06.5.GR6
2 **Payment**
3
4 6-06.5.INST1.GR6
5 Section 6-06.5 is supplemented with the following:
6
7 6-06.5.OPT1.FB6
8 (March 6, 2000)
9 All costs in connection with constructing Bridge Railing Type *** \$\$1\$\$ *** shall be
10 included in the *** \$\$2\$\$ ***.

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1 **6-09 is now Vacant**
2 All 6-09 GSPs including the headings have been deleted.
3
4 ~~6-09.GR6~~
5 **Modified Concrete Overlays**
6
7 ~~6-09.2.GR6~~
8 **Materials**
9
10 ~~6-09.2.OPT1.2025.GR6~~
11 ~~(February 6, 2023)~~
12 ~~The second, third, fourth, and fifth paragraphs are deleted from Section 6-09.2.~~
13

14 ~~6-09.2.INST1.GR6~~
15 ~~Section 6-09.2 is supplemented with the following:~~
16

17 ~~6-09.2.OPT8.BSP.GB6~~
18 ~~(*****)~~

19 **Materials for Polyester Concrete**
20 **Polyester Resin Binder**

21 ~~The resin shall be an unsaturated isophthalic polyester styrene co-polymer.~~

22
23 ~~Prior to adding the initiator, the resin shall conform to the following requirements:~~

- 24
25 ~~Viscosity: _____ 75 to 200 cps _____ ASTM D 2196~~
26 ~~_____ (20 rpm at 77F, RVT No. 1 spindle)~~
27
28 ~~Specific Gravity: _____ 1.05 to 1.10 at 77F _____ ASTM D 1475~~
29
30 ~~Styrene Content: _____ 45% to 50% by weight _____ ASTM D2369~~
31 ~~_____ of polyester styrene resin~~
32

33 ~~After adding the initiator, the resin shall conform to the following requirements:~~

- 34
35 ~~Elongation: _____ 35% minimum _____ ASTM D 638~~
36 ~~_____ w/ thickness 0.25" ± 0.04"~~
37
38 ~~Tensile Strength: _____ 2,500 psi minimum _____ ASTM D 638~~
39 ~~_____ w/ thickness 0.25" ± 0.04"~~
40
41 ~~Conditioning _____ 18 hours/77F/50% + 5 hours/158F ASTM D 618~~
42
43 ~~Silane Coupler: _____ 1.0% minimum (by weight of polyester styrene resin)~~
44

45 ~~The silane coupler shall be an organosilane ester, gammamethacryloxypro-~~
46 ~~pyltrimethoxysilane. The promoter/hardeners shall be compatible with suitable~~
47 ~~methyl ethyl ketone peroxide (MEKP) and cumene hydroperoxide (CHP)~~
48 ~~initiators. MEKP initiators shall be used when the surrounding concrete~~
49 ~~temperatures are above 60F. A blend of initiators may be used as approved by~~
50 ~~the Engineer when the surrounding concrete temperature is 50F to 60F.~~
51

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~~Polyester resin binder will be accepted based on submittal to the Engineer of a Manufacturer's Certificate of Compliance conforming to Section 1-06.3.~~

High Molecular Weight Methacrylate (HMWM) Resin

~~In addition to the viscosity and density properties, and the promoter/initiator system, already specified in this Section, the HMWM resin for polyester concrete overlays shall conform to the following requirements:~~

~~Flash Point: _____ 180F minimum _____ ASTM D 3278~~

~~Tack-Free Time: _____ 400 minutes maximum _____ California Test 551~~

~~Prior to adding initiator, the HMWM resin shall have a maximum volatile content of 30 percent, when tested in conformance with ASTM D 2369.~~

~~HMWM resin will be accepted based on submittal to the Engineer of a Manufacturer's Certificate of Compliance conforming to Section 1-06.3.~~

Aggregate

~~The aggregate shall be from a WSDOT approved pit site and shall be thoroughly washed and kiln dried.~~

~~The aggregate shall conform to Section 9-03, and one of the following combined aggregate gradings:~~

| | <u>Combined Aggregate</u> | |
|-------------------|---------------------------|------------------|
| | <u>1/2" Max.</u> | <u>3/8" Max.</u> |
| <u>Sieve Size</u> | <u>% Passing</u> | <u>% Passing</u> |
| 1/2" | 100 | 100 |
| 3/8" | 83-100 | 100 |
| U.S. No. 4 | 65-82 | 62-85 |
| U.S. No. 8 | 45-64 | 45-67 |
| U.S. No. 16 | 27-48 | 29-50 |
| U.S. No. 30 | 12-30 | 16-36 |
| U.S. No. 50 | 6-17 | 5-20 |
| U.S. No. 100 | 0-7 | 0-7 |
| U.S. No. 200 | 0-3 | 0-3 |

~~The combined aggregate shall have a maximum of 45 percent crushed particles. Fine aggregate shall consist of natural sand only.~~

~~Aggregate absorption shall not exceed 1.0 percent. The moisture content of the aggregate shall not exceed one half of the aggregate absorption at the time of mixing with the polyester resin binder. The aggregate temperature shall be between 45F and 100F at the time of mixing.~~

Sand for Abrasive Finish

~~The sand for abrasive finish shall conform to Section 6-09.2, and the aggregate moisture content requirements specified above.~~

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~~6-09.3.GR6~~

Construction Requirements

~~6-09.3(1).GR6~~

Equipment

~~6-09.3(1).INST1.GR6~~

Section ~~6-09.3(1)~~ is supplemented with the following:

~~6-09.3(1).OPT1.BSP.GB6~~

~~(*****)~~

~~Mobile Mixer for Polyester Concrete~~

~~The mixer shall be equipped to be calibrated to automatically proportion and blend all components of the specified mix on a continuous or intermittent basis as required by the finishing operation, and shall discharge mixed material directly into the finishing machine.~~

~~The mixer shall be equipped with a metering device that automatically measures and records the aggregate volumes and the corresponding resin volumes. The metering device shall have a readout display gage visible at all times, and shall be capable of printing out the volumes being recorded for each material.~~

~~The aggregate and resin volumes shall be recorded at no greater than five minute intervals along with the date of each recording. A printout of the recordings shall be furnished to the Engineer at the end of each work shift.~~

~~The Contractor shall prevent any cleaning chemicals from reaching the polyester mix during the overlay applications.~~

~~6-09.3(2).GR6~~

Submittals

~~6-09.3(2).INST1.GR6~~

Section ~~6-09.3(2)~~ is supplemented with the following:

~~6-09.3(2).OPT1.BSP.GB6~~

~~(*****)~~

~~Submittals for Polyester Concrete~~

~~The Contractor shall submit the following items to the Engineer for approval in accordance with Section 6-01.9:~~

- ~~1. The type of shot blasting machine selected by the Contractor for use in this project to scarify concrete surfaces.~~
- ~~2. 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.~~
- ~~3. The qualifications of on-site supervisors, mobile mixer operators, and finishing machine operators, in accordance with Section 6-09.3(8) as supplemented in these Special Provisions.~~

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- ~~4. The polyester concrete mix design in accordance with Section 6-09.3(3) as supplemented in these Special Provisions.~~

- ~~5. Samples, as specified below, shall be submitted to the Engineer at least 15 working days prior to placing the polyester overlay:
 - ~~a. One gallon minimum of the polyester resin binder.~~
 - ~~b. One pint minimum of the HMWM resin.~~
 - ~~c. 100 pounds minimum of aggregate.~~
 - ~~d. Representative samples from each lot of prepackaged deck repair material and aggregate extenders, if selected for use in this project, as specified in Section 6-09.3(3) as supplemented in these Special Provisions.~~~~

- ~~6. The method and materials used to contain HMWM resin and polyester concrete within the deck area specified to receive the overlay.~~

- ~~7. Paving equipment specifications and details of the screed rail support system, including details of anchoring the rails and providing rail continuity.~~

~~The Contractor shall not begin scarifying operations until receiving the Engineer's approval of Items 1 and 2. The Contractor shall not begin placing polyester concrete overlay until receiving the Engineer's approval of Items 3 through 7.~~

~~6-09.3(3).GR6~~
~~Concrete Overlay Mixes~~

~~6-09.3(3).INST1.GR6~~
~~Section 6-09.3(3) is supplemented with the following:~~

~~6-09.3(3).OPT1.GB6~~
~~(January 7, 2002)~~
~~The Contractor may use either fly ash modified concrete (FMC), latex modified concrete (LMC), or microsilica modified concrete (MMC) for the concrete overlay. The Contractor shall select one type of concrete for the overlay, provide a mix for the selected concrete to the Engineer in accordance with Item 5 of Section 6-09.3(2), and use that type for the total concrete overlay operation. Use of a combination of types will not be allowed.~~

~~6-09.3(3).OPT2.GB6~~
~~(January 7, 2002)~~
~~The Contractor may use either fly ash modified concrete (FMC), or latex modified concrete (LMC) for the concrete overlay. The Contractor shall select one type of concrete for the overlay, provide a mix for the selected concrete to the Engineer in accordance with Item 5 of Section 6-09.3(2), and use that type for the total concrete overlay operation. Use of a combination of types will not be allowed. Use of microsilica modified concrete (MMC) will not be allowed.~~

1 ~~6-09.3(3).OPT3.GB6~~
2 ~~(January 7, 2002)~~
3 ~~The Contractor shall use latex modified concrete (LMC) for the total concrete overlay~~
4 ~~operation, and shall provide a concrete mix to the Engineer in accordance with Item~~
5 ~~5 of Section 6-09.3(2). Use of fly ash modified concrete (FMC) or microsilica~~
6 ~~modified concrete (MMC) will not be allowed.~~
7

8 ~~6-09.3(3).OPT9.BSP.GB6~~
9 ~~(*****)~~
10 ~~**Polyester Concrete**~~
11 ~~The Contractor shall use polyester concrete for the total concrete overlay operation.~~
12 ~~Use of latex modified concrete (LMC), fly ash modified concrete (FMC) or microsilica~~
13 ~~modified concrete (MMC) will not be allowed.~~
14

15 ~~Polyester concrete shall consist of the following three components—polyester resin~~
16 ~~binder, HMWM resin, and combined aggregate, in accordance with Section 6-09.2~~
17 ~~as supplemented in these Special Provisions. The Contractor shall submit the mix~~
18 ~~design for the polyester concrete to the Engineer for approval. The mix design shall~~
19 ~~include a recommended initiator percentage for the expected application~~
20 ~~temperature. The polyester resin binder shall be approximately 12 percent by weight~~
21 ~~of the dry combined aggregate. The Contractor shall not begin the trial overlay of~~
22 ~~the polyester concrete, as specified in Section 6-09.3(8) as supplemented in these~~
23 ~~Special Provisions, until receiving the Engineer’s approval of the polyester concrete~~
24 ~~mix design.~~
25

26 ~~6-09.3(3).OPT10.BSP.GB6~~
27 ~~(*****)~~
28 ~~**Deck Repair Concrete for Polyester Concrete Overlays**~~
29 ~~Patching concrete for further deck preparation in accordance with Section 6-09.3(6)~~
30 ~~shall be the polyester concrete mix used for the overlay.~~
31

32 ~~6-09.3(3)A.GR6~~
33 ~~**General**~~
34

35 ~~6-09.3(3)A.INST1.GR6~~
36 ~~Section 6-09.3(3)A is revised to read:~~
37

38 ~~6-09.3(3)A.OPT1.2025.GR6~~
39 ~~(February 6, 2023)~~
40 ~~For fly ash, microsilica, and latex modified concrete, the Contractor shall adjust~~
41 ~~the slump to accommodate the gradient of the bridge deck, subject to the~~
42 ~~maximum slump specified.~~
43

44 ~~For fly ash and microsilica modified concrete, the maximum water/cement ratio~~
45 ~~shall be calculated using all of the available mix water, including the free water~~
46 ~~in both the coarse and fine aggregate, and in the microsilica slurry if a slurry is~~
47 ~~used.~~
48

49 ~~For fly ash and microsilica modified concrete, all water reducing and air~~
50 ~~entraining admixtures, and superplasticizers, shall be used in accordance with~~
51 ~~the admixture manufacturer’s recommendations.~~
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~~Fine aggregate shall be Class 1. Coarse aggregate shall be AASHTO grading No. 7 or No. 8.~~

~~Fly ash shall be Class F only.~~

~~6-09.3(3)B.GR6~~

~~**Concrete Class M**~~

~~6-09.3(3)B.INST1.GR6~~

~~Section 6-09.3(3)B is revised to read:~~

~~6-09.3(3)B.OPT1.2025.GR6~~

~~(February 6, 2023)~~

~~Concrete Class M for further deck preparation patching concrete shall be proportioned in accordance with the following mix design:~~

| | |
|---|--------------|
| Type I or II Portland Cement or Type II(X) Blended hydraulic Cement | 705 pounds |
| Fine Aggregate | 1,280 pounds |
| Coarse Aggregate | 1,650 pounds |
| Water/Cement Ratio | 0.37 maximum |
| Air ($\pm 1\frac{1}{2}$ percent) | 6 percent |
| Slump (± 1 inch) | 5 inches |

~~The use of a water-reducing admixture conforming to AASHTO M194 Type A will be required to produce patching concrete with the desired slump, and shall be used in accordance with the admixture manufacturer's recommendations. Air entraining admixtures shall conform to AASHTO M154 and shall be used in accordance with the admixture manufacturer's recommendations. The use of accelerating admixtures or other types of admixtures is not allowed.~~

~~6-09.3(3)C.GR6~~

~~**Fly Ash Modified Concrete**~~

~~6-09.3(3)C.INST1.GR6~~

~~Section 6-09.3(3)C is revised to read:~~

~~6-09.3(3)C.OPT1.2025.GR6~~

~~(February 6, 2023)~~

~~Fly ash modified concrete shall be a workable mix, uniform in composition and consistency. Mix proportions per cubic yard shall be as follows:~~

| | |
|---|-------------------------------|
| Type I or II Portland Cement or Type II(X) Blended hydraulic Cement | 611 pounds |
| Fly Ash | 275 pounds |
| Fine Aggregate | 38 percent of total aggregate |
| Coarse Aggregate | 62 percent of total aggregate |
| Water/Cement Ratio | 0.30 maximum |
| Air ($\pm 1\frac{1}{2}$ percent) | 6 percent |
| Slump | 7 inches maximum |

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Cement and fly ash may be replaced with 886 pounds of Type IP(31)MS blended hydraulic cement. Only Type IP(31)MS that is blended with Type F fly ash is permitted for use. Type IP(31)MS that is blended with natural pozzolans are not allowed.

~~6-09.3(3)D.GR6~~

Microsilica Modified Concrete

~~6-09.3(3)D.INST1.GR6~~

Section ~~6-09.3(3)D~~ is revised to read:

~~6-09.3(3)D.OPT1.2025.GR6~~

(February 6, 2023)

Microsilica modified concrete shall be a workable mix, uniform in composition and consistency. Mix proportions per cubic yard shall be as follows:

| | |
|---|------------------|
| Type I or II Portland Cement or Type II(X) Blended hydraulic Cement | 658 pounds |
| Microsilica Fume | 52 pounds |
| Fine Aggregate | 1,515 pounds |
| Coarse Aggregate | 1,515 pounds |
| Water/Cement Ratio | 0.33 maximum |
| Air ($\pm 1\frac{1}{2}$ percent) | 6 percent |
| Slump | 7 inches maximum |

~~6-09.3(3)E.GR6~~

Latex Modified Concrete

~~6-09.3(3)E.INST1.GR6~~

Section ~~6-09.3(3)E~~ is revised to read:

~~6-09.3(3)E.OPT1.2025.GR6~~

(February 6, 2023)

Latex modified concrete shall be a workable mix, uniform in composition and consistency. Mix proportions per cubic yard shall be as follows:

| | |
|---|--------------------------------|
| Type I or II Portland Cement or Type II(X) Blended hydraulic Cement | 1.00 parts by weight |
| Fine Aggregate | 2.40 to 2.75 parts by weight |
| Coarse Aggregate | 1.75 to 2.00 parts by weight |
| Latex Admixture | 3.50 gallons per bag of cement |
| Water/Cement Ratio | 0.33 maximum |
| Air Content of Plastic Mix | 6 percent maximum |
| Slump | 7 inches maximum |

The aggregates shall be proportioned such that the amount of aggregate passing the No. 4 sieve is 65 ± 5 percent of the total aggregate (fine plus coarse). All calculations shall be based on dry weights.

1 ~~The moisture content of the fine aggregate and coarse aggregate shall be no~~
2 ~~more than 3.0 and 1.0 percent, respectively, above the saturated surface dry~~
3 ~~condition.~~

4
5 ~~The water limit for calculating the water/cement ratio shall include the added~~
6 ~~water, the free water in the aggregates, and 52 percent of the latex admixture.~~

7
8 ~~6-09.3(4).GR6~~
9 ~~**Storing and Handling**~~

10
11 ~~6-09.3(4).INST1.GR6~~
12 ~~Section 6-09.3(4) is supplemented with the following:~~

13
14 ~~6-09.3(4).OPT1.BSP.GB6~~
15 ~~(*****)~~
16 ~~**Storing and Handling of Polyester Concrete Materials**~~

17 ~~All materials shall be delivered in their original containers bearing the manufacturer's~~
18 ~~label, specifying date of manufacturing, batch number, trade name brand, quantity,~~
19 ~~and mixing ratio. Each shipment of polyester resin binder and HMWM resin shall be~~
20 ~~accompanied by a Safety Data Sheet (SDS).~~

21
22 ~~The material shall be stored to prevent damage by the elements and to ensure the~~
23 ~~preservation of their quality and fitness for the work. The storage space shall be kept~~
24 ~~clean and dry and shall contain a high-low thermometer. The temperatures of the~~
25 ~~storage space shall not fall below nor rise above that recommended by the~~
26 ~~manufacturer. Every precaution shall be taken to avoid contact with flame.~~

27
28 ~~Stored materials shall be inspected prior to their use and shall meet the requirements~~
29 ~~of these Special Provisions at the time of use.~~

30
31 ~~Any material which is rejected because of failure to meet the required tests or that~~
32 ~~has been damaged so as to cause rejections shall be immediately replaced at no~~
33 ~~additional expense to the Contracting Agency.~~

34
35 ~~Sufficient material to perform the entire polyester concrete overlay application shall~~
36 ~~be in storage at the site prior to any field preparation, so that there shall be no delay~~
37 ~~in procuring the materials for each day's application.~~

38
39 ~~Appropriate impermeable protective garments shall be used by all workers who may~~
40 ~~contact the resin or initiators to prevent skin contact. If skin contact occurs, the resin~~
41 ~~or initiators shall be immediately washed off. Clothing that becomes saturated with~~
42 ~~resin shall be removed immediately.~~

43
44 ~~All personnel working with the polyester concrete shall be issued suitable approved~~
45 ~~organic vapor respirators in addition to other appropriate protection equipment.~~

46
47 ~~6-09.3(5).GR6~~
48 ~~**Scarifying Concrete Surface**~~

49
50 ~~6-09.3(5).INST1.GR6~~
51 ~~Section 6-09.3(5) is supplemented with the following:~~

52

- 1 ~~6-09.3(5).OPT1.GB6~~
2 ~~(January 7, 2002)~~
3 ~~The Contractor may use either a rotary milling machine, hydro-demolition machine,~~
4 ~~or shot blasting machine for scarifying concrete surfaces. The Contractor shall~~
5 ~~inform the Engineer of the type of machine selected in accordance with Item 1 of~~
6 ~~Section 6-09.3(2).~~
7
8 ~~6-09.3(5).OPT2.GB6~~
9 ~~(January 7, 2002)~~
10 ~~The Contractor may use either a hydro-demolition machine or shot blasting machine~~
11 ~~for scarifying concrete surfaces. The use of a rotary milling machine will not be~~
12 ~~allowed. The Contractor shall inform the Engineer of the type of machine selected~~
13 ~~in accordance with Item 1 of Section 6-09.3(2).~~
14
15 ~~6-09.3(5).OPT7.GB6~~
16 ~~(April 6, 2015)~~
17 ~~The Contractor shall use a hydro-demolition machine for scarifying concrete~~
18 ~~surfaces. The use of a rotary milling or shot blasting machines will not be allowed.~~
19 ~~The Contractor shall inform the Engineer of the type of machine selected in~~
20 ~~accordance with Item 1 of Section 6-09.3(2).~~
21
22 ~~6-09.3(5).OPT8.BSP.GB6~~
23 ~~(*****)~~
24 ~~The Contractor shall use a shot blasting machine for scarifying concrete surfaces.~~
25 ~~The use of a rotary milling or hydro-demolition machines will not be allowed. The~~
26 ~~Contractor shall inform the Engineer of the type of machine selected in accordance~~
27 ~~with Item 1 of Section 6-09.3(2).~~
28
29 ~~6-09.3(5).OPT9.BSP.GB6~~
30 ~~(*****)~~
31 ~~The scarification depth for all concrete decks receiving polyester concrete overlay~~
32 ~~shall be 1/4 inch, and all references to scarification depth in Sections 6-09.3(5)A and~~
33 ~~6-09.3(5)B shall be revised accordingly.~~
34
35 ~~6-09.3(5).OPT10.BSP.GB6~~
36 ~~(*****)~~
37 ~~Steel reinforcing bars used in deck repair operations, in accordance with Sections 6-~~
38 ~~09.3(5)F and 6-09.3(6)B, shall be epoxy coated in accordance with Section 6-~~
39 ~~02.3(24)H.~~
40
41 ~~6-09.3(6).GR6~~
42 ***Further Deck Preparation***
43
44 ~~6-09.3(6)B.GR6~~
45 ***Deck Repair Preparation***
46
47 ~~6-09.3(6)B.INST1.GR6~~
48 ~~Section 6-09.3(6)B is supplemented with the following:~~
49
50 ~~6-09.3(6)B.OPT1.GB6~~
51 ~~(April 6, 2015)~~

1 The Contractor shall not remove the bottom two inches of the existing concrete
2 deck, unless otherwise directed by the Engineer. If the existing concrete bridge
3 deck is punctured by the removal operations, the Contractor shall form the
4 bottom surface prior to placing the patching concrete. The Contractor shall
5 submit the method and materials to be used for such forming as a Type 2E
6 Working Drawing in accordance with Section 6-02.3(16).
7

8 ~~6-09.3(6).GR6~~
9 **Placing Deck Repair Concrete**

10
11 ~~6-09.3(6).INST1.GR6~~
12 Section 6-09.3(6)C is supplemented with the following:
13

14 ~~6-09.3(6).OPT2.BSP.GB6~~
15 (~~*****~~)
16 **Placing Patching Concrete For Polyester Concrete Overlay**

17 Patching concrete shall be polyester concrete, as specified in Section 6-09.3(3)
18 as supplemented in these Special Provisions. Concrete Class M shall not be
19 used.
20

21 Polyester concrete for deck repair shall be placed and cured in accordance with
22 Sections 6-09.3(11) and 6-09.3(13), respectively, as supplemented in these
23 Special Provisions.
24

25 All deck repair material that fails to achieve a minimum compressive strength of
26 3,000 psi in six hours as verified by the rebound number determined in
27 accordance with ASTM C 805 shall be removed and replaced with new deck
28 repair material by the Contractor, at no additional expense to the Contracting
29 Agency.
30

31 ~~6-09.3(8).GR6~~
32 **Quality Assurance**

33
34 ~~6-09.3(8).INST1.GR6~~
35 Section 6-09.3(8) is supplemented with the following:
36

37 ~~6-09.3(8).OPT3.BSP.GB6~~
38 (~~*****~~)
39 **Quality Assurance For Polyester Concrete Overlay**

40 The Contractor shall arrange to have the suppliers of the polyester resin binder and
41 HMWM resin furnish technical service relating to application of material and health
42 and safety training for personnel who are to handle the polyester concrete and the
43 HMWM resin prime coat.
44

45 On-site supervisors, and all personnel operating the mobile mixer and finishing
46 machines, shall have successful previous experience in mixing and placing polyester
47 concrete overlay. Documentation of project experience with polyester concrete
48 overlay shall include the name and location of the project, the Contracting Agency of
49 the project, the area quantity of overlay placed, and the name and current phone
50 number of the Contracting Agency's contact person for the referenced project.
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~~6-09.3(8).OPT4.BSP.GB6~~

~~(*****)~~

~~**Polyester Concrete Trial Overlay**~~

~~The Contractor shall place a trial overlay of polyester concrete using the equipment selected by the Contractor and the production mix and procedure as approved by the Engineer in accordance with Section 6-09.3(3). The Contractor shall notify the Engineer of the time and location of the trial overlay at least seven calendar days prior to the scheduled trial overlay.~~

~~The trial overlay shall be placed on a previously cast and cured concrete pad at a location selected by the Contractor. The plan area of the concrete pad shall be 12 feet minimum in width and 15 feet minimum in length.~~

~~The Contractor shall clean the concrete pad surface, mix, place, finish, and cure the polyester concrete overlay, and check the trial overlay for bond, in accordance with Section 6-09.3 as supplemented in these Special Provisions, except as otherwise noted. The Contractor need not scarify the concrete surface and perform further deck preparation on the concrete pad surface provided that all other conditions of Section 6-09.3(7) are satisfied. The trial overlay shall be 12 feet wide, 15 feet long, and 3/4 inches thick.~~

~~The Contractor shall perform three pull-off tests on the trial overlay in accordance with American Concrete Institute 503R Appendix A. The Contractor shall record the pull-off test results and the amount of (if any) failure into the base concrete, and shall provide written documentation of the test results to the Engineer.~~

~~The Contractor shall not begin placing polyester concrete overlay at the bridge site(s) receiving the polyester concrete overlay until receiving the Engineer's approval of the completed trial overlay.~~

~~After receiving the Engineer's approval of the completed trial overlay, the concrete pad and trial overlay shall become the Contractor's property and shall be removed and disposed of in accordance with Section 2-02.3.~~

~~6-09.3(9).GR6~~

~~**Mixing Concrete for Concrete Overlay**~~

~~6-09.3(9).INST1.GR6~~

~~Section 6-09.3(9) is supplemented with the following:~~

~~6-09.3(9).OPT2.BSP.GB6~~

~~(*****)~~

~~**Mixing Polyester Concrete**~~

~~Polyester concrete shall be mixed in mobile mixers conforming to Section 6-09.3(1) as supplemented in these Special Provisions, and in accordance with the mix design approved by the Engineer.~~

~~The polyester resin binder in the polyester concrete shall be approximately 12 percent by weight of the dry aggregate. The Contractor shall determine the exact percentage as approved by the Engineer.~~

1 The amount of peroxide initiator used shall result in a polyester concrete set time
2 between 30 and 120 minutes during placement as determined by California Test 551,
3 Part 2, "Method of Test For Determination of Set Time of Concrete Overlay and
4 Patching Materials", by Gilmore Needles. Accelerators or inhibitors may be required
5 as recommended by the polyester resin binder supplier and as approved by the
6 Engineer.

7
8 The polyester resin binder shall be initiated and thoroughly blended just prior to
9 mixing the aggregate and binder. The polyester concrete shall be thoroughly mixed
10 prior to placing.

11
12 ~~6-09.3(10).GR6~~

13 ***Overlay Profile and Screed Rails***

14
15 ~~6-09.3(10).INST1.GR6~~

16 Section 6-09.3(10) is supplemented with the following:

17
18 ~~6-09.3(10).OPT1.BSP.GB6~~

19 ~~(*****)~~

20 The minimum thickness of polyester concrete overlay shall be 3/4 inches, except as
21 otherwise shown in the Plans or adjusted by the Engineer.

22
23 ~~6-09.3(11).GR6~~

24 ***Placing Concrete Overlay***

25
26 ~~6-09.3(11).INST1.GR6~~

27 Section 6-09.3(11) is supplemented with the following:

28
29 ~~6-09.3(11).OPT2.BSP.GB6~~

30 ~~(*****)~~

31 ***Placing Polyester Concrete Overlay***

32 Application of the HMWM prime coat and the polyester concrete overlay shall not
33 begin if rain is expected. The area receiving the prime coat shall be dry and had no
34 rain for at least 24 hours. Immediately prior to applying the prime coat, the surface
35 receiving the prime coat shall be swept clean by compressed air to remove
36 accumulated dust and any other loose material. If the surface receiving the HMWM
37 prime coat and polyester concrete has been exposed to moisture within the previous
38 12 hours, it shall be thoroughly dried using a heat lance prior to placement of the
39 HMWM prime coat.

40
41 The concrete bridge deck surface temperature shall be between 50F and 85F when
42 the prime coat is applied.

43
44 The prepared concrete surface shall receive one coat of promoted/initiated wax free
45 HMWM resin. The promoted/initiated HMWM resin primer shall be worked into the
46 concrete in a manner to effect complete coverage of the area. A one pint sample of
47 each batch of promoted/initiated HMWM resin shall be retained and submitted to the
48 Engineer at the time of primer application to verify proper catalyzation. Under no
49 circumstances shall any resin be allowed to run into drains and expansion joints, or
50 otherwise escape the Contractor's collection and containment system.

51

1 If the HMWM primed surface becomes contaminated, the contaminated area shall
2 be cleaned by abrasive blasting and reprimed at no additional expense to the
3 Contracting Agency.
4
5 The HMWM prime coat shall cure for a minimum of 30 minutes before placing the
6 polyester concrete overlay. Placement of the polymer concrete shall not proceed
7 until the Engineer verifies that the HMWM resin was properly promoted and initiated,
8 as evidenced by the HMWM batch sample.
9
10 The polyester concrete shall be placed on the liquid or hardened HMWM prime coat
11 within two hours of placing the prime coat. Polyester concrete shall be placed prior
12 to gelling and within 15 minutes following initiation, whichever occurs first. Polyester
13 concrete that is not placed within this time shall be discarded.
14
15 If, for any reason, polyester concrete is not placed over the prime coat within the two
16 hour time limit, the Contractor shall apply a fresh coat of HMVM resin primer
17 immediately followed by an abrasive sand finish coating. The abrasive sand finish
18 shall be broadcast onto the surface to affect a uniform coverage of a minimum of 0.8
19 pounds per square yard. Prior to applying the polyester concrete overlay, the surface
20 shall be re-cleaned in accordance with Section 6-09.3(7).
21
22 Expansion joints shall be adequately isolated prior to placing the overlay as approved
23 by the Engineer. Saw cutting at bridge expansion joints will not be allowed.
24
25 The surface temperature of the area receiving the polyester concrete shall be the
26 same as specified above for the HMWM prime coat.
27
28 The polyester concrete shall be consolidated to a relative compaction of not less than
29 97 percent.
30

31 6-09.3(12).GR6

32 **Finishing Concrete Overlay**

33
34 6-09.3(12).INST1.GR6

35 Section 6-09.3(12) is supplemented with the following:
36

37 6-09.3(12).OPT2.BSP.GB6

38 (*****)

39 **Finishing Polyester Concrete Overlay**

40 The finished surface of the polyester concrete overlay shall conform to Section 6-
41 02.3(10).
42

43 The polyester concrete shall be struck off to the established grade and cross section
44 and consolidated to the required compaction. No further texturing and grooving of
45 the finish overlay surface will be required. Forms shall be coated with suitable bond
46 release agent to permit ready release of forms.
47

48 The polyester concrete overlay shall receive an abrasive sand finish. The sand finish
49 shall be applied immediately after overlay strike off and before gelling occurs.
50

51 The surface texture of polyester concrete surface shall be uniform and shall have a
52 friction number of not less than 35 as determined by ASTM E 274.

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~~After initial finishing, the polyester overlay may require grinding of rough areas as determined by the Engineer. The grinding shall be done in a manner that will not damage the existing bridge deck. Rotary milling machines are not allowed.~~

~~The Contractor shall demonstrate to the satisfaction of the Engineer that the method and equipment for grinding the polyester overlay are adequate for the intended purpose and will provide satisfactory results. The removal shall not commence until the Contractor receives the Engineer's approval of the grinding equipment.~~

~~The bridge deck areas specified by the Engineer to receive grinding shall be ground in a longitudinal direction. The grinding equipment shall use diamond tipped saw blades mounted on a power driven, self-propelled machine that is specifically designed to texture concrete surfaces. The grinding equipment shall have a blade spacing to provide grooves that are between 0.10 and 0.15 inches wide. The land area between the grooves shall be approximately 0.125 inches.~~

~~The Contractor shall contain, collect, and dispose of all concrete debris generated by the grinding operation in accordance with Item 2 of the polyester concrete submittal in Section 6-09.3(2) as supplemented in these Special Provisions.~~

~~Prior to opening the overlay area to vehicular traffic the finished overlay shall be power swept to remove excess loose aggregate and abrasive sand. The Contractor shall demonstrate to the satisfaction of the Engineer that the power broom equipment will not damage the finished overlay. Any damage to the finished overlay caused by the power broom shall be repaired at no additional expense to the Contracting Agency.~~

~~6-09.3(13).GR6~~
~~Curing Concrete Overlay~~

~~6-09.3(13).INST1.GR6~~
~~Section 6-09.3(13) is supplemented with the following:~~

~~6-09.3(13).OPT2.BSP.GB6~~
~~(*****)~~

~~**Curing Polyester Concrete**
Traffic and equipment shall not be permitted on the polyester overlay for at least four hours and until the polyester overlay has reached a minimum compressive strength of 3,000 psi as verified by the rebound number determined in accordance with ASTM C-805.~~

~~Areas in the polyester concrete that do not totally cure, or that fail to attain the minimum compressive strength specified above, shall be removed and replaced with new polyester concrete material by the Contractor, at no additional expense to the Contracting Agency.~~

~~6-09.3(14).GR6~~
~~Checking For Bond~~

~~6-09.3(14).INST1.GR6~~
~~Section 6-09.3(14) is supplemented with the following:~~

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~~6-09.3(14).OPT1.BSP.GB6~~

~~(*****)~~

~~**Checking Polyester Concrete For Bond**~~

~~After the requirements for curing have been met, the entire overlaid surface shall be sounded by the Contractor, in a manner approved by and in the presence of the Engineer, to ensure total bond of the concrete to the bridge deck. Polyester concrete in unbonded areas shall be removed and replaced with polyester concrete by the Contractor, at no additional expense to the Contracting Agency.~~

~~All cracks, except those that are significant enough to require removal as determined by the Engineer, shall be thoroughly filled and sealed with HMWM resin. Cracks 1/16 inch and greater in width shall receive two applications of HMWM resin. Immediately following the application of HMWM resin, the wetted surface shall be coated with sand for abrasive finish.~~

~~6-09.4.GR6~~

~~**Measurement**~~

~~6-09.4.INST1.GR6~~

~~Section 6-09.4 is supplemented with the following:~~

~~6-09.4.OPT2.BSP.GB6~~

~~(*****)~~

~~Polyester concrete overlay will be measured by the square yard of overlay surface actually placed, finished, and cured.~~

~~6-09.5.GR6~~

~~**Payment**~~

~~6-09.5.INST2.GR6~~

~~Section 6-09.5 is supplemented with the following:~~

~~6-09.5.OPT7.BSP.GB6~~

~~(*****)~~

~~"Polyester Concrete Trial Overlay", lump sum.~~

~~The lump sum contract price for "Polyester Concrete Trial Overlay" shall be full pay for performing the work as specified, including establishing a location for the trial overlay, and construction, removal, and disposal of the concrete pad and trial overlay.~~

~~6-09.5.OPT8.BSP.GB6~~

~~(*****)~~

~~"Force Account Grinding Polyester Conc. Overlay", force account.~~

~~Grinding polyester concrete overlay as specified will be paid by force account in accordance with Section 1-09.6. For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Force Account Grinding Polyester Conc. Overlay" in the bid proposal to become a part of the total bid by the Contractor.~~

~~6-09.5.OPT9.BSP.GB6~~

~~(*****)~~

~~"Polyester Concrete Overlay", per square yard.~~

1 ~~The unit contract price per square yard for "Polyester Concrete Overlay" shall be full pay~~
2 ~~for performing the work as specified, including placing, finishing, and curing the overlay,~~
3 ~~and checking for bond.~~
4
5 ~~6-09.5.OPT11.GB6~~
6 ~~(April 6, 2015)~~
7 ~~"Force Account Forms For Full Depth Deck Repair", force account~~
8 ~~Payment for "Force Account Forms For Full Depth Deck Repair" will be by force~~
9 ~~account in accordance with Section 1-09.6. For the purpose of providing a common~~
10 ~~proposal to all bidders, the Contracting Agency has entered an amount for the item~~
11 ~~"Force Account Forms For Full Depth Deck Repair" in the bid proposal to become a~~
12 ~~part of the total bid by the Contractor.~~

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6-11.GR6
Reinforced Concrete Walls

6-11.2.GR6
Materials

6-11.2.INST1.GR6
Section 6-011.2 is supplemented with the following:

6-11.2.OPT1.2025.GR6
(November 20, 2023)

| | |
|------------------------------------|------------------|
| <u>Sealing Band</u> | <u>9-04.12</u> |
| <u>Welded Wire Reinforcement</u> | <u>9-07.7</u> |
| <u>Concrete Surface Treatments</u> | <u>9-08.3</u> |
| <u>Grout</u> | <u>9-20.3(2)</u> |

6-11.3.GR6
Construction Requirements

6-11.3.INST1.GR6
Section 6-11.3 is replaced in its entirety with the following:

6-11.3.OPT1.2025.GR6
(November 20, 2023)

6-11.3(1) Submittals

All components of reinforced concrete retaining walls, regardless of the combination of precast and cast-in-place components shall be submitted simultaneously as a comprehensive submittal.

The Contractor shall submit Type 2E Working Drawings consisting of shoring plans in accordance with Section 2-09.3(3)D.

6-11.3(1)A Precast Reinforced Concrete Retaining Walls

When a precast reinforced concrete retaining wall using Standard Plan D-20.10 is detailed in the Plans, the Contractor shall submit a Type 2 Working Drawing of the precast unit shop drawings in accordance with Section 6-02.3(9)A. When cast-in-place footing keys are required, the precast unit shop drawing shall also include the following:

1. The construction method option selected from the Plans
2. The anticipated trench excavation wall slopes
3. The methods for dewatering if required
4. The methods for maintaining stability of the walls prior to and during placement of the footing key concrete
5. The location and size of block outs and closure holes.

6-11.3(1)B Cast-In-Place Reinforced Conc. Retaining Walls

When cast-in-place reinforced concrete retaining walls are called out in the Plans, 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).

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6-11.3(1)B1 Substitution of Precast Stem Walls in Lieu of Cast-In-Place Stem Walls

The Contractor may elect to fabricate and erect precast reinforced concrete wall stem panels in place of the cast-in-place wall stem panels.

If the Contractor elects to use precast wall stem panels in lieu of cast-in-place wall stem panels, Type 2E Working Drawings shall be submitted that meet the requirements of 6-11.3(1)A and also include the following:

1. Working drawings for fabrication of the precast wall stem panels, showing dimensions, steel reinforcing bars, joint and joint filler details, surface finish details, lifting devices with the manufacturer's recommended safe working capacity, and material Specifications.
2. Working drawings and design calculations for the erection of the precast wall stem panels showing dimensions, support points, support footing sizes, erection blockouts, member sizes, connections, and material Specifications.
3. Design calculations for the precast wall stem panels, the connection between the precast panels and the cast-in-place footing, and all modifications to the cast-in-place footing details as shown in the Plans.
4. Cast-in-place submittal requirements for foundations in accordance with 6-11.3(1)A.

6-11.3(2) Excavation and Foundation Preparation

Excavation shall conform to Section 2-09.3(3), and to the limits and construction stages shown in the Plans. Foundation soils found to be unsuitable shall be removed and replaced in accordance with Section 2-09.3(1)C.

Bedding material for precast reinforced concrete retaining wall units shall be in accordance with the Standard Plans and Section 6-20.3(6)A.

6-11.3(3) Wall Construction

6-11.3(3)A Precast Reinforced Concrete Wall Construction

Precast reinforced concrete retaining wall units for Standard Plan D-20.10 and precast reinforced concrete wall stem panels shall conform to Section 6-02.3(9) except as modified in this section.

When precast reinforced concrete retaining walls are called out in the Plans to be constructed in accordance with Standard Plan D-20.10, the units shall be Class 7000 concrete. Cast-in-place footing keys shall be Class 4000 when required. The precast units shall be fabricated full height and shall be fabricated in segment lengths greater than or equal to 4 feet.

When the Contractor elects to use precast stem panels as described in 6-11.3(1)B1, precast reinforced concrete stem panels shall be Class 4000 concrete unless otherwise shown in the Plans. The precast wall stem panels shall be fabricated full height and shall be fabricated in lengths of 8, 16, or 24 feet.

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6-11.3(3)A1 Fabrication Tolerances

The construction tolerances for the precast reinforced concrete retaining wall units for Standard Plan D-20.10 and the precast reinforced concrete wall stem panels shall be as follows:

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|--|------------------|
| Height | ±¼ inch |
| Width | ±¼ inch |
| Thickness | +¼ inch, -⅛ inch |
| Concrete cover for steel reinforcing bar | +⅜ inch, -⅛ inch |
| Width of precast concrete wall stem panel joints | ±¼ inch |

Offset of precast concrete wall stem panels ±¼ inch
(Deviation from a straight line extending 5 feet on each side of the panel joint)

When precast reinforced concrete retaining walls are called out in the Plans to be constructed in accordance with Standard Plan D-20.10, the precast reinforced concrete retaining wall shall be constructed with a joint between adjacent units. The wall and footing joints shall be constructed as shown in the Standard Plans. The joints shall be continuous and shall be of uniform width over the entire height of the precast wall and footing.

When the Contractor elects to use precast stem panels as described in 6-11.3(1)B1, precast concrete wall stem panels shall be constructed with a mating shear key between adjacent panels. The shear key shall have beveled corners and shall be 1½ inches in thickness. The width of the shear key shall be 3½ inches minimum and 5½ inches maximum. The shear key shall be continuous and shall be of uniform width over the entire height of the precast reinforced wall stem panel.

6-11.3(3)A2 Finishing

For precast reinforced concrete retaining wall units for Standard Plan D-20.10 and precast reinforced concrete wall stem panels, the Contractor shall provide the specified exterior concrete surface finish as noted, and to the limits shown, in the Plans. Surface finishes shall conform to Section 6-02.3(14). Rolled on textured finished shall not be used. If the Plans call for a form liner texture on both sides of the wall, it shall be cast in a vertical position.

6-11.3(3)A3 Erection

When precast reinforced concrete retaining walls are called out in the Plans to be constructed in accordance with Standard Plan D-20.10, all joints shall be constructed with sealing band installed on the rear (backfill) side of the precast reinforced concrete retaining walls. When cast-in-place footing keys are required, the precast reinforced concrete retaining walls shall be secured in place during placement and curing of the Class 4000 cast-in-place footing key. The Contractor shall ensure the concrete is fully consolidated around all headed reinforcing bars that are wet inserted into the Class 4000 concrete.

When the Contractor elects to use precast stem panels as described in 6-11.3(1)B1, the precast reinforced concrete wall stem panel shall be rigidly held in place during placement and curing of the cast-in-place footing concrete. The precast reinforced concrete wall stem panels shall be placed a minimum of 1 inch into the cast-in-place footing to provide a shear key. The base of the precast reinforced concrete wall stem panel shall be sloped ½ inch per foot to facilitate

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proper concrete placement. To ensure an even flow of concrete under and against the base of the precast reinforced concrete wall stem panel, a form shall be placed parallel to the precast reinforced concrete wall stem panel, above the cast-in-place footing, to allow a minimum 1-foot head to develop in the concrete during concrete placement. The steel reinforcing bars shall be shifted to clear the erection blockouts in the precast reinforced concrete wall stem panel by 1½ inches minimum. All joints shall be constructed with joint filler installed on the rear (backfill) side of the wall. The joint filler material shall extend from 2 feet below the final ground level in front of the wall to the top of the wall. The joint filler shall be a nonorganic flexible material and shall be installed to create a waterproof seal at panel joints. The soil bearing pressure beneath the falsework supports for the precast reinforced concrete wall stem panels shall not exceed the maximum design soil pressure shown in the Plans for the reinforced concrete retaining wall.

6-11.3(3)B Cast-In-Place Concrete Construction

Cast-in-place concrete for reinforced concrete retaining walls shall be formed, reinforced, cast, cured, and finished in accordance with Section 6-02, and the details shown in the Plans. All cast-in-place concrete shall be Class 4000 unless otherwise shown in the Plans. Cast-in-place footings shall have a longitudinal slope no steeper than 1V: 6H, unless otherwise shown in the Plans.

The Contractor shall provide the specified exterior concrete surface finish as noted, and to the limits shown in the Plans. Surface finishes shall conform to Section 6-02.3(14).

Cast-in-place concrete for adjacent wall stem sections (between vertical expansion joints) shall be formed and placed separately, with a minimum 24-hour time period between concrete placement operations.

Premolded joint filler, ½ inch thick, shall be placed full height of all vertical wall stem expansion joints in accordance with Section 6-01.14.

6-11.3(4) Backfill, Weepholes, and Gutters

Unless the Plans specify otherwise, backfill and weepholes shall be placed in accordance with the Plans and Section 6-02.3(22). Gravel backfill for drain shall be compacted in accordance with Section 2-09.3(1)E. Backfill within the zone defined as Bridge Approach Embankment in Section 1-01.3 shall be compacted in accordance with Method C of Section 2-03.3(14)C. All other backfill shall be compacted in accordance with Method B of Section 2-03.3(14)C, unless otherwise specified.

Cement concrete gutter shall be constructed as shown in the Plans.

6-11.3(5) Traffic Barrier and Pedestrian Barrier

When shown in the Plans, traffic barrier and pedestrian barrier shall be constructed in accordance with Sections 6-02.3(11)A and 6-10.3(2), and the details shown in the Plans.

**6-11.4.GR6
Measurement**

6-11.4.INST1.GR6
Section 6-11.4 is replaced with the following:

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6-11.4.OPT1.2025.GR6

(November 20, 2023)

Concrete Class 4000 for retaining wall will be measured as specified in Section 6-02.4.

Except as noted below, concrete Class 7000 for precast retaining wall will be measured as specified in Section 6-02.4.

Except as noted below, all reinforcing steel for retaining wall and precast retaining wall will be measured as specified in Section 6-02.4.

Exception: When precast retaining walls are called out in the Plans to be constructed in accordance with Standard Plan D 20.10 with footing keys, the construction of the footing keys shall be incidental to wall construction. The concrete and reinforcing steel, including dowels, for the construction of footing keys will not be measured.

Traffic barrier and pedestrian barrier will be measured as specified in Section 6-10.4 for cast-in-place concrete barrier.

6-11.5.GR6

Payment

6-11.5.INST1.GR6

Section 6-11.5 is replaced with the following:

6-11.5.OPT1.2025.GR6

(November 20, 2023)

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

Structure Excavation Class A and Shoring or Extra Excavation Class A will be paid for in accordance with Section 2-09.5.

Traffic and Pedestrian Barrier shall be paid for in accordance with Section 6-10.5.

“Conc. Class 4000 For Retaining Wall”, per cubic yard.

All costs in connection with furnishing and installing PVC pipe for weep holes, premolded joint filler, grout, exterior surface finish, and pigmented sealer (when specified), shall be included in the unit Contract price per cubic yard for “Conc. Class 4000 For Retaining Wall”

“Conc. Class 7000 For Precast Retaining Wall”, per cubic yard.

All costs in connection with furnishing and installing PVC pipe for weep holes, premolded joint filler, joint sealant, external sealing bands, weld tie assemblies, footing keys, wall joints, footing joints, grout, exterior surface finish, and pigmented sealer (when specified), shall be included in the unit Contract price per cubic yard for “Conc. For Retaining Wall”

“St. Reinf. Bar For Retaining Wall”, per pound.

“Epoxy-Coated St. Reinf. Bar For Retaining Wall”, per pound.

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“St. Reinf. Bar For Precast Retaining Wall”, per pound.

“Epoxy-Coated St. Reinf. Bar For Precast Retaining Wall”, per pound.

Structure Excavation Class A and Shoring or Extra Excavation Class A will be paid in accordance with Section 2-09.5.

Traffic and Pedestrian Barrier will be paid in accordance with Section 6-10.5.

1 6-16.GR6
2 **Soldier Pile and Soldier Pile Tieback Walls**

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4 6-16.3.GR6
5 **Construction Requirements**

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7 6-16.3(3).GR6
8 **Shaft Excavation**

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10 6-16.3(3).INST1.GR6
11 The second sentence in the first paragraph of Section 6-16.3(3) is revised to read:

12
13 6-16.3(3).OPT1.2025.GR6
14 (November 20, 2023)
15 The diameter of the shaft shall be as shown in the Plans.
16

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1 6-18.SA1.2025.GR6

2 VACANT

3 Section 6-18 including the title is revised and replaced with the following:

4

5 (November 20, 2023)

6 6-18 Shotcrete Facing

7

8 6-18.1 Description

9 This Work consists of constructing permanent shotcrete facing using the wet-mixing method
10 as shown on the Plans. Shotcrete constructed as concrete slope protection shall be
11 constructed in accordance with Section 8-16.

12

13 6-18.2 Materials

14 Materials shall meet the requirements of the following sections:

15

16 Cement 9-01.2(1)

17 Aggregates for Portland Cement Concrete 9-03.1

18 Premolded Joint Filler 9-04.1(2)

19 Steel Reinforcing Bar 9-07.2

20 Epoxy-Coated Steel Reinforcing Bar 9-07.3

21 Concrete Curing Materials and Admixtures 9-23

22 Fly Ash 9-23.9

23 Ground Granulated Blast Furnace Slag 9-23.10

24 Microsilica Fume 9-23.11

25 Water 9-25.1

26

27 Aggregate for shotcrete shall meet the following gradation requirements expressed as
28 percentages by weight:

29

| <u>Sieve Size</u> | <u>Percent Passing</u> |
|-------------------|------------------------|
| <u>1/2 inch</u> | <u>100</u> |
| <u>3/8 inch</u> | <u>90 to 100</u> |
| <u>No. 4</u> | <u>70 to 85</u> |
| <u>No. 8</u> | <u>50 to 70</u> |
| <u>No. 16</u> | <u>35 to 55</u> |
| <u>No. 30</u> | <u>20 to 35</u> |
| <u>No. 50</u> | <u>8 to 20</u> |
| <u>No. 100</u> | <u>2 to 10</u> |
| <u>No. 200</u> | <u>0 to 2.5</u> |

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31 6-18.3 Construction Requirements

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33 6-18.3(1) Submittals

34 The Contractor shall submit Type 2 Working Drawings prior to beginning construction of all
35 mix design panels. The submittal shall consist of the following:

36

37 1. The shotcrete mix design, all mix design test panel measurements,

38 2. Planned method, equipment, means of access, joint formwork, and materials for

39

40 placement, finishing and curing of each shotcrete facing specified.

3. A detailed construction sequence which includes order of operations and maximum
timing between operations (including placing, flash coating, finishing, fogging,

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curing). The sequence will also include the anticipated crew size and production rate for the work.

- 4. Documentation of the certification of each nozzle operator placing permanent shotcrete facing. Nozzle operator shall be certified for the method and position required by the Plans.

The Contractor shall submit all test results as a Type 2 Working Drawing after construction of all mix design panels as described in these Special Provisions. The Contractor shall give the Contracting Agency ample time to review the test results.

6-18.3(2) Preconstruction Meeting

Prior to placing production shotcrete, the Contractor shall participate in a preconstruction meeting with the Engineer. At a minimum, attendance at this meeting shall include representatives from the Contractor, shotcrete subcontractor, and shotcrete supplier. Discussion will include shotcrete testing and acceptance, shotcrete production testing, placement and curing.

6-18.3(3) Shotcrete Testing

The Contractor shall retain a testing Laboratory to perform the tests required in these provisions. Testing Laboratories' equipment shall be calibrated within 1 year prior to testing and testers shall be either ACI certified or qualified in accordance with AASHTO R 18."

All cylinder specimens tested under ASTM C1604 shall be constructed with a L/D ratio of 2:1

6-18.3(3)A Mix Design Test Panel

The Contractor shall prepare mix design test panels for each mix design in accordance with ASTM C1140 and the following requirements:

- 1. The panels shall be of adequate size and thickness to complete all required testing.
- 2. The nozzle operators producing the panels do not need to be the same personnel who will be placing the permanent shotcrete facing.

Prior to shotcrete placement for the mix design test panels, the Contractor shall measure the air content of the freshly mixed shotcrete in accordance with WAQTC FOP for AASHTO T 152.

The Contractor shall obtain cores from the mix design test panels in accordance with ASTM C1604. Core diameters shall be at least 4 inches.

The cores shall be tested as follows and shall meet the following criteria:

- 1. Determine density in accordance with ASTM C1604.
- 2. Determine compressive strength in accordance with ASTM C1604, except that the cores shall be cured per Standard Curing in a moist condition per AASHTO T 23. Minimum compressive strength shall be 4000 psi at 28 days.
- 3. Determine the chloride ion content in accordance with AASHTO T 260. Chloride ion content shall not exceed the limits of Section 6-02.3(2) for reinforced concrete.
- 4. Satisfy one of the following requirements:
 - a. Determine the spacing factor and air content in accordance with ASTM C457. The maximum spacing factor shall be 0.010 inches and the minimum air content shall be 4%.

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b. Determine the durability factor using Method A after 300 cycles in accordance with AASHTO T161. The minimum durability factor shall be 90 percent. Test samples shall be obtained from shotcrete batches of a minimum of 3.0 cubic yards.

6-18.3(3)B Preproduction Testing

After meeting the mix design test panels performance requirements and prior to constructing the permanent shotcrete facing, the Contractor shall schedule and perform preproduction testing.

Preproduction test panels shall be prepared at the project site with the same method of shotcrete installation, finishing and curing to construct the permanent shotcrete facing. Prior to placement in the preproduction test panels, the shotcrete shall be tested for air content in accordance with WAQTC FOP for AASHTO T 152.

All nozzle operators constructing preproduction test panels shall have a current ACI shotcrete Nozzleman Certification. Each nozzle operator shall construct preproduction test panels for verification of shotcrete properties, for verification of placement methods and if specified in the Plans a test panel for surface finish. Only nozzle operators who have constructed acceptable preproduction test panels shall be allowed to place permanent shotcrete facing. When the preproduction test panels are rejected for strength, density, air entrainment or grade, a second panel may be prepared at the Contractor's option. When the second panel is rejected for strength, density, air entrainment or grade, the nozzle operator shall not be permitted to place permanent shotcrete facing.

6-18.3(3)B1 Preproduction Test Panels for Verification of Shotcrete Properties

One test panel shall be constructed for each mix design and each anticipated shooting orientation. Test panels shall be constructed per ASTM C1140. No reinforcing steel shall be included.

At the completion of the curing period, the Contractor shall take at least six cores from each panel in accordance with ASTM C1604. Core diameters shall be at least 4 inches. Testing of these cores and acceptance criteria of the panel shall be as follows:

1. Three cores shall be measured for density in accordance with ASTM C1604. Density shall be a minimum of 95% of the density reported for the mix design test panel.
2. Three cores shall be measured for compressive strength in accordance with ASTM C1604, except that the cores shall be cured per Standard Curing in a moist condition per AASHTO T 23. Minimum compressive strength shall be 4000 psi at 28 days.
3. The remaining three cores not measured for compressive strength shall have the air void system assessed in accordance with ASTM C457. Shotcrete shall have a maximum spacing factor of 0.010 inches and a minimum air content of 4%.

The results of the testing shall be submitted to the Engineer as a Type 2 Working Drawing.

1 **6-18.3(3)B2 Preproduction Test Panels for Verification of Placement Methods**

2 One preproduction test panel shall be constructed for each combination of mix
3 design, anticipated shooting orientation, and wall reinforcing layout. The test panels
4 shall be constructed per ASTM C1140. The minimum test panel size shall be 48
5 inches by 48 inches. Test panels shall be constructed to the same thickness shown
6 in the Plans and shall include the same reinforcing type, size and layout and shall
7 have the same finish as specified for the permanent shotcrete facing.

8
9 At the completion of the curing period, the Contractor shall take three cores from
10 each panel in accordance with ASTM C1604. Core diameters shall be at least 4
11 inches. Cores shall be taken at locations where reinforcing steel is present. These
12 cores shall be visually graded as follows:

13 **Grade 1** - Shotcrete specimens are solid; there are no laminations, sandy areas
14 or voids. Small air voids with maximum diameter of 1/8 inch and maximum length
15 of 1/4 inch are normal and acceptable. Sand pockets or voids behind continuous
16 reinforcing steel are unacceptable. The surface against the form or bond plane
17 shall be sound, without sandy texture or voids.

18 **Grade 2** - Shotcrete specimens shall have no more than two laminations or
19 sandy areas with dimensions not to exceed 1/8 inch thick by 1 inch long. The
20 height, width, and depth of voids shall not exceed 3/8 inch. Porous areas behind
21 reinforcing steel shall not exceed 1/2 inch in any direction except along length
22 of reinforcing steel. The surface against the form or bond plane shall be sound,
23 without sandy texture or voids.

24 **Grade 3** - Shotcrete specimens shall have no more than two laminations or
25 sandy areas with dimensions exceeding 3/16 inch thick by 1-1/4 inches long, or
26 one major void, sand pocket, or lamination containing loosely bonded sand not
27 to exceed 5/8 inch thick and 1-1/4 inches in width. The surface against the form
28 or bond plane may be sandy, with voids containing overspray to a depth of 1/16
29 inch.

30 **Grade 4** - Core shall meet, in general, requirements of Grade 3 cores, but may
31 have two major flaws such as described for Grade 3, or may have one flaw with
32 maximum dimension of 1 inch perpendicular to the face of the core, with
33 maximum width of 1-1/2 inches. The end of the core that was shot against the
34 form may be sandy, with voids containing overspray to a depth of 1/8 inch.

35 **Grade 5** - Core that does not meet criteria of core grades 1 through 4, by being
36 of poorer quality, shall be classified as Grade 5.

37
38 For the purpose of qualifying the nozzle operator, the panel will be acceptable if all
39 of the following are met:

- 40 1. The mean grade of the cores is 2.5 or less.
- 41 2. No core is graded at 4 or higher.

42
43 If the mean grade of the cores exceeds 2.5, the Contractor may take three additional
44 cores and calculate a mean based on all six cores. If the mean grade of the six cores
45 is 2.5 or less, the panel will be acceptable.

46
47 The measurements, scaled photographs of the cores and grading shall be submitted
48 to the Engineer as a Type 2 Working Drawing. Cores shall be provided to the
49 Engineer upon request.

50

1 **6-18.3(3)B3 Preproduction Test Panels for Verification of Surface Finish**

2 When specified in the Plans, the Contractor shall prepare a surface finish test panel
3 to demonstrate the ability of each concrete finisher to achieve the specified surface
4 finish. The Engineer will determine the acceptability of the panel surface finish by
5 comparing it against the surface finish specified in the Contract.

6
7 Upon approval, the surface finish test panel will serve as a reference for qualifying
8 additional concrete finishers and as a basis for accepting the surface finish of
9 production shotcrete work.

10
11 **6-18.3(3)C Production Testing**

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13 **6-18.3(3)C1 Sampling and Testing Fresh Concrete**

14 At the start of each day of production, the shotcrete will be tested in accordance with
15 Section 6-02.3(5)G for temperature, consistency, and air content and will be sampled
16 in accordance with Section 6-02.3(5)H. The Contractor shall provide curing boxes in
17 accordance with 6-02.3(5)H.

18
19 The air content of the freshly mixed concrete shall be a minimum of 4%. The
20 Contractor shall adjust the air content of the freshly mixed concrete in order to assure
21 4% minimum air content in the hardened shotcrete.

22
23 **6-18.3(3)C2 Production Test Panels**

24 The Contractor shall construct one unreinforced production test panel in accordance
25 with ASTM C1140 for each day's production of shotcrete facing. The production test
26 panel shall be constructed and cured on site using the same methods and initial
27 curing that will be used to construct the permanent shotcrete facing. Following a
28 seven day curing period of the production test panel, three cores shall be taken by
29 the Contractor in accordance with ASTM C1604. Core diameters shall be at least 4
30 inches. The Production cores shall be delivered to the Engineer for testing, and shall
31 meet the following requirements:

- 32 1. The cores shall be measured for density in accordance with ASTM C1604.
33 Density shall be a minimum of 95% of the density reported for the mix
34 design test panel.
35 2. The cores shall be measured for 28-day compressive strength in
36 accordance with ASTM C1604. Minimum compressive strength shall be
37 4,000 psi.

38
39 The remainder of the panels shall remain the property of the Contractor.

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41 **6-18.3(4) Vacant**

42
43 **6-18.3(5) Placing Wire Reinforcement**

44 Reinforcement of the shotcrete shall be placed as shown in the Plans. The wire reinforcement
45 shall be securely fastened to the steel reinforcing bars so that it will be 1 to 1.5 inches from
46 the face of the shotcrete at all locations, unless otherwise shown in the Plans. Wire
47 reinforcement shall be lapped 1.5 squares in all directions, unless otherwise shown in the
48 Plans.

49
50 **6-18.3(6) Alignment Control**

51 The Contractor shall install non-corroding alignment wires and thickness control pins to
52 establish thickness and plane surface. The Contractor shall install alignment wires at corners

1 and offsets not established by formwork. The Contractor shall ensure that the alignment wires
2 are tight, true to line, and placed to allow further tightening. The Contractor shall remove the
3 alignment wires after facing construction is complete.

4 5 **6-18.3(7) Shotcrete Application**

6 The Contractor shall not place shotcrete that cannot be finished in the same shift.

7
8 The Contractor shall not apply shotcrete when the ambient air temperature rises above 86
9 degrees Fahrenheit. The Contractor may submit a request to apply shotcrete during hot
10 weather (ambient temperatures above 86 degrees Fahrenheit), but shall submit hot-weather
11 shotcreting procedures as a Type 3 Working Drawing to obtain the Engineer's approval. The
12 Working Drawing shall address any necessary means to control the temperature of the freshly
13 placed concrete, prevent drying and shrinkage cracking, and ensure evaporative moisture loss
14 is controlled.

15
16 Shotcrete shall not be placed on substrates below 41 degrees Fahrenheit.

17
18 Temperature and time for placement of shotcrete shall meet the requirement of Sections 6-
19 02.3(4)D and 6-02.3(6)A.

20
21 A clean, dry supply of compressed air sufficient for maintaining adequate nozzle velocity for
22 all parts for the Work and for simultaneous operation of a blow pipe for cleaning away rebound
23 shall be always maintained. Thickness, method of support, air pressure, and rate of placement
24 of shotcrete shall be controlled to prevent sagging or sloughing of freshly applied shotcrete.

25
26 The shotcrete shall be applied from the lower part of the area upwards. Surfaces to be shot
27 shall be damp, but free of standing water.

28
29 The nozzles shall be held at an angle approximately perpendicular to the working face and at
30 a distance that will keep rebound at a minimum and compaction will be maximized. Shotcrete
31 shall emerge from the nozzle in a steady uninterrupted flow. If, for any reason, the flow
32 becomes intermittent, the nozzle shall be diverted from the Work until a steady flow resumes.

33
34 Deficiencies observed during shotcrete application such as the following, shall constitute a
35 cause for shotcrete rejection:

- 36 1. Failures to control and remove build-up of overspray and rebound;
- 37 2. Incomplete consolidation of shotcrete around reinforcing steel and embedments;
- 38 3. Incorporation of shadows, excessive voids, delaminations, sags or sloughing; and
- 39 4. Failures to apply shotcrete to the required line, grade and tolerance.

40
41 The Engineer will inspect the shotcrete for evidence of excessive plastic or drying shrinkage
42 cracking, tears, sloughs or other deficiencies. Sounding or other nondestructive testing may
43 be used to check for voids or delamination. The Engineer may also evaluate the in-place
44 shotcrete as follows:

- 45 1. Extraction of cores from the in-place shotcrete at locations selected by the Engineer
46 and evaluation of such cores for compliance with the specifications;
- 47 2. Sawcutting or coring to check the adequacy of encasement of reinforcing steel and
48 embedments.

49
50 Surface defects shall be repaired as soon as possible after initial placement of the shotcrete.
51 All shotcrete which lacks uniformity; which exhibits segregation, honeycombing, or lamination;
52 or which contains any dry patches, slugs, voids, or sand pockets, shall be removed and

1 replaced with fresh shotcrete by the Contractor, to the satisfaction of the Engineer at no cost
2 to the Contracting Agency.

3
4 Construction joints in the shotcrete shall be uniformly tapered over a minimum distance of
5 twice the thickness of the shotcrete layer. The surface of the joints shall be cleaned and
6 thoroughly wetted before adjacent shotcrete is placed. Shotcrete shall be placed in a manner
7 that provides a finish with uniform texture and color across the construction joint.

8
9 The shotcrete shall be cured by applying a clear curing compound in accordance with Section
10 9-23.2. The curing compound shall be applied immediately after final gunning. Two coats of
11 curing compound shall be applied to the shotcrete surface immediately after finishing.

12
13 If field inspection or testing indicates that any shotcrete produced fails to meet the
14 requirements, the Contractor shall immediately modify procedures, equipment, or system, to
15 produce specification material. When the shotcrete is specified as the final fascia finish, the
16 shotcrete shall be wet cured in accordance with Section 6-02.3(11). The Contractor shall keep
17 the surface of the freshly placed shotcrete wet by fogging until the wet cure is applied.

18 19 **6-18.3(8) Shotcrete Finishing**

20 When the shotcrete facing is an interim coating to be covered by a subsequent shotcrete
21 coating or a cast-in-place concrete fascia, the Contractor shall strike off the surface of the
22 shotcrete facing with a roughened surface as specified in Section 6-02.3(12). The grooves of
23 the roughened surface shall be either vertical or horizontal.

24
25 The shotcrete face shall be finished using the alternative finish treatment shown in the Plans.
26 The alternatives are as follows:

27 **Alternative A** – After the surface has taken its initial set (crumbling slightly when cut), the
28 surface shall be broom finished to secure a uniform surface texture.

29 **Alternative B** – Shotcrete shall be applied in a thickness a fraction beyond the alignment
30 wires and forms. The shotcrete shall stiffen to the point where the surface does not pull
31 or crack when screeded with a rod or trowel. Excess material shall be trimmed, sliced, or
32 scraped to true lines and grade. Alignment wires shall be removed and the surface shall
33 receive a steel trowel finish, leaving a smooth uniform texture and color. Once the
34 shotcrete has cured, pigmented sealer shall be applied to the shotcrete face. The
35 shotcrete surface shall be completed to within a tolerance of ½ inch of true line and grade.

36 **Alternative C** – Shotcrete shall be hand-sculptured, colored, and textured to simulate the
37 relief, jointing, and texture of the natural backdrop surrounding the facing. The ends and
38 base of the facing shall transition in appearance as appropriate to more nearly match the
39 color and texture of the adjoining Roadway fill slopes. This may be achieved by
40 broadcasting fine and coarse aggregates, rocks, and other native materials into the final
41 surface of the shotcrete while it is still wet, allowing sufficient embedment into the
42 shotcrete to become a permanent part of the surface.

43 **Alternative D (Heavy Nozzle Finish)** – The heavy nozzle finish shall conform to
44 Alternative B method except that after the alignment wires are removed, the surface shall
45 be flashed and sealed to a heavy nozzle finish. The surface shall have an amplitude of
46 3/16” and be uniform in texture and color.

47 48 **6-18.4 Measurement**

49 Shotcrete facing will be measured by the square foot surface area of the completed facing
50 measured to the neat lines of the facing as shown in the Plans.

1 **6-18.5 Payment**

2 Payment will be made for each of the following Bid items when they are included in the
3 Proposal:

4
5 “Shotcrete Facing”, per square foot.

6 All costs in connection with constructing shotcrete facing as specified shall be included in
7 the unit Contract price per square foot for “Shotcrete Facing”.

8
9 6-18.GR6

10 **Shotcrete Facing**

11
12 6-18.2.GR6

13 **Materials**

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15 6-18.2.INST1.GR6

16 Section 6-18.2 is supplemented with the following:

17
18 ~~6-18.2.OPT1.GB6~~

19 ~~(August 1, 2005)~~

20 ~~**Shotcrete Facing**~~

21 ~~Portland cement shall be Type I or II in accordance with Section 9-01.2(1).~~

22
23 ~~Air entrainment shall be 6.0 percent, ± 1.5 percent.~~

24
25 ~~Water for mixing and curing shall be clean and free from substances which may be~~
26 ~~injurious to concrete or steel, and shall be free of elements which would cause staining.~~

27
28 ~~Aggregate for shotcrete shall meet the following gradation requirements:~~

| <u>Sieve Size</u> | <u>Percent Passing by Weight</u> |
|-------------------|----------------------------------|
| 1/2 inch | 100 |
| 3/8 inch | 90 to 100 |
| U.S. No. 4 | 70 to 85 |
| U.S. No. 8 | 50 to 70 |
| U.S. No. 16 | 35 to 55 |
| U.S. No. 30 | 20 to 35 |
| U.S. No. 50 | 8 to 20 |
| U.S. No. 100 | 2 to 10 |
| U.S. No. 200 | 0 to 2.5 |

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42 6-18.2.OPT2.GB6

43 ~~(August 3, 2015)~~

44 ~~**Coloration for Shotcrete Facing Finishing Alternative C**~~

45 ~~If shotcrete facing finishing Alternative C is specified, the Contractor shall provide~~
46 ~~shotcrete coloration for finishing the sculptured shotcrete to match the color of the natural~~
47 ~~surroundings. Acceptance of the final appearance of the coloration will be based on the~~
48 ~~pre-production test panel. Acceptance of the long-term properties of the coloration~~
49 ~~material will be based on a manufacturer's certification, submitted as a Type 1 Working~~
50 ~~Drawing which verifies the following to be true about the product:~~

- 51
52 1. ~~Resistance to alkalis in accordance with ASTM D 543.~~

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- 2. Demonstrates no change in coloration after 1,000 hours of testing in accordance with ASTM D 822.
- 3. Does not oxidize when tested in accordance with ASTM D 822.
- 4. Demonstrates resistance to gasoline and mineral spirits when tested in accordance with ASTM D 543.

Additionally, the certification shall provide the product name, proposed mix design and application method, and evidence of at least one project where the product, using the proposed mix and application method, was applied and which has provided at least five years or more of acceptable durability and color permanency.

6-18.2.OPT3.GB6

(August 3, 2015)
Fiber Reinforcement for Shotcrete Facing

Fiber reinforcement for shotcrete facing shall be either steel fibers or macro synthetic fibers.

Steel fibers shall be cold drawn, deformed steel Type 1 or Type 4 fibers conforming to ASTM A 820 with a minimum tensile strength of 120 ksi. Steel fibers shall have a length between 1.0 and 1.50 inches and shall have a length to diameter ratio of less than 80. The steel fibers used shall be manufactured specifically for shotcrete applications.

Macro synthetic fibers shall be deformed polyolefin Type 3 fibers conforming to ASTM C 1116. Macro synthetic fibers shall have a length between 1.0 and 2.0 inches and shall be between 0.02 and 0.04 inches in diameter. The macro synthetic fibers used shall be manufactured specifically for shotcrete applications.

Fiber reinforcement will be accepted based on the Manufacturer's Certificate of Compliance.

~~6-18.3.GR6~~

Construction Requirements

~~6-18.3.INST1.GR6~~

~~Section 6-18.3 is supplemented with the following:~~

~~6-18.3.OPT1.GB6~~

~~**(August 3, 2015)**~~
~~**Shotcrete Facing for Rock/Soil Slope Stabilization**~~

~~**Qualifications of Contractor's Personnel**~~

~~The shotcrete crew members shall have work experience conforming to Section 6-18.3(4), except that the nozzle operators and pumping equipment operators shall have placed a minimum of 100 cubic yards of shotcrete on a minimum of three projects of similar slope heights and orientations as in this project within the last five years.~~

~~All nozzle operators shall be qualified by test in accordance with Section 6-18.3(4).~~

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Testing

~~Pre-production and production testing shall conform to Section 6-18.3(3) and the following additional requirements:~~

~~Fiber reinforcement shall be included in the shotcrete mix used for all pre-production and production testing.~~

~~The Contractor shall make at least two 12-inch square production test panels, where one section is defined as one day's placement. One additional 12-inch square production test panel shall be made whenever a nozzle operator or equipment is changed during the daily work period.~~

~~In addition to compressive strength testing, cores taken from the pre-production and production test panels will be tested for density, absorption and voids in accordance with ASTM C 642.~~

~~Absorption shall not exceed 8 percent and void content shall not exceed 17 percent.~~

Mix Design

~~Unless otherwise specified in the Plans, the fiber reinforced shotcrete used for rock/soil slope stabilization shall have a minimum compressive strength of 2,500 psi at seven days and 4,000 psi at 28 days.~~

~~Microsilica shall be included in the shotcrete mix, but shall not exceed 8 percent by mass of the mix.~~

~~The minimum steel fiber content in the shotcrete mix shall be 100 pounds per cubic yard. The minimum macro-synthetic fiber content in the shotcrete mix shall be 10 pounds per cubic yard.~~

Surface Preparation

~~Immediately prior to shotcrete application, rock and soil surfaces within the section being shot shall be scaled of all loose material and be thoroughly cleaned by use of air or water jets or other means acceptable to the Engineer. Shotcrete shall not be placed on any surface which is frozen, spongy, or where there is free water. The surface receiving shotcrete shall be dampened not more than one hour prior to shotcrete application.~~

Alignment Control

~~Thickness control pins shall conform to Section 6-18.3(6) and shall be placed on a maximum five foot square grid pattern.~~

Drainage

~~Unless otherwise shown in the Plans, weep holes shall be provided throughout the shotcrete facing at 10-foot centers maximum, horizontal and vertical. The weep holes shall consist of 24-inch long, two-inch diameter Schedule 40 PVC slotted drain pipe placed within predrilled holes and sloped to drain. The weep hole drains shall be installed prior to placement of the shotcrete facing. The weep hole drains shall extend one to three inches beyond the final finished surface of the shotcrete facing. During placement of the shotcrete facing, the exposed open ends of the weep hole~~

1 drains shall be covered or plugged to prevent shotcrete intrusion. The Contractor
2 shall remove the covers or plugs after completing shotcrete placement.

3
4 Prefabricated drainage mat, if shown in the Plans or specified by the Engineer, shall
5 be placed on the slope face prior to placement of the shotcrete facing in accordance
6 with Section 6-15.3(7) and the details shown in the Plans, and shall be secured to
7 the slope face by methods acceptable to the Engineer to ensure permanent and full
8 contact with the slope.

9 10 **Anchor Bars**

11 Unless otherwise shown in the Plans, steel reinforcing bar anchor bars shall be
12 placed at approximately 10-foot centers maximum, horizontal and vertical. The bars
13 shall be L shaped #5 bars with the short leg measuring 8 inches and the long leg 24
14 inches. The bars shall be placed in 1 1/4 inch diameter, 24-inch deep holes. The
15 bars shall be set either with grout conforming to Section 9-20.3, or with Type II epoxy
16 bonding agent conforming to Section 9-26.1, with the grade and class as
17 recommended by the epoxy bonding agent manufacturer. The bars shall be placed
18 such that the short leg of the L shaped bar points upward and is approximately 1 1/2
19 inches clear of the slope surface.

20 21 **Mixing of Production Fiber Reinforced Shotcrete**

22 Fiber reinforced shotcrete can be mixed by either a dry mix or wet mix process. If
23 the dry mix process is selected, the fiber reinforcement used shall only be steel fibers.
24 If the wet mix process is selected, the fiber reinforcement may be either steel fibers
25 or macro-synthetic fibers.

26
27 The method and equipment used for batch mixing shall be as submitted in
28 accordance with Section 6-18.3(1). The frequency and procedure for equipment
29 inspection, cleaning and maintenance shall be as recommended by the equipment
30 manufacturer.

31 32 **Dry Mix Process**

33 The cement and aggregate shall be batched by weight. Pre-dampening shall
34 be done prior to flow into the main hopper and immediately after flow out of the
35 packaging in order to ensure that the premix will flow at a uniform rate (without
36 slugs) through the main hopper, delivery hose and nozzle to form uniform
37 shotcrete free of dry pockets. Pre-dampened cement and aggregate mix shall
38 not be used if allowed to stand more than 90 minutes.

39 40 **Wet Mix Process**

41 The batching and mixing shall conform to ASTM C 94.

42 43 **Batching and Mixing Fiber Reinforcement**

44 If fiber addition takes place in the field after batching and mixing the shotcrete,
45 the procedure used to add the fibers to the shotcrete mix shall be demonstrated
46 by the Contractor for the Engineer's acceptance.

47
48 If fibers are added during the batching and mixing process, a screen having a
49 mesh of 1.5 to 2.5 inches shall be used to prevent any fiber balls from entering
50 the shotcrete line. Batching through a screen will not be required if the
51 Contractor successfully demonstrates to the Engineer that fiber balls are not
52 being formed.

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~~Fibers shall not be added to the dry or wet mix at a rate faster than they can be blended with the other ingredients without forming balls or clumps. Bulk fibers showing a tendency to tangle together shall pass through a vibrating screen or be carefully sifted into the mix so that they enter the mix as individual elements and not as clumps.~~

Shotcrete Application

~~Shotcrete application shall conform to Section 6-18.3(7) and the following requirements:~~

~~Unless otherwise shown in the Plans, the minimum finished thickness of the shotcrete facing shall be four inches.~~

~~Shotcrete shall be applied from the lower portion of the area upwards to prevent rebound from accumulating on surfaces yet to be covered. Rebound, defined as shotcrete constituents that fail to adhere to the applied surface, shall not be worked into the finished shotcrete facing and shall not be salvaged or recycled for inclusion in later batches.~~

~~Shotcrete application shall be suspended if any of the following conditions are present:~~

- ~~1. High winds prevent proper application of the shotcrete.~~
- ~~2. The ambient temperature is, or is forecast to be, outside the temperature range of 40F to 90F during placement or initial curing.~~
- ~~3. Rain or seepage is washing cement out of the freshly placed shotcrete or is causing sloughs in the work.~~

~~Construction joints shall be tapered over a minimum distance of 12 inches to the thin edge. Square construction joints will not be permitted.~~

Shotcrete Finishing

~~Unless otherwise shown in the Plans or specified in the Special Provisions, the shotcrete facing shall be finished in accordance with Finish Alternative A in Section 6-18.3(8). Colorization, if required, shall conform to the requirements specified in Section 6-18.2 as supplemented in these Special Provisions.~~

~~6-18.4.GR6~~

Measurement

~~6-18.4.INST1.GR6~~

~~Section 6-18.4 is supplemented with the following:~~

~~6-18.4.OPT1.GB6~~

~~(April 5, 2010)~~

~~Shotcrete facing for rock/soil slope stabilization will be measured by the cubic yard of shotcrete placed.~~

1 ~~6-18.5.GR6~~

2 **Payment**

3

4 ~~6-18.5.INST1.GR6~~

5 Section 6-18.5 is supplemented with the following:

6

7 ~~6-18.5.OPT1.GB6~~

8 (~~April 5, 2010~~)

9 "~~Shotcrete Facing For Rock/Soil Slope Stabilization~~", per cubic yard.

10 The unit contract price per cubic yard for "~~Shotcrete Facing For Rock/Soil Slope~~
11 ~~Stabilization~~" shall be full pay for performing the work as specified, including pre-
12 ~~production and production testing, surface preparation, weep hole drains, steel anchor~~
13 ~~bars, and shotcrete, mixing, application, curing and finishing, and, if required, shotcrete~~
14 ~~colorization.~~

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1 6-20.GR6

2 **Buried Structures**

3

4 6-20.1.GR6

5 **Description**

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7 6-20.1(1).GR6

8 **Definitions**

9

10 6-20.1(1).INST1.GR6

11 The list of types of buried structures in Section 6-20.1(1) is supplemented with the
12 following:

13

14 6-20.1(1).OPT1.GB6

15 (January 10, 2022)

16 **Composite Arch System (CAS):** A buried Structure consisting of a two-component
17 Superstructure placed on reinforced concrete foundations. The Superstructure
18 consists of fiber-reinforced polymer (FRP) composite hollow tube external
19 reinforcement/stay-in-place forms filled with expansive self-consolidating concrete
20 (ESCC), supporting custom pultruded corrugated FRP deck panels retaining the
21 structural backfill.

22

23 The Superstructure of the CAS shall be as designed and supplied by:

24

25 Advanced Infrastructure Technologies (AIT), LLC

26 55 Baker Boulevard

27 Brewer, ME 04412

28 (207) 573-9055

29 www.aitbridges.com

30

31 Fabrication shall be by the supplier or a licensed designee as designated by a Type
32 1 Working Drawing.

33

34 6-20.2.GR6

35 **Materials**

36

37 6-20.2.INST1.GR6

38 Section 6-20.2 is supplemented with the following:

39

40 6-20.2.OPT1.GB6

41 **(January 10, 2022)**

42 **Composite Arch System**

43 **FRP Composite Hollow Tubes**

44 Glass fibers shall be type E-glass manufactured in accordance with ASTM D578
45 Section 4.2.2 and tested in accordance with ASTM D2343.

46

47 Carbon fibers shall be standard modulus fibers. Tensile strength, tensile modulus,
48 and strain of the fibers shall be documented in accordance with the manufacturer's
49 test specifications.

50

51 Resin shall be epoxy vinyl ester resin with viscosity suitable for infusion. Clear
52 casting tensile strength and tensile modulus shall be tested in accordance with ASTM

1 D638. Clear casting flexural strength and modulus shall be tested in accordance
2 with ASTM D790. Heat distortion temperature shall be documented in accordance
3 with ASTM D648.
4
5 FRP components will be accepted based on a Manufacturer's Certificate of
6 Compliance. The certificate shall include test results for physical, material, and
7 durability properties specified in Section 3 of the *AASHTO LRFD Guide Specification*
8 *for Design of Concrete Filled FRP Tubes for Flexural and Axial Members*.
9
10 **FRP Deck Panels and Associated Fasteners and Adhesive Sealant**
11 The resin shall be premium grade, chemically resistant, UV stabilized polyurethane
12 of the type specified in the fabrication shop drawings.
13
14 The glass reinforcement shall be E-Glass that is straight and continuous, with fibers
15 oriented in three directions (0, 45, 90-degrees with respect to the length of the panel).
16 The glass content shall be a minimum of 70-percent by weight.
17
18 The FRP deck panels shall have a class B flame spread rating of 75 or less when
19 tested in accordance with ASTM E84, with the thickness, width, and corrugation
20 height specified in the fabrication shop drawings.
21
22 The fasteners attaching the FRP deck panels to the FRP composite hollow tubes
23 shall be drill point type AISI 410 stainless steel screws as specified in the fabrication
24 shop drawings.
25
26 The adhesive sealing the longitudinal joint of the FRP deck panels shall be a two-
27 part urethane sealant as specified in the fabrication shop drawings.
28
29 **Expansive Self Consolidating Concrete (ESCC)**
30 Total Cementitious Materials (CM) shall include cement, fly ash, and an expansive
31 cement component specified by the composite arch bridge system supplier.
32
33 Cement shall be Type I/II or Type IL portland cement conforming to AASHTO M 85.
34
35 An expansive cement product conforming to ASTM C845 Type K shall be added at
36 the rate as specified in Item 8 of the mix design parameters specified below.
37
38 Class F fly ash conforming to Section 9-23.9 or ground granulated blast furnace slag
39 conforming to Section 9-23.10 may be added at the allowable rates specified in Item
40 9 of the mix design parameters specified below.
41
42 **ESCC Mix Design**
43 The ESCC mix shall be designed in accordance with Section 6-02.3(2)A2 and
44 the following requirements:
45
46 1. Minimum 28-day compressive strength = 6000 psi.
47
48 2. Maximum size of coarse aggregate = 3/8-inch.
49
50 3. Fine aggregate proportions shall be 50 ± 5-percent of the total
51 aggregate by volume, to be determined by trial batching as required

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to attain specified strength, Visual Stability Index (VSI) and flow characteristics.

4. Type F high range water reducer conforming to Section 9-23.6(7) is required and shall be used at the concrete supplier's recommended dosage.
5. Viscosity modifying admixture conforming to Section 9-23.6(9) may be added at the concrete supplier's recommended dosage to improve mix stability.
6. Hydration stabilizer (retarder) is required to ensure sufficient water and time to begin ettringite formation of the Type K expansive cement.
7. Minimum Cementitious Material (CM) = 850 LB./C.Y.
8. The mix shall contain Type K expansive cement at a rate of 15-percent by weight of total cementitious material. This quantity may be revised by a CTS Component materials technician that has reviewed mix design and has provided a recommended Type K proportion for a specific mix supplier.
9. The mix may include Section 9-23.9 Class F fly ash at a rate less than 25-percent by weight of cementitious material, or Section 9-23.10 Grade 100 or Grade 120 ground granulated blast furnace slag at a rate less than 50-percent, by weight of cementitious material.
10. The water/cementitious material ratio (W/CM) shall be between 0.40 and 0.45.
11. Air content shall be 0-percent to 5.0-percent.

ESCC shall meet the following requirements in accordance with ASTM C1611 or AASHTO T 347 and AASHTO T 351 for slump flow and visual stability index:

1. Slump flow shall be between 24 and 30-inches
2. Visual stability index shall be between 0 and 1.0.

Additional concrete mix design requirements of the supplier shall be shown in the FRP tube fabrication shop drawings.

Trial batches shall be performed prior to use to verify compressive strength, slump flow, and visual stability index. Test results shall be submitted as a Type 1 Working Drawing. The trial batch requirement may be waived at the discretion of the Engineer if the concrete supplier is experienced in producing ESCC.

Each batch of ESCC delivered to the jobsite shall be tested for slump flow and visual stability index. If the ESCC fails to meet the requirements re-dosing with additives is permitted. The Engineer may reject ESCC that does not meet specified requirements.

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6-20.3.GR6

Construction Requirements

6-20.3.INST1.GR6

Section 6-20.3 is supplemented with the following:

6-20.3.OPT1.GB6

(January 10, 2022)

Composite Arch System

Design

The CAS design, Superstructure and foundation, shall conform to Section 6-20.3(1), and the following:

The CAS shall be designed in accordance with the AASHTO LRFD Bridge Design Specifications, the AASHTO LRFD Guide Specifications for Design of Concrete-Filled FRP Tubes for Flexural and Axial Members, the ASCE Pre-Standard for LRFD of Pultruded FRP Structures, and other applicable specifications.

The CAS shall be designed by the supplier on a project-specific basis by a licensed professional engineer, with design and load rating calculations and fabrication shop drawing Working Drawings provided to the Contractor.

Submittals

Submittals for CAS Superstructure and foundation shall conform to Section 6-20.3(2).

Foundation

The CAS foundation shall be constructed in accordance with Sections 6-20.3(5) and 6-20.3(6).

Fabrication

The CAS structural components shall be fabricated, either by the supplier or an independent fabricator licensed by the supplier, in accordance with Section 6-20.3(7) and the following:

Fabrication Quality Control/Quality Assurance

FRP composite hollow tubes shall be fabricated in accordance with the supplier's QC/QA plan and standard operating procedures. The portions of the QC/QA plan and procedures which do not contain trade secret material will be submitted to the Contracting Agency for review upon Engineer's request prior to beginning fabrication.

The FRP laminate comprising the tube shell shall be tested for tensile strength. Test result documentation of the mechanical properties and the required design values shall be submitted as a Type 1 Working Drawing.

A minimum of five test specimens shall be obtained from each FRP composite hollow tube. A minimum of two specimens per tube shall be tested. If the mean of the two tests from any one tube fails to meet or exceed the required design value, then at least three more specimens from the corresponding tube shall be

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tested. If the mean of the three additional specimens does not meet or exceed the design value, the tube will be rejected and replaced. All test results shall be submitted as a Type 1 Working Drawing prior to placing and assembling the tubes.

FRP Composite Hollow Tube Fabrication

The FRP composite hollow tubes may be fabricated as specified below using a closed mold vacuum assisted resin transfer method (VARTM) of composite manufacturing:

Reinforcement Storage and Preparation

Fabrics shall be stored in a clean, dry environment in the original packaging. They shall be protected from water, dirt, grease, grinding dust, and other foreign matter. The fabrics shall be cut on a clean cutting surface, free of any deleterious material that may adhere to the fabrics prior to layup. Longitudinal fabric shall not be spliced. Hoop reinforcement may be spliced.

Chemicals

Vinyl ester resins and other chemicals necessary for catalyzing the infusion matrix shall be stored in accordance with the manufacturer's recommendations.

Vacuum Assisted Resin Transfer

Prior to vacuum infusion of the vinyl ester matrix, the fabricator shall thoroughly seal the tooling and demonstrate that the sealed tooling can obtain a minimum workable vacuum pressure and a drop test. Chemical additives and catalysts to be combined with the vinyl ester resin shall be measured by weight, or the corresponding volume, based on the batch weight of the vinyl ester resin. The fabricator shall maintain documentation of the promotion rates and the actual amount of catalyst used for each infusion.

The infusion tank shall be charged with a sufficient amount of resin at all times to prevent air bubbles from entering the infusion ports in the tooling. Once resin is introduced into the tooling, the infusion process shall continue uninterrupted until it has been demonstrated that all evacuation ports have a surplus of resin flowing past the finished surface of the tooling and that no less than the predicted volume of resin has been introduced into the tool.

Post Processing

Once the laminate has been allowed to harden, the FRP composite hollow tubes shall be removed from the form with care so as not to induce stresses into the curing laminate. The laminate shall reach a minimum Barcol hardness value of 35 prior to removing the tubes from the form.

Tolerances

The finished FRP composite hollow tubes shall conform to the dimensions set forth in the accepted Type 2 Working Drawing fabrication shop drawings of Section 6-20.3(2). The diameter shall not vary in any one section by more than one-percent of the dimension given in the fabrication shop drawings. The tubes shall be checked for shape variations. No tube may vary from the shape specified in the fabrication shop drawings, expect for

1 diameter, by more than 2-inches or one-percent of the dimension,
2 whichever is smaller.

3
4 **Composite Arch System Placement and Assembly**

5 The CAS structural components shall be erected in accordance with Section 6-
6 20.3(8) and the following:

7
8 **Assignment of Responsibility**

9 The supplier shall furnish the Contractor the FRP composite hollow tubes, FRP
10 deck panels, stainless steel fasteners, and the structural adhesive at the project
11 site on the date requested by the Contractor.

12
13 The Contractor is responsible for the complete installation of the FRP composite
14 hollow tubes including but not limited to unloading and storing the tubes at the
15 project site, erecting and setting the tubes into the reinforced concrete
16 foundation, filling the tubes with ESCC, inspecting the filled tubes for voids, and
17 filling such voids if any are found.

18
19 After receiving the accepted fabrication shop drawings, the Contractor shall
20 notify the fabricator to fabricate and deliver the FRP composite hollow tubes,
21 FRP deck panels, stainless steel fasteners, and the structural adhesive to the
22 project site.

23
24 **Handling and Storage at the Project Site**

25 Care shall be taken when handling the FRP composite hollow tubes such that
26 no damage is caused to the unfilled tubes. When moved or placed by hand,
27 tubes shall be stabilized to prevent tipping over. When moved by hoist, straps
28 shall provide at least 2 inches of padded contact area.

29
30 The Contractor is responsible for receiving, unloading, and storing the FRP deck
31 panels. All FRP deck panels shall be handled with care and protected from cuts,
32 scratches, and abrasions. FRP deck panels shall be stored on blocking off the
33 ground and kept clean and dry. Damaged panels shall be replaced at no
34 additional expense to the Contracting Agency.

35
36 **FRP Tube and FRP Panel Placement and Assembly**

37 The Contractor is advised that the FRP composite hollow tubes have some
38 flexibility prior to filling with ESCC, and tubes out of tolerance without any outside
39 loading may be brought into tolerance with a small force applied at each end.
40 All tubes shall be clearly marked by the fabricator in accordance with the
41 designation in the fabrication shop drawings.

42
43 The FRP composite hollow tubes shall be erected in a vertical position and FRP
44 deck panels installed prior to filling the tubes with ESCC. The maximum
45 allowable variation of installed tubes shall be $\pm 1/2$ -inch in-plane and out-of-
46 plane. The FRP deck panels shall be installed over the tubes after the tubes are
47 erected and aligned. The tubes shall be set into the reinforced concrete
48 foundation as shown in the Plans. Care shall be taken when placing the
49 foundation and vibrating around the base of the tubes as to not damage or
50 displace the tubes.
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FRP deck panels shall be installed as shown in the Plans using fasteners provided. The first row of FRP deck panels shall be installed on each side prior to casting the foundation stem wall. The remaining FRP deck panels shall be installed after the foundation stem wall has been cast and prior to filling the FRP composite hollow tubes with ESCC.

Adhesive provided shall be used in accordance with the manufacturer's recommendations to seal the longitudinal joint between the panels. FRP deck panels shall be installed starting at the bottom at both ends of the FRP composite hollow tubes and proceeding to the apex. The Contractor shall assure that the starter panels are placed as shown in the Plans to a level line. A closure plate is provided at the apex to be field-trimmed to fit and attached after the tubes are filled with ESCC.

Once the foundation has achieved 2000 psi minimum concrete compressive strength, the erected FRP composite hollow tubes shall be filled with ESCC.

Placing ESCC Tube Fill

ESCC will be accepted as a self-consolidating concrete in accordance with Section 6-02.3(5).

ESCC shall be placed in accordance with Section 6-02.3(6) and the following:

All FRP composite hollow tubes shall be filled with ESCC under the observation of the Engineer. The tubes shall be filled in one continuous operation. Vibration may be necessary for shallow rise tubes and such use of vibration will be determined by the Engineer. The tubes shall be filled through the fill holes that are field drilled by the Contractor to the size and locations shown in the fabrication shop drawings.

ESCC placement shall be accomplished using a method capable of directing the ESCC into the 3-inch fill hole and regulating placement speed to prevent voids. Acceptable methods include the use of a boom type pump truck, a trailer pump, or a standard concrete bucket. The Contractor shall have an alternative method available in the event of an equipment malfunction.

All FRP composite hollow tubes shall undergo auditory tap testing after ESCC placement to ensure complete filling of tubes. In the event that voids are discovered, they shall be injected with grout conforming to Section 9-20.3(2) for large voids or epoxy bonding agent conforming to Section 9-26.1 for small voids. The maximum permitted hole size for grout injection is 3/4-inch. The supplier shall be provided 72-hour minimum notice and offered the opportunity to be present for the filling of the tubes and tap testing.

Backfilling the Assembled Composite Arch System

The CAS shall be backfilled in accordance with Section 6-20.3(9) and the following:

ESCC fill in the FRP composite hollow tubes shall reach a minimum compressive strength of 3000 psi prior to any backfilling or compaction activities on the Structure other than headwall connection work.

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Select gravel backfill shall extend to the lines and grades shown in the Plans and shall be placed in accordance with Section 2-09.3(1)E and as follows:

Backfill shall be placed in maximum 6-inch lifts with each layer compacted to 95-percent of the maximum density determined by the Compaction Control Test in accordance with Section 2-03.3(14)D. Compaction within 4-feet of the Structure shall be accomplished with hand compactors only. Vibratory rollers may be used outside of this zone and above the Structure provided there is at least 24-inches of compacted cover above the Structure.

All backfill shall be carefully placed to avoid damage to the Structure.

Lightweight equipment of an operating weight less than 12-tons may be operated over the Structure provided there is at least 12-inches of cover. Construction equipment of an operating weight 12-tons or greater may be used after 24-inches of compacted backfill has been placed over the Structure. In no case may the loading exceed the AASHTO design loading HL-93 without the Engineer's written permission.

Backfill shall be placed in lifts such that at no time will the elevation difference exceed 24-inches between opposite sides of the Structure.

6-20.3(1).GR6

Geotechnical Considerations

6-20.3(1).INST1.GR6

Section 6-20.3(1) is supplemented with the following:

6-20.3(1).OPT1.2025.GR6

(November 20, 2023)

If the Geotechnical Report prepared for this Contract does not provide recommendations for the Contractor's selected foundation or wall types, the Contractor shall submit Type 3E Working Drawings consisting of a supplemental Geotechnical Report for all foundation and wall types selected which are not provided for in the recommendations.

6-20.5.GR6

Payment

6-20.5.INST1.GR6

Section 6-20.5 is supplemented with the following:

6-20.5.OPT1.GB6

(January 10, 2022)

Payment for the Composite Arch System will be made with the lump sum item, "Contractor Designed Buried Structure No. ____" shall be full payment for the Work as specified.

1 **DIVISION8.GR8** **Miscellaneous Construction**

2
3 **8-01.GR8** **Erosion Control and Water Pollution Control**

4
5 **8-01.3.GR8** **Construction Requirements**

6
7 **8-01.3(1).GR8** **General**

8
9 8-01.3(1).INST1.GR8 (The tenth paragraph of Section 8-01.3(1) is revised to
10 read)
11 Must use once preceding any of the following:

12
13 8-01.3(1).OPT1.GR8 (Erodible Soil Eastern Washington)
14 (January 25, 2010)
15 Use for projects east of the Cascade range in areas
16 receiving 12 inches or less annual precipitation. Do not
17 use if any portion of the project lies in areas that receive
18 more than 12 inches of annual precipitation. See
19 [https://wsdot.wa.gov/engineering-standards/design-](https://wsdot.wa.gov/engineering-standards/design-topics/hydraulics-hydrology)
20 [topics/hydraulics-hydrology.](https://wsdot.wa.gov/engineering-standards/design-topics/hydraulics-hydrology)

21
22 8-01.3(1).INST2.GR8 (Section 8-01.3(1) is supplemented with the following)
23 Must use once preceding any of the following:

24
25 8-01.3(1).OPT8.FR8 (Side Slope Treatment)
26 (April 1, 2002)
27 Use on projects where erodible soils are anticipated and
28 it is desired to have the newly exposed slopes walked
29 before final erosion control can be accomplished, in
30 accordance with recommendation from environmental
31 office.
32 (1 fill-in)

33
34 **8-01.3(1)B.GR8** **Erosion and Sediment Control (ESC) Lead**

35
36 8-01.3(1)B.INST1.GR8 (Item number 3 and 4 in the second paragraph of
37 Section 8-01.3(1)B are revised to read)
38 Must use once preceding any of the following:

39
40 8-01.3(1)B.OPT1.GR8 (October 3, 2022)
41 Use on projects without a CSWGP that require an
42 ESC lead.

43
44 **8-01.3(1)C.GR8** **Water Management**

45
46 **8-01.3(1)C4.GR8** **Management of Off-Site Water**

47
48 8-01.3(1)C4.INST1.GR8 (Section 8-01.3(1)C4 is supplemented with the
49 following)
50 Must use once preceding any of the following:

51
52 8-01.3(1)C4.OPT1.FR8 (Off-site stormwater routed through or around
53 Project site)
54 (August 6, 2012)

1 Use when there are known locations where
2 stormwater enters the project site and it is desired
3 to prevent this stormwater from flowing
4 uncontrolled through the project site.
5 (1 fill-in)
6

7 **8-01.3(2).GR8 Temporary Seeding and Mulching**

8
9 **8-01.3(2)B.GR8 Temporary Seeding**

10
11 8-01.3(2)B.INST1.GR8 (Section 8-01.3(2)B is supplemented with the
12 following)

13 Must use once preceding any of the following:

14
15 8-01.3(2)B.OPT1.FR8 (Composition, proportion, quality and application
16 rate of grass seed)
17 (August 4, 2014)
18 Use on projects where a common, non-native or
19 non-source-identified seed can be used. This mix
20 will generally be used within urban areas on small
21 areas of disturbance. The fill-ins for the seed
22 should be provided by the Region Landscape
23 Architect or Headquarters Roadside and Site
24 Development for regions without a Landscape
25 Architect.
26 (2 fill-ins) (Fill-ins with dollar signs only are to be
27 used as required)

28
29 8-01.3(2)B.OPT2.FR8 (Composition, proportion, quality and
30 application rate of grass seed)
31 (August 4, 2014)
32 Use in projects where the Region Landscape
33 Architect recommends source identified (local
34 genetics) native seed. The fill-ins should be
35 provided by the Region Landscape Architect or
36 Headquarters Roadside and Site Development for
37 regions without a Landscape Architect.
38 (3 fill-ins) (Fill-ins with dollar signs only are to be
39 used as required.)

40
41 8-01.3(2)B.OPT3.GR8 (Seeding by hand)
42 (September 3, 2019)
43 Use in projects with seeding and fertilizing of less
44 than 1 acre, the use of mechanical equipment
45 would not be cost effective, or on remote projects
46 with many small areas.

47
48 8-01.3(2)B.OPT4.FR8 (One application of fertilizer)
49 (January 3, 2006)
50 Use in projects requiring only one application of
51 fertilizer.
52 (4 fill-ins) (The fill-ins for the fertilizer itself should
53 be by consulting the State Horticulturist, the
54 Region Landscape Architect, or Headquarters

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Roadside and Site Development. Fill-in \$\$\$ should be 2/3 the amount of nitrogen in fill-in \$1\$\$.)

8-01.3(2)B.OPT8.FR8 (Composition, proportion, quality and application rate of grass seed)
(August 4, 2014)
Use in projects where the Region Landscape Architect recommends native seed that is not source identified. The fill-ins should be provided by the Region Landscape Architect or Headquarters Roadside and Site Development for regions without a Landscape Architect.
(3 fill-ins)

8-01.3(2)D.GR8 Temporary Mulching

8-01.3(2)D.INST1.GR8 (Section 8-01.3(2)D is supplemented with the following)
Must use once preceding any of the following:

8-01.3(2)D.OPT1.FR8 (Type and rate of application of mulch)
(January 5, 2015)
Use in projects requiring the application of mulch when the application rate per acre or the allowable pounds in any single lift are revised from the Standard Specifications.
(3 fill-ins)

8-02.GR8 Roadside Restoration

8-02.1.GR8 Description

8-02.1.INST1.GR8 (Section 8-02.1 is supplemented with the following)
Must use once preceding any of the following:

8-02.1.OPT1.GR8 (Removal of Buried Previously Fabricated Debris)
(August 4, 2014)
Use on projects that include soil amendment, and/or irrigation systems, and where previously fabricated construction debris is known or suspected to exist. Requires the approval of the Region Construction Manager. Must include **8-02.3(5).OPT4.GR8** and **8-02.5.OPT2.GR8**.

8-02.1.OPT2.GR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.

1 Must also use **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, **8-**
2 **02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8**.

3
4 **8-02.2.GR8** **Materials**

5
6 8-02.2.INST1.GR8 (Section 8-02.2 is supplemented with the following)
7 Must use once preceding the following:

8
9 8-02.2.OPT1.GR8 (Conservation Grade Plant Material)
10 (January 3, 2011)
11 Use in projects that include “conservation grade” plant
12 material in the plant list. Use requires approval of the
13 Region Landscape Architect or HQ Region Liaison
14 Landscape Architect.

15
16 8-02.2.OPT2.GR8 (Biotic Soil Amendments)
17 (April 1, 2019)
18 Use on projects to amend poor quality soils (which have a
19 lack of organic matter and little to no bioactivity) using Biotic
20 Soil Amendments (BSAs). Should only be used if the soil is
21 determined to be deficient from the results of a soil organic
22 matter test or the soil analysis and the application of
23 compost or topsoil is not possible due to steepness or
24 access. Use requires the approval of the Region Landscape
25 Architect or the HQ Region Liaison Landscape Architect.
26 Must also use **8-02.1.OPT2.GR8**, **8-02.3.OPT1.GR8**, **8-**
27 **02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8**.

28
29 8-02.2(9-14).GR8 (Erosion Control and Roadside Planting)

30
31 8-02.2(9-14).INST1.GR8 (Section 9-14 is supplemented with the following)
32 Must use once preceding the following:

33
34 8-02.2(9-14).OPT1.FR8 (Weed Barrier Mats)
35 (January 3, 2011)
36 Use in projects requiring weed barrier mats.
37 (1 fill-in) Fill-in is the staple length.
38 Contact the Region Landscape Architect or HQ Region
39 Liaison Landscape Architect for fill-in information.

40
41 8-02.2(9-14.2).GR8 (Topsoil)

42
43 8-02.2(9-14.2(1)).GR8 (Topsoil Type A)
44 (Section 9-14.1(1) is supplemented with the
45 following)
46 Must use once preceding any of the following:

47
48 8-02.2(9-14.2(1)).OPT1.FR8 (February 25, 2021)
49 For use on projects where Topsoil Type A is
50 needed for stormwater BMPs and for plant
51 growth and establishment. Contact the
52 Landscape Architect for fill-ins and depth of
53 application.
54 (4 fill-ins)

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8-02.2(9-14.5).GR8 (Mulch and Amendments)

8-02.2(9-14.5(8)).GR8 (Compost)
(Section 9-14.5(8) is supplemented with the following)
Must use once preceding any of the following:

8-02.2(9-14.5(8)).OPT2.GR8 (September 3, 2019)
May be used to allow biosolids compost on projects that do not use compost on stormwater BMPs. Use with concurrence of the Hydraulics Engineer.

8-02.3.GR8 Construction Requirements

8-02.3.INST1.GR8 (Section 8-02.3 is supplemented with the following)
Must use once preceding any of the following:

8-02.3.OPT1.GR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8**.

8-02.3(4).GR8 Topsoil

8-02.3(4)A.GR8 Topsoil Type A

8-02.3(4)A.INST1.GR8 (Section 8-02.3(4)A is supplemented with the following)
Must use once preceding any of the following:

8-02.3(4)A.OPT1.FR8 (Topsoil Type A)
(August 3, 2015)
Must include with **8-02.2(9-14.2(1)).OPT1.FR8**.

8-02.3(5).GR8 Roadside Seeding, Lawn and Planting Area Preparation

8-02.3(5).INST1.GR8 (Section 8-02.3(5) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(5).OPT1.FR8 (Application of Compost)
(August 5, 2013)
Include when no incorporation of compost is required.
(1 fill-in)

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8-02.3(5).OPT2.FR8 (Application of Compost)
(August 5, 2013)
Include when compost is to be incorporated into the soil
and irrigation lines are included in the Contract.
(2 fill-ins)

8-02.3(5).OPT3.FR8 (Application of Compost)
(August 5, 2013)
Include when compost is to be incorporated onto the soil
and there are no irrigation lines included in the Contract.
(2 fill-ins).

8-02.3(5).OPT4.GR8 (Removal of Buried Previously Fabricated Debris)
(August 4, 2014)
Must include with **8-02.1.OPT1.GR8** and **8-02.5.OPT2.GR8**.

8-02.3(6).GR8 Mulch and Amendments

8-02.3(6)B.GR8 Fertilizers

8-02.3(6)B.INST1.GR8 (Section 8-02.3(6)B is supplemented with the
following)
Must use once preceding any of the following:

8-02.3(6)B.OPT1.FR8 (One application of fertilizer)
(September 3, 2019)
Use in projects requiring only one application of
fertilizer.
(4 fill-ins) (The fill-ins for the fertilizer itself should
be by consulting the State Horticulturist, the
Region Landscape Architect, or Headquarters
Roadside and Site Development. Fill-in \$\$\$
should be 2/3 the amount of nitrogen in fill-in
\$\$1\$\$.)

8-02.3(6)B.OPT2.FR8 (More than one application of fertilizer)
(September 3, 2019)
Use in projects when the Region Landscape Arch.
recommends more than one fertilizer application.
(7 fill-ins) (The fill-ins for the fertilizer itself should
be by consulting the Region Landscape Architect,
or Headquarters Roadside and Site Development.
Fill-in \$\$7\$\$ should be 2/3 the amount of nitrogen
in fill-in \$\$4\$\$.)

8-02.3(6)B.OPT3.GR8 (Fertilizing by hand)
(September 3, 2019)
Must include with **8-02.3(9)B.OPT2.GR8**.
Use in projects with seeding and fertilizing of less
than 1 acre, the use of mechanical equipment
would not be cost effective, or on remote projects
with many small areas.

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8-02.3(6)B.OPT4.FR8 (Fertilizer Application in Eastern Washington)
(September 3, 2019)
Use this GSP for projects in eastern Washington
where soils tests show excess potassium and
phosphorous and high pH.

8-02.3(8).GR8 Planting

8-02.3(8).INST1.GR8 (Section 8-02.3(8) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(8).OPT1.FR8 (February 25, 2013)
Must use when the project requires a U.S. Army Corps
of Engineers Nationwide Permit. Use the Environmental
Commitment Meeting to determine applicability of this
provision for the project.
(1 fill-in)

8-02.3(9).GR8 Seeding, Fertilizing, and Mulching

8-02.3(9)B.GR8 Seeding and Fertilizing

8-02.3(9)B.INST1.GR8 (Section 8-02.3(9)B is supplemented with the
following)
Must use once preceding any of the following:

8-02.3(9)B.OPT1.FR8 (Composition, proportion, quality and
application rate of grass seed)
(September 3, 2019)
Use in projects where the Region Landscape
Architect recommends source identified (local
genetics) native seed. The fill-ins should be
provided by the Region Landscape Architect or
Headquarters Roadside and Site Development for
regions without a Landscape Architect.
(3 fill-ins) (Fill-ins with dollar signs only are to be
used as required.)

8-02.3(9)B.OPT2.GR8 (Seeding by hand)
(September 3, 2019)
Use in projects with seeding and fertilizing of less
than 1 acre, the use of mechanical equipment
would not be cost effective, or on remote projects
with many small areas.

8-02.3(9)B.OPT3.FR8 (Composition, proportion, quality and application
rate of grass seed)
(September 3, 2019)
Use in projects where the Region Landscape
Architect recommends native seed that is not
source identified. The fill-ins should be provided
by the Region Landscape Architect or

Headquarters Roadside and Site Development for regions without a Landscape Architect.
(3 fill-ins)

8-02.3(11).GR8 Mulch

8-02.3(11).INST1.GR8 (Section 8-02.3(11) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(11).OPT1.FR8 (Placement of Bark or Wood Chip Mulch)
(April 2, 2012)
Use in projects requiring bark and wood chip mulch.
Use requires approval of the Region Landscape Architect or HQ Region Liaison Landscape Architect.
(1 fill-in)

8-02.3(11)A.GR8 Mulch for Seeding Areas

8-02.3(11)A.INST1.GR8 (Section 8-02.3(11)A is supplemented with the following)
Must use once preceding any of the following:

8-02.3(11)A.OPT1.FR8 (Type and rate of application of mulch)
(September 3, 2019)
Use in projects requiring the application of mulch when the application rate per acre or the allowable pounds in any single lift are revised from the Standard Specifications.
(3 fill-ins)

8-02.4.GR8 Measurement

8-02.4.INST1.GR8 (Section 8-02.4 is supplemented with the following)
Must use once preceding any of the following:

8-02.4.OPT2.GR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, and **8-02.5.OPT4.FR8**.

8-02.5.GR8 Payment

8-02.5.INST1.GR8 (Section 8-02.5 is supplemented with the following)
Must use once preceding any of the following:

8-02.5.OPT2.GR8 (Removal of Buried Previously Fabricated Debris)

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(September 7, 2021)
Must include with **8-02.1.OPT1.GR8** and **8-02.3(5).OPT4.GR8**.

8-02.5.OPT4.FR8

(Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
(1 fill-in) (Fill-in #1 indicates which seed item will be used in conjunction with the BSA. Consult with the Region Landscape Architect to determine which permanent seeding item to use.)
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, and **8-02.4.OPT2.GR8**.

8-03.GR8 Irrigation Systems

8-03.3.GR8 Construction Requirements

8-03.3(6).GR8 Excavation

8-03.3(6)A.GR8 Trenches

8-03.3(6)A2.GR8 Within Critical Root Zone

8-03.3(6)A2.INST1.GR8 (Section 8-03.3(6)A2 is supplemented with the following)
Must use once preceding any of the following:

8-03.3(6)A2.OPT1.FR8 (Trenching in Critical Root Zone)
(October 3, 2022)
Use in projects when the Landscape Architect has indicated that locations of mechanical trenching will be allowed.
(1 fill-in)
Fill-in #1: Indicate locations where mechanical trenching within the critical root zone will be allowed. Contact Region Landscaping Office for assistance.

8-10.GR8 Guide Posts

8-10.1.GR8 Description

8-10.1.INST1.GR8 (Section 8-10.1 is supplemented with the following)
Must use once preceding any of the following:

1 8-10.1.OPT1.NEW.GR8 (Linear delineation panels)
2 (November 20, 2023)
3 Use in projects where linear delineation panels will be used.

4
5 Must also use 8-10.2.OPT1a.GR8, 8-10.3.OPT1a.GR8, 8-
6 10.4.OPT1a.GR8, and 8-10.5.OPT1a.GR8.

7
8 ~~8-10.1.OPT1.GR8 (Barrier Delineators)~~
9 ~~(April 1, 2002)~~
10 ~~Must also use 8-10.2.OPT1.GR8, 8-10.3.OPT1.GR8 or 8-~~
11 ~~10.3.OPT2.GR8, 8-10.4.OPT1.GR8, and 8-~~
12 ~~10.5.OPT1.GR8.~~

13
14 **8-10.2.GR8 Materials**

15
16 8-10.2.INST1.GR8 (Section 8-10.2 is supplemented with the following)
17 Must use once preceding any of the following:

18
19 8-10.2.OPT1.NEW.GR8 (Linear delineation panels)
20 (November 20, 2023)
21 Use in projects where linear delineation panels will be used.

22
23 Must also use 8-10.1.OPT1.NEW.GR8, 8-
24 10.3.OPT1.NEW.GR8, 8-10.4.OPT1.NEW.GR8, and 8-
25 10.5.OPT1.NEW.GR8.

26
27 ~~8-10.2.OPT1.GR8 (Barrier Delineators)~~
28 ~~(October 3, 2022)~~
29 ~~Must also use 8-10.1.OPT1.GR8, 8-10.3.OPT1.GR8 or 8-~~
30 ~~10.3.OPT2.GR8, 8-10.4.OPT1.GR8, and 8-~~
31 ~~10.5.OPT1.GR8.~~

32
33 **8-10.3.GR8 Construction Requirements**

34
35 8-10.3.INST1.GR8 (Section 8-10.3 is supplemented with the following)
36 Must use once preceding any of the following:

37
38 8-10.3.OPT1.NEW.GR8 (Linear delineation panels)
39 November 20, 2023)
40 Use in projects where linear delineation panels will be used.

41
42 Must also use 8-10.1.OPT1.NEW.GR8, 8-
43 10.2.OPT1.NEW.GR8, 8-10.4.OPT1.NEW.GR8, and 8-
44 10.5.OPT1.NEW.GR8.

45
46 ~~8-10.3.OPT1.GR8 (Barrier Delineators)~~
47 ~~(April 1, 2002)~~
48 ~~Delineators placed 6" down from top.~~
49 ~~Must also use 8-10.1.OPT1.GR8, 8-10.2.OPT1.GR8 8-~~
50 ~~10.4.OPT1.GR8, and 8-10.5.OPT1.GR8.~~

51
52 ~~8-10.3.OPT2.GR8 (Barrier Delineators)~~
53 ~~(April 1, 2002)~~
54 ~~Delineators placed on top of barrier.~~

1 ~~Must also use 8-10.1.OPT1.GR8, 8-10.2.OPT1.GR8 8-~~
2 ~~10.4.OPT1.GR8, and 8-10.5.OPT1.GR8.~~

3
4 **8-10.4.GR8 Measurement**

5
6 8-10.4.INST1.GR8 (Section 8-10.4 is supplemented with the following)
7 Must use once preceding any of the following:

8
9 8-10.4.OPT1.NEW.GR8 (Linear delineation panels)
10 November 20, 2023)
11 Use in projects where linear delineation panels will be used.

12
13 Must also use 8-10.1.OPT1.NEW.GR8, 8-
14 10.2.OPT1.NEW.GR8, 8-10.3.OPT1.NEW.GR8, and 8-
15 10.5.OPT1.NEW.GR8.

16
17 ~~8-10.4.OPT1.GR8 (Barrier Delineators)~~
18 ~~(April 1, 2002)~~
19 ~~Must also use 8-10.1.OPT1.GR8, 8-10.2.OPT1.GR8 8-~~
20 ~~10.3.OPT1.GR8, or 8-10.3.OPT2.GR8, and 8-~~
21 ~~10.5.OPT1.GR8.~~

22
23 **8-10.5.GR8 Payment**

24
25 8-10.5.INST1.GR8 (Section 8-10.5 is supplemented with the following)
26 Must use once preceding any of the following:

27
28 8-10.5.OPT1.NEW.GR8 (Linear delineation panels)
29 November 20, 2023)
30 Use in projects where linear delineation panels will be used.

31
32 Must also use 8-10.1.OPT1.NEW.GR8, 8-
33 10.2.OPT1.NEW.GR8, 8-10.3.OPT1.NEW.GR8, and 8-
34 10.4.OPT1.NEW.GR8.

35
36 ~~8-10.5.OPT1.GR8 (Barrier Delineators)~~
37 ~~(April 1, 2002)~~
38 ~~Must also use 8-10.1.OPT1.GR8, 8-10.2.OPT1.GR8 8-~~
39 ~~10.3.OPT1.GR8, or 8-10.3.OPT2.GR8, and 8-~~
40 ~~10.4.OPT1.GR8.~~

41
42 **8-11.GR8 Guardrail**

43
44 **8-11.1.GR8 Description**

45
46 8-11.1.INST1.GR8 (Section 8-11.1 is supplemented with the following)
47 Must use once preceding any of the following:

48
49 8-11.1.OPT1.GR8 (High-Tension Cable Barrier System 4 Cable)
50 (February 3, 2020)

51 Must also use 8-11.2.OPT2.FR8, 8-11.3.OPT2.FR8, 8-
52 11.4.OPT2.GR8, 8-11.5.OPT7.GR8, and 8-11.5.OPT8.GR8.

53
54 8-11.1.OPT2.GR8 (Aesthetic Treatment for Beam Guardrail)

(January 7, 2019)
Use in all projects that require Aesthetic Treatment for Beam
Guardrail. This replaces the use of Weathering Steel Beam
Guardrail.
Must also use **8-11.2.OPT4.GR8, 8-11.3.OPT4.GR8, 8-
11.4.OPT4.GR8, and 8-11.5.OPT1.GR8.**

8-11.2.GR8 Materials

8-11.2.INST1.GR8 (Section 8-11.2 is supplemented with the following)
Must use once preceding any of the following:

8-11.2.OPT2.FR8 (High-Tension Cable Barrier System 4 Cable)
(~~October 3, 2022~~ November 20, 2023)
Must also use **8-11.1.OPT1.GR8, 8-11.3.OPT2.FR8, 8-
11.4.OPT2.GR8, 8-11.5.OPT7.GR8, and 8-
11.5.OPT8.GR8.**
(1 fill-in)
Fill-in #1 is the maximum allowable lateral deflection
distance for the high-tension cable barrier system(s).

8-11.2.OPT4.GR8 (Aesthetic Treatment for Beam Guardrail)
(January 2, 2018)
Use in all projects that require Aesthetic Treatment for Beam
Guardrail. This replaces the use of Weathering Steel Beam
Guardrail.
Must also use **8-11.1.OPT2.GR8, 8-11.3.OPT4.GR8, 8-
11.4.OPT4.GR8, and 8-11.5.OPT1.GR8.**

8-11.2(9-16.3).GR8 (Beam Guardrail)

8-11.2(9-16.3(2)).GR8 (Posts and Blocks)

8-11.2(9-16.3(2)).INST1.GR8 (Section 9-16.3(2) is supplemented with
the following)
Must use once preceding any of the following:

8-11.2(9-16.3(2)).OPT1.GB8 (Steel shear plates and backing plates)
(~~April 6, 2015~~ November 20, 2023)
Use in thrie beam retrofit projects with beam guardrail
Type Thrie Beam using timber blockouts wedged
between openings in existing concrete baluster rails.
Include with ~~6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6,~~
**8-11.2(9-16.3(4)).OPT1.GB8, 8-11.2(9-
16.3(4)).OPT2.GB8, 8-11.3(1)A.OPT1.GB8, and 8-
11.3(1)B.OPT7.GB8.**

8-11.2(9-16.3(2)).OPT2.GB8 (Grout)
(April 6, 2015)
Use in thrie beam retrofit projects with beam guardrail
Type Thrie Beam using a steel post connection to the
existing concrete curb or railbase. Include with ~~6-~~

~~02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, 8-11.2(9-16.3(4)).OPT1.GB8, and 8-11.3(1)A.OPT2.GB8.~~

8-11.2(9-16.3(2)).OPT3.GB8 (Steel Angles for Timber Blockout Connection to Truss)
(April 6, 2015)
Use in thrie beam retrofit projects with beam guardrail Type Thrie Beam requiring timber blockout connection to existing steel truss members. Include with **8-11.2(9-16.3(4)).OPT2.GB8 and other appropriate GSPs supplementing Sections 8-11.2 and 8-11.3(1).**

8-11.2(9-16.3(2)).OPT4.GB8 (Beam Guardrail Type WP Thrie Beam)
(April 6, 2015)
Use in thrie beam retrofit projects with weak post thrie beam guardrail retrofit (beam guardrail Type WP Thrie Beam). Include with ~~1-07.1.OPT2.FR1~~, **8-11.2(9-16.3(4)).OPT2.GB8, 8-11.3(1)A.OPT3.GB8, 8-11.3(1)B.OPT9.GB8, 8-11.3(1)H.OPT1.GB8, and 8-11.3(1)D.OPT1.GB8.**

8-11.2(9-16.3(4)).GB8 (Hardware)
(Section 9-16.3(4) is supplemented with the following)
Must use once preceding any of the following:

8-11.2(9-16.3(4)).OPT1.GB8 (Resin bonded anchors)
(April 6, 2015)
Use in thrie beam retrofit projects requiring resin bonded anchors for connection to concrete baluster railing end posts, and concrete curbs and railbases. Include with ~~6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, and E~~ither **8-11.2(9-16.3(2)).OPT1.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, 8-11.3(1)A.OPT1.GB8, and 8-11.3(1)B.OPT7.GB8, or 8-11.2(9-16.3(2)).OPT2.GB8 and 8-11.3(1)A.OPT2.GB8.**

8-11.2(9-16.3(4)).OPT2.GB8 (Lag screws)
(April 6, 2015)
Use in thrie beam retrofit projects requiring connections with lag screws to timber members and blockouts.

8-11.3.GR8 Construction Requirements

8-11.3.INST1.GR8 (Section 8-11.3 is supplemented with the following)
Must use once preceding any of the following:

8-11.3.OPT1.FR8 (Installing Steel Posts on Existing Box Culverts)
(October 3, 2022)
Must also use **8-11.4.OPT1.GR8 and 8-11.5.OPT6.GR8.**
Use in projects requiring the construction of steel guardrail posts on top of existing concrete box culverts either by embedding or bolting through the culvert wall. ~~When using embedded anchor box culvert guardrail steel posts (Std.~~

Use in all projects that specifically require wood guardrail posts or specifically require steel guardrail posts.

8-11.3(1)A.GR8 Erection of Posts

8-11.3(1)A.INST1.GR8 (Section 8-11.3(1)A is supplemented with the following)
Must use once preceding any of the following:

8-11.3(1)A.OPT1.GB8 (Timber Blockouts for Beam Guardrail Type Thrie Beam)
(April 6, 2015)
Use in thrie beam retrofit projects with beam guardrail Type Thrie Beam using timber blockouts wedged between openings in existing concrete baluster rails. Include with ~~6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6,~~ 8-11.2(9-16.3(2)).OPT1.GB8, 8-11.2(9-16.3(4)).OPT1.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, and 8-11.3(1)B.OPT7.GB8.

8-11.3(1)A.OPT2.GB8 (Steel Posts for Beam Guardrail Type Thrie Beam)
(January 4, 2016)
Use in thrie beam retrofit projects with beam guardrail Type Thrie Beam using a steel post connection to the existing concrete curb or railbase. Include with ~~6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6,~~ 8-11.2(9-16.3(2)).OPT2.GB8, 8-11.2(9-16.3(4)).OPT1.GB8, and 8-11.3(1)A.OPT2.GB8.

8-11.3(1)A.OPT3.GB8 (Beam Guardrail Type WP Thrie Beam)
(September 8, 2020)
Include in thrie beam retrofit projects with weak post thrie beam guardrail retrofit (beam guardrail Type WP Thrie Beam). Include with ~~4-07.1.OPT2.FR1,~~ 8-11.2(9-16.3(2)).OPT4.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, 8-11.3(1)B.OPT9.GB8, 8-11.3(1)H.OPT1.GB8, and 8-11.3(1)D.OPT1.GB8.

8-11.3(1)B.GR8 Erection of Rail

8-11.3(1)B.INST1.GR8 (Section 8-11.3(1)B is supplemented with the following)
Must use once preceding any of the following:

8-11.3(1)B.OPT6.GB8 (Field Measuring to Existing Type 3 Anchors)
(April 6, 2015)

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Include in thrie beam retrofit projects when existing Type 3 anchors are being salvaged for reuse as part of the retrofitted guardrail system.

8-11.3(1)B.OPT7.GB8 (Attaching Beam Guardrail Type Thrie Beam to Timber Blockouts) (April 6, 2015)
Use in thrie beam retrofit projects with beam guardrail Type Thrie Beam using timber blockouts wedged between openings in existing concrete baluster rails. Include with ~~6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6,~~ 8-11.2(9-16.3(2)).OPT1.GB8, 8-11.2(9-16.3(4)).OPT1.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, and 8-11.3(1)A.OPT1.GB8.

8-11.3(1)B.OPT8.GB8 (Thrie Beam Expansion Joint Element) (September 13, 2021)
Use in projects where the guardrail elements are continuous across interior bridge expansion joints. Contact HQ Design for the thrie beam expansion joint element detail to include in the project plans

8-11.3(1)B.OPT9.GB8 (Beam Guardrail Type WP Thrie Beam) (April 6, 2015)
Include in thrie beam retrofit projects with weak post thrie beam guardrail retrofit (beam guardrail Type WP Thrie Beam). Include with ~~4-07.1.OPT2.FR1,~~ 8-11.2(9-16.3(2)).OPT4.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, 8-11.3(1)A.OPT3.GB8, 8-11.3(1)H.OPT1.GB8, and 8-11.3(1)D.OPT1.GB8.

8-11.3(1)D.GR8 Removing Guardrail

8-11.3(1)D.INST1.GR8 (Section 8-11.3(1)D is supplemented with the following)
Must use once preceding any of the following:

8-11.3(1)D.OPT1.GB8 (Beam Guardrail Type WP Thrie Beam) (September 8, 2020)
Include in thrie beam retrofit projects with weak post thrie beam guardrail retrofit (beam guardrail Type WP Thrie Beam). Include with ~~4-07.1.OPT2.FR1,~~ 8-11.2(9-16.3(2)).OPT4.GB8, 8-11.2(9-16.3(4)).OPT2.GB8, 8-11.3(1)A.OPT3.GB8, 8-11.3(1)B.OPT9.GB8, and 8-11.3(1)H.OPT1.GB8.

8-11.3(1)H.GR8 Guardrail Construction Exposed to Traffic

8-11.3(1)H.INST1.GR8 (Section 8-11.3(1)H is supplemented with the following)
Must use once preceding any of the following:

1 8-11.3(1)H.OPT1.GB8 (Beam Guardrail Type WP Thrie Beam)
2 (April 6, 2015)
3 Include in thrie beam retrofit projects with weak post
4 thrie beam guardrail retrofit (beam guardrail Type WP
5 Thrie Beam). Include with ~~1-07.1.OPT2.FR1~~, **8-11.2(9-**
6 **16.3(2)).OPT4.GB8**, **8-11.2(9-16.3(4)).OPT2.GB8**, **8-**
7 **11.3(1)A.OPT3.GB8**, **8-11.3(1)B.OPT9.GB8**, and **8-**
8 **11.3(1)D.OPT1.GB8**.

9
10 **8-11.4.GR8 Measurement**

11
12 8-11.4.INST1.GR8 (Section 8-11.4 is supplemented with the following)
13 Must use once preceding any of the following:

14
15 8-11.4.OPT1.GR8 (Box Culvert Guardrail Steel Posts)
16 (October 3, 2022)
17 **Must include with 8-11.3.OPT1.FR8 or 8-11.3.OPT5.FR8,**
18 **and 8-11.5.OPT6.GR8.**
19 Use in projects requiring the construction of steel guardrail
20 posts on top of existing or new concrete box culverts.

21
22 8-11.4.OPT2.GR8 (High-Tension Cable Barrier System 4 Cable)
23 (February 3, 2020)
24 Must also use **8-11.1.OPT1.GR8**, **8-11.2.OPT2.FR8**, **8-**
25 **11.3.OPT2.FR8**, **8-11.5.OPT7.GR8**, and **8-11.5.OPT8.GR8**.

26
27
28 8-11.4.OPT4.GR8 (Aesthetic Treatment for Beam Guardrail)
29 (April 2, 2018)
30 Use in all projects that require Aesthetic Treatment for Beam
31 Guardrail.
32 Must also use **8-11.1.OPT2.GR8**, **8-11.2.OPT4.GR8**, **8-**
33 **11.3.OPT4.GR8**, and **8-11.5.OPT1.GR8**.

34
35 ~~8-11.4.INST2.GR8 (The fifth paragraph of Section 8-11.4 is revised to read)~~
36 ~~Must use once preceding any of the following:~~

37
38 ~~8-11.4.OPT5.2024.GR8 (November 2, 2022)~~
39 ~~Use in all projects with guardrail.~~
40 ~~Must also use **8-11.5.OPT3.2024.GR8**.~~

41
42 **8-11.5.GR8 Payment**

43
44 ~~8-11.5.INST1.GR8 (In Section 8-11.5, the bid item for “Beam Guardrail Anchor~~
45 ~~Type 10”, per each is revised to read)~~
46 ~~Must use once preceding any of the following:~~

47
48 ~~8-11.5.OPT3.2024.GR8 (November 2, 2022)~~
49 ~~Use in all projects with guardrail.~~
50 ~~Must also use **8-11.4.OPT5.2024.GR8**.~~

51
52 8-11.5.INST2.GR8 (Section 8-11.5 is supplemented with the following)
53 Must use once preceding any of the following:
54

Use once preceding the following:

8-12.3.OPT1(A).GB8 (Field Measuring For Cable Fence)
(April 6, 2015)
Use in projects with cable fence when anchoring the cable fence posts to existing concrete structures. Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.3.OPT1(B).GB8 (Cable Fence)
(~~April 6, 2015~~ **November 20, 2023**)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.3.OPT1(C).GB8 (Cable Fence)
(January 2, 2018)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures.

8-12.4.GR8 Measurement

8-12.4.INST1.GR8 (Section 8-12.4 is supplemented with the following)
Must use once preceding any of the following:

8-12.4.OPT1.GB8 (Cable Fence)
(April 6, 2015)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.5.GR8 Payment

8-12.5.INST1.GR8 (Section 8-12.5 is supplemented with the following)
Must use once preceding any of the following:

8-12.5.OPT1.GR8 (Coated chain link fence)
(April 1, 2002)
Use in projects requiring the construction of coated chain link fence.

8-12.5.OPT6.GB8 (Cable Fence)

(April 6, 2015)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8**, **8-12.3.OPT1(B).GB8**, and **8-12.4.OPT1.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-13.GR8 Monument Cases

8-13.1.GR8 Description

8-13.1.INST1.GR8 (Section 8-13.1 is deleted and replaced by the following)
Must use once preceding any of the following:

8-13.1.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must also use **8-13.2.OPT1.GR8**, **8-13.4.OPT1.GR8** and **8-13.5.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.2.GR8 Materials

8-13.2.INST1.GR8 (Section 8-13.2 is supplemented with the following)
Must use once preceding any of the following:

8-13.2.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.3.GR8 Construction Requirements

8-13.3(1).GR8 Monument Case and Cover

8-13.3(1).INST1.GR8 (The last paragraph of Section 8-13.3(1) is revised to read)
Must use once preceding any of the following:

8-13.3(1).OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Use in projects requiring that the monument pipes be installed by the Contractor.
Must include with **8-13.1.OPT1.GR8**.

8-13.3(2).GR8 Adjust Monument Case and Cover

8-13.3(2)B.GR8 Reinstalling Monument Case and Cover

8-13.3(2)B.INST1.GR8 (The first sentence of Section 8-13.3(2)B is revised to read)
Must use once preceding any of the following:

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8-13.3(2)B.OPT1.GR8 (October 3, 2022)
Use in projects where it is desired to reinstall the monument case ¼" lower than grade, such as routes that are subjected to frequent snow plowing.

8-13.4.GR8 Measurement

8-13.4.INST1.GR8 (Section 8-13.4 is deleted and replaced by the following)
Must use once preceding any of the following:

8-13.4.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.5.GR8 Payment

8-13.5.INST1.GR8 (Section 8-13.5 is supplemented with the following)
Must use once preceding any of the following:

8-13.5.OPT1.GR8 (Monument pipes included in work)
(April 28, 1997)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-14.GR8 Cement Concrete Sidewalks

8-14.2.GR8 Materials

8-14.2(9-19.1).GR8 (Surface Applied Detectable Warning Surface)

8-14.2(9-19.1(1)).GR8 (General Requirements)
(The first paragraph of Section 9-19.1(1) is revised to read)
Must use once preceding any of the following:

8-14.2(9-29.1(1)).OPT1.FR8 (Alternative color for detectable warning surfaces)
(October 3, 2022)
Use in projects where the color for detectable warning surfaces will not be yellow.
(1 fill-in)
Fill-in #1 is the color of the detectable warning surface.

8-14.2(9-19.2).GR8 (Cast-in-Place Detectable Warning Surface)

8-14.2(9-19.2(1)).GR8 (General Requirements)
(The first paragraph of Section 9-19.2(1) is revised to read)

Must use once preceding any of the following:

8-14.2(9-29.2(1)).OPT1.FR8 (Alternative color for detectable warning surfaces)
(October 3, 2022)
Use in projects where the color for detectable warning surfaces will not be yellow.

(1 fill-in)
Fill-in #1 is the color of the detectable warning surface.

8-14.3.GR8 Construction Requirements

8-14.3.INST1.GR8 (Section 8-14.3 is supplemented with the following)
Must use once preceding any of the following:

8-14.3.OPT1.GR8 (Pre-construction meeting for cement concrete sidewalks, curb ramps or other pedestrian access routes to discuss ADA issues before Work begins)
(October 3, 2022)
Use in projects where pedestrian access route Work (cement concrete sidewalks, curb ramps or other pedestrian access) is proposed and it is felt that a pre-construction meeting is needed by Region Construction Office to discuss ADA compliance.

8-14.3.OPT2.GR8 (Timing Restrictions)
(January 7, 2019)
Use in all projects that require any ADA Feature work where the closure of pedestrian routes is subject to time restrictions.
Must use with **1-05.4.OPT4.GR8**, and **8-14.3.OPT3.GR8**.

8-14.3.OPT3.GR8 (Layout and Conformance to Grades)
(January 7, 2019)
Use in all projects that require any ADA Feature work. Use with **1-05.4.OPT4.GR8**.

8-15.GR8 Riprap

8-15.4.GR8 Measurement

8-15.4.INST1.GR8 (Section 8-15.4 is supplemented with the following)
Must use once preceding any of the following:

8-15.4.OPT3.GR8 (Special excavation)
(March 13, 1995)
Must also use **8-15.5.OPT8.GR8**.
Use in projects requiring excavation outside the limits of structure excavation for riprap at bridge piers located within streams.

8-15.4.OPT5.GR8 (Excavation for riprap is included in cost

1 of riprap)
2 (The last paragraph of Section 8-14.5 is deleted)
3 (February 5, 2001)
4 Must also use **8-15.5.OPT1.GR8**.
5 Use in projects with small quantities of riprap or upon
6 recommendation of the Construction and Materials Division.
7

8 **8-15.5.GR8 Payment**

9
10 8-15.5.INST1.GR8 (The first sentence of the second paragraph of Section
11 8-15.5 is revised to read)
12 Must use once preceding any of the following:
13

14 8-15.5.OPT1.GR8 (Excavation for riprap is included in cost
15 of riprap)
16 (March 13, 1995)
17 Must include with **8-15.4.OPT5.GR8**.
18 Use in projects with small quantities of riprap or upon
19 recommendation of the Construction and Materials
20 Division.
21

22 8-15.5.INST2.GR8 (Section 8-15.5 is supplemented with the following)
23 Must use once preceding the following:
24

25 8-15.5.OPT8.GR8 (Special excavation)
26 (September 30, 1996)
27 Must include with **8-15.4.OPT3.GR8**.
28 Use in projects requiring excavation outside the limits of
29 structure excavation for riprap at bridge piers located within
30 streams.
31

32 **8-16.GR8 Concrete Slope Protection**

33 **8-16.3.GR8 Construction Requirements**

34 **8-16.3(2).GR8 Placing Semi-Open Concrete Masonry Units**

35
36 8-16.3(2).INST1.GR8 (Section 8-16.3(2) is supplemented with the following)
37 Must use once preceding any of the following:
38

39 8-16.3(2).OPT1.GR8 (Requirements for semi-open precast masonry
40 units)
41 (December 19, 2005)
42 Must include with **8-16.5.OPT1.GR8**.
43 Use in projects requiring semi-open concrete masonry
44 slope protection.
45
46
47

48 **8-16.5.GR8 Payment**

49
50 8-16.5.INST1.GR8 (Section 8-16.5 is supplemented with the following)
51 Must use once preceding any of the following:
52

53 8-16.5.OPT1.GR8 (Semi-open Conc. Masonry Slope Protection)
54 (September 30, 1996)

1 Must include with **8-16.3(2).OPT1.GR8**.
2 Use in projects requiring semi-open concrete masonry
3 slope protection.
4

5 **8-20.GR8 Illumination, Traffic Signal Systems, Intelligent Transportation**
6 **Systems, and Electrical**

7
8 **8-20.2.GR8 Materials**

9
10 8-20.2.INST1.GR8 (Section 8-20.2 is supplemented with the following)
11 Must use once preceding any of the following:

12
13 8-20.2.OPT1.GB8 (Traffic Signal Shaft Foundation Shaft Casing and
14 Slurry)
15 (April 6, 2015)
16 Use in traffic signal projects with shaft foundations in weak
17 soils, with the concurrence of the Materials Laboratory
18 Geotechnical Branch. Include with **8-20.3(4).OPT1.FB8**
19 **and 8-20.5.OPT1.GB8**.

20
21 8-20.2(9-29.1).GR8 (Conduit, Innerduct, and Outerduct)

22
23 8-20.2(9-29.1(11)).GR8 (Foam Conduit Sealant)
24 (Section 9-29.1(11) is supplemented with the following)
25 Must use once preceding any of the following:

26
27 8-20.2(9-29.1(11)).OPT1.GR8(January 7, 2019)
28 Use in projects where new conduit is installed,
29 wiring is added to existing conduit, or wiring is
30 removed from existing conduit.

31
32 8-20.2(9-29.2).GR8 (Junction Boxes, Cable Vaults, and Pull Boxes)
33 (Section 9-29.2 is supplemented with the following):
34 Must use once preceding any of the following:

35
36 8-20.2(9-29.2).OPT1.GR8 (Slip-Resistant Surfacing)
37 (September 3, 2019)
38 Use in projects where junction boxes, cable vaults, pull
39 boxes, or Structure mounted boxes require slip-
40 resistant surfacing.

41
42 8-20.2(9-29.6).GR8 (Light and Signal Standards)
43 (Section 9-29.6 is supplemented with the following)
44 Must use once preceding any of the following:

45
46 8-20.2(9-29.6).OPT1.GR8 Light Standards With Type 1 Luminaire Arms
47 (January 13, 2021)
48 Use in projects requiring Type 1 luminaire arms and the
49 Engineer is not required to verify the H1 distances
50 shown in the Plans.

51
52 8-20.2(9-29.6).OPT2.GR8 Light Standards With Type 1 Luminaire Arms
53 (January 13, 2021)

1 Use in projects requiring Type 1 luminaire arms and H1
2 distances are not shown in the Plans or the Engineer is
3 required to verify the H1 distances shown in the Plans.
4

5 8-20.2(9-29.6).OPT5.GR8 Traffic Signal Standards

6 (January 10, 2022)

7 Use in projects requiring traffic signal standards, or
8 combination traffic signal/light standards with Type 1
9 luminaire arms, or both.
10

11 8-20.2(9-29.6(2)).GR8 (Slip Base Hardware)

12 (Section 9-29.6(2) is supplemented with the following)
13 Must use preceding the following:
14

15 8-20.2(9-29.6(2)).OPT1.2025.GR8(November 20, 2023)

16 Use in all projects with light or signals with slip
17 bases.
18

19 8-20.2(9-29.6(3)).GR8 (Timber Light Standards, Timber Strain Poles, Timber
20 Service Supports)

21 (Section 9-29.6(3) is supplemented with the following)
22 Must use preceding the following:
23

24 8-20.2(9-29.6(3)).OPT1.GR8 (November 20, 2023)

25 Use in all projects with timber poles.
26

27 8-20.2(9-29.6(5)).GR8 (Foundation Hardware)

28 (Section 9-29.6(5) is supplemented with the following)
29 Must use once preceding any of the following:
30

31 8-20.2(9-29.6(5)).OPT1.GR8 (January 13, 2021)

32 Use in all projects where light standards are to
33 be installed.
34

35 8-20.2(9-29.13).GR8 (Control Cabinet Assemblies)

36 (Section 9-29.13 is supplemented with the following)
37 Must use once preceding any of the following:
38

39 8-20.2(9-29.13).OPT1.GR8 Uninterruptible Power Supply (UPS)

40 (January 2, 2018)

41 With Region Traffic Engineer approval, use in projects
42 where Uninterruptible Power Supply (UPS) cabinets are
43 required. Include with **8-20.3(14).OPT1.GR8**.
44

45 8-20.2(9-29.13(10)).GR8(NEMA and Type 2070 Controllers and Cabinets)

46 8-20.2(9-29.13(10)D).GR8(Cabinets for Type 2070 Controllers)

47 ~~8-20.2(9-29.13(10)D).INST1.GR8 (Item 1 of Section 9-29.13(10)D is~~
48 ~~revised to read)~~
49 ~~Must use once preceding any of the~~
50 ~~following:~~
51

52 ~~following:~~
53

54 ~~8-20.2(9-29.13(10)D).OPT1.2024.GR8 (February 6, 2023)~~

1 Use in all projects with Type
2 332, 332D, 334, 334D, or 342LX
3 cabinets.
4

5 8-20.2(9-29.13(10)D).INST2.GR8 (9-29.13(10)D is supplemented with
6 the following)
7 Must use once preceding any of the
8 following:
9

10 8-20.2(9-29.13(10)D).OPT2.GR8 (February 6, 2023)
11 Use in all projects where
12 removable cabinet door handles
13 are required.
14

15 8-20.2(9-29.13(11)).GR8 (Traffic Data Accumulator and Ramp Meters)
16 (Section 9-29.13(11) is supplemented with the
17 following)
18 Must use once preceding any of the following:
19

20 8-20.2(9-29.13(11)).OPT1.GR8 (~~July 6, 2021~~ November 20, 2023)
21 Use in all projects where a Ramp Meter or ITS
22 Data Station controller is required.
23

24 8-20.2(9-29.13(11)).OPT2.GR8 (February 6, 2023)
25 Use in all projects where removable cabinet door
26 handles are required.
27

28 8-20.2(9-29.13(12)).GR8 (Type 331L ITS Cabinet)
29

30 ~~8-20.2(9-29.13(12)).INST1.GR8 (Item 3 of Section 9-29.13(12) is revised~~
31 ~~to read)~~
32 ~~Must use once preceding any of the following:~~
33

34 ~~8-20.2(9-29.13(12)).OPT1.2024.GR8 (February 6, 2023)~~
35 ~~Use in all projects where Type 331L or 331D~~
36 ~~cabinets are used.~~
37

38 8-20.2(9-29.13(12)).INST2.GR8 (Item 3 of Section 9-29.13(12) is
39 supplemented with the following)
40 Must use once preceding any of the following:
41

42 8-20.2(9-29.13(12)).OPT2.2024.GR8 (February 6, 2023)
43 Use in all projects where removable cabinet
44 door handles are required.
45

46 8-20.2(9-29.15).GR8 (Flashing Beacon Control)
47 (Section 9-29.15 is supplemented with the following)
48 Must use once preceding any of the following:
49

50 8-20.2(9-29.15).OPT1.GR8 Rapid Flashing Beacons (RFB)
51 (January 7, 2019)
52 Use in projects where Rectangular Rapid Flashing
53 Beacons (RRFBs) are required.
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8-20.2(9-29.19).GR8 (Pedestrian Push Buttons)
(Section 9-29.19 is supplemented with the following)
Must use once preceding any of the following:

8-20.2(9-29.19).OPT1.GR8 Accessible Pedestrian Signal (APS) Pushbuttons
(February 6, 2023)
Use in projects requiring accessible pedestrian signal
(APS) pushbuttons. Do not use for RRFB system
pushbuttons.

Include speech message programming table in
Contract Plans – one table for each signal system.

See <https://wsdot.wa.gov/engineering-standards/design-topics/traffic-illumination-traffic-signals-and-intelligent-transportation-systems-its>,
specification section, for instructions for filling out the
tables.

8-20.2(9-29.24).GR8 (Service Cabinets)
(Item 3 of Section 9-29.24 is supplemented with the
following)
Must use once preceding any of the following:

8-20.2(9-29.24).OPT1.GR8 (February 6, 2023)
Use in all projects where removable cabinet door
handles are required.

8-20.2(9-29.25).GR8 (Amplifier, Transformer, and Terminal Cabinets)
(Item 3 of Section 9-29.25 is supplemented with the
following)
Must use once preceding any of the following:

8-20.2(9-29.25).OPT1.GR8 (February 6, 2023)
Use in all projects where removable cabinet door
handles are required.

8-20.2(1).GR8 Equipment List and Drawings

8-20.2(1).INST1.GR8 (Section 8-20.2(1) is supplemented with the following)
Must use once preceding any of the following:

8-20.2(1).OPT1.GR8 (Light standards when H1 dimension is
shown on the Plans)
(March 13, 1995)
Use in projects with illumination systems and the
lighting standard H1 dimension is shown in the Plans
and verification by the Engineer is not required prior to
fabrication.

8-20.2(1).OPT2.GR8 (Light standards when H1 dimension is not
Shown on the Plans or must be verified prior to
fabrication)
(March 13, 1995)

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Use in projects with illumination systems and the lighting standard H1 dimension is not shown in the Plans or the dimension shown in the Plans must be verified by the Engineer prior to fabrication.

8-20.2(1).OPT3.GR8 (Traffic signal standards, strain pole standards or combination traffic signal/lighting standards) (March 13, 1995)
Use in projects with traffic signal systems when standards are to be installed.

8-20.3.GR8 Construction Requirements

8-20.3(1).GR8 General

8-20.3(1).INST1.GR8 (Section 8-20.3(1) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(1).OPT1.FR8 (Salvaged Equipment)
(November 20, 2023)
Use in projects with equipment to be removed which will stay the property of WSDOT.
(Five fill-ins).

8-20.3(4).GR8 Foundations

8-20.3(4).INST1.GR8 (Section 8-20.3(4) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(4).OPT1.FB8 (Shafts for Signal Standard Foundations)
(August 7, 2017)
Use in traffic signal projects with shaft foundations in weak soils, with the concurrence of the Materials Laboratory Geotechnical Branch. The fill-in specifies the location(s) of the shaft(s) requiring construction under these construction requirements. Include with **8-20.2.OPT1.GB8 and 8-20.5.OPT1.GB8.**
(One fill-in).

8-20.3(5).GR8 Conduit

8-20.3(5)E.GR8 Method of Conduit Installation

8-20.3(5)E.INST1.GR8 (Section 8-20.3(5)E is supplemented with the following)
Must use once preceding any of the following:

8-20.3(5)E.OPT1.GR8 (CDF Encased ITS Conduit)
(February 6, 2023)
Use in projects where 4-inch ITS conduits are required to be encased in Controlled Density Fill (CDF) when installed by open trenching.

8-20.3(8).GR8 Wiring

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8-20.3(8).INST1.GR8 (Section 8-20.3(8) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(8).OPT1.GR8 Field Wiring Chart
(March 13, 1995)
Use in projects with traffic signal systems.

8-20.3(14).GR8 Signal Systems

8-20.3(14).INST1.GR8 (Section 8-20.3(14) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(14).OPT1.GR8 Uninterruptible Power Supply (UPS)
(January 2, 2018)
With Region Traffic Engineer approval use in projects
where Uninterruptible Power Supply (UPS) cabinets are
required. Include with **8-20.2(9-29.13).OPT1.GR8**

8-20.3(14)A.GR8 Signal Controllers

8-20.3(14)A.INST1.GR8 (Section 8-20.3(14)A is supplemented with the
following)
Must use once preceding any of the following:

8-20.3(14)A.OPT1.GR8 Testing
(August 2, 2010)
Use in projects with Contractor furnished signal
controllers.

~~**8-20.3(14)D.GR8 Test for Induction Loops and Lead-In Cable**~~

~~8-20.3(14)D.INST1.GR8 (The fourth subparagraph of the first paragraph of
Section 8-20.3(14)D is revised to read)
Must use once preceding any of the following:~~

~~8-20.3(14)D.OPT1.2024.GR8 (November 2, 2022)
Use in all projects where induction loops are being
installed or may be affected by other work (such
as paving projects).~~

8-20.5.GR8 Payment

8-20.5.INST1.GR8 (Section 8-20.5 is supplemented with the following)
Must use once preceding any of the following:

8-20.5.OPT1.GB8 (Removing Traffic Signal Shaft Obstructions)
(April 6, 2015)
Use in traffic signal projects with shaft foundations in weak
soils, with the concurrence of the Materials Laboratory
Geotechnical Branch. Include with **8-20.2.OPT1.GB8** and
8-20.3(4).OPT1.FB8.

1 **8-21.GR8 Permanent Signing**

2
3 **8-21.2.GR8 Materials**

4
5 8-21.2(9-06.16).GR8 (Roadside Sign Structures)
6 (Section 9-06.16 is supplemented with the following)
7 Must use once preceding the following:
8

9 8-21.2(9-06.16).OPT1.GR8 (January 3, 2011)
10 Use in projects with perforated steel square sign posts.
11

12 8-21.2(9-28.11).GR8 (Hardware)
13 (Section 9-28.11 is supplemented with the following)
14 Must use once preceding any of the following:
15

16 8-21.2(9-28.11).OPT1.GB8 (Overhead Sign Structure Locknuts)
17 (August 3, 2015)
18 Use in all projects with overhead sign structures (sign
19 bridge, cantilever sign structure, bridge mounted sign
20 bracket).
21

22 ~~8-21.2(9-28.12).GR8 (Reflective Sheeting)~~
23 ~~(Section 9-28.12 is revised to read)~~
24 ~~Must use once preceding any of the following:~~
25

26 ~~8-21.2(9-28.12).OPT1.2024.GR8 (February 6, 2023)~~
27 ~~Use in all projects.~~
28

29 8-21.2(9-28.14).GR8 (Sign Support Structures)
30 (Section 9-28.14 is supplemented with the following)
31 Must use once preceding any of the following:
32

33 8-21.2(9-28.14).OPT6.GR8 (Roadside Signing Material and Fabrication)
34 (September 8, 2020)
35 Use in all projects that have steel sign supports.
36

37 **8-21.3.GR8 Construction Requirements**

38
39 **8-21.3(9).GR8 Sign Structures**

40
41 **8-21.3(9)A.GR8 Fabrication of Sign Structures**

42
43 **8-21.3(9)A1.GR8 Fabrication of Monotube Sign Bridges and**
44 **Cantilever Sign Structures**

45
46 8-21.3(9)A1.INST1.GR8 (Section 8-21.3(9)A1 is supplemented with the
47 following)
48 Must use once preceding any of the following:
49

50 8-21.3(9)A1.OPT1.FB8 (Non-Conventional Paint Color)
51 (September 8, 2020)
52 Use in projects with monotube sign bridges
53 and/or monotube cantilever sign structures

1 painted a color other than the conventionally
2 specified gray color. Include with **8-**
3 **21.4.OPT1.FB8**. The fill-in specifies the SAE
4 AMS Standard 595 color number, or the color
5 name if no number.
6 (1 fill-in)
7

8 **8-21.3(9)E.GR8 Bridge Mounted Sign Brackets**

9
10 8-21.3(9)E.INST1.GR8 (Section 8-21.3(9)E is supplemented with the
11 following)
12 Must use once preceding any of the following:

13
14 8-21.3(9)E.OPT1.FB8 (Bridge Mounted Sign Brackets)
15 (~~April 6, 2015~~ November 20, 2023)
16 Use in projects with bridge mounted sign brackets.
17 The first and third fill-ins specify the sign bracket
18 number(s). The second fill-in itemizes the
19 structural carbon steel quantity for each sign
20 bracket. The fourth fill-in specifies the quantity of
21 hole drilling required for the resin bonded anchors
22 for each sign bracket.
23 (4 fill-ins)
24

25 **8-21.3(9)F.GR8 Foundations**

26
27 **8-21.3(9)F1.GR8 Fabrication of Monotube Sign Bridges and**
28 **Cantilever Sign Structures**

29
30 8-21.3(9)F1.INST1.GR8 (Section 8-21.3(9)F1 is supplemented with the
31 following)
32 Must use once preceding any of the following:

33
34 8-21.3(9)F1.OPT1.FB8 (Temporary Casing Requirements)
35 (September 8, 2020)
36 Use in sign structure projects with shaft
37 foundations where the shaft diameter is 48
38 inches or greater, or where the shaft depth is
39 15 feet or greater, or where the Materials
40 Laboratory Geotechnical Branch identifies the
41 foundation soils as sufficiently weak to require
42 use of this specification. The fill-in specifies
43 the location(s) of the shaft(s) requiring
44 construction under these construction
45 requirements.
46 (1 fill-in)
47

48 **8-21.4.GR8 Measurement**

49
50 8-21.4.INST1.GR8 (Section 8-21.4 is supplemented with the following)
51 Must use once preceding any of the following:

52
53 8-21.4.OPT1.FB8 (Monotube Sign Structures)

(September 8, 2020)
Use in projects with monotube sign bridges and/or
monotube cantilever sign structures. The first fill in
specifies the type of sign structure work included (sign
bridge or cantilever sign structure or both). The second fill-
in itemizes the quantities and work involved with each sign
structure.
(2 fill-ins)

8-23.GR8 Temporary Pavement Markings

8-23.2.GR8 Materials

8-23.2(9-34).GR8 (Pavement Marking Material)
(Section 9-34 is supplemented with the following)
Must use once preceding any of the following:

8-23.2(9-34).OPT1.GR8 (October 3, 2022)
Consider including temporary adhesive transverse
rumble strips when a project has temporary signals on
two lane highways. Use in all projects when temporary
adhesive Rumble Strips are shown on the traffic control
plans. Must also include **8-23.3(4)A.OPT1.GR8**, **8-
23.4.OPT1.GR8**, and **8-23.5.OPT1.GR8**.

8-23.3.GR8 Construction Requirements

8-23.3(4).GR8 Pavement Marking Application

8-23.3(4)A.GR8 Temporary Pavement Markings – Short Duration

8-23.3(4)A.INST1.GR8 (Section 8-23.3(4)A is supplemented with the following)
Must use once preceding any of the following:

8-23.3(4)A.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strips)
(October 3, 2022)
Consider including temporary adhesive
transverse rumble strips when a project has
temporary signals on two lane highways. Use in
all projects when temporary adhesive Rumble
Strips are shown on the traffic control plans. Must
also include **8-23.2(9-34).OPT1.GR8**, **8-
23.4.OPT1.GR8**, and **8-23.5.OPT1.GR8**.

8-23.4.GR8 Measurement

8-23.4.INST1.GR8 (Section 8-23.4 is supplemented with the following)
Must use once preceding any of the following:

8-23.4.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strips)
(October 3, 2022)
Consider including temporary adhesive transverse rumble
strips when a project has temporary signals on two lane

highways. Use in all projects when temporary adhesive Rumble Strips are shown on the traffic control plans. Must also include **8-23.2(9-34).OPT1.GR8**, **8-23.3(4)A.OPT1.GR8**, and **8-23.5.OPT1.GR8**.

8-23.5.GR8 Payment

8-23.5.INST1.GR8 (Section 8-23.5 is supplemented with the following)
Must use once preceding any of the following:

8-23.5.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strips)
(October 3, 2022)
Consider including temporary adhesive transverse rumble strips when a project has temporary signals on two lane highways. Use in all projects when temporary adhesive Rumble Strips are shown on the traffic control plans. Must also include **8-23.2(9-34).OPT1.GR8**, **8-23.3(4)A.OPT1.GR8**, and **8-23.4.OPT1.GR8**.

8-24.GR8 Rock and Gravity Block Wall, and Gabion Cribbing

8-24.2.GR8 Materials

8-24.2.INST1.GR8 (Section 8-24.2 is supplemented with the following)
Must use once preceding any of the following:

8-24.2.OPT1.GR8 (Gravity Block Wall)
(November 2, 2022)
Use in projects constructing gravity block walls. Include with **8-24.3(2).OPT1.GR8**.

8-24.3.GR8 Construction Requirements

8-24.3(2).GR8 Gravity Block Wall

8-24.3(2).INST1.GR8 (Section 8-24.3(2) is supplemented with the following)
Must use once preceding any of the following:

8-24.3(2).OPT1.GR8 (Gravity Block Wall)
(January 7, 2002)
Use in projects constructing gravity block walls. Include with **8-24.2.OPT1.GR8**.

8-25.GR8 Glare Screen

8-25.1.GR8 Description

8-25.1.INST1.GR8 (Section 8-25.1 is supplemented with the following)
Must use once preceding any of the following:

8-25.1.OPT1.GR8 (April 1, 2002)
Use in projects when the work zone analysis determines the need for temporary barrier screening.

1 **8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8, 8-25.4.OPT1.GR8,**
2 **and 8-25.5.OPT1.GR8.**

3
4 **8-25.2.GR8 Materials**

5
6 8-25.2.INST1.GR8 (Section 8-25.2 is supplemented with the following)
7 Must use once preceding any of the following:

8
9 8-25.2.OPT1.GR8 (April 1, 2002)
10 Use in projects when the work zone analysis determines the
11 need for temporary barrier screening.
12 Must use with **8-25.1.OPT1.GR8, 8-25.3.OPT1.GR8, 8-**
13 **25.4.OPT1.GR8, and 8-25.5.OPT1.GR8.**

14
15 **8-25.3.GR8 Construction Requirements**

16
17 8-25.3.INST1.GR8 (Section 8-25.3 is supplemented with the following)
18 Must use once preceding any of the following:

19
20 8-25.3.OPT1.GR8 (April 1, 2002)
21 Use in projects when the work zone analysis determines the
22 need for temporary barrier screening.
23 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.4.OPT1.GR8,**
24 **and 8-25.5.OPT1.GR8.**

25
26 **8-25.4.GR8 Measurement**

27
28 8-25.4.INST1.GR8 (Section 8-25.4 is supplemented with the following)
29 Must use once preceding any of the following:

30
31 8-25.4.OPT1.GR8 (April 1, 2002)
32 Use in projects when the work zone analysis determines the
33 need for temporary barrier screening.
34 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8,**
35 **and 8-25.5.OPT1.GR8.**

36
37 **8-25.5.GR8 Payment**

38
39 8-25.5.INST1.GR8 (Section 8-25.5 is supplemented with the following)
40 Must use once preceding any of the following:

41
42 8-25.5.OPT1.GR8 (April 1, 2002)
43 Use in projects when the work zone analysis determines the
44 need for temporary barrier screening.
45 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8,**
46 **and 8-25.4.OPT1.GR8.**

47
48 **8-29.GR8 Wire Mesh Slope Protection**

49
50 **8-29.1.GR8 Description**

51
52 8-29.1.INST1.GR8 (Section 8-29.1 is supplemented with the following)
53 Must use once preceding any of the following:

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8-29.1.OPT1.GR8 (Cable Net Slope Protection)
(April 5, 2010)
Use in projects with cable net slope protection. Include with
**8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8, 8-29.4.OPT1.GR8
and 8-29.5.OPT1.GR8.**

8-29.2.GR8 Materials

8-29.2.INST1.GR8 (Section 8-29.2 is supplemented with the following)
Must use once preceding any of the following:

8-29.2.OPT1.GR8 (Cable Net Slope Protection Materials)
(January 2, 2018)
Use in projects with cable net slope protection. Include with
**8-29.1.OPT1.GR8, 8-29.3.OPT1.GR8, 8-29.4.OPT1.GR8
and 8-29.5.OPT1.GR8.**

8-29.3.GR8 Construction Requirements

8-29.3.INST1.GR8 (Section 8-29.3 is supplemented with the following)
Must use once preceding any of the following:

8-29.3.OPT1.GR8 (Cable Net Slope Protection Construction Requirements)
(January 3, 2011)
Use in projects with cable net slope protection. Include with
**8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.4.OPT1.GR8
and 8-29.5.OPT1.GR8.**

8-29.4.GR8 Measurement

8-29.4.INST1.GR8 (Section 8-29.4 is supplemented with the following)
Must use once preceding any of the following:

8-29.4.OPT1.GR8 (Cable Net Slope Protection)
(April 5, 2010)
Use in projects with cable net slope protection. Include with
**8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8,
and 8-29.5.OPT1.GR8.**

8-29.5.GR8 Payment

8-29.5.INST1.GR8 (Section 8-29.5 is supplemented with the following)
Must use once preceding any of the following:

8-29.5.OPT1.GR8 (Cable Net Slope Protection)
(January 3, 2011)
Use in projects with cable net slope protection. Include with
**8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8,
and 8-29.4.OPT1.GR8.**

8-31.GR8 Temporary Stream Diversion

1 **8-31.3.GR8 Construction Requirements**

2
3 **8-31.3(1).GR8 General**

4
5 **8-31.3(1)A.GR8 General TSD Requirements**

6
7 8-31.3(1)A.INST1.GR8 (Section 8-31.3(1)A is supplemented with the following)
8 Must use once preceding any of the following:

9
10 8-31.3(1)A.OPT1.FR8 (Minimum Stream Flows)
11 (October 3, 2022)
12 Use in all projects requiring a temporary stream
13 diversion. Contact the HQ Hydraulics Office for fill-
14 in information.
15 If a contingency system is required, must also use
16 **8-31.3(1)A.OPT2.FR8.**
17 (1 fill-in)
18 Fill-in #1 is the minimum flow rate for the
19 temporary stream diversion.

20
21 8-31.3(1)A.OPT2.FR8 (Minimum Stream Flows (Contingency System))
22 (October 3, 2022)
23 Use in all projects requiring a contingency system
24 for temporary stream. Contact the HQ Hydraulics
25 Office for fill-in information.
26 Must also use **8-31.3(1)A.OPT1.FR8.**
27 (1 fill-in)
28 Fill-in #1 is the minimum flow rate for the
29 contingency system.

30
31 ~~8-31.3(2).GR8 Temporary Stream Diversion Plan~~

32
33 ~~8-31.3(2)B.GR8 Plan Requirements~~

34
35 ~~8-31.3(2)B.INST1.GR8 (Item number 3a of Section 8-31.3(2)B is revised to~~
36 ~~read)~~
37 ~~Must use once preceding any of the following:~~

38
39 ~~8-31.3(2)B.OPT1.2024.GR8 (February 6, 2023)~~
40 ~~Use in all projects requiring a temporary stream~~
41 ~~diversion.~~

42
43 ~~8-31.3(2)B.INST2.GR8 (Item number 3 of Section 8-31.3(2)B is supplemented~~
44 ~~with the following)~~
45 ~~Must use once preceding any of the following:~~

46
47 ~~8-31.3(2)B.OPT2.2024.GR8 (February 6, 2023)~~
48 ~~Use in all projects requiring a temporary stream~~
49 ~~diversion.~~

50
51 **8-31.3(3).GR8 Fish Block Net Installation and Fish and Aquatic Species**
52 **Exclusion**

53
54 **8-31.3(3)B.GR8 Contracting Agency Provided Materials**

1
2 8-31.3(3)B.INST1.GR8 (Section 8-31.3(1)B is supplemented with the following)
3 Must use once preceding any of the following:
4

5 8-31.3(3)B.OPT1.FR8 (Contracting Agency Furnished Materials)
6 (October 3, 2022)
7 Use in all projects where the Contracting Agency
8 is supplying fish exclusion materials such as nets,
9 sandbags, posts, or other materials required to
10 complete fish exclusion including installing fish
11 block nets.
12 (1 fill-in)
13 Fill-in #1 is the materials that will be supplied by
14 the Contracting Agency.
15

16 ~~8-31.3(4).GR8~~ ~~Dewatering Work Areas~~

17
18 ~~8-31.3(4).INST1.GR8~~ ~~(The last paragraph of Section 8-31.3(4) is revised to read)~~
19 ~~Must use once preceding any of the following:~~

20
21 ~~8-31.3(4).OPT1.2024.GR8~~ ~~(February 6, 2023)~~
22 ~~Use in all projects requiring a temporary stream~~
23 ~~diversion.~~
24

25 **8-SA1.GR8** **Field Office Building**
26 (August 7, 2017)
27 Use in projects when a field office building is required.
28

29 **8-SA2.GR8** **Bollards**
30 (October 3, 2022)
31 Use in projects requiring bollards.
32 Contact Headquarters Design Standard Plans Office for plan details on
33 Type 3 Bollards.
34

35 **8-SA3.GR8** **(Environmental Compliance)**
36 (August 6, 2018)
37 For use on projects where the project has a high risk of soil erosion due
38 to soil type, slope gradient and work in or has proximity to waters of the
39 State (Hydraulics Runoff Manual (HRM) defines projects susceptible for
40 high-risk soil erosion). Also for use on projects where there is extensive
41 monitoring of environmental permit compliance.
42 The Region Construction Engineer and Region Environmental Office
43 should be consulted for use as the provision introduces an
44 Environmental Compliance Lead person that incorporates, expands, and
45 replaces the duties of the ESC Lead person.
46

47 ~~8-SA4.FR8~~ ~~(Water Crossings)~~
48 ~~(October 3, 2022)~~
49 ~~For use on projects that include Work within stream channels.~~
50 ~~Must use with **8-SA4(9-03.11).GR8**.~~
51
52 (1 fill-in)
53 See _____ template _____ file _____ at
54 <https://wsdot.wa.gov/publications/fulltext/projectdev/gspspdf/8-SA4-Fill->

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~~In.docx for starting point. Contact HQ Hydraulics for fill in information to indicate the percentage of blends for streambed aggregates, coarse bands, coarse bars, meander bars, boulder cluster, or fine band material.~~

~~8-SA4(9-03.11).GR8 (Streambed Aggregates)~~

~~Must use with 8-SA4.FR8.~~

8-SA5.GR8 (Woody Material)

(October 3, 2022)

For use on projects that have logs with or without rootwads or slash materials.

1 8-10.GR8

2 **Guide Posts**

3

4 8-10.1.GR8

5 **Description**

6

7 8-10.1.INST1.GR8

8 Section 8-10.1 is supplemented with the following:

9

10 8-10.1.OPT1.NEW.GR8

11 (November 20, 2023)

12 This Work shall consist of furnishing and installing linear delineation panels in accordance
13 with these Specifications, at the locations indicated in the Plans or where designated by
14 the Engineer.

15

16 ~~8-10.1.OPT1.GR8~~

17 ~~(April 1, 2002)~~

18 ~~This Work shall consist of furnishing and installing barrier delineators on concrete barrier~~
19 ~~when barrier runs concurrent with guide post locations.~~

20

21 8-10.2.GR8

22 **Materials**

23

24 8-10.2.INST1.GR8

25 Section 8-10.2 is supplemented with the following:

26

27 8-10.2.OPT1.NEW.GR8

28 (November 20, 2023)

29 Linear delineation panels shall consist of one of the following products:

- 30 1. 3M Linear Delineation System – Series 340 – 6” high for barrier
31 2. 3M Linear Delineation System – Series 340, 1-1/2” high for guardrail.
32 3. Luciol Systems Bidirectional Linear Delineation M.S. for barrier or guardrail.

33

34 Only one system shall be selected and installed for the project.

35

36 Adhesives and mechanical fasteners for linear delineation shall meet the requirements of
37 the manufacturer.

38

39 Reflective sheeting shall be in accordance with Section 9-28.12.

40

41 ~~8-10.2.OPT1.GR8~~

42 ~~(October 3, 2022)~~

43 ~~Barrier delineators shall consist of a flat plastic reflector lens or reflective sheeting~~
44 ~~attached to a housing or bracket to facilitate the mounting of the delineator on concrete~~
45 ~~traffic barrier. The reflective surface shall be rectangular or trapezoidal shape with a~~
46 ~~minimum area of 9 square inches for reflectors and 12 square inches for reflective~~
47 ~~sheeting. The housing or bracket can be flexible or rigid, molded from a durable plastic~~
48 ~~or other durable material approved by the Engineer. Barrier delineators shall be one sided~~
49 ~~for single direction or two sided for bi-directional.~~

50

51 ~~Reflectors shall be acrylic or polycarbonate. Reflectors shall equal or exceed the following~~
52 ~~minimum values of specific intensity:~~

| Observation Angle (Degrees) | Entrance Angle (Degrees) | Specific Intensity cd/ft-c | |
|-----------------------------------|--------------------------------|-------------------------------|--------|
| | | White | Yellow |
| 0.1 | 0 | 126 | 75 |
| 0.1 | 20 | 50 | 30 |

~~Reflective sheeting for barrier delineators shall be in accordance with Section 9-28.12.~~

8-10.3.GR8

Construction Requirements

8-10.3.INST1.GR8

Section 8-10.3 is supplemented with the following:

8-10.3.OPT1.NEW.GR8

(November 20, 2023)

General

Installation of linear delineation panels shall follow manufacturer recommendations but shall not be installed on top of concrete barriers or guardrail.

Spacing of linear delineation panels shall be as specified in the plans. Delineator color shall be white on the right of traffic and yellow on the left of traffic.

Attachment methods for linear delineation panels shall not rely solely on adhesives and shall utilize the manufacturer recommended method for mechanical fasteners.

Concrete Barrier

Linear delineation panels shall be installed 6" from the top of concrete barrier unless otherwise shown on the Plans.

Guardrail

Linear delineation panels installed on beam guardrail shall be installed in the rail trough. For installation on thrie beam guardrail the top trough shall be used.

Linear delineation panels shall be installed at least 1 inch away from the outer edge of post rail attachment slots of beam guardrail. Linear delineation panels shall not be installed in, over, or through the rail slots located where the rail is attached to the guardrail posts and blocks.

8-10.3.OPT1.GR8

~~(April 1, 2002)~~

~~Barrier delineators shall be placed on the traffic face of the barrier six inches down from the top. Spacing shall be as shown in the plans. Delineator color shall be white on the right of traffic and yellow on the left of traffic. The surface of the barrier where the delineator is applied shall be free of dirt, curing compound, moisture, paint, or any other material that would adversely affect the bond of the adhesive. Install delineators with an adhesive recommended by the manufacturer.~~

8-10.3.OPT2.GR8

~~(April 1, 2002)~~

~~Barrier delineators shall be placed on the top of the barrier. Spacing shall be as shown in the plans. Delineator color shall be white on the right of traffic and yellow on the left of~~

1 traffic. The surface of the barrier where the delineator is applied shall be free of dirt,
2 curing compound, moisture, paint, or any other material that would adversely affect the
3 bond of the adhesive. Install delineators with an adhesive recommended by the
4 manufacturer.

5

6 8-10.4.GR8

7 **Measurement**

8

9 8-10.4.INST1.GR8

10 Section 8-10.4 is supplemented with the following:

11

12 8-10.4.OPT1.NEW.GR8

13 (November 20, 2023)

14 Linear delineation panels will be measured by each panel furnished and installed.

15

16 ~~8-10.4.OPT1.GR8~~

17 ~~(April 1, 2002)~~

18 ~~Barrier delineators will be measured by the unit for each delineator furnished and~~
19 ~~installed.~~

20

21 8-10.5.GR8

22 **Payment**

23

24 8-10.5.INST1.GR8

25 Section 8-10.5 is supplemented with the following:

26

27 8-10.5.OPT1.NEW.GR8

28 (November 20, 2023)

29 "Linear Delineation Panel for Concrete Barrier", per each.

30 "Linear Delineation Panel for Guardrail" per each.

31

32 ~~8-10.5.OPT1.GR8~~

33 ~~(April 1, 2002)~~

~~"Barrier Delineator", per each~~

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1 8-11.GR8

2 **Guardrail**

3

4 8-11.1.GR8

5 **Description**

6

7 8-11.1.INST1.GR8

8 Section 8-11.1 is supplemented with the following:

9

10 8-11.1.OPT1.GR8

11 **(February 3, 2020)**

12 **High-Tension Cable Barrier System (4 Cable)**

13 This work consists of supplying and constructing high-tension cable barrier systems
14 (cable, posts, compensating devices, fittings, and hardware), terminals, and transitions in
15 conformity with the lines and grades as staked.

16

17 8-11.1.OPT2.GR8

18 (April 1, 2019)

19 This Work shall consist of applying an aesthetic treatment, either a powder coating or
20 reactive coloring agent, to galvanized beam guardrail, galvanized guardrail posts,
21 terminal ends and associated hardware that provides a “non-reflective” and “earth” tone
22 colored finish (dark brown) that visually blends with the natural environment.

23

24 8-11.2.GR8

25 **Materials**

26

27 8-11.2.INST1.GR8

28 Section 8-11.2 is supplemented with the following:

29

30 8-11.2.OPT2.FR8

31 **~~(October 3, 2022)~~ *November 20, 2023***

32 **High-Tension Cable Barrier System (4 Cable)**

33 The Contractor shall furnish a high-tension 4-cable barrier system, terminals, and
34 transitions that meet the requirements of ~~NCHRP Report 350~~ the current version of
35 AASHTO Manual for Assessing Safety Hardware (MASH-16) Test Level 3 or 4 ~~that are~~
36 ~~designed for a minimum cable~~ Cable barrier ~~tension of 3,000 pounds at an ambient air~~
37 ~~temperature of 70 degrees F. All~~ and breaking strength of all cable barrier fittings and
38 ~~connecting hardware shall have a minimum breaking strength of 36,000 pounds~~ be as
39 specified by the manufacturer.

40

41 The maximum allowable lateral deflection distance for the high-tension cable barrier
42 system(s) on the project is:

43

44 *** \$\$1\$\$ *** feet

45

46 The Contractor shall submit a Type 2 Working Drawing consisting of fabrication drawings
47 and installation procedures. The Working Drawings shall specify all components used in
48 the entire barrier system ~~and~~ document the barrier system deflection distances, and
49 specify the required post spacing necessary to meet the maximum allowable deflection
50 distances.

51

1 The barrier system will be accepted based on a Manufacturer's Certificate of Compliance
2 provided by the Contractor. The Manufacturer's Certificate of Compliance shall consist of
3 a Contract specific letter from the manufacturer stating the system is ~~NCHRP 350~~**MASH-**
4 **16** Test Level 3 or 4 compliant, a copy of the original FHWA eligibility letter(s) for the
5 barrier system, documentation from the manufacturer describing any and all modifications
6 that have been made to the system since the letter(s) were issued, and a statement from
7 the manufacturer certifying that those modifications do not affect the performance of the
8 original system.
9

10 8-11.2.OPT4.GR8

11 **(April 1, 2019)**

12 ***Powder Coating***

13 Powder coating materials for coating galvanized surfaces shall be in accordance with
14 Section 9-08.2. The color shall match SAE AMS Standard 595, color number 30045.
15

16 ***Reactive Coloring Agent***

17 The reactive coloring agent shall consist of a stable, "non-reflective" "earth" tone (dark
18 brown) colored finish on the surface of the galvanized materials. The reactive coloring
19 agent shall only utilize oxidizers, metals, metal salts, and/or other trace elements applied
20 directly to the galvanized surfaces to obtain the desired color. The chemical components
21 of the reactive coloring agent shall have no adverse reactions or effects on soils, plants,
22 or animals and shall not contain corrosive by-products once the product has been applied.
23 Only nitrate fertilizer products are permitted to be present as soluble residues.
24

25 The reactive coloring agent shall be provided by either the following manufacturer or an
26 accepted equal:
27

28 NATINA manufactured by Natina Products, LLC
29 1577 First Street
30 Coachella, CA 92236
31 Telephone: (877) 762-8462
32 www.natinaproducts.com
33

34 8-11.2(9-16.3).GR8

35 ***Beam Guardrail***

36

37 8-11.2(9-16.3(2)).GR8

38 ***Posts and Blocks***

39

40 8-11.2(9-16.3(2)).INST1.GR8

41 Section 9-16.3(2) is supplemented with the following:
42

43 8-11.2(9-16.3(2)).OPT1.GB8

44 (April 6, 2015)

45 Shear plates and backing plates shall conform to ASTM A 36, and shall be
46 galvanized after fabrication in accordance with AASHTO M 111.
47

48 8-11.2(9-16.3(2)).OPT2.GB8

49 (April 6, 2015)

50 Grout for post bases shall conform to Section 9-20.3(2).
51

1 8-11.2(9-16.3(2)).OPT3.GB8
2 (April 6, 2015)
3 Steel angles connecting the timber blockout to the existing steel truss members
4 shall conform to either ASTM A 36 or ASTM A 992, and shall be galvanized in
5 accordance with AASHTO M 111.
6
7 8-11.2(9-16.3(2)).OPT4.GB8
8 (April 6, 2015)
9 HSS steel tubing shall conform to ASTM A 500 Grade B, and shall be galvanized
10 after fabrication in accordance with AASHTO M 111.
11
12 Steel bars, plates, and shapes shall conform to ASTM A 36, and shall be
13 galvanized after fabrication in accordance with AASHTO M 111, except that
14 structural shapes may conform to ASTM A 992.
15
16 Galvanized sheet metal shall conform to ASTM A 653, Coating Designation G
17 235.
18
19 Paving bulkheads, timber blocking, and custom cut shims shall be Douglas Fir-
20 Larch No. 2 or better, and shall be treated as specified in this Section.
21
22 Rubberized asphalt shall conform to ASTM D 6690 (Type 1 for bridge locations
23 in Western Washington, and Type 2 for bridge locations in Eastern Washington).
24
25 8-11.2(9-16.3(4)).GB8
26 **Hardware**
27 Section 9-16.3(4) is supplemented with the following:
28
29 8-11.2(9-16.3(4)).OPT1.GB8
30 (~~April 6, 2015~~ November 20, 2023)
31 Resin bonded anchors shall conform to Sections 6-02.23(18)A and ~~6-02.3(18)~~
32 ~~as supplemented in these Special Provisions~~ 9-06.4.
33
34 8-11.2(9-16.3(4)).OPT2.GB8
35 (April 6, 2015)
36 Lag screws shall conform to Section 9-06.22.
37
38 8-11.3.GR8
39 **Construction Requirements**
40
41 8-11.3.INST1.GR8
42 Section 8-11.3 is supplemented with the following:
43
44 8-11.3.OPT1.FR8
45 **(October 3, 2022)**
46 ***Installing Steel Posts on Existing Box Culverts***
47 **Field Measurements**
48 The Contractor shall obtain field measurements both vertically and horizontally at
49 each location steel posts are to be installed on the existing box culvert. The
50 Contractor shall calculate the steel post lengths for fabrication using the field
51 measurement information obtained.
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Submittals

The Contractor shall remove surfacing materials from the top of the box culvert and shall determine the length of the posts. Prior to post and rail fabrication the Contractor shall submit Type 2 Working Drawings in accordance with Section 1-05.3. The Working Drawings shall include plan and elevation views of each post location on the culvert. The plan view drawing shall show the station and offset of each post on the culvert. The elevation view drawing shall show the top of culvert elevation at each post location, the top of surfacing elevation at each post location, the top of rail elevation, the top of post elevation, and the length of post at each post location.

Excavation

The Contractor shall excavate an area extensive enough to allow the top of the culvert to be cleaned of all dirt, oil, and debris, installation of the baseplate, backfilled, and properly compacted around the posts.

Post Installation

See the Contract plans for the method of steel post attachment to the box culvert (embedded or bolt through). Steel posts shall be installed in accordance with Standard Plan C-20.41 or Standard Plan C-20.43.

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

Backfilling

After the posts are installed on the box culverts, the excavated areas shall be backfilled and compacted in 6-inch maximum lifts. Compaction shall be accomplished with three passes with a mechanical tamper. When culvert posts are installed through HMA, repair the roadway with materials matching the existing surfacing depths. Use Commercial HMA in accordance with Section 5-04.

Additional Box Culvert Guardrail Steel Post Assemblies

For each culvert with embedded or bolt through guardrail steel posts, furnish and deliver one complete set of Box Culvert Guardrail Steel Post Assemblies. Box Culvert Guardrail Steel Post Assemblies shall be delivered to the Contracting Agency locations as listed below:

| Location (SR & MP) | Location/Contact Phone Number |
|--------------------|-------------------------------|
| *** \$\$1\$\$ *** | *** \$\$2\$\$ *** |
| *** \$\$3\$\$ *** | *** \$\$4\$\$ *** |

A complete set of assemblies will include the following:

When using Embedded Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.41):

1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert

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- 2. Embedded Anchor Bolt Assemblies including four threaded rods, bolts, and resin adhesive for each post installed on culvert

When using Bolt-Thru Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.43):

- 1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert
- 2. Bottom Plate – One plate for each post installed on culvert
- 3. Hex Head Bolts, Nuts, & Washers – 4 bolts, 4 nuts, and 8 washers for each post installed on culvert

Provide 48-hours’ notice to both the Engineer and the contact(s) listed above prior to delivery. Damaged items will not be accepted and shall be replaced at no cost to the Contracting Agency.

8-11.3.OPT2.FR8

~~(October 3, 2022~~November 20, 2023)

High-Tension Cable Barrier System (4 Cable)

A manufacturer’s representative, or an installer who has been ~~trained and~~certified by the ~~unit’s~~system’s manufacturer within the last 5 years ~~and~~for the specific system(s) being installed; shall supervise the assembly and installation of the system at all times. ~~Provide~~The Contractor shall provide a copy of the installer’s certification to the Engineer prior to installation.

Assemble and install the high-tension cable barrier system according to the manufacturer’s recommendations. This shall include ~~the connection~~connecting cable barrier to guardrail, guardrail transitions, and ~~the transition and terminal sections/or guardrail terminals when~~ identified in the Plans. Submit any Contractor proposed modification in barrier location, type, terminal or transition to the Engineer for approval a minimum of 10-days prior to any work in the affected section.

~~Unless otherwise stated in the Plans, all~~ High-tension cable barrier line posts shall be one of the following types:

- (1) A socket type assembly; with the actual cable barrier line post being inserted into a sleeve encased in a cast-in-place or precast reinforced concrete post foundation and will be installed as recommended specified by the manufacturer.
- (2) A socket type assembly with the line post being inserted into a direct driven socket assembly as specified by the manufacturer.
- (3) Direct driven posts as specified by the manufacturer.

On every 6th- line post, install yellow retro-reflective markers in accordance with the ~~manufacturer’s~~manufacturer’s system and Section 9-28.12. The retro-reflective markers shall be applied to a clean and dry line post.

Unless otherwise stated in the Plans, all high-tension cable barrier terminal anchor posts shall be a socket type assembly with the cable barrier post being inserted into a sleeve encased in a cast-in-place or precast reinforced concrete post foundation and installed as specified by the manufacturer. Delineate the terminal anchor posts for approach traffic

1 with yellow Type IV lateral clearance markers (object markers) in accordance with Section
2 9-28.12. The object markers shall be applied to a clean and dry terminal post.

3
4 **Terminal Placement**

5 Unless otherwise stated in the Plans, the foundations for the high-tension cable barrier
6 terminals shall be cast in place or precast concrete and shall be installed in accordance
7 with manufacturer's recommendations. If a precast concrete foundation is installed, the
8 bottom of the unit shall have a full and even bearing on the surface under it. If there is a
9 need for backfilling an excavation, use Controlled Density Fill (CDF) in accordance with
10 Section 2-09.3(1) E. ~~Delineate the anchor posts for approach traffic with Type 3 lateral~~
11 ~~clearance markers (object markers) in accordance with Section 9-28.12.~~

12
13 **Additional High-Tension Cable Barrier Components**

14 Furnish and deliver one complete set of High-Tension Cable Barrier to each of the
15 Contracting Agency sites listed below:

16 *** \$\$1\$\$ ***

17
18
19 Include the following components with each complete set:

20
21 One-hundred line posts and all associated hardware including but not limited to
22 spacers, connectors, straps, caps and covers. If the system has a special post to
23 accommodate turnbuckles, then 5 of the line posts shall be these special posts.

24
25 Twenty sockets except when concrete sockets are used.

26
27 One 50-foot long section of cable used for the contract.

28
29 ~~Three~~Four cable splices and ~~3~~4 turnbuckle assemblies ~~for a 3-cable system or 4~~
30 ~~cable splices and 4 turnbuckle assemblies for a 4-cable system~~ (1-assembly consists
31 of a left- and right-hand threaded end with a turnbuckle).

32
33 One tension measuring device as recommended by the manufacturer.

34
35 One anchor post designed for use with the foundations installed.

36
37 Ten line terminal posts and all associated hardware.

38
39 Provide ~~48-hours~~ hour notice to both the Engineer and the maintenance contact listed
40 above prior to delivery. Damaged items will not be accepted and shall be replaced at no
41 cost to the Contracting Agency.

42
43 8-11.3.OPT4.GR8

44 (April 1, 2019)

45 Aesthetic treatments to the galvanized W-beam guardrail, galvanized guardrail posts,
46 galvanized guardrail terminals, and associated galvanized hardware shall be performed
47 using either a powder coating or reactive coloring agent. The Contractor shall apply
48 powder coating or reactive coloring agent to all galvanized steel rail, posts, other
49 galvanized steel parts, and impact head components of the beam guardrail as specified
50 in the Plans. Confirm that the manufacturer of proprietary guardrail terminals allows the
51 use of powder coatings or reactive coloring agents prior to applying them.

1 Only the top 30 inches on any guardrail post length to be exposed above ground shall
2 receive aesthetic treatment.
3
4 The color of the finish coat shall be a dark brown. The Contractor shall furnish a one-foot
5 minimum length test section of galvanized W-beam guardrail treated with the proposed
6 aesthetic treatment product to the Engineer for acceptance. The test section shall be
7 prepared in accordance with the manufacturer's instructions.
8
9 The Engineer will provide acceptance in writing accepting the color of the test section
10 prior to acceptance of any permanently incorporated material into the project.
11

12 ***Powder Coating***

13 Powder coating of galvanized surfaces shall be in accordance with Section 6-07.3(11)B.
14

15 ***Reactive Coloring Agent***

16 Application of the reactive coloring agent to galvanized surfaces shall be in accordance
17 with the following:
18

19 The reactive coloring agent shall be applied using the same methods used for the
20 accepted test section. The treated material shall develop full coloration within two weeks
21 of application and achieve a color consistent with the color of the authorized test section.
22

23 The Contractor shall apply the reactive coloring agent prior to delivering the steel
24 components to the project site. The reactive coloring agent manufacturer or the
25 manufacturer's authorized application contractor shall apply the reactive coloring agent
26 for both the test section and production applications. Application of the reactive coloring
27 agent shall fully coat the galvanized steel in accordance with the manufacturer's written
28 instructions and achieve the accepted surface color. Once the reactive coloring agent is
29 applied, the Contractor shall protect the steel pieces from abrasion that would remove the
30 brown color.
31

32 After the various guardrail components have been installed, the Contractor shall apply
33 the reactive coloring agent to any steel products that did not receive adequate coloring,
34 or where the color was removed during the shipment or the construction process. This
35 remedial action shall coat the affected area. Any reactive coloring agent applied in the
36 field shall be cured according to manufacturer's specifications, and shall be applied while
37 protecting soil, plants, and surrounding natural surfaces.
38

39 8-11.3.OPT5.FR8

40 ***(October 3, 2022)***

41 ***Installing Steel Posts on New Box Culverts***

42 ***Post Installation***

43 See the Contract plans or culvert Working Drawings for the method of steel post
44 attachment to the box culvert (embedded or bolt through). Steel posts shall be
45 installed in accordance with Standard Plan C-20.41 or Standard Plan C-20.43.
46

47 The Contractor shall exercise care in locating and drilling the holes to avoid damage
48 to existing steel reinforcing bars and concrete. To avoid damaging the existing steel
49 reinforcing bars, the location of the holes may be shifted slightly with the acceptance
50 of the Engineer. All damage caused by the Contractor's operations shall be repaired
51 by the Contractor in accordance with Section 1-07.13.
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Additional Box Culvert Guardrail Steel Post Assemblies

For each culvert with embedded or bolt through guardrail steel posts, furnish and deliver one complete set of Box Culvert Guardrail Steel Post Assemblies. Box Culvert Guardrail Steel Post Assemblies shall be delivered to the Contracting Agency locations as listed below:

| Box Culvert Designation & Location (SR & MP) | Contracting Agency Delivery Location/Contact Phone Number |
|--|---|
| *** \$\$1\$\$ *** | *** \$\$2\$\$ *** |
| *** \$\$3\$\$ *** | *** \$\$4\$\$ *** |

A complete set of assemblies will include the following:

When using Embedded Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.41):

1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert
2. Embedded Anchor Bolt Assemblies including Four threaded rods, bolts, and resin adhesive for each post installed on culvert

When using Bolt-Thru Anchor Box Culvert Guardrail Steel Posts (Standard Plan C-20.43):

1. Steel Post and Base Plate Assembly – One replacement post and base plate for each post installed on culvert
2. Bottom Plate – One plate for each post installed on culvert
3. Hex Head Bolts, Nuts, & Washers – 4 bolts, 4 nuts, and 8 washers for each post installed on culvert

Provide 48-hours’ notice to both the Engineer and the contact(s) listed above prior to delivery. Damaged items will not be accepted and shall be replaced at no cost to the Contracting Agency.

8-11.3(1).GR8

Beam Guardrail

8-11.3(1).INST1.GR8

Section 8-11.3(1) is supplemented with the following:

8-11.3(1).OPT1.GR8

(April 5, 2010)

This project may contain a mixture of steel and wood posts. The bidder is advised that post selection will be as detailed in the plans and these specifications.

8-11.3(1)A.GR8

Erection of Posts

1 8-11.3(1)A.INST1.GR8
2 Section 8-11.3(1)A is supplemented with the following:
3
4 8-11.3(1)A.OPT1.GB8
5 **(April 6, 2015)**
6 **Timber Blockouts for Beam Guardrail Type Thrie Beam**
7 The Contractor shall cut and trim the timber blocks as necessary to conform to
8 the shape of the existing concrete baluster rail, and to align the beam guardrail
9 element, as shown in the Plans.
10
11 When the specified timber blockout spacing places a block at an existing
12 concrete end post or intermediate post, the Contractor shall core drill holes into
13 the existing concrete as shown in the Plans and as follows. The Contractor shall
14 not shatter or damage the concrete adjacent to the holes. Location of blockout
15 assemblies may be shifted slightly within the tolerance specified in the Plans in
16 order to reduce the risk of damage to existing steel reinforcing bars. However,
17 once a blockout assembly position is established, damage to existing steel
18 reinforcing bars caused by subsequent core drilling operations at that assembly
19 location is acceptable.
20
21 8-11.3(1)A.OPT2.GB8
22 **(January 4, 2016)**
23 **Steel Posts for Beam Guardrail Type Thrie Beam**
24 The Contractor shall field measure the dimension of the existing curb above the
25 existing wearing surface at each curb line for each bridge receiving beam
26 guardrail Type Thrie Beam. The field measured dimensions, and all adjustments
27 to the field measurements required by planing and paving operations included
28 in this project, shall be included in the steel post assembly shop drawings
29 submitted in accordance with Section 8-11.3(1)G.
30
31 8-11.3(1)A.OPT3.GB8
32 **(September 8, 2020)**
33 **Beam Guardrail Type WP Thrie Beam**
34 The Contractor shall field measure the depth of the existing ballast and wearing
35 course at both wheel guard lines, and shall include the dimensions at both wheel
36 guard lines in the steel post mounting bracket shop drawings submitted in
37 accordance with Section 8-11.3(1)G.
38
39 The Contractor shall remove the existing ballast and wearing course to the top
40 of existing timber deck in the vicinity of the steel post anchorage locations, and
41 shall dispose of the removed surfacing materials in accordance with Section 2-
42 02.3.
43
44 As shown in the Plans, the Contractor shall place a timber block beneath the
45 timber deck at each steel post anchorage location and against the existing
46 exterior timber stringer.
47
48 The Contractor shall install the steel post anchorage assembly, including the
49 deck plate, distribution plate, bearing plate, base plate, backing plate, and HSS
50 steel tube post, as shown in the Plans. Timber deck shims shall be cut and
51 trimmed as necessary to align the top of the vertical webs of the steel post
52 anchorage 1/2 inch below the top of the surrounding wearing course surfacing,

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in accordance with the existing timber deck transverse slope and existing ballast and wearing course depth specified in the shop drawings.

The Contractor may field drill holes through the steel components in accordance with Section 6-03.3(27) except as otherwise noted. The Contractor shall identify all holes to be field drilled in the steel fabrication shop drawings. The Contractor may field drill the holes using hand held drills provided that the Contractor submits the method and equipment used to the Engineer for approval, and that the Contractor receives the Engineer's acceptance of the submittal prior to beginning hand drilling. The Contractor shall repair all galvanized steel surfaces damaged by field drilling operations by painting the damaged areas with one coat of paint conforming to Section 9-08.1(2)B.

The Contractor shall replace all existing ballast and wearing course removed in the vicinity of the steel post anchorage locations to the top of the surrounding surfacing. The Contractor shall fill the void with an HMA surfacing material accepted by the Engineer.

8-11.3(1)B.GR8
Erection of Rail

8-11.3(1)B.INST1.GR8
Section 8-11.3(1)B is supplemented with the following:

8-11.3(1)B.OPT6.GB8
(April 6, 2015)
Field Measuring to Existing Type 3 Anchors

The Contractor shall field measure the dimension from the centerline of the existing Type 3 anchors specified for reuse to the end of the existing concrete curb and railbase or concrete baluster railing end blocks of the adjacent bridge. The Contractor shall submit these dimensions to the Engineer along with a Type 2 Working Drawing showing the arrangement of the thrie beam guardrail elements and approach guardrail elements relative to the existing Type 3 anchors and concrete curb and railbase or concrete baluster railing end blocks for each bridge as applicable.

8-11.3(1)B.OPT7.GB8
(April 6, 2015)
Attaching Beam Guardrail Type Thrie Beam to Timber Blockouts

The Contractor shall fasten the thrie beam element to the timber blockout assemblies such that the steel shear plates fit snug against the surface forming the opening through the concrete baluster rail.

The Contractor may field drill the holes through the thrie beam elements in accordance with Section 6-03.3(27), except as otherwise noted. The Contractor may field drill the holes using hand held drills.

The Contractor shall repair all galvanized steel surfaces damaged by field drilling operations by painting the damaged areas with one coat of paint conforming to Section 9-08.1(2)B.

1 8-11.3(1)B.OPT8.GB8
2 **(September 13, 2021)**
3 **Thrie Beam Expansion Joint Element**
4 Where beam guardrail Type Thrie Beam crosses bridge interior expansion joints,
5 the Contractor shall place a thrie beam expansion section element conforming
6 to Standard Plan C-25.22 or C-25.26.
7

8 8-11.3(1)B.OPT9.GB8
9 **(April 6, 2015)**
10 **Beam Guardrail Type WP Thrie Beam**
11 The Contractor may field drill the holes through the thrie beam elements in
12 accordance with Section 6-03.3(27), except as otherwise noted. The Contractor
13 may field drill the holes using hand held drills.
14

15 The Contractor shall repair all galvanized steel surfaces damaged by field drilling
16 operations by painting the damaged areas with one coat of paint conforming to
17 Section 9-08.1(2)B.
18

19 After completing the beam guardrail retrofit and replacing the surfacing at the
20 steel post anchorage locations on the bridge up to the level of the surrounding
21 surfacing, the Contractor shall install the sheet metal water barrier, when the
22 water barrier is shown in the Plans. A bonding layer of rubberized asphalt shall
23 be applied to the surfacing contact area immediately prior to installing the water
24 barrier assembly. The direction of overlap of adjacent water barrier segments
25 shall be as directed by the Engineer.
26

27 8-11.3(1)D.GR8
28 **Removing Guardrail and Guardrail Anchor**
29

30 8-11.3(1)D.INST1.GR8
31 Section 8-11.3(1)D is supplemented with the following:
32

33 8-11.3(1)D.OPT1.GB8
34 **(September 8, 2020)**
35 **Beam Guardrail Type WP Thrie Beam**
36 The Contractor shall remove the existing bridge guardrail posts and railing, the
37 existing timber wheel guards, all associated fasteners, and the existing ballast
38 and wearing course in the vicinity of the steel post anchorage assemblies of the
39 bridges being retrofitted with beam guardrail Type WP Thrie Beam as shown in
40 the Plans
41

42 The items specified above shall be removed as follows:
43

- 44 1. The Contractor shall remove the existing timber wheel guards before
45 beginning the beam guardrail retrofit work.
46
- 47 2. The Contractor shall not remove any section of the existing bridge
48 railing system on the bridge until completing the beam guardrail
49 retrofit within that section of the bridge, except as otherwise specified.
50 The Contractor may remove portions of the existing bridge railing
51 system on the bridge which conflict with the anchorages, posts, and
52 rail elements of the retrofit, provided:

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- a. The Contractor installs as much of the beam guardrail retrofit as possible in the section that does not conflict with the existing bridge railing system elements.
- b. After removing the conflicting element of the existing bridge railing system, the Contractor shall immediately complete the beam guardrail retrofit in the section.
- c. The Contractor receives the Engineer’s acceptance for removing the conflicting element of the existing bridge railing system before proceeding.

8-11.3(1)H.GR8

Guardrail Construction Exposed to Traffic

8-11.3(1)H.INST1.GR8

Section 8-11.3(1)H is supplemented with the following:

8-11.3(1)H.OPT1.GB8

(April 6, 2015)

Beam Guardrail Type WP Thrie Beam

Whenever the Contractor is not actively working on the beam guardrail retrofit, the Contractor shall ensure that all guardrail ends are securely fastened to the rail posts and existing bridge railing system, including temporary terminal end sections as required. The Contractor shall conduct retrofit operations such that no gaps occur between the existing bridge railing system and the beam guardrail retrofit at any time.

The Contractor shall submit Type 2 Working Drawings detailing the temporary connections between the existing guardrail system and the thrie beam guardrail system, and the temporary terminal end sections.

8-11.4.GR8

Measurement

8-11.4.INST1.GR8

Section 8-11.4 is supplemented with the following:

8-11.4.OPT1.GR8

(October 3, 2022)

Box culvert guardrail steel posts type 31 will be measured per each, for each post installed.

8-11.4.OPT2.GR8

(February 3, 2020)

Measurement of high-tension cable barrier (4 Cable) will be by the linear foot along the line of the completed barrier from end to end including transition sections, terminals, cable barrier to guardrail terminals, foundations, sockets, concrete, compensating devices, tensioning device, slip base post, sleeves, caps, and all hardware.

1 8-11.4.OPT4.GR8
2 (April 2, 2018)
3 Measurement of Aesthetic Treatment for beam guardrail will be by the linear foot
4 measured along the line of the completed guardrail, including expansion sections and the
5 end section for F connections.
6
7 Measurement for Aesthetic Treatment for beam guardrail transition section will be per
8 each for the type of transition section installed.
9
10 Measurement for Aesthetic Treatment for beam guardrail anchor type specified will be per
11 each for the completed anchor, including the attachment of the anchor to the guardrail.
12
13 Measurement of Aesthetic Treatment beam guardrail ____ terminal will be per each for
14 the completed terminal.
15
16 Measurement of Aesthetic Treatment beam guardrail Type 31 buried terminal Type 2 will
17 be per linear foot for the completed terminal.
18

19 ~~8-11.4.INST2.GR8~~
20 ~~The fifth paragraph of Section 8-11.4 is revised to read:~~

21
22 ~~8-11.4.OPT5.2024.GR8~~
23 ~~(November 2, 2022)~~
24 ~~Measurement for beam guardrail anchor Type 11 will be per each for the completed~~
25 ~~anchor, including the attachment of the anchor to the guardrail.~~

26
27 8-11.5.GR8

28 **Payment**

29
30 ~~8-11.5.INST1.GR8~~
31 ~~In Section 8-11.5, the bid item for “Beam Guardrail Anchor Type 10”, per each is revised to~~
32 ~~read:~~

33
34 ~~8-11.5.OPT3.2024.GR8~~
35 ~~(November 2, 2022)~~
36 ~~“Beam Guardrail Anchor Type 11”, per each.~~

37
38 8-11.5.INST2.GR8
39 Section 8-11.5 is supplemented with the following:

40
41 8-11.5.OPT1.GR8
42 (April 2, 2018)
43 “Aes. Tr. Beam Guardrail Type ____”, per linear foot

44
45 “Aes Tr. Beam Guardrail Type 1- ____ Ft. Long Post” , per linear foot.

46
47 “Aes Tr. Beam Guardrail Type 31- ____ Ft. Long Post” , per linear foot.

48
49 The unit Contract price per linear foot for “Aes. Tr. Beam Guardrail Type____”, “Aes Tr.
50 Beam Guardrail Type 1- ____ Ft. Long Post”, and “Aes Tr. Beam Guardrail Type 31- ____
51 Ft. Long Post”, shall be full payment for all costs to perform the Work as specified.
52

1 "Aes. Tr. Beam Guardrail Transition Section Type _____", per each
2 The unit Contract price per each for "Aes. Tr. Beam Guardrail Transition Section Type
3 _____" shall be full payment for all costs to perform the Work as described in Section 8-
4 11.3.
5
6 "Aes. Tr. Beam Guardrail Anchor Type _____", per each.
7
8 "Aes. Tr. Beam Guardrail _____ Terminal", per each.
9
10 The unit Contract price per each for "Aes. Tr. Beam Guardrail Anchor Type _____" and
11 "Aes. Tr. Beam Guardrail _____ Terminal" shall be full payment for all costs to perform the
12 Work as specified.
13
14 "Aes. Tr. Beam Guardrail Type 31 Buried Term. Type 2", per linear foot.
15
16 The unit Contract price per linear foot for "Aes. Tr. Beam Guardrail Type 31 Buried Term.
17 Type 2" shall be full payment for all costs to perform the Work as specified.
18
19 8-11.5.OPT6.GR8
20 (October 3, 2022)
21 "Box Culvert Guardrail Steel Post Type 31", per each.
22
23 The unit contract price per each for "Box Culvert Guardrail Steel Post Type 31" shall be
24 full pay for completing the installation of the posts, including obtaining field
25 measurements, excavation, furnishing, placing and compacting the backfill material, and
26 when required, repairing surfacing materials. Beam guardrail will be paid for in
27 accordance with Section 8-11.5.
28
29 "Additional Box Culvert Guardrail Steel Post Assemblies", lump sum.
30
31 The lump sum contract price for "Additional Box Culvert Guardrail Steel Post Assemblies"
32 shall be full pay to complete the work as specified.
33
34 8-11.5.OPT7.GR8
35 (February 3, 2020)
36 "High-Tension Cable Barrier System (4 Cable)", per linear foot.
37 "Additional High-Tension Cable Barrier Components", lump sum.
38
39 The unit contract price per linear foot for "High-Tension Cable Barrier (4 Cable)" shall be
40 full pay to complete the work as specified.
41
42 8-11.5.OPT8.GR8
43 (February 3, 2020)
44 The lump sum contract price for "Additional High-Tension Cable Barrier Components"
45 shall be full pay to complete the work as specified for a 4 Cable system.

1 8-12.GR8
2 **Chain Link Fence and Wire Fence**

3
4 8-12.2.GR8
5 **Materials**

6
7 8-12.2.INST1.GR8
8 Section 8-12.2 is supplemented with the following:

9
10 8-12.2.OPT1.FR8

11 **(September 8, 2020)**

12 **Coated Chain Link Fence**

13 Chain link fence fabric shall be hot-dip galvanized with a minimum of 0.8 ounce per square
14 foot of surface area.

15
16 Fencing materials shall be coated with an ultraviolet-insensitive plastic or other inert
17 material at least 2 mils in thickness. Any pretreatment or coating shall be applied in
18 accordance with the manufacturer's written instructions. The Contractor shall provide the
19 Engineer with the manufacturer's written specifications detailing the product and method
20 of fabrication. The color shall match SAE AMS Standard 595 color number *** \$\$\$ **.

21
22 Samples of the coated fencing materials shall have received the Engineer's acceptance
23 prior to installation on the project.

24
25 The Contractor shall supply the Engineer with 10 aerosol spray cans containing a
26 minimum of 14 ounces each of paint of the color specified above. The touch-up paint
27 shall be compatible with the coating system used.

28
29 8-12.2.OPT6.GB8

30 **(September 3, 2019 November 20, 2023)**

31 **Cable Fence**

32 Steel pipe shall conform to ASTM ~~A-53~~A53, Grade B, Type E or S.

33
34 Steel bars, plates, and shapes shall conform to ASTM ~~A-36~~A36.

35
36 Steel components shall be galvanized after fabrication in accordance with AASHTO M
37 111.

38
39 Resin bonded anchors shall conform to ~~Section 6-02.2 as supplemented in these Special~~
40 ~~Provisions~~ Sections 6-02.3(18)A and 9-06.4.

41
42 Proof coil chain shall conform to ASTM A413 Grade 30.

43
44 Spelter sockets and turnbuckles shall conform to the size and breaking strength
45 requirements specific in the Plans, shall be compatible with the wire rope selected by the
46 Contractor, and shall be galvanized after fabrication in accordance with AASHTO M 232.

47
48 Wire rope shall conform to one of the following:

- 49
50 1. ASTM ~~A-603~~A603 with Class A weight zinc-coated wires throughout.
51

1 2. ASTM ~~A-1023~~A1023 with drawn galvanized wires throughout in accordance with
2 ASTM ~~A-1007~~A1007. Acceptance of ASTM ~~A-1023~~A1023 wire rope is contingent
3 upon the Contractor furnishing a Type 1 Working Drawing certifying that the lot
4 of supplied wire rope has a minimum modulus of elasticity of 15,000 ksi when
5 tested in accordance with ASTM ~~A-934~~A931 Section 3.2.17.

6
7 3. Phillystran HPTG 27000 I as manufactured by:

8
9 Phillystran, Inc.
10 151 Commerce Drive
11 Montgomeryville, PA 18936-9628
12 (215) 368-6611
13 www.phillystran.com
14

15 8-12.3.GR8

16 **Construction Requirements**

17
18 8-12.3.INST1.GR8

19 Section 8-12.3 is supplemented with the following:

20
21 8-12.3.OPT1.GB8

22 **Cable Fence**

23
24 8-12.3.OPT1(A).GB8

25 (April 6, 2015)

26 The Contractor shall field measure the slope of the top of the existing retaining wall at
27 each location of cable fence end post and intermediate brace. The Contractor shall
28 submit Type 1 Working Drawings consisting of the tabulated field measured slope data.

29
30 8-12.3.OPT1(B).GB8

31 (~~April 6, 2015~~November 20, 2023)

32 The Contractor shall submit shop drawings of the cable fence in accordance with Section
33 6-03.3(7). The shop drawings shall include, at a minimum, the following:

- 34
35 1. Plan, elevation, and section views of the cable fence and all components, with
36 dimensions and tolerances.
37
38 2. Material designations for all components.
39
40 3. Socketing procedure for the spelter sockets.
41
42 4. Erection plan for installing the posts, installing and connecting the cable to the
43 posts, and tensioning the cable.
44

45 The Contractor shall install resin bonded anchors in accordance with ~~Section~~Sections 6-
46 02.3(18) ~~as supplemented in these Special Provisions~~A and 9-06.4.

47
48 The cable shall be tensioned to 400 pounds with six inches minimum of take up still
49 available in the turnbuckle.
50

51 8-12.3.OPT1(C).GB8

52 (January 10, 2022)

1 The Contractor shall clean, prepare, and shop paint or powder coat all exposed
2 galvanized surfaces of the cable fence post assemblies in accordance with Section 6-
3 07.3(11). The color of the finish coat, when dry, shall match SAE AMS Standard 595 Color
4 No. 20045. After installation of the cable fence posts, any surfaces with paint or powder
5 coating damage shall be repaired in accordance with Section 6-07.3(10)P or Section 6-
6 07.3(11)B6, respectively.

7
8 8-12.4.GR8

9 **Measurement**

10

11 8-12.4.INST1.GR8

12 Section 8-12.4 is supplemented with the following:

13

14 8-12.4.OPT1.GB8

15 (April 6, 2015)

16 Cable fence will be measured by the linear foot along the line and slope at the base of
17 the completed fence.

18

19 8-12.5.GR8

20 **Payment**

21

22 8-12.5.INST1.GR8

23 Section 8-12.5 is supplemented with the following:

24

25 8-12.5.OPT1.GR8

26 (April 1, 2002)

27 "Coated Chain Link Fence Type ____", per linear foot.

28 Payment for clearing of fence line for "Coated Chain Link Fence Type ____" shall be in
29 accordance with Section 2-01.5.

30 "Coated End, Gate, Corner, Pull Post for Chain Link Fence", per each.

31 "Double 14 Ft. Coated Chain Link Gate", per each.

32 "Double 20 Ft. Coated Chain Link Gate", per each.

33 "Single 6 Ft. Coated Chain Link Gate", per each.

34

35 8-12.5.OPT6.GB8

36 (April 6, 2015)

37 "Cable Fence", per linear foot.

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1 8-20.GR8
2 **Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and**
3 **Electrical**
4
5 8-20.2.GR8
6 **Materials**
7
8 8-20.2.INST1.GR8
9 Section 8-20.2 is supplemented with the following:
10
11 8-20.2.OPT1.GB8
12 **(April 6, 2015)**
13 **Traffic Signal Standard Foundation Shaft Casing**
14 All permanent casing shall be a smooth wall non corrugated structure of steel base metal.
15 All permanent casing shall be of ample strength to resist damage and deformation from
16 transportation and handling, installation stresses, and all pressures and forces acting on
17 the casing. The casing shall be clean prior to placement in the excavation. The
18 permanent casing may be telescoped, but the outside diameter of the casing shall not be
19 less than the specified diameter of the shaft.
20
21 8-20.2(9-29.1).GR8
22 **Conduit, Innerduct, and Outerduct**
23
24 8-20.2(9-29.1(11)).GR8
25 **Foam Conduit Sealant**
26 Section 9-29.1(11) is supplemented with the following:
27
28 8-20.2(9-29.1(11)).OPT1.GR8
29 (January 7, 2019)
30 The following products are accepted for use as foam conduit sealant:
31
32 • CRC Minimal Expansion Foam (No. 14077)
33 • Polywater FST Foam Duct Sealant
34 • Superior Industries Foam Seal
35 • Todol Duo Fill 400
36
37 8-20.2(9-29.2).GR8
38 **Junction Boxes, Cable Vaults, and Pull Boxes**
39 Section 9-29.2 is supplemented with the following:
40
41 8-20.2(9-29.2).OPT1.GR8
42 **(September 3, 2019)**
43 **Slip-Resistant Surfacing for Junction Boxes, Cable Vaults, and Pull Boxes**
44 Where slip-resistant junction boxes, cable vaults, or pull boxes are required, each
45 box or vault shall have slip-resistant surfacing material applied to the steel lid and
46 frame of the box or vault. Where the exposed portion of the frame is ½ inch wide or
47 less, slip-resistant surfacing material may be omitted from that portion of the frame.
48
49 Slip-resistant surfacing material shall be identified with a permanent marking on the
50 underside of each box or vault lid where it is applied. The permanent marking shall
51 be formed with a mild steel weld bead, with a line thickness of at least 1/8 inch. The
52 marking shall include a two character identification code for the type of material used

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and the year of manufacture or application. The following materials are approved for application as slip-resistant material, and shall use the associated identification codes:

1. Harsco Industrial IKG, Mebac #1 - Steel: **M1**
2. W. S. Molnar Co., SlipNOT Grade 3 – Coarse: **S3**
3. Thermion, SafTrax TH604 Grade #1 – Coarse: **T1**

8-20.2(9-29.6).GR8

Light And Signal Standards

Section 9-29.6 is supplemented with the following:

8-20.2(9-29.6).OPT1.GR8

(January 13, 2021)

Light Standards with Type 1 Luminaire Arms

Lighting standards shall be fabricated in conformance with the methods and materials specified on the pre-approved Plans listed below, provided the following requirements have been satisfied:

- (a) Light source to pole base distance (H1) shall be as noted in the Plans. Verification of H1 distances by the Engineer, prior to fabrication, is not required. Fabrication tolerance shall be ± 6 inches.
- (b) All other requirements of the Special Provisions have been satisfied.

| Fabricator | Pre-Approved Drawing No. | Rev. | Mounting Height(s) (feet) |
|-------------------------------|---|------|--------------------------------------|
| Valmont Ind., Inc. | DB01164, Sheets 1-5 of 5 | B | 30, 35, 40, and 50 |
| Ameron Pole Products Division | WA15LT3721, Sheets 1 and 2 of 2 | A | 20, 25, 30, 35, 40, 45, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-BB, Sheets 1 and 2 of 2 | H | 30, 35, 40, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-ELBOW, Sheets 1-3 of 3 | J | 30, 35, 40, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-SB, Sheets 1-3 of 3 | G | 30, 35, 40, and 50 |

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8-20.2(9-29.6).OPT2.GR8

(January 13, 2021)

Light Standards with Type 1 Luminaire Arms

Lighting standards shall be fabricated in conformance with the methods and materials specified on the pre-approved plans listed below, provided the following requirements have been satisfied:

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- (a) Mounting heights shall be as specified in the Plans.
- (b) Light source to pole base distances (H1) shall be determined or verified by the Engineer prior to fabrication. Fabrication tolerance shall be ±6 inches.
- (c) All other requirements of the Special Provisions have been satisfied.

| Fabricator | Pre-Approved Drawing No. | Rev. | Mounting Height(s) (feet) |
|-------------------------------|---|------|--------------------------------------|
| Valmont Ind., Inc. | DB01164, Sheets 1-5 of 5 | B | 30, 35, 40, and 50 |
| Ameron Pole Products Division | WA15LT3721, Sheets 1 and 2 of 2 | A | 20, 25, 30, 35, 40, 45, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-BB, Sheets 1 and 2 of 2 | H | 30, 35, 40, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-ELBOW, Sheets 1-3 of 3 | J | 30, 35, 40, and 50 |
| Millerbernd Manufacturing Co. | 74515-WA-LP1-SB, Sheets 1-3 of 3 | G | 30, 35, 40, and 50 |

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8-20.2(9-29.6).OPT5.GR8
(June 6, 2023)

Traffic Signal Standards

Traffic signal standards shall be furnished and installed in accordance with the methods and materials noted in the applicable Standard Plans, pre-approved plans, or special design plans.

All welds shall comply with the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. Welding inspection shall comply with Section 6-03.3(25)A Welding Inspection.

Hardened washers shall be used with all signal arm connecting bolts instead of lockwashers. All signal arm ASTM F 3125 Grade A325 connecting bolts tightening shall comply with Section 6-03.3(33).

Traffic signal standard types, applicable characteristics, and foundation types are as follows:

Type PPB

Pedestrian push button posts shall conform to Standard Plan J-20.10 or to one of the following pre-approved plans:

| Fabricator | Pre-Approved Drawing No. |
|-------------------------------|--|
| Valmont Ind., Inc. | DB01165 Rev. B (4 sheets) |
| Ameron Pole Products Division | WA15TR10-1 Rev. C (1 sheet) and WA15TR10-3 Rev. B (1 sheet) |

| | |
|--------------------------------|-----------------------------------|
| Millerbernd Manufacturing, Co. | 74514-WA-PED-PPB Rev J (2 sheets) |
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Foundations shall be as noted in Standard Plan J-20.10

Type PS, Type I, Type RM, and Type FB

Type PS pedestrian signal standards, Type I vehicle signal standards, Type RM ramp meter signal standards, and Type FB flashing beacon standards shall conform to Standard Plan J-20.16, J-21.15, J-21.16, and J-22.15 respectively, or to one of the following pre-approved plans:

| Fabricator | Pre-Approved Drawing No. |
|--------------------------------|---|
| Valmont Ind., Inc. | DB01165 Rev. B (4 sheets) |
| Ameron Pole Products Division | WA15TR10-1 Rev. C (1 sheet) and WA15TR10-2 Rev. C (1 sheet) |
| Millerbernd Manufacturing, Co. | 74514-WA-PED-FB Rev. H (2 sheets) |
| Millerbernd Manufacturing Co. | 74514-WA-PED-SB Rev. H (2 sheets) |

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Foundations shall be as noted in Standard Plan J-21.10.

Type II

Type II signal standards are single mast arm signal standards with no luminaire arm or extension. Type II standards shall conform to one of the following pre-approved plans. Maximum arm length (in feet) and wind load (XYZ value, in cubic feet) is noted for each manufacturer.

| Fabricator | Pre-Approved Drawing No. | Max. Arm Length (ft) | Max. Wind Load (XYZ) (ft ³) |
|--------------------------------|--|----------------------|---|
| Valmont Ind., Inc. | DB01162 Rev. B (5 sheets) | 65 | 3206 |
| Ameron Pole Products Division | WA15TR3724-1 Rev. C (sheet 1 of 2), and WA15TR3724-2 Rev. D (sheet 2 of 2) | 65 | 2935 |
| Millerbernd Manufacturing, Co. | 74516-WA-TS-II Rev. L (4 sheets) | 65 | 3697 |

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Foundations shall be as noted in the Plans and Standard Plan J-26.10. Type II signal standards with two mast arms installed 90 degrees apart may use these pre-approved drawings. Standards with two arms at any other angle are Type SD and require special design.

Type III

Type III signal standards are single mast arm signal standards with one Type 1 (radial davit type) luminaire arm. The luminaire arm has a maximum length of

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16 feet and a mounting height of 30, 35, 40, or 50 feet, as noted in the Plans. Type III standards shall conform to one of the following pre-approved plans. Maximum arm length (in feet) and wind load (XYZ value, in cubic feet) is noted for each manufacturer. Wind load limit includes a luminaire arm up to 16 feet in length.

| Fabricator | Pre-Approved Drawing No. | Max. Arm Length (ft) | Max. Wind Load (XYZ) (ft³) |
|--------------------------------|---|-----------------------------|--|
| Valmont Ind., Inc. | DB00162 Rev. B (5 sheets), with Type "J" luminaire arm | 65 | 3259 |
| Ameron Pole Products Division | WA15TR3724-1 Rev. C (sheet 1 of 2), and WA15TR3724-2 Rev. D (sheet 2 of 2), with Series "J" luminaire arm | 65 | 2988 |
| Millerbernd Manufacturing, Co. | 74516-WA-TS-III-J Rev. L (5 sheets) | 65 | 3750 |

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Foundations shall be as noted in the Plans and Standard Plan J-26.10. Type III signal standards with two mast arms installed 90 degrees apart may use these pre-approved drawings. Standards with two arms at any other angle are Type SD and require special design.

Type IV

Type IV strain pole standards shall be consistent with the Plans and Standard Plan J-27.15 or one of the following pre-approved plans:

| Fabricator | Pre-Approved Drawing No. |
|--------------------------------|----------------------------------|
| Valmont Ind., Inc. | DB01167 Rev. B (2 sheets) |
| Ameron Pole Products Division | WA15TR15 Rev. A (2 sheets) |
| Millerbernd Manufacturing, Co. | 74554-WA-SP-IV Rev. H (2 sheets) |

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Foundations shall be as noted in the Plans and Standard Plan J-27.10.

Type V

Type V strain poles are combination strain pole and light standards, with Type 1 (radial davit type) luminaire arms. Luminaire arms may be up to 16 feet in length, and a mounting height of 40 or 50 feet, as noted in the Plans. Type V strain poles shall be consistent with the Plans and Standard Plan J-27.15 or one of the following pre-approved plans:

| Fabricator | Pre-Approved Drawing No. |
|--------------------------------|---------------------------------|
| Valmont Ind., Inc. | DB01167 Rev. B (2 sheets), |
| Ameron Pole Products Division | WA15TR15 Rev. A (2 sheets) |
| Millerbernd Manufacturing, Co. | 74554-WA-SP-V Rev. J (3 sheets) |

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Foundations shall be as noted in the Plans and Standard Plan J-27.10.

Type CCTV

Type CCTV camera pole standards shall conform to Standard Plan J-29.15 or to one of the following pre-approved plans:

| Fabricator | Pre-Approved Drawing No. |
|--------------------------------|---------------------------------|
| Valmont Ind., Inc. | DB01166 Rev. C (4 sheets) |
| Ameron Pole Products Division | WA15CCTV01 Rev. B (2 sheets) |
| Millerbernd Manufacturing, Co. | 74577-WA-LC1 Rev. H (2 sheets) |
| Millerbernd Manufacturing, Co. | 74577-WA-LC2 Rev. H (2 sheets) |
| Millerbernd Manufacturing, Co. | 74577-WA-LC3 Rev. H (3 sheets) |

Foundations shall be as noted in the Plans and Standard Plan J-29.10.

Type SD

Type SD signal standards are outside the basic requirements of any pre-defined signal standard and require special design. All special design shall be based on the latest AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and pre-approved plans and as follows:

1. A 115 mph wind loading shall be used.
2. The Mean Recurrence Interval shall be 1700 years.
3. Fatigue category shall be III.

Complete calculations for structural design, including anchor bolt details, shall be prepared by a Professional Engineer, licensed under Title 18 RCW, State of Washington, in the branch of Civil or Structural Engineering or by an individual holding valid registration in another state as a civil or structural Engineer.

All shop drawings and the cover page of all calculation submittals shall carry the Professional Engineer's original signature, date of signature, original seal, registration number, and date of expiration. The cover page shall include the contract number, contract title, and sequential index to calculation page numbers. Two copies of the associated design calculations shall be submitted for approval along with shop drawings.

Details for handholes and luminaire arm connections are available from the Bridges and Structures Office.

Foundations for Type SD standards shall be as noted in the Plans.

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8-20.2(9-29.6(2)).GR8

Slip Base Hardware

The second sentence of Section 9-29.6(2) is revised to read:

8-20.2(9-29.6(2)).OPT1.2025.GR8

(November 20, 2023)

The keeper plate shall be either 28 or 26 gage and conform to ASTM A653 coating designation G 90.

8-20.2(9-29.6(3)).GR8

Timber Light Standards, Timber Strain Poles, Timber Service Supports

The third and fourth paragraph of Section 9-29.6(3) are revised to read:

8-20.2(9-29.6(3)).OPT1.GR8

(November 20, 2023)

All poles shall be treated with DiChloro-Octyl-Isothiazolin (DCOI) or pentachlorophenol in accordance with Section 9-09.3(1).

Tops shall be sawed before treatment. Where holes are field bored in poles to accommodate hanging bolts for brackets, transformers, guy assemblies, or other accessories, such holes shall be painted with an appropriate repair preservative in accordance with Standard Specification 9-09.3(1) (Copper Naphthenate or Oxine Copper in accordance with AWWA Standard M4).

8-20.2(9-29.6(5)).GR8

Foundation Hardware

Section 9-29.6(5) is supplemented with the following:

8-20.2(9-29.6(5)).OPT1.GR8

(January 13, 2021)

Anchor bolt assemblies for light standards installed on top of barrier (median barrier mount) shall consist of the following:

- (4) 1-inch diameter threaded rods (bolts), minimum 36 inches in length
- (24) heavy hex nuts, six per anchor rod
- (24) flat washers, six per anchor rod
- Two anchor plates

Each anchor plate shall be constructed from 1/2" ASTM A36 plate and hot-dip galvanized in accordance with AASHTO M111. Each anchor plate shall be ring shaped, with an outside diameter of 16 inches and an inside diameter of 12 inches. Each anchor plate shall have four 1 1/8" diameter holes on a 13.89" bolt circle, with the holes positioned to match the anchor rod layout shown in the Standard Plans.

Anchor rods shall extend a minimum of five inches and a maximum of six inches above the top of the traffic barrier. The lower anchor plate shall be embedded 29 inches below the top of the traffic barrier. Each anchor plate shall be clamped with a heavy hex nut and washer above and below the anchor plate. The lower heavy hex nut for the pole base plate shall be no more than one inch from the top of the traffic barrier.

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8-20.2(9-29.13).GR8

Control Cabinet Assemblies

Section 9-29.13 is supplemented with the following:

8-20.2(9-29.13).OPT1.GR8

(January 2, 2018)

Uninterruptible Power Supply (UPS)

Each UPS System shall provide battery backup power to the cabinet to which it is connected in the event of loss or failure of normal utility power. Each UPS system shall be constructed for full on line configuration (line interactive type), providing automatic voltage regulation and power conditioning when operating on normal utility power. The transfer between utility power and battery power shall not interfere with the normal operation of the connected downstream cabinet.

Each UPS System shall be capable of supplying a minimum 1000W load at 120 VAC for a minimum number of hours depending on the number of batteries specified:

- Four batteries: Minimum 4 hours run time.
- Eight batteries: Minimum 8 hours run time.

Each UPS System shall be composed of the following equipment:

UPS Cabinet Construction

Each UPS Cabinet shall be constructed as follows. The equipment shall be installed within the cabinet as shown in the Plans.

1. The cabinet shall be designated Type 331, consisting of Housing 1B and Mounting Cage 1 as described in the CalTrans TEES. The housing shall use 0.125 inch minimum thickness 5052 H32 ASTM B209 alloy aluminum, with bare mill finish. The exterior shall not be anodized or painted.
2. Each cabinet door shall be provided with:
 - a. A three point latch system. Locks shall be spring loaded construction locks capable of accepting a Best 6 pin core. A 6 pin construction core of the type (blue, green, or red) specified in the contract shall be installed in each core lock. One core removal key and two standard keys shall be included with each cabinet and delivered to the Engineer.
 - b. A one piece, closed cell, neoprene gasket.
 - c. A two position doorstop assembly. The doorstops shall hold the door open at both 90 degrees and 180 +/- 10 degrees.
3. Cabinet lighting shall be provided by two LED light strips. Each LED light strip shall be approximately 12 inches long, have a minimum output of 320 lumens, and have a color temperature of 4000K (cool white) plus or minus 400K. Lighting shall not interfere with the proper

- 1 operation of any other ceiling or shelf mounted equipment. All lighting
2 fixtures shall energize whenever any door is opened. Each door
3 switch shall be labeled "Light". Both light strips shall be ceiling
4 mounted - rack mounted lights are not allowed. One light strip shall
5 be installed over the front face of the rack and the second shall be
6 installed over the rear face of the rack. Each light strip shall be
7 oriented parallel to the door face, and placed such that the associated
8 face of the rack and the rack mounted equipment is illuminated.
9
- 10 4. Cabinet ventilation shall be as described in the TEES for a Type 332L
11 cabinet. The door vent filter shall be a 12 inch by 16 inch by 1 inch
12 thick (nominal) disposable paper filter.
13
- 14 5. A UPS Service Panel, installed on the left side of the cabinet as
15 viewed from the front. This service panel shall include the following,
16 positioned as shown in the Plans:
17
- 18 a. Two three-position terminal blocks. Each terminal block shall be
19 labeled "Power IN" or "Power OUT" as appropriate.
20
- 21 b. Two 120V 1P-15A circuit breakers, one each for the cabinet
22 lighting and the cabinet ventilation (fan and thermostat).
23
- 24 c. A Tesco TES-10B (or equivalent) Surge Suppressor.
25
- 26 d. A HESCORLS LF60X (or equivalent) Line Filter.
27
- 28 e. A neutral (AC-) bus bar, with minimum 10 connections.
29
- 30 f. A ground bus bar, with minimum 10 connections.
31
- 32 6. Three battery shelves, each 0.5U (Rack Unit) in height. Each shelf
33 shall be vented and capable of supporting three AlphaCell 240XTV
34 batteries without visibly flexing. Each shelf shall span the full width
35 and depth of the rack, and be secured to all of the rack verticals.
36
- 37 7. One drawer shelf, 1U in height.
38
- 39 8. A Generator Transfer Switch (GTS) and enclosure, meeting the
40 requirements of Section 9-29.13(8). The GTS shall be installed in
41 place of the Police Panel Switch enclosure as shown on a Type 332L
42 cabinet. The lock shall have an aluminum rain shield cover riveted to
43 the cabinet housing.
44

45 **UPS System Components**

46 The following UPS System Equipment shall be provided and installed within the
47 cabinet as shown in the Plans. All equipment shall be from Alpha Technologies
48 unless otherwise noted.
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- 50 1. One UPS Controller, model FXM 2000 w/SNMP module operating at
51 120 VAC, Part Number (P/N) 017-232-31. The UPS Controller shall

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include the 19" EIA rack mount kit, P/N 740-697-21, and support shelf, P/N 3610030085.

2. One Universal Automatic Transfer Switch (UATS) Accessory Shelf Assembly (P/N 020-168-25), consisting of a Surge Arrestor Assembly (P/N 740-755-21), UATS (P/N 020-165-21), and 120V Single Duplex Plate (P/N 740-748-23).
3. Four or eight AlphaCell 240XTV Batteries, as required by the Contract. Where four batteries are required, they shall be installed with two each on the middle and lower battery shelves. Where eight batteries are required, the upper and middle battery shelves shall hold three batteries each, with the remaining two installed on the lower battery shelf. Batteries shall be labeled with their string ID and number in the string. The first four batteries shall be labeled A1 through A4, and the second four batteries (when required) shall be labeled B1 through B4.
4. Remote Battery Monitoring System Plus. Use P/N 03760260-002 for cabinets requiring four batteries. Use P/N 03760260-003 for cabinets requiring eight batteries.
5. 48V Battery Cable Kit, 10ft in length with 1/4-20 termination(s), P/N 740-628-27. Where eight batteries are required, a second battery cable kit and a Y-Connector (P/N 870-601-21) shall also be included.
6. Battery Heater Mats, one per shelf with batteries installed, sized for the number of batteries present on that shelf. Each mat shall run on 120VAC and be plugged into the duplex receptacle on the Accessory Shelf Assembly.

Three sets of cabinet drawings and maintenance and operations manuals shall be provided. Two sets shall be hard copies in paper format and placed in the cabinet drawer shelf. The third shall be electronic in PDF format and provided on a portable USB flash drive (stick) and placed in the cabinet drawer shelf.

Contact information for Alpha Technologies:

Alpha Technologies, Inc.
3767 Alpha Way
Bellingham, WA 98226
Phone: (360) 647-2360
E-mail: alpha@alpha.com
Website: www.alpha.ca

8-20.2(9-29.13(10)).GR8
NEMA and Type 2070 Controllers and Cabinets
8-20.2(9-29.13(10)D).GR8
Cabinets for Type 2070 Controllers

1 ~~8-20.2(9-29.13(10)D).INST1.GR8~~
2 ~~Item 1 of Section 9-29.13(10)D is revised to read:~~
3
4 ~~8-20.2(9-29.13(10)D).OPT1.2024.GR8~~
5 ~~(February 6, 2023)~~
6 ~~Each cabinet door shall be furnished with the equipment listed in Section 9-~~
7 ~~29.13(10)C item 6 above.~~
8
9 8-20.2(9-29.13(10)D).INST2.GR8
10 Item 1 of Section 9-29.13(10)D is supplemented with the following:
11
12 8-20.2(9-29.13(10)D).OPT2.GR8
13 **(February 6, 2023)**
14 **Removable Door Handles**
15 Cabinet doors shall be provided with a 5/8-inch hex key socket in place of a
16 handle. The hex socket and locking cam shall rotate on a 0.5-inch minimum
17 diameter shaft. No portion of the socket assembly shall extend beyond the
18 face of the door, such that the socket cannot be rotated by locking pliers or
19 a similar gripping device. No door handles or hex keys shall be provided.
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21 8-20.2(9-29.13(11)).GR8
22 **Traffic Data Accumulator and Ramp Meters**
23 Section 9-29.13(11) is supplemented with the following:
24
25 8-20.2(9-29.13(11)).OPT1.GR8
26 ~~(July 6, 2024)~~**November 20, 2023**
27 **Advanced Transportation Controller**
28 All new Traffic Data Accumulator (Data Station) and Ramp Meter cabinets shall
29 be provided with a Type ATC 2070 Controller as shown in the Plans. Each
30 controller shall comply with Advanced Transportation Controller (ATC) Standard
31 Version 06 (ATC 5201 v06.25), and shall support both C12S serial bus operation
32 and C1S (104 pin) parallel bus operation. Each controller shall be supplied with
33 the following options and equipment:
34
35 1. Board Support Package, in electronic format (see ATC 5201,
36 Paragraph 3.3.1)
37 2. 2070-1C Engine Board (CPU Module)
38 3. 2070-2E Field I/O Module
39 4. 2070-3B or 2070-3D Front Panel
40 5. 2070-4A Power Supply Module
41
42 A spare blank cover (4X wide), designed to cover the slot for the 270-2E module
43 when it is removed, shall also be provided.
44
45 ATC Controllers are required to be preapproved by WSDOT to ensure
46 compatibility with WSDOT ITS operating software. The following controllers
47 have been verified compatible with WSDOT ITS operating software and are
48 preapproved:
49
50 1. Model: **Intelight 2070-LDX**
51
52 Manufacturer:

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Q-Free America
5962 La Place Ct SE, Ste. 150
Carlsbad, CA 92008
(833) MAXHELP (833-629-4357)
info@intelight-its.com
www.intelight-its.com

2. Model: **McCain ATC 2070LX**

Manufacturer:
McCain, Inc.
2365 Oak Ridge Way
Vista, CA 92801
(888) 262-2246
info@mccain-inc.com
www.mccain-inc.com

3. Model: ~~Siemens ATC~~ **Yunex 2070LX ATC**

Manufacturer:
Yunex, LLC
(formerly Siemens Mobility, Inc.)
~~9225 Bee Cave~~ **Caves Road**
Building B, Suite 101
Austin, TX 78733
(512) 837-8300
mobility.siemens.com/us/en.html

4. Model: **Safetran ATC 2070LX**

Manufacturer:
Econolite
1250 N Tustin Ave
Anaheim, CA 92807
(714) 630-3700
www.econolite.com

8-20.2(9-29.13(11)).OPT2.GR8

(February 6, 2023)
Removable Door Handles

Cabinet doors shall be provided with a 5/8-inch hex key socket in place of a handle. The hex socket and locking cam shall rotate on a 0.5-inch minimum diameter shaft. No portion of the socket assembly shall extend beyond the face of the door, such that the socket cannot be rotated by locking pliers or a similar gripping device. No door handles or hex keys shall be provided.

8-20.2(9-29.13(12)).GR8

Type 331L ITS Cabinet

~~8-20.2(9-29.13(12)).INST1.GR8~~

~~Item 3 of Section 9-29.13(12) is revised to read:~~

1 ~~8-20.2(9-29.13(12)).OPT1.2024.GR8~~
2 ~~(February 6, 2023)~~
3 ~~Each cabinet door shall be furnished with the equipment listed in Section 9-~~
4 ~~29.13(10)C item 6 above.~~
5

6 8-20.2(9-29.13(12)).INST2.GR8
7 Item 3 of Section 9-29.13(12) is supplemented with the following:
8

9 8-20.2(9-29.13(12)).OPT2.GR8
10 **(February 6, 2023)**
11 **Removable Door Handles**
12 Cabinet doors shall be provided with a 5/8-inch hex key socket in place of a
13 handle. The hex socket and locking cam shall rotate on a 0.5-inch minimum
14 diameter shaft. No portion of the socket assembly shall extend beyond the face
15 of the door, such that the socket cannot be rotated by locking pliers or a similar
16 gripping device. No door handles or hex keys shall be provided.
17

18 8-20.2(9-29.15).GR8
19 **Flashing Beacon Control**
20 Section 9-29.15 is supplemented with the following:
21

22 8-20.2(9-29.15).OPT1.GR8
23 **(January 7, 2019)**
24 **Rapid Flashing Beacons**
25 Rapid Flashing Beacon (RFB) indications shall comply with the dimensional,
26 operational, and flash pattern requirements of Federal Highway Administration
27 (FHWA) Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f;
28 https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm). RFB
29 systems shall be capable of providing, at a minimum, the following two-channel
30 flashing patterns:
31

- 32 1. NEMA Standard 50-50:
33
34 • Channel one is ON and channel two is OFF for 0.5 seconds.
35
36 • Channel one is OFF and channel two is ON for 0.5 seconds.
37
38 (Cycle repeats; the total flashing pattern cycle length is 1.00 second.)
39
40 2. RFB "WW+S" Pattern (IA-21 Condition 5b):
41
42 • Channel one is ON and channel two is OFF for 0.05 seconds.
43
44 • Both channels are OFF for 0.05 seconds.
45
46 • Channel one is OFF and channel two is ON for 0.05 seconds.
47
48 • Both channels are OFF for 0.05 seconds.
49
50 • Channel one is ON and channel two is OFF for 0.05 seconds.
51
52 • Both channels are OFF for 0.05 seconds.

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- Channel one is OFF and channel two is ON for 0.05 seconds.
- Both channels are OFF for 0.05 seconds.
- Both channels are ON for 0.05 seconds.
- Both channels are OFF for 0.05 seconds.
- Both channels are ON for 0.05 seconds.
- Both channels are OFF for 0.25 seconds.

(Cycle repeats; the total flashing pattern cycle length is 0.80 seconds.)

The flashing pattern shall be user-selectable in the field.

RFB system pushbuttons shall include a locator tone, but shall not include tactile arrows, speech messages, or vibrotactile indications. RFB system pushbuttons may include speech message and vibrotactile functionality, provided these features can be deactivated. RFB system pushbuttons shall use a 9" x 12" R10-25 sign. The R10-25 sign may include integral yellow warning lights.

8-20.2(9-29.19).GR8

Pedestrian Push Buttons

Section 9-29.19 is supplemented with the following:

8-20.2(9-29.19).OPT1.GR8

(February 6, 2023)

Accessible Pedestrian Signal (APS) Pushbuttons

When required in the Contract, APS Pushbuttons shall be provided for traffic signal systems. Each accessible pedestrian signal (APS) shall be a complete APS pushbutton system at each pedestrian pushbutton location shown in the Plans.

Each pushbutton station shall include the following:

1. Flat dark green colored housing. All exterior housing screws shall be security (pinned) Torx™ type.
2. High contrast pushbutton arrow (dark on a light background or light on a dark background). White on silver or silver on white are not acceptable as high contrast.
3. Integral 9" x 15" R10-3e Sign. Braille shall not be included. Adaptor plates shall be included if required to accommodate the sign.
4. Interface unit for installation in associated pedestrian display:
5. Percussive tone / rapid tick walk indication.
6. Voice messages, as specified below, pre-installed. Voice shall be male.

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7. Interconnect cable for installation between pushbutton station and pedestrian display interface unit. Four conductor cable meeting the requirements of Standard Specification 9-29.3(2)B or 9-29.3(2)G may be used if it meets the pushbutton manufacturer's requirements. Otherwise, cable shall be provided by the pushbutton manufacturer.

The following shall be provided at each intersection:

1. One USB flash drive with copies of all voice message audio files for that intersection, placed in the traffic signal cabinet drawer or drawing envelope. A separate flash drive is required for each intersection.
2. One USB cable of the appropriate type (A to A, A to B, male/female, etc.), placed in the traffic signal cabinet drawer or drawing envelope for connection of a laptop to the APS button.

Any other equipment or software required by the manufacturer for setup, operation, and maintenance of the pushbutton stations shall be provided.

Dual button adaptor brackets are required for all installations with two APS pushbuttons on the same Type PPB, Type PS, or Type I Signal Standard. Where dual button adaptor brackets are required, they shall be obtained from the same manufacturer as the pushbutton station - brackets from other manufacturers shall not be used.

Extensions, when allowed, shall be in accordance with WSDOT Standard Detail IS-2 (see <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/illumination-signals-and-its#IS-2>). Where the signal system is owned by another agency, extensions shall be in accordance with the owning agency's requirements.

APS Speech Messages

Speech messages shall be provided in the following format:

- "Wait."
- "Wait to cross ____ (A) ____ at ____ (B) ____."
- "Walk sign is on to cross ____ (A) ____."

Tables with the entries for (A) and (B) above, as well as quantities for button and arrow orientations, are provided in the Plans for each intersection.

Order forms shall be completed by the Contractor using the information presented above.

Each APS pushbutton shall include a label tape with the text "Crossing (A) at (B)", where (A) and (B) are the street names as described here and programmed into the pushbutton. The label shall be installed directly on the side or back of the APS pushbutton and shall remain intact and legible until final installation.

Delivery and Setup

All APS pushbuttons shall be delivered to the region signal shop or owning agency shop for verification and owner setup. After the owning agency has completed setup,

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the Contractor will be notified that the APS pushbuttons are ready for pickup and installation.

Wireless access features (Bluetooth and/or WiFi), if included, will be disabled upon installation.

Approved APS Equipment

APS equipment shall be one of the following systems:

1. Model: **Campbell Guardian Independent 4-Wire APS**

Components:

APS Pushbutton Kit: KAC-32021-2BT

Pedestrian Display Interface Unit: 501-0300 SPI

Manufacturer:

Campbell Company

450 W McGregor Dr

Boise, ID 83705

(208) 345-7459

www.pedsafety.com

2. Model: **Pelco IntelliCross Intelligent Pedestrian System**

Components:

APS Pushbutton: SE-2901-#-P30 9x15

Pedestrian Display Interface Unit: SE-6190-PNC

Manufacturer:

Pelco Products, Inc.

320 W 18th St

Edmond, OK 73013

(405) 340-3435

intellicross@pelcoinc.com

www.pelcointellcross.com

3. Model: **Polara iNS iNavigator Push Button Station**

Components:

APS Pushbutton: iNS23TN1-G

Pedestrian Display Interface Unit: iPHCU3S

PC Interface Module: iN-DGL (one per intersection; place in cabinet drawer).

Manufacturer:

Polara Enterprises

1497 CR 2178

Greenville, TX 75402

(903) 366-0300

www.polara.com

Only one brand of equipment shall be used for the entire Contract.

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8-20.2(9-29.24).GR8

Service Cabinets

Item 3 of Section 9-29.24 is supplemented with the following:

8-20.2(9-29.24).OPT1.GR8

(February 6, 2023)

Removable Door Handles

Service cabinet doors shall be provided with a 5/8-inch hex key socket in place of a handle for customer sections of the service cabinet. The hex socket and locking cam shall rotate on a 1/2-inch minimum diameter shaft. The socket assembly shall either be:

1. Flush with the face of the door, such that no portion of the socket assembly extends beyond the face of the door, and it cannot be rotated by locking pliers or a similar gripping device; or
2. Protected by a ring of 6061-T6 aluminum tubing. The tubing shall have a minimum wall thickness of 0.125 inches. The ring shall extend at least 0.15 inches beyond the end of the socket and shall provide no more than 0.07 inches of clearance from the socket such that the socket cannot be gripped by pliers or a similar gripping device. The ring shall be attached to the door using three 1/2-inch fillet welds, each 3/4-inch long, evenly spaced around the outer circumference of the tube.

One hex key door handle shall be provided with each cabinet.

8-20.2(9-29.25).GR8

Amplifier, Transformer, and Terminal Cabinets

Item 3 of Section 9-29.25 is supplemented with the following:

8-20.2(9-29.25).OPT1.GR8

(February 6, 2023)

Removable Door Handles

Transformer cabinet doors shall be provided with a 5/8-inch hex key socket in place of a handle for customer sections of the service cabinet. The hex socket and locking cam shall rotate on a 1/2-inch minimum diameter shaft. The socket assembly shall either be:

1. Flush with the face of the door, such that no portion of the socket assembly extends beyond the face of the door, and it cannot be rotated by locking pliers or a similar gripping device; or
2. Protected by a ring of 6061-T6 aluminum tubing. The tubing shall have a minimum wall thickness of 0.125 inches. The ring shall extend at least 0.15 inches beyond the end of the socket and shall provide no more than 0.07 inches of clearance from the socket such that the socket cannot be gripped by pliers or a similar gripping device. The ring shall be attached to the door using three 1/2-inch fillet welds, each 3/4-inch long, evenly spaced around the outer circumference of the tube.

One hex key door handle shall be provided with each cabinet.

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8-20.2(1).GR8

Equipment List And Drawings

8-20.2(1).INST1.GR8

Section 8-20.2(1) is supplemented with the following:

8-20.2(1).OPT1.GR8

(March 13, 1995)

Pole base to light source distances (H1) for lighting standards with pre-approved plans shall be as noted in the Plans.

Pole base to light source distances (H1) for lighting standards without pre-approved plans will be furnished by the Engineer as part of the final approved shop drawings, prior to fabrication.

8-20.2(1).OPT2.GR8

(March 13, 1995)

Pole base to light source distances (H1) for lighting standards with pre-approved plans will be determined or verified by the Engineer at the request of the Contractor prior to fabrication.

Pole base to light source distances (H1) for lighting standards without pre-approved plans and for combination traffic signal and lighting standards will be furnished by the Engineer as part of the final approved shop drawings prior to fabrication.

8-20.2(1).OPT3.GR8

(March 13, 1995)

If traffic signal standards, strain pole standards, or combination traffic signal and lighting standards are required, final verified dimensions including pole base to signal mast arm connection point, pole base to light source distances (H1), mast arm length, offset distances to mast arm mounted appurtenances, and orientations of pole mounted appurtenances will be furnished by the Engineer as part of the final approved shop drawings prior to fabrication.

8-20.3.GR8

Construction Requirements

8-20.3(1).GR8

General

8-20.3(1).INST1.GR8

Section 8-20.3(1) is supplemented with the following:

8-20.3(1).OPT1.FR8

(November 20, 2023)

Salvaged Equipment

The following equipment designated for removal shall remain the property of WSDOT:

- \$\$\$1\$\$\$

1 The contractor shall deliver this equipment to the following addresses as appropriate:

2
3 All poles (light poles, signal poles, etc.):

4 ***\$\$2\$\$\$***

5
6 All other equipment:

7 ***\$\$\$3\$\$\$***

8
9 All equipment deliveries shall be made during normal business hours. The point of
10 contact is the ***\$\$4\$\$\$*** Region Signal Superintendent at ***\$\$\$5\$\$\$***.

11
12 All other existing electrical equipment and materials designated to be removed shall
13 become the property of the Contractor and be removed from the project.

14
15 8-20.3(4).GR8

16 **Foundations**

17
18 8-20.3(4).INST1.GR8

19 Section 8-20.3(4) is supplemented with the following:

20
21 8-20.3(4).OPT1.FB8

22 **(August 7, 2017)**

23 **Shafts For Signal Standard Foundations**

24 Shaft foundations for the traffic signal standards at the following location(s) shall be
25 constructed in accordance with the following requirements:

26
27 *** \$\$1\$\$ ***

28
29 Shaft foundations for traffic signal standards shall be constructed in accordance with
30 Section 6-19.3, except as follows:

31
32 **Quality Assurance**

33 The tolerance for placing the center at the top of shaft under Section 6-19.3(1)A
34 is revised for traffic signal standard foundation shafts to be within 4-inches of the
35 Plan location.

36
37 Non-destructive testing of shafts under Sections 6-19.3(1)B and 6-19.3(9) and
38 associated Work under Section 6-19.3(6) does not apply.

39
40 **Shaft Excavation**

41 Permanent casing advanced during excavation operations is required full depth
42 for all traffic signal standard shaft foundation locations specified at the beginning
43 of this Special Provision. Excavation in advance of the casing tip shall not
44 exceed three feet. In no case shall shaft excavation and casing placement
45 extend below the bottom of shaft excavation as shown in the Plans.

46
47 When efforts to advance past the obstruction to the design shaft tip elevation
48 result in the rate of advance of the shaft drilling equipment being significantly
49 reduced relative to the rate of advance for the portion of the shaft excavation in
50 the geological unit that contains the obstruction, then the Contractor shall
51 remove, break-up, or push aside, the obstruction under the provisions of Section
52 8-20.5 as supplemented in these Special Provisions.

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Placing Concrete

Traffic signal standard foundation shaft concrete shall be Class 4000P.

Casing Removal

Tops of permanent casing for the shafts shall be removed to at least 6-inches beneath the finish groundline, unless otherwise specified by the Engineer.

8-20.3(5).GR8

Conduit

8-20.3(5)E.GR8

Method of Conduit Installation

8-20.3(5)E.INST1.GR8

Section 8-20.3(5)E is supplemented with the following:

8-20.3(5)E.OPT1.GR8

**(February 6, 2023)
CDF Encased ITS Conduit**

Where two 4-inch conduits with factory installed innerducts are used for ITS fiber-optic cable installation and open trenching is allowed the conduits shall be installed by open trenching with CDF encasement. Conduit shall be installed where shown in the Plans and backfilled in accordance with the Standard Plans.

8-20.3(8).GR8

Wiring

8-20.3(8).INST1.GR8

Section 8-20.3(8) is supplemented with the following:

8-20.3(8).OPT1.GR8

**(March 13, 1995)
Field Wiring Chart**

| | | |
|---------|-----------------|----------------------------|
| 501 | AC+ Input | 516-520 Railroad Pre-empt |
| 502 | AC- Input | 5A1-5D5 Emergency Pre-empt |
| 503-510 | Control-Display | 541-580 Coordination |
| 511-515 | Sign Lights | 581-599 Spare |

| Movement Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Vehicle Head | | | | | | | | | |
| Red | 611 | 621 | 631 | 641 | 651 | 661 | 671 | 681 | 691 |
| Yellow | 612 | 622 | 632 | 642 | 652 | 662 | 672 | 682 | 692 |
| Green | 613 | 623 | 633 | 643 | 653 | 663 | 673 | 683 | 693 |
| Spare | 614 | 624 | 634 | 644 | 654 | 664 | 674 | 684 | 694 |
| Spare | 615 | 625 | 635 | 645 | 655 | 665 | 675 | 685 | 695 |
| AC- | 616 | 626 | 636 | 646 | 656 | 666 | 676 | 686 | 696 |
| Red Auxiliary | 617 | 627 | 637 | 647 | 657 | 667 | 677 | 687 | 697 |
| Yellow Auxiliary | 618 | 628 | 638 | 648 | 658 | 668 | 678 | 688 | 698 |
| Green Auxiliary | 619 | 629 | 639 | 649 | 659 | 669 | 679 | 689 | 699 |

| | | | | | | | | | | |
|----|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | Pedestrian Heads & Dets. | | | | | | | | | |
| 2 | Hand | 711 | 721 | 731 | 741 | 751 | 761 | 771 | 781 | 791 |
| 3 | Man | 712 | 722 | 732 | 742 | 752 | 762 | 772 | 782 | 792 |
| 4 | AC- | 713 | 723 | 733 | 743 | 753 | 763 | 773 | 783 | 793 |
| 5 | Detection | 714 | 724 | 734 | 744 | 754 | 764 | 774 | 784 | 794 |
| 6 | Common-Detection | 715 | 725 | 735 | 745 | 755 | 765 | 775 | 785 | 795 |
| 7 | Spare | 716 | 726 | 736 | 746 | 756 | 766 | 776 | 786 | 796 |
| 8 | Spare | 717 | 727 | 737 | 747 | 757 | 767 | 777 | 787 | 797 |
| 9 | Spare | 718 | 728 | 738 | 748 | 758 | 768 | 778 | 788 | 798 |
| 10 | Spare | 719 | 729 | 739 | 749 | 759 | 769 | 779 | 789 | 799 |
| 11 | Detection | | | | | | | | | |
| 12 | AC+ | 811 | 821 | 831 | 841 | 851 | 861 | 871 | 881 | 891 |
| 13 | AC- | 812 | 822 | 832 | 842 | 852 | 862 | 872 | 882 | 892 |
| 14 | Common-Detection | 813 | 823 | 833 | 843 | 853 | 863 | 873 | 883 | 893 |
| 15 | Detection A | 814 | 824 | 834 | 844 | 854 | 864 | 874 | 884 | 894 |
| 16 | Detection B | 815 | 825 | 835 | 845 | 855 | 865 | 875 | 885 | 895 |
| 17 | Loop 1 Out | 816 | 826 | 836 | 846 | 856 | 866 | 876 | 886 | 896 |
| 18 | Loop 1 In | 817 | 827 | 837 | 847 | 857 | 867 | 877 | 887 | 897 |
| 19 | Loop 2 Out | 818 | 828 | 838 | 848 | 858 | 868 | 878 | 888 | 898 |
| 20 | Loop 2 In | 819 | 829 | 839 | 849 | 859 | 869 | 879 | 889 | 899 |
| 21 | Supplemental Detection | | | | | | | | | |
| 22 | Loop 3 Out | 911 | 921 | 931 | 941 | 951 | 961 | 971 | 981 | 991 |
| 23 | Loop 3 In | 912 | 922 | 932 | 942 | 952 | 962 | 972 | 982 | 992 |
| 24 | Loop 4 Out | 913 | 923 | 933 | 943 | 953 | 963 | 973 | 983 | 993 |
| 25 | Loop 4 In | 914 | 924 | 934 | 944 | 954 | 964 | 974 | 984 | 994 |
| 26 | Loop 5 Out | 915 | 925 | 935 | 945 | 955 | 965 | 975 | 985 | 995 |
| 27 | Loop 5 In | 916 | 926 | 936 | 946 | 956 | 966 | 976 | 986 | 996 |
| 28 | Loop 6 Out | 917 | 927 | 937 | 947 | 957 | 967 | 977 | 987 | 997 |
| 29 | Loop 6 In | 918 | 928 | 938 | 948 | 958 | 968 | 978 | 988 | 998 |
| 30 | Spare | 919 | 929 | 939 | 949 | 959 | 969 | 979 | 989 | 999 |

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8-20.3(14).GR8

Signal Systems

8-20.3(14).INST1.GR8

Section 8-20.3(14) is supplemented with the following:

8-20.3(14).OPT1.GR8

(January 2, 2018)

Uninterruptible Power Supply (UPS)

UPS Systems shall be tested before and after field installation.

Contractor Quality Control Testing

Prior to delivery of the UPS system to the Washington State Department of Transportation Materials Laboratory (State Materials Laboratory), all components and equipment, including the batteries shall be fully installed in the cabinet and the UPS system operations shall be successfully tested by the Contractor's representative. A testing certification (letter or similar) shall be provided with the cabinet.

After the UPS system has been successfully tested, the batteries shall be removed from the cabinet and the cabinet and batteries shall be delivered, independently, to

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the State Materials Laboratory, located in Tumwater, Washington, for pre-installation testing.

UPS System Laboratory Testing

The UPS system testing shall simulate the operations as installed in the field. The tests shall check the operation of each individual component as well as the overall operation of the system.

The State Materials Laboratory testing of the UPS system will consist of the following four separate stages:

1. Delivery and Assembly
2. Documentation
3. Demonstration
4. Performance Test

Testing will follow in the listed order with no time gaps between stages unless mutually agreed upon by the Contractor and State Materials Laboratory.

The Contractor shall designate a qualified representative for these tests. All communications and actions regarding testing of all equipment submitted to the State Materials Laboratory shall be made through this representative. These communications and actions shall include, but not be limited to, all notifications of failure or rejection, demonstration of the equipment, and the return of rejected equipment.

Stage 1: Delivery and Assembly

The Contractor shall provide all Work necessary to assemble the UPS system and make ready for demonstration at the State Materials Laboratory. Upon delivery, the batteries shall be reinstalled in the cabinet and the UPS system shall be made fully operational. All components for the complete UPS system, including the necessary test equipment, shall be ready for testing within 14 calendar days of delivery to the State Materials Laboratory.

Stage 2: Documentation

All documentation shall be furnished with the UPS system equipment prior to the start of testing. The documents to be supplied shall consist of the following:

1. Serial numbers when applicable.
2. Wiring diagrams for all equipment in the required quantities and formats.
3. Complete operations and maintenance manuals in the required quantities and formats.
4. A description of the functions and the capabilities of individual components and of the overall UPS system.

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Stage 3: Demonstration

The Contractor shall provide the following:

- 1. A presentation on how to operate the system.
- 2. A complete and thorough demonstration to show that all components of the UPS system are in good condition and operating properly.

The demonstration shall be performed by the Contractor’s representative in the presence of State Materials Laboratory personnel.

Stage 4: Performance Test

The performance test will be conducted by State Personnel to determine if the UPS system performs correctly. The performance test shall include the testing of the following specifications:

- 1. Battery Discharge Rate
- 2. Battery Recharge Rate
- 3. Power Transfer Rate
- 4. Operational Duration

Test results for items 1-3 shall be within the manufacturers recommended values in order for the tests to be considered successful. For item 4, the test is considered successful if the system maintains the test load for the required minimum duration for the battery configuration.

Equipment Failure or Rejection

All component or system failures shall be documented. This documentation shall provide the following information:

- 1. A detailed description of the failure.
- 2. The steps undertaken to correct the failure.
- 3. A list of parts that were replaced, if any.

All failed or rejected equipment shall be removed from the Materials Laboratory within three calendar days following notification; otherwise, the failed or rejected equipment will be returned, freight collect, to the Contractor.

Following final approval by the State Materials Laboratory, all equipment shall be removed from the State Materials Laboratory by the Contractor and delivered to the appropriate site(s) as designated elsewhere in this Contract.

UPS System Field Testing

After installation, the Contractor shall field test the UPS system to ensure the system operates in accordance with Plans, Specifications and manufacturer’s instructions. The test shall ensure that that all components are operational within manufacturer’s

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tolerances. The Contractor shall provide a testing procedure to the Engineer for approval. The testing procedure shall provide for operational testing of the following:

1. UPS Power Module
2. Surge Suppressor
3. Automatic Transfer Switch
4. Generator Power Transfer Switch

The field test shall demonstrate the loss of utility power and the switch over to battery power without interference with the normal operation of the connected downstream cabinet. For traffic signal systems, this includes the traffic signal controller including conflict monitor and any other peripheral devices within the traffic controller assembly.

8-20.3(14)A.GR8
Signal Controllers

8-20.3(14)A.INST1.GR8
Section 8-20.3(14)A is supplemented with the following:

8-20.3(14)A.OPT1.GR8
(August 2, 2010)
Testing

All signal control equipment shall be tested at the Washington State Department of Transportation Materials Laboratory located in Tumwater, Washington, prior to final delivery. The tests shall check the operation of each individual component as well as the overall operation of the system.

The Contractor shall designate a qualified representative for these tests. Notification of this representative shall be submitted for approval, in writing, to the State Materials Laboratory, 14 calendar days prior to any equipment deliveries. The Engineer shall also receive a copy of this notification, which includes the representative's name, address, and telephone number. All communications and actions regarding testing of all equipment submitted to the State Materials Laboratory shall be made through this representative. These communications and actions shall include, but not be limited to, the following:

All notifications of failure or rejection, demonstration of the equipment, and the return of rejected equipment.

The State Materials Laboratory testing process will consist of the following four separate stages:

- a. Delivery and Assembly
- b. Demonstration and Documentation
- c. Performance Test
- d. Operational Test

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Testing will follow in the correct order with no time gaps between stages unless mutually agreed upon by the Contractor and State Materials Laboratory.

Stage 1 Delivery Assembly

All components for the complete traffic control systems, including the necessary test equipment, shall be assembled and ready for demonstration within ten working days of delivery to the Materials Laboratory. The systems shall simulate the operations as installed in the field.

Equipment and prerequisites necessary to complete this stage shall include:

- a. Detection Simulator:
The detection simulator shall provide at least one detector per phase and variable traffic volumes. One simulator shall be required for every two controllers tested.

- b. Communications Network:
Locations, specified for coordinating communications equipment and cable, shall be completely wired to provide an operational communications system between all local and master controllers.

The Contractor shall provide labor, equipment, and materials necessary to assemble all control equipment complete and ready for demonstration. Materials and equipment used for this stage that are not required for field installation shall remain the property of the Contractor. Failure to complete this stage within ten working days will result in rejection of the entire system.

Stage 2 Demonstration and Documentation

This stage shall be completed within seven working days following the completion of Stage 1. Failure to do so shall result in rejection of the entire shipment.

All documentation shall be furnished with the control equipment prior to the start of testing. If corrections to any document are deemed necessary by the State, the Contractor shall submit this updated version prior to the final approval by the State Materials Laboratory. The documents to be supplied shall consist of or provide the following:

- a. A Complete accounting of all the control and test equipment required.

- b. A complete set of documents which shall include:
 - 1. Serial numbers when applicable.

 - 2. Written certification that equipment of the same make and model has been tested according to NEMA Environmental Standards and Test Procedures, and has met or exceeded these standards. The certificate shall include equipment model number and where, when, and

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by whom the tests were conducted. This certificate shall accompany each shipment of controllers.

3. Reproducible mylar wiring diagrams and two blue-tone prints for each controller and cabinet supplied. The sheet size shall be 24 inches by 36 inches.
 4. Wiring diagrams for all auxiliary equipment furnished. One set per cabinet.
 5. Complete operations and maintenance manuals including complete and correct software listing and flow charts. One set of operations and maintenance manuals per cabinet; at least four but no more than ten. Five sets of software listings and flow charts.
 6. Complete operations and maintenance manuals for all auxiliary equipment. One set per cabinet.
- c. A description of the functions and the capabilities of individual components and of the overall control system.
 - d. A presentation on how to operate the system.
 - e. A complete and thorough demonstration to show that all components of the control system are in good condition and operating properly, and proof that the controller and cabinet are functioning correctly.
 - f. Detailed instructions for installing and operating the controller(s), including explanations on the use of all features of the controller(s).
 - g. The operational and maintenance manuals for each traffic signal controller supplied including as a minimum, but not to be limited to the following:
 1. Detailed instructions for maintaining all hardware components, controller, and auxiliary equipment.
 2. A complete parts list detailing all manufacturer's identification codes.
 3. Detailed wiring diagrams and schematics indicating voltage levels and pictorial description, part name, and location for all hardware components, controller, and auxiliary equipment.

The demonstration shall include the following:

- a. Phasing per plans and all phase timing.

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- b. Detection including any special detector functions.
- c. Conflict Monitor and Load Switches.
- d. Special Coordination including communication equipment.

This demonstration shall be performed by the Contractor in the presence of State Materials personnel. The Contractor shall supply any item not accounted for within five working days of the accounting. Controllers and cabinets that remain incomplete five working days after notification shall be rejected and returned freight collect to the Contractor.

Stage 3 Unit Performance Test

A minimum of ten working days shall be allowed for one or two cabinet assemblies and five working days for each additional assembly.

The unit performance test will be conducted by State Personnel to determine if each and every controller cabinet assembly complies with NEMA Environmental Standards as stated in NEMA publication No. TS 1-1976, Part 2.

Any unit submitted, whose failure has been corrected, shall be retested from the beginning of this stage.

Stage 4 Operational Test

All control and auxiliary equipment shall operate without failure for a minimum of ten consecutive days. If an isolated controller is specified, it shall operate as an isolated controller. If a coordinated system is specified, it shall operate as a total coordinated system with the master and all local controllers operating in all coordinated modes.

If any failure occurs during this stage, all equipment for this stage shall be restarted following completion of repairs.

Equipment Failure Or Rejection

Equipment failures shall be defined as set forth in NEMA Publication No. TS 1-1976. Failure of load switches, detector amplifiers, and conflict monitors shall not result in rejection of the controller or cabinet. However, the Contractor shall stock, as replacements, approximately 30 percent more than the total for these three items. All excess material shall remain the property of the Contractor following completion of all tests.

If a failure occurs during Stages 3 or 4, repairs shall be made and completed within ten working days following notification of the malfunction. The Contractor shall have the option of making onsite repairs or repair them at a site selected by the Contractor. Failure to complete repairs within the allotted time shall result in rejection of the controller or cabinet assembly under test.

A total of two failures will be allowed from the start of Stage 3 to the end of Stage 4. If three failures occur during this time period, the equipment will be rejected. New equipment of different serial numbers submitted as

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replacement shall be received by the Materials Laboratory for testing under Stage 3 within ten working days following notification of rejection. Failure to meet this requirement within the allotted time will result in rejection of the entire system. Software errors will be considered as failures and, if not corrected within ten working days, the entire system will be subject to rejection. Following rejection of any equipment, the Contractor shall be responsible for all costs incurred. This shall include but not be limited to all shipping costs.

When the traffic control program is supplied by the State, the Contractor shall prove that any failures are, in fact, caused by that program and not the hardware.

All component or system failures, except load switches and detector amplifiers, shall be documented. This documentation shall be submitted prior to commencing the test or stage in which the failure was found and shall provide the following information:

- a. A detailed description of the failure.
- b. The steps undertaken to correct the failure.
- c. A list of parts that were replaced, if any.

Upon completion of the tests, the equipment will be visually inspected. If material changes are observed which adversely affect the life of the equipment, the cause and conditions shall be noted. The Contractor will immediately be given notice to correct these conditions. If not repaired within ten working days of notification, the equipment will be subject to rejection. A final accounting shall be made of all equipment prior to approval.

All failed or rejected equipment shall be removed from the Materials Laboratory within three working days following notification; otherwise, the failed or rejected equipment will be returned, freight collect, to the Contractor.

Following final approval by the State Materials Laboratory, all equipment shall be removed from the State Materials Laboratory and delivered to sites as designated elsewhere in this contract.

Guarantees

Guarantees and warranties shall be in accordance with Section 1-05.10.

~~8-20.3(14)D.GR8~~

~~**Test for Induction Loops and Lead-in Cable**~~

~~8-20.3(14)D.INST1.GR8~~

~~The fourth subparagraph of the first paragraph of Section 8-20.3(14)D is revised to read:~~

~~14)D.OPT1.2024.GR8~~

~~(November 2, 2022)~~

~~**Test D** Inductance test of the loop circuit. Type 1 loops and Type 2 and Type 3 loops connected in series, shall have a minimum inductance of 150~~

1 ~~microhenries. Single and parallel spliced Type 2 and Type 3 loops shall have a~~
2 ~~minimum inductance of 75 microhenries.~~

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4 8-20.5.GR8

5 **Payment**

6
7 8-20.5.INST1.GR8

8 Section 8-20.5 is supplemented with the following:

9
10 8-20.5.OPT1.GB8

11 (April 6, 2015)

12 "Removing Traffic Signal Shaft Obstructions", estimated.

13 Payment for removing obstructions, as defined in Section 8-20.3(4) as supplemented in
14 these Special Provisions, will be made for the changes in shaft construction methods
15 necessary to remove the obstruction. The Contractor and the Engineer shall evaluate the
16 effort made and reach agreement on the equipment and employees utilized, and the
17 number of hours involved for each. Once these cost items and their duration have been
18 agreed upon, the payment amount will be determined using the rate and markup methods
19 specified in Section 1-09.6. For the purpose of providing a common proposal for all
20 bidders, the Contracting Agency has entered an amount for the item "Removing Traffic
21 Signal Shaft Obstructions" in the bid proposal to become a part of the total bid by the
22 Contractor.

23
24 If the shaft construction equipment is idled as a result of the obstruction removal work and
25 cannot be reasonably reassigned within the project, then standby payment for the idled
26 equipment will be added to the payment calculations. If labor is idled as a result of the
27 obstruction removal work and cannot be reasonably reassigned within the project, then
28 all labor costs resulting from Contractor labor agreements and established Contractor
29 policies will be added to the payment calculations.

30
31 The Contractor shall perform the amount of obstruction work estimated by the Contracting
32 Agency within the original time of the contract. The Engineer will consider a time
33 adjustment and additional compensation for costs related to the extended duration of the
34 shaft construction operations, provided:

- 35
36 1. the dollar amount estimated by the Contracting Agency has been exceeded, and
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38 2. the Contractor shows that the obstruction removal work represents a delay to
39 the completion of the project based on the current progress schedule provided
40 in accordance with Section 1-08.3.

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1 8-21.GR8

2 **Permanent Signing**

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4 8-21.2.GR8

5 **Materials**

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7 8-21.2(9-06.16).GR8

8 **Roadside Sign Structures**

9 Section 9-06.16 is supplemented with the following:

10

11 8-21.2(9-06.16).OPT1.GR8

12 **(January 3, 2011)**

13 **Perforated Steel Square Sign Post System**

14 Where noted in the Plans, steel sign post systems shall be square, pre-punched
15 galvanized steel tubing, that are NCHRP 350 Test Level 3 Certified and FHWA
16 approved. The steel sign post system shall include all anchor sleeves, and other
17 hardware required for a complete sign installation.

18

19 **System Acceptance**

20 Systems listed in the current QPL will be accepted per the QPL approval code.
21 Systems not listed in the QPL will be accepted based on a Supplier's Certificate of
22 Compliance. The Supplier's Certificate of Compliance will be a contract specific letter
23 from the supplier stating the system is NCHRP 350 Test Level 3 compliant.

24

25 8-21.2(9-28.11).GR8

26 **Hardware**

27 Section 9-28.11 is supplemented with the following:

28

29 8-21.2(9-28.11).OPT1.GB8

30 **(August 3, 2015)**

31 Locknuts shown in the Plans specifying a locknut or locknut with nylon insert shall
32 conform to one of the following:

33

34 1. ANCO Pin Locknut, with stainless steel locking pin, as manufactured by
35 Lok-Mor, Inc.

36

37 2. Tri-lock Locknut, as manufactured by Lok-Mor, Inc.

38

39 3. Grade DH or 2H hex or heavy hex nuts conforming to one of the ASTM
40 material specifications in the Locknut category of the Hardware table of this
41 Section may be modified by installing a nylon insert washer. A minimum of
42 60-percent of the original number of threads shall meet the requirements of
43 the applicable ASTM material specification after insertion of the nylon insert
44 washer.

45

46 4. Hex or heavy hex nuts conforming to one of the ASTM material
47 specifications in the Locknut category of the Hardware table of this Section
48 may be modified by adding one of the following products to a minimum of
49 one-half of the internal threads of the nut and the entire exterior top surface
50 of the nut:

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52 a. Nylok Blue Torq-Patch Locknut.

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- b. Nylok Precote 30.
- c. ND Patch 360 Ring Patch.

The nuts with any of the three listed products are permitted for a single use only and shall have a maximum of two nut widths of thread extending beyond the nut after installation.

The alternatives to locknuts specified in Standard Plans G-90.20, G-90.30, and J-75.41 are deleted and replaced with the four options specified above.

~~8-21.2(9-28.12).GR8~~

~~Reflective Sheeting~~

~~Section 9-28.12 is revised to read:~~

~~8-21.2(9-28.12).OPT1.2024.GR8~~

~~(February 6, 2023)~~

~~Reflective sheeting material shall conform to ASTM D4956—Standard Specification for Retroreflective Sheeting for Traffic Control. The following standard reflective sheeting types have been modified to reflect Contracting Agency requirements:~~

| Device Type | Use | Sheeting Color | Allowable Sheeting Types |
|--|-------------------|-----------------------------|--|
| Permanent Signs | | | |
| Permanent Signing | All | All | IV ¹ |
| Object Markers | All | All | IV |
| Temporary Construction Signing | | | |
| Warning Signs | All | Fluorescent Orange | VIII, IX, X ² , XI |
| Regulatory Signs | All | White | IV |
| Regulatory Signs | Rural | White | III ³ , IV |
| Regulatory Signs | Urban/Rural | White | III ³ , IV |
| Regulatory Signs | All | Red | III, IV |
| Regulatory Signs | All | Green | II, IV |
| Regulatory Letters, Border or Symbols | | Green | III ³ , IV ³ |
| Temporary Construction Signs | All | All Other Background Colors | III ³ , IV |
| Other Devices | | | |
| Barricades | All | White or Orange | III ³ , IV |
| Barrier Delineators | All | White or Yellow | III, IV, V, XI |
| Bollards | All | All | IV |
| Flexible Guidepost | All | All | III, IV, V |
| Pedestrian Channelization Devices | All | White or Orange | III ³ , IV |
| Signal Backplates | Portable Signals | | IV |
| Signal Backplates | Permanent Signals | | See Section 9-29.16 |
| Tall Channelization Devices 42-inch | All | Fluorescent Orange/White | III ⁴ , IV ⁴ , VIII, IX, XI ⁴ |
| Traffic Cones 28- and 36-inch | All | White or Higher White | III ³ , IV |

| | | | |
|--|-----|--------------------------|--|
| Traffic Safety Drums | All | Fluorescent Orange/White | III ⁴ , IV ⁴ , VIII, IX, XI ⁴ |
| Transportable Attenuators | All | Yellow and Black Chevron | III ³ , IV |
| Transportable Attenuators | All | White and Red Chevron | IV |
| Tubular Markers (portable or pavement mounted) | All | White or Yellow | III ³ , IV |
| Utilities attached to Bridges | All | | I, See Section 6-01.10 |

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Notes:

- ~~1. Except S Series signs with fluorescent yellow green sheeting shall use Type XI and Overhead Warning Signs and overhead exit only panels with fluorescent yellow shall use Type IV or XI.~~
- ~~2. Former Type X, not shown in ASTM D4956, however meets requirements of Types VII, IX and XI.~~
- ~~3. Only devices in inventory may be used, new fabrication shall use Type IV.~~
- ~~4. Type III and Type IV orange and white sheeting may be still used through December 31, 2026.~~

8-21.2(9-28.14).GR8

Sign Support Structures

Section 9-28.14 is supplemented with the following:

8-21.2(9-28.14).OPT6.GR8

(September 8, 2020)

Manufacturers for Steel Roadside Sign Supports

The Standard Plans lists several steel sign support types. These supports are patented devices and many are sole-source. All of the sign support types listed below are acceptable when shown in the Plans.

| <u>Steel Sign Support Type</u> | <u>Manufacturer</u> |
|--------------------------------|---|
| Type TP-A & TP-B | Transpo Industries, Inc. |
| Type PL, PL-T & PL-U | Northwest Pipe Co. |
| Type AS | Transpo Industries, Inc. |
| Type AP | Transpo Industries, Inc. |
| Type ST 1, ST 2, ST 3, & ST 4 | Ultimate Highway Solutions, Inc., Allied Tube & Conduit Corp. (Mechanical Division), Trinity Highway Products, LLC. |
| Type SB-1, SB-2, & SB-3 | Ultimate Highway Solutions, Inc., |

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8-21.3.GR8

Construction Requirements

8-21.3(9).GR8

Sign Structures

8-21.3(9)A.GR8

Fabrication of Steel Structures

8-21.3(9)A1.GR8

Fabrication of Monotube Sign Bridges and Cantilever Sign Structures

8-21.3(9)A1.INST1.GR8

Section 8-21.3(9)A1 is supplemented with the following:

8-21.3(9)A1.OPT1.FB8

(September 8, 2020)

The color of the monotube sign bridge and cantilever sign structure finish coat, when dry, shall match *** \$\$1\$\$ ***.

8-21.3(9)E.GR8

Bridge Mounted Sign Brackets

8-21.3(9)E.INST1.GR8

Section 8-21.3(9)E is supplemented with the following:

8-21.3(9)E.OPT1.FB8

~~(April 6, 2015~~November 20, 2023)

Bridge Mounted Sign Bracket No(s). *** \$\$1\$\$ *** include the following quantities of structural carbon steel:

*** \$\$2\$\$ ***

For bridge mounted sign brackets mounted with resin bonded anchors, the Contractor shall install resin bonded anchors in accordance with Section 6-02.3(18) ~~as supplemented in these Special Provisions A and Section 9-06.4.~~

For this type of mounting, Bridge Mounted Sign Bracket No(s). *** \$\$3\$\$ *** include the following quantities of drilled holes:

*** \$\$4\$\$ ***

8-21.3(9)F.GR8

Foundations

8-21.3(9)F1.GR8

Shafts for Monotube Sign Bridge and Cantilever Sign Structure Foundations

1 8-21.3(9)F1.INST1.GR8
2 Section 8-21.3(9)F1 is supplemented with the following:
3
4 8-21.3(9)F1.OPT1.FB8
5 (September 8, 2020)
6 Shafts for monotube sign bridge and cantilever sign structure foundations
7 at the following location(s) shall be constructed in accordance with Section
8 8-21.3(9)F1, except temporary casing is not required by the Contracting
9 Agency but is instead a Contractor option.
10
11 *** \$\$1\$\$ ***
12
13 Shafts for monotube sign bridge and cantilever sign structure foundations
14 at the following location(s) shall be constructed in accordance with Section
15 8-21.3(9)F1, including the required use of temporary casing:
16
17 *** \$\$2\$\$ ***
18
19 8-21.4.GR8
20 **Measurement**
21
22 8-21.4.INST1.GR8
23 Section 8-21.4 is supplemented with the following:
24
25 8-21.4.OPT1.FB8
26 (September 8, 2020)
27 *** \$\$1\$\$ *** contain(s) the following approximate quantities of material and work:
28
29 *** \$\$2\$\$ ***
30
31 The quantities are listed only for the convenience of the Contractor in determining the
32 volume of work involved and are not guaranteed to be accurate. The prospective bidders
33 shall verify these quantities before submitting a bid. No adjustments other than for
34 accepted changes will be made in the applicable sign structure lump sum Contract price
35 even though the actual quantities required may deviate from those listed.
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1 8-31.GR8
2 **Temporary Stream Diversion**

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4 8-31.3.GR8
5 **Construction Requirements**

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7 8-31.3(1).GR8
8 **General**

9
10 8-31.3(1)A.GR8
11 **General TSD Requirements**

12
13 8-31.3(1)A.INST1.GR8
14 Section 8-31.3(1)A is supplemented with the following:

15
16 8-31.3(1)A.OPT1.FR8
17 **(October 3, 2022)**
18 **Minimum Stream Flows**

19 At all times of operation, the Contractor's temporary stream diversion shall be
20 designed to convey the following minimum flow rate of water in cubic feet per
21 second:

22
23 *** \$\$1\$\$ ***

24
25 8-31.3(1)A.OPT2.FR8
26 **(October 3, 2022)**
27 **Minimum Stream Flows (Contingency System)**

28 A Contingency System is required for this Project. The Contractor's contingency
29 system shall be designed to convey the following minimum flow rate of water in
30 cubic feet per second:

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32 *** \$\$1\$\$ ***

33
34 ~~8-31.3(2).GR8~~
35 ~~**Temporary Stream Diversion Plan**~~

36
37 ~~8-31.3(2)B.GR8~~
38 ~~**Plan Requirements**~~

39
40 ~~8-31.3(2)B.INST1.GR8~~
41 ~~Item number 3a of Section 8-31.3(2)B is revised to read:~~

42
43 ~~8-31.3(2)B.OPT1.2024.GR8~~
44 ~~(February 6, 2023)~~
45 ~~Detail all elements of the temporary stream diversion; including but not limited~~
46 ~~to pipes, pumps, screen intake elements, and other equipment and materials.~~

47
48 ~~8-31.3(2)B.INST2.GR8~~
49 ~~Item number 3 of Section 8-31.3(2)B is supplemented with the following:~~

50
51 ~~8-31.3(2)B.OPT2.2024.GR8~~
52 ~~(February 6, 2023)~~

1 g. ~~Detail where bags will be used for temporary stream diversion. Bags shall~~
2 ~~comply with the requirements of the HPA and be filled using clean pea~~
3 ~~gravel. Clean pea gravel is pea gravel that does not cause an exceedance~~
4 ~~of the allowable turbidity in the stream or waterbody.~~

5
6 8-31.3(3).GR8
7 ***Fish Block Net Installation and Fish and Aquatic Species Exclusion***

8
9 8-31.3(3)B.GR8
10 **Contracting Agency Provided Materials**

11
12 8-31.3(3)B.INST1.GR8
13 Section 8-31.3(3)B is supplemented with the following:

14
15 8-31.3(3)B.OPT1.FR8
16 (October 3, 2022)
17 The Contracting Agency will provide the following fish exclusion materials:

18
19 *** \$\$1\$\$ ***

20
21 ~~8-31.3(4).GR8~~
22 ***Dewatering Work Areas***

23
24 ~~8-31.3(4).INST1.GR8~~
25 ~~The last paragraph of Section 8-31.3(4) is revised to read:~~

26
27 ~~8-31.3(4).OPT1.2024.GR8~~
28 ~~(February 6, 2023)~~
29 ~~The minimum open area for all types of fish screens is 27 percent. The screened~~
30 ~~intake facility must have enough surface area to ensure that the velocity through the~~
31 ~~screen complies with the velocity provided within the Hydraulic Project Approval~~
32 ~~(HPA). If no velocity is provided within the HPA, the maximum approach velocity shall~~
33 ~~not exceed 0.33 feet per second. The fish screen must remain in place whenever~~
34 ~~water is withdrawn until the Contracting Agency Biologists confirm all fish have been~~
35 ~~removed. At that point, the Contractor may remove the fish screen to finish~~
36 ~~dewatering the work area.~~

| | | |
|----|----------------------|---|
| 1 | DIVISION9.GR9 | Materials |
| 2 | | |
| 3 | APPENDIX1.FR9 | Appendices |
| 4 | | (January 2, 2012) |
| 5 | | Use when only one appendix is included in the Contract. |
| 6 | | If 1-02.4(1).OPT1.FR1 is used, then the <i>Summary of Geotechnical</i> |
| 7 | | <i>Conditions Report</i> must be an appendix as required in Section 1-02.4(2) |
| 8 | | of the Standard Specifications. |
| 9 | | (1 fill-in) |
| 10 | | |
| 11 | APPENDIX2.FR9 | Appendices |
| 12 | | (January 2, 2012) |
| 13 | | Must be used when multiple appendices are included in the Contract. |
| 14 | | If 1-02.4(1).OPT1.FR1 is used, then the <i>Summary of Geotechnical</i> |
| 15 | | <i>Conditions Report</i> is an appendix as required in Section 1-02.4(2) and |
| 16 | | must be included as an appendix and is part of the fill-in. |
| 17 | | (1 fill-in) |
| 18 | | |
| 19 | STDPLANS.GR9 | Standard Plans |
| 20 | | (November 20, 2023 January 9, 2023) |
| 21 | | Use in all projects. |

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1 STDPLANS.GR9
2 ~~(November 20,2023)~~ ~~(January 9, 2023)~~
3 Standard Plans

4 The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-
5 01, effective ~~September 30, 2022~~ October 23, 2023, is made a part of this contract.

6
7 The Standard Plans are revised as follows:

8
9 A-10.30

10 RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table):
11 The RISER RING detail is deleted from the plan.

12
13 INSTALLATION detail, SECTION A: The "1/4"" callout is revised to read "+/- 1/4" (SEE
14 CONTRACT ~ Note: The + 1/4" installation is shown in the Section A view)"

15
16 A-40.20

17 Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

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

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

28
29 A-60.40

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

31
32 B-90.40

33 Valve Detail – DELETED

34
35 ~~C-8~~

36 ~~DELETED~~

37
38 ~~C-8A~~

39 ~~DELETED~~

40
41 ~~C-20.42~~

42 ~~Plan View (Case 22A-31), callout, was; "BEAM GUARDRAIL ANCHOR TYPE 10 PAY~~
43 ~~LIMIT" is revised to read; "BEAM GUARDRAIL ANCHOR TYPE 11 PAY LIMIT"~~

44
45 ~~C-23.60~~

46 ~~DELETED~~

47
48 ~~C-23.70~~

49 ~~Sheet 1, Detail A, callout, was—"EIGHT 5/8" x 1/2" (IN) BOLTS W/ HEX NUTS AND~~
50 ~~WASHERS (SEE NOTE 5)"is revised to read: "EIGHT 5/8" x 1-1/2" (IN) BOLTS W/ HEX~~
51 ~~NUTS AND WASHERS (SEE NOTE 5)".~~

1 ~~Sheet 2, ANCHOR RAIL ELEMENT DETAIL and associated Enlarged Detail, 3/4"~~
2 ~~Diameter hole pattern (8 holes), callout, "3/4" DIAMETER HOLE (TYP.)" is revised to read:~~
3 ~~"29/32" x 1 1/8" (IN) SLOT (TYP.)"~~
4
5 ~~D-2.04~~
6 ~~DELETED~~
7
8 ~~D-2.06~~
9 ~~DELETED~~
10
11 ~~D-2.08~~
12 ~~DELETED~~
13
14 ~~D-2.32~~
15 ~~DELETED~~
16
17 ~~D-2.34~~
18 ~~DELETED~~
19
20 ~~D-2.60~~
21 ~~DELETED~~
22
23 ~~D-2.62~~
24 ~~DELETED~~
25
26 ~~D-2.64~~
27 ~~DELETED~~
28
29 ~~D-2.66~~
30 ~~DELETED~~
31
32 ~~D-2.68~~
33 ~~DELETED~~
34
35 ~~D-2.80~~
36 ~~DELETED~~
37
38 ~~D-2.88~~
39 ~~DELETED~~
40
41 ~~D-3.10~~
42 ~~Sheet 1, Typical Section, callout – "FOR WALLS WITH SINGLE SLOPE TRAFFIC~~
43 ~~BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-~~
44 ~~3.15" is revised to read; "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER, SEE~~
45 ~~CONTRACT PLANS"~~
46 ~~Sheet 1, Typical Section, callout – "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER.~~
47 ~~USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.16" is revised~~
48 ~~to read; "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER, SEE CONTRACT PLANS"~~
49
50 ~~D-3.11~~
51 ~~Sheet 1, Typical Section, callout – "'B" BRIDGE APPROACH SLAB (SEE BRIDGE~~
52 ~~PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD~~

1 PLANS D-3.15 OR D-3.16” is revised to read; ”B” BRIDGE APPROACH SLAB OR
2 MOMENT SLAB (SEE CONTRACT PLANS)
3 Sheet 1, Typical Section, callout – “TYPICAL BARRIER ON BRIDGE APPROACH SLAB
4 (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE
5 STANDARD PLANS D-3.15 OR D-3.16” is revised to read; “TYPICAL BARRIER ON
6 BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)
7

8 ~~D-3.15~~
9 ~~DELETED~~

10
11 ~~D-3.16~~
12 ~~DELETED~~

13
14 ~~D-3.17~~
15 ~~DELETED~~

16
17 D-10.10
18 Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
19 barriers attached on top of the wall are considered non-standard and shall be designed
20 in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions
21 stated in the 11/3/15 Bridge Design memorandum.
22

23 D-10.15
24 Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
25 barriers attached on top of the wall are considered non-standard and shall be designed
26 in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15
27 Bridge Design memorandum.
28

29 D-10.30
30 Wall Type 5 may be used in all cases.
31

32 D-10.35
33 Wall Type 6 may be used in all cases.
34

35 D-10.40
36 Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
37 barriers attached on top of the wall are considered non-standard and shall be designed
38 in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15
39 Bridge Design memorandum.
40

41 D-10.45
42 Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic
43 barriers attached on top of the wall are considered non-standard and shall be designed
44 in accordance with the current WSDOT BDM and the revisions stated in the revisions
45 stated in the 11/3/15 Bridge Design memorandum.
46

47 ~~D-15.10~~
48 ~~STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls”~~
49 ~~are withdrawn. Special designs in accordance with the current WSDOT BDM are required~~
50 ~~in place of these STD Plans.~~

51
52 D-15.20

1 ~~STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls”~~
2 ~~are withdrawn. Special designs in accordance with the current WSDOT BDM are required~~
3 ~~in place of these STD Plans.~~
4
5 D-15.30
6 ~~STD Plans D-15 series “Traffic Barrier Details for Reinforced Concrete Retaining Walls”~~
7 ~~are withdrawn. Special designs in accordance with the current WSDOT BDM are required~~
8 ~~in place of these STD Plans.~~
9
10 F-10.18
11 Note 2, “Region Traffic engineer approval is needed to install a truck apron lower than 3”.”
12 - DELETED
13
14 J-10.10
15 Sheet 4 of 6, “Foundation Size Reference Table”, PAD WIDTH column, Type 33xD=6’ –
16 3” is revised to read: 7’ – 3”. Type 342LX / NEMA P44=5’ – 10” is revised to read: 6’ – 10”
17 Sheet 5 of 6, Plan View, “FOR EXAMPLE PAD SHOWN HERE:, “first bullet” item, “-
18 SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6” (IN)” IS REVISED
19 TO READ: “SPACE BETWEEN TYPE B MOD. CABINET (BACK OF ALL CHANNEL
20 STEEL) AND 33x CABINET IS 6” (IN) (CHANNEL STEEL ADDS ABOUT 5” (IN)”
21
22 J-10.16
23 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
24
25 J-10.17
26 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
27
28 J-10.18
29 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
30
31 J-20.10
32 ~~Elevation View, horizontal dimension to edge of sidewalk 10” (IN) OR LESS DESIRABLE~~
33 ~~~ 18” (IN) MAXIMUM is revised to read: “10” (IN) MAXIMUM”~~
34
35 J-20.26
36 Add Note 1, “1. One accessible pedestrian pushbutton station per pedestrian pushbutton
37 post.”
38
39 J-20.16
40 View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE
41
42 J-21.10
43 Sheet 1 of 2, Elevation View, Round Concrete Foundation Detail, callout – “ANCHOR
44 BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ THREE REQ’D. PER ASSEMBLY” IS
45 REVISED TO READ: “ANCHOR BOLTS ~ ¾” (IN) x 30” (IN) FULL THREAD ~ FOUR
46 REQ’D. PER ASSEMBLY”
47 Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top
48 of the foundation to find 2 #4 reinforcing bar shown, to read; 3” CLR Delete “(TYP.)”
49 from the 2 ½” CLR. dimension, depicting the distance from the bottom of the foundation
50 to find 2 # 4 reinf. Bar.
51 Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top
52 of the foundation to find 1 #4 reinforcing bar shown, to read; 3” CLR. Delete “(TYP.)” from

1 the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find
2 1 # 4 reinf. Bar.
3 Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top
4 of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from
5 the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find
6 2 # 4 reinf. Bar.
7 Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top
8 of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from
9 the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find
10 1 # 4 reinf. Bar.
11 Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping
12 Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam.
13 Torque Clamping Bolts (see Note 1)"
14 Detail F, callout, "3/4" (IN) x 2' - 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is
15 revised to read; "3/4" (IN) x 2' - 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"
16
17 J-21.15
18 Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE
19 NIPPLE ~ 1 ½" (IN) DIAM.
20
21 J-21.16
22 Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE
23
24 J-22.15
25 Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0"
26 (2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½" DIAM. is revised to read; CHASE
27 NIPPLE ~ 1 ½" (IN) DIAM.
28
29 J-40.10
30 Sheet 2 of 2, Detail F, callout, "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 12" S. S.
31 FLAT WASHER" is revised to read; "12 – 13 x 1 ½" S.S. PENTA HEAD BOLT AND 1/2"
32 (IN) S. S. FLAT WASHER"
33
34 J-40.36
35 Note 1, second sentence; "Finish shall be # 2B for backbox and # 4 for the cover." Is
36 revised to read; "Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and
37 Pickled) for the cover."
38
39 J-40.37
40 Note 1, second sentence; "Finish shall be # 2B for backbox and # 4 for the cover." Is
41 revised to read; "Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and
42 Pickled) for the cover."
43
44 J-75.20
45 Key Notes, note 16, second bullet point, was: "1/2" (IN) x 0.45" (IN) Stainless Steel
46 Bands", add the following to the end of the note: "Alternate: Stainless steel cable with
47 stainless steel ends, nuts, bolts, and washers may be used in place of stainless steel
48 bands and associated hardware."
49
50 J-75.41
51 ~~DELETED~~
52

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

K-80.20
~~DELETED~~

L-5.10
Sheet 1, General Note 8, third sentence – was; “For traffic barrier having no deflection distance, the fence shall be placed a minimum horizontal distance of 3’ – 6’ as measured form the top front face of the barrier.” Is revised to read; “For traffic barrier having no deflection distance, the fence shall be placed a minimum horizontal distance of 2’ – 6” as measured form the top front face of the barrier.”

Sheet 2, Typical Elevation, callout – “2’ – 0” MIN. LAP SPLICE BETWEEN (mark) A #3 BAR AND WALL REINFORCEMENT ~ TYPICAL” is revised to read: “2’ – 0” MIN. LAP SPLICE BETWEEN (MARK) A #4 BAR AND WALL REINFORCEMENT ~ TYPICAL”
Section C, callout; “(mark) A #3” is revised to read: “(mark) A #4”, callout – “(mark) B #3” is revised to read: “(mark) B #4”, callout – “(mark) C #3 TIE” is revised to read: “(mark) C #4 TIE” Reinforcing Steel Bending Diagram, (mark) B detail, callout – “128 deg.” is revised to read: “123 deg.”, callout – “51 deg.” is revised to read: “57 deg.”

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

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

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

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|---|----------------------------------|----------------------------------|----------------------------------|
| | <u>B-30.05-00.....9/9/20</u> | <u>B-60.20-02 9/9/20</u> | <u>B-90.40-01 1/26/17</u> |
| | <u>B-30.10-03.....2/27/18</u> | <u>B-60.40-01 2/27/18</u> | <u>B-90.50-00 6/8/06</u> |
| | <u>B-30.15-00.....2/27/18</u> | <u>B-65.20-01 4/26/12</u> | <u>B-95.20-02 8/17/21</u> |
| | <u>B-30.20-04.....2/27/18</u> | <u>B-65.40-00 6/1/06</u> | <u>B-95.40-01 6/28/18</u> |
| | <u>B-30.30-03.....2/27/18</u> | <u>B-70.20-01 3/15/22</u> | |
| 1 | <u>C-1.....9/8/22</u> | <u>C-22.40-10 10/16/23</u> | <u>C-60.70-01 9/8/22</u> |
| | <u>C-1b.....10/12/23</u> | <u>C-22.45-06 9/8/22</u> | <u>C-60.80-01 9/8/22</u> |
| | <u>C-1d.....10/31/03</u> | <u>C-23.70-01 10/16/23</u> | <u>C-70.15-00 8/17/21</u> |
| | <u>C-2c.....8/12/19</u> | <u>C.24.10-04 10/16/23</u> | <u>C-70.10-04 10/16/23</u> |
| | <u>C-4f.....8/12/19</u> | <u>C-24.15-00 3/15/22</u> | <u>C-75.10-02 9/16/20</u> |
| | <u>C-6a.....9/8/22</u> | <u>C-25.20-07 8/20/21</u> | <u>C-75.20-03 8/20/21</u> |
| | <u>C-7.....9/8/22</u> | <u>C-25.22-06 8/20/21</u> | <u>C-75.30-03 8/20/21</u> |
| | <u>C-7a.....9/8/22</u> | <u>C-25.26-05 8/20/21</u> | <u>C-80.10-03 10/16/23</u> |
| | <u>C-20.10-09 10/12/23</u> | <u>C-25.30-01 8/20/21</u> | <u>C-80.20-01 6/11/14</u> |
| | <u>C-20.14-05 9/8/22</u> | <u>C-25.80-05 8/12/19</u> | <u>C-80.30-02 8/20/21</u> |
| | <u>C-20.15-03 10/12/23</u> | <u>C-60.10-03 10/16/23</u> | <u>C-80.40-01 6/11/14</u> |
| | <u>C-20.18-04 9/8/22</u> | <u>C-60.15-00 8/17/21</u> | <u>C-85.10-00 4/8/12</u> |
| | <u>C-20.40-10 10/12/23</u> | <u>C-60.20-01 9/8/22</u> | <u>C-85.11-01 9/16/20</u> |
| | <u>C-20.41-04 8/22/22</u> | <u>C-60.30-01 8/17/21</u> | <u>C-85.15-03 10/17/23</u> |
| | <u>C-20.42-06 10/12/23</u> | <u>C-60.40-00 8/17/21</u> | <u>C-85.18-03 9/8/22</u> |
| | <u>C-20.43-00 8/22/22</u> | <u>C-60.45-00 8/17/21</u> | <u>C-81.10-00 9/12/23</u> |
| | <u>C-20.45.03.....9/8/22</u> | <u>C-60.50-00 8/17/21</u> | <u>C-81.15-00 9/12/23</u> |
| | <u>C-22.16-08 10/17/23</u> | <u>C-60.60-00 8/17/21</u> | |
| 2 | <u>D-2.36-03 6/11/14</u> | <u>D-3.11-03 6/11/14</u> | <u>D-10.25-01 8/7/19</u> |
| | <u>D-2.46-02 8/13/21</u> | <u>D-4 12/11/98</u> | <u>D-10.30-00 7/8/08</u> |
| | <u>D-2.84-00 11/10/05</u> | <u>D-6 6/19/98</u> | <u>D-10.35-00 7/8/08</u> |
| | <u>D-2.92-01 4/26/22</u> | <u>D-10.10-01 12/2/08</u> | <u>D-10.40-01 12/2/08</u> |
| | <u>D-3.09-00 5/17/12</u> | <u>D-10.15-01 12/2/08</u> | <u>D-10.45-01 12/2/08</u> |
| | <u>D-3.10-01 5/29/13</u> | <u>D-10.20-01 8/7/19</u> | <u>D-20.10-00 10/9/23</u> |
| 3 | <u>E-1.....2/21/07</u> | <u>E-4.....8/27/03</u> | <u>E-20.10-00 9/12/23</u> |
| | <u>E-2.....5/29/98</u> | <u>E-4a.....8/27/03</u> | <u>E-20.20-00 10/4/23</u> |
| 4 | <u>F-10.12-04 9/24/20</u> | <u>F-10.62-02.....4/22/14</u> | <u>F-40.15-04 9/25/20</u> |
| | <u>F-10.16-00.....12/20/06</u> | <u>F-10.64-03.....4/22/14</u> | <u>F-40.16-03 6/29/16</u> |
| | <u>F-10.18-03.....3/28/22</u> | <u>F-30.10-04.....9/25/20</u> | <u>F-45.10-04 10/16/23</u> |
| | <u>F-10.40-04 9/24/20</u> | <u>F-40.12-03.....6/29/16</u> | <u>F-80.10-04 7/15/16</u> |
| | <u>F-10.42-00.....1/23/07</u> | <u>F-40.14-03.....6/29/16</u> | |
| 5 | <u>G-10.10-00 9/20/07</u> | <u>G-24.50-05 8/7/19</u> | <u>G-90.10-03 7/11/17</u> |
| | <u>G-20.10-03 8/20/21</u> | <u>G-24.60-05 6/28/18</u> | <u>G-90.20-05 7/11/17</u> |
| | <u>G-22.10-04 6/28/18</u> | <u>G-25.10-05 9/16/20</u> | <u>G-90.30-04 7/11/17</u> |
| | <u>G-24.10-00 11/8/07</u> | <u>G-26.10-00 7/31/19</u> | <u>G-95.10-02 6/28/18</u> |
| | <u>G-24.20-01 2/7/12</u> | <u>G-30.10-04 6/23/15</u> | <u>G-95.20-03 6/28/18</u> |
| | <u>G-24.30-02 6/28/18</u> | <u>G-50.10-03 6/28/18</u> | <u>G-95.30-03 6/28/18</u> |
| | <u>G-24.40-07 6/28/18</u> | | |

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| <u>H-10.10-00 7/3/08</u> | <u>H-32.10-00 9/20/07</u> | <u>H-70.10-02 8/17/21</u> |
| <u>H-10.15-00 7/3/08</u> | <u>H-60.10-01 7/3/08</u> | <u>H-70.20-02 8/17/21</u> |
| <u>H-30.10-00 10/12/07</u> | <u>H-60.20-01 7/3/08</u> | |

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| <u>I-10.10-01 8/11/09</u> | <u>I-30.20-00 9/20/07</u> | <u>I-40.20-00 9/20/07</u> |
| <u>I-30.10-02 3/22/13</u> | <u>I-30.30-02 6/12/19</u> | <u>I-50.20-02 7/6/22</u> |
| <u>I-30.15-02 3/22/13</u> | <u>I-30.40-02 6/12/19</u> | <u>I-60.10-01 6/10/13</u> |
| <u>I-30.16-01 7/11/19</u> | <u>I-30.60-02 6/12/19</u> | <u>I-60.20-01 6/10/13</u> |
| <u>I-30.17-01 6/12/19</u> | <u>I-40.10-00 9/20/07</u> | <u>I-80.10-02 7/15/16</u> |

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| <u>J-05.50-00 8/30/22</u> | <u>J-26.20-01 6/28/18</u> | <u>J-50.10-01 7/31/19</u> |
| <u>J-10 7/18/97</u> | <u>J-27.10-01 7/21/16</u> | <u>J-50.11-02 7/31/19</u> |
| <u>J-10.10-04 9/16/20</u> | <u>J-27.15-00 3/15/12</u> | <u>J-50.12-02 8/7/19</u> |
| <u>J-10.12-00 9/16/20</u> | <u>J-28.01-00 8/30/22</u> | <u>J-50.13-01 8/30/22</u> |
| <u>J-10.14-00 9/16/20</u> | <u>J-28.10-02 8/7/19</u> | <u>J-50.15-01 7/21/17</u> |
| <u>J-10.15-01 6/11/14</u> | <u>J-28.22-00 8/07/07</u> | <u>J-50.16-01 3/22/13</u> |
| <u>J-10.16-02 8/18/21</u> | <u>J-28.24-02 9/16/20</u> | <u>J-50.18-00 8/7/19</u> |
| <u>J-10.17-02 8/18/21</u> | <u>J-28.26-01 12/02/08</u> | <u>J-50.19-00 8/7/19</u> |
| <u>J-10.18-02 8/18/21</u> | <u>J-28.30-03 6/11/14</u> | <u>J-50.20-00 6/3/11</u> |
| <u>J-10.20-04 8/18/21</u> | <u>J-28.40-02 6/11/14</u> | <u>J-50.25-00 6/3/11</u> |
| <u>J-10.21-02 8/18/21</u> | <u>J-28.42-01 6/11/14</u> | <u>J-50.30-00 6/3/11</u> |
| <u>J-10.22-03 10/4/23</u> | <u>J-28.43-01 6/28/18</u> | <u>J-60.05-01 7/21/16</u> |
| <u>J-10.25-00 7/11/17</u> | <u>J-28.45-03 7/21/16</u> | <u>J-60.11-00 5/20/13</u> |
| <u>J-10.26-00 8/30/22</u> | <u>J-28.50-03 7/21/16</u> | <u>J-60.12-00 5/20/13</u> |
| <u>J-12.15-00 6/28/18</u> | <u>J-28.60-03 8/27/21</u> | <u>J-60.13-00 6/16/10</u> |
| <u>J-12.16-00 6/28/18</u> | <u>J-28.70-04 8/30/22</u> | <u>J-60.14-01 7/31/19</u> |
| <u>J-15.10-01 6/11/14</u> | <u>J-29.10-02 8/26/22</u> | <u>J-75.10-02 7/10/15</u> |
| <u>J-15.15-02 7/10/15</u> | <u>J-29.15-01 7/21/16</u> | <u>J-75.20-01 7/10/15</u> |
| <u>J-20.01-00 8/30/22</u> | <u>J-29.16-02 7/21/16</u> | <u>J-75.30-02 7/10/15</u> |
| <u>J-20.10-05 10/4/23</u> | <u>J-30.10-01 8/26/22</u> | <u>J-75.50-00 8/30/22</u> |
| <u>J-20.11-03 7/31/19</u> | <u>J-40.01-00 8/30/22</u> | <u>J-75.55-00 8/30/22</u> |
| <u>J-20.15-03 6/30/14</u> | <u>J-40.05-00 7/21/16</u> | <u>J-80.05-00 8/30/22</u> |
| <u>J-20.16-02 6/30/14</u> | <u>J-40.10-04 4/28/16</u> | <u>J-80.10-01 8/18/21</u> |
| <u>J-20.20-02 5/20/13</u> | <u>J-40.20-03 4/28/16</u> | <u>J-80.12-00 8/18/21</u> |
| <u>J-20.26-01 7/12/12</u> | <u>J-40.30-04 4/28/16</u> | <u>J-80.15-00 6/28/18</u> |
| <u>J-21.10-04 6/30/14</u> | <u>J-40.35-01 5/29/13</u> | <u>J-81.10-02 8/18/21</u> |
| <u>J-21.15-01 6/10/13</u> | <u>J-40.36-02 7/21/17</u> | <u>J-81.12-00 9/3/21</u> |
| <u>J-21.16-01 6/10/13</u> | <u>J-40.37-02 7/21/17</u> | <u>J-84.05-00 8/30/22</u> |
| <u>J-21.17-01 6/10/13</u> | <u>J-40.38-01 5/20/13</u> | <u>J-86.10-00 6/28/18</u> |
| <u>J-21.20-01 6/10/13</u> | <u>J-40.39-00 5/20/13</u> | <u>J-90.10-03 6/28/18</u> |
| <u>J-22.15-02 7/10/15</u> | <u>J-40.40-02 7/31/19</u> | <u>J-90.20-03 6/28/18</u> |
| <u>J-22.16-03 7/10/15</u> | <u>J-45.36-00 7/21/17</u> | <u>J-90.21-02 6/28/18</u> |
| <u>J-26.10-03 7/21/16</u> | <u>J-50.05-00 7/21/17</u> | <u>J-90.50-00 6/28/18</u> |
| <u>J-26.15-01 5/17/12</u> | | |

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

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| <u>L-5.10-01 7/17/23</u> | <u>L-20.10-03 7/14/15</u> | <u>L-40.20-02 6/21/12</u> |
| <u>L-5.15-00 9/19/22</u> | <u>L-30.10-02 6/11/14</u> | <u>L-70.10-01 5/21/08</u> |
| <u>L-10.10-02 6/21/12</u> | <u>L-40.15-01 6/16/11</u> | <u>L-70.20-01 5/21/08</u> |

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| <u>M-1.20-04 9/25/20</u> | <u>M-9.60-00 2/10/09</u> | <u>M-24.66-00 7/11/17</u> |
| <u>M-1.40-03 9/25/20</u> | <u>M-11.10-04 8/2/22</u> | <u>M-40.10-04 10/17/23</u> |
| <u>M-1.60-03 9/25/20</u> | <u>M-12.10-03 8/2/22</u> | <u>M-40.20-00 10/12/07</u> |
| <u>M-1.80-03 6/3/11</u> | <u>M-15.10-02 7/17/23</u> | <u>M-40.30-01 7/11/17</u> |
| <u>M-2.20-03 7/10/15</u> | <u>M-17.10-02 7/3/08</u> | <u>M-40.40-00 9/20/07</u> |
| <u>M-2.21-00 7/10/15</u> | <u>M-20.10-04 8/2/22</u> | <u>M-40.50-00 9/20/07</u> |
| <u>M-3.10-04 9/25/20</u> | <u>M-20.20-02 4/20/15</u> | <u>M-40.60-00 9/20/07</u> |
| <u>M-3.20-04 8/2/22</u> | <u>M-20.30-04 2/29/16</u> | <u>M-60.10-01 6/3/11</u> |
| <u>M-3.30-04 9/25/20</u> | <u>M-20.40-03 6/24/14</u> | <u>M-60.20-03 8/17/21</u> |
| <u>M-3.40-04 9/25/20</u> | <u>M-20.50-02 6/3/11</u> | <u>M-65.10-03 8/17/21</u> |
| <u>M-3.50-03 9/25/20</u> | <u>M-24.20-02 4/20/15</u> | <u>M-80.10-01 6/3/11</u> |
| <u>M-5.10-03 9/25/20</u> | <u>M-24.40-02 4/20/15</u> | <u>M-80.20-00 6/10/08</u> |
| <u>M-7.50-01 1/30/07</u> | <u>M-24.60-04 6/24/14</u> | <u>M-80.30-00 6/10/08</u> |
| <u>M-9.50-02 6/24/14</u> | <u>M-24.65-00 7/11/17</u> | |

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| A 10.10 00 8/7/07 | A 30.35 00 10/12/07 | A 50.10 01 8/17/21 |
| A 10.20 00 10/5/07 | A 40.00 01 7/6/22 | A 50.40 01 8/17/21 |
| A 10.30 00 10/5/07 | A 40.10 04 7/31/19 | A 60.10 03 12/23/14 |
| A 20.10 00 8/31/07 | A 40.15 00 8/11/09 | A 60.20 03 12/23/14 |
| A 30.10 00 11/8/07 | A 40.20 04 1/18/17 | A 60.30 01 6/28/18 |
| A 30.30 01 6/16/11 | A 40.50 02 12/23/14 | A 60.40 00 8/31/07 |

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| B 5.20 03 9/9/20 | B 30.50 03 2/27/18 | B 75.20 03 8/17/21 |
| B 5.40 02 1/26/17 | B 30.60 00 9/9/20 | B 75.50 02 3/15/22 |
| B 5.60 02 1/26/17 | B 30.70 04 2/27/18 | B 75.60 00 6/8/06 |
| B 10.20 02 3/2/18 | B 30.80 01 2/27/18 | B 80.20 00 6/8/06 |
| B 10.40 02 8/17/21 | B 30.90 02 1/26/17 | B 80.40 00 6/1/06 |
| B 10.70 02 8/17/21 | B 35.20 00 6/8/06 | B 85.10 01 6/10/08 |
| B 15.20 01 2/7/12 | B 35.40 00 6/8/06 | B 85.20 00 6/1/06 |
| B 15.40 01 2/7/12 | B 40.20 00 6/1/06 | B 85.30 00 6/1/06 |
| B 15.60 02 1/26/17 | B 40.40 02 1/26/17 | B 85.40 00 6/8/06 |
| B 20.20 02 3/16/12 | B 45.20 01 7/11/17 | B 85.50 01 6/10/08 |
| B 20.40 04 2/27/18 | B 45.40 01 7/21/17 | B 90.10 00 6/8/06 |
| B 20.60 03 3/15/12 | B 50.20 00 6/1/06 | B 90.20 00 6/8/06 |
| B 25.20 02 2/27/18 | B 55.20 03 8/17/21 | B 90.30 00 6/8/06 |
| B 25.60 02 2/27/18 | B 60.20 02 9/9/20 | B 90.40 01 1/26/17 |
| B 30.05 00 9/9/20 | B 60.40 01 2/27/18 | B 90.50 00 6/8/06 |
| B 30.10 03 2/27/18 | B 65.20 01 4/26/12 | B 95.20 02 8/17/21 |
| B 30.15 00 2/27/18 | B 65.40 00 6/1/06 | B 95.40 01 6/28/18 |
| B 30.20 04 2/27/18 | B 70.20 01 3/15/22 | |
| B 30.30 03 2/27/18 | B 70.60 01 1/26/17 | |
| B 30.40 03 2/27/18 | | |

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| C 1 9/8/22 | C 22.40 09 9/8/22 | C 60.70 01 9/8/22 |
| C 1b 9/8/22 | C 22.45 06 9/8/22 | C 60.80 01 9/8/22 |
| C 1d 10/31/03 | C 23.70 00 8/22/22 | C 70.15 00 8/17/21 |
| C 2c 8/12/19 | C 24.10 03 7/24/22 | C 70.10 03 8/20/21 |
| C 4f 8/12/19 | C 24.15 00 3/15/22 | C 75.10 02 9/16/20 |
| C 6a 9/8/22 | C 25.20 07 8/20/21 | C 75.20 03 8/20/21 |
| C 7 9/8/22 | C 25.22 06 8/20/21 | C 75.30 03 8/20/21 |

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| | C-7a.....9/8/22 | C-25.26-05.....8/20/21 | C-80.10-02.....9/16/20 |
| | C-20.10-08.....9/8/22 | C-25.30-01.....8/20/21 | C-80.20-01.....6/11/14 |
| | C-20.14-05.....9/8/22 | C-25.80-05.....8/12/19 | C-80.30-02.....8/20/21 |
| | C-20.15-02.....6/11/14 | C-60.10-02.....9/8/22 | C-80.40-01.....6/11/14 |
| | C-20.18-04.....9/8/22 | C-60.15-00.....8/17/21 | C-85.10-00.....4/8/12 |
| | C-20.40-09.....9/8/22 | C-60.20-01.....9/8/22 | C-85.11-01.....9/16/20 |
| | C-20.41-04.....8/22/22 | C-60.30-01.....8/17/21 | C-85.15-02.....8/27/21 |
| | C-20.42-05.....7/14/15 | C-60.40-00.....8/17/21 | C-85-18-03.....9/8/22 |
| | C-20.43-00.....8/22/22 | C-60.45-00.....8/17/21 | |
| | C-20.45-03.....9/8/22 | C-60.50-00.....8/17/21 | |
| | C-22.16-07.....9/16/20 | C-60.60-00.....8/17/21 | |
| 1 | D-2.36-03.....6/11/14 | D-4.....12/11/98 | D-10.35-00.....7/8/08 |
| | D-2.46-02.....8/13/21 | D-6.....6/19/98 | D-10.40-01.....12/2/08 |
| | D-2.84-00.....11/10/05 | D-10.10-01.....12/2/08 | D-10.45-01.....12/2/08 |
| | D-2.92-01.....4/26/22 | D-10.15-01.....12/2/08 | |
| | D-3.09-00.....5/17/12 | D-10.20-01.....8/7/19 | |
| | D-3.10-01.....5/29/13 | D-10.25-01.....8/7/19 | |
| | D-3.11-03.....6/11/14 | D-10.30-00.....7/8/08 | |
| 2 | E-1.....2/21/07 | E-4.....8/27/03 | |
| | E-2.....5/29/98 | E-4a.....8/27/03 | |
| 3 | F-10.12-04.....9/24/20 | F-10.62-02.....4/22/14 | F-40.15-04.....9/25/20 |
| | F-10.16-00.....12/20/06 | F-10.64-03.....4/22/14 | F-40.16-03.....6/29/16 |
| | F-10.18-03.....3/28/22 | F-30.10-04.....9/25/20 | F-45.10-03.....8/13/21 |
| | F-10.40-04.....9/24/20 | F-40.12-03.....6/29/16 | F-80.10-04.....7/15/16 |
| | F-10.42-00.....1/23/07 | F-40.14-03.....6/29/16 | |
| 4 | G-10.10-00.....9/20/07 | G-26.10-00.....7/31/19 | |
| | G-20.10-03.....8/20/21 | G-30.10-04.....6/23/15 | |
| | G-22.10-04.....6/28/18 | G-50.10-03.....6/28/18 | |
| | G-24.10-00.....11/8/07 | G-90.10-03.....7/11/17 | |
| | G-24.20-01.....2/7/12 | G-90.20-05.....7/11/17 | |
| | G-24.30-02.....6/28/18 | G-90.30-04.....7/11/17 | |
| | G-24.40-07.....6/28/18 | G-95.10-02.....6/28/18 | |
| | G-24.50-05.....8/7/19 | G-95.20-03.....6/28/18 | |
| | G-24.60-05.....6/28/18 | G-95.30-03.....6/28/18 | |
| | G-25.10-05.....9/16/20 | | |
| 5 | H-10.10-00.....7/3/08 | H-32.10-00.....9/20/07 | H-70.10-02.....8/17/21 |
| | H-10.15-00.....7/3/08 | H-60.10-01.....7/3/08 | H-70.20-02.....8/17/21 |
| | H-30.10-00.....10/12/07 | H-60.20-01.....7/3/08 | |
| 6 | I-10.10-01.....8/11/09 | I-30.20-00.....9/20/07 | I-40.20-00.....9/20/07 |
| | I-30.10-02.....3/22/13 | I-30.30-02.....6/12/19 | I-50.20-02.....7/6/22 |
| | I-30.15-02.....3/22/13 | I-30.40-02.....6/12/19 | I-60.10-01.....6/10/13 |
| | I-30.16-01.....7/11/19 | I-30.60-02.....6/12/19 | I-60.20-01.....6/10/13 |
| | I-30.17-01.....6/12/19 | I-40.10-00.....9/20/07 | I-80.10-02.....7/15/16 |
| 7 | J-05.50-00.....8/30/22 | J-28.10-02.....8/7/19 | J-50.25-00.....6/3/11 |
| | J-10.....7/18/97 | J-28.22-00.....8/07/07 | J-50.30-00.....6/3/11 |

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