

September 3, 2024 GSP Official Update Package & 2025 Standard Specifications Publication

The following contains the GSPs that consist of the September 3, 2024 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 2025 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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General Special Provision (GSP) revisions published as part of the annual update package (September 3, 2024)

Posted: September 3, 2024

[Update corresponding indexes](#)

File	Date of change	File type	Revision type
INTRO.GR1	9/3/2024	GSP Option	Revised
1-02.6.INST2.GR1	9/3/2024	GSP Instruction	New
1-02.6.OPT3.GR1	9/3/2024	GSP Option	Revised/Renamed (formerly 1-02.6.OPT3.2024.GR1)
1-02.6.OPT5.FR1	9/3/2024	GSP Option	Renamed (formerly 1-02.6.OPT5. NEW .FR1) - no content change
1-02.6.OPT7.GR1	9/3/2024	GSP Option	New
1-02.6.OPT8.2026.GR1	9/3/2024	GSP Option	New
1-02.9.OPT1.GR1	9/3/2024	GSP Option	Revised
1-02.13.INST1.GR1	9/3/2024	GSP Instruction	New
1-02.13.OPT1.2026.GR1	9/3/2024	GSP Option	New
1-05.4.OPT1.GR1	9/3/2024	GSP Option	Revised
1-07.9(3).OPT1.GR1	9/3/2024	GSP Option	Revised
1-07.11.OPT3.FR1	9/3/2024	GSP Option	Revised
1-07.11(2).INST1.GR1	9/3/2024	GSP Instruction	Deleted
1-07.11(2).OPT1.2025.GR1	9/3/2024	GSP Option	Deleted
1-07.18(5).OPT2.2025.GR1	9/3/2024	GSP Option	Deleted
1-07.23(1).OPT10.GR1	9/3/2024	GSP Option	Revised
1-08.1(7)A.INST1.GR1	9/3/2024	GSP Instruction	Deleted
1-08.1(7)A.OPT1.2025.GR1	9/3/2024	GSP Option	Deleted
1-08.1(7)C.INST1.GR1	9/3/2024	GSP Instruction	Deleted
1-08.1(7)C.OPT1.2025.GR1	9/3/2024	GSP Option	Deleted
1-08.1(9)B.INST1.GR1	9/3/2024	GSP Instruction	Deleted
1-08.1(9)B.OPT1.2025.GR1	9/3/2024	GSP Option	Deleted
1-08.3(2).GR1	9/3/2024	GSP Heading	Renamed (formerly 1-08.3(2). NEW .GR1) - no content change
1-08.9.OPT1.FR1	9/3/2024	GSP Option	Renamed (formerly 1-08.9.OPT1. NEW .FR1) - no content change
1-08.9.OPT2.FR1	9/3/2024	GSP Option	Renamed (formerly 1-08.9.OPT2. NEW .FR1) - no content change
1-08.9.OPT3.FR1	9/3/2024	GSP Option	Renamed (formerly 1-08.9.OPT3. NEW .FR1) - no content change
1-10.1(1).INST1.GR1	9/3/2024	GSP Instruction	Deleted
1-10.1(1)(9-35).GR1	9/3/2024	GSP Heading/Instruction	Renamed (formerly 1-10.2(9-35).GR1) - no content change
1-10.1(1)(9-35).OPT1.GR1	9/3/2024	GSP Option	Renamed (formerly 1-10.1(1).OPT1.GR1) - no content change

1-10.1(1)(9-35).OPT2.GR1	9/3/2024 GSP Option	Renamed (formerly 1-10.2(9-35).OPT1.GR1) - no content change
1-10.1(1)(9-35.4).GR1	9/3/2024 GSP Heading/Instruction	New
1-10.1(1)(9-35.4).OPT1.GR1	9/3/2024 GSP Option	New
1-10.1(1)(9-35.8).GR1	9/3/2024 GSP Heading/Instruction	Renamed (formerly 1-10.3(3)(9-35.8).GR1) - no content change
1-10.1(1)(9-35.8).OPT1.GR1	9/3/2024 GSP Option	Renamed (formerly 1-10.3(3)(9-35.8).OPT1.GR1) - no content change
1-10.3(3)A.INST1.GR1	9/3/2024 GSP Instruction	Deleted
1-10.3(3)A.OPT1.2025.GR1	9/3/2024 GSP Option	Deleted
1-10.3(3)B.INST1.GR1	9/3/2024 GSP Instruction	New
1-10.3(3)B.OPT1.GR1	9/3/2024 GSP Option	New
1-10.3(3)B(9-35.4).GR1	9/3/2024 GSP Heading/Instruction	Deleted
1-10.3(3)B(9-35.4).OPT1.2025.G	9/3/2024 GSP Option	Deleted
1-10.4(2).OPT1.GR1	9/3/2024 GSP Option	Deleted
1-10.4(3).INST1.GR1	9/3/2024 GSP Instruction	Deleted
1-10.4(3).OPT1.FR1	9/3/2024 GSP Option	Deleted
2-03.4.OPT2.GR2	9/3/2024 GSP Option	Revised
5-04.2(9-03.21(1)A).GR5	9/3/2024 GSP Heading/Instruction	Deleted
5-04.2(9-03.21(1)A).OPT1.2025.G	9/3/2024 GSP Option	Deleted
5-05.3.OPT3.FR5	9/3/2024 GSP Option	Revised
6-02.3(5)G.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-02.3(5)G.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-02.3(25)L2.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-02.3(25)L2.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-10.3(5).INST2.GR6	9/3/2024 GSP Option	Deleted
6-10.3(5).OPT2.2025.GR6	9/3/2024 GSP Option	Deleted
6-11.2.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-11.2.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-11.3.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-11.3.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-11.4.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-11.4.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-11.5.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-11.5.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-15.3(8).INST1.GR6	9/3/2024 GSP Instruction	Deleted

6-15.3(8).OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-16.3(3).INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-16.3(3).OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-17.3(8).INST1.2025.GR6	9/3/2024 GSP Option	Deleted
6-17.3(8).OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-18.SA1.2025.GR6	9/3/2024 GSP Option	Deleted
6-19.3(7)F.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-19.3(7)F.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-20.3(1).INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-20.3(1).OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-20.3(1)D.INST1.GR6	9/3/2024 GSP Instruction	Deleted
6-20.3(1)D.OPT1.2025.GR6	9/3/2024 GSP Option	Deleted
6-21.SA1.2025.GR6	9/3/2024 GSP Option	Deleted
6-SA1.FR6	9/3/2024 GSP Option	New
8-01.2(9-14.6(4)A).GR8	9/3/2024 GSP Heading/Instruction	Deleted
8-01.2(9-14.6(4)A).OPT1.2025.G	9/3/2024 GSP Option	Deleted
8-01.3(6).INST1.GR8	9/3/2024 GSP Instruction	Deleted
8-01.3(6).OPT1.2025.GR8	9/3/2024 GSP Option	Deleted
8-10.1.OPT1.GR8	9/3/2024 GSP Option	Renamed (formerly 8-10.1.OPT1. NEW .GR8) - no content change
8-10.2.OPT1.GR8	9/3/2024 GSP Option	Renamed (formerly 8-10.2.OPT1. NEW .GR8) - no content change
8-10.3.OPT1.GR8	9/3/2024 GSP Option	Renamed (formerly 8-10.3.OPT1. NEW .GR8) - no content change
8-10.4.OPT1.GR8	9/3/2024 GSP Option	Renamed (formerly 8-10.4.OPT1. NEW .GR8) - no content change
8-10.5.OPT1.GR8	9/3/2024 GSP Option	Renamed (formerly 8-10.5.OPT1. NEW .GR8) - no content change
8-12.2.OPT6.GB8	9/3/2024 GSP Option	Deleted
8-12.3.INST1.GR8	9/3/2024 GSP Instruction	Deleted
8-12.3.OPT1.GB8	9/3/2024 GSP Option	Deleted
8-12.3.OPT1(A).GB8	9/3/2024 GSP Option	Deleted
8-12.3.OPT1(B).GB8	9/3/2024 GSP Option	Deleted
8-12.3.OPT1(C).GB8	9/3/2024 GSP Option	Deleted
8-12.4.INST1.GR8	9/3/2024 GSP Instruction	Deleted
8-12.4.OPT1.GB8	9/3/2024 GSP Option	Deleted
8-12.5.OPT1.GR8	9/3/2024 GSP Option	Deleted
8-20.2(9-29.6(2)).GR8	9/3/2024 GSP Heading/Instruction	Deleted

8-20.2(9-29.6(2)).OPT1.2025.GR
STDPLANS.GR9

9/3/2024 GSP Option
9/3/2024 GSP Option

Deleted
Revised

2025 Standard Specifications Updates

Please note: The following is a brief description of the latest updates that are being published in the 2025 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 2025 Standard Specifications.

The 2025 Standard Specifications Book is effective for all WSDOT projects advertised on or after Tuesday, September 3, 2024.

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

- Fixing errors regarding capitalization, punctuation, and spelling.

DIVISION 1 – General Requirements

1-02.4(1) – General

Modified when questions are due to 4 business days preceding bid opening so that it works for Local agencies as well.

1-02.13 – Irregular Proposals

Removed the trucking form from items causing an irregular proposal since it is not required at bid time anymore.

1-03.5 – Failure to Execute Contract

Removed MWBE from the paragraph since it is not applicable to this Section because it is not due until 20 days after execution.

1-04.4 – Changes

Modified language to proceed when receiving an executed change order or an oral or written order from the engineer before receiving the executed change order.

1-04.11 – Final Cleanup

Removed Highway. Right of Way includes the Highway and is redundant.

1-05.3 – Working Drawings

Modified language slightly to be aligned with the RCW.

1-05.13 – Superintendents, Labor, and Equipment of Contractor

Modified list to match the items that are evaluated on the Prime Contractors Performance Report.

1-07 – Legal Relations and Responsibilities to the Public

Throughout Section 1-07 modified the “State” to the “Contracting Agency” where applicable, and added the Contracting Agency to the list of entities so that it works for Local Programs.

1-07.9(1) – General

Updated OEO to OECR.

1-07.9(4) – Wage Disputes

Clarified the path for wage disputes.

2025 Standard Specifications Updates

1-07.11(2) – Contractual Requirements

Added in the Anti-Discrimination language required in contracts by state law. This language is currently approved as GSP 1-07.11(2).OPT1.2025.GR1.

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

Fixed reference to IFC Section 3506 to change to Section 5706.

1-07.17 – Utilities and Similar Facilities

Fixed language about at the Contractor's expense.

1-07.17(1) – Utility Construction, Removal, or Relocation by the Contractor

Added language for clarity on new installation in response to Dig Once to allow fiber optics to be installed during construction.

1-07.18(5) – Required Insurance Policies

Added in correct OCP insurance endorsement from GSP 1-07.18(5).OPT2.2025.GR1

1-08 – Prosecution and Progress

Throughout Section 1-08 modified the "State" to the "Contracting Agency" where applicable, and added the Contracting Agency to the list of entities so that it works for Local Programs.

1-08.1(7)A – Payment Reporting

Modified to update what needs to be reported for clarification.

1-08.1(7)C – Subcontractor Retainage

Corrected the reference to Section 1-08.1(11).

1-08.1(8) – Required Subcontract Clauses (was "Vacant")

Moved Required Subcontract Clauses from Section 1-08.1(9) to 1-08.1(8)

1-08.1(8)A – Clauses Required in All First-Tier Subcontracts

Revised to clarify language about lower tiers (was Section 1-08.1(9)A).

1-08.1(8)B – Clauses Required in Subcontracts of All Tiers

Added in RCW antidiscrimination language currently included in GSP 1-08.1(9)B.OPT1.2025.GR1 (was Section 1-08.1(9)B).

1-08.1(9) – Submittal of Executed Contracts (New section)

Added in requirements for subcontracts to be submitted for all subcontractors. (This is currently in 1-07.11.OPT3.FR1, but it is required for all contracts, not just DBEs).

1-08.3(4) – Vacant (was "Measurement")

Deleted Section and changed to Vacant since only LS items now.

1-08.5 – Time for Completion

Clarified that Monthly Reports of amounts paid are reported through DMCS.

1-09.6 – Force Account

Made minor changes to clarify and clean up force account services.

2025 Standard Specifications Updates

1-09.7 – Mobilization

Added in pay item for mobilization.

1-09.10 – Vacant (was “ Payment for Surplus Processed Materials”)

Deleted section and payment for surplus materials. It is being moved to Section 3-01 and having a bid item added.

1-10.3(3)A – Construction Signs

Adds interim GSP for temporary sign covering to be with wood or plastic if only for a short amount of time. There are some minor changes to the GSP language. GSP 1-10.3(3)A.OPT1.2025.GR1 will be deleted as part of this change.

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

Added in clarification that work performed by the TCS will not be measured under Flaggers and other Traffic Control Labor. Removed quotations from the measurement section.

1-10.4 Measurement & 1-10.5 Payment

The callouts for lump sum traffic control were modified for consistency. Changed to look at the bid proposal rather than provisions for reinstated items when using Lump Sum Traffic Control.

DIVISION 2 – Roadway Excavation and Embankment

2-03.3(14)L – Embankment Widening for Guardrail

Added language for policy change to use Method B compaction for the top 3 feet of embankment widening for guardrail.

2-03.5- Payment

Added clarification for applications when embankment compaction will not be paid as a separate item.

DIVISION 3 – Acceptance of Aggregate

3-01.2(4) - Production Requirements

Modified “surplus” to be “excess” for changes to add the “Excess Processed Material” pay item.

3-01.3(4) - Excess Screenings (was “Surplus Screenings”)

modified to add the Excess processed material that was in 1-09 to this section. Added a standard item so a change order is not needed for every job with Contractor Agency provided sites. Changed from “surplus” to “excess”

3-01.4(2) - Excess Screenings (was “Surplus Screenings”)

Modified “surplus” to be “excess” for changes to add the “Excess Processed Material” pay item.

3-01.6- Payment

Added a pay item for “Excess Processed Material” by calculation.

3-02.2(4) - Stockpiling Aggregates for Immediate Use

Modified excess material to be in line with changes to Section 3-01

2025 Standard Specifications Updates

DIVISION 4 – Ballast and Crushed Surfacing

No changes

DIVISION 5 – Surface Treatments and Pavements

5-02.3(1) – Equipment

Modified roller requirements

5-02.3(3) – Application of Emulsified Asphalt and Aggregate

Clarified language on requirements for dilution and spreading of emulsified asphalt, modified max temperature for CSS-1, CSS-1h.

5-02.3(5) – Application of Aggregates

Added that there is a maximum of one complete coverage with a combination or smooth wheel roller.

5-02.3(7) – Patching and Correction of Defects

Minor clarification on dilution is no more than one part water to one part emulsified asphalt.

5-02.3(10) – Unfavorable Weather

Changes to wind speed and temperature to be considered unfavorable weather.

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

Cleaned up additives to just refer to 5-04.2(2)B rather than repeating information.

5-04.2(2)B – Using HMA Additives

Clarification on additive use.

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

Clarification that if the final mixture lot has 10 sublots or less it shall be combined into the previous lot (it is not an option).

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

Clarification that if the final mixture lot has 10 sublots or less it shall be combined into the previous lot (it is not an option).

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

Clarification on when cores will be taken.

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

Modified requirements including – the entire lot doesn't need to be below 1.00, Contracting Agency cores increase to \$400, and added a time limit on Contractor core sampling.

5-04.4 Measurement and 5-04.5 Payment

Cleaned up items that refer to another chapter to be consistent.

DIVISION 6 – Structures

2025 Standard Specifications Updates

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

Fixed error in testing frequency (Was GSP 6-02.3(5)G.OPT1.2025.GR6)

6-02.3(9)B – Casting

Clarification on stripping strength.

6-02.3(9)D – Control Strength

Clarification on test cylinder curing requirements. Broken into two sections 6-02.3(9)D1 Control Strength for Precast Units Cast at a Fabrication Plant and 6-02.3(9)D2 Control Strength for Precast Units Cast On-Site

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

Modified to add that requirements don't apply to the construction joints below the top of drilled shafts.

6-02.3(14)A – Class 1 Surface Finish

Modified to allow minor projections up to 1/4"

6-02.3(25)H – Finishing

Added survey marker embedments or indelible markers for surveying.

6-02.3(25)J – Horizontal Alignment

Modified checking horizontal alignment of girders including Working Drawing requirements.

6-02.3(25)K – Vertical Deflection

Modified checking vertical alignment of girders including Working Drawing requirements.

6-02.3(25)L1 – Lifting and Handling Devices

Modified to ensure that lift loops for slab girders could be contained within the end block region.

6-02.3(25)L2 - Girder Lateral Stability and Stress Analysis

Fixed error in the table (was GSP 6-02.3(25)L2.OPT1.2025.GR6)

6-02.3(25)L4 – Girder Shipping

Modified strength requirements for girder shipping.

6-03.3(25) – Repair Welding

Added in steel Ferry Terminal Structures to clarify WS structures are included in this requirement.

6-03.3(25)A – Welding Inspection

Removed ultrasonic from sentence so that it is more general as there are other times QA may be needed to be performed..

6-03.3(25)A2 – Radiographic Inspection

Added in steel Ferry Terminal Structures to clarify WS structures are included in this requirement.

2025 Standard Specifications Updates

6-05.3(2) – Ordering Piling

Modified from “list” to “order list”

6-07.3(1)B – Work Force Qualifications for Field Application of Paint

Added in Association for Materials Protection and Performance (AMPP) requirements.

6-07.3(2)C – Paint System Manufacturer and Paint System Information Submittal Component

Added in time limit to certification of compliance

6-10.3 – Construction Requirements

Removed installing in conjunction with sign bridge foundations. Deleted transition for Type 2 to F shape.

6-10.3(5) – Temporary Barrier

Added language about Temporary Barrier non-mash fabrication dates (incorporates GSP 6-10.3(5).OPT2.2025.GR6).

6-10.3(6) – Placing Concrete Barrier

Modified to allow the installation on compacted surfaces.

6-11.2 – Materials

Added in materials for precast concrete retaining walls (incorporates 6-11.2.OPT1.2025.GR6)

6-11.3 – Construction Requirements

Modifies 6-11.3 including adding new subsections to added in the construction requirements for precast concrete retaining walls (incorporates 6-11.3.OPT1.2025.GR6)
Adds in

6-11.4– Measurement

added in construction requirements for precast concrete retaining walls (incorporates 6-11.4.OPT1.2025.GR6)

6-11.5. – Payment

added in construction requirements for precast concrete retaining walls (incorporates 6-11.5.OPT1.2025.GR6)

6-14.1 – Description

Modified description to change Standard Plans to Plans.

6-14.3(1) – Tolerances (was “Quality Assurance”

Modified for clarity and put the tolerances in a table format.

6-14.4 – Measurement

Modified measurement referring to other Sections for consistency

6-14.5 –Payment

Modified to remove compaction from the payment temporary retaining wall.

2025 Standard Specifications Updates

6-15.3(8) – Soil Nail Testing and Acceptance

Modified location for the maximum test load (incorporates GSP 6-15.3(8).OPT1.2025.GR6).

6-16.3(3) – Shaft Excavation

Removed the word minimum from shaft excavation (incorporates GSP 6-16.3(3).OPT1.2025.GR6).

6-17.3(8) – Testing and Stressing

Modified location for the maximum test load (incorporates GSP 6-17.3(8).OPT1.2025.GR6).

6-18 – Shotcrete (was “Vacant”)

Adds in updated shotcrete section (incorporates GSP 6-18.SA1.2025.GR6)

6-19.3(7) – Shaft Construction Joint

Modified the time when crosshole sonic log testing can occur (incorporates 6-19.3(7)F.OPT1.2025.GR6).

6-20.1(1) – Definitions

Deleted upper unit language so it doesn't preclude the bottom unit.

6-20.3(1)A - Design Delivery Method

clarification on Std Plan being acceptable.

6-20.3(1)A2 - Contracting Agency Supplied Design

took away alternate design option.

6-20.3(1)D - Geotechnical Considerations

added in interim GSP for Geotech considerations (incorporates GSP 6-20.3(1)D.OPT1.2025.GR6).

6-20.3(6)A - Bedding and Leveling

clarifying that leveling course is needed.

6-21.2 – Materials

Added in the materials which were accidentally left out in the 2024 Standard Specs (incorporates GSP 6-21.SA1.2025.GR6)

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

7-04.2 – Materials

Modified to clarify allowable pipe types for Rigid and Flexible applications and clarify the type of pipes included in the category Thermoplastic Storm Sewer Pipe

7-04.4 – Measurement

Measurement revised to be inclusive of all tests.

7-05.3 – Construction Requirements

Paragraph 11 is revised to clarify the requirement also applies to drainage structures.

2025 Standard Specifications Updates

7-17.2 – Materials

Revised the type of allowable pipe materials.

7-17.3(2)A – General

Modified for clarity on when the local sanitary agency does not have a standard for testing.

7-17.3(2)B - Exfiltration Test

Modified for clarity.

7-17.3(2)C -Infiltration Test

Modified for clarity.

7-17.3(2)E – Low Pressure Air Test for Sanitary Sewers Constructed of Air Permeable Materials

Modified for clarity.

DIVISION 8 – Miscellaneous Construction

8-01.2 – Materials

Deleted fertilizer and added that cementitious materials will not be used.

8-01.3(1) – General

Modified for clarity to ensure correct monitoring.

8-01.3(1)D – Dispersion/Infiltration

Modified for clarity. Added that infiltration areas shall be away from slopes adjacent to surface waters.

8-01.3(2)A – Preparation for Application

Added in mulching preparation.

8-01.3(2)B – Temporary Seeding

Modified tracer requirements and removed reference to fertilizing in temporary seeding.

8-01.3(2)D – Temporary Mulching

Added in requirements for when HECP contains tackifiers.

8-01.3(3) – Placing Erosion Control Blanket

Removed reference to fertilizing.

8-01.3(5) – Plastic Covering

Added that permeable soil coverings should be prioritized.

8-01.3(6) – Check Dams

Removed wattles from use for check dams (incorporated GSP 8-01.3(6).OPT1.2025.GR8).

8-01.3(7) – Stabilized Construction Entrance

Added that material shall be free of pH modifying materials. Added clarifying on wheel wash water management.

2025 Standard Specifications Updates

8-01.3(8) – Street Cleaning

Added in source control rather than just sweeping.

8-01.3(9)A2 – Silt Fence

Modified to add more instruction to ensure correct installation.

8-01.3(9)A3 – High Visibility Silt Fence

Modified to add more instruction to ensure correct installation.

8-01.3(9)D – Inlet Protection

Added in source control.

8-01.3(10) – Wattles

Added clarification that wattles are for sheet control and not concentrated flow.

8-01.4 Measurement and 8-01.5 Payment

The callouts for lump sum erosion control were modified for consistency to change refer to the correct divisions for measurement vs payment. Changed to look at the bid proposal rather than provisions for reinstated items.

8-01.4(4) – Items not included with Lump Sum Erosion Control and Water Pollution Prevention

Added in high visibility silt fence.

8-01.5(4) – Items not included with Lump Sum Erosion Control and Water Pollution Prevention

Added in High Visibility Silt Fence.

8-02.3(1) – Responsibility During Construction

Modified to ensure staging areas are restored.

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

Modified to add site specific requirements to the weed plan.

8-02.3(5)C – Planting Area Preparation

Removed 18" from required depth, so it will match other requirements.

8-02.3(6)A – Compost

Modified to add additional construction requirements.

8-02.3(9) – Seeding, Fertilizing, and Mulching

Deleted material requirements from this section and moved them to Section 9-14.3

8-02.3(9)D – Inspection

Added clarification that reseeding to due nonconformance is at no cost.

8-02.3(13) – Plant Establishment

Deleted the reference to 8-02.3(3) which is not relevant to this section.

2025 Standard Specifications Updates

8-02.3(15)A – Live Fascines

Modified dimensions to for consistency with the Standard Plans.

8-02.3(15)B – Brush Mattress

Added the word “branch” before cuttings for clarity.

8-02.3(15)C – Brush Layer

Modified for consistency with the Plan production and other bioengineering replacement requirements.

8-11.3(1)A – Erection of Posts

Added in policy that existing guardrail runs shall have matching timber or steel posts.

8-11.3(1)C – Terminal and Anchor Installation

Added in clarification that requirement applies to both terminals and anchors and bull nose requirements.

8-11.4 – Measurement

Added in beam guardrail bull nose terminal.

8-11.5 – Payment

Added in “Beam Guardrail Bull Nose Terminal Type 2”.

8-12.2 – Materials

Added in cable fence materials (incorporated GSP 8-12.3.OPT1(B).GR8

8-12.3(3) – Cable Fence (new section)

Added in cable fence construction requirements (incorporated GSP 8-12.3.OPT1(A).GB8 and 8-12.3.OPT1(B).GB8)

8-12.4 – Measurement

Added in cable fence measurement (Incorporated GSP 8-12.4.OPT1.GB8).

8-12.5 – Payment

Added in cable fence payment (Incorporated GSP 8-12.5.OPT6.GB8).

8-20.2 – Materials

Added storage requirements to address issues with improper storage and requirements for temporary systems.

8-20.3(1)A – Maintenance During Construction

Added that the Contracting agency will do the first set of locates on preexisting systems, and added clarity about ITS equipment that contracting agency will keep maintenance of the inside of the cabinet.

8-20.3(5)A – General

Added direction on bends to stop them from being too tight, and clarified when locate wire and detectable warning tape are needed.

8-20.3(5)E – Conduit Installation

Added conduit shall be certified for use with the method of installation.

2025 Standard Specifications Updates

8-20.3(6) – Junction Boxes, Cable Vaults, and Pull Boxes

Added tolerance for jbox installation.

8-20.3(6)A – Junction Box Security Collars (New Section)

New section to address questions that have arisen with implementation of junction box security collars.

8-20.3(8) – Wiring

Added requirements for aluminum wire and fiber racking.

8-20.3(8)A – Splices

Added reference to Standard Plans, optional submersible connectors, and aluminum wire requirements.

8-20.3(11) - Testing

Added requirements to pick up cabinets after 14 days.

8-21.3(1) – Location of Signs

Added that the final length shall be determined in the field by the contractor.

8-30 – Streams, Rivers, and Waterbodies (was Water Crossings)

Entire section including title has been revised to be consistent with current practices.

DIVISION 9 – Materials

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

Modified the binder requirements.

9-02.1(6)A – Polymerized Cationic Emulsified Asphalt CRS-2P

Modified the minimum penetration.

9-03.4(2) – Grading and Quality

Modified the fracture requirements.

9-03.21(1) – Recycled Asphalt Shingles (was Reclaimed Asphalt Shingles)

Revised section including title (incorporates 5-04.2(9-03.21(1)A).OPT1.2025.GR5

9-08.1(8) – Standard Colors

Updated the link for colors.

9-13.4 – Rock for Erosion and Scour Protection

Added grading requirements.

9-13.4(1) – Suitable Shape of Rock for Erosion and Scour Protection

Added a figure for clarification.

9-13.4(2) – Grading Requirements of Rock for Erosion and Scour Protection

Added Class D. Removed material acceptance in last paragraph to new section 9-13.4(3).

2025 Standard Specifications Updates

9-13.4(3) – Material Acceptance

New section on Material Acceptance, includes last paragraph from 9-13.4(2) that was moved here, and new requirements for rejection.

9-14.3 – Seed

Added the requirements deleted from 8-02.3(9) on seed supply to this section.

9-14.5(3) – Bark or Wood Chip Mulch

Added timing requirements to testing

9-14.5(8) – Compost

Added in C:N ratios.

9-14.6(4)A – Biodegradable Check Dams

Removed wattles (incorporated GSP 8-01.2(9-14.6(4)A.OPT1.2025.GR8).

9-14.6(6) – Compost Socks

Added in cedar as an option

9-14.6(7) – Coir Log

Added in cedar as an option.

9-14.7(1) – Description

Added in age and size of live cuttings.

9-16 - Fence, Guardrail and Glare Screen (was Fence and Guardrail)

Added in glare screen to main heading.

9-16.7 – Cable Fence

Added new section for Cable Fence (incorporated 8-12.2.OPT6.GB8

9-29.2(4) – Cover Markings

Added in WIM label.

9-29.3(2)A1 – Single Conductor Current Carrying

Added in aluminum requirements.

9-29.3(2)A2 – Grounding Electrode Conductor

Modified for clarification regarding grounding electrode conductor.

9-29.3(2)A3 – Equipment Grounding and Bonding Conductors

Updated to current standard

9-29.6 – Light and Signal Standards

Added information on Frangible bolts

9-29.6(2) – Slip Base Hardware

Added in that keeper plates can be 28 or 26 gage (incorporating GSP 8-20.2(9-29.6(2)).OPT1.2025.GR8).

2025 Standard Specifications Updates

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

Updated to address issues with timber pole procurement and wood preservatives.

9-29.9 – Electrical Ballasts and Transformers (was Ballast, Transformers)

Minor change in heading title to differentiate better from rock ballast.

9-29.10 – Luminaires

Modified for clarity. Moved luminaire rating from 9-29.10(1) to 9-29.10.

9-29.10(1) – Conventional Roadway Luminaires

Modified for clarity. Moved luminaire ratings from 9-29.10(1) to 9-29.10.

9-29.10(4) – Underdeck and Wall Mount Luminaires

Modified to only LED luminaires. Non-LED luminaires are nearly impossible to get now.

9-29.12(1) – Illumination Circuit Splices

Added direct burial pedestal splice connector as an option.

9-29.12(5) – Vinyl Electrical Tape for Splices

Updated to more conventional standards for tape used.

9-29.12(6) – Linerless Rubber Splicing Tape

New Section to add aluminum wire splicing.

9-29.15 – Flashing Beacon Control

Modified to allow alternates to jack mounted and address RRFB system controllers.

9-29.16(1)A1 – Vacant (was “Non-LED Optical System”)

Deleted (made vacant), non-LED optical units are not wanted anymore.

9-29.19 – Pedestrian Pushbuttons

Updated to reflect current standard of accessible pushbuttons.

9-29.19(1) – Speech Messages for Pedestrian Pushbuttons (new section)

Added new section for Speech Messages for Pedestrian Pushbuttons.

9-29.21(2) – Rectangular Rapid Flashing Beacons (new section)

Added new section for Rectangular Rapid Flashing Beacons.

9-34.2(2) – Color

Modified to be in table format and changed wording for clarity.

9-34.3 – Plastic

Simplified last paragraph.

9-34.3(2) – Type B – Pre-Formed Fused Thermoplastic

Deleted the last two paragraphs that conflicted with the paint section.

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Revisions to General Special Provisions Effective September 3, 2024

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 2025 Standard Specifications.

DIVISION 1 – General Requirements

1-02.6.OPT8.2026.GR1 – New

This GSP (Subcontractor List) was added to update the subcontractor list to include the form number so it is not confused with the new Bidder Questionnaire form.

1-02.6.OPT7.GR1 – New

This GSP (Bidder Questionnaire) was added to include the new Bidder Questionnaire form required by the federal rule change to 49 CFR Part 26.

1-02.6.OPT3.GR1 - Revised and Renamed (was 1-02.6.OPT3.NEW.GR1)

This GSP (Deliver of DBE forms) was revised to clarify that the items are submitted in accordance with 1-02.9.

1-02.6.OPT5.FR1 –Renamed (was 1-02.6.OPT5.NEW.FR1)

This GSP (Alt Bids) was renamed

1-02.9.OPT1.GR1 –Revised

This GSP (DBE documents) was updated because of the federal rule changes to 49 CFR Part 26.

1-02.13.OPT1.2026.GR1 – New GSP

This GSP (irregular proposals) was added to address that the trucking form is no longer needed with Bids, but the Bidder Questionnaire is needed.

1-05.4.OPT1.GR1 – Revised

This GSP (structure surveying) was revised to clarify survey point horizontal intervals.

1-07.9(3).OPT1.GR1 - Revised

This GSP (Apprentice Utilization) was revised for changes to be in line with L&I requirements.

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1-07.11.OPT3.FR1 –Revised

This GSP (irregular proposals) was updated because of the federal rule changes to 49 CFR Part 26.

1-07.11(2).OPT1.2025.GR1 - Deleted

This GSP (Anti-discrimination) and the associated instructions were deleted. It was added to the 2025 Standard Specifications

1-07.18(5).OPT2.2025.GR1 - Deleted

This GSP (OCP insurance) was deleted. It was added to the 2025 Standard Specifications

1-07.23(1).OPT10.GR1 – Revised

This GSP (fourth of July) was revised to not have mid-week holidays go into the previous or next week.

1-08.1(7)A.OPT1.2025.GR1 - Deleted

This GSP (Payment Reporting) and the associated instructions were deleted. It was added to the 2025 Standard Specifications

1-08.1(7)C.OPT1.2025.GR1 - Deleted

This GSP (Subcontractor Retainage) and the associated instructions were deleted. It was added to the 2025 Standard Specifications

1-08.1(9)B.OPT1.2025.GR1 - Deleted

This GSP (Anti-discrimination) and the associated instructions were deleted. It was added to the 2025 Standard Specifications

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

This GSP (General Requirements heading) was renamed.

1-08.9.OPT1.FR1 – Renamed (was 1-08.9.OPT1.NEW.FR1)

This GSP (Liquidated Damages) was renamed.

1-08.9.OPT2.FR1 – Renamed (was 1-08.9.OPT2.NEW.FR1)

This GSP (Signal LDs) was renamed.

1-08.9.OPT3.FR1 - Renamed (was 1-08.9.OPT3.FR1)

This GSP (Interim LDs) was renamed.

1-10.1(1)(9-35).GR1 – New

The 9-35 heading and instructions were moved under the Materials (1-10.1(1)).

1-10.1(1)(9-35).OPT1.GR1 – Renamed (was 1-10.1(1).OPT1.GR1)

This GSP (AFAD) was renamed to be under the 9-35 heading.

1-10.1(1)(9-35).OPT2.GR1 – Renamed and moved (was 1-10.2(9-35).OPT1.GR1)

This GSP (Temporary Rumble Strips) was renamed and moved to be in 1-10.1(1).

Revisions to General Special Provisions Effective September 3, 2024

1-10.1(1)(9-35.4). – Renamed and moved (was 1-10.3(3)B(9-35.4).GR1)

The 9-35.4 heading and instructions were moved under the Materials (1-10.1(1)).

1-10.1(1)(9-35.4).OPT1.GR1 – New

This GSP (sequential Arrow) is a new GSP. It is the Materials for sequential arrow sign that was in GSP 1-10.3(3)B(9-35.4).OPT1.2025.GR1.

1-10.1(1)(9-35.8). – Renamed and moved (was 1-10.3(3)(9-35.8).GR1)

The 9-35.8 heading and instructions were moved under the Materials (1-10.1(1)).

1-10.1(1)(9-35.8).OPT1.GR1 – Renamed and moved (was 1-10.3(3)(9-35.8).OPT1.GR1)

This GSP (Radar Speed Display Signs) was renamed and moved to be in Section 1-10.1(1)

1-10.3(3)A.OPT1.2025.GR1 - Deleted

This GSP (Sign covering) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

1-10.3(3)B(9-35.4).OPT1.2025.GR1 - Deleted

This GSP (smart arrow board) was deleted. This has been modified and is now covered in 1-10.1(1)(9-35.4).OPT1.GR1 and 1-10.3(3)B.OPT1.GR1

1-10.3(3)B.OPT1.GR1 – New GSP

This GSP (Seq Arrow) is a new GSP that modifies the requirements for sequential arrow boards to be GPS enabled. This includes information from GSP 1-10.3(3)B(9-35.4).OPT1.2025.GR1 which was deleted.

1-10.4(2).OPT1.GR1 – Deleted

This GSP (Standard Item) was deleted. The changes to the 2025 Standard Specifications refer to the proposal for items.

1-10.4(3).OPT1.FR1 – Deleted

This GSP (Standard Item) was deleted. The changes to the 2025 Standard Specifications refer to the proposal for items.

DIVISION 2 – Roadway Excavation and Embankment

2-03.4.OPT2.GR2 .OPT1.FR1 – Revised

This GSP (ground measure) was revised to incorporate the Electronic Design Files.

DIVISION 3 – Acceptance of Aggregate

N/A – no changes to Division 3 GSPs

DIVISION 4 – Ballast and Crushed Surfacing

N/A – no changes to Division 4 GSPs

DIVISION 5 - Surface Treatments And Pavements

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5-04.2(9-03.21(1)A).OPT1.2025.GR5 - Deleted

This GSP (Recycled Asphalt Shingles) and the associated instructions were deleted. It was added to the 2025 Standard Specifications

5-05.3.OPT3.FR5 – New GSP

This (textured patters with colored release agent) this is a new GSP to use when the use of a colored release agent is required.

DIVISION 6 – Structures

6-02.3(5)G.OPT1.2025.GR6 – Deleted

This GSP (Error in testing frequency) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-02.3(25)L2.OPT1.2025.GR6 – Deleted

This GSP (Error in table) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-10.3(5).OPT2.2025.GR6 – Deleted

This GSP (Temporary Barrier non-mash fabrication dates) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-11.2.OPT1.2025.GR6 – Deleted

This GSP (precast concrete retaining walls) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-11.3.OPT1.2025.GR6 – Deleted

This GSP (precast concrete retaining walls) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-11.4.OPT1.2025.GR6 – Deleted

This GSP (precast concrete retaining walls) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-11.5.OPT1.2025.GR6 – Deleted

This GSP (precast concrete retaining walls) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-15.3(8).OPT1.2025.GR6 – Deleted

This GSP (maximum test load) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-16.3(3).OPT1.2025.GR6 – Deleted

This GSP (minimum shaft diameter) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

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6-17.3(8).OPT1.2025.GR6 – Deleted

This GSP (Maximum test load) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-18.SA1.2025.GR6 – Deleted

This GSP (Shotcrete) was deleted. It was added to the 2025 Standard Specifications.

6-19.3(7)F.OPT1.2025.GR6 – Deleted

This GSP (crosshole sonic log testing) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-20.3(1)D.OPT1.2025.GR6 – Deleted

This GSP (Geotech considerations) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

6-21.SA1.2025.GR6 – Deleted

This GSP (Materials) was deleted. It was added to the 2025 Standard Specifications.

6-SA1.2026.GR6 – New GSP

This GSP (Polyester Concrete) – New requirements for a polyester concrete overlay.

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

N/A – no changes to Division 7 GSPs

DIVISION 8 - Miscellaneous Construction

8-01.2(9-14.6(4)A).OPT1.2025.GR8 – Deleted

This GSP (no wattles in check dams) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-01.3(6).OPT1.2025.GR8 – Deleted

This GSP (no wattle in check dams). and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-10.1.OPT1.GR1 – Renamed (was 8-10.1.OPT1.NEW.GR8)

This GSP (Linear Delineation panels) was renamed.

8-10.2.OPT1.GR1 – Renamed (was 8-10.2.OPT1.NEW.GR8)

This GSP (Linear Delineation panels) was renamed.

8-10.3.OPT1.GR1 – Renamed (was 8-10.3.OPT1.NEW.GR8)

This GSP (Linear Delineation panels) was renamed.

8-10.4.OPT1.GR1 – Renamed (was 8-10.4.OPT1.NEW.GR8)

This GSP (Linear Delineation panels) was renamed.

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8-10.5.OPT1.GR1 – Renamed (was 8-10.5.OPT1.NEW.GR8)
This GSP (Linear Delineation panels) was renamed.

8-12.2.OPT6.GB8 – Deleted
This GSP (Cable fence) was deleted. It was added to the 2025 Standard Specifications.

8-12.3.OPT1(A).GB8 – Deleted
This GSP (Cable fence) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-12.3.OPT1(B).GB8 – Deleted
This GSP (Cable fence) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-12.3.OPT1(C).GB8 – Deleted
This GSP (Cable fence) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-12.4.OPT1.GB8 – Deleted
This GSP (Cable fence) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

8-12.5.OPT1.GB8 – Deleted
This GSP (Cable fence) was deleted. It was added to the 2025 Standard Specifications.

8-20.2(9-29.6(2)).OPT1.2025.GR8 – Deleted
This GSP (Keeper plate) and the associated instructions were deleted. It was added to the 2025 Standard Specifications.

DIVISION 9 – Materials

STDPLANS.GR9 – Revised
Revised to chapter changes with the new publication to the Standard Plans.

Deleted GSPs

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

1-07.11(2).INST1.GR1	1-10.3(3)B(9-35.4).GR1
1-07.11(2).OPT1.2025.GR1	1-10.3(3)B(9-35.4).POT1.2025.GR1
1-07.18(5).OPT2.2025.GR1	1-10.4(2).OPT1.GR1
1-08.1(7)A.INST1.GR1	1-10.4(3).INST1.GR1
1-08.1(7)A.OPT1.2025.GR1	1-10.4(3).OPT1.FR1
1-08.1(7)C.INST1.GR1	5-04.2(9-03.21(1)A).GR5
1-08.1(7)C.OPT1.2025.GR1	5-04.2(9-03.21(1)A).OPT1.2025.GR5
1-08.1(9)B.INST1.GR1	6-02.3(5)G.INST1.GR6
1-08.1(9)B.OPT1.2025.GR1	6-02.3(5)G.OPT1.2025.GR6
1-10.1(1).INST1.GR1	6-02.3(25)L2.INST1.GR6
1-10.3(3)A.INST1.GR1	6-02.3(25)L2.OPT1.2025.GR6
1-10.3(3)A.OPT1.2025.GR1	6-10.3(5).INST2.GR6

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6-10.3(5).OPT2.2025.GR6
6-11.2.INST1.GR6
6-11.2.OPT1.2025.GR6
6-11.3.INST1.GR6
6-11.3.OPT1.2025.GR6
6-11.4.INST1.GR6
6-11.4.OPT1.2025.GR6
6-11.5.INST1.GR6
6-11.5.OPT1.2025.GR6
6-15.3(8).INST1.GR6
6-15.3(8).OPT1.2025.GR6
6-16.3(3).INST1.GR6
6-16.3(3).OPT1.2025.GR6
6-17.3(8).INST1.2025.GR6
6-17.3(8).OPT1.2025.GR6
6-18.SA1.2025.GR6
6-19.3(7)F.INST1.GR6
6-19.3(7)F.OPT1.2025.GR6
6-20.3(1)D.INST1.GR6
6-20.3(1)D.OPT1.2025.GR6
6-21.SA1.2025.GR6
8-01.2(9-14.6(4)A).GR8
8-01.2(9-14.6(4)A).OPT1.2025.GR8
8-01.3(6).INST1.GR8
8-01.3(6).OPT1.2025.GR8
8-12.2.OPT6.GB8
2-12.3.INST1.GR8
8-12.3.OPT1.GB8
8-12.3.OPT1(A).GB8
8-12.3.OPT1(B).GB8
8-12.3.OPT1(C).GB8
8-12.4.INST1.GR8
8-12.4.OPT1.GB8
8-12.5.OPT6.GB8
8-20.2(9-29.6(2)).GR8
8-20.2(9-29.6(2)).OPT1.2025.GR8

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1	INTRO.GR1	Special Provisions
2		(November 20, 2023 <u>September 3, 2024</u>)
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	(Reference information)
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
53		project limits and as-built plans for all bridges which are
54		being modified as part of the Project scope including
55		but not limited to widening, repair, retrofit (rail, seismic,

etc.), painting, overlay and paving. Structural Reference Information should be listed by bridge number. For projects including culverts or bridges associated with water crossings, include the Final Hydraulic Design Report. When applicable, include the project electronic design files.

1-02.6.GR1 Preparation of Proposal

1-02.6.INST1.GR1 (Item number 3 in the second paragraph of Section 1-02.6 is supplemented with the following)
Must use once preceding any of the following:

1-02.6.OPT1.FR1 (Maximum Funds Available)
(September 3, 2019)
Use in Connecting Washington projects. Contact your Region Program Management Office and CPDM to determine whether to use this GSP and establish a maximum funds available amount.
The list of Connecting Washington projects is available at <http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/ConnectingWashington.pdf>.
Use of this GSP requires approval from the HQ Construction Office.
(1 fill-in)
Fill-in #1 is the maximum funds available for this Contract.

1-02.6.OPT2.GR1 (Subcontractor list not required with bid)
(The fourth and fifth paragraphs of Section 1-02.6 are deleted)
(November 20, 2023)
Use in all projects with estimated cost of \$1,000,000 or less.
Do not use with 1-02.6.OPT8.2026.GR1.

1-02.6.INST2.GR1 (The fourth paragraph of Section 1-02.6 is supplemented with the following)
Must use once preceding any of the following:

1-02.6.OPT8.2026.GR1 (Subcontractor List)
(September 3, 2024)
Use in all projects requiring a subcontractor list.
Do not use with 1-02.6.OPT2.GR1.

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

1-02.6.OPT3.~~NEW~~.GR1 (Delivery of DBE forms)
(~~November 20, 2023~~ September 3, 2024)
Use in Federal Aid projects with DBE Condition of Award (COA) goals.

Must use with **1-02.9.OPT1.GR1**, **1-03.3.OPT2.GR1**, and **1-07.11.OPT3.FR1**

1	1-02.6.OPT4.GR1	(Small and Veteran-Owned Business Enterprises (SVBE) and Minority and Women’s Business Enterprises (MWBE) Documentation) (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 1-02.9.OPT2.GR1 and 1-07.11.OPT6.FR1 .
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11	1-02.6.OPT5. NEW .FR1	(Alternative Bids) (September 7, 2021) Use in projects when the proposal is to contain alternate items for bidding. Fill-ins consist of a brief description of the portion of the project or of the work that would be subject to alternative bidding. Repeat the "Alternative" paragraphs if the project consists of more than two alternatives. (4 or more fill-ins)
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20	1-02.6.OPT6.FR1	(Cumulative Alternate Bidding) (August 3, 2015) Use in contracts when the award process is modified to include cumulative Alternates. The region shall determine and notify the Ad and Award office of the Funds Available. The bid items shall be segregated into a Base Bid and Alternates as appropriate. Fill-ins consist of a brief description of the portion of the project or of the work that is included in the noted Alternates. The specification language may be adjusted to suit the number of Alternates.
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31		Use of this GSP requires the approval of the HQ Ad and Award Manager and HQ Assistant State Design Engineer. When requesting approval, provide documentation of funds available, and that Approvals consistent with Design Manual Chapter 300 exist for the Base project and each potential combination of Base plus Alternates. (1 or more fill-ins)
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39	<u>1-02.6.OPT7.GR1</u>	<u>(Bidder Questionnaire)</u>
40		<u>(September 3, 2024)</u>
41		<u>Use in all Federally funded projects.</u>
42		
43	1-02.9.GR1	Delivery of Proposal
44		
45	1-02.9.INST1.GR1	(Section 1-02.9 is supplemented with the following) Must use once preceding any of the following:
46		
47		
48	1-02.9.OPT1.GR1	(DBE document submittal) (November 20, 2023) September 3, 2024)
49		Use in projects that require the use of the Disadvantaged Business Enterprise (DBE) Condition of Award (COA) Participation Goal Requirement. Must use with 1-02.6.OPT3.NEW.GR1 , 1-03.3.OPT2.GR1 , and 1-07.11.OPT3.FR1 .
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1 1-02.9.OPT2.GR1 (SVBE document submittal)
2 (November 20, 2023)
3 Use in all State funded (100%) projects with an estimated
4 cost of \$250,000 or more and requiring the use of Small
5 Business Enterprise (SBE) or Veteran-Owned Business
6 (VOB) enforceable COA goals and MWBE voluntary goals.
7 Must use with **1-02.6.OPT4.GR1, and 1-07.11.OPT6.FR1.**
8

9 **1-02.12.GR1 Public Opening of Proposal**

10
11 1-02.12.INST1.GR1 (Section 1-02.12 is supplemented with the following)
12 Must use once preceding any of the following:

13
14 1-02.12.OPT1.FR1 (Date of Opening Bids)
15 (August 3, 2015)
16 Do not use in projects scheduled for Region bid openings.
17 Use in all projects scheduled for bid openings in Olympia.
18 Do not use with **1-02.12.OPT2.FR1.**
19 (1 fill-in)
20 Bid opening is held on Wednesday, except in the event of
21 holidays. Should a holiday be observed on the Monday
22 prior to bid opening, bid opening will be held on Thursday
23 of that same week. Contact the HQ Contract Ad & Award
24 Office if additional guidance is necessary.
25

26 1-02.12.OPT2.FR1 (Date of Opening Bids for Region Bid Openings)
27 (October 3, 2022)
28 Do not use in projects scheduled for bid opening in
29 Olympia.
30 Use in all projects scheduled for Region bid openings.
31 Do not use with **1-02.12.OPT1.FR1.**
32 (3 fill-ins)
33 Fill-in #1 is the name of the facility where the bid opening
34 will be held.
35 Fill-in #2 is the address of the facility where the bid opening
36 will be held.
37 Fill-in #3 is the bid opening date.
38

39 **1-02.13.GR1 Irregular Proposals**

40
41 1-02.13.INST1.GR1 (Item 1j of Section 1-02.13 is revised to read:)
42 Must use once preceding any of the following:
43

44 1-02.13.OPT1.2026.GR1 (Bidder Questionnaire)
45 (September 3, 2024)
46 Use in all Federal Aid projects.
47

48 1-02.INST1.GR1 (Section 1-02 is supplemented with the following)
49 Must use once preceding any of the following:
50

51 1-02.OPT1.GR1 (Protest Procedures)
52 (September 7, 2021)
53 Include in all contracts with Federal Transit Administration
54 (FTA) funding. Typically only applies to Ferry System and
55 Sound Transit projects.

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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)
(July 2, 2024)
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>.

1-04.GR1 Scope of the Work

**1-04.2.GR1 Coordination of Contract Documents, Plans, Special
Provisions, Specifications, and Addenda**

1-04.2.INST1.GR1 (Section 1-04.2 is supplemented with the following)
Must use once preceding any of the following:

1		
2	1-04.2.OPT1.GR1	(Unifier)
3		(November 20, 2023)
4		Use in all projects unless approved for omission by Region
5		Construction.
6		
7	1-04.5.GR1	Procedure and Protest by the Contractor
8		
9	1-04.5.INST1.GR1	(Section 1-04.5 is supplemented with the following)
10		Must use once preceding any of the following:
11		
12	1-04.5.OPT1.GR1	(Partnering)
13		(January 13, 2021)
14		Use in all projects with an Engineer's estimate of \$5 million
15		or greater, and/or Contracts exceeding 200 working days.
16		At the discretion of the Region, may be used in projects
17		with lesser cost and duration where the project complexity,
18		scope of work, or project conditions support the need to
19		host a Project Specific Partnering workshop. Deletion of
20		this item requires Region Construction Engineer approval.
21		
22	1-05.GR1	Control of Work
23		
24	1-05.3.GR1	Working Drawings
25		
26	1-05.3.INST1.GR1	(Section 1-05.3 is supplemented with the following)
27		Must use once preceding any of the following:
28		
29	1-05.3.OPT2.GR1	(Right/Left Designation)
30		(October 3, 2022)
31		Use in all WSF projects.
32		
33	1-05.3.OPT3.GR1	(Work Plan)
34		(October 3, 2022)
35		Use in all WSF projects.
36		
37	1-05.4.GR1	Conformity With and Deviations from Plans and Stakes
38		
39	1-05.4.INST1.GR1	(Section 1-05.4 is supplemented with the following)
40		Must use once preceding any of the following:
41		
42	1-05.4.OPT1.GR1	(Contractor Surveying - Structure)
43		(February 6, 2023 September 3, 2024)
44		Use in projects requiring the Contractor to do all surveying
45		needed for bridges, buried structures, walls, or marine
46		structures. May be edited to retain portions of surveying for
47		WSDOT crews but editing to assign additional work to the
48		Contractor requires HQ Construction Office approval. Do
49		not use for bridge deck paving existing surfacing profile
50		work (already covered by Section 6-08.3(2)). Do not use for
51		concrete overlay existing surfacing profile work (already
52		covered by Section 6-21.3(4) or 6-22.3(4) depending on
53		the type of overlay).
54		
55	1-05.4.OPT2.GR1	(Contractor Surveying - Roadway)

1		(January 13, 2021)
2		Use in projects requiring the Contractor to do all surveying
3		needed for roadway items. May be edited to retain portions
4		of surveying for WSDOT crews but editing to assign
5		additional work to the Contractor requires HQ Construction
6		Office approval. Must also use 2-03.4.OPT2.GR2 if
7		roadway excavation or embankment is included in the
8		project.
9		
10	1-05.4.OPT3.GR1	(Licensed Surveyors)
11		(April 4, 2011)
12		Include in projects requiring the Contractor to supply
13		professional land surveyors to establish right-of-way lines
14		and other monuments. Use of this GSP for Local Agency
15		projects requires the approval of the HQ Local Programs
16		Office.
17		
18	1-05.4.OPT4.GR1	(Contractor Surveying – ADA Features)
19		(March 9, 2023)
20		Use in all projects that require any ADA work.
21		Must use with 8-14.3.OPT2.GR8 and 8-14.3.OPT3.GR8 .
22		
23	1-05.9.GR1	Equipment
24		
25	1-05.9.INST1.GR1	(Section 1-05.9 is supplemented with the following)
26		Must use once preceding any of the following:
27		
28	1-05.9.OPT1.FR1	(Machine control grading)
29		(April 7, 2008)
30		Use in eligible projects that require extensive grading if
31		adequate design files have already been created during the
32		design process. Eligible projects are those that require
33		large areas of linear grading or mass quantities of roadway
34		excavation, and are in locations where satellite signals are
35		not obstructed by natural or manmade feature (such as
36		highly mountainous areas or urban canyons). Requires
37		approval of Region Construction Manager.
38		
39		Must also use 1-05.4.OPT2.GR1 (Contractor Surveying –
40		Roadway).
41		(2 fill-ins) The first fill-in describes the type of data to be
42		provided (cross sections Sta. A to B, digital terrain model,
43		etc.) and the file format of the electronic data. The second
44		fill-in is the name and address of the Project Engineer
45		administering the contract.
46		
47	1-05.9.OPT2.FR1	(Class A Noxious Weeds)
48		(March 9, 2023)
49		RCW 17.10.145 requires state agencies to control Class A
50		noxious weeds. Apply this GSP if the project's SEPA
51		checklist and/or the Region Landscape Architect determine
52		a Class A noxious weed is present in the upland.
53		Fill-in #1 will contain the name of the noxious weed or
54		aquatic invasive species.

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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:

Please use the following Table to determine which GSPs to use. If you have FTA funding, Contact HQ Construction for advice on which GSPs to use:

		Federal Funding Amount	
		Less than \$500K in Federal Aid Aggregate total for all phases	\$500K or more in Federal Aid Aggregate total for all phases.
Funding Source	No federal aid on any phases (Only State and/or Local Funds are being used for all phases)	Ø	Ø
	Federal aid on CN phase only (Only State and/or Local funds are being used for all other phases)	BA	BABA
	Federal aid on any phase except CN phase (Only State and/or Local funds are being used on the CN phase)	BA	BA

	Federal aid on CN phase and at least one other phase of the Project	BA	BABA
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Ø = Neither Buy America nor Buy America/Build America Specs apply

BA = Buy America applies. Use the 1-06.OPT1 GSPs. (Iron & Steel Only)

BABA=Buy America/Build America applies. Use 1-06.OPT2 GSPs (all materials including Iron & Steel)

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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.

Use if “BA” GSPs are required in the table above.

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.

Use in projects that use 1-06.OPT1(A).GR1 when steel or iron in both permanent and temporary installations will be required.

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)

When the “BA” GSPs are required in the table above, this GSP may be used instead of 1-06.OPT1(A).GR1 in any Contract at each Region’s discretion 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

1 alternate bid item is Item Name - Domestic Steel and Item
2 Name - Foreign Steel.
3
4 (6 fill-ins) (\$1\$\$ and \$\$6\$\$ will be the same and \$\$2\$\$
5 and \$\$5\$\$ will be the same)
6
7 1-06.INST1.GR1 (Section 1-06 is supplemented with the following)
8 Must use once preceding any of the following:
9
10 1-06.OPT2.GR1 Build America/Buy America
11 Must use once preceding any of the following:
12
13 1-06.OPT2(A).GR1 (Build America/Buy America)
14 (December 20, 2023)
15 Requires the use of domestically sourced Steel, Iron, and
16 Construction Materials in accordance with Public Law 117-
17 58, div G §§70901-52.
18
19 Must use if “BABA” GSPs are required in the table above.
20
21 1-06.OPT2(B).FR1 (Build America/Buy America)
22 (October 5, 2022)
23 Specification used for providing a list of temporary steel,
24 iron or other construction materials that are excluded from
25 Build America/Buy America requirements.
26
27 Use in Projects with 1-06.OPT2(A).GR1 when both
28 permanent and temporary installations will be required
29 **AND** the Project is federal funded for construction.
30
31 Must also use **1-06.OPT2(A).GR1**
32 (1 fill-in) List of temporary steel, iron or other construction
33 materials.
34
35 **1-06.1.GR1 Approval of Materials Prior to Use**
36
37 1-06.1.INST1.GR1 (Section 1-06.1 is supplemented with the following)
38 Must use once preceding any of the following:
39
40 1-06.1.OPT1.GR1 (April 3, 2017)
41 May be used on any project with Construction Project
42 Engineer, Region Construction Engineering Manager, or
43 Assistant Regional Administrator approval. Should be
44 considered on projects that contain large or numerous
45 electrical or ITS components.
46
47 **1-07.GR1 Legal Relations and Responsibilities to the Public**
48
49 **1-07.1.GR1 Laws to be Observed**
50
51 1-07.1.INST1.GR1 (Section 1-07.1 is supplemented with the following)
52 Must use once preceding any of the following:
53
54 1-07.1.OPT1.GR1 Ferry Tolls and Service
55 (October 3, 2022)

1		Use in all WSF projects. At the discretion of the Region,
2		may also be used in highway projects that have a close
3		proximity to WSF Terminals.
4		
5	1-07.1.OPT2.GR1	Ferry Terminal Access and Security
6		(October 3, 2022)
7		Use in all WSF projects. Provides access requirements and
8		restrictions at WSF terminals such as Contractor employee
9		ID lists and cards, parking, material delivery, and
10		equipment identification.
11		
12		
13		
14	1-07.1.OPT4.FR1	Noise Exemption/Variance Conditions
15		(October 3, 2022)
16		Use in projects that have been issued a local agency noise
17		variance or exemption and there is a requirement for
18		notification of property owners by mail. Requires Region
19		Construction Approval.
20		(6 fill-ins)
21		Fill-in #1 is the name of the local jurisdiction(s) issuing the
22		exemption/variance
23		Fill-in #2 is the number of nights allowed
24		Fill-in #3 is the date the exemption/variance expires
25		Fill-in #4 is the distance from the project limits the nighttime
26		notices are to be mailed
27		Fill-in #5 is any additional requirements added to the
28		exemption/variance
29		Fill-in #6 is the number of days the notices need to be
30		mailed before work starts
31		
32	1-07.1.OPT5.FR1	Nighttime Construction Work Requirements
33		(October 3, 2022)
34		Use in projects when a local agency noise variance has not
35		been obtained but restrictions are placed on the contract to
36		mitigate nighttime construction noise. Requires Region
37		Construction Approval.
38		(3 fill-ins)
39		Fill-in #1 is the distance from the project limits the nighttime
40		notices are to be mailed to
41		Fill-in #2 is any additional requirements added to the
42		project
43		Fill-in #3 is the number of days the notices need to be
44		mailed before work starts
45		
46	1-07.1.OPT6.FR1	Noise Exemption/Variance Conditions
47		(October 3, 2022)
48		Use in projects that have been issued a local agency noise
49		variance or exemption. This can be used for rural (not
50		heavily populated) areas and where notification of property
51		owners is not required by mail.
52		(5 fill-ins)
53		Fill-in #1 and #2 is the name of the local jurisdiction(s)
54		issuing the exemption/variance
55		Fill-in #3 is the number of nights allowed

Fill-in #4 is the date the exemption/variance expires
Fill-in #5 is other requirements

1-07.1(2).GR1 Health and Safety

1-07.1(2).INST1.GR1 (Section 1-07.1(2) is supplemented with the following)
Must use once preceding any of the following:

1-07.1(2).OPT1.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.
- 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(2).OPT2.GR1 (Diving and Workboat Safety Requirements)
(October 3, 2022)
Use in all WSF projects. Provides communication and safety protocols for all diving and work boat activities. Also provides requirements and restriction for working around ferry slips.

1-07.1(2).OPT3.FR1 (Lead Health Protection Program)
(March 9, 2023)
Use in projects when lead based paint on existing structures and non-structural items will be disturbed.
(1 fill-in).

1-07.3.GR1 Fire Prevention and Merchantable Timber Requirements

1-07.3.INST1.GR1 (Section 1-07.3 is supplemented with the following)
Must use once preceding any of the following:

1	1-07.3.OPT1.GR1	(Forest Service Provisions)
2		(August 2, 2004)
3		Use in projects that require work in or adjacent to National
4		Forest Reservations.
5		
6		Must also use Forest Service Provisions Appendix located
7		at:
8		http://wsdot.wa.gov/publications/fulltext/ProjectDev/GSPsP
9		DF/1-07.3.Appendix.pdf. Do not include this Appendix in
10		the run-list. On the Final Check sheet (Form 221-019EF)
11		under Contract Make-Up check the box Forest Service
12		Provisions.
13		
14	1-07.3(2).GR1	Merchantable Timber Requirements
15		
16	1-07.3(2).INST1.GR1	(Section 1-07.3(2) is supplemented
17		with the following)
18		Must use once preceding any of the following:
19		
20	1-07.3(2).OPT1.GR1	(Timber Export Restrictions)
21		(April 7, 2008)
22		Use in projects that have one log truck load
23		(approximately 5,000 board feet) or more of
24		merchantable timber that is to be cut.
25		
26	1-07.4.GR1	Sanitation
27		
28	1-07.4(2).GR1	Health Hazards
29		
30	1-07.4(2).INST1.GR1	(Section 1-07.4(2) is revised to read)
31		Must use once preceding any of the following:
32		
33	1-07.4(2).OPT1.FR1	(Site cleanup of biological and physical hazards)
34		(August 7, 2017)
35		Use in all projects known to be inhabited by transients,
36		and all projects known to contain biological or physical
37		hazards such as drug paraphernalia, human
38		excrement, etc.
39		(1 fill-in)
40		
41	1-07.5.GR1	Environmental Regulations
42		
43	1-07.5.INST1.GR1	(Section 1-07.5 is supplemented with the following)
44		Must use once preceding any of the following:
45		
46	1-07.5.OPT1.GR1	Environmental Commitments
47		(September 20, 2010)
48		An Environmental Commitment Meeting is expected as
49		outlined in Division 4 of the Plans Preparation Manual
50		
51		Must use with 1-07.5.OPT2.GR1 . Must use once preceding
52		any of the following Environmental Commitment GSPs:
53		
54	1-07.5.OPT1(A).FR1	(Notification of ground disturbing activities)
55		(August 4, 2014)

1		Use if the project includes a requirement for Cultural Resource Monitoring.
2		(1 fill-in)
3		The fill-in can either be a station reference(s), plan sheet(s), or a certain depth below an elevation control point, etc.
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8	1-07.5.OPT1(B).FR1	(Notification of work in sensitive areas)
9		(April 1, 2019)
10		Use if work is authorized in environmentally sensitive areas. Use the Environmental Commitment Meeting to determine applicability of this provision for the project.
11		(1 fill-in - choose the largest number of days noted in your permits/environmental documentation or 15 days, whichever is greater.)
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17	1-07.5.OPT1(C).FR1	(Setback distance)
18		(April 1, 2019)
19		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.
20		(3 Fill-ins)
21		Fill-in #1 defines the contractor activity that is not allowed (e.g. staging, storing material, maintaining equipment, etc.)
22		Fill-in #2 defines the minimum distance between the contractor activity and the sensitive area.
23		Fill-in #3 defines the sensitive area(s).
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33	1-07.5.OPT2.GR1	Payment
34		(August 3, 2009)
35		Must use with 1-07.5.OPT1.GR1 .
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37	1-07.5(1).GR1	General
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39	1-07.5(1).INST1.GR1	(Section 1-07.5(1) is supplemented with the following)
40		Must use once preceding any of the following:
41		
42	1-07.5(1).OPT1.FR1	In-Water Operations Along Marine Shorelines
43		(October 3, 2022)
44		Use in all WSF Projects, and any projects where floating equipment or vessels will be operating or mooring near marine shorelines.
45		(2 fill-ins)
46		Fill-in #1 is State or Federal Agency issuing permit or approval.
47		Fill in #2 is allowable work dates.
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52	1-07.5(2).GR1	State Department of Fish And Wildlife
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54	1-07.5(2).INST1.GR1	(Section 1-07.5(2) is supplemented with the following)
55		Must use once preceding any of the following:

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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

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.

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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

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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 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)

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(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. If this GSP is used, please ensure that the Plans indicate where the 100 year floodplain is. Do not use for Emergency Projects.

1-07.5(6).OPT1(C).FR1 (Floating work platforms)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #15. Fill-in #1 is the maximum number of days. Work with the Region Environmental Coordinator.
(1 fill-in)

1-07.5(6).OPT1(D).GR1 (Truck chute cleanout areas)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #27.

1-07.5(6).OPT1(E).GR1 (Creosote-treated wood restrictions)
(April 2, 2018)
Use in projects applying Programmatic Biological Assessment Minimization Measure #69.

1-07.5(6).OPT1(F).GR1 (Pile removal methods)
(April 2, 2018)

1		Use in projects applying Programmatic Biological Assessment Minimization Measure #71.
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4	1-07.5(6).OPT1(G).GR1	(Removed pile requirements)
5		(April 2, 2018)
6		Use in projects applying Programmatic Biological Assessment Minimization Measure #73.
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9		This GSP should pertain only to non-bridge projects (i.e., culverts) because treated wood containment for bridges is covered by Section 2-02.3(2)A1 of the Standard Specifications.
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14	1-07.5(6).OPT1(H).FR1	(Pile driving sound pressure monitoring)
15		(April 2, 2018)
16		Use in projects applying Programmatic Biological Assessment Minimization Measure #74.
17		Fill-in #1 is the maximum decibel level.
18		(1 fill-in)
19		
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21	1-07.5(6).OPT1(I).FR1	(Temporary light restriction)
22		(April 2, 2018)
23		Use in projects applying Programmatic Biological Assessment Minimization Measure #76.
24		Fill-in #1 is the waterbody name that has ESA listed species.
25		(1 fill-in)
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29	1-07.5(6).OPT1(J).FR1	(Night work required - 2 hrs after sunset to 2 hrs before sunrise)
30		(April 2, 2018)
31		Use in projects applying Programmatic Biological Assessment Minimization Measure #82.
32		Fill-in #1 is the Washington city nearest to the project location.
33		(1 fill-in)
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38	1-07.5(6).OPT1(K).FR1	(Night work required - 1 hr after sunset to 1 hr before sunrise)
39		(April 2, 2018)
40		Use in projects applying Programmatic Biological Assessment Minimization Measure #83.
41		Fill-in #1 is the Washington city nearest to the project location.
42		(1 fill-in)
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47	1-07.5(6).OPT1(L).FR1	(Night work required - cease work 2 hours before sunrise)
48		(April 2, 2018)
49		Use in projects applying Programmatic Biological Assessment Minimization Measure #84.
50		Fill-in #1 is the Washington city nearest to the project location.
51		(1 fill-in)
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1	1-07.5(6).OPT1(M).FR1	(Night and day work – sunrise and sunset restrictions)
2		(April 2, 2018)
3		Use in projects applying Programmatic Biological Assessment Minimization Measure #85.
4		Fill-in #1 is the Washington city nearest to the project location.
5		
6	1-07.5(6).OPT1(N).FR1	(Night and day work – sunrise restrictions only, no sunset restrictions)
7		(April 2, 2018)
8		Use in projects applying Programmatic Biological Assessment Minimization Measure #86.
9		Fill-in #1 is the Washington city nearest to the project location.
10		
11	1-07.5(6).OPT1(O).GR1	(Trash and food waste collection plan)
12		(April 2, 2018)
13		Use in projects applying Programmatic Biological Assessment Minimization Measure #87.
14		
15	1-07.5(6).OPT1(P).FR1	(Day work required April 1 through Sept 22)
16		(September 3, 2019)
17		Use in projects applying Programmatic Biological Assessment Minimization Measure #93.
18		Fill-in #1 is the type of visual or noisy work that is not allowed.
19		Fill-in #2 is the Washington city nearest to the project location.
20		(2 fill-ins)
21		
22	1-07.5(6).OPT1(Q).GR1	(Galvanizing and zinc coating restrictions)
23		(September 7, 2021)
24		Restricts the use of Galvanized or Zinc Coatings below the 100-year water level. Contact Region Biologist for direction on use.
25		
26	1-07.5(6).OPT2.GR1	Payment
27		(April 2, 2018)
28		Must use with 1-07.5(6).OPT1.GR1 .
29		
30	1-07.5(6).OPT3.FR1	(Bird Protection and Monitoring)
31		(November 2, 2022)
32		Use in projects that require a Project-specific Bird Protection Plan. Consult Region biologist for assistance.
33		(2 fill-ins)
34		Fill-in #1 defines the birds identified for protection.
35		Fill-in #2 identifies the Appendix in which the MTBA Assessment Report will be located.
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38	1-07.6.GR1	Permits and Licenses
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40	1-07.6.INST1.GR1	(Section 1-07.6 is supplemented with the following)
41		Must use once preceding any of the following:
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2	1-07.6.OPT1.FR1	Permits and Licenses
3		(January 2, 2018)
4		An Environmental Commitment Meeting is expected as
5		outlined in Division 4 of the Plans Preparation Manual.
6		
7		*This GSP requires editing the data located in the permit
8		table located at:
9		http://www.wsdot.wa.gov/publications/fulltext/projectdev/En
10		vironmentalDocumentation/1-07.6.OPT2.FR1_Table.docx ,
11		copying and pasting the revised table inside this fill-in area.
12		This needs to be edited prior to insertion and final printing
13		to delete all permits that are not required for the project and
14		insert additional permits not part of the original table. All
15		permits will be attached as an Appendix. Include the
16		Department of Ecology permit coverage letter with the
17		CSWGP. If using a Nationwide Permit, attach the most
18		recent U.S. Army Corps of Engineers Nationwide Permit
19		Verification Letter, conditions, and permit drawings.
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21		(1 fill-in)
22		
23	1-07.6.OPT3.GB1	United States Coast Guard
24		Must use once preceding any of the following:
25		
26	1-07.6.OPT3(A).FB1	United States Coast Guard
27		(January 2, 2018)
28		Use in projects over navigable waters when the Coast
29		Guard is involved.
30		(2 fill-ins)
31		
32	1-07.6.OPT3(B).GB1	United States Coast Guard
33		(September 3, 2019)
34		Use in all projects involving bridge work, including
35		painting, in or near the navigable portion of a waterway
36		when 1-07.6.OPT3(A).FB1 is not used.
37		
38	1-07.7.GR1	Load Limits
39		
40	1-07.7.INST1.GR1	(Section 1-07.7 is supplemented with the following)
41		Must use once preceding any of the following:
42		
43	1-07.7.OPT3.FR1	(List of haul routes provided)
44		(March 13, 1995)
45		Use when WSDOT provides a materials source and roads
46		other than State highways are designated as the haul
47		route.
48		(4 fill-ins)
49		
50	1-07.7.OPT4.FR1	(Restrictions on provided haul routes)
51		(March 13, 1995)
52		Use with 1-07.7.OPT3.FR1 when the agreement
53		stipulates additional requirements.
54		(1 fill-in)
55		

1	1-07.7.OPT5.GR1	(Contractor provides haul routes for material sources not designated to come from the provided source)
2		(March 13, 1995)
3		Use in all projects where WSDOT provides a source of materials for part or all required materials.
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7	1-07.7.OPT6.GR1	(Contractor provides haul routes for material sources)
8		(March 13, 1995)
9		Use in projects when no source of materials is provided.
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11	1-07.9.GR1	Wages
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13	1-07.9(1).GR1	General
14		
15	1-07.9(1).INST1.GR1	(Section 1-07.9(1) is supplemented with the following)
16		Must use once preceding any of the following:
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18	1-07.9(1).OPT1.GR1	(January 10, 2024)
19		Use in all Federally funded projects consisting of highway construction and/or landscaping.
20		
21		
22		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:
23		https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf .
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29	1-07.9(1).OPT2.FR1	(January 10, 2024)
30		Use in Federally funded projects consisting of both highway and building construction.
31		(1 fill-in)
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34		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:
35		https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf .
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41	1-07.9(1).OPT3.FR1	(May 11, 2010)
42		Use in Federally funded projects consisting of only building construction.
43		(1 fill-in)
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46		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:
47		https://www.dol.gov/whd/programs/dbra/docs/memo-131.pdf .
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53	1-07.9(1).OPT5.FR1	(January 10, 2024)
54		Use in all Federally funded projects consisting of both highway and heavy construction.
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(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 10, 2024)
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~~ **September 3, 2024**)
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:

1-07.11.OPT1.GR1 Requirement for Affirmative Action to Ensure Equal Employment Opportunity
(October 3, 2022)
Use in Federally funded projects exceeding \$10,000 in contract cost.

1-07.11.OPT2.GR1 Disadvantaged Business Enterprise (DBE) Participation
(October 3, 2022)
**REQUIREMENTS PERTAINING TO "No DBE Goals"
DO NOT USE UNTIL FURTHER NOTICE.**

1-07.11.OPT3.FR1 Disadvantaged Business Enterprise (DBE) Participation
(~~October 3, 2022~~ **September 3, 2024**)
Requires a CONDITION-OF-AWARD GOAL
Use in selected Federal Aid projects with DBE Condition of Award (COA) goals. The final COA DBE Goal is to be

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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.

Must use with **1-02.6.OPT3.NEW.GR1 1-02.9.OPT1.GR1**, and **1-03.3.OPT2.GR1**

(1 fill-in) The fill-in shall be one of the following formats:

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

Do not use with 1-07.11.OPT7.GR1 or 1-07.11.OPT8.FR1.

1-07.11.OPT4.FR1

Special Training Provisions
(November 2, 2022)
Use in all Federal Aid projects with more than 50 working days that contain Training (Obtain Training Decision & Fill-in from the Office of Equity and Civil Rights).
(1 fill-in)

Note: Fill-in is Total Hours.

1-07.11.OPT6.FR1

Small and Veteran-Owned Business Enterprises (SVBE) and Minority and Women's Business Enterprise (MWBE) Participation
(October 3, 2022)
Use in all State funded (100%) projects with an estimated cost of \$250,000 or more. Contact the Office of Equity and Civil Rights at GoalRequests@wsdot.wa.gov for determination of goals.
(2 fill-ins)
Fill-in #1 is the enforceable COA Goal for Small Business Enterprises
Fill-in #2 is the enforceable COA Goal for Veteran-Owned Businesses
Must also include **1-02.6.OPT4.GR1 and 1-02.9.OPT2.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(2).GR1~~ **Contractual Requirements**

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~~1-07.11(2).INST1.GR1 (Section 1-07.11(2) is supplemented with the following)
Must use once preceding any of the following:~~

~~1-07.11(2).OPT1.2025.GR1 (January 24, 2024)
Use in all WSDOT projects. (Use of this GSP in Local
Agency projects is voluntary.)~~

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, 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.)

1-07.15.GR1 Temporary Water Pollution Prevention

1-07.15(1).GR1 Spill Prevention, Control, and Countermeasures Plan

1-07.15(1).INST1.GR1 (Section 1-07.15(1) is supplemented with the following)
Must use once preceding any of the following:

1-07.15(1).OPT1.GR1 Notification Requirements
(October 3, 2022)
Use in all WSF projects.

1-07.16.GR1 Protection and Restoration of Property

1-07.16(1).GR1 Private/Public Property

1-07.16(1)C.GR1 Private Property

1-07.16(1)C.INST1.GR1 (Section 1-07.16(1)C is supplemented with the following)
Must use once preceding any of the following:

1-07.16(1)C.OPT1.GR1 (October 3, 2022)
Use on projects where the Contractor is expected to be accessing R/W from adjacent properties. This provision requires Contractor to obtain permission to use adjacent properties and submit a Working Drawing.

1-07.16(1)C.OPT2.GR1 (October 3, 2022)

1 Use in all WSF projects. Requires the Contractor
2 to obtain permission to use adjacent properties.
3

4 **1-07.16(2).GR1 Vegetation Protection and Restoration**

5
6 1-07.16(2).INST1.GR1 (Section 1-07.16(2) is supplemented with the following)
7 Must use once preceding any of the following:
8

9 1-07.16(2).OPT1.GR1 (August 2, 2010)
10 Use in projects to specify preservation of existing
11 desirable vegetation.
12

13 **1-07.16(4).GR1 Archaeological and Historical Objects**

14
15 1-07.16(4).INST1.GR1 (Section 1-07.16(4) is supplemented with the following)
16 Must use once preceding any of the following:
17

18 1-07.16(4).OPT1.GR1 (December 6, 2004)
19 Use in projects when reconnaissance studies indicate
20 that there is the probability of finding cultural remains
21 within the project limits which will require monitoring the
22 project area during clearing, grubbing or excavation
23 operations. Requires a pay item.
24

25 **1-07.17.GR1 Utilities and Similar Facilities**

26
27 1-07.17.INST1.GR1 (Section 1-07.17 is supplemented with the following)
28 Must use once preceding any of the following:
29

30 1-07.17.OPT1.FR1 (April 2, 2007)
31 Use in projects where there are utilities within the R/W that
32 will not be adjusted, replaced or constructed by the utility
33 owner or its contractor during the prosecution of the work.
34 (1 fill-in)
35

36 (May use with **1-07.17.OPT2.FR1** if utilities other than
37 those described in this provision will be adjusted, replaced
38 or constructed by the utility owner during the prosecution of
39 the work.)
40

41 1-07.17.OPT2.FR1 (October 3, 2022)
42 Use in projects where there are utilities within the R/W and
43 those utilities will be adjusted, relocated or replaced by the
44 utility owner or its contractor during the performance of the
45 contract, or when the utility owner or its contractor will
46 construct new utilities within the R/W during the
47 performance of the contract.
48

49 (3 fill-ins) (\$\$1\$\$ is a description and location of the work
50 the each utility owner or its contractor will complete, and
51 the duration of that work or anticipated date of completion
52 by each utility or its contractor. \$\$2\$\$ is the name of the
53 utility company or companies, contact person, address,
54 telephone number and e-mail address or other contact
55 information as required to enable the Contractor to identify

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and contact each utility performing work during the life of the contract. \$\$\$ 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(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:

~~1-07.18(5).OPT2.2025.GR1 (Owners and Contractors Protective Insurance)
(November 20, 2023)
Use in all projects unless an increased or reduced 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** or **1-07.18(5).OPT2.GR1**.~~

1-07.18(5).OPT1.FR1 (Increased Insurance Requirement – Owners and Contractors Protective Insurance)
(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**.

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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 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

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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)
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.

1		Fill-in #6, #7, and #8 provide information on delays
2		when the Contracting Agency needs to make
3		adjustments due to actual traffic conditions.
4		
5	1-07.23(1).OPT6.GR1	(Accommodating Oversized Loads through the Work
6		Zone)
7		(April 14, 2014)
8		Use in projects on the following routes:
9		
10		I-5, I-405, I-90, I-82, I-182, SR 18, SR 167 and
11		US 395 (Tri-Cities to Spokane)
12		If there is the potential for the travelled way to be
13		reduced to less than 16 feet
14		
15		The designer is authorized to modify this specification
16		as necessary to coordinate with the rest of the contract
17		provisions that may contradict, provided the intent of
18		the GSP is maintained. The intent being; provide a
19		clear width of at least 16 feet to accommodate a wide
20		load, provide windows of time to accommodate a wide
21		load (if possible) and/or provide notice as described.
22		Changes in this specification should be coordinated
23		with Commercial Vehicle Services.
24		
25		This specification requires that the Engineer must
26		approve any proposed reduction of the travelled way to
27		a single lane with a clear width of less than 16 feet for
28		duration of 4 calendar days or more.
29		
30	1-07.23(1).OPT7.FR1	(Public Notification)
31		(October 3, 2022)
32		Use in projects where there are roadway, ramp, or
33		other closures.
34		(3 fill-ins)
35		Fill-in #1 is the number of working days signs are to be
36		installed for closures.
37		Fill-in #2 is the stakeholder(s) required to be notified.
38		Suggested notifications include Washington State
39		Patrol, Local fire/police/emergency services, city
40		engineering departments, affected school or transit, or
41		other stakeholder.
42		Fill-in #3 is the number of working days in advance that
43		notification is to occur.
44		
45	1-07.23(1).OPT8.FR1	(Maintenance and Protection of Ferry Traffic)
46		(October 3, 2022)
47		Use in single-slip offshore WSF projects.
48		(1 fill-in)
49		Fill-in #1 is the name of the ferry terminal
50		
51	1-07.23(1).OPT9.GR1	(Maintenance and Protection of Ferry Traffic)
52		(October 3, 2022)
53		Use in multi-slip offshore WSF projects.
54		
55	1-07.23(1).OPT10.GR1	(Fourth of July Holiday)

~~(October 3, 2022~~ **September 3, 2024**)

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:

1-07.28.OPT1.FR1 (Additional Requirements for Working with the Railroad)
(October 3, 2022)
Use in projects when the Contracting Agency Work is within 25 feet of the centerline of the tracks. 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.
(1 fill-in)
Fill-in #1 is the name of the railroad company

1-07.28.OPT2.FR1 (October 3, 2022)
Use in projects when the Contracting Agency has entered into an agreement with the Railroad Company the Work is within 25 feet of the centerline of the tracks. 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.
(1 fill-in)
Fill-in #1 is the appendix number of the agreement.

1-07.28.OPT3.FR1 (Construction Work by Railroad Company)
(October 3, 2022)
Use when the Railroad Company is to provide work with the railroad company forces. 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.
(1 fill-in)
Fill-in #1 is the work activities that will be provided by the railroad company.

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1-07.28(1).GR1 General

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

1-07.28(1).OPT1.FR1 (Contractor’s Right of Entry Agreement)
(October 3, 2022)
Use when the Contracting Agency has made a right of entry agreement with the Railroad. 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 Railroad Company’s contact for the Right of Entry Agreement.
Fill-in #2 is the appendix number for Contractor Right of Entry “SAMPLE”.

1-07.28(2).GR1 Submittals and Working Drawings

1-07.28(2).INST1.GR1 (Section 1-07.28(2) is supplemented with the following)
Must use once preceding any of the following:

1-07.28(2).OPT1.FR1 (October 3, 2022)
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)

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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 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 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.

1-08.GR1 Prosecution and Progress

1-08.1.GR1 Subcontracting

1-08.1.INST1.GR1 (Section 1-08.1 is supplemented with the following)
Must use once preceding any of the following:

1-08.1.OPT1.GR1 (Subcontracting)
(October 3, 2022)
Use in all Federally funded projects.

1-08.1.OPT3.GR1 Qualifications Of Building Contractor
(March 13, 1995)
Use in road construction projects that also include building construction.

~~1-08.1(7).GR1 Payments to Subcontractors and Lower Tier Subcontractors~~

~~1-08.1(7)A.GR1 Payment Reporting~~

~~1-08.1(7)A.INST1.GR1 (The first paragraph of Section 1-08.1(7)A is revised to read)
Must use once preceding any of the following:~~

~~1-08.1(7)A.OPT1.2025.GR1 (July 2, 2024)
Use in all projects.~~

~~1-08.1(7)C.GR1 Subcontractor Retainage~~

~~1-08.1(7)C.INST1.GR1 (The first sentence in the last paragraph of Section 1-08.1(7)C is revised to read)
Must use once preceding any of the following:~~

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~~1-08.1(7)C.OPT1.2025.GR1 (February 13, 2024)
Use in all projects.~~

~~**1-08.1(9).GR1** ————— **Required Subcontract Clauses**~~

~~**1-08.1(9)B.GR1** ————— **Clauses Required in Subcontracts of All Tiers**~~

~~1-08.1(9)B.INST1.GR1 (The second paragraph of Section 1-08.1(9)B is supplemented with the following)
Must use once preceding any of the following:~~

~~1-08.1(9)B.OPT1.2025.GR1 (January 24, 2024)
Use in all WSDOT projects. (Use of this GSP in Local Agency projects is voluntary.)~~

1-08.3.GR1 **Progress Schedule**

1-08.3(2).NEW.GR1 **General Requirements**

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

1-08.3(2)B.INST1.GR1 (Section 1-08.3(2) is supplemented with the following)
Must use once preceding any of the following:

1-08.3(2)B.OPT1.FR1 (Additional Required Activities on Progress Schedule)
(November 20, 2023)
Use in projects with milestones and/or activities that need to be shown on the progress schedule for successful schedule management. This may not be Work items, but permits, procurement, or other activities known to have risk or drive the length of the schedule. Suggested items include Railroad Right of Entry Agreements and materials requiring long procurement or fabrication periods, such as signal or light poles, structural elements, or mechanical items. If you have a right of entry agreement with the railroad, 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.
(1 fill-in)
Fill-in #1 is milestones and/or activities.

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.

1		Recommendation by the Region Construction Office is
2		advised.
3		(1 fill-in)
4		
5	1-08.4.OPT2.GR1	(Variable 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
10		contract the date of that event or happening is not known.
11		Region Construction Engineer, or equivalent, approval is
12		required to use this provision. Must include 1-
13		08.5.OPT1.FR1 and 1-08.5.OPT7.FR1.
14		
15	1-08.4.OPT3.FR1	(Fixed start: State controls start)
16		(August 7, 2006)
17		Use in contracts where the contractor shall start work
18		immediately after a happening or event to avoid high
19		impacts to the public. At the time of issuance of the
20		contract the date of that event or happening is known.
21		Region Construction Engineer, or equivalent, approval is
22		required to use this provision. Must include 1-
23		08.5.OPT2.FR1 and 1-08.5.OPT7.FR1.
24		(1 fill-in)
25		
26	1-08.5.GR1	Time for Completion
27		
28	1-08.5.INST1.GR1	(The third paragraph of Section 1-08.5 is revised to read)
29		Must use once preceding any of the following:
30		
31	1-08.5.OPT1.FR1	(Variable start: State controls start)
32		(August 7, 2006)
33		Use in contracts where the contractor shall start work
34		immediately after a happening or event to avoid high
35		impacts to the public. At the time of issuance of the
36		contract the date of that event or happening is not known.
37		Region Construction Engineer, or equivalent, approval is
38		required to use this provision. Must include
39		1-08.4.OPT2.GR1 and 1-08.5.OPT7.FR1.
40		(2 fill-ins) Fill-ins are contract start times.
41		
42	1-08.5.OPT2.FR1	(Fixed start: State controls start)
43		(August 7, 2006)
44		Use in contracts where the contractor shall start work
45		immediately after a happening or event to avoid high
46		impacts to the public. At the time of issuance of the
47		contract the date of that event or happening is known.
48		Region Construction Engineer, or equivalent, approval is
49		required to use this provision. Must include
50		1-08.4.OPT3.FR1 and 1-08.5.OPT7.FR1.
51		(1 fill-in) Fill-in is contract start time.
52		
53	1-08.5.INST2.GR1	(Section 1-08.5 is supplemented with the following)
54		Must use once preceding any of the following:
55		

1	1-08.5.OPT7.FR1	(Time for physical completion)
2		(March 13, 1995)
3		Use in all projects not requiring one of the following "TIME
4		FOR COMPLETION" GSP's.
5		(1 fill-in)
6		
7	1-08.5.OPT8.FR1	(Time for physical completion)
8		(March 13, 1995)
9		Must also use 1-08.9.OPT2.NEW.FR1 .
10		Use in projects requiring an interim or temporary controller
11		for early use of a signal system and where an intermediate
12		physical completion time is required.
13		(2 fill-ins)
14		
15	1-08.5.OPT9.FR1	(Time for physical completion)
16		(December 4, 2006)
17		Must also use 1-08.4.OPT1.FR1 .
18		(2 fill-ins)
19		Fill-in #2 is the same as fill-in #1 for 1-08.4.OPT1.FR1 .
20		
21	1-08.5.OPT10.FR1	(Time for physical completion)
22		(March 13, 1995)
23		Use in projects with signal work and the Contracting
24		Agency furnishes the signal control equipment.
25		(1 fill-in)
26		
27	1-08.5.OPT11.FR1	Incentive For Early Completion
28		(July 2, 2024)
29		Use in projects requiring an incentive for early completion.
30		Prior approval from the State Construction office is required
31		for the use of this GSP.
32		(4 fill-ins)
33		\$\$1\$\$ is the daily incentive value, \$\$2\$\$ and \$\$4\$\$ are
34		"Substantial" or "Physical" depending on if the incentive will
35		be calculated at the Substantial or Physical Comp[letion
36		Date, and \$\$3\$\$ is the maximum incentive dollar value
37		established by the Region. Incentive values must be
38		justified by road user costs.
39		Fill-in \$\$2\$\$ and \$\$4\$\$ need to be the same.
40		
41	1-08.6.GR1	Suspension of Work
42		
43	1-08.6.INST1.GR1	(Section 1-08.6 is supplemented with the following)
44		Must use once preceding any of the following:
45		
46	1-08.6.OPT1.FR1	(Procurement Suspension)
47		(January 3, 2017)
48		Requires approval of HQ Construction. Use in projects
49		requiring materials that have long lead times for
50		procurement or fabrication, or proprietary/specialized
51		materials, HMA Mix Design evaluation, and procurement of
52		the materials or HMA Design evaluation is a controlling
53		factor in the time for completion. Not recommended if
54		material procurement or mix design approval are not critical

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path items. Use 1-08.6.OPT2.FR1 instead, if project does not include HMA paving.

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 Hot Mix Asphalt, 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.

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.INST1.GR1

(Section 1-08.9 is supplemented with the following)
Must use once preceding any of the following:

- 1
- 2 1-08.9.OPT1.~~NEW~~.FR1 (Liquidated Damages)
- 3 (September 8, 2020)
- 4 Use in all projects.
- 5 (1 fill-in)
- 6 Fill-in shall be the amount determined by the Design
- 7 Liquidated Damages Calculation Sheet:
- 8 <http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/DesignLiquidatedDamagesCalculationSheet.xlsm>.
- 9
- 10
- 11 1-08.9.OPT2.~~NEW~~.FR1 (Failure to complete temporary signal system)
- 12 (March 13, 1995)
- 13 Use in projects requiring an interim or temporary controller
- 14 for early use of a signal system and where an intermediate
- 15 physical completion time is required. The Region must
- 16 determine the appropriate liquidated damages based on
- 17 road user costs.
- 18 Must also use **1-08.5.OPT8.FR1** and **1-**
- 19 **08.9.OPT1.~~NEW~~.FR1**.
- 20 (1 fill-in)
- 21
- 22 1-08.9.OPT3.~~NEW~~.FR1 (Interim Completion Liquidated Damages)
- 23 (April 6, 2009)
- 24 Use in projects where an interim completion time is desired
- 25 (such as the completion of a stage of work, lane closure, or
- 26 ITS disruption), and the Region determines that user costs
- 27 for failure to complete the specified portion of work, as
- 28 calculated by the Transportation Data Office, are significant
- 29 enough to warrant liquidated damages. Determination of
- 30 the liquidated damage amount must adhere to Chapter
- 31 700.01 of the Plans Prep Manual.
- 32 (6 fill-ins) ~~\$\$\$~~ describes the work to be completed;
- 33 ~~\$\$\$~~ is the user cost; ~~\$\$\$~~ and ~~\$\$\$~~ is the unit of time
- 34 (minutes, hours or days); ~~\$\$\$~~ is the smallest increment
- 35 of time that will be measured; and ~~\$\$\$~~ is the contract
- 36 provision that specifies the completion time.
- 37 Must also use **1-08.9.OPT1.~~NEW~~.FR1**.
- 38
- 39 **1-09.GR1 Measurement and Payment**
- 40
- 41 **1-09.2.GR1 Weighing Equipment**
- 42
- 43 **1-09.2(1).GR1 General Requirements for Weighing Equipment**
- 44
- 45 **1-09.2(1)A.GR1 Electronic Delivery Management System (E-Ticketing)**
- 46
- 47 1-09.2(1)A.INST1.GR1 (Section 1-09.2(1)A is revised to read as follows)
- 48 Must use once preceding any of the following:
- 49
- 50 1-09.2(1)A.OPT1.GR1 (January 24, 2024)
- 51 Use in all projects with HMA that do not require
- 52 the use of 1-09.2(1)A.OPT2.GR1.
- 53
- 54 This GSP requires the use of the WSDOT Portal
- 55 through HaulHub for HMA e-Tickets only.

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*Do not use with 1-09.2(1)A.OPT2.GR1
Must use with 1-09.2(6).OPT1.GR1.*

1-09.2(1)A.OPT2.GR1 (January 24, 2024)
Use on select projects with Region Construction Engineer approval when the WSDOT Portal through HaulHub will be used for all e-Tickets on the project.

*Do not use with 1-09.2(1)A.OPT1.GR1
Must use with 1-09.2(6).OPT2.GR1.*

1-09.2(6).GR1 Payment

1-09.2(6).INST1.GR1 (Section 1-09.2(6) is supplemented with the following:
Must use once preceding any of the following:

1-09.2(6).OPT1.GR1 (January 24, 2024)
Use on projects when the WSDOT Portal through HaulHub will be required for HMA eTickets only.

*Do not use with 1-09.2(6).OPT2.GR1
Must use with 1-09.2(1)A.OPT1.GR1.*

1-09.2(6).OPT2.GR1 (January 24, 2024)
Use on projects when the WSDOT Portal through HaulHub will be required for all eTickets.

*Do not use with 1-09.2(6).OPT1.GR1
Must use with 1-09.2(1)A.OPT2.GR1.*

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)
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 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:

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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	0.70 gal/cy
____ Excavation Incl. Haul – Area ____ per cubic yard	0.70 gal/cy
____ Borrow Incl. Haul, per cubic yard	0.68 gal/cy
____ Borrow Incl. Haul, per ton	0.45 gal/ton
Structure Excavation Class ____ Incl. Haul, per cubic yard	0.70 gal/cy
Crushed Surfacing ____, per ton	0.70 gal/ton
Crushed Surfacing ____, per cubic yard	1.20 gal/cy
Furnishing and Placing Crushed ____, per cubic yard	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	1.2 gal/cy
Cement Concrete Pavement - Including Dowels, per cubic yard	1.2 gal/cy
Concrete Class ____, per cubic yard	1.2 gal/cy
Commercial Concrete, per cubic yard	1.2 gal/cy
Superstructure ____, lump sum	0.005 gal/dollar
St. Reinf. Bar, per pound	0.004 gal/Lb
Epoxy-Coated St. Reinf. Bar, per pound	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**.

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

Contract Duration	Contract Duration Factor
Up to 1 year	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:
Use the formulas below.

Adjustment = (Est. Monthly Fuel Cost – (1.10 x Base Fuel Cost)) x Q

Where Q = □ ((Fuel Usage Factor) x (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:

Base Fuel Cost = 3.06 dollars/gal

Est. Monthly Fuel Cost = Base Fuel Cost x Contract Duration Factor

Est. Monthly Fuel Cost = 3.06 x 1.25 = 3.825 dollars/gal

Q = (0.70 gal/ton x 500 tons) + (0.90gal/ton x 10,000 tons)

Q = 9,350 gal

Adjustment = (3.82 dollars/gal – (1.10 x 3.06 dollars/gal)) x 9,350 gal

Adjustment = \$5,675.45= \$5,700

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.

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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)

1-09.8.GR1 Payment for Material On Hand

1-09.8.INST1.GR1 (The last paragraph of Section 1-09.8 is revised to read)
Must use once preceding any of the following:

1-09.8.OPT1.GR1 (August 3, 2009)
Use in projects that are over \$2 million and have more than 120 working days.

1-09.9.GR1 Payments

1-09.9(1).GR1 Retainage

1-09.9(1).INST1.GR1 (Section 1-09.9(1) including title is deleted and replaced with the following)
Must use once preceding any of the following:

1-09.9(1).OPT1.GR1 (Vacant)
(June 27, 2011)
Use in all Federally funded projects.

1-10.GR1 Temporary Traffic Control

1-10.1.GR1 General

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

1-10.1.OPT1.FR1 (Agency-Provided Traffic Control Resources)
(April 1, 2013)
Use on projects where the Region will be providing some labor, equipment or material resource to the Contractor. Typically will include signs, posts, pilot car drivers, etc. The decision to provide resources and the use of this provision requires the approval of the Region Construction Manager.

The first fill-in is a detailed list of the resources to be provided. Include a description of the item, the quantity (if appropriate), its location and any special instructions to the Contractor for acquiring the item. Include a reference to the description of work provision where the resource is to be applied. The second fill-in is the number of working days

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you want the Contractor to notify the Engineer before each duration of use of the resources.

(2 fill-ins)

1-10.1.OPT2.FR1

(Agency-Arranged Law Enforcement)
(May 20, 2020)

Use on projects where the use of WSP personnel is included in the Contract. The decision to use this provision requires the approval of the ARA for Construction or designee.

(2 fill-ins)

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.

Use with **1-10.5(2).OPT8.GR1**.

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:~~

1-10.21(1)(9-35).GR1 (Temporary Traffic Control Materials)
(Section 9-35 is supplemented with the following)
Must use once preceding any of the following:

1-10.1(1)(9-35).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**.

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.

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

4
5 1-10.21(1)(9-35).OPT24.GR1 (Temporary Portable Transverse Rumble Strips)
6 (October 3, 2022)
7 Use on projects that have flagging operations and
8 speeds are 45mph or higher. Consult region traffic
9 engineer for assistance.

10
11 Must use with 1-10.3(3).OPT5.GR1.

12
13 If temporary portable transverse rumble strips are
14 included in the lump sum cost for "Project Temporary
15 Traffic Control," do not use 1-10.4(2).OPT8.GR1 and 1-
16 10.5(2).OPT6.GR1.

17
18 If temporary portable transverse rumble strips will be
19 paid for by each use with 1-10.4(2).OPT8.GR1 and 1-
20 10.5(2).OPT6.GR1.

21
22 ~~If temporary portable transverse rumble strips will be~~
23 ~~paid for by each and the project also contains "Project~~
24 ~~Temporary Traffic Control" also add to the reinstated~~
25 ~~items in 1-10.4(3).OPT1.FR1.~~

26
27 1-10.1(1)(9-35.4).GR1 (Sequential Arrow Signs)
28 (Section 9-35.4 is supplemented with the following)
29 Must use once preceding any of the following:

30
31 1-10.1(1)(9-35.4).OPT1.GR1 (GPS and Remote Communications
32 Requirements)
33 (September 3, 2024)
34 Use on all Freeway projects where the traffic control
35 plans show sequential arrow signs being used.
36 Must use with 1-10.3(3)B.OPT1.GR1.

37
38 1-10.31(31)(9-35.8).GR1(Section 9-35.8 is revised to read)
39 Must use once preceding any of the following:

40
41 1-10.31(31)(9-35.8).OPT1.GR1 (Radar Speed Display Signs)
42 (April 1, 2019)
43 Use on projects that will be utilizing Radar Speed
44 Display Signs. The Region Traffic Engineer will need to
45 approve the speed limit reduction.
46 Must use with 1-10.3(3).OPT2.GR1.

47
48 If radar speed display signs are included in the lump
49 sum cost for "Project Temporary Traffic Control," do not
50 use with 1-10.4(2).OPT3.GR1 and 1-
51 10.5(2).OPT2.GR1.

52
53 If radar speed display signs will be paid for by the hour
54 use with 1-10.4(2).OPT3.GR1 and 1-
55 10.5(2).OPT2.GR1.

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2 If radar speed display signs will be paid for by the hour
3 and the project also contains "Project Temporary Traffic
4 Control" also add to the reinstated items in ~~1-
5 10.4(3).OPT1.FR1.~~
6

7 **1-10.2.GR1 Traffic Control Management**

8
9 1-10.2.INST1.GR1 (Section 1-10.2 is supplemented with the following)
10 Must use one preceding any of the following:

11
12 1-10.2.OPT1.GR1 (Work Zone Safety Contingency)
13 (November 2, 2022)
14 Use in all WSDOT projects with traffic control.

15
16 For projects with item bids, use with **1-10.5(2).OPT7.GR1**.

17
18 For projects with lump sum plus reinstated bid items, use
19 with ~~1-10.4(3).OPT1.FR1~~ and **1-10.5(2).OPT7.GR1**.

20
21 **1-10.2(1).GR1 General**

22
23 1-10.2(1).INST1.GR1 (Section 1-10.2(1) is supplemented with the following)
24 Must use once preceding any of the following:

25
26 1-10.2(1).OPT1.GR1 (Acceptable TCS Training)
27 (October 3, 2022)
28 Include in all projects that include the bid item Traffic
29 Control Supervisor, or include the bid item Project
30 Temporary Traffic Control.

31
32 1-10.2(1).OPT2.GR1 (Traffic Control Supervisor)
33 (January 5, 2015)
34 May be used on projects with temporary traffic control
35 where a greater experience level is desired for the
36 primary Traffic Control Supervisor. Typical projects
37 where use of the GSP would be considered may have
38 complex traffic control plans, increased risk of worker
39 safety, or impacts to the public.
40

41 **1-10.3.GR1 Traffic Control Labor, Procedures and Devices**

42
43 1-10.3.INST1.GR1 (Section 1-10.3 is supplemented with the following)
44 Must use once preceding any of the following:

45
46 1-10.3.OPT1.FR1 (Contractor-Provided Uniformed Police Officers)
47 (May 20, 2020)
48 Use on projects where the traffic control plans show
49 Uniformed Police Officers performing traffic control-related
50 duties.

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52 (1 fill-in)
53 The fill-in should provide contact information for local law
54 enforcement agencies that may be able to provide this

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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**.

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)(9-35.8).OPT1.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**.~~

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1-10.3(3).OPT3.FR1

(Smart Work Zone System)
(April 15, 2024)
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 the smart work zone system 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).OPT4.FR1

(Queue Warning System)
(April 15, 2024)
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 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 the queue warning system 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**.~~

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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**.~~

~~**1-10.3(3)A.GR1** — **Construction Signs**~~

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

~~1-10.3(3)A.OPT1.2025.GR1 (Sign covering)
(February 13, 2024)
Use on projects where signs in conflict with the temporary traffic configuration will be covered for 7 calendar days or less.~~

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

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

1-10.3(3)B.OPT1.GR1 (Initial Arrow Board Turn-On Meeting)
(September 3, 2024)
Use on all Freeway projects where the traffic control plans show sequential arrow signs being used.
Must use with **1-10.1(1)(9-35.4).OPT1.GR1**.

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

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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 if being paid by the hour.

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)(9-35.8).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.

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

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.
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.

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

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 Changeable Message Signs. Smart work zone~~

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~~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)
(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".
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,"
Must use with **1-10.3(3).OPT2.GR1**, **1-10.3(3)(9-35.8).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"
Use with **1-10.3(3).OPT3.FR1** and **1-10.4(2).OPT5.GR1**.

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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 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,"

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 in all WSDOT projects with traffic control.

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

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

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

1-10.5(2).OPT8.GR1 (Washington State Patrol Reimbursement)
(July 2, 2024)
Use on projects where the use of WSP personnel is included in the Contract. The decision to use this provision requires the approval of the ARA for Construction or designee.

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Use with 1-10.1.OPT2.FR1.

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1 **INTRODUCTION**

2
3 This Contract shall be constructed in accordance with the 2025⁴ Standard Specifications for
4 Road, Bridge, and Municipal Construction.

5
6 **SPECIAL PROVISIONS**

7
8 Several types of Special Provisions are included in this contract; General, Region, Bridges
9 and Structures, and Project Specific. Special Provisions types are differentiated as follows:

- | | | |
|----|-----------------------------|--|
| 10 | | |
| 11 | (date) | General Special Provision |
| 12 | (*****) | Notes a revision to a General Special Provision
and also notes a Project Specific Special
Provision. |
| 13 | | |
| 14 | | |
| 15 | (Regions ¹ date) | Region Special Provision |
| 16 | | |

17 **General Special Provisions** are similar to Standard Specifications in that they typically apply
18 to many projects, usually in more than one Region. Usually, the only difference from one
19 project to another is the inclusion of variable project data, inserted as a “fill-in”.

20
21 **Region Special Provisions** are commonly applicable within the designated Region. Region
22 designations are as follows:

- | | | |
|----|----------------------------|-----------------------------------|
| 23 | | |
| 24 | <u>Regions¹</u> | |
| 25 | ER | Eastern Region |
| 26 | NCR | North Central Region |
| 27 | NWR | Northwest Region |
| 28 | OR | Olympic Region |
| 29 | SCR | South Central Region |
| 30 | SWR | Southwest Region |
| 31 | | |
| 32 | WSF | Washington State Ferries Division |
| 33 | | |

34 **Project Specific Special Provisions** normally appear only in the contract for which they were
35 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 1-02.4(2).GR1

35 ***Subsurface Information***

36

37 1-02.6.GR1

38 **Preparation of Proposal**

39

40 1-02.6.INST1.GR1

41 Item number 3 in the second paragraph of Section 1-02.6 is supplemented with the following:

42

43 1-02.6.OPT1.FR1

44 (September 3, 2019)

45 The successful Bidder will be the Bidder submitting the lowest responsive Bid that does
46 not exceed the maximum funds available. The maximum funds available for this Contract
47 is *** \$\$1\$\$ ***.

48

49 Submitting a Proposal that exceeds the maximum funds available will result in the
50 Proposal being declared irregular and shall cause the Bid to be rejected by the

- 1 Contracting Agency. Submitted Proposals that exceed the maximum funds available will
2 be opened publicly in accordance with Section 1-02.12 prior to being rejected.
3
- 4 1-02.6.INST2.GR1
5 The fourth paragraph of Section 1-02.6 is revised to read:
6
7
- 8 1-02.6.OPT8.2026.GR1
9 (September 3, 2024)
10 The Bidder shall submit with the Bid a Subcontractor List (WSDOT Form #271-015)
11 containing the following:
12
- 13 1. Subcontractors who will perform the work of structural steel installation, rebar
14 installation, heating, ventilation, air conditioning, and plumbing as described in
15 RCW 18.106 and electrical as described in RCW 19.28, and
16
 - 17 2. The Work those subcontractors will perform on the Contract as described in
18 RCW 39.30.060.
19
 - 20 3. No more than one subcontractor for each category of work identified, except,
21 when subcontractors vary with Bid alternates, in which case the Bidder shall
22 identify which subcontractor will be used for which alternate.
23
- 24 1-02.6.INST3.GR1
25 Section 1-02.6 is supplemented with the following:
26
- 27 1-02.6.OPT2.GR1
28 (November 20, 2023)
29 The fourth and fifth paragraphs of Section 1-02.6 are deleted.
30
- 31 1-02.6.OPT3.~~NEW~~.GR1
32 (September 3, 2024)
33 The Bidder shall submit the following supplemental documents with the Bid in accordance with
34 Section 1-02.9:
35
- 36 1. Disadvantaged Business Enterprise Utilization Certification (WSDOT Form 272-
37 056).
38
 - 39 2. DBE Written Confirmation Form (WSDOT Form 422-031) - For each and every DBE
40 firm listed on the Bidder's completed Disadvantaged Business Enterprise Utilization
41 Certification, the Bidder shall submit written confirmation from that DBE firm that the
42 DBE is in agreement with the DBE participation commitment that the Bidder has
43 made in the Bidder's completed Disadvantaged Business Enterprise Utilization
44 Certification.
45
 - 46 3. Good Faith Effort Documentation - Bidder must submit good faith effort
47 documentation with the Disadvantaged Business Enterprise Utilization Certification
48 only in the event the Bidder's efforts to solicit sufficient DBE participation have been
49 unsuccessful.
50

1 4. DBE Item Breakdown (WSDOT Form 272-054) The Bidder shall submit a DBE Item
2 Breakdown form defining the scope of work to be performed by each DBE listed on
3 the DBE Utilization Certification.
4

5 1-02.6.OPT4.GR1

6 (March 14, 2022)

7 The Bidder shall submit a completed Small and Veteran-Owned Business Plan (SVB
8 Plan, WSDOT Form 226-018) with the Bid, when required by the Special Provisions.
9

10 For each and every Small or Veteran-Owned Business firm listed on the Bidder's
11 completed SVB Plan, the Bidder shall submit a completed SVBE Subcontractor Written
12 Confirmation Form (WSDOT Form 226-017) that confirms the listed firm is in agreement
13 with the SVBE participation commitment that the Bidder has made in the Bidder's
14 completed SVB Plan. Bidder must submit good faith effort documentation only in the event
15 the Bidder's efforts to solicit sufficient participation have been unsuccessful.
16

17 Directions for delivery of the SVB Plan, SVBE Subcontractor Written Confirmation, and
18 good faith effort documentation are included in Section 1-02.9.
19

20 1-02.6.OPT5.NEW.FR1

21 **(September 7, 2021)**

22 **Alternative Bids**

23 The bidding proposal on this project permits the Bidder to submit a Bid on one or more
24 alternatives for the construction *** \$\$1\$\$ ***.
25

26 **Bid Proposal**

27 The bid proposal is composed of the following parts: Base Bid and Alternatives ***
28 \$\$2\$\$ *** i.e. A1, A2, etc.
29

30 The base bid includes all items that do not change as to quantity, dimension, or type
31 of construction, regardless of which alternative is Bid.
32

33 The Alternative portions of the bid proposal contain all items which change as to
34 quantity, dimension, or construction method, depending on which alternative is Bid.
35

36 **Alternative A1**

37 Alternative A1 is based on constructing the *** \$\$3\$\$ ***.
38

39 The bid items for Alternative A1 are as listed in the bid proposal.
40

41 **Alternative A2**

42 Alternative A2 is based on constructing the *** \$\$4\$\$ ***.
43

44 The bid items for Alternative A2 are as listed in the bid proposal.
45

46 **Bidding Procedures**

47 The Bidder shall submit a price on each and every item of Work included in the base
48 bid. The Bidder shall also submit prices on each and every item under the alternative
49 on which the Bidder chooses to bid, or, if the Bidder chooses to bid on more than one
50 alternative, the Bidder shall submit prices for each and every item under each
51 alternative chosen. If the Bidder chooses to bid on more than one alternative, the
52 Bidder shall submit their sealed Bid in the envelope provided by the Contracting

1 Agency using the Proposal Form provided. If the Bidder chooses to Bid on more than
2 one alternative, the Bid cannot be accepted electronically via AASHTOWare Project
3 Bids™ “BidExpress®.”
4
5 The successful Bidder will be determined by the lowest total of an alternative plus
6 the base bid. Award will be based on the lowest total subject to the requirements of
7 Section 1-03.
8

9 1-02.6.OPT6.FR1

10 **(August 3, 2015)**

11 **Cumulative Alternates Bidding**

12 The Bid Proposal for this Contract requires the Bidder to bid cumulative Alternates as part
13 of the bid. As such the Bidder is required to submit a Base Bid and a bid for each of the
14 Alternate(s).
15

16 **Bid Proposal**

17 The Bid Proposal includes the following:
18

- 19 1. Base Bid
20 The Base Bid shall include constructing all items included in the Proposal
21 *except* those items contained in the Alternate(s).
22
- 23 2. Alternate(s)
 - 24 a. Alternate A1
25 Based on constructing (** \$1\$ \$ **)
26 The Bid items for Alternate A1 are as listed in the Bid Proposal.
27
 - 28 b. Alternate A2
29 Based on constructing (** \$2\$ \$ **)
30 The Bid items for Alternate A2 are as listed in the Bid Proposal.
31
 - 32 c. Alternate A3
33 Based on constructing (** \$3\$ \$ **)
34 The Bid items for Alternate A3 are as listed in the Bid Proposal.
35
36

37 **Bidding Procedures**

38 To be considered responsive the Bidder shall submit a price on each and every Bid
39 item included in the Base Bid and all Alternate(s.)
40

41 The successful Bidder will be the Bidder submitting the lowest responsible Bid for
42 the highest order Preference that is within the amount of available funds for the
43 project. Available funds will be announced immediately prior to the opening of Bids.
44 The following are listed in order from highest to lowest Preference:
45

- 46 1. Preference 1: Lowest total for Base Bid plus Alternate A1 plus Alternate A2
47 plus Alternate A3, plus etcetera.
48
- 49 2. Preference 2: Lowest total for Base Bid plus Alternate A1 plus Alternate A2
50 plus Alternate A3.
51
- 52 3. Preference 3: Lowest total for Base Bid plus Alternate A1 plus Alternate A2.

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- 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.

1-02.6.OPT7.GR1

(September 3, 2024)
Bidder Questionnaire

The Bidder shall submit with their Bid a completed Bidder Questionnaire form (WSDOT Form #272-022). This shall be filled out for each firm who submitted a bid or quote in attempt to participate in the project whether they were successful or not and include the following information:

- 1. Firm name;
- 2. Firm address including ZIP code;
- 3. Firm's status as a DBE or non-DBE;
- 4. Race and gender information for the firm's majority owner;
- 5. NAICS code applicable to each scope of work the firm sought to perform in its bid;
- 6. Age of the firm; and
- 7. The annual gross receipts of the firm. The Bidder may obtain this information by asking each firm to indicate into what gross receipts bracket they fit (less than \$1 million; \$1-3 million; \$3-6 million; \$6-10 million; etc.) rather than requesting an exact figure from the firm.

Failure to return this completed form as part of the Bid Proposal package will cause this Bid to be considered irregular in accordance with Section 1-02.13. A copy of this form is included in the Proposal Forms.

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

(November 20, 2023 September 3, 2024)
DBE Document Submittal Requirements

General

The Bidder shall submit supplemental documents that are identified with the Bidder's company name, Project title, Bid date, and description of all contents. (ie, DBE

1 Utilization Certification, DBE Written Confirmation Document, Good Faith Effort (GFE)
2 Documentation, and DBE Bid Item Breakdown Form)
3

4 Submissions must be made by one of the following methods:

- 5 1. Physically in a sealed envelope marked as "BID SUPPLEMENT"; or
- 6 2. By facsimile to the following FAX number: 360-705-6966; or
- 7 3. By e-mail to the following e-mail address: DBEDoc@wsdot.wa.gov; or
- 8 4. Mailed to: Washington State Department of Transportation
9 Room 2D20
10 310 Maple Park Avenue SE
11 Olympia WA 98501-2361
12
13
14
15
16

17 The only documents that can be accepted after the 11:00:59 am time for delivery of
18 Proposal are the Written Confirmation Documentation, the DBE Bid Item Breakdown
19 Form, and a GFE Documentation (if applicable). Incomplete or inaccurate documents
20 will be rejected, except as detailed above for the DBE Bid Item Breakdown Form.
21

22 The Contracting Agency is not responsible for delayed, partial, failed, illegible or
23 partially legible FAX or e-mail document transmissions, and such documents may be
24 rejected as incomplete at the Bidder's risk.
25

26 ***DBE Utilization Certification (WSDOT Form 272-056)***

27 The DBE Utilization Certification shall be received at the same location and no later
28 than the time required for delivery of the Proposal. The Contracting Agency will not
29 open or consider any Proposal when the DBE Utilization Certification is received after
30 the time specified for receipt of Proposals or received in a location other than that
31 specified for receipt of Proposals. The DBE Utilization Certification may be submitted
32 in the same envelope as the Bid deposit.
33

34 ***DBE Written Confirmation Document (WSDOT Form 422-031) and GFE***
35 ***Documentation, (if applicable)***

36 The DBE Written Confirmation Document(s) and/or GFE Documentations are not
37 required to be submitted with the Proposal. The DBE Written Confirmation
38 Document(s) and/or GFE Documentation (if applicable) shall be received either with
39 the Bid Proposal or as a Supplement to the Bid. Written confirmation and/or GFE
40 Documentation shall be received no later than 48 hours (not including Saturdays,
41 Sundays and Holidays) after the time for delivery of the Proposal. To be considered
42 responsive, Bidders shall submit a Written Confirmation Documentation from each
43 DBE firm listed on the Bidder's completed DBE Utilization Certification and/or the GFE
44 Documentation as required by Section 1-02.6.
45

46 ***DBE Bid Item Breakdown Form (WSDOT Form 272-054)***

47 The DBE Bid Item Breakdown shall be received either with the Bid Proposal or as a
48 Supplement to the Bid. The documents shall be received no later than 48 hours (not
49 including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal.
50 The successful Bidder shall submit a completed DBE Bid Item Breakdown, however,
51 the Contractor may correct minor errors ~~and corrections~~ to the DBE Bid Item

1 Breakdown ~~will be returned for correction~~ for a period up to five calendar days (not
2 including Saturdays, Sundays and Holidays).

3
4 The DBE Bid Item Breakdown Form will not be included as part of the executed
5 Contract.

6
7 **NOTE: If the Bid is submitted electronically via AASHTOWare Project Bids™**
8 **software, “BidExpress,” the DBE Utilization Certification may be attached to the**
9 **electronic bid or submitted as a supplemental document as defined above.**

10
11 1-02.9.OPT2.GR1

12 **(November 20, 2023)**

13 **SVBE Document Submittal Requirements**

14 **General**

15 The Bidder shall submit supplemental documents that are identified with the Bidder’s
16 company name, Project title, Bid date, and description of all contents (i.e., Small and
17 Veteran-Owned Business Plan, SVBE Subcontractor Written Confirmation
18 Documents, and/or SVBE GFE Documentation).

19
20 Submissions must be made by one of the following methods:

- 21
22 1. Physically in a sealed envelope marked as “BID SUPPLEMENT”; 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: DBEDoc@wsdot.wa.gov; or
27
28 4. Mailed to: Washington State Department of Transportation
29 Room 2D20
30 310 Maple Park Avenue SE
31 Olympia WA 98501-2361
32

33 The Contracting Agency is not responsible for delayed, partial, failed, illegible or
34 partially legible FAX or e-mail document transmissions, and such documents may be
35 rejected as incomplete at the Bidder’s risk.

36
37 **Small and Veteran-Owned Business Plan (SVB Plan) (WSDOT Form 226-018)**

38 The SVBE Plan shall be received no later than the time required for delivery of the
39 Bid. The Contracting Agency will not open or consider any Bid when the SVBE Plan
40 is received after the time specified for receipt of Bids or received as specified by this
41 Special Provision. The SVBE Plan may be submitted in the same envelope as the
42 Bid deposit.

43
44 **SVBE Subcontractor Written Confirmation (WSDOT Form 226-017) and/or**
45 **GFE Documentation**

46 The SVBE Subcontractor Written Confirmation Documents and/or GFE Documents
47 are not required to be submitted with the Bid. The SVBE Subcontractor Written
48 Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid
49 or as a Supplement to the Bid. The documents shall be received no later than 48
50 hours (not including Saturdays, Sundays, and Holidays) after the time for delivery of
51 the Bid. To be considered responsive, Bidders shall submit Written Confirmation

1 Documentation from each SVBE firm listed on the Bidder's completed SVB Plan
2 and/or the GFE as required by Section 1-02.6.
3

4 **NOTE: If the Bid is submitted electronically via AASHTOWare Project Bids™**
5 **software "BidExpress®", the SVB Plan may be attached to the electronic Bid**
6 **or submitted as a supplemental document as defined above.**
7

8 1-02.12.GR1
9 **Public Opening of Proposals**

10
11 1-02.12.INST1.GR1
12 Section 1-02.12 is supplemented with the following:
13

14 1-02.12.OPT1.FR1

15 **(August 3, 2015)**
16 **Date of Opening Bids**

17 The bid opening date for this project is *** \$\$1\$\$ **. Bids received will be publicly opened
18 and read after 11:00:59 A. M. Pacific Time on this date.
19

20 1-02.12.OPT2.FR1

21 **(October 3, 2022)**
22 **Date of Opening Bids**

23 Proposals will be received by in-person delivery or by courier at the *** \$\$1\$\$ ** reception
24 desk located at the *** \$\$2\$\$ ** on the Bid opening day.
25

26 The Bid opening date for this project is *** \$\$3\$\$ **. Bids received will be publicly opened
27 and read after 11:00:59 A.M. on this date.
28

29 1-02.13.INST1.GR1

30 Item 1j of Section 1-02.13 is revised to read:

31
32 1-02.13.OPT1.2026.GR1

33 (September 3, 2024)

34 i. The Bidder fails to submit the Bidder Questionnaire (WSDOT Form 272-022), if
35 applicable, as required in Section 1-02.6, or if the documentation that is submitted
36 fails to meet the requirements of the Special Provisions; or
37

38 1-02.INST1.GR1

39 Section 1-02 is supplemented with the following:
40

41 1-02.OPT1.GR1

42 **(September 7, 2021)**
43 **Protest Procedures**

44 **Form and Substance**

45 All protests regarding any contents or portion of the bid proposal must be submitted
46 to the Contracting Agency as soon as possible after the protestant becomes aware
47 of the reason(s) for the protest. All protests must be in writing and signed by the
48 protestant or an authorized agent. Such writing must state all facts and arguments
49 on which the protestant is relying as the basis for its action. Such protestant shall
50 also attach, or supply on demand by the Contracting Agency, any relevant exhibits
51 referenced in the writing. Copies of all protests and exhibits shall be submitted by the
52 protestant to the Bidder against whom the protest is made (if any) at the same time

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such protest and exhibits are submitted to the Contracting Agency. All protests shall be emailed to CAA@wsdot.wa.gov.

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 1-05.GR1
2 **Control of Work**
3
4 1-05.3.GR1
5 **Working Drawings**
6
7 1-05.3.INST1.GR1
8 Section 1-05.3 is supplemented with the following:
9
10 1-05.3.OPT1.FR1
11 (September 3, 2019)
12 When submittals require review by the railroad, the Engineer will require up to *** \$\$1\$\$
13 *** calendar days from the date the submittals are received until they are returned to the
14 Contractor. If a submittal is returned unapproved and then resubmitted, then an additional
15 review time of up to *** \$\$2\$\$ *** calendar days will be required.
16
17 If more than *** \$\$1\$\$ *** calendar days are required for the Engineer's review of any
18 individual submittal or resubmittal, an extension of time will be considered in accordance
19 with Section 1-08.8.
20
21 1-05.3.OPT2.GR1
22 **(October 3, 2022)**
23 **Right and Left Designation**
24 Any right or left designations used to locate Structures throughout the Plans and these
25 Special Provisions are made by facing offshore.
26
27 1-05.3.OPT3.GR1
28 **(October 3, 2022)**
29 **Work Plan**
30 The Contractor shall submit a Work Plan to the Engineer for review. The Work Plan shall
31 include the following minimum requirements:
32
33 1. The Work Plan shall describe the Contractor's proposed methods for
34 accomplishing the Work within the conditions and restrictions of the Contract. It
35 shall describe the nature, approach and sequence of the Work to be performed;
36 the type and location of cranes, barges and other equipment to be used; plans
37 for demolition, debris control and disposal of materials; temporary construction;
38 compliance with environmental provisions; and any unavoidable impacts,
39 necessary safeguards, and mitigating measures.
40
41 2. Where the Contractor's Work would impact the operation and safety of ferry
42 traffic and ferry pedestrian areas, the Work Plan shall detail the methods used
43 to either separate the Work from the ferry traffic or to maintain the area in a safe
44 condition while it is being utilized by ferry passengers.
45
46 3. The Work Plan shall be a Type 2 Working Drawing with attached drawings,
47 charts, diagrams and references to the Plans and Progress Schedule as
48 necessary.
49
50 4. The Work Plan shall be updated whenever conditions change or as directed by
51 the Engineer.
52

1 All costs associated with the Work Plan shall be included in the applicable items of Work.

2

3 1-05.4.GR1

4 **Conformity with and Deviations from Plans and Stakes**

5

6 1-05.4.INST1.GR1

7 Section 1-05.4 is supplemented with the following:

8

9 1-05.4.OPT1.GR1

10 (~~February 6, 2023~~ September 3, 2024)

11 **Contractor Surveying - Structure**

12 The Contracting Agency has provided primary survey control in the Plans.

13

14 The Contractor shall be responsible for setting, maintaining, and resetting all alignment
15 stakes, slope stakes, and grades necessary for the construction of bridges, noise walls,
16 retaining walls, buried structures, and marine structures. Except for the survey control
17 data to be furnished by the Contracting Agency, calculations, surveying, and measuring
18 required for setting and maintaining the necessary lines and grades shall be the
19 Contractor's responsibility.

20

21 The Contractor shall inform the Engineer when monuments are discovered that were not
22 identified in the Plans and construction activity may disturb or damage the monuments.
23 All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the
24 length of the project or be replaced at the Contractor's expense.

25

26 Detailed survey records shall be maintained, including a description of the work
27 performed on each shift, the methods utilized, and the control points used. The record
28 shall be adequate to allow the survey to be reproduced. A copy of each day's record shall
29 be provided to the Engineer within three working days after the end of the shift.

30

31 The meaning of words and terms used in this provision shall be as listed in "Definitions of
32 Surveying and Associated Terms" current edition, published by the American Congress
33 on Surveying and Mapping and the American Society of Civil Engineers.

34

35 The survey work by the Contractor shall include but not be limited to the following:

36

37 1. Verify the primary horizontal and vertical control furnished by the Contracting
38 Agency and expand into secondary control by adding stakes and hubs as well
39 as additional survey control needed for the project. Provide descriptions of
40 secondary control to the Contracting Agency. The description shall include
41 coordinates and elevations of all secondary control points.

42

43 2. Establish, by placing hubs and/or marked stakes, the location with offsets of
44 foundation shafts and piles.

45

46 3. Establish offsets to footing centerline of bearing for structure excavation.

47

48 4. Establish offsets to footing centerline of bearing for footing forms.

49

50 5. Establish wing wall, retaining wall, noise wall, and buried structure horizontal
51 alignment.

52

- 1 6. Establish retaining wall top of wall profile grade.
- 2
- 3 7. Establish buried structure profile grade.
- 4
- 5 8. Establish elevation benchmarks for all substructure formwork.
- 6
- 7 9. Check elevations at top of footing concrete line inside footing formwork
- 8 immediately prior to concrete placement.
- 9
- 10 10. Check column location and pier centerline of bearing at top of footing
- 11 immediately prior to concrete placement.
- 12
- 13 11. Establish location and plumbness of column forms, and monitor column
- 14 plumbness during concrete placement.
- 15
- 16 12. Establish pier cap and crossbeam top and bottom elevations and centerline of
- 17 bearing.
- 18
- 19 13. Check pier cap and crossbeam top and bottom elevations and centerline of
- 20 bearing prior to and during concrete placement.
- 21
- 22 14. Establish grout pad locations and elevations.
- 23
- 24 15. Establish structure bearing locations and elevations, including locations of
- 25 anchor bolt assemblies.
- 26
- 27 16. Establish box girder bottom slab grades and locations.
- 28
- 29 17. Establish girder and/or web wall profiles and locations.
- 30
- 31 18. Establish diaphragm locations and centerline of bearing.
- 32
- 33 19. Establish roadway slab alignment, grades and provide dimensions from top of
- 34 girder to top of roadway slab. Set elevations for deck paving machine rails.
- 35
- 36 20. Establish traffic barrier and curb profile.
- 37
- 38 21. Profile all girders prior to the placement of any deadload or construction live load
- 39 that may affect the girder's profile.
- 40
- 41 22. Establish locations for marine structures including fixed and floating berthing
- 42 structures, vehicle and pedestrian foundations and spans, and marine-based
- 43 buildings.
- 44

45 The Contractor shall provide the Contracting Agency copies of any calculations and
46 staking data when requested by the Engineer.

47
48 The Contractor shall submit the computed elevations at the top of bridge decks as a Type
49 2 Working Drawing. The To compute top of bridge deck elevations, elevations shall be
50 computed taken at the tenth points along the centerline of each girder web from center-
51 to-center of bearing. For girders exceeding 100 feet in length, the elevations shall be
52 taken at equivalent intervals not to exceed 10 feet.

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The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
1. Stationing on structures		±0.02 feet
2. Alignment on structures		±0.02 feet
3. Superstructure elevations	±0.01 feet variation from plan elevation	
4. Substructure	±0.02 feet variation from Plan grades.	

Buried structures shall be within the tolerances described in Section 6-20.3.

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking the following items, the Contractor shall perform independent checks from different secondary control to ensure that the points staked for these items are within the specified survey accuracy tolerances:

- Piles
- Shafts
- Footings
- Columns

The Contractor shall calculate coordinates for the points associated with piles, shafts, footings and columns. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the survey work. The Contracting Agency will require up to seven calendar days from the date the data is received to issuing approval.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Payment

Payment will be made for the following bid item when included in the proposal:

"Structure Surveying", lump sum.

The lump sum contract price for "Structure Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

1-05.4.OPT2.GR1

(January 13, 2021)

Contractor Surveying - Roadway

The Contracting Agency has provided primary survey control in the Plans.

1 The Contractor shall be responsible for setting, maintaining, and resetting all alignment
2 stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage,
3 surfacing, paving, channelization and pavement marking, illumination and signals,
4 guardrails and barriers, and signing. Except for the survey control data to be furnished
5 by the Contracting Agency, calculations, surveying, and measuring required for setting
6 and maintaining the necessary lines and grades shall be the Contractor's responsibility.
7

8 The Contractor shall inform the Engineer when monuments are discovered that were not
9 identified in the Plans and construction activity may disturb or damage the monuments.
10 All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the
11 length of the project or be replaced at the Contractors expense.
12

13 Detailed survey records shall be maintained, including a description of the work
14 performed on each shift, the methods utilized, and the control points used. The record
15 shall be adequate to allow the survey to be reproduced. A copy of each day's record shall
16 be provided to the Engineer within three working days after the end of the shift.
17

18 The meaning of words and terms used in this provision shall be as listed in "Definitions of
19 Surveying and Associated Terms" current edition, published by the American Congress
20 on Surveying and Mapping and the American Society of Civil Engineers.
21

22 The survey work shall include but not be limited to the following:
23

- 24 1. Verify the primary horizontal and vertical control furnished by the Contracting
25 Agency, and expand into secondary control by adding stakes and hubs as well
26 as additional survey control needed for the project. Provide descriptions of
27 secondary control to the Contracting Agency. The description shall include
28 coordinates and elevations of all secondary control points.
29
- 30 2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on
31 centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and
32 at points on the alignments spaced no further than 50 feet.
33
- 34 3. Establish clearing limits, placing stakes at all angle points and at intermediate
35 points not more than 50 feet apart. The clearing and grubbing limits shall be 5
36 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise
37 shown in the Plans.
38
- 39 4. Establish grading limits, placing slope stakes at centerline increments not more
40 than 50 feet apart. Establish offset reference to all slope stakes. If Global
41 Positioning Satellite (GPS) Machine Controls are used to provide grade control,
42 then slope stakes may be omitted at the discretion of the Contractor
43
- 44 5. Establish the horizontal and vertical location of all drainage features, placing
45 offset stakes to all drainage structures and to pipes at a horizontal interval not
46 greater than 25 feet.
47
- 48 6. Establish roadbed and surfacing elevations by placing stakes at the top of
49 subgrade and at the top of each course of surfacing. Subgrade and surfacing
50 stakes shall be set at horizontal intervals not greater than 50 feet in tangent
51 sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-
52 foot intervals in intersection radii with a radius less than 10 feet. Transversely,

- 1 stakes shall be placed at all locations where the roadway slope changes and at
 2 additional points such that the transverse spacing of stakes is not more than 12
 3 feet. If GPS Machine Controls are used to provide grade control, then roadbed
 4 and surfacing stakes may be omitted at the discretion of the Contractor.
 5
 6 7. Establish intermediate elevation benchmarks as needed to check work
 7 throughout the project.
 8
 9 8. Provide references for paving pins at 25-foot intervals or provide simultaneous
 10 surveying to establish location and elevation of paving pins as they are being
 11 placed.
 12
 13 9. For all other types of construction included in this provision, (including but not
 14 limited to channelization and pavement marking, illumination and signals,
 15 guardrails and barriers, and signing) provide staking and layout as necessary to
 16 adequately locate, construct, and check the specific construction activity.
 17
 18 10. Contractor shall determine if changes are needed to the profiles or roadway
 19 sections shown in the Contract Plans in order to achieve proper smoothness
 20 and drainage where matching into existing features, such as a smooth transition
 21 from new pavement to existing pavement. The Contractor shall submit these
 22 changes to the Engineer for review and approval 10 days prior to the beginning
 23 of work.
 24

25 The Contractor shall provide the Contracting Agency copies of any calculations and
 26 staking data when requested by the Engineer.
 27

28 The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

50
 51 The Contracting Agency may spot-check the Contractor's surveying. These spot-checks
 52 will not change the requirements for normal checking by the Contractor.

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When staking roadway alignment and stationing, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances.

The Contractor shall calculate coordinates for the alignment. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

Payment

Payment will be made for the following bid item when included in the proposal:

"Roadway Surveying", lump sum.

The lump sum contract price for "Roadway Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

1-05.4.OPT3.GR1

(April 4, 2011)

Licensed Surveyors

The Contractor shall be responsible for reestablishing or locating legal survey markers such as GLO monuments or property corner monuments, conduct boundary surveys to determine Contracting Agency right-of-way locations, and obtain, review and analyze deeds and records as necessary to determine these boundaries. The Contracting Agency will provide "rights of entry" as needed by the Contractor to perform the work.

The Contractor shall brush out or clear and stake or mark the right-of-way lines as designated by the Engineer.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at Contractors expense.

When required, the Contractor shall prepare and file a Record of Survey map in accordance with RCW 58.09 and provide a recorded copy to the Contracting Agency. The Contracting Agency will provide all existing base maps, existing horizontal and vertical control, and other material available with Washington State Plane Coordinate information to the Contractor. The Contracting Agency will also provide maps, plan sheets, and/or aerial photographs clearly identifying the limits of the areas to be surveyed. The

1 Contractor shall establish Washington State Plane Coordinates on all points required in
2 the Record of Survey and other points designated in the Contract documents.
3
4 Existing right of way documentation, existing base maps, existing horizontal and vertical
5 control descriptions, maps, plan sheets, aerial photographs and all other available
6 material may be viewed by prospective bidders at the office of the Engineer.
7
8 The Contractor shall perform all of the necessary calculations for the contracted survey
9 work and shall provide copies of these calculations to the Contracting Agency. Electronic
10 files of all survey data shall be provided and in a format acceptable to the Contracting
11 Agency.
12
13 All survey work performed by the Contractor shall conform to all applicable sections of
14 the Revised Code of Washington and the Washington Administrative Code.
15
16 The Contractor shall provide all traffic control, signing, and temporary traffic control
17 devices in order to provide a safe work zone.
18
19 **Payment**
20 Payment will be made in accordance with Section 1-09.6 for the following bid item when
21 included in the proposal:
22
23 "Licensed Surveying", Force Account.
24 For the purpose of providing a common proposal for all bidders, the Contracting
25 Agency has entered an amount for the item "Licensed Surveying" in the bid proposal
26 to become a part of the total bid by the Contractor.
27
28 1-05.4.OPT4.GR1
29 **(March 9, 2023)**
30 **Contractor Surveying – ADA Features**
31 **ADA Feature Staking Requirements**
32 The Contractor shall be responsible for setting, maintaining, and resetting all
33 alignment stakes, and grades necessary for the construction of the ADA features.
34 Calculations, surveying, and measuring required for setting and maintaining the
35 necessary lines and grades shall be the Contractor's responsibility. The Contractor
36 shall build the ADA features within the specifications in the Standard Plans and
37 contract documents.
38
39 **ADA Feature Contract Compliance**
40 The Contractor shall be responsible for completing measurements to verify all ADA
41 features comply with the Contract in the presence of the Engineer.
42
43 **ADA Feature As-Built Measurements**
44 The Contractor shall be responsible for providing the latitude and longitude of each
45 ADA feature as indicated on the ADA Inspection Form(s) (WSDOT Form 224-020).
46
47 The completed ADA Inspection Form(s) (WSDOT Form 224-020) shall be submitted
48 as a Type 3 Working Drawing and transmitted to the Engineer within 30 calendar
49 days of completing the ADA feature. After acceptance, the Contracting Agency will
50 submit the final form(s) to the WSDOT ADA Steward.
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Payment

Payment will be made for the following bid item that is included in the Proposal:

"ADA Features Surveying", lump sum.

The lump sum Contract price for "ADA Features Surveying" shall be full pay for all the Work as specified.

In the instance where an ADA feature does not meet accessibility requirements, all work to replace non-compliant work and then to measure, record the as-built measurements, and transmit the electronic forms to the Engineer shall be completed at no additional cost to the Contracting Agency.

1-05.9.GR1

Equipment

1-05.9.INST1.GR1

Section 1-05.9 is supplemented with the following:

1-05.9.OPT1.FR1

(April 7, 2008)

General

This specification contains requirements for the use of machine control grading.

Instead of providing grade control through construction stakes, the Contractor may control grade with equipment that is controlled by a machine control system.

The Contractor may use any type of equipment and machine control system that produces results meeting the requirements of the Contract.

Electronic data is provided for the Contractor's convenience, and is not a part of the Contract. No guarantee or warranty is made by the Contracting Agency that electronic data provided to the Contractor: is compatible with any of the systems that are used by the Contractor; is complete; is representative of actual conditions at the project site, or; accurately reflects the quantities and character of the actual Work required. The furnishing of electronic design data or documentation shall not relieve the Contractor from any risks or of any duty to make examinations and investigations as required by Section 1-02.4 or any other responsibility under the Contract or as required by law. Except as provided above, no corrections, additions, or updates of any kind will be made to electronic data provided to the Contractor.

The Engineer may perform spot checks of the Contractor's machine control grading results, calculations, records, field procedures, and quality control measures. If the Engineer determines that the Work being performed is not achieving results that will meet the Contract requirements, the Contractor shall make corrections to the Work at no additional cost to the Contracting Agency.

WSDOT Responsibilities

1. The Engineer will set the initial horizontal and vertical control points for the project as shown in the Contract documents.

- 1 1. Permits;
- 2
- 3 2. The current edition of the Washington Department of Fish and Wildlife's
- 4 publication, "Invasive Species Management Protocols"; and
- 5
- 6 3. *** \$\$2\$\$ ***
- 7

8 1-05.14.GR1
9 **Cooperation with Other Contractors**

10
11 1-05.14.INST1.GR1
12 Section 1-05.14 is supplemented with the following:

13
14 1-05.14.OPT1.FR1
15 ***(March 13, 1995)***
16 ***Other Contracts Or Other Work***

17 It is anticipated that the following work adjacent to or within the limits of this project will
18 be performed by others during the course of this project and will require coordination of
19 the work:

20
21 *** \$\$1\$\$ ***

22
23 1-05.14.OPT2.FR1
24 (March 13, 1995)
25 The Contractor on this project shall provide sufficient room within the right of way for a
26 two-way haul road past the Contractor's operations for use of the *** \$\$1\$\$ *** Contractor.
27

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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.

*** \$\$5\$\$ ***

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).OPT1.FR1

(April 3, 2006)

Confined Space

Confined spaces are known to exist at the following locations:

*** \$\$1\$\$ ***

1 The Contractor shall be fully responsible for the safety and health of all on-site
2 workers and compliant with Washington Administrative Code (WAC 296-809).
3
4 The Contractor shall prepare and implement a confined space program for each of
5 the confined spaces identified above. The Contractor's Confined Space program
6 shall be sent to the Contracting Agency at least 30 days prior to the Contractor
7 beginning work in or adjacent to the confined space. No work shall be performed in
8 or adjacent to the confined space until the plan is submitted to the Engineer as
9 required. The Contractor shall communicate with the Engineer to ensure a
10 coordinated effort for providing and maintaining a safe worksite for both the
11 Contracting Agency's and Contractor's workers when working in or near a confined
12 space.
13
14 All costs to prepare and implement the confined space program shall be included in
15 the bid prices for the various items associated with the confined space work.
16
17 1-07.1(2).OPT2.GR1
18 **(October 3, 2022)**
19 **Diving and Workboat Safety Requirements**
20 The Contractor shall comply with the requirements of WAC 296-37, "Standards for
21 Commercial Diving Operations" and the requirements contained herein as
22 applicable. The Contractor shall give the Engineer 24 hours advance notice of any
23 planned diving or workboat activity.
24
25 **General Requirements for Communications and Safety**
26 The following requirements shall be followed whenever diving or workboat activity is
27 performed at the ferry terminal:
28
29 • Prior to diving and workboat activity, the Contractor shall obtain approval
30 from the Engineer.
31
32 • Notification shall be made no less than one hour prior to the Diver entering
33 the water.
34
35 • The Engineer or designee will be responsible for notifying each vessel of
36 the upcoming day's diving or workboat activity.
37
38 • The Engineer will request that the vessels depart under low power (slow
39 bell) unless otherwise necessary due to weather conditions.
40
41 • The diving team and workboat operations shall not disrupt the ferry service
42 schedule.
43
44 • Communications between the Diver and the Diver's Tender shall be
45 maintained at all times.
46
47 • The Engineer and Masters shall be notified at the completion of diving and
48 workboat activity each day.
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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.

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.

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- 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 beginning Work involving exposure to materials containing lead. 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.

Contracting Agency personnel shall be given free and full access to all hygiene and housekeeping facilities including, but not limited to, change areas, showers, and handwashing and eating facilities.

Payment

All costs to comply with this Special Provision for the Lead Health Protection laws and regulations are the responsibility of the Contractor and shall be included in related items of work.

1-07.3.GR1

Fire Prevention and Merchantable Timber Requirements

1-07.3.INST1.GR1

Section 1-07.3 is supplemented with the following:

1-07.3.OPT1.GR1

(August 2, 2004)

The Forest Service Provisions, included in the Appendix to these Special Provisions, are made a part of this contract. The Contractor shall comply with the requirements of these Forest Service provisions at no additional cost to the Contracting Agency.

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1-07.3(2).GR1

Merchantable Timber Requirements

1-07.3(2).INST1.GR1

Section 1-07.3(2) is supplemented with the following:

1-07.3(2).OPT1.GR1

(April 7, 2008)

This project contains merchantable timber.

Export Restrictions - DOT Form 410-100, Purchaser Certification for Export Restricted Timber, will be included when the contract is sent to the Contractor for execution. The form shall be completed and signed by the Contractor. The Contractor shall send the original signed form and one copy of the signed form directly to the Washington State Department of Revenue at the address on the form. The Contractor shall send one signed copy along with the other documents required by Section 1-03.3 to the Contracting Agency with the executed contract.

State Tax Requirements - It shall be the Contractor's responsibility to pay to the State Department of Revenue all taxes on harvested timber.

1-07.4.GR1

Sanitation

1-07.4(2).GR1

Health Hazards

1-07.4(2).INST1.GR1

Section 1-07.4(2) is revised to read:

1-07.4(2).OPT1.FR1

(August 7, 2017)

This project site is known to be occupied by transients and therefore contains biological hazards and associated physical hazards. These may include, but not be limited to violent and dangerous individuals, hypodermic needles, garbage, broken glass, human and animal excrement, drug paraphernalia, and other hazards.

The Contractor shall take precautions and perform any necessary Work required to provide and maintain a safe and healthful jobsite for all workers and the public for the duration of the project in accordance with all applicable laws and contract requirements.

The Contractor shall ensure that the public, including persons who may be non-English speaking or those who may not be able to recognize potential safety and health hazards within the project area, are not harmed by the Contractors activities.

Nothing required by this Specification shall operate as a waiver of the Contractor's responsibility for taking all steps necessary to ensure the safety of the public under Section 1-07.23 or responsibility for liability and damages under Section 1-07.14 or for any other responsibility under the Contract or as may be required by law.

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Health and Safety Plan

The Contractor shall prepare a written Health and Safety Plan. The plan shall be prepared under the supervision of a certified industrial hygienist and shall incorporate all required County, State, and Federal health and safety provisions. The plan shall include requirements of the Federal Occupational Safety and Health Act of 1970 (OSHA), all amendments, and all other applicable health regulations.

Preparation of the Health and Safety Plan shall include an initial site assessment by the industrial hygienist. The plan shall break initial cleanup of the project into identifiable construction areas. The plan shall be submitted to the Engineer prior to commencing cleanup Work. At least one copy of the plan shall be posted at the work site while cleanup Work is in progress. The industrial hygienist shall perform one or more follow-up site assessments as needed to approve the site following completion of the initial site cleanup.

Public Notification

The Contractor shall furnish and install the “No Trespassing” signs shown in the Plans at locations staked by the Engineer at least 72 hours prior to performing site cleanup or any potentially hazardous Work (such as clearing or operating equipment).

At the same time that “No Trespassing” signs are posted, provide written notification of the following to the Engineer and to the chief law enforcement officer of the local governmental entity where the Work will occur:

- 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;

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- 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.

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

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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 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.

1 The unit contract price per each “No Trespassing Sign” shall be full payment for
2 all Work required to furnish, install, maintain and remove the signs.

3
4 “Health and Safety Plan”, lump sum.

5 The lump sum unit contract price for “Health and Safety Plan” shall be full
6 payment for all Work associated with the preparation and implementation of the
7 Health and Safety Plan including the initial and follow up assessment(s) for initial
8 site cleanup, worker training and personal protective equipment, and providing
9 required notifications.

10
11 “FA-Site Cleanup of Bio. And Physical Hazards”, by force account as provided
12 in Section 1-09.6.

13
14 Removal and disposal of biological and physical hazards; removal of individuals
15 and encampments; removal, storage, and return of personal property; disposal
16 of unclaimed personal property; additional site assessment, notifications, worker
17 training and personal protective equipment required after the initial site cleanup
18 is completed; and site preservation Work authorized by the Engineer will be paid
19 for by force account in accordance with Section 1-09.6.

20
21 For the purpose of providing a common proposal for all bidders, the Contracting
22 Agency has entered an amount for the item “FA-Site Cleanup of Bio. And
23 Physical Hazards” in the bid proposal to become a part of the total bid by the
24 Contractor.

25
26 1-07.5.GR1
27 **Environmental Regulations**

28
29 1-07.5.INST1.GR1
30 Section 1-07.5 is supplemented with the following:

31
32 1-07.5.OPT1.GR1
33 **(September 20, 2010)**
34 **Environmental Commitments**

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

39
40 1-07.5.OPT1(A).FR1
41 (August 4, 2014)
42 The Contractor shall submit a written notification to the Engineer no later than 10
43 calendar days prior to beginning any ground disturbing activities *** \$\$1\$\$ ***. The
44 Contractor shall not commence any such ground disturbing activities until the monitor
45 is present.

46
47 1-07.5.OPT1(B).FR1
48 (April 1, 2019)
49 The Contractor shall notify the Engineer a minimum of *** \$\$1\$\$ *** calendar days
50 prior to commencing any work in sensitive areas, mitigation areas, and wetland
51 buffers. Installation of construction fencing is excluded from this notice requirement.

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2 1-07.5.OPT1(C).FR1
3 (April 1, 2019)
4 No *** \$\$1\$\$ *** is allowed within *** \$\$2\$\$ *** feet of *** \$\$3\$\$ ***.
5
6 1-07.5.OPT2.GR1
7 **(August 3, 2009)**
8 **Payment**
9 All costs to comply with this special provision for the environmental commitments and
10 requirements are incidental to the contract and are the responsibility of the Contractor.
11 The Contractor shall include all related costs in the associated bid prices of the contract.
12
13 1-07.5(1).GR1
14 **General**
15
16 1-07.5(1).INST1.GR1
17 Section 1-07.5(1) is supplemented with the following:
18
19 1-07.5(1).OPT1.FR1
20 **(October 3, 2022)**
21 **In-Water Operations Along Marine Shorelines**
22 In-Water Operations along Marine Shorelines shall meet the requirements from ***
23 \$\$1\$\$ ***.
24
25 The Contractor's vessels and equipment operating in support of the Work shall be in
26 adequate water depth and shall use the minimum required propulsion to prevent
27 impacts from propeller wash and grounding to seagrass, kelp, and forage fish
28 spawning beds as shown in the Plans. The Contractor shall not conduct activities
29 that may cause scouring within, or other types of sediment transfer out of or into the
30 seagrass, kelp, and forage fish spawning beds. At no time shall any vessel or
31 temporary floating work contact the ground.
32
33 The Contractor shall not deploy anchors or spuds in seagrass or kelp. The Contractor
34 shall maintain anchor cable tension, set and retrieve anchors vertically, and prevent
35 mooring cables from dragging to avoid impacts to seagrass and kelp.
36
37 To minimize shading of seagrass, the Contractor shall relocate vessels moored over
38 seagrass every fourth day when working within the allowed working dates listed in
39 *** \$\$2\$\$ ***.
40
41 The Contractor shall not allow debris or any type of fuel, solvent or lubricant to enter
42 the water.
43
44 1-07.5(2).GR1
45 **State Department of Fish And Wildlife**
46
47 1-07.5(2).INST1.GR1
48 Section 1-07.5(2) is supplemented with the following:
49
50 1-07.5(2).OPT1.GR1
51 (April 2, 2018)

1 The following Provisions summarize the requirements, in addition to those required
2 elsewhere in the Contract, imposed upon the Contracting Agency by the Washington
3 State Department of Fish and Wildlife. Throughout the work, the Contractor shall
4 comply with the following requirements:
5

6 1-07.5(2).OPT1(A).FR1
7 (April 2, 2018)
8 The Contractor may begin Work below the Ordinary High Water Line on ***
9 \$\$1\$\$ *** and must complete all the Work by *** \$\$2\$\$ ***.

10
11 1-07.5(2).OPT2.GR1
12 (April 2, 2018)
13 All costs to comply with this special provision are incidental to the Contract and are
14 the responsibility of the Contractor. The Contractor shall include all related costs in
15 the associated bid prices of the Contract.
16

17 1-07.5(3).GR1
18 **State Department of Ecology**
19

20 1-07.5(3).INST1.GR1
21 Section 1-07.5(3) is supplemented with the following:
22

23 1-07.5(3).OPT1.GR1
24 (April 2, 2018)
25 The following Provisions summarize the requirements, in addition to those required
26 elsewhere in the Contract, imposed upon the Contracting Agency by the Washington
27 State Department of Ecology. Throughout the work, the Contractor shall comply with
28 the following requirements:
29

30 1-07.5(3).OPT1(A).FR1
31 (August 3, 2009)
32 A mixing zone is established within which the turbidity standard is waived during
33 actual in-water work. The mixing zone is established to only temporarily allow
34 exceeding the turbidity criteria (such as a few hours or days) and is not
35 authorization to exceed the turbidity standard for the entire duration of the
36 construction. The mixing zone shall not exceed *** \$\$1\$\$ *** feet downstream
37 from the construction area.
38

39 1-07.5(3).OPT1(B).GR1
40 (April 1, 2019)
41 Stormwater, dewatering water, or other authorized non-stormwater discharges
42 that has come into contact with pH modifying substances such as concrete
43 rubble, cast concrete or amended soils, need to be maintained between 6.5 –
44 8.5 standard units (su). If pH exceeds 8.5 su, the Contractor shall immediately
45 discontinue work and initiate treatment to prevent discharges outside the
46 acceptable range from occurring. All neutralization methods used shall be in
47 accordance with the permit. Work may resume once treatment has been
48 implemented and pH of the stormwater or authorized non-stormwater discharge
49 is between 6.5 - 8.5 su or it can be demonstrated that high pH waters will not
50 discharge to surface waters.
51

1 Stormwater, dewatering water, and other authorized non-stormwater discharges
2 are monitored weekly for compliance with the turbidity benchmark (25
3 nephelometric turbidity units (ntu)) and the phone reporting trigger value (250
4 ntu) by the Contracting Agency. When the turbidity benchmark is breached, the
5 best management practices (BMPs) installed on-site are not working adequately
6 and need to be adapted, maintained or more BMPs shall be installed. When the
7 turbidity phone reporting trigger value is breached, immediate action is required
8 in order to lower the turbidity to ≤ 25 ntu or to eliminate the discharge. Daily
9 follow-up discharge samples will be collected at all locations where a discharge
10 of 250 ntu or higher was collected unless the discharge was stopped or
11 eliminated.

12
13 1-07.5(3).OPT2.GR1

14 (April 2, 2018)

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

18

19 1-07.5(4).GR1

20 **Air Quality**

21

22 1-07.5(4).INST1.GR1

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

24

25 1-07.5(4).OPT1.FR1

26 (October 4, 2021)

27 **Asbestos Good Faith Investigation**

28 An asbestos Good Faith Investigation (GFI) has been conducted for this project and
29 it has been determined that known Asbestos Containing Material (ACM), and/or
30 Presumed Asbestos Containing Material (PACM), will be disturbed by the work on
31 this project. The asbestos GFI has been provided in Appendix *** \$1\$ \$***.

32

33 1-07.5(4).OPT2.FR1

34 (October 4, 2021)

35 **Asbestos Good Faith Investigation**

36 An asbestos Good Faith Investigation (GFI) has been conducted for this project and
37 it has been determined to a reasonable certainty that no known Asbestos Containing
38 Material (ACM) will be disturbed by the work on this project. The asbestos GFI has
39 been provided as Appendix *** \$1\$ \$***.

40

41 1-07.5(4)C.GR1

42 **Asbestos Containing Material**

43

44 1-07.5(4)C.INST1.GR1

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

46

47 1-07.5(4)C.OPT1.FR1

48 (October 4, 2021)

49 **Asbestos Good Faith Investigation**

50 An asbestos Good Faith Investigation (GFI) has been conducted for this project
51 and it has been determined that known Asbestos Containing Material (ACM),
52 and/or Presumed Asbestos Containing Material (PACM), will be disturbed by the

1 work on this project. The asbestos GFI has been provided in Appendix *** \$1\$\$
2 ***.
3
4 1-07.5(4)C.OPT2.FR1
5 **(October 4, 2021)**
6 **Asbestos Good Faith Investigation**
7 An asbestos Good Faith Investigation (GFI) has been conducted for this project
8 and it has been determined to a reasonable certainty that no known Asbestos
9 Containing Material (ACM) will be disturbed by the work on this project. The
10 asbestos GFI has been provided as Appendix *** \$1\$\$ ***.
11
12 1-07.5(5).GR1
13 ***U.S. Army Corps of Engineers***
14
15 1-07.5(5).INST1.GR1
16 Section 1-07.5(5) is supplemented with the following:
17
18 1-07.5(5).OPT1.GR1
19 (April 2, 2018)
20 The following Provisions summarize the requirements, in addition to those required
21 elsewhere in the Contract, imposed upon the Contracting Agency by the U.S. Army
22 Corps of Engineers. Throughout the work, the Contractor shall comply with the
23 following requirements:
24
25 1-07.5(5).OPT1(B).FR1
26 (February 25, 2013)
27 Temporary fills at *** \$1\$\$ *** must be removed within *** \$2\$\$ *** calendar
28 days of beginning placement of these fills. This time period may be extended
29 with approval from the Engineer. Requests to extend must be received a
30 minimum of 45 days prior to the expiration of number of days listed above, since
31 the extension is subject to concurrence by the U.S. Army Corps of Engineers.
32
33 1-07.5(5).OPT1(C).GR1
34 (February 25, 2013)
35 Temporary structures and dewatering of areas under the jurisdiction of the U.S.
36 Army Corps of Engineers must maintain normal downstream flows and prevent
37 upstream and downstream flooding to the maximum extent practicable.
38
39 1-07.5(5).OPT1(D).GR1
40 (August 3, 2009)
41 Heavy equipment working in wetlands or mudflats must be placed on mats or
42 other measures taken to minimize soil disturbance as approved by the Engineer.
43
44 1-07.5(5).OPT1(F).GR1
45 (February 6, 2023)
46 The Contractor shall dispose of all creosoted timber, creosote piling and
47 associated debris as shown in the Plans in accordance with current federal,
48 state, and local regulations and provisions, and following Best Management
49 Practices. Handling shall meet the Minimum Functional Standards for Solid
50 Waste Handling, Chapter 173-304 WAC. Disposal shall be made in a landfill
51 which meets the liner and leachate standards of the Criteria for Municipal Solid
52 Waste Landfills, Chapter 173-351 WAC. The Contractor shall provide receipts

1 from the disposal facility to the Engineer. If the material is transported to a
2 transfer station, the Contractor shall obtain documentation indicating that final
3 disposal will comply with the standards referenced above.
4
5 1-07.5(5).OPT1(G).FR1
6 (August 4, 2014)
7 The Contractor shall submit a written notification to the Engineer no later than
8 10 calendar days prior to beginning any ground disturbing activities *** \$\$1\$\$
9 ***. The Contractor shall not commence any such ground disturbing activities
10 until the monitor is present.
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.

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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).OPT1(R).FR1
46 **(September 7, 2021)**
47 **Bird Protection and Monitoring**
48 **Description**
49 This Work includes preparing a Project-specific Bird Projection Plan,
50 implementation of the Bird Protection Plan, updating the Bird Protection
51 Plan, surveying, monitoring, and reporting of bird activity, actions required

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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 or other structures that would be demolished, 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 raptor nest is discovered or suspected. 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.

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

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Contract. The Plan shall be a Type 2 Working Drawing and apply to ***
\$\$\$ 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. Precautions taken or to be taken to prevent birds from nesting on
bridges or other structures that would be demolished, 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.
6. Communicating, notifying, and documenting:

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- 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.

1-07.5(6).OPT2.GR1

(April 2, 2018)

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

1-07.5(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.

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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.

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

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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. 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.
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.

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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.

*** \$\$1\$\$ ***

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.

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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.

By the 20th of each month, the Contractor shall furnish the Engineer a schedule of the work expected to be performed in the next two months. The Engineer will transmit this information through the Bridge and Structures Office to the Coast Guard so that interested users of the waterway can be notified.

The Coast Guard contact is:

Bridge Administrator
Thirteenth Coast Guard District
915 Second Avenue Suite 3510
Seattle, WA 98174-1067
D13-pf-d13bridges@uscg.mil
Telephone: (206) 220-7282

1 All costs in connection with furnishing, installing, maintaining, and removing temporary
2 navigation lights, signs, signals, or other warning devices shall be included in the contract
3 prices for the items of work involved.
4

5 All costs incurred in obtaining the required Coast Guard approvals and in complying with
6 all requirements specified herein shall be included in the contract prices for the items of
7 work involved.
8

9 All costs in connection with delays in the construction caused by the Contractor's failure
10 to obtain the necessary Coast Guard approvals shall be at the Contractor's expense.
11

12 1-07.6.OPT3(B).GB1

13 (September 3, 2019)

14 The Contractor shall comply with all United States Coast Guard requirements.
15

16 The Contractor shall submit a Type 3 Working Drawing consisting of a Navigation Work
17 Plan at least 60-calendar days prior to beginning activities and operations affecting any
18 part of the waterway in the vicinity of the bridge work. The Navigation Work Plan shall
19 include, at a minimum, the following:
20

- 21 1. Lead Contractor contact for the project, with associated email and phone
22 number.
23
- 24 2. Scheduled on-site start work date and finish work date.
25
- 26 3. Days and times of operation over the nominal work week.
27
- 28 4. Dates and times of stages of work, as applicable for operations involving
29 sequential or staged activities.
30
- 31 5. Location of the Work by latitude and longitude, river mile, and geographic point
32 of land, with latitude and longitude expressed in degrees, minutes, seconds, and
33 thousandths of seconds.
34
- 35 6. Identification and description of barges, vessels and equipment present in the
36 waterway, if any, to facilitate operations. The description shall include vessel
37 type, vessel name (as applicable), means of voice contact (VHF frequencies,
38 cell phone number, etc.) to the vessel, means of anchoring and mooring the
39 vessel and the location of such anchoring and mooring, the extent to which the
40 vessel is encroaching into the defined navigation channel, and lighting support
41 vessels in accordance with the Coast Guard Rules of the Road as applicable.
42
- 43 7. Point of contact phone number available for 24-hour-seven-days-a-week
44 contact from local mariners through the duration of the project.
45
- 46 8. Detailed identification of work operation hazards to mariners, if any, created by
47 operations (cables, buoys, machinery, tools, tows, containment and platform
48 structures, falling debris, etc.), including details such as size, diameter, color as
49 applicable.
50

- 1 9. Precautions regarding the in-water vessels, equipment, and work operation
2 hazards, if any, affecting local mariners such as operating speed and wake,
3 clearance distance, etc.
4
- 5 10. Systems and equipment causing a reduction in the available vertical clearance
6 beneath the bridge, if any, such as containment and platform systems and
7 supports and the equipment necessary to install, maintain, and remove such
8 systems, and the identification of any falling debris hazard to waterway traffic.
9
- 10 11. Description of advisory signage and lighting to be implemented by the
11 Contractor to advise local mariners of the operations, reduced clearances, and
12 presence of work operation hazards, as applicable. The description shall
13 include the advisory message, and placement and orientation of the signage
14 and flashing amber lighting (4-seconds/15 per minute).
15

16 The Engineer will submit the Navigation Work Plan to the US Coast Guard contact
17 identified below for concurrent review. Approval from the US Coast Guard and the
18 Engineer is required prior to the US Coast Guard issuing a Local Notice to Mariners
19 advising of the operations, and allowing the operations to commence.
20

21 The Contractor shall contact the US Coast Guard for requirements related to the mooring
22 of barges, placement of log booms, and all other equipment that could be a hazard to
23 waterway users.
24

25 Provisions shall be made for the removal, on 2 hours notice, of all equipment that would
26 block or partially block, the navigable portion of the waterway.
27

28 The US Coast Guard contact is:

29
30 Bridge Administrator
31 Thirteenth Coast Guard District
32 915 Second Avenue Suite 3510
33 Seattle, WA 98174-1067
34 D13-pf-d13bridges@uscg.mil
35 Telephone: (206) 220-7282
36

37 All costs incurred in contacting the US Coast Guard and in complying with all the
38 requirements specified herein shall be included in the contract prices for the items of work
39 involved.
40

41 All costs in connection with delays in the construction caused by the Contractor's failure
42 to contact the US Coast Guard shall be at the Contractor's expense.
43

44 1-07.7.GR1
45 **Load Limits**
46

47 1-07.7.INST1.GR1
48 Section 1-07.7 is supplemented with the following:
49

50 1-07.7.OPT3.FR1
51 (March 13, 1995)

1 The State has made arrangements with *** \$\$1\$\$ *** for the Contractor's use of the ***
2 \$\$2\$\$ *** shown in the Plans as a haul route for materials coming from *** \$\$3\$\$ *** Site
3 *** \$\$4\$\$ *** and used on this project. The Contractor shall comply with all existing legal
4 restrictions.

5
6 If the Contractor selects different haul routes than those designated, the Contractor shall,
7 at the Contractor's expense, make all arrangements for the use of the haul routes.

8
9 1-07.7.OPT4.FR1
10 (March 13, 1995)
11 The Contractor shall also comply with the further restrictions imposed by the owner of the
12 roads as follows:

13
14 *** \$\$1\$\$ ***

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16 1-07.7.OPT5.GR1
17 (March 13, 1995)
18 Whenever the Contractor obtains materials from a source other than that provided by the
19 Contracting Agency, or provides a source for materials not designated to come from a
20 source provided by the State and the location of the source necessitates hauling on other
21 than State Highways, the Contractor shall, at the Contractor's expense, make all
22 arrangements for the use of the haul routes.

23
24 1-07.7.OPT6.GR1
25 (March 13, 1995)
26 If the sources of materials provided by the Contractor necessitates hauling over roads
27 other than State Highways, the Contractor shall, at the Contractor's expense, make all
28 arrangements for the use of the haul routes.

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30 1-07.9.GR1

31 **Wages**

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33 1-07.9(1).GR1

34 **General**

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36 1-07.9(1).INST1.GR1
37 Section 1-07.9(1) is supplemented with the following:

38
39 1-07.9(1).OPT1.GR1
40 (January 10, 2024)
41 The Federal wage rates incorporated in this contract have been established by the
42 Secretary of Labor under United States Department of Labor General Decision No.
43 WA20240001.

44
45 The State rates incorporated in this contract are applicable to all construction
46 activities associated with this contract.

47
48 1-07.9(1).OPT2.FR1
49 (January 10, 2024)
50 The Federal wage rates for Highway Construction incorporated in this contract have
51 been established by the Secretary of Labor under United States Department of Labor

1 General Decision No. WA20240001. These rates are applicable to highway
2 construction.
3
4 The Federal wage rates for Building Construction incorporated in this contract have
5 been established by the Secretary of Labor under United States Department of Labor
6 General Decision No. *** \$\$1\$\$ ***. These rates are applicable to building
7 construction.
8
9 The State rates incorporated in this contract are applicable to all construction
10 activities associated with this contract.
11
12 1-07.9(1).OPT3.FR1
13 (May 11, 2010)
14 The Federal wage rates for Building Construction incorporated in this contract have
15 been established by the Secretary of Labor under United States Department of Labor
16 General Decision No. *** \$\$1\$\$ ***. These rates are applicable to building
17 construction.
18
19 The State rates incorporated in this contract are applicable to all construction
20 activities associated with this contract.
21
22 1-07.9(1).OPT5.FR1
23 (January 10, 2024)
24 The Federal wage rates for Highway Construction incorporated in this contract have
25 been established by the Secretary of Labor under United States Department of Labor
26 General Decision No. WA20240001. These rates are applicable to highway
27 construction.
28
29 The Federal wage rates for Heavy Construction incorporated in this contract have
30 been established by the Secretary of Labor under United States Department of Labor
31 General Decision No. *** \$\$1\$\$ ***. These rates are applicable to heavy construction.
32
33 The State rates incorporated in this contract are applicable to all construction
34 activities associated with this contract.
35
36 1-07.9(1).OPT6.FR1
37 (January 10, 2024)
38 The Federal wage rates for Highway Construction incorporated in this contract have
39 been established by the Secretary of Labor under United States Department of Labor
40 General Decision No. WA20240001. These rates are applicable to highway
41 construction.
42
43 The Federal wage rates for Heavy Construction incorporated in this contract have
44 been established by the Secretary of Labor under United States Department of Labor
45 General Decision No. *** \$\$1\$\$ ***. These rates are applicable to heavy construction.
46
47 The Federal wage rates for Building Construction incorporated in this contract have
48 been established by the Secretary of Labor under United States Department of Labor
49 General Decision No. *** \$\$2\$\$ ***. These rates are applicable to building
50 construction
51

1 The State rates incorporated in this contract are applicable to all construction
2 activities associated with this contract.
3
4 1-07.9(3).GR1
5 **Apprentices**
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7 1-07.9(3).INST1.GR1
8 Section 1-07.9(3) is supplemented with the following:
9
10 1-07.9(3).OPT1.GR1
11 ~~(October 3, 2022~~September 3, 2024)
12 **Apprentice Utilization**
13 This Contract includes an Apprentice Utilization Requirement. ~~No less than 15~~Fifteen
14 percent or more of project Labor Hours shall be performed by Apprentices.
15 Apprentice Utilization will be determined using the L&I online Prevailing Wage Intent
16 & Affidavit (PWIA) system.
17
18 **Definitions**
19 For the purposes of this specification the following definitions apply:
20
21 1. Apprentice is a person enrolled in a State-approved Apprenticeship Training
22 Program.
23
24 2. ~~Apprentice Utilization Requirement~~ is the Apprentice labor hours expressed
25 as a percentage of the project Labor Hours based on certified payrolls or
26 the affidavit of wages paid, whichever is least. The percentage is not
27 rounded up.
28
29 3. Apprentice Utilization Requirement is the minimum percentage of
30 apprentice labor hours required by the Contract.
31
32 34. ~~Good Faith Efforts (GFE) is used if the Contractor doesn't meet the~~
33 ~~Apprentice Utilization Requirement. It describes the Contractor's efforts to~~
34 ~~meet the Apprentice Utilization Requirement including but not necessarily~~
35 ~~limited to the specific steps as described elsewhere in this specification.~~
36
37 45. Labor Hours are the total hours performed by all workers receiving an hourly
38 wage who are subject to prevailing wage requirements for Work performed
39 on the Contract as defined by RCW 39.04.310. Labor Hours are determined
40 based on the scope of work performed by the individuals, rather than the
41 title of their occupations in accordance with WAC 296-127~~directly~~
42 ~~employed upon the project including hours performed by workers employed~~
43 ~~by the Contractor and all subcontractors. Labor Hours do not include hours~~
44 ~~performed by foremen, superintendents, owners, and workers who are not~~
45 ~~subject to prevailing wage requirements.~~
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47 56. State-approved Apprenticeship Training Program is an apprenticeship
48 training program approved by the Washington State Apprenticeship
49 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~~” GFE 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 use the PWIA system to 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:~~

<https://secure.lni.wa.gov/arts-public/#/program-search> ~~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~~ use the ~~State L&I online PWIA system~~ to submit 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. The GFE documentation for Apprentice Utilization based on certified payrolls shall be submitted after Substantial Completion but no later than 30 days after Physical Completion. After all affidavits of wages paid have been submitted, if the Apprentice Utilization based on the affidavits of wages paid is less than that of the Apprentice Utilization based on certified payrolls, a GFE shall be submitted based on the lower Apprentice Utilization.

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~~ include:

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- 1. Documentation of ongoing correspondence for solicitation of Apprentices from a State-approved Apprenticeship Training Program(s). To be considered ongoing, the correspondence shall be not less than once a quarter, beginning at the start of Work and continuing every three months thereafter. The response from the solicited State-Approved Apprenticeship Training Program(s) when there is a lack of availability of Apprentices shall be included in the correspondence. ~~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.~~

And one or more of the following:

- 2. ~~Provide d~~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.
- 3. ~~Provide d~~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.
- 4. Documentation of other obstacles the Contractor faced that may demonstrate or solidify a satisfactory explanation of not meeting the Apprenticeship Utilization Requirement.

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 1-07.11.OPT1.GR1
 2 (October 3, 2022)
 3 Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive
 4 Order 11246)
 5

- 6 1. The Contractor's attention is called to the Equal Opportunity Clause and the Standard
 7 Federal Equal Employment Opportunity Construction Contract Specifications set
 8 forth herein.
 9
 10 2. The goals and timetables for minority and female participation set by the Office of
 11 Federal Contract Compliance Programs, expressed in percentage terms for the
 12 Contractor's aggregate work force in each construction craft and in each trade on all
 13 construction work in the covered area, are as follows:
 14

15 Women - Statewide

16
 17 Timetable Goal

18
 19 Until further notice 6.9%

20 Minorities - by Standard Metropolitan Statistical Area (SMSA)

21
 22 Spokane, WA:

23 SMSA Counties:

24 Spokane, WA 2.8
 25 WA Spokane.

26 Non-SMSA Counties 3.0

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

29
 30 Richland, WA

31 SMSA Counties:

32 Richland Kennewick, WA 5.4
 33 WA Benton; WA Franklin.

34 Non-SMSA Counties 3.6
 35 WA Walla Walla.

36
 37 Yakima, WA:

38 SMSA Counties:

39 Yakima, WA 9.7
 40 WA Yakima.

41 Non-SMSA Counties 7.2
 42 WA Chelan; WA Douglas; WA Grant; WA Kittitas; WA Okanogan.

43

1	Seattle, WA:	
2	SMSA Counties:	
3	Seattle Everett, WA	7.2
4	WA King; WA Snohomish.	
5	Tacoma, WA	6.2
6	WA Pierce.	
7	Non-SMSA Counties	6.1
8	WA Clallam; WA Grays Harbor; WA Island; WA Jefferson; WA Kitsap;	
9	WA Lewis; WA Mason; WA Pacific; WA San Juan; WA Skagit; WA	
10	Thurston; WA Whatcom.	

11	Portland, OR:	
12	SMSA Counties:	
13	Portland, OR-WA	4.5
14	WA Clark.	
15	Non-SMSA Counties	3.8
16	WA Cowlitz; WA Klickitat; WA Skamania; WA Wahkiakum.	
17		

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

24
25 The Contractor's compliance with the Executive Order and the regulations in 41 CFR
26 Part 60-4 shall be based on its implementation of the Equal Opportunity Clause,
27 specific affirmative action obligations required by the specifications set forth in 41
28 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female
29 employment and training must be substantially uniform throughout the length of the
30 contract, in each construction craft and in each trade, and the Contractor shall make
31 a good faith effort to employ minorities and women evenly on each of its projects.
32 The transfer of minority or female employees or trainees from Contractor to
33 Contractor or from project to project for the sole purpose of meeting the Contractor's
34 goal shall be a violation of the contract, the Executive Order and the regulations in
35 41 CFR Part 60-4. Compliance with the goals will be measured against the total
36 work hours performed.

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

47
48 U.S. Department of Labor
49 Office of Federal Contract Compliance Programs Pacific Region
50 Attn: Regional Director
51 San Francisco Federal Building
52 90 – 7th Street, Suite 18-300

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

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

1. As used in these specifications:

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

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

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually

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

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have employment opportunities available, and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunity and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the U.S. Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

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- i. Direct its recruitment efforts, both oral and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of the obligations under 7a through 7p of this Special Provision provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensure that the concrete benefits of the program are reflected in the Contractor's minority and female work-force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrate the effectiveness of actions taken on behalf of

- 1 the Contractor. The obligation to comply, however, is the Contractor's and failure of
2 such a group to fulfill an obligation shall not be a defense for the Contractor's
3 noncompliance.
4
- 5 9. A single goal for minorities and a separate single goal for women have been
6 established. The Contractor, however, is required to provide equal employment
7 opportunity and to take affirmative action for all minority groups, both male and
8 female, and all women, both minority and non-minority. Consequently, the Contractor
9 may be in violation of the Executive Order if a particular group is employed in
10 substantially disparate manner (for example, even though the Contractor has
11 achieved its goals for women generally, the Contractor may be in violation of the
12 Executive Order if a specific minority group of women is underutilized).
13
- 14 10. The Contractor shall not use the goals and timetables or affirmative action standards
15 to discriminate against any person because of race, color, religion, sex, or national
16 origin.
17
- 18 11. The Contractor shall not enter into any subcontract with any person or firm debarred
19 from Government contracts pursuant to Executive Order 11246.
20
- 21 12. The Contractor shall carry out such sanctions and penalties for violation of these
22 specifications and of the Equal Opportunity Clause, including suspensions,
23 terminations and cancellations of existing subcontracts as may be imposed or
24 ordered pursuant to Executive Order 11246, as amended, and its implementing
25 regulations by the Office of Federal Contract Compliance Programs. Any Contractor
26 who fails to carry out such sanctions and penalties shall be in violation of these
27 specifications and Executive Order 11246, as amended.
28
- 29 13. The Contractor, in fulfilling its obligations under these specifications, shall implement
30 specific affirmative action steps, at least as extensive as those standards prescribed
31 in paragraph 7 of this Special Provision, so as to achieve maximum results from its
32 efforts to ensure equal employment opportunity. If the Contractor fails to comply with
33 the requirements of the Executive Order, the implementing regulations, or these
34 specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
35
- 36 14. The Contractor shall designate a responsible official to monitor all employment
37 related activity to ensure that the company EEO policy is being carried out, to submit
38 reports relating to the provisions hereof as may be required by the government and
39 to keep records. Records shall at least include, for each employee, their name,
40 address, telephone numbers, construction trade, union affiliation if any, employee
41 identification number when assigned, social security number, race, sex, status (e.g.,
42 mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours
43 worked per week in the indicated trade, rate of pay, and locations at which the work
44 was performed. Records shall be maintained in an easily understandable and
45 retrievable form; however, to the degree that existing records satisfy this requirement,
46 the Contractors will not be required to maintain separate records.
47
- 48 15. Nothing herein provided shall be construed as a limitation upon the application of
49 other laws which establish different standards of compliance or upon the application
50 of requirements for the hiring of local or other area residents (e.g., those under the
51 Public Works Employment Act of 1977 and the Community Development Block Grant
52 Program).

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16. Additional assistance for Federal Construction Contractors on contracts administered by Washington State Department of Transportation or by Local Agencies may be found at:

Washington State Dept. of Transportation
Office of Equity and Civil Rights
PO Box 47314
310 Maple Park Ave. SE
Olympia WA
98504-7314
Ph: 360-705-7090
Fax: 360-705-6801
<http://www.wsdot.wa.gov/equalopportunity/default.htm>

1-07.11.OPT2.GR1

(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. As such, the requirements of this Contract are to make affirmative efforts to solicit DBEs, provide information on who submitted a Bid or quote and to report DBE participation monthly as described elsewhere in these Contract Provisions. No preference will be included in the evaluation of Bids/Proposals, no minimum level of DBE participation shall be required as a Condition of Award and Bids/Proposals may not be rejected or considered non-responsive on that basis.

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. 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*

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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 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:

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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.

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.

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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.

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.

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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 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.

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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 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

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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.

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.

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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.

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~~ **September 3, 2024)**

Disadvantaged Business Enterprise Participation

General

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~~ **irregular in accordance with Section 1-02.13,** resulting in rejection or other sanctions as provided by the 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~~

1 the performance of the Contract; or, persons/companies who arrange or
2 expedite transactions.

3
4 **Certified Business Description** - The approved business description that
5 supplements the North American Industry Classification System (NAICS) code
6 listed in OMWBE's directory of certified firms. ~~Specific descriptions of work the~~
7 ~~DBE is certified to perform, as identified in the Certified Firm Directory, under~~
8 ~~the Vendor Information page.~~

9
10 **Certified Firm Business Directory** - A database of all Minority, Women, and
11 Disadvantaged Business Enterprises currently certified by Washington State.
12 The on-line Directory is available to Bidders for their use in identifying and
13 soliciting interest from DBE firms. The database is located under the Firm
14 Certification section of the Diversity Management and Compliance System web
15 page at: <https://omwbe.diversitycompliance.com>.

16
17 **Commercially Useful Function (CUF)** - A firm performs a commercially useful
18 function when it is responsible for execution of the work of the contract and is
19 carrying out its responsibilities by performing, managing, and supervising the
20 work involved as defined in 49 CFR 26.55(c)(1). To perform a commercially
21 useful function, the firm must also be responsible, with respect to materials and
22 supplies used on the contract, for ordering, negotiating price, paying for,
23 determining quality and quantity, and installing (where applicable) for the
24 material itself.

25
26 The DBE firm does not perform a CUF if its role is limited to that of an extra
27 participant in a transaction, contract, or Project through which the funds are
28 passed to obtain the appearance of DBE participation. ~~49 CFR 26.55(c)(1)~~
29 ~~defines commercially useful function as: "A DBE performs a commercially useful~~
30 ~~function when it is responsible for execution of the work of the contract and is~~
31 ~~carrying out its responsibilities by actually performing, managing, and~~
32 ~~supervising the work involved. To perform a commercially useful function, the~~
33 ~~DBE must also be responsible, with respect to materials and supplies used on~~
34 ~~the contract, for negotiating price, determining quality and quantity, ordering the~~
35 ~~material, and installing (where applicable) and paying for the material itself. To~~
36 ~~determine whether a DBE is performing a commercially useful function, you~~
37 ~~must evaluate the amount of work subcontracted, industry practices, whether~~
38 ~~the amount the firm is to be paid under the contract is commensurate with the~~
39 ~~work it is actually performing and the DBE credit claimed for its performance of~~
40 ~~the work, and other relevant factors."~~

41
42 **Consultant, DBE** – An individual, partnership, firm, or corporation who meet the
43 definition of a DBE which has been retained under a contract to provide technical
44 or professional services.

45
46 **DBE Commitment** - The dollar amount and scope of work the Bidder indicates
47 on each line of their DBE Utilization Certification (WSDOT Form 272-056) for
48 each DBE firm. These Commitments will be incorporated into the Contract and
49 shall be considered Contract requirements.

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51 **DBE Condition of Award (COA) Goal** - An assigned numerical amount
52 specified as a percentage of the Contract. At Bid, this is the minimum amount

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that the Bidder must commit to by submission of the DBE Utilization Certification form and, if necessary, by GFE Documentation.

Disadvantaged Business Enterprise (DBE) - A business that is owned and operated independently from other businesses and is 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. ~~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.

Good Faith Efforts (GFE) - Efforts to achieve the DBE COA Goal or other requirements of this ~~part~~ Provision which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Subcontractor, DBE - An individual, partnership, firm, corporation, or joint venture who meet the definition of a DBE and who is sublet part of the Contract.

Supplier, DBE - A Manufacturer, Regular Dealer, Distributor, or Transaction Facilitator who provides supplies or materials for the Contract. The role a Supplier performs is determined on a contract-by contract basis.

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.

Distributor, DBE - An established DBE firm that engages in the regular sale or lease of the items specified by the contract. A DBE Distributor assumes responsibility for the items it purchases once they leave the point of origin, making it liable for any loss or damage not covered by the carrier's

1 insurance. The Distributor must demonstrate ownership of the items in
2 question and assure all risk for loss or damage during transportation,
3 evidenced by the terms of the purchase order or bill of lading from a third
4 party, indicating Free on Board (FOB) at the point of origin or similar terms
5 that transfer responsibility of the items in question to the DBE distributors.
6

7 **Transaction Facilitator, DBE** - A DBE firm (packagers, brokers,
8 manufacturer's representatives, etc.) who provides a bona fide service
9 arranging, facilitating, or expediting transactions but does not qualify as a
10 Manufacturer, a Regular Dealer, or a Distributor.
11

12 ~~**Manufacturer (DBE)** - A DBE firm that operates or maintains a factory or~~
13 ~~establishment that produces on the premises the materials, supplies, articles, or~~
14 ~~equipment required under the Contract. A DBE Manufacturer shall produce~~
15 ~~finished goods or products from raw or unfinished material or purchase and~~
16 ~~substantially alters goods and materials to make them suitable for construction~~
17 ~~use before reselling them.~~
18

19 ~~**Reasonable Fee (DBE)** - For purposes of Brokers or service providers a~~
20 ~~reasonable fee shall not exceed 5% of the total cost of the goods or services~~
21 ~~brokered.~~
22

23 ~~**Regular Dealer (DBE)** - A DBE firm that owns, operates, or maintains a store,~~
24 ~~warehouse, or other establishment in which the materials or supplies required~~
25 ~~for the performance of a Contract are bought, kept in stock, and regularly sold~~
26 ~~to the public in the usual course of business. To be a Regular Dealer, the DBE~~
27 ~~firm must be an established regular business that engages in as its principal~~
28 ~~business and in its own name the purchase and sale of the products in question.~~
29 ~~A Regular Dealer in such items as steel, cement, gravel, stone, and petroleum~~
30 ~~products need not own, operate or maintain a place of business if it both owns~~
31 ~~and operates distribution equipment for the products. Any supplementing of~~
32 ~~regular dealers' own distribution equipment shall be by long term formal lease~~
33 ~~agreements and not on an ad-hoc basis. Brokers, packagers, manufacturers'~~
34 ~~representatives, or other persons who arrange or expedite transactions shall not~~
35 ~~be regarded as Regular Dealers within the meaning of this definition.~~
36

37 ~~**DBE Commitment** - The scope of work and dollar amount the Bidder indicates~~
38 ~~they will be subcontracting to be applied towards the DBE Condition of Award~~
39 ~~Goal as shown on the DBE Utilization Certification Form for each DBE~~
40 ~~subcontractor. This DBE Commitment will be incorporated into the Contract and~~
41 ~~shall be considered a Contract requirement. The Contractor shall utilize the COA~~
42 ~~DBEs to perform the work and supply the materials for which they are~~
43 ~~committed. Any changes to the DBE Commitment require the Engineer's prior~~
44 ~~written approval.~~
45

46 ~~**DBE Condition of Award (COA) Goal** - An assigned numerical amount~~
47 ~~specified as a percentage of the Contract. Initially, this is the minimum amount~~
48 ~~that the Bidder must commit to by submission of the Utilization Certification Form~~
49 ~~and/or by Good Faith Effort (GFE).~~
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DBE COA Goal

The Contracting Agency has established a DBE COA Goal for this Contract in the amount of: *** \$\$1\$\$ *** , which applies to the final Contract Amount.

If the Contractor cannot meet the DBE COA Goal, GFE Documentation is required.

Demonstrating compliance with the DBE COA Goal is a Condition of Award of this Contract.

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.~~

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2 3. ~~Work subcontracted to a non-DBE does not count towards the DBE COA~~
3 ~~Goal.~~
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5 **DBE Subcontract and Lower Tier Subcontract Documents**

6 There must be a subcontract agreement that complies with 49 CFR Part 26 and
7 fully describes the distinct elements of Work committed to be performed by the
8 DBE.
9

10 **DBE Service Provider**

11 The value of fees or commissions charged by a DBE firm behaving in a manner
12 of a Broker, or another service provider for providing a bona fide service, such
13 as professional, technical, consultant, managerial services, or for providing
14 bonds or insurance specifically required for the performance of the contract will
15 only be credited as DBE participation, if the fee/commission is determined by
16 the Contracting Agency to be reasonable and the firm has performed a CUF.
17

18 **Force Account Work**

19 When the Bidder elects to utilize force account Work to meet the DBE COA Goal,
20 as demonstrated by listing this force account Work on the DBE Utilization
21 Certification Form, for the purposes of meeting DBE COA Goal, only 50% of the
22 Proposal amount shall be credited toward the Bidder's Commitment to meet the
23 DBE COA Goal.
24

25 One hundred percent of the actual amounts paid to the DBE for the force
26 account Work shall be credited towards the DBE COA Goal or DBE participation.
27

28 **Temporary Traffic Control**

29 If the DBE firm only provides "Flagging", the DBE firm must provide a Traffic
30 Control Supervisor (TCS) and flagger(s), which are under the direct control of
31 the DBE. The DBE firm shall also provide all flagging equipment for its
32 employees (e.g. paddles, hard hats, and vests).
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34 If the DBE firm provides "Traffic Control Services", the DBE firm must provide a
35 TCS, flaggers, and traffic control items (e.g., cones, barrels, signs, etc.) and be
36 in total control of all items in implementing the traffic control for the project.
37

38 **Trucking**

39 DBE trucking firm participation may only be credited as DBE participation for the
40 value of the hauling services, not for the materials being hauled unless the
41 trucking firm is also certified as a supplier of those materials. In situations where
42 the DBE's work is priced per ton, the value of the hauling service must be
43 calculated separately from the value of the materials in order to determine DBE
44 credit for hauling
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46 The DBE trucking firm must own and operate at least one licensed, insured and
47 operational truck on the contract. The truck must be of the type that is necessary
48 to perform the hauling duties required under the contract. The DBE receives
49 credit for the value of the transportation services it provides on the Contract
50 using trucks it owns or leases, licenses, insures, and operates with drivers it
51 employs.
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~~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.~~

~~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.~~

Procedures Prior to Award

Approval of Regular Dealers and Distributors

DBE firms proposed to be used as either a Regular Dealer or a Distributor must be approved before being listed as a COA/used on a project. The Approved Regular Dealer list published on WSDOT's Office of Equity and Civil Rights (OECR) web site must include the specific project for which approval is being requested. For purposes of the DBE COA Goal participation, the Regular Dealer/Distributor must submit the DBE Regular Dealer/Distributor Affirmation

1 Form (USDOT OMB Control 508v3) a minimum of five calendar days prior to bid
2 opening. The DBE Regular Dealer/Distributor Affirmation Form is located at:

3
4 [https://www.transportation.gov/mission/civil-rights/dbe-regular-dealer-](https://www.transportation.gov/mission/civil-rights/dbe-regular-dealer-distributor-affirmation)
5 [distributor-affirmation](https://www.transportation.gov/mission/civil-rights/dbe-regular-dealer-distributor-affirmation)
6

7 Requests to be listed as a Regular Dealer/Distributor will only be processed if
8 the requesting firm is a material supplier certified by the Office of Minority and
9 Women's Business Enterprises in a NAICS code that falls within the 42XXXX
10 NAICS Wholesale code section.

11
12 **Disadvantaged Business Enterprise Utilization**

13 To be eligible for award of the Contract, the Bidder shall properly complete and
14 submit a Disadvantaged Business Enterprise (DBE) Utilization Certification with
15 the Bidder's sealed Bid Proposal, as specified in Section 1-02.9 Delivery of
16 Proposal. The Bidder's DBE Utilization Certification must clearly demonstrate
17 how the Bidder intends to meet the DBE COA Goal. A DBE Utilization
18 Certification (WSDOT Form 272-056) is included in the Proposal package for
19 this purpose as well as instructions on how to properly fill out the form.
20

21 The Bidder is advised that the items listed below when listed in the Utilization
22 Certification must have their amounts reduced to the percentages shown and
23 those reduced amounts will be the amount applied towards meeting the DBE
24 COA Goal.

25
26 1.* Force account at 50%

27
28 2.* Regular dealer at 60%

29
30 3. Distributor at 40% of the cost of the materials or supplies

31
32 4. Transaction Facilitator not more than 5% of the goods or services
33

34 In the event of arithmetic errors in completing the DBE Utilization Certification,
35 the amount listed to be applied towards the DBE COA Goal for each DBE shall
36 govern and the DBE total amount shall be adjusted accordingly.
37

38 Note: ~~The Contracting Agency shall consider as non-responsive and shall~~
39 ~~reject any Bid Proposals~~ submitted that does not contain a DBE
40 Utilization Certification Form that ~~accurately~~ demonstrates how the
41 Bidder intends to meet the DBE COA Goal will be considered irregular
42 in accordance with Section 1-02.13 and will be rejected.
43

44 **Disadvantaged Business Enterprise Written Confirmation Document(s)**

45 The Bidder shall submit a Disadvantaged Business Enterprise (DBE) Written
46 Confirmation Document (completed and signed by the DBE) for each DBE firm
47 listed in the Bidder's completed DBE Utilization Certification. ~~submitted with the~~
48 ~~Bid.~~ Failure to do so will result in the associated participation being disallowed,
49 which ~~may will~~ cause the Bid to be considered irregular in accordance with
50 Section 1-02.13 and will be rejected. ~~determined to be nonresponsive resulting~~
51 ~~in Bid rejection.~~
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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 be allowed.~~receive credit.~~

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.

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~~ GFE to achieve 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; and 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 Documentation only in the event a Bidder's efforts to solicit sufficient DBE participation have been unsuccessful. The Bidder must supply GFE ~~documentation~~ Documentation in addition to the DBE Utilization Certification, supporting DBE Written Confirmation Document(s); and the DBE Bid Item Breakdown form; ~~and the DBE Trucking Credit Form, if applicable.~~

In the case where a Bidder is awarded the contract based on demonstrating adequate GFE Documentation, the advertised DBE COA Goal will not be reduced. The Bidder shall demonstrate a GFE during the life of the Contract to attain the advertised DBE COA Goal.

1 ~~GFE documentation, the DBE Bid Item Breakdown form, and the DBE Trucking~~
2 ~~Credit Form, if applicable, shall be submitted as specified in Section 1-02.9.~~

3
4 The Contracting Agency will review the GFE ~~d~~Documentation and will determine
5 if the 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~~
15 ~~Contractor has satisfied its DBE commitments.~~

16
17 ~~49 CFR Part 26, Appendix A is intended as general guidance and does not, in~~
18 ~~itself, demonstrate adequate good faith efforts. The following is a list of types of~~
19 ~~actions, which would be considered as part of the Bidder's GFE to achieve DBE~~
20 ~~participation. It is not intended to be a mandatory checklist, nor is it intended to~~
21 ~~be exclusive or exhaustive. Other factors or types of efforts may be relevant in~~
22 ~~appropriate cases.~~

- 23
24 ~~1. Soliciting through all reasonable and available means (e.g.~~
25 ~~attendance at pre-bid meetings, advertising and/or written notices)~~
26 ~~the interest of all certified DBEs who have the capability to perform~~
27 ~~the Work of the Contract. The Bidder must solicit this interest within~~
28 ~~sufficient time to allow the DBEs to respond to the solicitation. The~~
29 ~~Bidder must determine with certainty if the DBEs are interested by~~
30 ~~taking appropriate steps to follow up initial solicitations.~~
31
32 ~~2. Selecting portions of the Work to be performed by DBEs in order to~~
33 ~~increase the likelihood that the DBE COA Goal will be achieved. This~~
34 ~~includes, where appropriate, breaking out contract Work items into~~
35 ~~economically feasible units to facilitate DBE participation, even when~~
36 ~~the Bidder might otherwise prefer to perform these Work items with its~~
37 ~~own forces.~~
38
39 ~~3. Providing interested DBEs with adequate information about the~~
40 ~~Plans, Specifications, and requirements of the Contract in a timely~~
41 ~~manner to assist them in responding to a solicitation.~~
42
43 ~~a. Negotiating in good faith with interested DBEs. It is the Bidder's~~
44 ~~responsibility to make a portion of the Work available to DBE~~
45 ~~subcontractors and suppliers and to select those portions of the~~
46 ~~Work or material needs consistent with the available DBE~~
47 ~~subcontractors and suppliers, so as to facilitate DBE participation.~~
48 ~~Evidence of such negotiation includes the names, addresses, and~~
49 ~~telephone numbers of DBEs that were considered; a description~~
50 ~~of the information provided regarding the Plans and Specifications~~
51 ~~for the Work selected for subcontracting; and evidence as to why~~

1 additional agreements could not be reached for DBEs to perform
2 the Work.

3
4 b. A Bidder using good business judgment would consider a number
5 of factors in negotiating with subcontractors, including DBE
6 subcontractors, and would take a firm's price and capabilities as
7 well as the DBE COA Goal into consideration. However, the fact
8 that there may be some additional costs involved in finding and
9 using DBEs is not in itself sufficient reason for a Bidder's failure to
10 meet the DBE COA Goal, as long as such costs are reasonable.
11 Also, the ability or desire of a Bidder to perform the Work of a
12 Contract with its own organization does not relieve the Bidder of
13 the responsibility to make Good Faith Efforts. Bidders are not,
14 however, required to accept higher quotes from DBEs if the price
15 difference is excessive or unreasonable.

16
17 4. Not rejecting DBEs as being unqualified without sound reasons
18 based on a thorough investigation of their capabilities. The Bidder's
19 standing within its industry, membership in specific groups,
20 organizations, or associations and political or social affiliations (for
21 example union vs. non-union employee status) are not legitimate
22 causes for the rejection or non-solicitation of bids in the Bidder's
23 efforts to meet the DBE COA Goal.

24
25 5. Making efforts to assist interested DBEs in obtaining bonding, lines of
26 credit, or insurance as required by the recipient or Bidder.

27
28 6. Making efforts to assist interested DBEs in obtaining necessary
29 equipment, supplies, materials, or related assistance or services.

30
31 7. Effectively using the services of available minority/women community
32 organizations; minority/women contractors' groups; local, State, and
33 Federal minority/women business assistance offices; and other
34 organizations as allowed on a case-by-case basis to provide
35 assistance in the recruitment and placement of DBEs.

36
37 8. Documentation of GFE must include copies of each DBE and non-
38 DBE subcontractor quotes submitted to the Bidder when a non-DBE
39 subcontractor is selected over a DBE for Work on the Contract. (Ref.
40 updated DBE regulations 26.53(b)(2)(vi) & App. A)

41
42 **Administrative Reconsideration of GFE Documentation**

43 A Bidder has the right to request reconsideration if the GFE documentation
44 submitted with their Bid was determined to be inadequate.

45
46 • The Bidder must request within 48 hours of notification of being
47 nonresponsive or forfeit the right to reconsideration.

48
49 • The reconsideration decision on the adequacy of the Bidder's GFE
50 documentation shall be made by an official who did not take part in
51 the original determination.

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- ~~• 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.~~

Procedures Between Award and Execution

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 1-03.3. ~~1-02.9, Delivery of Proposal.~~

The DBE Trucking Credit Form is ~~only~~ required for all DBE Firms ~~listed on the DBE Utilization Certification performing~~ 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 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

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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~~will 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:

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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~~ Primary 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 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

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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 ~~D~~daily DBE/FSBE Truck Unit Listing Log (WSDOT Form 350-077) 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 - NWRegionOEO@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 (WSDOT 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.

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~~

1 ~~executed subcontracts shall be submitted by email to the following email~~
2 ~~address for the region administering the Contract:~~

3
4 ~~Eastern Region — ERRegionOEO@wsdot.wa.gov~~
5 ~~North Central Region — NCRegionOEO@wsdot.wa.gov~~
6 ~~Northwest Region — NWRegionOEO@wsdot.wa.gov~~
7 ~~Olympic Region — ORegionOEO@wsdot.wa.gov~~
8 ~~South Central Region — SCRegionOEO@wsdot.wa.gov~~
9 ~~Southwest Region — SWRegionOEO@wsdot.wa.gov~~
10 ~~Washington State Ferries — FerriesOEO@wsdot.wa.gov~~

11
12 **Reporting**

13 The Contractor and all subcontractors of any tier, /suppliers, /service providers,
14 and professional services that utilize DBEs to perform work on the project, shall
15 maintain appropriate records that will enable the Engineer to verify DBE
16 participation throughout the life of the project.

17
18 Refer to Section 1-08.1 for additional reporting requirements associated with this
19 Contract.

20
21 **Crediting DBE Participation**

22 **General**

23 Subcontractors proposed as COA must be certified prior to the due date for bids
24 on the Contract. All non-COA DBE subcontractors shall be certified before the
25 subcontract on which they are participating is executed.

26
27 DBE participation is only credited upon payment to the DBE.

28
29 **DBE Prime Contractor and Subcontractor Participation**

30 Only take credit for the Work that the DBE contractor performs with its own
31 forces and is certified to perform.

32
33 If the Prime Contractor, subcontractor, or lower tier subcontractor DBE
34 subcontracts a portion of the Work of its contract to another firm, the value of
35 the subcontracted Work may be counted toward the DBE Commitments only if
36 the lower-tier subcontractor is also a DBE.

37
38 Work subcontracted to a lower-tier subcontractor that is a DBE may be counted
39 toward the DBE Commitments only if the lower-tier subcontractor self performs
40 a minimum of 30 percent of the Work subcontracted to them.

41
42 Work subcontracted by a DBE contractor to a non-DBE does not count towards
43 the DBE COA Goal.

44
45 **DBE Consultants**

46 A DBE firm providing a bona fide service, such as professional, technical, or
47 managerial services, specifically required for the performance of the contract will
48 be credited as DBE participation

49
50 **Force Account Work**

51 When the Bidder elects to utilize force account Work to meet the DBE COA Goal,
52 as demonstrated by listing this force account Work on the DBE Utilization

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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 Participation

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 Participation

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.

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 Supplier

The credit of a DBE Supplier is decided on a contract-by-contract basis based on what the role the proposed DBE Supplier will be performing. OECR will make determinations on whether a Supplier qualifies as a Regular Dealer, Distributor, or Transaction Facilitator based on their role for the Contract.

Manufacturer - One hundred percent (100%) of the cost of the manufactured product obtained from a DBE manufacturer may count towards the DBE COA Goal.

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Regular Dealer - Sixty percent (60%) of the cost of materials or supplies purchased from a DBE Regular Dealer may be credited toward the DBE Goal.

Distributor – Forty percent (40%) of the cost of materials or supplies purchased from a DBE Distributor may be credited toward the DBE Goal.

Transaction Facilitator - 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. The reasonable fee shall not exceed 5 percent of the total cost of the goods or 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.

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.

Changes

In the event a change results in a reduction to Work committed to a COA DBE, the Contractor shall substitute other remaining Work to that COA DBE, if possible, to avoid a change to the total dollar amount to be applied towards the goal committed to that COA DBE. If there is a reduction to the total dollar amount to be applied towards the goal for a COA DBE Commitment, regardless of the reason, it shall be viewed as DBE termination, and subject to the termination procedures below. A notification to the DBE shall occur as soon as possible but no later than two weeks after the Contractor is aware of the upcoming change.

~~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.

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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 for good cause and with prior written approval of the ~~Engineer~~ Contracting Agency. If the Contractor terminates a COA DBE without the prior written approval of the Contracting Agency, ~~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 GFE ~~and 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:

- 1. The DBE fails or refuses to execute a written contract.
- 2. The DBE fails or refuses to perform the Work of its subcontract in a way consistent with normal industry standards.
- 3. The DBE fails or refuses to meet the Contractor's reasonable nondiscriminatory bond requirements.
- 4. The DBE becomes bankrupt, insolvent, or exhibits credit unworthiness.
- 5. The DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to federal law or applicable State law.

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6. The DBE is ineligible to receive DBE credit for the type of work involved.

7. The DBE voluntarily withdraws from the project and provides written notice of its withdrawal.

8. The DBE’s work is deemed unsatisfactory by the Engineer and not in compliance with the Contract.

9. 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:

1. The Contractor seeks to terminate a COA DBE so that the Contractor can self-perform the Work.

2. The Contractor seeks to terminate a COA DBE so the Contractor can substitute another DBE contractor or non-DBE contractor after Contract Award.

3. 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.

Good Faith Effort (GFE) Documentation

GFE Documentation is required and will be evaluated whenever the Contractor is unable to fulfill the program requirement. This evaluation may need to be repeated when:

- 1. Determining award of a Contract that has COA goal,
- 2. When a COA DBE is terminated and substitution is required, and
- 3. Prior to Physical Completion when determining whether the Contractor has satisfied its DBE commitments.

49 CFR Part 26, Appendix A is intended as general guidance and does not, in itself, demonstrate adequate good faith efforts. The following is a list of types of actions, which would be considered as part of the Bidder’s GFE Documentation to achieve DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

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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 DBEs who have the capability to perform the Work of the Contract. The Bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The Bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

2. Selecting portions of the Work to be performed by DBEs in order to increase the likelihood that the DBE COA Goal will be achieved. This includes, where appropriate, breaking out contract Work items into economically feasible units to facilitate DBE participation, even when the Bidder might otherwise prefer to perform these Work items with its own forces.

3. Providing interested DBEs 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 DBEs. It is the Bidder's responsibility to make a portion of the Work available to DBE subcontractors and suppliers and to select those portions of the Work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs 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 DBEs to perform the Work.

 - b. A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as the DBE COA Goal into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a Bidder's failure to meet the DBE COA Goal, as long as such costs are reasonable. Also, the ability or desire of a Bidder to perform the Work of a Contract with its own organization does not relieve the Bidder of the responsibility to make Good Faith Efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

4. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Bidder'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 Bidder's efforts to meet the DBE COA Goal.

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- 5. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Bidder.
- 6. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- 7. Effectively using 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 DBEs.
- 8. GFE Documentation must include copies of each DBE and non-DBE subcontractor quotes submitted to the Bidder when a non-DBE subcontractor is selected over a DBE for Work on the Contract. (ref. updated DBE regulations - 26.53(b)(2)(vi) & App. A)

Administrative Reconsideration of GFE Documentation

A Bidder has the right to request reconsideration if the GFE Documentation submitted with their Bid was determined to be inadequate or without merit. If, during the life of the Contract, the Contractor submits an additional GFE Documentation and the Contracting Agency's GFE Documentation review determines a GFE Documentation is inadequate or has no merit, the Contractor has the right to request reconsideration of the Contracting Agency's determination.

- 1. The Bidder must request reconsideration within 48 hours of notification of GFE Documentation being inadequate or without merit, or the Bidder forfeits the right to reconsideration.
- 2. The reconsideration decision on the adequacy or merit of the Bidder's GFE Documentation shall be made by an official who did not take part in the original determination.
- 3. Only original GFE Documentation submitted as a supplement to the Bid will be considered. The Bidder shall not introduce new documentation at the reconsideration hearing.
- 4. 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.
- 5. 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.

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:

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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, of any tier, Consultant, Regular Dealer, or supplier, service providers, or professional services 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 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

1 for subcontractors or lower-tier subcontractors, this special provision shall be
2 included in the subcontract.

3
4 **Trainee Approval**

5 The Contractor shall make every effort to employ/enroll minority and women trainees
6 to the extent such persons are available within a reasonable recruitment area. This
7 training provision is not intended and shall not be used to discriminate against any
8 applicant for training, whether that person is a minority, woman or otherwise. A non-
9 minority male trainee or apprentice may be approved provided the following
10 requirements are met:

- 11
12 1. The Contractor is otherwise in compliance with the contract's Equal
13 Employment Opportunity (EEO) and On-the-Job Training (OJT)
14 requirements and provides documentation of the efforts taken to fill the
15 specific training position with either minorities or females
16
- 17 2. or, if not otherwise in compliance, furnishes evidence of his/her systematic
18 and direct recruitment efforts in regard to the position in question and in
19 promoting the enrollment and/or employment of minorities and females in
20 the craft which the proposed trainee is to be trained
21
- 22 3. and the Contractor has made a good faith effort towards recruiting of
23 minorities and women. As a minimum good faith efforts shall consist of the
24 following:
 - 25 a. Distribution of written notices of available employment opportunities
26 with the Contractor and enrollment opportunities with its unions.
27 Distribution should include but not be limited to; minority and female
28 recruitment sources, WSDOT's OJT Support Services Coordinator,
29 and minority and female community organizations.
30
 - 31 b. Records documenting the Contractor's efforts and the outcome of
32 those efforts, to employ minority and female applicants and/or refer
33 them to unions.
34
 - 35 c. Records reflecting the Contractor's efforts in participating in
36 developing minority and female on-the-job training opportunities,
37 including upgrading programs and apprenticeship opportunities.
38
 - 39 d. Distribution of written notices to unions and training programs
40 disseminating the Contractor's EEO policy and requesting
41 cooperation in achieving EEO and OJT obligations (and their written
42 responses). For assistance in locating trainee candidates, the
43 Contractor may call WSDOT's OJT Support Services Coordinator at
44 (360) 705-7090 or email ojtssinfo@wsdot.wa.gov.
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47 No employee shall be employed as a trainee in any classification in which the
48 employee has successfully completed a training course leading to journey-level
49 worker status or in which the employee has been employed as a journey-level
50 worker. The Contractor's records shall document the methods for determining the
51 trainee's status and findings in each case. When feasible, 25 percent of apprentices
52 or trainees in each occupation shall be in their first year of apprenticeship or training.

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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.

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.

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- 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.
- 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.

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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.

Requirements for Non ATELS/SATC Approved Training Programs

Contractors who are not affiliated with a program approved by ATELS or SATC may have their training program approved (by FHWA) provided that the program is submitted for approval on DOT Form 272-049, and the following standards are addressed and incorporated in the Contractor’s program:

1. The program establishes minimum qualifications for persons entering the training program.
2. The program shall outline the work processes in which the trainee will receive supervised work experience and training on-the-job and the allocation of the approximate time to be spent in each major process. The program shall include the method for recording and reporting the training completed shall be stated.
3. The program shall include a numeric ratio of trainees to journey-level worker consistent with proper supervision, training, safety, and continuity of employment. The ratio language shall be specific and clear as to application in terms of job site and workforce during normal operations (normally considered to fall between 1:10 and 1:4).
4. The terms of training shall be stated in hours. The number of hours required for completion to journey-level worker status shall be comparable to the apprenticeship hours established for that craft by the SATC. The following are examples of programs that are currently approved:

CRAFT	HOURS
Laborer	4,000
Ironworker	6,000
Carpenter	5,200-8,000
Construction Electrician	8,000
Operating Engineer	6,000-8,000

1	Cement Mason	5,400
2	Teamster	2,100
3		

4 5. The method to be used for recording and reporting the training completed
5 shall be stated.

6
7 **Measurement**

8 The Contractor may request that the total number of “training” hours for the contract
9 be increased subject to approval by the Contracting Agency. This reimbursement will
10 be made even though the Contractor receives additional training program funds from
11 other sources, provided such other sources do not prohibit other reimbursement.
12 Reimbursement to the Contractor for off-site training as indicated previously may only
13 be made when the Contractor does one or more of the following and the trainees are
14 concurrently employed on a Federal-aid project:

- 15 1. contributes to the cost of the training,
- 16 2. provides the instruction to the trainee,
- 17 3. pays the trainee’s wages during the off- site training period.

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22 Reimbursement will be made upon receipt of a certified invoice that shows the related
23 payroll number, the name of trainee, total hours trained under the program,
24 previously paid hours under the contract, hours due this estimate, and dollar amount
25 due this estimate. The certified invoice shall show a statement indicating the
26 Contractor’s effort to enroll minorities and women when a new enrollment occurs. If
27 a trainee is participating in a SATC/ATELS approved apprenticeship program, a copy
28 of the certificate showing apprenticeship registration must accompany the first
29 invoice on which the individual appears. Reimbursement for training occurring prior
30 to approval of the training program will be allowed if the Contractor verbally notifies
31 the Engineer of this occurrence at the time the apprentice/trainee commences work.
32 A trainee/apprentice, regardless of craft, must have worked on the contract for at
33 least 20 hours to be eligible for reimbursement.

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35 Training hours that are not in compliance with the approved training plan will not be
36 measured.

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38 **Payment**

39 The Contractor will be reimbursed under the item “Training” per hour for each hour
40 of approved training provided under the Contract.

41
42 1-07.11.OPT6.FR1
43 **(October 3, 2022)**
44 ***Small and Veteran-Owned Business Enterprises (SVBE) and Minority and***
45 ***Women’s Business Enterprises (MWBE) Participation***

46 **General Statement**

47 The participation of minority, small, veteran-owned, and women business enterprises
48 are an important strategic objective for the State of Washington. Contractors shall
49 not create barriers to open and fair opportunities for all businesses, including MWBEs
50 and SVBEs, to participate in the Work on this Contract.
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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 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

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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\$ \$***

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>

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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 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.

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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.

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

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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 using SVBEs is not in itself sufficient reason for a Bidder's failure to meet the SVBE COA Goals, as long as such costs are reasonable. Also, the ability or desire of a Bidder to perform the Work of a Contract with its own organization does not relieve the Bidder of the responsibility to make a GFE. Bidders are not, however, required to accept higher quotes from SVBE firms if the price difference is excessive or unreasonable.
4. Not rejecting SVBE firms as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Bidder'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 Bidder's efforts to meet the SVBE COA Goals.
5. Making efforts to assist interested SVBE firms in obtaining bonding, lines of credit, or insurance as required by the recipient or Bidder.
6. Making efforts to assist interested SVBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services.
7. Effectively using the services of available organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of SVBE firms.
8. Documentation of GFE must include copies of each SVBE and non-SVBE subcontractor quotes submitted to the Bidder when a non-

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SVBE subcontractor is selected over a SVBE for Work on the Contract.

Administrative Reconsideration of GFE Documentation Prior to Award

A Bidder has the right to request reconsideration if the GFE documentation submitted with their Bid was determined to be inadequate:

1. The Bidder must request within 48 hours of notification of being nonresponsive or forfeit the right to reconsideration.
2. 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.
3. 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.
4. 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.
5. 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 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

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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.

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.

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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.
 - 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 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

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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.

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.

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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.
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.

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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 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.

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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
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.

1 **FSBE Abbreviations and Definitions**

2 **Broker** – A business firm that provides a bona fide service, such as professional,
3 technical, consultant or managerial services and assistance in the procurement
4 of essential personnel, facilities, equipment, materials, or supplies required for
5 the performance of the Contract; or, persons/companies who arrange or
6 expedite transactions.
7

8 **Certified Business Description** – Specific descriptions of work the FSBE is
9 certified to perform, as identified in the Certified Firm Directory, under the Vendor
10 Information page.
11

12 **Certified Firm Directory** – A database of all Minority, Women, and
13 Disadvantaged Business Enterprises, including those identified as a FSBE,
14 currently certified by Washington State. The on-line Directory is available to
15 Bidders for their use in identifying and soliciting interest from FSBE firms. The
16 database is located under the Firm Certification section of the Diversity
17 Management and Compliance System web page at:
18 <https://omwbe.diversitycompliance.com>.
19

20 Firms certified by OMWBE as SBE, DBE can be used to fulfill the FSBE
21 mandatory goal on a project.
22

23 **Commercially Useful Function (CUF)** – 49 CFR 26.55(c)(1) defines
24 commercially useful function as: “A DBE performs a commercially useful function
25 when it is responsible for execution of the work of the contract and is carrying
26 out its responsibilities by actually performing, managing, and supervising the
27 work involved. To perform a commercially useful function, the DBE must also be
28 responsible, with respect to materials and supplies used on the contract, for
29 negotiating price, determining quality and quantity, ordering the material, and
30 installing (where applicable) and paying for the material itself. To determine
31 whether a DBE is performing a commercially useful function, you must evaluate
32 the amount of work subcontracted, industry practices, whether the amount the
33 firm is to be paid under the contract is commensurate with the work it is actually
34 performing and the DBE credit claimed for its performance of the work, and other
35 relevant factors.”
36

37 **FSBE** – A firm certified by OMWBE as meeting Federal requirements of a small
38 business enterprise. All firms on the OMWBE Certified Firm Directory with the
39 designation of SBE or DBE are FSBEs.
40

41 **Good Faith Efforts** – Efforts to achieve the FSBE Goal or other requirements
42 of this part which, by their scope, intensity, and appropriateness to the objective,
43 can reasonably be expected to fulfill the program requirement.
44

45 **Manufacturer (FSBE)** – A FSBE firm that operates or maintains a factory or
46 establishment that produces on the premises the materials, supplies, articles, or
47 equipment required under the Contract. A FSBE Manufacturer shall produce
48 finished goods or products from raw or unfinished material or purchase and
49 substantially alters goods and materials to make them suitable for construction
50 use before reselling them.
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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.

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

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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).

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.

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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.

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.

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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 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.

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- 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.

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.

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- 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:

- 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 FSBE 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 FSBE involved using the DBE Joint Check Request Form (WSDOT Form #272-053) prior to its use. The form must accompany the FSBE Joint Check

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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 FSBE credit for performing a CUF with respect to obtaining materials and supplies, a FSBE 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 FSBE involved, no FSBE credit will be given for the FSBE’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.

Subcontracts

Prior to a FSBE performing Work on the Contract, an executed subcontract between the FSBE 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 – NWRegionOEO@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

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.

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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(2).GR4~~

Contractual Requirements

~~1-07.11(2).INST1.GR1~~

~~Section 1-07.11(2) is supplemented with the following:~~

~~1-07.11(2).OPT1.2025.GR4~~

~~(January 24, 2024)~~

~~11. The Contractor shall comply with the following nondiscrimination provisions, and the Contractor shall ensure the nondiscrimination provisions are included in all subcontracts:~~

~~a. Nondiscrimination Requirement. During the term of this Contract, the Contractor, including all subcontractors, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, the Contractor, including all subcontractors, shall give written notice of this nondiscrimination requirement to any labor organizations with which the Contractor, or subcontractor, has a collective bargaining or other agreement.~~

~~b. Obligation to Cooperate. The Contractor, including all subcontractors, shall cooperate and comply with any Washington state agency investigation regarding any allegation that the Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).~~

~~c. Default. Notwithstanding any provision to the contrary, the Contracting Agency may suspend the Contract in accordance with Section 1-08.6, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until the Contracting Agency receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event the Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), the Contracting Agency may terminate this Contract in whole or in part in accordance with Section 1-08.10(1), and in addition to the sanctions listed in Section 1-07.11(5), the Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. The Contractor or subcontractor may be given~~

1 a reasonable time in which to cure this noncompliance, including
2 implementing conditions consistent with any court ordered injunctive relief
3 or settlement agreement.
4

5 ~~d. Remedies for Breach. Notwithstanding any provision to the contrary, in the~~
6 ~~event of Contract termination or suspension for engaging in discrimination,~~
7 ~~the Contractor, subcontractor, or both, shall be liable for contract damages~~
8 ~~as authorized by law including, but not limited to, any cost difference~~
9 ~~between the original contract and the replacement or cover contract and all~~
10 ~~administrative costs directly related to the replacement contract, which~~
11 ~~damages are distinct from any penalties imposed under Chapter 49.60,~~
12 ~~RCW. The Contracting Agency shall have the right to deduct from any~~
13 ~~monies due to Contractor or subcontractor, or that thereafter become due,~~
14 ~~an amount for damages Contractor or subcontractor will owe Contracting~~
15 ~~Agency for default under this Provision.~~
16

17 1-07.12.GR1

18 **Federal Agency Inspection**

19
20 1-07.12.INST1.GR1

21 Section 1-07.12 is supplemented with the following:

22
23 1-07.12.OPT1.GR1

24 ***(October 3, 2023)***

25 ***Required Federal Aid Provisions***

26 The Required Contract Provisions Federal Aid Construction Contracts (FHWA 1273)
27 Revised October 23, 2023 and the amendments thereto supersede any conflicting
28 provisions of the Standard Specifications and are made a part of this Contract; provided,
29 however, that if any of the provisions of FHWA 1273, as amended, are less restrictive
30 than Washington State Law, then the Washington State Law shall prevail.
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32 The provisions of FHWA 1273, as amended, included in this Contract require that the
33 Contractor insert the FHWA 1273 and amendments thereto in each subcontract, together
34 with the wage rates which are part of the FHWA 1273, as amended. Also, a clause shall
35 be included in each subcontract requiring the subcontractors to insert the FHWA 1273
36 and amendments thereto in any lower tier subcontracts, together with the wage rates.
37 The Contractor shall also ensure that this section, REQUIRED FEDERAL AID
38 PROVISIONS, is inserted in each subcontract for subcontractors and lower tier
39 subcontractors. For this purpose, upon request to the Engineer, the Contractor will be
40 provided with extra copies of the FHWA 1273, the amendments thereto, the applicable
41 wage rates, and this Special Provision.
42

43 1-07.12.OPT2.FR1

44 ***(October 3, 2022)***

45 ***Indian Preference and Tribal Ordinances***

46 This project is located on the *** \$\$1\$\$ ***. It is the Contractor's responsibility to contact
47 the person and/or office listed in this special provision to determine whether any tribal
48 laws or taxes apply. If the tribal laws and taxes do apply, the Contractor shall comply with
49 them in accordance with Section 1-07.1. For informational purposes only, the Work on
50 this project that falls within Tribal Lands is shown on the Summary of Quantities in
51 Group(s) *** \$\$2\$\$ ***.
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1 Tribal Employment Rights Ordinances (TEROs) may utilize a variety of tools to encourage
2 Indian employment. These tools may include, but are not limited to, TERO fees, Indian
3 hiring preference, Indian-owned business subcontracting preference and/or an Indian
4 training requirement. Other requirements may be a Tribal business license, a required
5 compliance plan and/or employee registration requirements. Every tribe is different and
6 each may be willing to work cooperatively with the Contractor to develop a strategy that
7 works for both parties. For specific details, the Contractor should contact *** \$\$\$ **.

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9 The state recognizes the sovereign authority of the tribe and supports the tribe's efforts
10 to enforce its rightful and legal ordinances and expects the Contractor to comply and
11 cooperate with the tribe. The costs related to such compliance shall be borne solely by
12 the Contractor, who is advised to contact the tribal representative listed above, prior to
13 submitting a bid, to assess the impact of compliance on the project.

14
15 Although Indian preference cannot be compelled or mandated by the Contracting Agency,
16 there is no limitation whereby voluntary Contractor or subcontractor-initiated preferences
17 are given, if otherwise lawful. 41 CFR 60-1.5(a)7 provides as follows:

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19 Work on or near Indian reservations --- It shall not be a violation of the equal
20 opportunity clause for a construction or non-construction Contractor to extend a
21 publicly announced preference in employment to Indians living on or near an Indian
22 reservation in connection with employment opportunities on or near an Indian
23 reservation. The use of the word *near* would include all that area where a person
24 seeking employment could reasonably be expected to commute to and from in the
25 course of a work day. Contractors or subcontractors extending such a preference
26 shall not, however, discriminate among Indians on the basis of religion, sex, or tribal
27 affiliation, and the use of such a preference shall not excuse a Contractor from
28 complying with the other requirements as contained in the August 25, 1981
29 Department of Labor, Office of Federal Contract Compliance Programs, Government
30 Contractors Affirmative Actions Requirements.

31
32 1-07.15.GR1
33 **Temporary Water Pollution Prevention**

34
35 1-07.15(1).GR1
36 ***Spill Prevention, Control, and Countermeasures Plan***

37
38 1-07.15(1).INST1.GR1
39 Section 1-07.15(1) is supplemented with the following:

40
41 1-07.15(1).OPT1.GR1
42 (November 2, 2022)
43 The Contractor shall immediately notify the Engineer and the WSF Terminal
44 Supervisor of any spill, including, but not limited to, petroleum products, hydraulic
45 fluid, chemical materials or liquids, and sewage. If neither the Engineer nor the WSF
46 Terminal Supervisor is available, the Contractor shall immediately notify the WSF
47 Operations Center at (206) 515-3456.

48
49 1-07.16.GR1
50 **Protection and Restoration of Property**

51

- 1 1-07.16(1).GR1
2 **Private/Public Property**
3
4 1-07.16(1)C.GR1
5 **Private Property**
6
7 1-07.16(1)C.INST1.GR1
8 Section 1-07.16(1)C is supplemented with the following:
9
10 1-07.16(1)C.OPT1.GR1
11 (October 3, 2022)
12 The Contractor shall not access the worksite from adjacent properties without
13 permission from the Engineer. The Contractor shall submit a Type 2 Working
14 Drawing to the Engineer in accordance with Section 1-05.3 prior to accessing
15 the project site from adjacent properties. The Working Drawing shall include the
16 methods, materials, equipment, and restoration measures used to access the
17 worksite.
18
19 1-07.16(1)C.OPT2.GR1
20 (October 3, 2022)
21 The Contractor is not to use adjoining property without first obtaining written
22 permission from adjacent property owner(s), and notifying the Engineer, in
23 writing, when such permission has been granted prior to occupying or using
24 adjoining property.
25
26 1-07.16(2).GR1
27 **Vegetation Protection and Restoration**
28
29 1-07.16(2).INST1.GR1
30 Section 1-07.16(2) is supplemented with the following:
31
32 1-07.16(2).OPT1.GR1
33 (August 2, 2010)
34 Vegetation and soil protection zones for trees shall extend out from the trunk to a
35 distance of 1 foot radius for each inch of trunk diameter at breast height.
36
37 Vegetation and soil protection zones for shrubs shall extend out from the stems at
38 ground level to twice the radius of the shrub.
39
40 Vegetation and soil protection zones for herbaceous vegetation shall extend to
41 encompass the diameter of the plant as measured from the outer edge of the plant.
42
43 1-07.16(4).GR1
44 **Archaeological and Historical Objects**
45
46 1-07.16(4).INST1.GR1
47 Section 1-07.16(4) is supplemented with the following:
48
49 1-07.16(4).OPT1.GR1
50 (December 6, 2004)
51 The project area potentially contains archaeological or historical objects that may
52 have significance from a historical or scientific standpoint. To protect these objects

1 from damage or destruction, the Contracting Agency, at its discretion and expense,
2 may monitor the Contractor's operations, conduct various site testing and perform
3 recovery and removal of such objects when necessary.
4

5 The Contractor may be required to conduct its operations in a manner that will
6 accommodate such activities, including the reserving of portions of the work area for
7 site testing, exploratory operations and recovery and removal of such objects as
8 directed by the Engineer. If such activities are performed by consultants retained by
9 the Contracting Agency, the Contractor shall provide them adequate access to the
10 project site.
11

12 Added work necessary to uncover, fence, dewater, or otherwise protect or assist in
13 such testing, exploratory operations and salvaging of the objects as ordered by the
14 Engineer shall be paid by force account as provided in Section 1-09.6. If the
15 discovery and salvaging activities require the Engineer to suspend the Contractor's
16 work, any adjustment in time will be determined by the Engineer pursuant to Section
17 1-08.8.
18

19 To provide a common basis for all bidders, the Contracting Agency has entered an
20 amount for the item "Archaeological and Historical Salvage" in the Proposal to
21 become a part of the total bid by the Contractor.
22

23 1-07.17.GR1
24 **Utilities and Similar Facilities**
25

26 1-07.17.INST1.GR1
27 Section 1-07.17 is supplemented with the following:
28

29 1-07.17.OPT1.FR1
30 (April 2, 2007)
31 Locations and dimensions shown in the Plans for existing facilities are in accordance with
32 available information obtained without uncovering, measuring, or other verification.
33

34 The following addresses and telephone numbers of utility companies known or suspected
35 of having facilities within the project limits are supplied for the Contractor's convenience:
36

37 *** \$\$1\$\$ ***
38

39 1-07.17.OPT2.FR1
40 (October 3, 2022)
41 Locations and dimensions shown in the Plans for existing facilities are in accordance with
42 available information obtained without uncovering, measuring, or other verification.
43

44 Public and private utilities, or their Contractors, will furnish all work necessary to adjust,
45 relocate, replace, or construct their facilities unless otherwise provided for in the Plans or
46 these Special Provisions. Such adjustment, relocation, replacement, or construction will
47 be done during the prosecution of the work for this project. It is anticipated that utility
48 adjustment, relocation, replacement, or construction within the project limits will be
49 completed as follows:
50

51 *** \$\$1\$\$ ***
52

1 The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer,
2 all affected subcontractors, and all utility owners and their Contractors prior to beginning
3 onsite work.

4
5 The following addresses and telephone numbers of utility companies or their Contractors
6 that will be adjusting, relocating, replacing or constructing utilities within the project limits
7 are supplied for the Contractor's use:

8
9 *** \$\$2\$\$ ***

10
11 *** \$\$3\$\$ ***

12
13 1-07.18.GR1
14 **Public Liability and Property Damage Insurance**

15
16 1-07.18(5).GR1
17 ***Required Insurance Policies***

18
19 1-07.18(5).INST1.GR1
20 The first sentence of Item No. 1 of Section 1-07.18(5) is revised to read:

21
22 ~~1-07.18(5).OPT2.2025.GR1~~
23 ~~(November 20, 2023)~~

24 ~~1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and~~
25 ~~property damage liability coverage, with limits of \$3,000,000 per occurrence and~~
26 ~~per project in the aggregate for each policy period, which shall be written solely~~
27 ~~on Insurance Services Office (ISO) form CG0009 1204, together with~~
28 ~~Washington State Department of Transportation amendatory endorsement CG~~
29 ~~2908 0999, specifying the Contracting Agency, the State, the Governor, the~~
30 ~~Commission, the Secretary, the Department, and all officers and employees of~~
31 ~~the State as named insured.~~

32
33 1-07.18(5).OPT1.FR1
34 (November 20, 2023)

35 1. Owners and Contractors Protective (OCP) Insurance providing bodily injury and
36 property damage liability coverage, with limits of *** \$\$1\$\$ *** per occurrence
37 and per project in the aggregate for each policy period, which will be written
38 solely on Insurance Services Office (ISO) form CG0009 1204, together with
39 Washington State Department of Transportation amendatory endorsement CG
40 2908 0999, specifying the Contracting Agency, the State, the Governor, the
41 Commission, the Secretary, the Department and all officers and employees of
42 the State as named insured.

43
44 1-07.18(5).OPT2.GR1
45 (September 7, 2021)
46 Item number 1 of Section 1-07.18(5) is deleted.

47
48 1-07.18(5).INST2.GR1
49 The first sentence of Item No. 2 of Section 1-07.18(5) is revised to read:

50
51 1-07.18(5).OPT3.GR1
52 (September 7, 2021)

- 1 2. Commercial General Liability (CGL) Insurance written under ISO Form CG0001
2 with minimum limits of \$1,000,000 per occurrence and in the aggregate for each
3 one-year policy period.
4
- 5 1-07.18(5).OPT4.FR1
6 (September 7, 2021)
7 2. Commercial General Liability (CGL) Insurance written under ISO Form CG0001
8 with minimum limits of *** \$\$1\$\$ *** per occurrence and in the aggregate for
9 each 1-year policy period.
10
- 11 1-07.18(5).INST3.GR1
12 Section 1-07.18(5) is supplemented with the following:
13
- 14 1-07.18(5).OPT5.GR1
15 **(October 3, 2022)**
16 **Builder's Risk Insurance**
17 Builder's Risk Insurance providing Broad Perils (All Risk) coverage upon any work at
18 the site, to the full insurable value thereof. This insurance shall include the
19 Contractor, its subcontractors of every tier, and the State of Washington as named
20 insured on the policy. Coverage shall be included for all materials and supplies to be
21 incorporated into the work at the jobsite, while in transit to the jobsite, or while stored
22 away from the jobsite.
23
- 24 1-07.18(5).OPT6.FR1
25 (October 3, 2022)
26 The Contractor shall obtain Contractor's Pollution Liability Insurance (CPL) with
27 minimum "per project" limits of *** \$\$1\$\$ *** per occurrence and in the aggregate for
28 claims, including investigation, defense, or settlement costs and expenses for bodily
29 injury and property damage (including natural resources damages and loss of use of
30 tangible property that has not been physically injured) arising out of:
31
- 32 a. Pollution conditions caused or made worse by the Contractor's
33 performance of the Work, including clean-up costs for a newly caused
34 condition or a historical condition that is made worse; and;
35
- 36 b. The vicarious liability of subcontractors of any tier.
37
- 38 The Contractor shall be Named Insured and the Contracting Agency, the State, the
39 Governor, the Commission, the Secretary, the Department, all officers and
40 employees of the State, and their respective members, directors, officers,
41 employees, agents, and consultants (collectively the "Additional Insureds") shall be
42 included as Additional Insureds, or, as appropriate, a Named Insured, under this
43 policy and coverage.
44
- 45 1-07.23.GR1
46 **Public Convenience and Safety**
47
- 48 1-07.23(1).GR1
49 **Construction Under Traffic**
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- 51 1-07.23(1).INST1.GR1
52 Section 1-07.23(1) is supplemented with the following:

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1-07.23(1).OPT1.FB1

(March 13, 1995)

During the hours that cleaning and painting operations are actually in progress, traffic may be restricted as follows:

*** \$\$1\$\$ ***

Whenever the Contractor's operations require lane reductions restricting the flow of traffic on multiple lanes in the same direction, the Contractor shall furnish, maintain, and operate a sequential arrow sign, for each lane closure, as specified in the Special Provision **SEQUENTIAL ARROW SIGN**.

If the Engineer determines that such lane restrictions are causing traffic congestion, the Contractor shall open all lanes to traffic until the congestion is eliminated.

For movable span structures, the Contractor's operations shall be arranged to permit the opening of the moveable span whenever required by marine traffic.

Bridge sidewalks shall be kept clear and open to maintain safe pedestrian traffic.

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.

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- 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.
- 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,

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- 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.

If the delay becomes greater than *** \$\$6\$\$ *** minutes, the Contractor shall immediately begin to take action to cease the operations that are causing the delays. If the *** \$\$7\$\$ *** minute delay limit has been exceeded, as determined by the Engineer, the Contractor shall provide to the Engineer, a written proposal to revise his work operations to meet the *** \$\$8\$\$ *** minute limit. This proposal shall be accepted by the Engineer prior to resuming any work requiring traffic control.

There shall be no delay to medical, fire, or other emergency vehicles. The Contractor shall alert all flaggers and personnel of this requirement.

General Restrictions

Construction vehicles using a closed traffic lane shall travel only in the normal direction of traffic flow unless expressly allowed in an accepted traffic control plan. Construction vehicles shall be equipped with flashing or rotating amber lights.

No two consecutive on-ramps, off-ramps, or intersections shall be closed at the same time and only one ramp at an interchange shall be closed, unless specifically shown in the Plans.

Roads or ramps that are designated as part of a detour shall not be closed or restricted during the implementation of that detour, unless specifically shown in the Plans.

Controlled Access

No special access or egress shall be allowed by the Contractor other than normal legal movements or as shown in the Plans.

Contractor’s vehicles of 10,000 GVW or greater shall not exit or enter a lane open to public traffic except as follows:

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Egress and ingress shall only occur during the hours of allowable lane closures, and:

1. For exiting an open lane of traffic, by decelerating in a lane that is closed during the allowable hours for lane closures.
2. For entering an open lane of traffic, by accelerating in a closed lane during the allowable hours for lane closures.

Traffic control vehicles are excluded from the gross vehicle weight requirement. If placing construction signs will restrict traveled lanes, then the work will be permitted during the hours of allowable lane closures.

Advance Notification

The Contractor shall notify the Engineer in writing of any traffic impacts related to lane closure, shoulder closure, sidewalk closure, or any combination for the week by 12:00 p.m. (noon) Wednesday the week prior to the stated impacts.

The Contractor shall notify the Engineer in writing ten working days in advance of any traffic impacts related to full roadway closure, ramp closure, or both.

The Contractor shall notify the Engineer in writing of any changes to the stated traffic impacts a minimum of 48 hours prior to the traffic impacts.

1-07.23(1).OPT6.GR1

(April 14, 2014)

Physical reductions of the width of thru travelling lanes are subject to the following restrictions:

The Contractor shall not reduce the travelled way to a single lane with a clear width of less than 16 feet for a duration that exceeds 4 calendar days without prior approval of the Engineer. The Contractor shall submit a request for a width reduction that exceeds 4 calendar days to the Engineer no later than 30 calendar days prior to the start of the proposed width reduction. At a minimum, this request shall include:

1. Schedule showing the planned beginning date and end date of the width reduction.
2. Plans showing the limits and cross-sections showing the clear distance provided during the width reduction.
3. Details of available detour routes.
4. Plan to provide temporary windows of a minimum 16 foot width periodically during the width reduction, where possible.

The Engineer will reply, in writing, to the request within 7 calendar days. The Contractor shall immediately notify the Engineer if there are any changes to the schedule for the width reduction.

1 1-07.23(1).OPT7.FR1
2 **(October 3, 2022)**
3 **Public Notification**
4 The Contractor shall furnish and install information signs that provide advance
5 notification of a ramp closure, roadway closure, or both, a minimum of *** \$\$1\$\$ ***
6 working days prior to the closure. Sign locations, messages, letter sizes, and sign
7 sizes are shown in the Plans.
8
9 The Contractor shall notify *** \$\$2\$\$ *** , in writing, a minimum of *** \$\$3\$\$ ***
10 working days prior to each closure. The Contractor shall furnish copies of these
11 notifications to the Engineer.
12
13 1-07.23(1).OPT8.FR1
14 **(October 3, 2022)**
15 **Maintenance and Protection of Ferry Traffic**
16 *** \$\$1\$\$ *** is a single-slip terminal. The slip must remain fully operational during
17 all phases of construction.
18
19 The Contractor shall not interfere with terminal or vessel operations of the slips such
20 that ferries do not arrive or depart on time. Every effort shall be made to ensure that
21 construction materials and equipment remain within the bounds of designated
22 staging areas as outlined in the Special Provisions.
23
24 The Contractor shall promptly and diligently remove any equipment, workers, or
25 materials from the traveled way and shall promptly and diligently move any vessels,
26 equipment, materials, or workers from the slip a minimum of 10 minutes prior to the
27 scheduled or anticipated arrival of a ferry until 5 minutes subsequent to the departure
28 of the ferry.
29
30 A safe environment for ferry operations, including vessels, vehicles, Washington
31 State Ferries employees, and passengers — both offshore and on the dock — shall
32 be maintained at all times.
33
34 The Contractor shall shield welding activities from ferries to protect the vision of the
35 captains to the satisfaction of the Engineer. Welding activities shall be shielded to
36 protect the safety of all persons in the area. Shielding is defined as surrounding the
37 work area with a material through which light or spark are not transmitted.
38
39 The Contractor shall assign one employee to monitor approaching vessels and alert
40 other workers to evacuate the work area if required. The worker will be equipped with
41 an air horn or similar device suitable to warn workers and a radio capable of
42 communicating with the ferry vessel captains.
43
44 Temporary steel plates shall not be used on the vehicle or pedestrian traveled way
45 in any location for more than three calendar days.
46
47 **Payment**
48 All costs associated with maintenance and protection of traffic shall be incidental to
49 and included in all other items of work.
50

1 1-07.23(1).OPT9.GR1
2 **(October 3, 2022)**
3 **Maintenance and Protection of Ferry Traffic**
4 The Contractor shall maintain access to and from the ferry vessels for both
5 pedestrian and vehicular traffic at all times. The Contractor shall promptly and
6 diligently remove any equipment, employees, or materials that would impede or delay
7 ferry vessel arrivals or departures. The Contractor shall provide and maintain such
8 barriers, barricades, signs, and lighting necessary to protect and safeguard
9 pedestrians and vehicles as shown in the Plans. The Contractor shall keep all
10 sidewalks, crosswalks, and other pedestrian routes and access points open and clear
11 at all times unless permitted otherwise by the Engineer in an approved traffic control
12 plan.
13
14 Temporary steel plates shall not be used on the vehicle or pedestrian traveled way
15 in any location for more than three calendar days.
16
17 **Payment**
18 All costs associated with maintenance and protection of traffic shall be incidental to
19 and included in other items of work.
20
21 1-07.23(1).OPT10.GR1
22 (~~October 3, 2022~~ September 3, 2024)
23 If July 4 occurs on a Tuesday, the prior Monday ~~and Friday are~~ is considered to be
24 part of a holiday weekend. If July 4 occurs on a Thursday, the following Friday ~~and~~
25 ~~Monday are~~ is considered to be part of a holiday weekend.
26
27 1-07.24.GR1
28 **Rights of Way**
29
30 1-07.24.INST1.GR1
31 Section 1-07.24 is supplemented with the following:
32
33 1-07.24.OPT1.FR1
34 (March 13, 1995)
35 The Contracting Agency has not completed the acquisition of title to the following
36 described property:
37
38 *** \$\$1\$\$ ***
39
40 The Contractor shall not perform any work within these limits until ordered to do so by the
41 Engineer. The Contracting Agency has estimated that the above described property will
42 be available *** \$\$2\$\$ ***.
43
44 1-07.24.OPT2.GR1
45 **(October 3, 2022)**
46 **Sundry Site Plan**
47 The Sundry Site Plan is included in the Plans for the benefit of the Contractor. It is meant
48 to give a graphical representation of the properties in the vicinity of the project site.
49
50 The Sundry Site Plan gives information necessary for locating Right-of-Way (R/W) lines,
51 construction permit boundaries and permanent or construction easements.
52

1 Areas identified within R/W are made available to the Contractor for use as indicated in
2 the Plans and Special Provisions.

3
4 1-07.28.GR1

5 **Railroads**

6

7 1-07.28.INST1.GR1

8 Section 1-07.28 is supplemented with the following:

9

10 1-07.28.OPT1.FR1

11 **(October 3, 2022)**

12 **Additional Requirements for Working with the Railroad**

13 The term Railroad Company shall be understood to mean each of the following railroad
14 companies:

15

16 *** \$\$1\$\$ ***

17

18 The Contractor shall keep the right of way and ditches of the Railroad Company open and
19 clean from any deposits or debris resulting from its operations. The Contractor shall be
20 responsible for the cost to clean and restore ballast of the Railroad Company which is
21 disturbed or becomes fouled with dirt or materials when such deposits or damage result
22 from the Contractor's operations, except as provided elsewhere.

23

24 The Contractor shall cooperate with the Railroad Company and so conduct operations
25 that the necessary reconstruction of its facilities and the removal of existing facilities can
26 be accomplished without interruption of service.

27

28 1-07.28.OPT2.FR1

29 (October 3, 2022)

30 The Contracting Agency has or will enter into an agreement with the Railroad Company
31 as specified in these provisions as contained in Appendix *** \$\$1\$\$ ***.

32

33 1-07.28.OPT3.FR1

34 **(October 3, 2022)**

35 **Construction Work by Railroad Company**

36 The work by the Railroad Company as described below will be performed by the Railroad
37 Company with its own forces at no cost to the Contractor:

38

39 *** \$\$1\$\$ ***

40

41 1-07.28(1).GR1

42 **General**

43

44 1-07.28(1).INST1.GR1

45 Section 1-07.28(1) is supplemented with the following:

46

47 1-07.28(1).OPT1.FR1

48 **(October 3, 2022)**

49 **Contractor's Right of Entry Agreement**

50 The Contractor shall obtain a Right of Entry Agreement from the railroad. For all
51 matters regarding the Contractor's Right of Entry Agreement, the Contractor shall
52 contact:

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*** \$\$1\$\$ ***

The Contracting Agency has furnished a SAMPLE Contractor’s Right of Entry Agreement in Appendix *** \$\$2\$\$ ***. The SAMPLE Contractor’s Right of Entry Agreement is an example which represents the Contracting Agency’s assessment of the likely terms and conditions prior to Advertisement for Bids. The final terms and conditions will be determined by the Railroad Company after Contract Execution.

The Contractor is at sole risk for the amount of time it takes to obtain the Right of Entry Agreement from the Railroad Company. Delays in obtaining the right of entry agreement shall not be eligible for a time extension or an equitable adjustment.

1-07.28(2).GR1

Submittals and Working Drawings

1-07.28(2).INST1.GR1

Section 1-07.28(2) is supplemented with the following:

1-07.28(2).OPT1.FR1

(October 3, 2022)

The Engineer will require up to *** \$\$1\$\$ *** calendar days from the date a Working Drawing is received until it is returned to the Contractor. If a submittal is returned unapproved and then resubmitted, then an additional review time for each subsequent resubmittal of up to *** \$\$2\$\$ *** calendar days will be required.

1-07.28(6).GR1

Railroad Protective Services

1-07.28(6).INST1.GR1

Section 1-07.28(6) is supplemented with the following:

1-07.28(6).OPT1.FR1

(October 3, 2022)

The Contractor shall notify the Railroad Company a minimum of *** \$\$1\$\$ *** in advance of whenever the Contractor is about to perform Work within Railroad Company property or within 25 feet of the centerline of tracks to enable the Railroad Company to provide flagging or other protective services.

The Railroad Company’s contact to schedule flagging or other protective services is:

*** \$\$2\$\$ ***

1-07.28(8).GR1

Measurement and Payment

1-07.28(8).INST1.GR1

Section 1-07.28(8) is revised to read:

1-07.28(8).OPT1.GR1

(October 3, 2022)

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The Contracting Agency will make payments to the Railroad for protective services unless:

1. Such services result from the Contractor's failure to comply with the terms and conditions of its contract with the Contracting Agency or with its Contractor's Right of Entry Agreements with the Railroad Company.
2. The Contractor fails to obtain authorization from the Engineer prior to coordinating with the Railroad Company for any flagging requiring overtime payments as specified under Railroad Safety and Flagging.
3. The Contractor arranges for assignment of a railroad flagger and alters project work so that a flagger is no longer needed, and adequate advance notice is not provided to the Railroad Company of such change in the need for a flagger (i.e., causing the Railroad Company to dispatch a flagger billable to the project when one is not required).
4. The Contractor causes an emergency, as specified under Railroad Operations.
5. Protective services are required as a result of a request to the Railroad Company for the Contractor's convenience.
6. The Contract provides for a bid item in the Contract.

All costs to comply with this Section, unless otherwise stated, are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all 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 – ERegionOEO@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 If the Contractor is not prequalified for building construction or cannot demonstrate
52 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 ~~1-08.1(7).GR1~~
5 **~~Payments to Subcontractors and Lower-Tier Subcontractors~~**
6
7 ~~1-08.1(7)A.GR1~~
8 **~~Payment Reporting~~**
9
10 ~~1-08.1(7)A.INST1.GR1~~
11 The first paragraph of Section 1-08.1(7)A is revised to read:
12
13 ~~1-08.1(7)A.OPT1.2025.GR1~~
14 (July 2, 2024)
15 The Contractor shall report the actual amounts paid to all firms that were used
16 as subcontractors of any tier, materials suppliers, manufacturers, regular
17 dealers, or service providers on the Contract, including all Disadvantaged,
18 Minority, Small, Veteran, or Women's Business Enterprise firms. The following
19 do not need reported: (1) retail sales or services that are paid for at the time of
20 purchase; (2) payments to materials suppliers or manufacturers that are in
21 normal course of business. The Contractor shall report this information by
22 entering it into the Contracting Agency's Diversity Management and Compliance
23 System at: <https://wsdot.diversitycompliance.com>. Payments shall be reported
24 no later than the 20th of the month for all payments made to firms during the
25 previous calendar month. For example, the Contractor shall enter all payments
26 made to firms during the month of March into DMCS by April 20th. Payments
27 shall be reported between execution of the Contract and the Contract
28 Completion Date. When no Work occurred or no payments were made for a firm,
29 the reported payment shall be zero.
30
31 ~~1-08.1(7)C.GR1~~
32 **~~Subcontractor Retainage~~**
33
34 ~~1-08.1(7)C.INST1.GR1~~
35 The first sentence in the last paragraph of Section 1-08.1(7)C is revised to read:
36
37 ~~1-08.1(7)C.OPT1.2025.GR1~~
38 (February 13, 2024)
39 If the Contractor fails to comply with the requirements of this Section and the
40 first tier subcontractor's retainage or retainage bond is wrongfully withheld, the
41 Contractor will be subject to the actions described in Section 1-08.1(10).
42
43 ~~1-08.1(9).GR1~~
44 **~~Required Subcontract Clauses~~**
45
46 ~~1-08.1(9)B.GR1~~
47 **~~Clauses Required in Subcontracts of All Tiers~~**
48
49 ~~1-08.1(9)B.INST1.GR1~~
50 The second paragraph of Section 1-08.1(9)B is supplemented with the following:
51

1 ~~1-08.1(9)B.OPT1.2025.GR1~~
2 ~~(January 24, 2024)~~
3 ~~16. 1-07.11 Requirements for Nondiscrimination—Item 11 from Section 1-~~
4 ~~07.11(2).~~

5
6 1-08.3.GR1
7 **Progress Schedule**

8
9 1-08.3(2).INST3.GR1
10 Section 1-08.3(2) is supplemented with the following:

11
12 1-08.3(2).~~NEW~~.GR1
13 **General Requirements**

14
15 1-08.3(2)B.GR1
16 **Type B Progress Schedules**

17
18 1-08.3(2)B.INST1.GR1
19 Section 1-08.3(2)B is supplemented with the following:

20
21 1-08.3(2)B.OPT1.FR1
22 (November 20, 2023)
23 In addition to information required in Items 1 through 13, the Progress Schedule
24 shall include the following milestones and/or activities:

25
26 *** \$\$1\$\$ ***

27
28 1-08.3(3).GR1
29 **Schedule Updates**

30
31 1-08.3(3).INST1.GR1
32 Section 1-08.3(3) is revised to read:

33
34 1-08.3(3).OPT1.GR1
35 (June 6, 2022)
36 The Contractor shall submit an electronic copy of a Type C Schedule Update to the
37 Engineer by the first business day of each month, starting the month after the
38 Progress Schedule is accepted, or some other mutually agreed upon submittal time.

39
40 In addition to the other requirements of this Section, Schedule Updates shall reflect
41 at least the following information:

- 42
43 1. The actual duration and sequence of as-constructed work activities,
44 including changed work.
45
46 2. Approved time extensions.
47
48 3. Any construction delays or other conditions that affect the progress of the
49 work.
50

- 1 4. Any modifications to the as-planned sequence or duration of remaining
2 activities, supplemented with a written narrative describing each change
3 and the reason for the change.
4
5 5. The physical completion of all remaining work in the remaining contract
6 time.
7
8 6. Progress on partially completed activities shall be indicated using percent
9 complete.

10
11 Activity numbers on Schedule Updates shall be the same as the Progress Schedule,
12 with the exception of deleted or added activities.

13
14 Unresolved requests for time extensions shall be reflected in the Schedule Update
15 by assuming no time extension will be granted, and by showing the effects to follow-
16 on activities necessary to physically complete the project within the currently
17 authorized time for completion.

18
19 1-08.4.GR1

20 **Prosecution of Work**

21

22 1-08.4.INST1.GR1

23 The first sentence of Section 1-08.4 is revised to read:

24

25 1-08.4.OPT1.FR1

26 (August 3, 2015)

27 The Contractor shall commence onsite work on or before *** \$\$1\$\$ *** and shall notify
28 the Engineer in writing a minimum of 10 calendar days in advance of the date on which
29 the Contractor intends to begin work.

30

31 1-08.4.OPT2.GR1

32 (August 7, 2006)

33 The Contractor shall begin work no earlier than the begin work date stated in the written
34 notice provided by the Engineer. The Engineer will provide a minimum of 10 calendar
35 days written notice for the date identified as the first working day.

36

37 1-08.4.OPT3.FR1

38 (August 7, 2006)

39 The Contractor shall begin work no earlier than *** \$\$1\$\$ ***.

40

41 1-08.5.GR1

42 **Time for Completion**

43

44 1-08.5.INST1.GR1

45 The third paragraph of Section 1-08.5 is revised to read:

46

47 1-08.5.OPT1.FR1

48 (August 7, 2006)

49 Contract time shall begin on the date stated in the written notice provided to the
50 Contractor. In no case shall the beginning of contract time be prior to *** \$\$1\$\$ *** or later
51 than *** \$\$2\$\$ ***.

52

1 1-08.5.OPT2.FR1
2 (August 7, 2006)
3 Contract time shall begin on the first working day. The first working day shall be *** \$\$1\$\$
4 ***.
5
6 1-08.5.INST2.GR1
7 Section 1-08.5 is supplemented with the following:
8
9 1-08.5.OPT7.FR1
10 (March 13, 1995)
11 This project shall be physically completed within *** \$\$1\$\$ *** working days.
12
13 1-08.5.OPT8.FR1
14 (March 13, 1995)
15 This project shall be physically completed in its entirety within *** \$\$1\$\$ *** working days
16 and the temporary traffic signal portion of the project shall be physically completed within
17 the first *** \$\$2\$\$ *** working days.
18
19 1-08.5.OPT9.FR1
20 (December 4, 2006)
21 This project shall be physically completed within *** \$\$1\$\$ *** working days.
22
23 Contract time shall begin on the first working day the Contractor starts onsite work or ***
24 \$\$2\$\$ *** , whichever occurs first.
25
26 1-08.5.OPT10.FR1
27 (March 13, 1995)
28 This project shall be physically completed within *** \$\$1\$\$ *** working days. Contract
29 time shall commence on the first working day:
30
31 1. Following 60 calendar days after contract execution; or,
32
33 2. That the Engineer and the Contractor agree to start work after approval of
34 construction materials is obtained, whichever occurs first.
35
36 The Contractor is allowed a maximum of 60 calendar days after execution of the contract
37 to obtain approvals for construction materials
38
39 1-08.5.OPT11.FR1
40 **(July 2, 2024)**
41 ***Incentive for Early Completion***
42 It is essential that the Contracting Agency has full and unrestricted use of the facilities at
43 the earliest possible time. As an incentive to the Contractor, the Contracting Agency will
44 pay the Contractor *** \$\$1\$\$ *** for each working day remaining in the contract after the
45 established *** \$\$2\$\$ *** Completion Date, but not to exceed an amount equal to ***
46 \$\$3\$\$ ***.
47
48 The days eligible for the incentive will be calculated by subtracting the working days
49 elapsed through the date of *** \$\$4\$\$ *** completion from the total working days
50 established in the Special Provision **TIME FOR COMPLETION**.
51

1 1-08.6.GR1
2 **Suspension of Work**
3

4 1-08.6.INST1.GR1
5 Section 1-08.6 is supplemented with the following:
6

7 1-08.6.OPT1.FR1
8 (January 3, 2017)

9 Contract time may be suspended for the HMA mix design evaluation report or for
10 procurement of critical materials (Procurement Suspension). In order to receive a
11 Procurement Suspension, the Contractor shall within 21 calendar days after execution by
12 the Contracting Agency, submit all HMA mix designs not already on the QPL according to
13 Section 5-04.2(1) or place purchase orders for all materials deemed critical by the
14 Contracting Agency for Physical Completion of the Contract. The Contractor shall provide
15 a copy of the completed WSDOT Form 350-042 indicating the date the mix design was
16 submitted, or copies of purchase orders for the critical materials. Such purchase orders
17 shall disclose the purchase order date and estimated delivery dates for such critical
18 material.

19
20 The Contractor shall show the HMA mix design evaluation report or procurement of the
21 critical materials listed below as activities in the Progress Schedule. If the approved
22 Progress Schedule indicates that acceptance of the HMA mix designs or materials
23 procurement are critical activities, and if the Contractor has provided documentation that
24 purchase orders are placed for the critical materials within the prescribed 21 calendar
25 days, then Contract time will be suspended upon Physical Completion of all critical work
26 except that work dependent upon the below listed critical materials:
27

28 *** \$\$1\$\$ ***
29

30 Charging of Contract time will resume upon the Contractor's receipt of a WSDOT mix
31 design evaluation report or delivery of the critical materials to the Contractor, notification
32 that the critical materials are ready for delivery to the Contractor from the Contracting
33 Agency's Materials Laboratory, or *** \$\$2\$\$ *** calendar days after execution by the
34 Contracting Agency, whichever occurs first.
35

36 No additional Procurement Suspension will be provided if the Contractor's HMA mix
37 designs did not meet Contract requirements and are resubmitted.
38

39 1-08.6.OPT2.FR1
40 (February 6, 2023)

41 Contract time may be suspended for procurement of critical materials (Procurement
42 Suspension). In order to receive a Procurement Suspension, the Contractor shall within
43 21 calendar days after execution by the Contracting Agency, place purchase orders for
44 all materials deemed critical by the Contracting Agency for physical completion of the
45 contract. The Contractor shall provide copies of purchase orders for the critical materials.
46 Such purchase orders shall disclose the purchase order date and estimated delivery
47 dates for such critical material.
48

49 The Contractor shall show procurement of the materials listed below as activities in the
50 Progress Schedule. If the approved Progress Schedule indicates that the materials
51 procurement are critical activities, and if the Contractor has provided documentation that
52 purchase orders are placed for the critical materials within the prescribed 21 calendar

1 days, then contract time will be suspended upon physical completion of all critical work
2 except that work dependent upon the below listed critical materials:

3
4 *** \$\$1\$\$ ***

5
6 Charging of contract time will resume upon delivery of the critical materials to the
7 Contractor or *** \$\$2\$\$ *** calendar days after execution by the Contracting Agency,
8 whichever occurs first.

9
10 1-08.9.GR1

11 **Liquidated Damages**

12
13 1-08.9.INST1.GR1

14 Section 1-08.9 is supplemented with the following:

15
16 1-08.9.OPT1.~~NEW~~.FR1

17 (September 8, 2020)

18 Liquidated damages in the amount of *** \$\$1\$\$ *** per working day will be assessed for
19 failure to physically complete the Contract within the physical completion time specified.

20
21 1-08.9.OPT2.~~NEW~~.FR1

22 (March 13, 1995)

23 Liquidated damages in the amount of *** \$\$1\$\$ *** per working day will be assessed for
24 failure to physically complete the temporary traffic signal portion of the contract within the
25 physical completion time specified. Liquidated damages in an amount based upon the
26 original contract amount and original time, will be assessed for failure to physically
27 complete the entire project within the physical completion time specified. Such damages
28 will accrue separately for each phase or stage of work. In the event damages occur on a
29 concurrent date, the larger of the two damages will apply for such days.

30
31 1-08.9.OPT3.~~NEW~~.FR1

32 (April 6, 2009)

33 Delayed completion of *** \$\$1\$\$ *** will result in impacts to the traveling public, increase
34 fuel consumption, increase vehicle operating costs, increase pollution, and cause other
35 inconveniences and harm.

36
37 Accordingly, the Contractor agrees:

- 38
39 1. To pay *** \$\$2\$\$ *** liquidated damages per *** \$\$3\$\$ *** for each *** \$\$4\$\$ ***
40 prorated to the nearest *** \$\$5\$\$ *** that the work is not completed as specified
41 in *** \$\$6\$\$ ***.
- 42
43 2. To authorize the Engineer to deduct these liquidated damages from any money
44 due or coming due the Contractor.

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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 1-10.21(1)(9-35).GR1

8 **Temporary Traffic Control Materials**

9 Section 9-35 is supplemented with the following:

10

11 1-10.1(1)(9-35).OPT1.GR1

12 (January 10, 2022)

13 **Automated Flagger Assistance Devices**

14 Automated Flagger Assistance Devices (AFADs) shall meet the requirements of the
15 MUTCD Red/Yellow Lens Automated Flagger Assistance Devices.

16

17 1-10.21(1)(9-35).OPT24.GR1

18 (October 3, 2022)

19 Temporary portable transverse rumble strips must be either the black RoadQuake 2
20 or the black RoadQuake 2F Folding Temporary Portable Rumble Strip manufactured
21 by Plastic Safety Systems, Inc., all black Traffix Alert High Speed Rumble Strip
22 manufactured by Traffix Devices or an approved equal.

23

24 Devices submitted for approval shall meet the following criteria:

25

- 26 1. Length will be a minimum of 11 feet long.
- 27 2. Width will be a minimum of 10 inches.
- 28 3. Provides a bevel on leading edge.
- 29 4. Weighs a minimum of 100 lbs.
- 30 5. No greater than 3/4-inch profile height.
- 31 6. Flexible along the length of the strip to facilitate conformity to the road
32 surface.
- 33 7. Withstands temperatures 0 to 180 degrees Fahrenheit without degradation
34 in deployment, use or safety.
- 35 8. Function on roads with posted speed limits up to 70 mph; and retain original
36 placement with minimal movement such that performance is not
37 compromised.
- 38 9. Deemed safe by the manufacturer for use by motorcycles.

39

40 1-10.1(1)(9-35.4).GR1

41 **Sequential Arrow Signs**

42 Section 9-35.4 is supplemented with the following:

43

44

45

46

47

48

49

50

51

1-10.1(1)(9-35.4).OPT1.GR1

(September 3, 2024)

GPS and Remote Communications Requirements

Sequential Arrow Signs (Arrow Boards) on this project shall also have the following communication abilities:

1. Arrow Boards capable of transmitting Work Zone Data Exchange (WZDx) Specification compliant data feeds from the arrow board or the Arrow Boards central server.
2. Arrow Boards shall transmit its GPS coordinates (latitude and longitude) with an accuracy of 30-foot diameter of its actual location.
3. Arrow Boards shall transmit its GPS coordinates and display mode of operation data to a compatible publicly accessible navigation app service.
4. Arrow Boards shall transmit status and location as follows:
 - a. Mode change within 2 minutes.
 - b. Location (if moved more than 500 feet) within 2 minutes.
 - c. Health checks every 60 minutes.
 - d. Current display mode posted on Board (e.g., left or right chevron, arrow direction, four corner flash, etc.).
 - e. Transport vs Display mode.

1-10.~~13~~(~~13~~)(9-35.8).GR1

Vacant

Section 9-35.8 is revised to read:

1-10.~~31~~(~~13~~)(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 1-10.1(2).GR1

11 **Description**

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

1 Kirkland, WA 98034-8709
2 1-800-521-0778
3 <https://www.esc.org>
4
5 The American Traffic Safety Services Association
6 15 Riverside Parkway, Suite 100
7 Fredericksburg, Virginia 22406-1022
8 Training Dept. Toll Free (877) 642-4637
9 Phone: (540) 368-1701
10 <https://atssa.com/training>

11
12 Integrity Safety
13 13912 NE 20th Ave.
14 Vancouver, WA 98686
15 (360) 574-6071
16 <https://www.integritysafety.com>

17
18 US Safety Alliance
19 (904) 705-5660
20 <https://www.ussafetyalliance.com>

21
22 K&D Services Inc.
23 2719 Rockefeller Ave.
24 Everett, WA 98201
25 (800) 343-4049
26 <https://www.kndservices.net>
27

28 1-10.2(1).OPT2.GR1

29 (January 5, 2015)

30 The primary TCS shall have a minimum of 500 hours of experience providing traffic
31 control as a TCS or traffic control labor on multilane highways with a speed limit of
32 55 mph or greater. The Contractor shall submit a certification of the TCS's
33 experience with the TCS designation. Documentation of experience shall be
34 available upon request by the Engineer.
35

36 1-10.3.GR1

37 **Traffic Control Labor, Procedures and Devices**

38
39 1-10.3.INST1.GR1

40 Section 1-10.3 is supplemented with the following:

41
42 1-10.3.OPT1.FR1

43 ***(May 20, 2020)***

44 ***Contractor Provided Uniformed Police Officers***

45 The Contractor shall provide, direct, and monitor Uniformed Police Officers having
46 jurisdiction to control traffic in accordance with the Plans. A uniformed police officer (UPO)
47 is a sworn police officer from a local law enforcement agency or a Washington State Patrol
48 officer. The UPO shall provide traffic control as shown in an accepted traffic control plan.
49

50 The following contact information for potential service providers is supplied for the
51 Contractor's convenience:
52

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1-10.3(3).GR1

Traffic Control Devices

1-10.3(3).INST1.GR1

Section 1-10.3(3) is supplemented with the following:

1-10.3(3).OPT1.GR1

(January 10, 2022)

Automated Flagger Assistance Devices

General

Where shown on an accepted traffic control plan, the Contractor shall provide, operate and maintain AFADs.

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.

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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 (RSDS). A RSDS shall be placed with a minimum of 4 ft. of lateral clearance to edge of a travelled lane and be delineated by channelization devices. The Contractor shall remove the RSDS from the clear zone when not in use unless protected by barrier or guardrail.

1-10.3(3).OPT3.FR1

(April 15, 2024)

Smart Work Zone System

Where shown on an approved traffic control plan, the Contractor shall provide, operate, maintain, and remove a Smart Work Zone System. A Smart Work Zone System (SWZS) uses portable roadside sensor information to display real-time dynamic work zone traffic information and instructions to motorists on a series of Portable Changeable Message Signs (PCMSs) approaching a work zone.

The SWZS shall be capable of communicating three types of work zone traffic information:

1. **Queue detection warning** for slowed or queued traffic ahead.
2. **Dynamic lane merge** guidance to use all open lanes up to the lane closure tapers and zipper merge instructions during times of congestion.
3. **Work zone travel delay** for current work zone delays in minutes.

In locations with multiple SWZS setups each setup shall be capable of operating independently. One SWZS Technician may operate all systems concurrently.

Vendor

The Contractor shall select an independent vendor listed below to provide the SWZS as shown on an approved SWZS Plan:

Highway Specialties LLC

Phone: (360) 437-1900

Website: <https://www.highwayspecialties.com>

Hill and Smith Inc.

Phone: (302) 328-3220

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Website: https://www.hillandsmith.com/portfolio_category/its-smart-work-zone/

ICONE by ICONE Products

Phone: (315) 626-6800
Website: <http://iconeproducts.com/>

Road-Tech Safety Services, Inc.

Phone: (888) 762-3832
Website: <https://www.road-tech.com/>

SolarTech

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

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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 and coordinate as appropriate. The technician shall be on site while the SWZS is in use and able to respond to system issues in person.

Duties of the Technician include, but are not limited to, the following:

1. Program the automated, real-time operation of the SWZS with traffic sensor trigger speed thresholds and PCMS messages shown on the approved SWZS Plan.
2. Service, debug, troubleshoot, and maintain all SWZS components.
3. Maintain SWZS equipment maintenance logs.
4. Collect and process system data and provide data as described below:
 - a. **System Data** – System data shall include:
 - i. Data in table format of traffic volume (vehicles per hour per each open lane), 50th-percentile traffic speed of all open lanes, and 85th-percentile traffic speed of all open lanes for 15-minute intervals organized by Day and Hour of day for each SWZS implementation measured by the side-fire traffic sensor.
 - ii. Day and Hour of day each traffic sensor was triggered, and the message displayed on each PCMS while the SWZS is in use.
 - b. **Agency Access to System Data** – Provide password protected access to the Engineer and identified Agency personnel to the System Data via a dedicated website or other wireless remote system.
 - c. **Provide System Data to Agency** – At the completion of the Project, provide System Data logs in an electronic format approved by the Engineer.
5. Immediately respond to all system failures in accordance with the **Smart Work Zone System Failure Protocol** section of these Specifications.

Operation

Operate the SWZS according to the following:

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Scheduled Use

Use a dynamic lane merge, queue detection warning, and work zone travel delay system on the following roadway(s), locations, and work operations:

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Installation, Relocation, Removal, and Storage

The Contractor shall store, install, relocate, and remove all the SWZS components as follows:

- 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.

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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:
 - 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 ± 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

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- ii. PCMS #2: Place 1.5 ± 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”.

1-10.3(3).OPT4.FR1

(April 15, 2024)
Queue Warning System

Where shown on an accepted traffic control plan, the Contractor shall provide, operate, maintain, and remove a Queue Warning System. A Queue Warning System (QWS) uses portable roadside sensor information to display real-time traffic queue information to motorists on Portable Changeable Message Signs (PCMS) approaching a work zone. QWS is a simplified smart work zone system intended for work zone queues up to 2 miles, measured from the first lane closure taper, but may be modified for queuing up to 3 miles by extending spacing between the two PCMSs from 1± mile to 1.5 ± mile spacing and adjusting the PCMS messages. Traffic sensor placement remains unchanged.

The QWS shall be capable of communicating two types of work zone traffic information:

1. **Queue detection warning** for slowed or queued traffic ahead.
2. **Dynamic lane merge** guidance to use all open lanes up to the lane closure tapers and to take turns at merges during times of congestion.

In locations with multiple QWS setups each setup shall be capable of operating independently. One QWS Technician may operate all systems concurrently.

Vendors

The Contractor shall select an independent vendor listed below to provide a QWS as shown on an accepted traffic control plan:

Highway Specialties LLC
Phone: (360) 437-1900
Website: <https://www.highwayspecialties.com>

Hill and Smith Inc.
Phone: (302) 328-3220
Website: https://www.hillandsmith.com/portfolio_category/its-smart-work-zone/

ICONE by ICONE Products
Phone: (315) 626-6800
Website: <http://iconeproducts.com/>

Road-Tech Safety Services, Inc.
Phone: (888) 762-3832
Website: <https://www.road-tech.com/>

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SolarTech
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
Website: <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.

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.

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- 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	NEXT	(Lane)	1.5
FOR SLOW	3	(Closure)	MILES
TRAFFIC	MILES	(Description)	AHEAD
2.0 SEC	2.0 SEC	2.0 SEC	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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11 1-10.3(3).OPT5.GR1

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(October 3, 2022)

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Temporary Portable Transverse Rumble Strips

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Where shown on a traffic control plan, the Contractor shall provide, install, and maintain temporary portable transverse rumble strips.

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Temporary portable transverse rumble strips may be used on two-way, two-lane roadways in conditions requiring traffic to stop.

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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.

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The Contractor shall remove the temporary portable transverse rumble strips in their entirety when they are no longer needed.

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All damage caused by removing temporary portable transverse rumble strips shall be repaired by the Contractor at no additional cost to the Contracting Agency.

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~~1-10.3(3)A.GR1~~

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Construction Signs

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~~1-10.3(3)A.INST1.GR1~~

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~~The third paragraph of Section 1-10.3(3)A is revised to read:~~

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~~1-10.3(3)A.OPT1.2025.GR1~~

32

~~(February 13, 2024)~~

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~~All signs that conflict with the current traffic configuration or the current sign configuration shall either be removed or completely covered in accordance with Section 8-21.3(3). If coverings are in place for 7 calendar days or less, in lieu of Section 8-21.3(3), the signs may be covered in accordance with the following requirements:~~

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- ~~1. Sheeting shall be either ¼-inch plywood or ½-inch thick ABS plastic.~~
- ~~2. No damage shall occur to the face of the sign being covered.~~
- ~~3. The sheeting shall be non-reflective and black in color with U-brackets attached to hook the sign covering over the top of the conflicting signs.~~
- ~~4. A 2 by 2-inch wooden handle or a PVC conduit of 2-inch nominal diameter handle shall be attached to install and remove the sign covering.~~
- ~~5. The handle shall be secured to the signpost with a plastic “zip” tie until the sign covering is removed.~~

~~Existing speed limit signs shall be uncovered when temporary reduced speed limit signs are not in place.~~

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

1-10.3(3)B.INST1.GR1
Section 1-10.3(3)B is supplemented with the following:

1-10.3(3)B.OPT1.GR1
(September 3, 2024)
Initial Arrow Board Turn-On Meeting
The Contractor shall arrange a meeting at least one week before the initial Arrow Board turn-on.

The meeting shall include the Contractor, Traffic Control Manager, Traffic Control Supervisor, Alternative Traffic Control Supervisor (if applicable), and WSDOT Project Engineering Office staff.

During this meeting, the Contractor shall perform the following:

- 1. A complete and thorough demonstration to show that communication elements listed in Section 9-35.4 are operating properly.

Arrow Board Failure
If Arrow Board repairs are required, the Contractor shall control traffic with Arrow Board without GPS and remote communication abilities, and the Arrow Board needing repairs shall be repaired or replaced within 48 hours.

Arrow Boards shall be deactivated immediately when the unit is not in use in accordance with the accepted traffic control plan.

Any data service costs for communications will be included in the unit cost per hour for Sequential Arrow Sign.

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~~1-10.3(3)B(9-35.4).GR1~~

~~**Sequential Arrow Signs**~~

~~Section 9-35.4 is supplemented with the following:~~

~~1-10.3(3)B(9-35.4).OPT1.2025.GR1~~

~~(October 3, 2022)~~

~~**GPS and Remote Communications Requirements**~~

~~Sequential Arrow Signs (Arrow Boards) on this project shall also have the following communication abilities:~~

- ~~1. Provide electronic Work Zone Data Exchange (WZDx) Specification compliant data feeds to Contracting Agency from the arrow board or the Arrow Boards central server.~~
- ~~2. Arrow Boards used on this project shall have the ability to transmit its GPS coordinates (latitude and longitude) with an accuracy of 30-foot diameter of its actual location.~~
- ~~3. Arrow Boards shall transmit its GPS coordinates and mode of operation data to a compatible publicly accessible mapping app service.~~
- ~~4. Arrow Boards shall transmit status and location as follows:

 - ~~a. Mode change within 2 minutes.~~
 - ~~b. Location (if moved more than 500 feet) within 2 minutes.~~
 - ~~c. Health checks every 30 minutes.~~
 - ~~d. Current "indication" posted on Board (e.g., left or right chevron, arrow direction, four corner flash, etc.).~~~~

~~If Arrow Board repairs are required, the Contractor shall control traffic with Arrow Board without GPS and remote communication abilities, and the Arrow Board needing repairs shall be repaired or replaced within 48 hours.~~

~~Arrow Boards shall be deactivated immediately when the unit is not in use in accordance with the accepted traffic control plan.~~

~~Any data service costs for communications will be included in the unit cost per hour for Sequential Arrow Sign.~~

1-10.4.GR1

Measurement

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:

- 1
- 2 ~~1-10.4(2).OPT1.GR1~~
- 3 ~~(August 2, 2004)~~
- 4 ~~The bid proposal does not contain the item "Project Temporary Traffic Control," lump~~
- 5 ~~sum. The provisions of Section 1-10.4(2) shall apply.~~
- 6
- 7 1-10.4(2).OPT2.GR1
- 8 (January 10, 2022)
- 9 "Automated Flagger Assistance Device" will be measured by the hour for the time
- 10 that each AFAD is operating as shown on the accepted traffic control plan.
- 11
- 12 1-10.4(2).OPT3.GR1
- 13 (January 2, 2018)
- 14 "Radar Speed Display Sign" will be measured by the hour for the time that each sign
- 15 is operating as shown on an approved Traffic Control Plan.
- 16
- 17 1-10.4(2).OPT5.GR1
- 18 (September 7, 2021)
- 19 "Operation of Smart Work Zone System" will be measured by the hour the system is
- 20 actively operating as defined in Section 1-10.3(3) as supplemented in these special
- 21 provisions. When the smart work zone system malfunctions for longer than 15-
- 22 minutes or if the smart work zone system is not used in accordance with the
- 23 applicable approved Smart Work Zone System traffic control plan, no measurement
- 24 will be made for the smart work zone system for that hour. Payment for all other Work
- 25 to implement and decommission the SWZS will be made under the applicable items
- 26 shown in the Proposal.
- 27
- 28 1-10.4(2).OPT6.GR1
- 29 (May 20, 2020)
- 30 "Contractor Provided Uniformed Police Officer" will be measured by the hour.
- 31
- 32 1-10.4(2).OPT7.GR1
- 33 (September 7, 2021)
- 34 "Operation of Queue Warning System" will be measured by the hour each system is
- 35 actively operating as defined in Section 1-10.3(3) as supplemented in these special
- 36 provisions. When the Queue Warning System malfunctions for longer than 15
- 37 minutes or is not used in accordance with the applicable accepted traffic control plan,
- 38 no measurement will be made for the queue warning system for that hour. Payment
- 39 for all other Work to implement and decommission the Queue Warning System will
- 40 be made under the applicable items shown in the Proposal.
- 41
- 42 1-10.4(2).OPT8.GR1
- 43 (October 3, 2022)
- 44 "Temporary Portable Transverse Rumble Strips" will be measured per each one time
- 45 for each array consisting of three rumble strips in operation at any one time. This
- 46 price shall include installation, maintaining, and relocating throughout the life of the
- 47 project and final removal from the project site.
- 48
- 49 ~~1-10.4(3).GR1~~
- 50 ~~**Reinstating Unit Items With Lump Sum Traffic Control**~~
- 51

1 ~~1-10.4(3).INST1.GR1~~
2 Section 1-10.4(3) is supplemented with the following:
3
4 ~~1-10.4(3).OPT1.FR1~~
5 ~~(November 2, 2022)~~
6 The bid proposal contains the item “Project Temporary Traffic Control,” lump sum and
7 the additional temporary traffic control items listed below. The provisions of Section
8 1-10.4(1), Section 1-10.4(3), and Section 1-10.5(3) shall apply.
9
10 ~~“Work Zone Safety Contingency”, by force account.~~
11
12 ~~*** \$\$1\$\$ ***~~
13
14 1-10.5.GR1
15 **Payment**
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17 1-10.5(2).GR1
18 ***Item Bids with Lump Sum for Incidentals***
19
20 1-10.5(2).INST1.GR1
21 Section 1-10.5(2) is supplemented with the following:
22
23 1-10.5(2).OPT1.GR1
24 (November 20, 2023)
25 “Automated Flagger Assistance Device”, per hour.
26 The unit Contract price, when applied to the number of hours measured for this item
27 in accordance with Section 1-10.4(2), shall be full pay to provide, maintain and
28 remove the AFAD as described including transporting, installing and resetting the
29 devices.
30
31 All costs for controlling AFADs shall be included in the unit Contract price per hour
32 for “Flaggers”.
33
34 1-10.5(2).OPT2.GR1
35 (January 2, 2018)
36 “Radar Speed Display Sign”, per hour.
37 The unit Contract price, when applied to the number of units measured for this item
38 in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred
39 by the Contractor in performing the Work for procuring all radar speed display signs
40 required for the project and for transporting these signs to and from the project.
41
42 1-10.5(2).OPT3.GR1
43 (September 7, 2021)
44 “Operation of Smart Work Zone System”, per hour.
45 The unit Contract price, when applied to the number of units measured for this item
46 in accordance with Section 1-10.4(2) shall be full compensation for all costs incurred
47 by the Contractor, SWZS Vendor, and SWZS Technician for mobilizing and
48 demobilizing the smart work zone system components; the hardware, software,
49 traffic sensors, and other required equipment; maintenance data logs; traffic data
50 logs; Contracting Agency access to Smart Work Zone System data; and wireless
51 system operations including Contracting Agency access. Payment for all other Work

1 to implement and decommission the SWZS will be made under the applicable items
2 shown in the Proposal.

3
4 1-10.5(2).OPT4.GR1
5 (September 7, 2021)
6 "Operation of Queue Warning System", per hour.
7 The unit Contract price, when applied to the number of units measured for this item
8 in accordance with Section 1-10.4(2) shall be full compensation for all costs incurred
9 by the Contractor, Vendor, and/or Queue Warning System Technician for mobilizing
10 and demobilizing the queue warning system components; the hardware, software,
11 traffic sensors, and other required Queue Warning System equipment; maintenance
12 data logs; traffic data logs; and wireless system operations including Contracting
13 Agency access. Payment for all other Work to implement and decommission the
14 Queue Warning System will be made under the applicable items shown in the
15 Proposal.

16
17 1-10.5(2).OPT5.GR1
18 (May 20, 2020)
19 "Contractor Provided Uniformed Police Officer", per hour.
20
21 The unit Contract price per hour for "Contractor Provided Uniformed Police Officer"
22 shall be full pay for performing the Work as specified and as shown in the Plans,
23 including all costs for arrangement for and supervision of a uniformed law
24 enforcement personnel and vehicles to participate in the Contractor's traffic control
25 activities.

26
27 1-10.5(2).OPT6.GR1
28 (October 3, 2022)
29 "Temporary Portable Transverse Rumble Strips", per each.
30 The unit Contract price, when applied to the number of units measured for this item
31 in accordance with Section 1-10.4(2), shall be full compensation for all costs incurred
32 by the Contractor in performing the Work as described.

33
34 1-10.5(2).OPT7.GR1
35 (November 2, 2022)
36 "Work Zone Safety Contingency", by force account.
37
38 All costs as authorized by the Engineer will be paid for by force account as specified
39 in Section 1-09.6.

40
41 For purpose of providing a common proposal for all bidders, the Contracting Agency
42 has entered an amount for the item "Work Zone Safety Contingency" in the Proposal
43 to become a part of the Contractor's total bid.

44
45 The Engineer may choose to use existing bid items for the implementation of the
46 agreed upon enhancement.

1	DIVISION2.GR2	Earthwork
2		
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
18		
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.

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:

2-02.3.OPT1.FR2 (Removal of Obstructions)

1		(September 7, 2021)
2		Use <i>except</i> when the combined cost of all obstruction
3		removal is \$5,000 or less and payment is to be included in
4		other payment items.
5		
6		Removal of obstructions that are readily measurable and
7		for which the cost of removal is \$5,000 or less per
8		obstruction may be included in this pay item.
9		
10		Removal of obstructions that are not readily measurable,
11		such as foundations, may be included in this item
12		regardless of the removal cost.
13		
14		List all items and approximate quantities to be removed
15		under "Removal of Structure and Obstruction".
16		(1 fill-in)
17		
18	2-02.3.OPT2.FR2	(Removing Miscellaneous Traffic Items)
19		(March 13, 1995)
20		Must include with 2-02.1.OPT1.GR2 .
21		
22	2-02.3.OPT3.FR2	(Removal and Disposal of Hazardous Material)
23		(June 6, 2022)
24		Must also use 2-02.4.OPT1.GR2 and 2-02.5.OPT7.GR2 .
25		Use only for subsurface removal of known or suspected
26		hazardous or contaminated material. Fill-in is for type of
27		material, depth of contamination in soil, and depth of
28		contamination in water. Fill-in information is to be provided
29		by the Region Environmental Staff.
30		(1 fill-in)
31		
32	2-02.3.OPT4.GR2	(Removal and Disposal of Asbestos Material)
33		(October 4, 2021)
34		Must include with 1-07.5(4)C.OPT1.FR1 , 2-
35		02.1.OPT2.GR2 , and 2-02.5.OPT11.GR2 .
36		
37	2-02.3.OPT5.GR2	(Removal and Disposal of Asbestos Material)
38		(October 4, 2021)
39		Must include with 1-07.5(4)C.OPT2.FR1 .
40		
41	2-02.3.OPT6.FB2	(Salvage of Removed Structure Items)
42		(June 26, 2000)
43		Use when removal items are to remain the property of the
44		Contracting Agency. The first fill-in specifies the salvaged
45		items. The second fill-in specifies the name and address
46		(street address or highway milepost) of the material storage
47		site. Include with either
48		2-02.3(2).OPT1.FB2 , 2-02.3(2).OPT2.FB2 , or 2-
49		02.3(2).OPT3.FB2 , and 2-02.3(2).OPT10(B).FB2 .
50		(2 fill-ins)
51		
52	2-02.3.OPT7.GR2	(Well Decommissioning)
53		(February 25, 2021)

1 Include in projects when wells will not be removed prior to
2 advertisement and will be removed as part of the Contract.
3 Use with **2-02.1.OPT5.GR2**, **2-02.2.OPT1.GR2**, and **2-**
4 **02.5.OPT2.GR2**.

5
6 **2-02.3(2).GB2** **Removal of Bridges, Box Culverts, and other Drainage**
7 **Structures**

8
9 2-02.3(2).INST1.GB2 (Section 2-02.3(2) is supplemented with the following)
10 Must use once preceding any of the following:

11
12 2-02.3(2).OPT1.FB2 (Removing Existing Bridge)
13 (June 26, 2000)
14 Use in projects requiring the removal of existing
15 bridge(s) in one stage. The first fill-in specifies the
16 bridge(s). The second fill-in specifies where traffic is
17 directed (onto the detour route or bridge, onto the new
18 bridge, etc.). Include with **2-02.3(2).OPT10(B).FB2**.
19 **Include with 1-07.1(2).OPT3.FR1** if the bridge being
20 removed has steel members with lead paint.
21 (2 fill-ins)

22
23 2-02.3(2).OPT2.FB2 (Removing Existing Bridge)
24 (June 26, 2000)
25 Use in projects requiring the removal of existing
26 bridge(s) in two or more stages. The fill-in specifies the
27 bridge(s). Include with **1-07.1(2).OPT3.FR1** if the bridge
28 being removed has steel members with lead paint.
29 (1 fill-in)

30
31 2-02.3(2).OPT3.FB2 (Removing Portion of Existing Bridge)
32 (June 26, 2000)
33 Use in projects requiring the removal of portions of
34 existing bridge(s). The first fill-in specifies the bridge(s).
35 The second fill-in specifies the portions being removed.
36 Include with **1-07.1(2).OPT3.FR1** if the bridge being
37 partially removed has steel members with lead paint.
38 (2 fill-ins)

39
40 2-02.3(2).OPT7.FB2 (Removal in Water)
41 (June 26, 2000)
42 Use in projects requiring the removal of existing
43 bridge(s) when removal involves piers within the wetted
44 perimeter of a stream, lake or bay. The first fill-in
45 specifies the bridge(s). The second and fourth fill-ins
46 specify the body of water. The third fill-in specifies the
47 elevation of the removal level. Include with **either 2-**
48 **02.3(2).OPT1.FB2**, **2-02.3(2).OPT2.FB2**, **or 2-**
49 **02.3(2).OPT3.FB2**, **and 2-02.3(2).OPT10(B).FB2**.

50
51 2-02.3(2).OPT10.GB2 (Use of Explosives)
52 Must use once preceding any of the following:
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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).OPT3.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).OPT3.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**.

2-02.4.OPT2.GR2 (Pavement Removal)

1		(September 8, 1997)
2		Must include with 2-02.3(3).OPT1.FR2..
3		
4	2-02.4.OPT3.GR2	(Sidewalk Removal)
5		(October 25, 1999)
6		Include in projects when removal of sidewalk is outside the
7		limits of roadway excavation, and the removal is to be paid
8		by the square yard.
9		Must include with 2-02.5.OPT16.FR2.
10		
11	2-02.4.OPT4.GR2	(Curb Removal)
12		(September 8, 1997)
13		Include in projects when removal of curb is outside the limits
14		of roadway excavation, and the removal is to be paid by the
15		linear foot.
16		Must include with 2-02.5.OPT17.FR2.
17		
18	2-02.5.GR2	Payment
19		
20	2-02.5.INST1.GR2	(Section 2-02.5 is revised by the following)
21		Must use once preceding any of the following:
22		
23	2-02.5.OPT1.FR2	(Removal of structures and obstructions included in other
24		work)
25		(August 1, 2017)
26		(1 fill-in)
27		
28	2-02.5.INST2.GR2	(Section 2-02.5 is supplemented with the following)
29		Must use once preceding any of the following:
30		
31	2-02.5.OPT2.GR2	(Decommissioning Wells)
32		(February 25, 2021)
33		Include in projects when wells will not be removed prior to
34		advertisement and will be removed as part of the Contract.
35		Use with 2-02.1.OPT5.GR2 , 2-02.2.OPT1.GR2 , and 2-
36		02.3.OPT7.GR2.
37		
38	2-02.5.OPT7.GR2	(Removal and Disposal of Hazardous Material)
39		(December 4, 2006)
40		<i>Must include with 2-02.3.OPT3.FR2 and</i>
41		<i>2-02.4.OPT1.GR2.</i>
42		
43	2-02.5.OPT8.GR2	(Removing Miscellaneous Traffic Items)
44		(September 30, 1996)
45		<i>Must include with 2-02.1.OPT1.GR2.</i>
46		
47	2-02.5.OPT11.GR2	(Removal and Disposal of Asbestos Material)
48		(September 30, 1996)
49		Must include with 1-07.5(4)C.OPT1.FR1 , 2-02.1.OPT.GR2 ,
50		and 2-02.3.OPT4.GR2.
51		
52	2-02.5.OPT12.GR2	(Removing Portion of Conc. Box Culvert)
53		(June 26, 2000)

1		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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7	2-02.5.OPT13.FR2	(Pavement Removal) (September 30, 1996) Must include with 2-02.3(3).OPT1.FR2. (1 fill-in)
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11		
12	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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20	2-02.5.OPT16.FR2	(Sidewalk Removal) (November 3, 1999) Must include with 2-02.4.OPT3.GR2 (1 fill-in)
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25	2-02.5.OPT17.FR2	(Removal of portions of Curb) (September 8, 1997) Must include with 2-02.4.OPT4.GR2. (1 fill-in)
26		
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2-03.GR2 Roadway Excavation and Embankment

2-03.1.GR2 Description

34	2-03.1.INST1.GR2	(Section 2-03.1 is supplemented with the following) Must use once preceding any of the following:
35		
36		
37	2-03.1.OPT1.GR2	(Geofoam Lightweight Fill) (July 2, 2024) Use in projects utilizing geofoam lightweight fill. Use with 2-03.2.OPT1.FR2, 2-03.3.OPT1.GR2, 2-03.4.OPT5.GR2, and 2-03.5.OPT4.GR2.
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2-03.2.GR2 Vacant

45	2-03.2.INST1.GR2	(Section 2-03.2, including title, is deleted and replaced with the following:) Must use once preceding any of the following:
46		
47		
48		
49	2-03.2.OPT1.GR2	(Geofoam Lightweight Fill) (July 2, 2024) Use in projects utilizing geofoam lightweight fill. Use with 2-03.1.OPT1.GR2, 2-03.3.OPT1.GR2, 2-03.4.OPT5.GR2, and 2-03.5.OPT4.GR2.
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2-03.3.GR2 Construction Requirements

2-03.3.INST1.GR2 (Section 2-03.3 is supplemented with the following)
Must use once preceding any of the following:

2-03.3.OPT1.GR2 (Geofoam Lightweight Fill)
(July 2, 2024)
Use in projects utilizing geofoam lightweight fill.
Use with **2-03.1.OPT1.GR2**, **2-03.2.OPT1.FR2**, **2-03.4.OPT5.GR2**, and **2-03.5.OPT4.GR2**.

2-03.3(2).GR2 Rock Cuts

2-03.3(2).INST1.GR2 (Section 2-03.3(2) is supplemented with the following)
Must use once preceding any of the following:

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**.

2-03.3(7).GR2 Disposal of Surplus Material

2-03.3(7).INST1.GR2 (Section 2-03.3(7) is supplemented with the following)
Must use once preceding any of the following:

2-03.3(7).OPT1.FR2 (Contracting Agency furnished waste site)
(March 13, 1995)
Use in projects with Contracting Agency provided waste sites.
(1 fill-in)

2-03.3(7).OPT2.FR2 (Waste material by embankment widening)
(March 13, 1995)
Use in projects where the Contracting Agency specifies embankments to be widened.
(2 fill-ins)

2-03.3(7).OPT3.GR2 (Contracting Agency provided sites are not mandatory)
(March 13, 1995)
Use, when applicable, with **2-03.3(7).OPT1.FR2**
or **2-03.3(7).OPT2.FR2**.

2-03.3(7).OPT4.GR2 (Contracting Agency provided sites are
not of sufficient size)
(March 13, 1995)
Use, when applicable, with **2-03.3(7).OPT1.FR2**
or **2-03.3(7).OPT2.FR2**.

2-03.3(14).GR2 Embankment Construction

1 Use with **2-03.1.OPT1.GR2**, **2-03.2.OPT1.FR2**, **2-**
2 **03.3.OPT1.GR2**, and **2-03.5.OPT4.GR2**.

3
4 **2-03.5.GR2** **Payment**

5
6 2-03.5.INST1.GR2 (Section 2-03.5 is supplemented with the following)
7 Must use once preceding any of the following:

8
9 2-03.5.OPT1.GR2 (Embankment In Place)
10 (September 30, 1996)
11 Must include with **2-03.4.OPT1.GR2**.

12
13 2-03.5.OPT2.FR2 (Preparation of waste sites)
14 (March 13, 1995)
15 Use in projects when the preparation of waste sites is
16 included in other work.
17 (1 fill-in)

18
19 2-03.5.OPT3.GR2 (Rock Slope Scaling and Rock Slope Scaling
20 Debris Removal Including Haul)
21 (April 5, 2010)
22 Use in projects with rock slope scaling. Include with **2-**
23 **03.3(2).OPT1.GR2 and 2-03.4.OPT4.GR2**.

24
25 2-03.5.OPT4.GR2 (Geofoam Lightweight Fill)
26 (July 2, 2024)
27 Use in projects utilizing geofoam lightweight fill.
28 Use with **2-03.1.OPT1.GR2**, **2-03.2.OPT1.FR2**, **2-**
29 **03.3.OPT1.GR2**, and **2-03.4.OPT5.GR2**.

30
31 **2-06.GR2** **Subgrade Preparation**

32
33 **2-06.3.GR2** **Construction Requirements**

34
35 **2-06.3(1).GR2** **Subgrade For Surfacing**

36
37 2-06.3(1).INST1.GR2 (Section 2-06.3(1) is supplemented with the following)
38 Must use once preceding any of the following:

39
40 2-06.3(1).OPT1.GR2 (Subgrade trimmer required)
41 (March 13, 1995)
42 Use in projects where a treated base or pavement will
43 be placed directly on the subgrade.
44 The project should include a bid item for "Gravel Borrow
45 Including Haul" or "Borrow Excavation Including Haul"
46 to ensure that sufficient fine material is available for
47 trimming.

48
49 2-06.3(1).OPT2.GR2 (Subgrade trimmer not required)
50 (March 13, 1995)
51 Use in grading-only projects where a treated base is
52 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 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

2-12.1.INST1.GR2 (Section 2-12.1 is supplemented with the following)
Must use once preceding any of the following:

2-12.1.OPT1.GR2 Geosynthetic Reinforced Slope
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes.
Slope design should be performed by the Olympia Service
Center Materials Laboratory or a geotechnical consultant.
Use details from DETAILS.CEL Library; D225, D229, D230,
and D230A or D230B.

1 **2-12.2.GR2**

2 **Materials**

3 2-12.2(9-03.14).GR2 (Borrow)
4 (Section 9-03.14 is supplemented with the following)
5 Must use once preceding any of the following:
6

7 2-12.2(9-03.14).OPT1.FR2 (Borrow for Geosynthetic Reinforced Slopes)
8 (November 17, 1997)
9 Use in projects requiring geosynthetic reinforced
10 slopes.
11 (1 fill-in)

12 2-12.2(9-07.7).GR2 (Welded Wire Reinforcement)
13 (Section 9-07.7 is supplemented with the following)
14 Must use once preceding any of the following:
15

16 2-12.2(9-07.7).OPT1.GR2 (Welded Wire Reinforcement)
17 (February 6, 2023)
18 Use in projects where welded wire faced geosynthetic
19 reinforced slopes are specified.
20

21 2-12.2(9-33.2(2)).GR2 (Geosynthetic Properties for Retaining Walls and
22 Reinforced Slopes)
23 (Section 9-33.2(2) is supplemented with the following)
24 Must use once preceding any of the following:
25

26 2-12.2(9-33.2(2)).OPT1.FR2 (Geosynthetic Properties for Reinforced
27 Slopes)
28 (January 2, 2012)
29 Use in projects requiring geosynthetic reinforced
30 slopes. The slope class must be identified in fill-in 6
31 based on the following: Class 1 is typically reinforced
32 slopes which support bridge abutments, buildings,
33 critical utilities, or other facilities which the
34 consequences of poor performance or failure would be
35 severe. In general, slopes greater than 30 feet in height.
36 Class 2 is all reinforced slopes not categorized as Class
37 1.
38 (6 fill-ins)
39

40 2-12.2(9-33.2(2)).OPT2.GR2 (Geosynthetic Properties for Turf
41 Reinforcement Mat)
42 (April 5, 2004)
43 Use in projects where geosynthetic reinforced slopes
44 with a turf reinforcement mat facing are specified.
45

46 2-12.2(9-33.4(1)).GR2 (Source Approval)
47 (Section 9-33.4(1) is supplemented with the following)
48 Must use once preceding any of the following:
49

50 2-12.2(9-33.4(1)).OPT1.GR2 (Geosynthetic Reinforced Slope)
51 Primary Reinforcement
52 (April 5, 2004)
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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:

2-12.2(9-33.4(4)).OPT1.GR2 (Reinforced Slope)

(November 17, 1997)

Use in projects requiring geosynthetic reinforced slopes.

2-12.3.GR2 Construction Requirements

2-12.3.INST1.GR2

(Supplemental Instructions)
(Section 2-12.3 is supplemented with the following)
Must use once preceding any of the following:

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2-12.3.OPT1.GR2 (Geosynthetic Reinforced Slope Construction Requirements)
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes. Slope facing options which include vegetative cover should only be used at sites where the average annual precipitation is 20 inches or more.

2-12.3.OPT2.FR2 (Turf Reinforced Mat Facing Construction)
(August 2, 2010)
Use in projects requiring geosynthetic reinforced slopes with turf reinforcement mat facing. In general, use for slopes no steeper than 1.2H:1V.
(2 fill-ins)

2-12.3.OPT3.GR2 (Geosynthetic Wrapped Slope Facing Construction)
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes with geosynthetic wrapped facing. Because of planting requirements, do not use this option for sites where the elevation is over 1500 feet. In general, use for slopes no steeper than 1H:1V.

2-12.3.OPT4.GR2 (Welded Wire Facing Construction)
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes with welded wire facing. In general, use for slopes no steeper than 1H:2V.

2-12.3.OPT5.GR2 (Installing Guardrail Posts in Geosynthetic Reinforced Slopes)
(November 17, 1997)
Use in projects requiring guardrail on geosynthetic reinforced slopes.

2-12.4.GR2 Measurement

2-12.4.INST1.GR2 (Supplemental Instructions)
(Section 2-12.4 is supplemented with the following)
Must use once preceding any of the following:

2-12.4.OPT1.FR2 (Geosynthetic Reinforced Slope)
(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:

1 2-12.5.OPT1.FR2 (Geosynthetic Reinforced Slope)
2 (November 17, 1997)
3 Use in projects requiring geosynthetic reinforced slopes.
4 (1 fill-in)
5

1 2-03.GR2
2 **Roadway Excavation and Embankment**

3
4 2-03.1.GR2
5 **Description**

6
7 2-03.2.GR2
8 **Vacant**

9
10 2-03.3.GR2
11 **Construction Requirements**

12
13 2-03.3(2).GR2
14 **Rock Cuts**

15
16 2-03.3(2).INST1.GR2
17 Section 2-03.3(2) is supplemented with the following:

18
19 2-03.3(2).OPT1.GR2
20 **(September 7, 2021)**
21 **Rock Slope Scaling and Removal and Disposal of Rock Slope Scaling Debris**
22 The Contractor shall remove loose rock and soil from the existing rock slope locations
23 shown in the Plans or as specified by the Engineer, and shall remove and dispose of
24 all rock slope scaling debris generated by the work.

25
26 **Equipment**
27 Rock slope scaling shall be performed with scaling bars, portable hydraulic
28 wedges, air pillows, hand drills, splitters, and other mechanical or hand tools
29 demonstrated to be effective in performing the work to the satisfaction of the
30 Engineer.

31
32 **Submittals**
33 The Contractor shall submit a rock slope scaling plan as a Type 2 Working
34 Drawing. The rock slope scaling plan shall include, but not be limited to, the
35 following:

- 36
37 1. Documented work experience of all rock slope scaling supervisors
38 and scalers scheduled to be working on the project. Rock slope
39 scaling supervisors shall have at least 1,500 hours of documented
40 experience as a rock slope scaler. Rock slope scalers shall have at
41 least 1,000 hours of documented experience as a rock slope scaler.
42
43 2. The proposed construction sequence and schedule.
44
45 3. The type of tools and equipment to be used for rock scaling
46 purposes.
47
48 4. The number of rock slope scaling crews to be employed on the
49 project, with a rock slope scaling crew defined as one qualified
50 scaling supervisor and two qualified scalers.
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5. Operation plan for collection, removal and disposal of all rock slope scaling debris generated by the rock slope scaling work.
6. Operation plan for protection of roadway surface, railroad facilities, structures, utilities, and other facilities adjacent to the rock slope scaling locations.
7. If the Roadway is exposed to the collection of rock slope scaling debris, the submittal shall include the equipment and procedure to be used to clear the Roadway for public use between rock slope scaling operations.

The Contractor shall not begin rock slope scaling operations until receiving the Engineer's approval of the rock slope scaling plan.

Rock Slope Scaling Construction Requirements

As a first item of work, the Contractor shall clear the rock slope of trees and woody vegetation within the work zone within 15 feet of the slope crest or as otherwise specified by the Engineer. Clearing shall conform to Sections 2-01.1 and 2-01.3(1), and the requirement that the vegetation shall be close cut, leaving the root wad intact.

The Contractor shall conduct rock slope scaling operations in accordance with the details shown in the Plans, the traffic control restrictions and requirements shown in the Plans and specified in the Special Provisions, and the rock slope scaling plan as approved by the Engineer. The size and work experience of the rock slope scaling crew as defined above shall be maintained at all times.

Rock slope scaling shall begin at the top of the rock slope and work shall proceed down slope, removing loose rock and soil as the work progresses. The extent of rock slope scaling shall be as shown in the Plans and as adjusted in the field by the Engineer.

Rock Slope Scaling Debris Collection and Removal

The Contractor shall collect, remove and dispose of all rock slope scaling debris generated by the work, including all rock debris within the limits of the project present at the base of the slope at the beginning of the project. Ditches and benches shall be cleared of all rock slope scaling debris and returned to original functional condition as specified by the Engineer

The Contractor shall break up any rocks that are too large to transport into manageable sized pieces for haul.

Rock slope scaling debris collection and removal shall be conducted in accordance with the traffic control restrictions and requirements shown in the Plans and specified in the Special Provisions, and the rock slope scaling plan as approved by the Engineer.

Except when the Plans or Special Provisions specify a Contracting Agency provided site for disposal of all or specific portions of the rock slope scaling debris, all rock slope scaling debris shall be disposed of at a site conforming to Section 2-03.3(7)C.

1
2 2-03.3(7).GR2
3 **Disposal Of Surplus Material**
4
5 2-03.3(7).INST1.GR2
6 Section 2-03.3(7) is supplemented with the following:
7
8 2-03.3(7).OPT1.FR2
9 (March 13, 1995)
10 Surplus materials may be disposed of within the Contracting Agency furnished site,
11 as detailed in the Plans. For informational purposes the maximum capacity of this
12 site is *** \$\$1\$\$ *** cubic yards, neat line measurement.
13
14 2-03.3(7).OPT2.FR2
15 (March 13, 1995)
16 Surplus materials may be disposed of by widening embankments at the following
17 locations, as may be designated by the Engineer :
18
19 *** \$\$1\$\$ ***
20
21 For informational purposes the maximum capacity of the embankment widening sites
22 is *** \$\$2\$\$ *** cubic yards, neat line measurement
23
24 2-03.3(7).OPT3.GR2
25 (March 13, 1995)
26 The Contractor is not required to utilize the Contracting Agency provided site(s), and
27 may make arrangements, at the Contractor's expense, for the disposal of waste
28 materials, and shall protect the Contracting Agency from all damages arising from
29 the Contractor's waste disposal operations.
30
31 2-03.3(7).OPT4.GR2
32 (March 13, 1995)
33 It is anticipated that the waste site(s) provided by the Contracting Agency will not be
34 of sufficient size or capacity to dispose of all excess materials. Therefore, it will be
35 necessary for the Contractor to make arrangements, at the Contractor's expense, for
36 the disposal of excess waste materials and shall protect the Contracting Agency from
37 all damages that may arise from the waste disposal operations.
38
39 2-03.3(14).GR2
40 **Embankment Construction**
41
42 2-03.3(14)C.GR2
43 **Compacting Earth Embankments**
44
45 2-03.3(14)C.INST1.GR2
46 Section 2-03.3(14)C is supplemented with the following:
47
48 2-03.3(14)C.OPT1.GR2
49 (March 13, 1995)
50 All embankments, except waste embankments, shall be compacted using
51 Method A.
52

1 2-03.3(14)I.GB2
2 **Embankments at Bridge And Trestle Ends**
3

4 2-03.3(14)I.INST1.GB2
5 Section 2-03.3(14)I is supplemented with the following:
6

7 2-03.3(14)I.OPT1.FB2
8 (March 13, 1995)
9 The approach embankments at the ends of *** \$\$1\$\$ *** shall be constructed
10 *** \$\$2\$\$ *** before undertaking the construction of the end piers.
11

12 2-03.4.GR2
13 **Measurement**
14

15 2-03.4.INST1.GR2
16 Section 2-03.4 is supplemented with the following:
17

18 2-03.4.OPT1.GR2
19 (March 13, 1995)
20 The embankment widening for guardrail will be measured by the cubic yard, between the
21 original roadway slope and the neat lines of the widened embankment.
22

23 2-03.4.OPT2.GR2
24 (~~March 13, 1995~~ **September 3, 2024**)
25 Only one determination of the original ground elevation will be made on this project.
26 Measurement for roadway excavation and embankment will be based on the original
27 ground elevations recorded previous to the award of this contract.
28

29 If discrepancies are discovered in the ground elevations which will materially affect the
30 quantities of earthwork, the original computations of earthwork quantities will be adjusted
31 accordingly.
32

33 Earthwork quantities will be computed, either manually or by means of electronic data
34 processing equipment, by use of the average end area method or by the finite element
35 analysis method utilizing digital terrain modeling techniques.
36

37 Electronic Design Files will be available by request for the Bidder's inspection before the
38 opening of Bids.
39

40 ~~Copies of the ground cross-section notes will be available for the bidder's inspection,~~
41 ~~before the opening of bids, at the Engineer's office and at the Region office.~~
42

43 ~~Upon award of the contract, copies of the original ground cross-sections will be furnished~~
44 ~~to the successful bidder on request to the Engineer.~~
45

46 2-03.4.OPT3.GR2
47 (March 13, 1995)
48 Only one determination of the original ground elevation will be made on this project.
49 Measurement for roadway excavation and embankment will be based on the original
50 ground elevations recorded previous to the award of this contract. Control stakes will be
51 set during construction to provide the Contractor with all essential information for the
52 construction of excavation and embankments.

1
2 If discrepancies are discovered in the ground elevations which will materially affect the
3 quantities of earthwork, the original computations of earthwork quantities will be adjusted
4 accordingly.
5
6 Earthwork quantities will be computed, either manually or by means of electronic data
7 processing equipment, by use of the average end area method or by the finite element
8 analysis method utilizing digital terrain modeling techniques.
9
10 Copies of the ground cross-section notes will be available for the bidder's inspection,
11 before the opening of bids, at the Engineer's office and at the Region office.
12
13 Upon award of the contract, copies of the original ground cross-sections will be furnished
14 to the successful bidder on request to the Engineer.
15
16 2-03.4.OPT4.GR2
17 (April 5, 2010)
18 Rock slope scaling will be measured by the crew hour.
19
20 Rock slope scaling debris removal including haul will be measured by the cubic yard in
21 the hauling conveyance at the point of removal from the work site.
22
23 2-03.5.GR2
24 **Payment**
25
26 2-03.5.INST1.GR2
27 Section 2-03.5 is supplemented with the following:
28
29 2-03.5.OPT1.GR2
30 (September 30, 1996)
31 "Embankment in Place", per cubic yard.
32
33 The unit contract price per cubic yard shall be full pay to perform the work as specified,
34 including terracing the existing slope.
35
36 2-03.5.OPT2.FR2
37 (March 13, 1995)
38 All costs in connection with the preparation of waste sites and waste deposits shall be
39 included in the *** \$\$1\$\$ ***.
40
41 2-03.5.OPT3.GR2
42 (April 5, 2010)
43 "Rock Slope Scaling", per crew hour.
44 The unit contract price per crew hour for "Rock Slope Scaling" shall be full pay for
45 performing the work as specified.
46
47 "Rock Slope Scaling Debris Removal Incl. Haul", per cubic yard.
48 The unit contract price per cubic yard for "Rock Slope Scaling Debris Removal Incl. Haul"
49 shall be full pay for performing the work as specified, including collection, removal and
50 disposal of all rock debris within the limits of the project present at the base of the slope
51 at the beginning of the project.
52

1 All costs in connection with felling of trees and woody vegetation from the site as
2 specified, and collection, removal and disposal of all trees and woody vegetation cut and
3 removed from the slope, shall be included in the lump sum contract price for "Clearing
4 and Grubbing".

1 **DIVISION5.GR5 Surface Treatments and Pavements**

2
3 **5-01.GR5 Cement Concrete Pavement Rehabilitation**

4
5 **5-01.1.GR5 Description**

6
7 5-01.1.INST1.GR5 (Section 5-01.1 is supplemented with the following)
8 Must use once preceding any of the following:

9
10 5-01.1.OPT1.GR5 (Partial Depth Spall Repair)
11 (September 7, 2021)
12 Use in projects that have the Bid item "Partial Depth Spall
13 Repair", by force account.
14 Must also use **5-01.2.OPT1.GR5 & 5-01.3(5).OPT1.GR5**.

15
16 **5-01.2.GR5 Materials**

17
18 5-01.2.INST1.GR5 (Section 5-01.2 is supplemented with the following)
19 Must use once preceding any of the following:

20
21 5-01.2.OPT1.GR5 (Partial Depth Spall Repair)
22 (September 7, 2021)
23 Use in projects that have the Bid item "Partial Depth Spall
24 Repair", by force account.
25 Must also use **5-01.1.OPT1.GR5 & 5-01.3(5).OPT1.GR5**.

26
27 **5-01.3.GR5 Construction Requirements**

28
29 **5-01.3(5).GR5 Partial Depth Spall Repair**

30
31 5-01.3(5).INST1.GR5 (Section 5-01.3(5) is revised to read)
32 Must use once preceding any of the following:

33
34 5-01.3(5).OPT1.GR5 (Partial Depth Spall Repair)
35 (September 7, 2021)
36 Use in projects that have the Bid item "Partial Depth
37 Spall Repair", by force account.
38 Must also use **5-01.1.OPT1.GR5 & 5-01.2.OPT1.GR5**.

39
40 **5-01.3(9).GR5 Portland Cement Concrete Pavement Grinding**

41
42 5-01.3(9).INST1.GR5 (Section 5-01.3(9) is supplemented with the following)
43 Must use once preceding any of the following:

44
45 5-01.3(9).OPT1.GR5 (April 1, 2013)
46 Use in projects that require 10,000 or more square
47 yards of cement concrete pavement grinding.

48
49 **5-01.3(10).GR5 Pavement Smoothness**

50
51 5-01.3(10).INST1.GR5 (Section 5-01.3(10) is supplemented with the following)
52 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

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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**.

5-04.GR5 Hot Mix Asphalt

5-04.2.GR5 Materials

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)
Must use once preceding any of the following:

5-04.2(2).OPT1.FR5 (HMA Test Requirements)
(January 3, 2011)
Include in all projects using HMA.
Fill-in (number of ESAL's) is included in the pavement design report.
(1 fill-in)

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:)
Must use once preceding any of the following:

5-04.2(9-03.8(7)).OPT1.GR5 (September 8, 2020)
Include in all projects using HMA.

~~5-04.2(9-03.21(1)A).GR5 (Reclaimed Asphalt Shingles)
(Section 9-03.21(1)A, including title, is revised to read:)
Must use once preceding any of the following:~~

~~5-04.2(9-03.21(1)A).OPT1.2025.GR5 (April 27, 2022)
Include in all projects using HMA.~~

5-04.3.GR5 Construction Requirements

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5-04.3.INST1.GR5 (Section 5-04.3 is supplemented with the following)
Must use once preceding any of the following:

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)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)
Must use once preceding any of the following:

5-04.3(3)D.OPT2.GR5 (Material Transfer Vehicle)

(August 1, 2011)
Use in projects containing Hot Mix Asphalt when only an MTV is to be used (no MTD). Use requires approval of the Region Construction Office.

5-04.3(9).GR5 HMA Mixture Acceptance

5-04.3(9).INST1.GR5 (Section 5-04.3(9) is supplemented with the following)
Must use once preceding any of the following:

5-04.3(9).OPT1.FR5 Visual Evaluation
(August 1, 2016)
Use in projects where the area that visual evaluation of hot mix asphalt is to be used is not identified in the Standard Specifications
(1 fill-in)

5-04.3(10).GR5 HMA Compaction Acceptance

5-04.3(10).INST1.GR5 (The column in Table 14 of Section 5-04.3(10), titled “Statistical Evaluation of HMA Compaction is Required for:”, is supplemented with the following)
Must use once preceding any of the following:

5-04.3(10).OPT1.GR5 HMA Shoulder Compaction
(April 3, 2017)
Use in projects to add compaction control on the shoulders.

5-04.3(10)D.GR5 HMA Compaction – Visual Evaluation

5-04.3(10)D.INST2.GR5 (The last sentence of Section 5-04.3(10)D is revised to read)
Must use once preceding any of the following:

5-04.3(10)D.OPT1.GR5 (HMA Prelevel Compaction)
(August 3, 2009)
Use in projects to require a pneumatic tire roller for the compaction of all prelevel.

5-04.3(12).GR5 Joints

5-04.3(12).INST1.GR5 (Section 5-04.3(12) is supplemented with the following)
Must use once preceding any of the following:

5-04.3(12).OPT1.GR5 (Feathering Hot Mix Asphalt)
(January 5, 2004)
Use in projects requiring the feathering of hot mix asphalt. May be used with the recommendation of the Region Construction Engineer.

5-04.3(13).GR5 Surface Smoothness

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5-04.3(13).INST1.GR5 (The first four paragraphs of Section 5-04.3(13) are revised to read)
Must use once preceding any of the following:

5-04.3(13).OPT1.FR5 (Surface Smoothness)
(January 5, 2015)
Use in all projects that contain HMA paving at the discretion of the Region Construction Manager. Paving must be a minimum of one mile in length. For accurate measurements, the HQ Materials Lab profiler must be able to move through the sections to be measured unimpeded at a minimum speed of 35 MPH. Notification must be made to HQ Materials Lab Pavements section in order to schedule the post paving IRI determination. Fill-ins #1-6 are to be provided by the HQ Materials Lab Pavements section. Use with **5-04.5.OPT1.FR5**. Do not use with **5-04.3(13).OPT2.FR5** or **5-04.3(13).OPT3.GR5**.

(6 fill-ins) Contact MLPavementProfileTest@wsdot.wa.gov to schedule the IRI determination and to complete the fill-ins.

5-04.3(13).INST2.GR5 (The second sentence of Section 5-04.3(13) is deleted and replaced with the following)
Must use once preceding any of the following:

5-04.3(13).OPT2.FR5 (Smoothness requirements)
(March 13, 1995)
Use at the discretion of the Region Construction Manager in projects with roadways to be paved that have a combination of posted speeds both greater than and less than 45 MPH. Do not use with **5-04.3(13).OPT1.FR5**.
(1 fill-in is for sections of roadway with a posted speed limit less than 45 mph)

5-04.3(13).INST3.GR5 (The second sentence of Section 5-04.3(13) is revised to read)
Must use once preceding any of the following:

5-04.3(13).OPT3.GR5 (Smoothness requirements)
(January 5, 2004)
Use at the discretion of the Region Construction Manager in projects where all roadways to be paved are posted less than 45 MPH. Do not use with **5-04.3(13).OPT1.FR5**.

5-04.3(13).INST4.GR5 (Section 5-04.3(13) is supplemented with the following)
Must use once preceding any of the following:

5-04.3(13).OPT4.GR5 (February 6, 2023)

1 Use in projects where Weigh-in-Motion (WIM) weight
2 sensors are being installed in pavement where Section
3 5-04 applies. Must include a WIM Site Index Station in
4 the Plans.

5
6 **5-04.3(14).GR5 Planing Bituminous Pavement**

7
8 5-04.3(14).INST1.GR5 (Section 5-04.3(14) is supplemented with the following)
9 Must use once preceding any of the following:

10
11 5-04.3(14).OPT1.FR5 (January 5, 2004)
12 Use in projects when it is necessary to control the time
13 the planed area will be open and exposed to traffic
14 prior to paving.
15 (1 fill-in)

16
17 5-04.3(14).OPT2.GR5 (Requires test section and smoothness
18 requirements)
19 (January 5, 2004)
20 Use in projects with large quantities of planing. When
21 using this GSP consider the need to control the
22 amount of time the planed area is open to traffic by
23 adding **5-04.3(14).OPT1.FR5** where appropriate.

24
25 5-04.3(14).OPT3.GR5 (Vertical Edge Planing)
26 (March 13, 1995)
27 Use in projects when planed lanes shall be paved prior
28 to being open to traffic.

29
30 5-04.3(14).OPT4.GR5 (Beveled Edge Planing)
31 (August 3, 2009)
32 Use in projects when a beveled edge is required on a
33 planed lane that will be opened to traffic prior to
34 paving. The GSP is required for depths greater than
35 0.20 feet and may be used with the recommendation
36 of the Region Construction Engineer for depths up to
37 0.20 feet. When using this GSP consider the need to
38 control the amount of time the planed area is open to
39 traffic by adding **5-04.3(14).OPT1.FR5** where
40 appropriate.

41
42 **5-04.5.GR5 Payment**

43
44 5-04.5.INST2.GR5 (Section 5-04.5 is supplemented with the following)
45 Must use once preceding any of the following:

46
47 5-04.5.OPT1.FR5 (Surface Smoothness)
48 (January 5, 2015)
49 Must include with **5-04.3(13).OPT1.FR5**.

50
51 Fill-in is the appropriate Pay Adjustment Schedule as
52 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)
(August 6, 2012)

1 Use in projects requiring color treatment, textured
2 treatment or both for roundabout truck aprons, splitter
3 islands, and mainline crossings.

4 Requires approval by the Region Landscape Architect or
5 the HQ Roadside and Site Development Manager for
6 regions without a landscape architect.
7

8 **Use the following table to determine the correct combination of GSPs**
9 **to include for pigmented or textured concrete:**

5-05.1.OPT1.GR5	Description for all pigment/textured concrete.
5-05.2.OPT1.GR5	Use for "Brick Red" Pigment.
5-05.2.OPT2.FR5	Use for other pigments specified by LA.
5-05.3.OPT1.GR5	Use to add a test panel for pigments and textures.
5-05.3.OPT2.FR5	Use to specify a pattern or texture for concrete.
5-05.3(1).OPT8.GR5	Use to limit aggregate size for texture concrete.
5-05.4.OPT1.GR5	Measurement for all pigmented or textured concrete.
5-05.5.OPT2.GR5	Payment for pigmented, only, concrete.
5-05.5.OPT3.GR5	Payment for textured, only, concrete.
5-05.5.OPT4.GR5	Payment for both pigmented and textured concrete.

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11 **5-05.2.GR5 Materials**

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13 5-05.2.INST1.GR5 (Section 5-05.2 is supplemented with the following)
14 Must use once preceding the following:

15
16 5-05.2.OPT1.GR5 ("Brick Red" pigmented cement concrete pavement)
17 (November 20, 2023)
18 Use in projects requiring brick red in roundabout truck
19 aprons, splitter islands, and mainline crossings. Concrete
20 color must contrast with pavement color.

21
22 5-05.2.OPT2.FR5 (Other pigments for cement concrete pavement
23 (November 20, 2023)
24 Use in projects requiring color treatment in roundabout
25 truck aprons, splitter islands, and mainline crossings.
26 Concrete color must contrast with pavement color.

27
28 Requires approval by the Region Landscape Architect or
29 the State Landscape Architect for regions without a
30 landscape architect.
31 (1 fill-ins)

32
33 Get Primary Pigment from Region Landscape Architect or
34 the HQ Roadside and Site Development Manager and
35 then list all the Manufactures and Pigment Color for that
36 Primary Pigment as fill-in information from list shown
37 below:

38 **5-05.3.GR5 Construction Requirements**

39
40 5-05.3.INST1.GR5 (Section 5-05.3 is supplemented with the following)
41 Must use once preceding any of the following:

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43 5-05.3.OPT1.GR5 (Test Panel)

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(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 State Landscape Architect for regions without a landscape architect.

5-05.3.OPT2.FR5

(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 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 :

Manufacturer	Pattern
Bomanite	"Mountain Granite Ashlar A"
Brickform/Solomon Colors	"Grand Ashlar, FM-3675"
Butterfield Color	"Majestic Ashlar"
Euclid chemical	"Ashlar Slate"
Matcrete	"Grand Ashler Slate"
Renew Crete Systems	"Ashler Slate"

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Primary Pattern - Brick

Manufacturer	Pattern
Bomanite	"Running Bond Belgian Block or Running Bond Used Brick"
Brickform/Solomon Colors	"Running Bond Used Brick"
Butterfield Color	"Pennsylvania Avenue Brick Running Bond"
Euclid Chemical	Running Bond Paver
Matcrete	"Old Brick Running Bond"

30

Primary Pattern - River Rock

Manufacturer	Pattern
Bomanite.	River Rock
Increte Systems	Savanah Stone
Matcrete	Large River Rock

5-05.3.OPT3.FR5 (Textured Cement Concrete with Colored Release Agent)
(September 3, 2024)

Use in projects requiring textured cement concrete pavement patterns with colored release agents on roundabouts, truck aprons, splitter islands and mainline crossings.

Requires approval by the Region Landscape Architect or the State Landscape Architect for regions without a landscape architect.

(1 fill-in)

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:

5-05.3(1).OPT1.GR5 (Cement Concrete Pavement)
(January 2, 2018)
Use in projects that include reconstruction of the concrete pavement with a recommendation from the State Pavements Engineer.

5-05.3(1).INST2.GR5 (Section 5-05.3(1) is supplemented with the following)
Must use once preceding any of the following:

5-05.3(1).OPT2.GR5 (Aggregate size for textured cement concrete pavement)
(November 20, 2023)
Use when textured cement concrete pavement patterns are needed in roundabouts, truck aprons, splitter islands and mainline crossings. Provides aggregate requirements for textured cement concrete pavement patterns.

Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a Landscape Architect.

5-05.3(12).GR5 Surface Smoothness

5-05.3(12).INST1.GR5 (The third paragraph of Section 5-05.3(12) is replaced with the following)
Must use once preceding any of the following:

5-05.3(12).OPT1.GR5 (Surface Smoothness)

(January 7, 2019)

Use in projects where concrete paving will occur in multiple short segments or in projects where paving will occur in multiple seasons.

5-05.3(12).INST2.GR5 (Section 5-05.3(12) is supplemented with the following)
Must use once preceding any of the following:

5-05.3(12).OPT2.GR5 (February 6, 2023)

Use in projects where Weigh-in-Motion (WIM) weight sensors are being installed in pavement where Section 5-05 applies. Must include a WIM Site Index Station in the Plans.

5-05.3(17).GR5 Opening to Traffic

5-05.3(17).INST2.GR5 (Section 5-05.3(17) is revised to read)
Must use once preceding any of the following:

5-05.3(17).OPT1.GR5 (Maturity Testing for Concrete Pavement)
(August 7, 2017)

Use in all projects where the Portland Cement Concrete Pavement (PCCP) or the Replacement of Portland Cement Concrete Panels are required to be opened to traffic within 24 hours of placement. Requires the approval of State Pavement Engineer or Headquarters Construction Office.
Use with **5-05.5.OPT5.GR5**.

5-05.4.GR5 Measurement

5-05.4.INST1.GR5 (Section 5-05.4 is supplemented with the following)
Must use once preceding any of the following:

5-05.4.OPT1.GR5 (August 6, 2012)

(Textured and pigmented cement concrete pavement per square yard.)

5-05.5.GR5 Payment

5-05.5.INST1.GR5 (Section 5-05.5 is supplemented with the following)
Must use once preceding any of the following:

5-05.5.OPT2.GR5 (August 6, 2012)

Pigmented cement concrete pavement per square yard.

5-05.5.OPT3.GR5 (August 6, 2012)

Textured cement concrete pavement per square yard. Use with

5-05.5.OPT4.GR5 (August 6, 2012)

Textured and pigmented cement concrete pavement per square yard.

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5-05.5.OPT5.GR5 (August 5, 2013)
Maturity Testing for Concrete Pavement incidental to bid
items Cement Conc. Pavement or Replacement Cement
Concrete Panel.
Use with **5-05.3(17).OPT1.GR5.**

5-SA1.FR5 **Just in Time Training**
(August 7, 2017)
Use in all projects with cement concrete pavement unless approved by
the ASCE or State Pavement Engineer.

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- 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(2).GR5
8 **Mix Design – Obtaining Project Approval**
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10 5-04.2(2).INST1.GR5
11 Section 5-04.2(2) is supplemented with the following:
12
13 5-04.2(2).OPT1.FR5
14 **(January 3, 2011)**
15 **ESAL's**
16 The number of ESAL's for the design and acceptance of the HMA shall be ***
17 \$\$1\$\$ *** million.
18
19 ~~5-04.2(9-03.21(1)A).GR5~~
20 ~~**Reclaimed Asphalt Shingles**~~
21 ~~Section 9-03.21(1)A, including title, is revised to read:~~
22
23 ~~5-04.2(9-03.21(1)A).OPT1.2025.GR5~~
24 ~~**(April 27, 2022)**~~
25 ~~**Recycled Asphalt Shingles**~~
26 ~~Recycled asphalt shingles shall be manufactured waste shingles and shall be non-~~
27 ~~asbestos-containing material (ACM) as defined in 40 CFR 61 Subpart M and tested~~
28 ~~in accordance with 40 CFR part 763, subpart E, appendix E, Section 1, Polarized~~
29 ~~Light Microscopy (PLM) Test Method EPA/600/R-93/116 by a certified testing~~
30 ~~laboratory. The PLM Test Method to determine ACM content will be the standard PLM~~
31 ~~Test Method to determine ACM less than 1.0%. Additionally, the PLM 1000 Point~~
32 ~~Count Test Method to determine asbestos less than 0.1% is required. At a minimum,~~
33 ~~the laboratory testing for asbestos content will be certified by one or more the~~
34 ~~following: National Voluntary Laboratory Accreditation Program (NVLAP), American~~
35 ~~Industrial Hygiene Association IH Laboratory Accreditation, or Washington State~~
36 ~~Department of Ecology for analysis of asbestos in bulk material. The Contractor shall~~
37 ~~keep all ACM and asbestos test results on file and provide copies to the Engineer~~
38 ~~when submitting a HMA mix design for approval in accordance with Section 5-04.~~
39 ~~The Contractor shall provide the testing and certification for toxicity characteristics in~~
40 ~~accordance with Section 9-03.21(1) prior to delivery and placement of the recycled~~
41 ~~asphalt shingles and use of the RAS in HMA. The Contractor shall also provide a~~
42 ~~Safety Data Sheet (SDS) of the RAS specifically detailing all ingredients of the~~
43 ~~manufactured waste shingles. The ingredients list needs to include the amount of~~
44 ~~asbestos as well as all types of fibrous materials.~~
45
46 5-04.2(9-03.8(7)).GR5
47 **HMA Tolerances, Specification Limits and Adjustments**
48 The second paragraph of item number 1 of Section 9-03.8(7) is revised to read:
49
50 5-04.2(9-03.8(7)).OPT1.GR5
51 (September 8, 2020)

1
2 5-04.3(3)C.OPT1.GR5
3 (April 4, 2016)
4 Reference lines will be required for both outer edges of the traveled way for
5 each mainline roadway for vertical control in accordance with Section 5-
6 04.3(3)C.
7
8 5-04.3(3)D.GR5
9 **Material Transfer Device or Material Transfer Vehicle**
10
11 5-04.3(3)D.INST1.GR5
12 Section 5-04.3(3)D including title is revised to read:
13
14 5-04.3(3)D.OPT1.GR5
15 (April 4, 2016)
16 Section 5-04.3(3)D is deleted in its entirety.
17
18 5-04.3(3)D.OPT2.GR5
19 **(August 1, 2011)**
20 **Material Transfer Vehicle**
21 Direct transfer of HMA from the hauling equipment to the paving machine will
22 not be allowed in the top 0.30-feet of the pavement section of hot mix asphalt
23 (HMA) used in traffic lanes with a depth of 0.08-feet or greater. A material
24 transfer vehicle (MTV) shall be used to deliver the HMA from the hauling
25 equipment to the paving machine. HMA placed in irregularly shaped and minor
26 areas such as road approaches, tapers, and turn lanes are excluded from this
27 requirement.
28
29 The MTV shall mix the HMA after delivery by the hauling equipment and prior to
30 lay down by the paving machine. Mixing of the HMA shall be sufficient to obtain
31 a uniform temperature throughout the mixture.
32
33 5-04.3(9).GR5
34 **HMA Mixture Acceptance**
35
36 5-04.3(9).INST1.GR5
37 Section 5-04.3(9) is supplemented with the following:
38
39 5-04.3(9).OPT1.FR5
40 **(August 1, 2016)**
41 **Visual Evaluation**
42 The following HMA will be accepted by visual evaluation:
43
44 *** \$\$1\$\$ ***
45
46 5-04.3(10).GR5
47 **HMA Compaction Acceptance**
48
49 5-04.3(10).INST1.GR5
50 The column in Table 14 of Section 5-04.3(10), titled "Statistical Evaluation of HMA
51 Compaction is Required for", is supplemented with the following:
52

1 5-04.3(10).OPT1.GR5
2 (April 3, 2017)
3 • Any HMA for which the specified course thickness is greater than 0.10 feet and
4 the HMA is placed in the shoulder.
5
6 5-04.3(10)D.GR5
7 **HMA Compaction – Visual Evaluation**
8
9 5-04.3(10)D.INST2.GR5
10 The last sentence in Section 5-04.3(10)D is revised to read:
11
12 5-04.3(10)D.OPT1.GR5
13 (April 4, 2016)
14 HMA that is used for preleveling shall be compacted with a pneumatic tire
15 roller unless otherwise approved by the Engineer.
16
17 5-04.3(12).GR5
18 **Joints**
19
20 5-04.3(12).INST1.GR5
21 Section 5-04.3(12) is supplemented with the following:
22
23 5-04.3(12).OPT1.GR5
24 (January 5, 2004)
25 The HMA overlay shall be feathered to produce a smooth riding connection to the
26 existing pavement.
27
28 HMA utilized in the construction of the feathered connections shall be modified by
29 eliminating the coarse aggregate from the mix at the Contractor's plant or the
30 commercial source or by raking the joint on the roadway, to the satisfaction of the
31 Engineer.
32
33 5-04.3(13).GR5
34 **Surface Smoothness**
35
36 5-04.3(13).INST1.GR5
37 The first four paragraphs of Section 5-04.3(13) are revised to read:
38
39 5-04.3(13).OPT1.FR5
40 (January 5, 2015)
41 Pavement surface smoothness for this project will include International Roughness
42 Index (IRI) testing that will be completed by the Contracting Agency. The Contracting
43 Agency will perform the IRI testing on each through lane, climbing lane, and passing
44 lane, greater than one mile in length and these lanes will be subject to
45 incentive/disincentive adjustments. IRI testing for a lane will be reported every 0.01
46 mile by averaging the IRI data for the left and right wheelpath within the section.
47
48 Bridge approaches and bridge decks that are located within the lanes specified to be
49 tested and are paved with HMA will be included in the IRI testing. Bridge structures,
50 approach slabs and 0.02 miles on either side of the bridge structures and approach
51 slabs will be eligible for price adjustment incentives and excluded from disincentive
52 adjustments.

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Ramps, shoulders and tapers will not be included in IRI testing for pavement smoothness and will not be subject to incentive adjustments. They will be subject to parallel and transverse 10-foot surface requirements, corrective work and disincentive adjustments.

Upon completion of the paving operation the Contractor shall notify the Engineer that the roadway is ready for IRI testing. Notification shall not take place until the following conditions are met for all lanes to be tested on the project:

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.

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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.
2. Removal and replacement of the HMA wearing course.
3. By other method approved by the Engineer.

For repairs following IRI testing the repaired area shall be checked by the Contractor with a 10-foot straightedge to ensure it no longer requires corrective work. With approval of the Engineer a lightweight profiler, California profilograph or other device may be used in place of the 10-foot straight edge.

If correction of the roadway as listed above either will not or does not produce satisfactory results as to smoothness or serviceability the Engineer may accept the completed pavement and a credit will be calculated in accordance with Section 5-04.5(1). Under these circumstances the decision whether to accept the completed pavement or to require corrective work as described above shall be vested entirely in the Engineer.

During the last review of this roadway, which was conducted on *** \$\$1\$\$ \$\$\$, by the Contracting Agency the following IRI (inches/mile) values were obtained. The IRI values are informational only and are average IRI values for 0.10 mile sections. Additional information may be available for review at the Engineer's Office.

SR	Begin	End	IRI	IRI
	Milepost	Milepost	Running Avg NB/EB (Inch/mile)	Running Avg SB/WB (Inch/mile)
\$\$2\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$

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5-04.3(13).INST2.GR5
The second sentence of Section 5-04.3(13) is deleted and replaced with the following:

5-04.3(13).OPT2.FR5
(March 13, 1995)

1 The completed surface of the wearing course of the following sections of Roadway
2 shall not vary more than 1/4 inch from the lower edge of a 10-foot straightedge placed
3 on the surface parallel to centerline:

- 4
5 1. *** \$\$1\$\$ ***
6

7 The completed surface of the wearing course of all other sections of Roadway shall
8 not vary more than 1/8 inch from the lower edge of a 10-foot straightedge placed on
9 the surface parallel to centerline.

10
11 5-04.3(13).INST3.GR5

12 The second sentence of Section 5-04.3(13) is revised to read:

13
14 5-04.3(13).OPT3.GR5

15 (January 5, 2004)

16 The completed surface of the wearing course shall not vary more than 1/4 inch from
17 the lower edge of a 10-foot straightedge placed on the surface parallel to centerline.

18
19 5-04.3(13).INST4.GR5

20 Section 5-04.3(13) is supplemented with the following:

21
22 5-04.3(13).OPT4.GR5

23 (February 6, 2023)

24 This Contract includes Weigh-in-Motion (WIM) sensors and additional surface
25 smoothness requirements within the WIM evaluation area.

26
27 The WIM evaluation area is 400 feet in length, beginning 275 feet before the WIM
28 Site Index Station. The width of the WIM evaluation area includes all lanes where
29 sensors are present and extends 0.75 feet beyond the edge of the lane(s).

30
31 The completed surface shall be sufficiently smooth such that a 6-inch diameter
32 circular plate, 0.125 inches thick, cannot be passed beneath a 16-foot straightedge
33 placed on the surface parallel to the centerline of the roadway, when evaluated as
34 described in ASTM E1318-09 (2017), Section 6.1.5.

35
36 Deviations within the WIM evaluation area that are in excess of these requirements
37 will not be accepted and shall be corrected by one of the following methods:

- 38
39 1. Remove and replace the final roadway surface layer, or
40
41 2. Remove material from high places by grinding with an accepted grinding
42 machine, or
43
44 3. By other method accepted by the Engineer.

45
46 Correct defects until there are no deviations anywhere within the WIM evaluation
47 area that are greater than allowable tolerances.

48
49 5-04.3(14).GR5

50 ***Planing Bituminous Pavement***

51

1 5-04.3(14).INST1.GR5
2 Section 5-04.3(14) is supplemented with the following:
3
4 5-04.3(14).OPT1.FR5
5 (January 5, 2004)
6 The Contractor shall perform the planing operations no more than *** \$\$1\$\$ ***
7 calendar days ahead of the time the planed area is to be paved with HMA, unless
8 otherwise allowed by the Engineer in writing.
9
10 5-04.3(14).OPT2.GR5
11 (January 5, 2004)
12 At the start of the planing operation the Contractor shall plane a 500 foot test section
13 to be evaluated by the Engineer for compliance with the surface tolerance
14 requirements. The test section shall have a minimum width of 10 feet. If the planing
15 is in accordance with the surface tolerance requirements, the Contractor may begin
16 production planing. If the planing is not in conformance with the surface tolerance
17 requirements, the Contractor shall make adjustments to the planing operation and
18 then plane another test section.
19
20 If at any time during the planing operation the Engineer determines the required
21 surface tolerance is not being achieved, the Contractor shall stop planing. Planing
22 shall not resume until the Engineer is satisfied that specification planing can be
23 produced or until successful completion of another test section. The forward speed
24 during production planing shall not exceed the speed used for the test section.
25
26 The completed surface after planing and prior to paving shall not vary more than 1/4
27 inch from the lower edge of a 10-foot straightedge placed on the surface parallel or
28 transverse to the centerline. The planed surface shall have a matted texture and the
29 difference between the high and low of the matted surface shall not exceed 1/8 inch.
30
31 Pavement repair operations, when required, shall be accomplished prior to planing.
32
33 5-04.3(14).OPT3.GR5
34 **(March 13, 1995)**
35 **Vertical Edge Planing**
36 During planing of bituminous pavement in the travelled lanes, the Contractor shall
37 coordinate the planing and paving operations such that the planed roadway surface
38 shall not remain unpaved at the end of the work day. The Contractor shall have a
39 contingency plan to ensure that no planed areas remain unpaved due to equipment
40 breakdown or other emergency.
41
42 5-04.3(14).OPT4.GR5
43 **(August 3, 2009)**
44 **Beveled Edge Planing**
45 A beveled edge shall be constructed in areas that will not be paved during the same
46 work shift.
47
48 The Contractor shall use a beveled cutter on the mandrel of the planing equipment,
49 or other approved method(s), to eliminate the vertical edge(s). The beveled edge(s)
50 shall be constructed at a 4:1 slope.
51

1 5-04.3(16).GR5
2 **HMA Road Approaches**
3
4 5-04.3(16).INST1.GR5
5 Section 5-04.3(16) is revised to read:
6
7 5-04.3(16).OPT1.FR5
8 (August 3, 2009)
9 HMA for wearing course shall not be placed on any travelled way from *** \$\$1\$\$ ***
10 and through March 31st of the following year without written approval from the
11 Engineer.
12
13 5-04.5.GR5
14 **Payment**
15
16 5-04.5.INST2.GR5
17 Section 5-04.5 is supplemented with the following:
18
19 5-04.5.OPT2.GR5
20 **(January 13, 2021)**
21 **Asphalt Cost Price Adjustment**
22 The Contracting Agency will make an Asphalt Cost Price Adjustment, either a credit or a
23 payment, for qualifying changes in the reference cost of asphalt binder. The adjustment
24 will be applied to partial payments made according to Section 1-09.9 for the following bid
25 items when they are included in the proposal:
26
27 “HMA Cl. ____ PG ____”
28 “HMA for Approach Cl. ____ PG ____”
29 “HMA for Preleveling Cl. ____ PG ____”
30 “HMA for Pavement Repair Cl. ____ PG ____”
31 “Commercial HMA”
32
33 The adjustment is not a guarantee of full compensation for changes in the cost of asphalt
34 binder. The Contracting Agency does not guarantee that asphalt binder will be available
35 at the reference cost.
36
37 The Contracting Agency will establish asphalt binder reference costs twice each month
38 and post the information on the Agency website at: [https://wsdot.wa.gov/business-](https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-reference-cost)
39 [wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-](https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-reference-cost)
40 [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
41 Poten & Partners, Inc. If the selected price source ceases to be available for any reason,
42 then the Contracting Agency will select a substitute price source to establish the reference
43 cost.
44
45 Price adjustments will be calculated one time per month. No price adjustment will be made
46 if the Current Reference Cost is within +/-5% of the Base Cost. Reference costs for
47 projects located in Eastern versus Western Washington shall be selected from the column
48 in the WSDOT website table labeled “Eastern”, or “Western”, accordingly. The adjustment
49 will be calculated as follows:
50
51 If the reference cost is greater than or equal to 105% of the base cost, then

1 Asphalt Cost Price Adjustment = (Current Reference Cost – (1.05 x Base Cost)) x (Q
2 x 0.056).
3
4 If the reference cost is less than or equal to 95% of the base cost, then
5 Asphalt Cost Price Adjustment = (Current Reference Cost – (0.95 x Base Cost)) x (Q
6 x 0.056).
7
8 Where: **Current Reference Cost** is selected from the website table based on
9 the “Date Effective” that immediately precedes the current month’s
10 progress estimate end date. For work completed after all authorized
11 working days are used, the adjustment will be based on the posted
12 reference cost during which contract time was exhausted.
13
14 **Base Cost** is selected from the website table based on the “Date
15 Effective” that immediately precedes the contract bid opening date, and
16 shall be a constant for all monthly adjustments.
17
18 **Q** = total tons of all classes of HMA paid in the current month’s progress
19 payment.
20
21 “Asphalt Cost Price Adjustment”, by calculation.
22 “Asphalt Cost Price Adjustment” will be calculated and paid for as described in this
23 section. For the purpose of providing a common proposal for all bidders, the Contracting
24 Agency has entered an amount in the proposal to become a part of the total bid by the
25 Contractor.
26
27 5-04.5.OPT3.GR5
28 (April 4, 2016)
29 “Asphalt Binder Revision” by calculation.
30 “Asphalt Binder Revision” shall be calculated and paid for as described in Section 5-04.3.

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.FR5

22 (August 6, 2012)

23 Pigment color for cement concrete pavement shall be one chosen from the manufacturers
24 and colors listed below:

25

26 *** \$\$1\$\$ ***

27

28 The pigment shall be incorporated in accordance with the manufacturer's
29 recommendations.

30

31 5-05.2.OPT1.GR5

32 (November 20, 2023)

33 Pigment color for "brick red" cement concrete pavement shall match SAE AMS-STD-595
34 Color #32169. The pigment shall be incorporated in accordance with the manufacturer's
35 recommendations.

36

37 5-05.2.OPT2.FR5

38 (November 20, 2023)

39 Pigment color for cement concrete pavement shall match SAE-AMS-STD-595 Color # ***
40 \$\$1\$\$ ***

41

42 The pigment shall be incorporated in accordance with the manufacturer's
43 recommendations.

44

45 5-05.3.GR5

46 **Construction Requirements**

47

48 5-05.3.INST1.GR5

49 Section 5-05.3 is supplemented with the following:

50

1 5-05.3.OPT1.GR5
2 **(August 6, 2012)**
3 **Pigmented Cement Concrete**
4 Curing shall be in accordance with Section 5-05.3(13) and be applied to the surface in
5 accordance with the manufacturer's recommendations. If liquid membrane-forming
6 concrete curing compound is used it shall meet the requirements of ASTM C 309 Type 1-
7 D.

8
9 The Contractor shall provide a 2 foot by 2 foot sample panel, that has been cured a
10 minimum seven days, showing the color of cement concrete to the Engineer for
11 acceptance before placing any pigmented cement concrete pavement.
12

13 5-05.3.OPT2.FR5
14 **(August 6, 2012)**
15 **Textured Cement Concrete**
16 Textured cement concrete pavement pattern shall be one chosen from the manufacturers
17 and patterns listed below:

18 *** \$\$1\$\$ ***

19 A mat or stamp shall be used to imprint the pattern into the concrete surface.
20

21 Curing shall be in accordance with Section 5-05.3(13) and be applied to the surface in
22 accordance with the manufacturer's recommendations. If liquid membrane-forming
23 concrete curing compound is used it shall meet the requirements of ASTM C 309 Type 1-
24 D.
25

26
27
28 5-05.3.OPT3.FR5
29 **(September 3, 2024)**
30 **Textured Cement Concrete with Colored Release Agent**
31 Textured cement concrete pavement pattern shall be one chosen from the manufacturers
32 and patterns listed below:

33
34 *** \$\$1\$\$ ***

35
36 A dark gray release agent shall be used with the mat or stamp to imprint the pattern into
37 the concrete surface in accordance with the manufacturer's recommendations.

38
39 Curing shall be in accordance with Section 5-05.3(13)A and be applied to the surface in
40 accordance with the manufacturer's recommendations. The liquid membrane-forming
41 concrete curing compound shall meet the requirements of ASTM C 309 Type 1-D.
42

43 5-05.3(1).GR5
44 **Concrete Mix Design for Paving**

45
46 5-05.3(1).INST1.GR5
47 Item number 1 of Section 5-05.3(1) is supplemented with the following:
48

49 5-05.3(1).OPT1.GR5
50 (January 2, 2018)
51 Coarse aggregate derived from the recycling of Cement Concrete Pavement
52 removed from the project may be used as coarse aggregate or blended with coarse

1 aggregate for Cement Concrete Pavement. The Contractor shall remove all
2 bituminous material, joint sealant and backer material from the existing pavement
3 prior to removal for recycling. The recycled concrete aggregates shall meet the
4 requirements of Section 9-03.21(1)B. Cement Concrete Pavement experiencing
5 carbonate silica reaction, sulfate reaction, D cracking or any other conditions that
6 may affect concrete durability shall not be used. Cement Concrete Pavement mix
7 designs using recycled concrete aggregates will require the use of Low Alkali Cement
8 or 25 percent Class F fly ash by total weight of the cementitious materials or the
9 Contractor shall submit evidence that other ASR mitigating measures control
10 expansion in accordance with Section 9-03.1(1).

11
12 5-05.3(1).INST2.GR5

13 Section 5-05.3(1) is supplemented with the following:

14
15 5-05.3(1).OPT2.GR5

16 **(November 20, 2023)**

17 **Aggregate for Textured Cement Concrete Pavement**

18 Fine aggregate and coarse aggregate shall be a combined gradation in accordance
19 with Section 9-03.1(5) and have a nominal maximum aggregate size equal to 1/2-inch,
20 3/4-inch, 1-inch, or 1-1/2-inch sieve.

21
22 The Contractor shall select the nominal maximum aggregate size that allows the
23 specified textured cement concrete pavement pattern to be imprinted into the
24 concrete surface to the depth specified for the textured pattern. If the textured cement
25 concrete pattern is unsatisfactory, the Contractor shall remove and replace the
26 concrete pavement at no expense to the Contracting Agency.

27
28 5-05.3(12).GR5

29 **Surface Smoothness**

30
31 5-05.3(12).INST1.GR5

32 The third paragraph of Section 5-05.3(12) is replaced with the following:

33
34 5-05.3(12).OPT1.GR5

35 (January 7, 2019)

36 Operate the inertial profiler in accordance with AASHTO R 57. Collect two
37 longitudinal traces, one in each wheel path. Collect profile data in a continuous pass
38 including areas excluded from pay adjustments for each section paved. The
39 Contractor shall determine when each section is to be tested except that the
40 minimum length to be tested shall be 528 feet unless accepted by the Engineer.
41 Where a completed section of concrete pavement abuts a segment to be completed
42 later in the project, the 50 feet adjacent to uncompleted section shall be included in
43 the testing and incentive/disincentive for the uncompleted segment. Provide seven
44 calendar days notice to the Engineer prior to testing.

45
46 5-05.3(12).INST2.GR5

47 Section 5-05.3(12) is supplemented with the following:

48
49 5-05.3(12).OPT2.GR5

50 (February 6, 2023)

51 This Contract includes Weigh-in-Motion (WIM) sensors and additional surface
52 smoothness requirements within the WIM evaluation area.

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The WIM evaluation area is 400 feet in length, beginning 275 feet before the WIM Site Index Station. The width of the WIM evaluation area includes all lanes where sensors are present and extends 0.75 feet beyond the edge of the lane(s).

The completed surface shall be sufficiently smooth such that a 6-inch diameter circular plate, 0.125 inches thick, cannot be passed beneath a 16-foot straightedge placed on the surface parallel to the centerline of the roadway, when evaluated as described in ASTM E1318-09 (2017), Section 6.1.5.

Deviations within the WIM evaluation area that are in excess of these requirements will not be accepted and shall be corrected by one of the following methods:

1. Remove and replace the final roadway surface layer, or
2. Remove material from high places by grinding with an accepted grinding machine, or
3. By other method accepted by the Engineer.

Correct defects until there are no deviations anywhere within the WIM evaluation area that are greater than allowable tolerances.

5-05.3(17).GR5
Opening to Traffic

5-05.3(17).INST2.GR5
Section 5-05.3(17) is revised to read:

5-05.3(17).OPT1.GR5
(August 7, 2017)
Maturity Testing for Concrete Pavement

The pavement shall not be opened to traffic until the Strength-Maturity Relationship (SMR) demonstrates the pavement has a minimum compressive strength of 2,500 psi and approval of the Engineer. The pavement shall be cleaned prior to opening to traffic.

The Contractor shall establish a Maturity Value on the approved concrete mix through the use of a testing program following the WSDOT Maturity Method Test Procedure for estimating concrete strength.

The Contractor shall establish the SMR at least 14 calendar days prior to the production pours. The Contractor shall notify the Engineer 7 days prior to performing the SMR as to the time, date and location where the SMR will be performed. The Contractor shall allow WSDOT the opportunity to place maturity loggers in the test cylinders in order to calibrate the WSDOT maturity meter. A SMR shall be developed for each mix used on the project. Referenced SMRs from previous projects will not be allowed.

The Contractor shall be responsible for the installation of the maturity logger/sensors within the concrete pavement pour area. For panel replacements performed under Section 5-01, place a minimum of four loggers/sensors at two different locations. Two

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in one of the first few panel replacements and two in the last panel replacement of the day, each day. For continuous concrete paving operations performed under Section 5-05, place a minimum of four loggers/sensors, two at the beginning and two at the end of the concrete pour, each day. The Contractor shall maintain the integrity of the logger/sensors and wires during concrete pouring, finishing and curing operations or until the maturity information is no longer needed.

The Contractor shall perform the Quality Control Procedure to Verify the Strength-Maturity Relationship on days 1 and 2 of concrete placement as indicated in the test procedure.

The Contractor shall develop a Quality Control Plan based on the Strength-Maturity Relationship to monitor and provide remedial action to ensure the concrete meets design strengths.

Any alteration in mix proportions or source or type of any material, in excess of those tolerable by batching variability shall require the development of a new SMR prior to its use at the Contractors time and expense. Alterations include a change in type, source, or proportion of cement, fly ash, coarse aggregate, fine aggregate, or 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
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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	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. 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.
6	At each test age, record the individual and average values of maturity and strength for each batch on a permanent data sheet
7	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. 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.

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Contractors Procedure to Estimate In-Place Strength

Step	Action
1	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.
2	As soon as practical after concrete placement, connect and activate the maturity meter(s).
3	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.

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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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1 5-05.4.GR5
2 **Measurement**
3
4 5-05.4.INST1.GR5
5 Section 5-05.4 is supplemented with the following:
6
7 5-05.4.OPT1.GR5
8 (August 6, 2012)
9 Pigmented, textured, or textured and pigmented cement concrete pavement will be
10 measured by the square yard placed.
11
12 5-05.5.GR5
13 **Payment**
14
15 5-05.5.INST1.GR5
16 Section 5-05.5 is supplemented with the following:
17
18 5-05.5.OPT2.GR5
19 (August 6, 2012)
20 "Pigmented Cement Concrete Pavement", per square yard
21 The unit Contract price per square yard for Pigmented Cement Concrete Pavement shall
22 be full pay for all costs incurred to perform the Work in this Specification.
23
24 5-05.5.OPT3.GR5
25 (August 6, 2012)
26 "Textured Cement Concrete Pavement", per square yard
27 The unit Contract price per square yard for Textured Cement Concrete Pavement shall
28 be full pay for all costs incurred to perform the Work in this Specification.
29
30 5-05.5.OPT4.GR5
31 (August 6, 2012)
32 "Textured and Pigmented Cement Concrete Pavement", per square yard
33 The unit Contract price per square yard for Textured and Pigmented Cement Concrete
34 Pavement shall be full pay for all costs incurred to perform the Work in this Specification.
35
36 5-05.5.OPT5.GR5
37 (August 5, 2013)
38 All costs in connection with conducting concrete pavement maturity testing and surface
39 cleaning prior to opening to traffic shall be included in the unit Contract price per cubic
40 yard for "Cement Conc. Pavement" and per square yard for "Replace Cement Concrete
41 Panel", if either or both of the items are included in the Contract.
42
43 5-05.5(1).GR5
44 ***Pavement Thickness***
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46 5-05.5(1)B.GR5
47 **Vacant**
48
49 5-05.5(1)B.OPT1.GR5
50 **(January 7, 2019)**
51 **Vacant**

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)
8		Must use once preceding any of the following:
9		
10	6-01.5.OPT1.FB6	(Work Access)
11		(April 1, 2019)
12		Use in projects requiring the Contractor to construct work
13		access to perform structure removal and construction,
14		including work trestle construction for work within or above
15		an environmentally sensitive area as required by resource
16		agency environmental permits and restrictions. The fill-in
17		specifies the name of the environmentally sensitive area
18		or waterway. Include with 6-01.5.OPT1(B).GB6 .
19		Must use once preceding any of the following:
20		(1 fill-in)
21		
22	6-01.5.OPT1(A).FB6	(Waterway Clearance Requirements)
23		(April 6, 2015)
24		Use in projects requiring the Contractor to construct
25		the work access structure to conform to navigation
26		clearance requirements of the USCG. The first fill-in
27		specifies the minimum horizontal clearance required
28		for the channel span. The second fill-in specifies the
29		minimum elevation required for the bottom of the work
30		access structure superstructure. Include with 6-
31		01.5.OPT1.FB6 and 6-01.5.OPT1(B).GB6 .
32		(2 fill-ins)
33		
34	6-01.5.OPT1(B).GB6	(Payment)
35		(April 6, 2015)
36		Use in projects requiring the Contractor to construct
37		work access to perform structure removal and
38		construction, including work trestle construction for
39		work within or above an environmentally sensitive area
40		as required by resource agency environmental permits
41		and restrictions. Include with 6-01.5.OPT1.FB6 .
42		
43	6-01.5.OPT2.FB6	(Temporary Bridge)
44		(August 6, 2018)
45		Use in projects requiring construction of a temporary
46		bridge. The first fill-in specifies the minimum overall length
47		of the temporary bridge, and can also be used to specify
48		requirements for number of spans and lengths of specific
49		spans, if necessary. The second fill-in specifies the
50		minimum roadway width required between barriers or
51		railings. The third fill-in specifies the minimum vertical
52		clearance dimension to the roadway, body of water, or
53		surface, specified in the fourth fill-in. If the length, width or

vertical clearance of the temporary bridge is shown in the plans, the specific geometric requirement item text in the specification can be deleted (or if all are shown in the plans, the entire geometric requirements paragraph can be deleted).
(4 fill-ins)

6-02.GR6 Concrete Structures

6-02.2.GR6 Materials

6-02.2.INST1.GR6 (Section 6-02.2 is supplemented with the following)
Must use once preceding any of the following:

6-02.2.OPT2.GB6 (Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels)
(September 8, 2020)
Use in projects when epoxy resin is required for setting steel reinforcing bars into holes drilled into concrete. Include with **6-02.3(24)C.OPT1.GB6**.

6-02.2.OPT4.GB6 (Epoxy Crack Sealing)
(November 2, 2022)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with **6-02.3.OPT1.GB6** and **6-02.5.OPT49.GB6**.

6-02.2.OPT26.GB6 (Rapid Cure Silicone Sealant)
(April 6, 2015)
Use in projects where rapid cure silicone sealant is used for expansion joint modification. Include with **6-02.3(13).OPT7(C).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).

6-02.2.OPT27.GB6 (Polyester Concrete)
(April 6, 2015)
Use in projects where polyester concrete is required. Include with **6-02.3.OPT9.GB6**.

6-02.2.OPT28.GB6 (Elastomeric Concrete)
(April 6, 2015)
Use in projects where elastomeric concrete is required. Include with **6-02.3.OPT10.GB6**.

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)

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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 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)

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(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)
(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.

6-02.2.OPT61.GB6 (PCPS Conc. SIP Panels)
(September 8, 2020)

1 Use in projects with precast prestressed concrete stay-
2 in-place panels. Include with **6-02.3(9)A.OPT6.GB6**, **6-**
3 **02.3(9)E.OPT6.GB6**, **6-02.3(9)F.OPT1.GB6**, **6-**
4 **02.3(9)G.OPT6.GB6** and **6-02.3(9)I.OPT6.GB6**.

5
6 **6-02.3.GR6 Construction Requirements**

7
8 6-02.3.INST1.GR6 (Section 6-02.3 is supplemented with the following)
9 Must use once preceding any of the following:

10
11 6-02.3.OPT1.GB6 (Epoxy Crack Sealing)
12 (September 7, 2021)
13 Use in projects which require sealing cracks in existing
14 concrete with injected epoxy resin. Include with **6-**
15 **02.2.OPT4.GB6**, **6-02.4.OPT24.GB6**, and **6-**
16 **02.5.OPT49.GB6**.

17
18 6-02.3.OPT2.GB6 (Bridge Supported Utilities)
19 Must use once preceding any of the following:

20
21 6-02.3.OPT2(A).GB6 (Bridge Supported Utilities)
22 (August 3, 2015)
23 Use in projects with bridge supported utilities when the
24 supports include concrete inserts. Include with **6-**
25 **02.2.OPT46.GB6**, **6-02.4.OPT1.FB6**, and **6-**
26 **02.5.OPT26.FB6**.

27
28 6-02.3.OPT2(B).GB6 (Bridge Supported Utilities)
29 (June 26, 2000)
30 Use in projects with bridge supported utilities when the
31 Contractor furnishes and installs the supports and the
32 utility pipe or conduit pipe. Include with **6-**
33 **02.5.OPT92.FB6** and other applicable bridge
34 supported utility material GSP's. Include with **6-**
35 **02.2.OPT46(A).GB6**, **6-02.3.OPT2(A).GB6**, **6-**
36 **02.4.OPT1.FB6**, and **6-02.5.OPT26.FB6** when the
37 supports include concrete inserts.

38
39 6-02.3.OPT2(C).FB6 (Bridge Supported Utilities)
40 (June 26, 2000)
41 Use in projects with bridge supported utilities when the
42 Utility Company furnishes, or furnishes and installs,
43 some of the supports and pipe for the utilities. The first
44 fill-in specifies the items to be furnished and installed
45 by the Utility Company. The second and third fill-ins
46 specify the items to be installed by the Contractor
47 which are furnished by either the Utility Company or
48 the Contractor. Include with **6-02.5.OPT92.FB6** and **6-**
49 **02.5.OPT93.GB6**, and other applicable bridge
50 supported utility material GSP's. Include with **6-**
51 **02.2.OPT46(A).GB6**, **6-02.3.OPT2(A).GB6**, **6-**
52 **02.4.OPT1.FB6**, and **6-02.5.OPT26.FB6** when the
53 supports include concrete inserts.

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(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 Existing Bridge Columns)

(April 6, 2015)

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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 reinforcement. Include with **6-**

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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(L).GB6 (Longitudinal Seismic Restrainers)
(November 20, 2023)
Use in seismic retrofit projects requiring the installation of longitudinal seismic restrainer assemblies. Include with **6-02.2.OPT60(B).GB6, 6-02.2.OPT60(C).BSP.GB6, 6-02.2.OPT60(D).GB6, either 6-02.4.OPT43.GB6 and 6-02.5.OPT71.GB6, or 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(M).GB6 (Column Jacketing)
(September 8, 2020)
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(D).GB6, 6-02.3.OPT8(E).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.OPT9.GB6 (Polyester Concrete)
(January 7, 2019)
Use in projects where polyester concrete is required. Include with **6-02.2.OPT27.GB6.**

6-02.3.OPT10.GB6 (Elastomeric Concrete)
(January 7, 2019)
Use in projects where elastomeric concrete is required. Include with **6-02.2.OPT28.GB6.**

6-02.3(2).GR6 Proportioning Materials

6-02.3(2).INST1.GR6 (Section 6-02.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-02.3(2).OPT1.GB6 (Expansion Joint Header Concrete)
(September 8, 2020)
Use in projects with expansion joint modifications where the headers for the modified joints are made of a high early strength concrete mix. Include **with 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(13).OPT7(H).GB6, , or 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 ~~6-02.3(5).GR6~~ ~~Acceptance of Concrete~~

2
3 ~~6-02.3(5)G.GR6~~ ~~Sampling and Testing for Temperature, Consistency,~~
4 ~~and Air Content~~

5
6 ~~6-02.3(5)G.INST1.GR6~~ (The second paragraph of Section ~~6-02.3(5)G~~ is
7 revised to read:

8 Must use preceding the following:

9
10 ~~6-02.3(5)G.OPT1.2025.GR6~~ (Sampling and testing frequency)
11 (November 20, 2023)

12 Use in All projects with concrete testing (This
13 GSP changes the frequency of testing to match
14 the Construction Manual).

15
16 **6-02.3(6).GR6** **Placing Concrete**

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18 **6-02.3(6)B.GR6** **Placing Concrete in Foundation Seals**

19
20 6-02.3(6)B.INST1.GR6 (Section 6-02.3(6)B is supplemented with the
21 following)

22 Must use once preceding any of the following:

23
24 6-02.3(6)B.OPT1.GB6 (Concrete Seals)
25 (June 26, 2000)

26 Use in projects where there is the possibility of
27 seals being omitted during construction, in which
28 case the footing is to be lowered to bottom of
29 seal.

30
31 6-02.3(6)B.OPT2.GB6 (Concrete Seals)
32 (June 26, 2000)

33 Use in projects where there is the possibility of
34 seals being omitted during construction, in which
35 case the footing is not to be lowered.

36
37 **6-02.3(9).GR6** **Precast Concrete Panels**

38
39 **6-02.3(9)A.GR6** **Shop Drawings**

40
41 6-02.3(9)A.INST2.GR6 (The list included in the third paragraph of
42 Section 6-02.3(9)A is supplemented with the following)

43 Must use once preceding any of the following:

44
45 6-02.3(9)A.OPT6.GB6 (PCPS Conc. SIP Panels)
46 (September 8, 2020)

47 Use in projects with precast prestressed concrete
48 stay-in-place panels. Include with **6-**
49 **02.2.OPT61.GB6, 6-02.3(9)E.OPT6.GB6, 6-**
50 **02.3(9)F.OPT1.GB6, 6-02.3(9)G.OPT6.GB6 and**
51 **6-02.3(9)I.OPT6.GB6.**

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53 **6-02.3(9)E.GR6** **Finishing**

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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-
02.3(10)D.OPT3.GB6**. Include with **6-**

1 **02.5.OPT53.FB6** if the work is included in
2 the cost of the membrane waterproofing.
3 Include with **6-02.4.OPT26.GB6** and **6-**
4 **02.5.OPT51.GB6** if the unit contract bid
5 item “Modify Bridge Drain” is used to pay
6 for the work.
7

8 6-02.3(10)D.OPT5.GB6 (Plugging Existing Bridge Drain)
9 (August 3, 2015)
10 Use in projects requiring plugging of bridge
11 drains. Include with **6-02.5.OPT53.FB6** if the
12 work is included in the cost of the membrane
13 waterproofing or modified concrete overlay.
14 Include with **6-02.4.OPT27.GB6** and **6-**
15 **02.5.OPT52.GB6** if the unit contract bid item
16 “Plugging Existing Bridge Drain” is used to pay
17 for the work.
18

19 6-02.3(10)D.OPT12.GB6 (Core Drilled Bridge Deck Drain)
20 (April 6, 2015)
21 Use in projects with core drilled bridge deck
22 drains. Include with **6-02.2.OPT58.GB6**, and
23 either **6-02.4.OPT32.GB6** and **6-**
24 **02.5.OPT58.GB6**, or **6-02.5.OPT59.FB6**.
25

26 **6-02.3(10)F.GR6 Bridge Approach Slab Orientation and Anchors**

27
28 6-02.3(10)F.INST1.GR6 (Section 6-02.3(10)F is supplemented with
29 the following)
30 Must use once preceding any of the following:
31

32 6-02.3(10)F.OPT2.GB6 (Construct pavement end of approach
33 slabs parallel to pavement seat)
34 (August 4, 2008)
35 Use in projects when the pavement ends of all
36 approach slabs are constructed parallel to the
37 pavement seat.
38

39 6-02.3(10)F.OPT3.FB6 (Construct pavement end of approach
40 slabs both
41 normal to the roadway centerline and parallel to
42 pavement seat)
43 (August 4, 2008)
44 Use in projects when the pavement ends of the
45 approach slabs are constructed both normal to
46 the roadway centerline and parallel to the
47 pavement seat.
48 (2 fill-ins)
49

50 **6-02.3(13).GR6 Expansion Joints**

51
52 6-02.3(13).INST1.GR6 (Section 6-02.3(13) is supplemented with the
53 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 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)

Use in projects where rapid cure silicone sealant is used for modified bridge expansion joints with modified concrete overlay headers. To be used

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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. Include with **6-02.4.OPT1.FB6, 6-02.5.OPT26.FB6, 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.

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4 **6-02.3(24).GR6 Reinforcement**

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6 **6-02.3(24)C.GR6 Placing and Fastening**

7
8 6-02.3(24)C.INST1.GR6 (Section 6-02.3(24)C is supplemented with
9 the following)

10 Must use once preceding any of the following:

11
12 6-02.3(24)C.OPT1.GB6 (Drilling Holes for, and Setting, Steel Reinforcing
13 Bar Dowels)
14 (September 8, 2020)
15 Use in projects where holes are drilled into
16 existing concrete and steel reinforcing bar
17 dowels are set with epoxy resin. Include with **6-**
18 **02.2.OPT2.GB6**. Include the above with **2-**
19 **02.1.OPT3.GR2**, **2-02.3(2).OPT12.GR2**, and **2-**
20 **02.5.OPT7.GR2** when extending a conc. box
21 culvert.

22
23 ~~6-02.3(25).GR6 Prestressed Concrete Girders~~

24
25 ~~6-02.3(25)L.GR6 Handling and Storage~~

26
27 ~~6-02.3(25)L2.GR6 Girder Lateral Stability and Stress Analysis~~

28
29 ~~6-02.3(25)L2.INST1.GR6 (The table in Item No. 4 in the first paragraph of~~
30 ~~Section 6-02.3(25)L2 is revised to read:~~
31 ~~Must use preceding the following:~~

32
33 ~~6-02.3(25)L2.OPT1.2025.GR6 (Stability and Stress Analysis Table)~~
34 ~~(November 20, 2023)~~
35 ~~Use in All projects with prestressed concrete~~
36 ~~girders.~~

37
38 **6-02.3(26).GR6 Cast-in-Place Prestressed Concrete**

39
40 6-02.3(26).INST1.GR6 (The third paragraph of Section 6-02.3(26) is
41 revised to
42 read as follows)
43 Must use once preceding any of the following:

44
45 6-02.3(26).OPT1.GB6 (Cast-in-Place Prestressed Concrete)
46 (January 4, 2010)
47 Use in projects with segmental post-tensioned
48 structures. Check with the Region Construction
49 Engineer to see if testing equipment is available.

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51 **6-02.4.GR6 Measurement**

52
53 6-02.4.INST1.GR6 (Section 6-02.4 is supplemented with the following)

Must use once preceding any of the following:

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- 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**.
- 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.
- 6-02.4.OPT27.GB6 (Plugging Existing Bridge Drain)
(June 26, 2000)

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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**.

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**.

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**, **6-02.5.OPT71.GB6** and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

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)

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)

6-02.5.GR6

Payment

6-02.5.INST3.GR6

(The fifth and sixth bid items under Section 6-02.5 are supplemented with the following)
Must use once preceding any of the following:

6-02.5.OPT20.GB6

(Epoxy-coated St. Reinf. Bar for Bridge)
(April 6, 2015)

Use in projects with small amounts of epoxy-coated steel reinforcing bar in bridge substructure which is included in the quantity for "St. Reinf. Bar for Bridge" in lieu of a separate stand-alone bid item.

1	6-02.5.INST4.GR6	(Section 6-02.5 is supplemented with the following) Must use once preceding any of the following:
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3		
4	6-02.5.OPT26.FB6	(Bridge Deck)
5		(August 2, 2010)
6		Use in steel bridge construction projects with lump sum
7		items for bridge deck. The fill-in specifies work items
8		included in the bid item. Include with 6-02.4.OPT1.FB6 .
9		(1 fill-in)
10		
11	6-02.5.OPT33.GB6	(Expansion Joint Modification)
12		(April 6, 2015)
13		Use in projects where expansion joint modification is a
14		lump sum item. Include with 6-02.4.OPT8.FB6 and all
15		applicable expansion joint modification GSPs
16		supplementing Sections 6-02.2 and 6-02.3(13).
17		
18	6-02.5.OPT49.GB6	(Epoxy Crack Sealing)
19		(August 1, 2011)
20		Use in projects which require sealing cracks in existing
21		concrete with injected epoxy resin. Include with 6-
22		02.2.OPT4.GB6 , 6-02.3.OPT1.GB6 , and 6-
23		02.4.OPT24.GB6 .
24		
25	6-02.5.OPT51.GB6	(Modify Bridge Drain)
26		(June 26, 2000)
27		Use in projects where modifying bridge drains is a stand-
28		alone bid item. Include with 6-02.2.OPT48.GB6 , 6-
29		02.3(10)D.OPT3.GB6 , and 6-02.4.OPT26.GB6 with
30		modified concrete overlay projects. Include the above with
31		6-02.3(10)D.OPT4.GB6 with waterproof membrane and
32		HMA overlay projects.
33		
34	6-02.5.OPT52.GB6	(Plugging Existing Bridge Drain)
35		(June 26, 2000)
36		Use in projects where plugging existing bridge drains is a
37		stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6
38		and 6-02.4.OPT27.GB6 .
39		
40	6-02.5.OPT53.FB6	(Modifying or Plugging Existing Bridge Drain)
41		(June 26, 2000)
42		Use in projects where payment for modifying or plugging
43		existing bridge drains is included under either "Waterproof
44		Membrane" or "Finishing and Curing Modified Conc.
45		Overlay". The first fill-in specifies whether the work is
46		modifying or plugging existing bridge drains. The second
47		fill-in specifies appropriate pay item for the work. Include
48		with 6-02.2.OPT48.GB6 , and 6-02.3(10)D.OPT3.GB6 for
49		modifying bridge drains with modified concrete overlay
50		projects. Include the above with 6-02.3(10)D.OPT4.GB6
51		for modifying bridge drains with waterproof membrane and
52		HMA overlay projects. Include with 6-
53		02.3(10)D.OPT5.GB6 for plugging existing bridge drains.
54		(2 fill-ins)

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- 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, 6-02.4.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.
- 6-02.5.OPT91.FB6 (Bridge and Structures Minor Items)
(June 26, 2000)
Use in projects with bridges and other structures when there are minor items that are incidental to a lump sum or a unit price bid item. The first fill-in specifies the minor items. The second fill-in specifies the appropriate pay item(s) for the minor items.
(2 fill-ins)
- 6-02.5.OPT92.FB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects requiring installation of bridge supported utilities. The first fill-in specifies the type of utility. The

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second fill-in specifies the bridge(s). The third fill-in specifies the work performed by the Contractor (furnishing materials, installing materials, coordination with utility, etc.), excluding furnishing and installing inserts. The fourth fill-in specifies the pay item. Include with **6-02.3.OPT2(B).GB6**, with appropriate bridge supported utility material GSP's, if all materials and work are supplied and performed by the Contractor. Include with **6-02.3.OPT2(C).GB6** and **6-02.5.OPT93.GB6** if a utility company is supplying and performing a portion of the utility materials and work. 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.
(4 fill-ins)

6-02.5.OPT93.GB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects requiring installation of bridge supported utilities where a utility company is supplying and performing a portion of the utility materials and work. Include with **6-02.3.OPT2(C).GB6** and **6-02.5.OPT92.FB6**, and appropriate 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.

6-03.GR6 Steel Structures

6-03.3.GR6 Construction Requirements

6-03.3(7).GR6 Shop Plans

6-03.3(7)A.GR6 Erection Methods

6-03.3(7)A.INST1.GR6 (The list in the second paragraph of Section 6-03.3(7)A is supplemented with the following)
Must use once preceding any of the following:

6-03.3(7)A.OPT1.GB6 (Erection by Girder Launching)
(April 6, 2015)
Use in projects where girder launching may be used as an erection method.

6-03.3(7)A.OPT2.GB6 (Hand-held Drilling and Reaming)
(April 6, 2015)
Use in projects where drilling and reaming operations with hand-held devices is permissible. Include with **6-03.3(27)B.OPT1.FB6**.
(1 fill-in)

6-03.3(25).GR6 Welding and Repair Welding

1 6-03.3(25).INST1.GR6 (Section 6-03.3(25) is supplemented with the following)
2 Must use once preceding any of the following:
3

4 6-03.3(25).OPT2.GB6 (Narrow Gap Improved-Electroslag Welding
5 (NGI-ESW) Procedure)
6 (April 6, 2015)
7 Use in projects with steel plate girder bridges and box
8 girder bridges primarily with Grades 50 and 50W steel.
9 Accompanying details are required in the Plans for
10 NGI-ESW test joint configurations for WPS
11 qualification and charpy v-notch test specimens.
12

13 **6-03.3(27).GR6 High Strength Bolt Holes**

14 **6-03.3(27)B.GR6 Reamed and Drilled Holes**

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16
17 6-03.3(27)B.INST1.GR6 (The second sentence of the first paragraph of Section
18 6-03.3(27)B is revised to read)
19 Must use once preceding any of the following:
20

21 6-03.3(27)B.OPT1.FB6 (Hand-held Drilling and Reaming)
22 (September 8, 2020)
23 Use in projects where drilling and reaming
24 operations with hand-held devices is permissible.
25 The first fill-in specifies the members and items
26 being drilled and reamed, and the second fill-in
27 specifies the bridge(s) where the work is being
28 done. Include with **6-03.3(7)A.OPT2.GB6**.
29 (2 fill-ins)
30

31 **6-03.3(28).GR6 Shop Assembly**

32 **6-03.3(28)A.GR6 Method of Shop Assembly**

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34
35 6-03.3(28)A.INST1.GR6 (Section 6-03.3(28)A is supplemented with the
36 following)
37 Must use once preceding any of the following:
38

39 6-03.3(28)A.OPT1.GB6 (Progressive Transverse Shop Assembly)
40 (August 5, 2013)
41 Use in projects with new steel girder bridges that
42 have curved or skewed geometry, with the
43 concurrence of the Bridge and Structures Office
44 Steel Specialist. Include with **6-**
45 **03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-**
46 **03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-**
47 **03.5.OPT1.GB6.**
48

49 **6-03.3(28)B.GR6 Check of Shop Assembly**

50
51 6-03.3(28)B.INST1.GR6 (Section 6-03.3(28)B is supplemented with the
52 following)
53 Must use once preceding any of the following:

1
2 6-03.3(28)B.OPT1.GB6 (Check of Shop Assembly)
3 (August 3, 2015)
4 Use in projects with new steel bridges. Include
5 with **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(30).GR6 Painting**

10
11 6-03.3(30).INST1.GR6 (Section 6-03.3(30) is supplemented with the following)
12 Must use once preceding any of the following:

13
14 6-03.3(30).OPT1.FB6 (Color of Finish Coat)
15 (August 3, 2009)
16 Use in projects with new steel bridges and steel
17 members to cover paint color requirements by
18 specifying the SAE AMS Standard 595 Color Number,
19 or the color name if no number. Include with **6-**
20 **03.3(28)B.OPT1.GB6**, **6-03.3(39).OPT1.GB6**, **6-**
21 **03.4.OPT1.FB6**, and **6-03.5.OPT1.GB6**.

22
23 Also include in projects with new minor steel items
24 such as steel expansion joints (**6-02.3(13).OPT3.FB6**,
25 **6-02.4.OPT3.FB6**, **6-02.5.OPT28.GB6**, and **6-**
26 **02.2.OPT22.GB6**) and bearings (**6-**
27 **02.3(19)B.OPT1.GB6**).
28 (1 fill-in)

29
30 6-03.3(30).OPT6.FB6 (Painting Galvanized Seismic Retrofit Components)
31 (April 6, 2015)
32 Use in seismic retrofit projects where galvanized steel
33 components are attached to painted members of
34 existing steel bridges to cover paint color
35 requirements. The first fill-in specifies the galvanized
36 components to be painted. The second fill-in specifies
37 the SAE AMS Standard 595 Color Number, or the
38 color name if no number.
39 (2 fill-ins)

40
41 **6-03.3(38).GR6 Placing Superstructure**

42
43 6-03.3(38).INST1.GR6 (Section 6-03.3(38) is supplemented with the following)
44 Must use once preceding any of the following:

45
46 6-03.3(38).OPT1.GB6 (Concrete Protection)
47 (August 3, 2015)
48 Use within projects with bridges having weathering
49 steel superstructure members which remain unpainted
50 at completion of construction, and which are above
51 concrete surfaces which require protection from
52 staining while the steel members develop their

1 weathered protective surface. Include with **6-**
2 **03.5.OPT7.FB6**.

3
4 **6-03.3(39).GR6 Swinging the Span**

5
6 6-03.3(39).INST1.GR6 (Section 6-03.3(39) is supplemented with the following)
7 Must use once preceding any of the following:

8
9 6-03.3(39).OPT1.GB6 (Girder Camber Field Measurements)
10 (June 26, 2000)
11 Use in projects with new steel bridges. Include with **6-**
12 **03.3(28)B.OPT1.GB6**, **6-03.3(30).OPT1.FB6**, **6-**
13 **03.4.OPT1.FB6**, and **6-03.5.OPT1.GB6**.

14
15 **6-03.4.GR6 Measurement**

16
17 6-03.4.INST1.GR6 (Section 6-03.4 is supplemented with the following)
18 Must use once preceding any of the following:

19
20 6-03.4.OPT1.FB6 (Structural Low Alloy Quantities)
21 (August 6, 2007)
22 Use in projects with new steel bridges. Include with **6-**
23 **03.3(28)B.OPT1.GB6**, **6-03.3(30).OPT1.FB6**, and **6-**
24 **03.3(39).OPT1.GB6**. Include with **6-03.5.OPT1.GB6** when
25 the steel girder includes a pipe railing.
26 (2 fill-ins)

27
28 **6-03.5.GR6 Payment**

29
30 6-03.5.INST1.GR6 (The second bid item under Section 6-03.5 is supplemented
31 with the following)
32 Must use once preceding any of the following:

33
34 6-03.5.OPT1.GB6 (Payment for Steel Girder Railing)
35 (August 6, 2007)
36 Use in projects with new steel bridges when the steel
37 girder includes a pipe railing. Include with **6-**
38 **03.3(28)B.OPT1.GB6**, **6-03.3(30).OPT1.FB6**, **6-**
39 **03.3(39).OPT1.GB6**, and **6-03.4.OPT1.FB6**.

40
41 6-03.5.INST2.GR6 (Section 6-03.5 is supplemented with the following)
42 Must use once preceding any of the following:

43
44 6-03.5.OPT7.FB6 (Payment for Concrete Protection)
45 (June 26, 2000)
46 Use in projects with bridges having weathering steel
47 members which remain unpainted at the completion of
48 construction, and which are above concrete surfaces
49 which require protection from staining while the steel
50 members develop their weathered protective surface.
51 Include with **6-03.3(38).OPT1.GB6**.
52 (1 fill-in)
53

1 **6-04.GR6 Timber Structures**

2
3 **6-04.3.GR6 Construction Requirements**

4
5 **6-04.3(1).GR6 Storing and Handling Material**

6
7 6-04.3(1).INST1.GR6 (Section 6-04.3(1) is supplemented with the following)
8 Must use once preceding any of the following:

9
10 6-04.3(1).OPT1.GB6 (Fire Prevention)
11 (March 6, 2000)
12 Use in all timber bridge construction and timber deck
13 replacement projects. Include with **6-04.5.OPT1.FB6**.

14
15 6-04.3(1).OPT2.GB6 (Top Flange Treatment)
16 (January 2, 2018)
17 Include in timber redecking projects. Include with **6-**
18 **04.3(1).OPT1.GB6, 6-04.5.OPT1.FB6, and 6-**
19 **04.5.OPT2.FB6.**

20
21 **6-04.5.GR6 Payment**

22
23 6-04.5.INST1.GR6 (Section 6-04.5 is supplemented with the following)
24 Must use once preceding any of the following:

25
26 6-04.5.OPT1.FB6 (Fire Protection)
27 (March 6, 2000)
28 Use in all timber bridge construction and timber deck
29 replacement projects. Include with **6-04.3(1).OPT1.GB6.**
30 (1 fill-in)

31
32 6-04.5.OPT2.FB6 (Top Flange Treatment)
33 (March 6, 2000)
34 Use in timber deck replacement projects. Include with **6-**
35 **04.3(1).OPT1.GB6, 6-04.3(1).OPT2.GB6, and 6-**
36 **04.5.OPT1.FB6.**
37 (1 fill-in)

38
39 **6-05.GR6 Piling**

40
41 **6-05.2.GR6 Materials**

42
43 6-05.2.INST1.GR6 (Section 6-05.2 is supplemented with the following)
44 Must use once preceding any of the following:

45
46 6-05.2.OPT1.GB6 Micropiles
47 (April 6, 2015)
48 Use in projects where micropiles are required. Include with
49 **6-05.3.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-**
50 **05.5.OPT6.GB6.**

51
52 **6-05.3.GR6 Construction Requirements**

53
54 6-05.3.INST1.GR6 (Section 6-05.3 is supplemented with the following)

1 Must use once preceding any of the following:
2

3 6-05.3.OPT1.FB6 Micropiles
4 (October 3, 2022)
5 Use in projects where micropiles are required. The first
6 fill-in specifies the top elevation of the micropile bond
7 zone. The second fill-in specifies the location(s) of
8 micropile verification tests. The third fill in is the 1.00 FDL
9 deflection limit for the verification load test. The fourth fill
10 in is the 1.00 FDL deflection limit for the proof load test.
11 Include with **6-05.2.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-**
12 **05.5.OPT6.GB6.**
13 (Four fill-ins)
14

15 **6-05.3(5).GR6 Manufacture of Steel Piles**

16
17 6-05.3(5).INST1.GR6 (Section 6-05.3(5) is supplemented with the
18 following)
19 Must use once preceding any of the following:
20

21 6-05.3(5).OPT1.GB6 (Furnishing St. Piling)
22 (September 8, 2020)
23 Use in projects with steel piling where the piling
24 consists of hollow steel pipe that may or may not be
25 filled with concrete and steel reinforcing bars for a
26 portion of its length. Include with **6-05.3(6).OPT1.GB6**
27

28 **6-05.3(6).GR6 Splicing Steel Casings and Steel Piles**

29
30 6-05.3(6).INST1.GR6 (Section 6-05.3(6) is supplemented with the
31 following)
32 Must use once preceding any of the following:
33

34 6-05.3(6).OPT1.GB6 (Furnishing St. Piling)
35 (September 8, 2020)
36 Use in projects with steel piling where the piling
37 consists of hollow steel pipe that may or may not be
38 filled with concrete and steel reinforcing bars for a
39 portion of its length. Include with **6-05.3(5).OPT1.GB6.**
40

41 **6-05.3(10).GR6 Test Piles**

42
43 6-05.3(10).INST1.GR6 (Section 6-05.3(10) is supplemented with the
44 following)
45 Must use once preceding any of the following:
46

47 6-05.3(10).OPT1.FB6 (Furnishing and Driving Test Piles)
48 (March 6, 2000)
49 Include in projects having test piles, as recommended
50 by the Materials Laboratory Geotechnical Branch. The
51 first, third, and fourth fill-ins specify the pile type (cast-
52 in-place conc., steel, timber, etc.). The second fill-in
53 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

6-06.2.GR6 Materials

6-06.2.INST1.GR6 (Section 6-06.2 is supplemented with the following)
Must use once preceding any of the following:

6-06.2.OPT1.GB6 (Bridge Railing Type Chain Link Fence)
(November 20, 2023)

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Use in projects with Bridge Railing Type Chain Link Fence. Include with **6-06.3(2).OPT1.GB6**. Also include **6-06.5.OPT1.FB6** if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.2.OPT2.GB6

(Bridge Railing Type Chain Link Fence)
(March 6, 2000)

Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with **6-06.2.OPT1.GB6 and 6-06.3(2).OPT2.GB6**. Also include **6-06.5.OPT1.FB6** if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.2.OPT7.GB6

(Tamper Proof Nuts for steel Bridge Railing Type BP)
(April 6, 2015)

Use in projects where steel Bridge Railing Type BP is used.

6-06.2.OPT8.FB6

(Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric Fence)
(November 20, 2023)

Use in projects with Bridge Railing Type Snow Fence or Bridge Railing Type Wire Fabric Fence. The fill-in specifies the Federal Standard 595 Color Number, or the color name if no number.

Include with **6-06.3(2).OPT7.GB6**.
(1 fill-in)

6-06.3.GR6

Construction Requirements

6-06.3(2).GR6

Metal Railings

6-06.3(2).INST1.GR6

(Section 6-06.3(2) is supplemented with the following)

Must use once preceding any of the following:

6-06.3(2).OPT1.GB6

(Bridge Railing Type Chain Link Fence)
(November 20, 2023)

Use in projects with Bridge Railing Type Chain Link Fence where the posts are fastened into position with anchor bolts or resin bonded anchors. Include with **6-06.2.OPT1.GB6**. Also include **6-06.5.OPT1.FB6** if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.3(2).OPT2.GB6

(Bridge Railing Type Chain Link Fence)
(March 6, 2000)

Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with **6-06.2.OPT1.GB6 and 6-**

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06.2.OPT2.GB6. Also include **6-06.5.OPT1.FB6** if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.3(2).OPT7.GB6 (Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric Fence) (November 20, 2023)
Use in projects with Bridge Railing Type Snow Fence or Bridge Railing Type Wire Fabric Fence. Include with **6-06.2.OPT8.FB6.**

6-06.5.GR6 Payment

6-06.5.INST1.GR6 (Section 6-06.5 is supplemented with the following)
Must use once preceding any of the following:

6-06.5.OPT1.FB6 (Bridge Railing)
(March 6, 2000)
Use in projects with bridge railing where the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”. The first fill-in specifies the bridge railing type. The second fill-in specifies the bid item name.
(2 fill-ins)

6-07.GR6 Painting

6-07.1.GR6 Description

6-07.1.INST1.GR6 (Section 6-07.1 is supplemented with the following)
Must use once preceding any of the following:

6-07.1.OPT1.FB6 (Scope of Work)
(August 3, 2009)
Include in projects with cleaning and painting of existing steel bridge(s). Use to define limits of cleaning and painting by using the second fill-in to specify surfaces that are not to be painted (light fixtures, utilities, bridge attachments, etc.). Include with **6-07.3(10)D.OPT1.FB6 and/or 6-07.3(10)E.OPT1.FB6** as appropriate for the surface preparation requirements. Include with **DESWORK2.FB1 and 6-07.3(10)I.OPT1.FB6**. Include with **1-07.1(2).OPT3.FR1** if the existing bridge(s) contain lead 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.).

1 Include with **1-07.1(2).OPT3.FR1** if the existing bridge(s)
2 contain lead paint. Project specific Special Provisions
3 supplementing Section 6-07.3(13) may be required to
4 specify specific primer and top coat paint requirements.
5 (2 fill-ins)
6

7 **6-07.3.GR6 Construction Requirements**

8
9 **6-07.3(10).GR6 Painting Existing Steel Structures**

10
11 6-07.3(10).INST1.GR6 (Section 6-07.3(10) is supplemented with the
12 following)
13 Must use once preceding any of the following:
14

15 6-07.3(10).OPT1.FB6 (Utility Conduits)
16 (August 3, 2009)
17 Include only when utility conduits are attached to the
18 existing bridge(s) being painted. Fill-in to read "shall or
19 "shall not". Include with **DESWORK2.FB1, 6-**
20 **07.1.OPT1.FB6 and 6-07.3(10).OPT1.FB6.**
21 (1 fill-in)
22

23 6-07.3(10).OPT2.GB6 (Light Fixtures)
24 (August 3, 2009)
25 Include only when light fixtures are attached to existing
26 bridge(s) being painted. Include with
27 **DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-**
28 **07.3(10).OPT1.FB6.**
29

30 6-07.3(10).OPT4.GB6 (Cleaning Grid Deck)
31 (August 3, 2015)
32 Use with **DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-**
33 **07.3(10).OPT1.FB6, and 6-07.3(10).N.OPT1.GB6** if
34 the bridge has a grid roadway deck or steel grid
35 catwalks which require cleaning and painting.
36

37 **6-07.3(10)A.GR6 Containment**

38
39 6-07.3(10)A.INST1.GR6 (Section 6-07.3(10)A is supplemented with
40 the following)
41 Must use once preceding any of the following:
42

43 6-07.3(10)A.OPT1.GB6 (Protection of Existing Structure)
44 (August 3, 2009)
45 Use only when the bridge has mechanical
46 equipment to protect such as a draw bridge.
47 Include with **DESWORK2.FB1, 6-**
48 **07.1.OPT1.FB6 and 6-07.3(10).OPT1.FB6.**
49

50 6-07.3(10)A.OPT2.FB6 (Containment System)
51 (September 7, 2021)

1 Use when a paint removal containment system
2 must be removed from a bridge when winds at
3 the site exceed a wind speed/gust threshold.
4 Fill-in #1 specifies the bridge(s) that have wind
5 speed/gust thresholds.
6 Fill-in #2 specifies the wind speed/gust threshold.
7 (2 fill-ins)

8
9 **6-07.3(10)D.GR6 Surface Preparation Prior to Overcoat Painting**

10
11 6-07.3(10)D.INST1.GR6 (Section 6-07.3(10)D is supplemented with
12 the following)
13 Must use once preceding any of the following:

14
15 6-07.3(10)D.OPT1.FB6 (Surfaces Requiring Overcoat Painting
16 Surface Preparation)
17 (April 6, 2015)
18 Use in bridge painting projects with bridges and
19 bridge members requiring surface preparation for
20 overcoat painting. Include with
21 **DESWORK2.FB1, 1-07.6.OPT3(A).FB1, 6-**
22 **07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.**
23 Include with **6-07.3(10)E.OPT1.FB6** if the
24 bridge(s) also have bridge members requiring full
25 paint removal. Include with **1-07.1(2).OPT3.FR1**
26 if the existing bridge(s) contain lead paint. The
27 first fill-in specifies the bridge(s) requiring
28 overcoat painting surface preparation. The
29 second fill-in specifies the bridge members
30 requiring overcoat painting surface preparation.
31 (2 fill-ins)

32
33 **6-07.3(10)E.GR6 Surface Preparation – Full Paint Removal**

34
35 6-07.3(10)E.INST1.GR6 (Section 6-07.3(10)E is supplemented with
36 the following)
37 Use once preceding any of the following:

38
39 6-07.3(10)E.OPT1.FB6 (Surfaces Requiring Full Paint Removal
40 Surface)
41 Preparation)
42 (April 5, 2010)
43 Use in bridge painting projects with bridges and
44 bridge members requiring surface preparation for
45 full paint removal. Include with
46 **DESWORK2.FB1, 1-07.6.OPT3(A).FB1, 6-**
47 **07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.**
48 Include with **6-07.3(10)D.OPT1.FB6** if the
49 bridge(s) also have bridge members requiring
50 overcoat painting. Include with **1-**
51 **07.1(2).OPT3.FR1** if the existing bridge(s)
52 contain lead paint. The first fill-in specifies the
53 bridge(s) requiring full paint removal surface

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2 **6-08.GR6 Bituminous Surfacing on Structure Decks**

3
4 **6-08.3.GR6 Construction Requirements**

5
6 6-08.3.INST1.GR6 (Section 6-08.3 is supplemented with the following)
7 Must use once preceding the following:

8
9 6-08.3.OPT1.FB6 (Surfacing Removal and Paving Equipment Load and
10 Spacing Restrictions)
11 (October 29, 2020)
12 Use in bridge deck paving projects where specific bridges
13 are subject to surfacing removal and paving equipment
14 load and spacing restrictions as shown and specified in
15 the Plans. The fill-in specifies the Bridge Number(s) of the
16 bridge(s) affected by these restrictions.
17 (1-fill-in)
18

19 **6-08.3(2).GR6 Contractor Survey for Grade-Controlled Structure Decks**

20
21 6-08.3(2).INST1.GR6 (Section 6-08.3(2) is supplemented with the
22 following)
23 Must use once preceding any of the following:

24
25 6-08.3(2).OPT1.FB6 (Contractor Structure Survey Not Applicable)
26 (January 3, 2017)
27 Use in projects where the Contracting Agency
28 performs the Structure survey for Grade Controlled
29 Structure Decks, and the Contract Plans were
30 adjusted for Final Grade Profile and Adjusted Removal
31 Depth as needed. The fill-in specifies the Bridge
32 number(s) where the Contracting Agency is performing
33 the survey.
34 (1 fill-in)
35

36 **6-08.3(5).GR6 Full Depth Removal of Bituminous Pavement from**
37 **Bridge Decks**

38
39 6-08.3(5).INST1.GR6 (Section 6-08.3(5) is supplemented with the
40 following)
41 Must use once preceding any of the following:

42
43 6-08.3(5).OPT1.FB6 (Rotary milling/planing equipment prohibited)
44 (January 2, 2018)
45 Use in bridge deck paving projects where equipment
46 used to perform full depth removal of existing surfacing
47 from specific Grade Controlled bridges is restricted to
48 exclude rotary milling/planing equipment. Bridges in
49 this category are generally identified in the Bridge
50 Condition Report (BCR) prepared for the project by the
51 Bridge Asset Management unit of the Bridge and
52 Structures Office and provided to the Region Design
53 PE Offices as part of the site data at the beginning of

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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-feet minimum. The fill-in specifies the Bridge Number(s) of the bridges affected by these restrictions.
(1 fill-in)

6-10.GR6 Concrete Barrier

6-10.3.GR6 Construction Requirements

6-10.3(5).GR6 Temporary Barrier

6-10.3(5).INST1.GR6 (The first paragraph of Section 6-10.3(5) is revised to read)
Must use once preceding any of the following:

6-10.3(5).OPT1.GR6 (Type F Temporary Barrier)
(February 3, 2020)
Use in projects that have less than 1,000 linear feet of temporary barrier. The use of this GSP on projects with more than 1,000 linear feet of temporary barrier requires approval from HQ Construction.

~~Do not use with 6-10.3(5).OPT2.2025.GR6.~~

~~6-10.3(5).INST2.GR6 (The first sentence of Section 6-10.3(5) is revised to read)
Must use once preceding the following:~~

~~6-10.3(5).OPT2.2025.GR6 (Temporary Barrier)
(February 26, 2024)
Use in all projects with temporary concrete barrier unless Type F precast barrier is required.~~

~~Do not use with 6-10.3(5).OPT1.GR6.~~

6-10.5.GR6 Payment

6-10.5.INST1.GR6 (Section 6-10.5 is supplemented with the following)
Must use once preceding any of the following:

6-10.5.OPT1.GR6 (Temporary barrier delineators)
(August 1, 2016)

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Use in projects that require temporary barrier to be placed adjacent to a travelled lane.

6-10.5.OPT2.FB6

(Bridge Concrete Barrier)
(March 6, 2000)

Use in projects with concrete barrier on bridges only where the barrier is included as part of a separate bid item such as "Superstructure - ____", or "Roadway Deck - ____". The first fill-in specifies the barrier type (traffic barrier, traffic-pedestrian barrier, pedestrian barrier, etc.). The second fill-in specifies the bid item name.
(2 fill-ins)

~~6-11.GR6~~ ————— ~~Reinforced Concrete Walls~~

~~6-11.2.GR6~~ ————— ~~Materials~~

~~6-11.2.INST1.GR6~~ ————— (Section 6-11.2 is supplemented with the following)
Must use preceding the following:

~~6-11.2.OPT1.2025.GR6~~ (Reinforced Concrete Retaining Walls)
(November 20, 2023)
Use in projects with reinforced concrete retaining walls.

~~6-11.3.GR6~~ ————— ~~Construction Requirements~~

~~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**

1 **6-12.2.GR6**

Materials

2
3 6-12.2.INST1.GR6 (Section 6-12.2 is supplemented with the following)
4 Must use once preceding any of the following:

5
6 6-12.2.OPT1.GB6 (Precast Concrete Noise Barrier Walls)
7 (September 8, 2020)
8 Use in projects with noise barrier walls of precast concrete
9 panels. Include with **6-12.3(6).OPT1.FB6 and all other**
10 **applicable noise barrier wall GSP's.**

11
12 6-12.2.OPT2.FB6 (Masonry Noise Barrier Walls)
13 (September 8, 2020)
14 Use in projects with noise barrier walls of masonry block
15 panels. The fill-in describes the surface texture and color
16 requirements for the field, cap, accent, and other CMU
17 blocks used for the masonry wall. Include with **6-**
18 **12.3(7).OPT1.GB6 and all other applicable noise**
19 **barrier wall GSP's.**
20 (1 fill-in)

21
22 **6-12.3.GR6**

Construction Requirements

23
24 **6-12.3(1).GR6** **Submittals**

25
26 6-12.3(1).INST1.GR6 (Section 6-12.3(1) is supplemented with the
27 following)
28 Must use once preceding any of the following:

29
30 6-12.3(1).OPT1.GB6 (Noise Barrier Wall Existing Groundline Field
31 Survey)
32 (August 3, 2015)
33 Use in noise barrier wall projects where the Contractor
34 is required to perform and submit a field survey of the
35 existing noise barrier wall alignment. Include with **1-**
36 **05.4.OPT1.GR1, 6-12.5.OPT1.GB6, and all other**
37 **applicable noise barrier wall GSP's.**

38
39 **6-12.3(6).GR6**

Precast Concrete Panel Fabrication and Erection

40
41 6-12.3(6).INST1.GR6 (Section 6-12.3(6) is supplemented with the
42 following)
43 Must use once preceding any of the following:

44
45 6-12.3(6).OPT1.FB6 (Precast Concrete Panel Surface
46 Finish Requirements)
47 (April 5, 2004)
48 Use in projects with noise barrier walls of precast
49 concrete panels. The fill-ins specify the type or name
50 of the formed finish on the traffic side and on the
51 residential side of the precast concrete panels. Include
52 with **6-12.2.OPT1.GB6 and all other applicable**
53 **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)

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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:

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 may be repeated as necessary for additional walls with differing geotechnical design parameters.
(13 fill-ins)

6-13.3(4).GR6 Precast Concrete Facing Panel and Concrete Block Fabrication

6-13.3(4).INST1.GR6 (Section 6-13.3(4) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(4).OPT1.GB6 (Specific Fabrication Requirements for Precast Concrete Panel Faced Structural Earth Walls)
(April 3, 2017)
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.OPT2.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT1.GB6.**

6-13.3(4).OPT1(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.OPT2(A).GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6, and 6-13.3(7).OPT1.GB6.**

6-13.3(5).GR6 Precast Concrete Facing Panel and Concrete Block Erection

6-13.3(5).INST1.GR6 (Section 6-13.3(5) is supplemented with the following)
Must use once preceding any of the following:
6-13.3(5).OPT2.GB6 (Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls) (April 2, 2012)
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.OPT3.GB6, and 6-13.3(2).OPT1.FB6.**

6-13.3(7).GR6 Backfill

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)
Use in projects with soil nail retaining walls. Include with **6-15.3(8)A.OPT1.FB6**.

6-15.3.GR6 Construction Requirements

6-15.3(8).GR6 Soil Nail Testing And Acceptance

~~6-15.3(8).INST1.GR6 (The second sentence in the fourth paragraph of Section 6-15.3(8) is revised to read)
Must use preceding the following:~~

~~6-15.3(8).OPT1.2025.GR6 (Pressure Gauge)
(February 13, 2024)
Use in all projects with soil nail walls.~~

6-15.3(8)A.GR6 Verification Testing

6-15.3(8)A.INST1.GR6 (Section 6-15.3(8)A is supplemented with the following)
Must use once preceding any of the following:

6-15.3(8)A.OPT1.FB6 (Soil Nail Verification Test Locations)
(April 5, 2004)
Use in projects with soil nail retaining walls. The fill-ins specify the soil nail verification test locations and the number of successful tests required at each location. Include with **6-15.2.OPT1.GB6**.
(3 fill-ins)

6-16.GR6 Soldier Pile and Soldier Pile Tieback Walls

1
2 ~~6-16.3.GR6~~ ~~Construction Requirements~~

3
4 ~~6-16.3(3).GR6~~ ~~Shaft Excavation~~

5
6 ~~6-16.3(3).INST1.GR6~~ ~~(The second sentence in the first paragraph of Section~~
7 ~~6-16.3(3) is revised to read)~~
8 ~~Must use once preceding the following:~~

9
10 ~~6-16.3(3).OPT1.2025.GR6~~ ~~(Shaft Excavation Diameter)~~
11 ~~(November 20, 2023)~~
12 ~~Use in all projects with soldier pile walls.~~

13
14 **6-17.GR6 Permanent Ground Anchors**

15
16 **6-17.1.GR6 Description**

17
18 6-17.1.INST1.GR6 (Section 6-17.1 is supplemented with the following)
19 Must use once preceding any of the following:

20
21 6-17.1.OPT1.GB6 (Rock Bolts and Rock Dowels)
22 (January 7, 2013)
23 Use in projects with rock bolts and/or rock dowels. Include
24 with **6-17.2.OPT2.GB6, 6-17.3.OPT1.GB6, 6-**
25 **17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-**
26 **17.5.OPT1.GB6.**

27
28 **6-17.2.GR6 Materials**

29
30 6-17.2.INST1.GR6 (Section 6-17.2 is supplemented with the following)
31 Must use once preceding any of the following:

32
33 6-17.2.OPT1.GB6 (Permanent Ground Anchor Materials and
34 Components)
35 (November 2, 2022)
36 Use in projects with walls using permanent ground
37 anchors.

38
39 6-17.2.OPT2.GB6 (Rock Bolt and Rock Dowel Materials)
40 (January 7, 2013)
41 Use in projects with rock bolts and/or rock dowels. Include
42 with **6-17.1.OPT1.GB6, 6-17.3.OPT1.GB6, 6-**
43 **17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-**
44 **17.5.OPT1.GB6.**

45
46 **6-17.3.GR6 Construction Requirements**

47
48 6-17.3.INST1.GR6 (Section 6-17.3 is supplemented with the following)
49 Must use once preceding any of the following:

50
51 6-17.3.OPT1.GB6 (Rock Bolt and Rock Dowel
52 Construction Requirements)
53 (September 8, 2020)

1 Use in projects with rock bolts and/or rock dowels. Include
2 with **6-17.1.OPT1.GB6**, **6-17.2.OPT2.GB6**, **6-**
3 **17.3(8).OPT1.GB6**, **6-17.4.OPT1.GB6** and **6-**
4 **17.5.OPT1.GB6**.

5
6 **6-17.3(8).GR6 Testing And Stressing**

7
8 ~~6-17.3(8).INST1.2025.GR6 (The third sentence in the third paragraph of Section 6-~~
9 ~~17.3(8) is revised to read)~~
10 ~~Must use preceding the following:~~

11
12 ~~6-17.3(8).OPT1.2025.GR6 (Pressure Gauge)~~
13 ~~(February 13, 2024)~~
14 ~~Use in all projects with permanent ground anchors.~~

15
16 6-17.3(8).INST1.GR6 (Section 6-17.3(8) is supplemented with the
17 following)
18 Must use once preceding any of the following:

19
20 6-17.3(8).OPT1.GB6 Rock Bolt and Rock Dowel Testing
21 (January 7, 2013)
22 Use in projects with rock bolts and/or rock dowels.
23 Include with **6-17.1.OPT1.GB6**, **6-17.2.OPT2.GB6**, **6-**
24 **17.3.OPT1.GB6**, **6-17.4.OPT1.GB6** and **6-**
25 **17.5.OPT1.GB6**.

26
27 **6-17.3(8)A.GR6 Verification Testing**

28
29 6-17.3(8)A.INST1.GR6 (Section 6-17.3(8)A is supplemented with the
30 following)
31 Must use once preceding any of the following:

32
33 6-17.3(8)A.OPT1.GB6 (August 3, 2015)
34 Use in projects with permanent ground anchors
35 where the soil conditions require a verification
36 testing program for the permanent ground
37 anchors as recommended by the WSDOT
38 Materials Laboratory Geotechnical Services
39 Division. Include with **6-17.3(8)B.OPT1.GB6** and
40 **6-17.3(8)C.OPT1.GB6**.

41
42 **6-17.3(8)B.GR6 Performance Testing**

43
44 6-17.3(8)B.INST1.GR6 (The performance test schedule following the
45 second paragraph of Section 6-17.3(8)B is revised to
46 read)
47 Must use once preceding any of the following:

48
49 6-17.3(8)B.OPT1.GB6 (January 3, 2011)
50 Use in projects with permanent ground anchors where
51 the soil conditions require a verification testing
52 program for the permanent ground anchors, as
53 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, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, and 6-17.4.OPT1.GB6.**

~~**6-18.SA1.2025.GR6 Shotcrete Facing**
(November 20, 2023)
Use in all projects with shotcrete. Section 6-18 was deleted in the 2024 Standard Specifications. This GSP adds back in Section 6-18.~~

6-18.GR6 Shotcrete Facing

6-18.2.GR6 Materials

6-18.2.INST1.GR6 (Section 6-18.2 is supplemented with the following) Must use once preceding any of the following:

1	6-18.2.OPT2.GB6	(Coloration for Shotcrete Facing Finishing
2		Alternative C)
3		(August 3, 2015)
4		Use in projects with shotcrete facing where tinting of the
5		finish coating of shotcrete is required.
6		Must also use with 6-18.SA1.2025.GR6 .
7		
8	6-18.2.OPT3.GB6	(Fiber Reinforcement for Shotcrete Facing)
9		(August 3, 2015)
10		Use in projects with shotcrete facing where fiber
11		reinforcement in the shotcrete is specified.
12		Must also use with 6-18.SA1.2025.GR6 .
13		
14	6-19.GR6	Shafts
15		
16	6-19.2.GR6	Materials
17		
18	6-19.2(9-36.2(2)).GR6	Synthetic Slurry
19		(Section 9-36.2(2) is supplemented with the following)
20		Must use once preceding any of the following:
21		
22	6-19.2(9-36.2(2)).OPT1.GB6	(Fresh Water for Synthetic Slurry)
23		(January 2, 2012)
24		Use in projects with shafts constructed in salt
25		water when the geotechnical report specifies that
26		the use of fresh water for synthetic slurry is
27		feasible and when the Contracting Agency
28		restricts the water for synthetic slurry to fresh
29		water only. Include with 6-19.4.OPT3.GB6 and
30		6-19.5.OPT2.GB6 .
31		
32	6-19.2(9-36.4).GR6	(Access Tubes and Caps)
33		(The first paragraph of Section 9-36.4 is revised to read)
34		Must use once preceding any of the following:
35		
36	6-19.2(9-36.4).OPT1.GR6	(Shaft Related Materials)
37		(October 3, 2022)
38		Use in projects that contain shaft construction and
39		crosshole sonic log testing is required.
40		
41	6-19.3.GR6	Construction Requirements
42		
43	6-19.3(3).GR6	Shaft Excavation
44		
45	6-19.3(3).INST1.GR6	(Section 6-19.3(3) is supplemented with the following)
46		Must use once preceding any of the following:
47		
48	6-19.3(3).OPT1.GB6	(Variations In Bearing Layer Elevations)
49		(January 2, 2012)
50		Use in projects where shaft embedment to a minimum
51		penetration into a bearing layer is required, and where
52		the bearing layer elevation cannot be accurately

specified with certainty. Include with **6-19.3(5).OPT1.GB6.**

6-19.3(3)B.GR6 Temporary and Permanent Shaft Casing

6-19.3(3)B.INST1.GR6 (Section 6-19.3(3)B is supplemented with the following)
Must use once preceding any of the following:

6-19.3(3)B.OPT2.GB6 (Rotating/Oscillating Method Required)
(January 2, 2012)
Use in projects where the geotechnical report for the project recommends, and the ADSC/WSDOT Shaft Task Force concurs, that site conditions dictate the use of the rotating/oscillating method for shaft excavation.

6-19.3(3)B4.GR6 Temporary Telescoping Shaft Casing

6-19.3(3)B4.INST1.GR6 (The second paragraph of Section 6-19.3(3)B4 is revised to read as follows)
Must use once preceding any of the following:

6-19.3(3)B4.OPT1.GB6 (Temp. Telescoping Casing Not Allowed At End Piers)
(January 2, 2012)
Use in projects where design conditions exist where the option of temporary telescoping casing for shafts at bridge end piers is not appropriate for the overall design behavior of the overall bridge.

6-19.3(3)I.GR6 Required Use of Slurry in Shaft Excavation

6-19.3(3)I.INST1.GR6 (Section 6-19.3(3)I is supplemented with the following)
Must use once preceding any of the following:

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)
Use in projects that include shaft construction requiring nondestructive testing. This includes all bridge foundation shafts, but may or may not include other shafts such as sign bridges, cantilever sign structures, signal standards, etc.

6-19.3(7).GR6 Placing Concrete

6-19.3(7)D.GR6 Requirements for Placing Concrete Underwater

6-19.3(7)D.INST1.GR6 (Section 6-19.3(7)D is supplemented with the following)
Must use once preceding any of the following:

6-19.3(7)D.OPT1.GB6 (Tremie Allowed As An Alternative To Concrete

Pump)
(January 2, 2012)
Use in projects where the construction site is at a remote location where it may be difficult to make arrangements to have a concrete pump at the site.

~~6-19.3(7)F.GR6~~ ~~Shaft Construction Joint~~

~~6-19.3(7)F.INST1.GR6 (The second paragraph of Section 6-19.3(7)F is revised to read)
Must use once preceding any of the following:~~

~~6-19.3(7)F.OPT1.2025.GR6 (Crosshole sonic log testing)
(February 13, 2024)
Use in bridge projects with shaft foundations.~~

6-19.4.GR6 Measurement

6-19.4.INST2.GR6 (Section 6-19.4 is supplemented with the following)
Must use once preceding any of the following:

6-19.4.OPT3.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 **6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.5.OPT2.GB6.**

6-19.5.GR6 Payment

6-19.5.INST1.GR6 (Section 6-19.5 is supplemented with the following)
Must use once preceding any of the following:

6-19.5.OPT2.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 **6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.4.OPT3.GB6.**

6-20.GR6 Buried Structures

6-20.1.GR6 Description

6-20.1(1).GR6 Definitions

6-20.1(1).INST1.GR6 (The list of types of buried structures in Section 6-20.1(1) is supplemented with the following):
Must use once preceding any of the following:

1
2 6-20.1(1).OPT1.GB6 (January 10, 2022)
3 Use in all projects requiring the use of a Contractor-
4 designed buried structure. Must be included with **6-**
5 **20.2.OPT1.GB6**, **6-20.3.OPT1.GB6**, and **6-**
6 **20.5.OPT1.GB6**.

7
8 **6-20.2.GR6 Materials**

9
10 6-20.2.INST1.GR6 (Section 6-20.2 is supplemented with the following)
11 Must use once preceding any of the following:

12
13 6-20.2.OPT1.GB6 (January 10, 2022)
14 Use in all projects requiring the use of a Contractor-
15 designed buried structure. Must be included with **6-**
16 **20.1(1).OPT1.GB6**, **6-20.3.OPT1.GB6**, and **6-**
17 **20.5.OPT1.GB6**.

18
19 **6-20.3.GR6 Construction Requirements**

20
21 6-20.3.INST1.GR6 (Section 6-20.3 is supplemented with the following)
22 Must use once preceding any of the following:

23
24 6-20.3.OPT1.GB6 (January 10, 2022)
25 Use in all projects requiring the use of a Contractor-
26 designed buried structure. Must be included with **6-**
27 **20.1(1).OPT1.GB6**, **6-20.2.OPT1.GB6**, and **6-**
28 **20.5.OPT1.GB6**.

29
30 ~~6-20.3(1).GR6 Design~~

31
32 ~~6-20.3(1)D.GR6 Geotechnical Considerations~~

33
34 ~~6-20.3(1)D.INST1.GR6 (Section 6-20.3(1) is supplemented with the following:)~~
35 ~~Must use once preceding any of the following:~~

36
37 ~~6-20.3(1)D.OPT1.2025.GR6 (November 20, 2023)~~
38 ~~Use in all projects with buried structures.~~

39 **6-20.5.GR6 Payment**

40
41 6-20.5.INST1.GR6 (Section 6-20.5 is supplemented with the following)
42 Must use once preceding any of the following:

43
44 6-20.5.OPT1.GB6 (January 10, 2022)
45 Use in all projects requiring the use of a Contractor-
46 designed buried structure. Must be included with **6-**
47 **20.1(1).OPT1.GB6**, **6-20.2.OPT1.GB6**, and **6-**
48 **20.3.OPT1.GB6**.

49
50 **6-SA1.FR6 Polyester Concrete Overlay**
51 **(September 3, 2024)**
52 **Use in projects with polyester concrete bridge deck overlays.**
53

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~~6-21.SA1.2025.GR6 Modified Concrete Overlay —
Microsilica or Fly Ash
(February 13, 2024)
Use in all projects with modified concrete overlay with
microsilica or fly ash. This GSP adds back in the missing
Sections 6-21.2.~~

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.OPT2.GB6
11 **(September 8, 2020)**
12 **Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels**
13 Epoxy bonding agent for surfaces shall be Type II, as specified in Section 9-26.1. Epoxy
14 bonding agent for steel reinforcing bar dowels shall be either Type I or Type IV, as
15 specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as
16 recommended by the resin manufacturer.

17
18 6-02.2.OPT26.GB6
19 **(April 6, 2015)**
20 **Rapid Cure Silicone Sealant**
21 Rapid cure silicone sealant shall be Dow Corning 902 RCS Joint Sealant.

22
23 The Contractor shall deliver the joint sealant to the job site in the sealant manufacturer's
24 original sealed container. Each container shall be marked with the sealant manufacturer's
25 name and lot or batch number. Each lot or batch shall be accompanied by the
26 manufacturer's Safety Data Sheet (SDS), and Manufacturer's Certificate of Compliance,
27 identifying the lot or batch number, and certifying that the materials conform to the
28 properties stated on the product data sheet.

29
30 The backer rod shall be closed cell expanded polyethylene foam as recommended by the
31 sealant manufacturer. The diameter of the backer rod shall be as recommended by the
32 sealant manufacturer for the expansion joint opening at the time of installation.

33
34 6-02.2.OPT27.GB6
35 **(April 6, 2015)**
36 **Polyester Concrete**
37 **Polyester Resin Binder**

38 The resin shall be an unsaturated isophthalic polyester-styrene co-polymer.

39
40 Prior to adding the initiator, the resin shall conform to the following requirements:

41

42	Viscosity:	75 to 200 cps (20 rpm at 77F, RVT No. 1 spindle)	ASTM D 2196
43			
44			
45	Specific Gravity:	1.05 to 1.10 at 77F	ASTM D 1475
46			
47	Styrene Content:	45% to 50% by weight of polyester styrene resin	ASTM D2369
48			
49			

50 The hardened resin shall conform to the following requirements:

51

1	Elongation:	35% minimum	ASTM D 638
2		w/ thickness 0.25" ± 0.04"	
3			
4	Tensile Strength:	2,500 psi minimum	ASTM D 638
5		w/ thickness 0.25" ± 0.04"	
6			
7	Conditioning	18 hours/77F/50% + 5 hours/158F	ASTM D 618
8			
9	Silane Coupler:	1.0% minimum (by weight of polyester-styrene resin)	

10
11 The silane coupler shall be an organosilane ester, gammamethacryloxypropyltrimethoxysilane. The promoter/hardeners shall be compatible with suitable
12 methyl ethyl ketone peroxide (MEKP) and cumene hydroperoxide (CHP)
13 initiators. MEKP and CHP initiators shall be used as recommended by the
14 manufacturer.
15

16
17 Polyester resin binder will be accepted based on submittal to the Engineer of a
18 Manufacturer's Certificate of Compliance.
19

20 **High Molecular Weight Methacrylate (HMWM) Resin**

21 In addition to the viscosity and density properties, and the promoter/initiator system,
22 specified in Section 6-09.2, the HMWM resin for polyester concrete shall conform to
23 the following requirements:
24

25	Flash Point:	180F minimum	ASTM D 3278
26			
27	Tack-Free Time:	400 minutes maximum	California Test 551
28			

29 Prior to adding initiator, the HMWM resin shall have a maximum volatile content of
30 30 percent, when tested in conformance with ASTM D 2369.
31

32 HMWM resin will be accepted based on submittal to the Engineer of a Manufacturer's
33 Certificate of Compliance.
34

35 **Aggregate**

36 The aggregate shall be from a WSDOT approved pit site and shall be thoroughly
37 washed and kiln dried.
38

39 The aggregate shall conform to Section 9-03.1(5)B for either 1/2-inch or 3/8-inch
40 maximum nominal aggregate size.
41

42 The combined aggregate shall have a maximum of 45 percent crushed particles.
43 Fine aggregate shall conform to Section 9-03.13.
44

45 Aggregate absorption shall not exceed 1.0 percent. The moisture content of the
46 aggregate shall not exceed one half of the aggregate absorption at the time of mixing
47 with the polyester resin binder. The aggregate temperature shall be between 45F
48 and 100F at the time of mixing.
49

50 **Sand for Abrasive Finish**

51 The sand for abrasive finish shall conform to Section 6-09.2, and the aggregate
52 moisture content requirements specified above.

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6-02.2.OPT28.GB6

(April 6, 2015)

Elastomeric Concrete

Elastomeric concrete shall be one of the following three products:

BASF/Watson Bowman Acme Wabo Crete II

D. S. Brown Delcrete

R. J. Watson Poly-Tron

The elastomeric concrete aggregate shall be as specified, gradated, and packaged by the elastomeric concrete manufacturer.

The primer shall be as recommended by the elastomeric concrete manufacturer.

The Contractor shall deliver the elastomeric concrete components to the job site in the elastomeric concrete manufacturer's original sealed containers. Each container shall be marked with the sealant manufacturer's name and lot or batch number. Each lot or batch shall be accompanied by the manufacturer's Safety Data Sheet (SDS), and Manufacturer's Certificate of Compliance, identifying the elastomeric concrete manufacturer and the lot or batch number, and certifying that the materials conform to the properties stated in the product data sheet.

6-02.2.OPT33.GB6

(August 3, 2015)

Fabric Pad Bearing

Unless other materials are specified in the Plans, fabric pad bearing assembly components shall conform to the following requirements for those components shown and specified in the Plans:

Steel Plates and Bars

Steel plates and bars (keeper bars, sole plates, backing plates, and masonry plates) shall conform to ASTM A 36 and the dimensions shall conform to the details shown in the Plans. The backing plate and masonry plate surfaces in contact with the pre-formed fabric pad, and the surface within the recess of the backing plate, shall have an average surface roughness of 250 microinches or less. The surface of the sole plate in contact with the stainless steel sheet shall have an average surface roughness of 125 microinches or less. All other steel plate and bar surfaces in contact with other fabric pad bearing components shall have an average surface roughness of 500 microinches or less.

Pre-formed Fabric Pad

Pre-formed fabric pads shall be composed of multiple layers of duck, impregnated and bound with high quality oil resistant synthetic rubber, compressed into resilient pads. The pre-formed fabric pads shall conform to the latest edition of MIL C 882 and the following requirements. The number of plies shall be as required to produce the specified thickness, after compression and vulcanization.

The pre-formed fabric pad shall have a shore A hardness of 90±5 in accordance with ASTM D 2240.

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Polytetrafluoroethylene (PTFE) Sheet

PTFE shall be 100 percent virgin (unfilled) PTFE, fiberglass fiber filled PTFE, or dimpled PTFE conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction Specifications, current edition and latest interims, and the following requirements:

1. PTFE sheet shall be composed of 100 percent virgin (unfilled) polytetrafluoroethylene resin, except where filled PTFE is specified in the Plans.
2. Filled PTFE, when specified in the Plans, shall be composed of PTFE resin uniformly blended with 15 percent maximum fiberglass fiber.
3. The substrate shall limit the flow (elongation) of the confined PTFE to not more than 0.009 inch under a pressure of 2,000 psi for 15 minutes at 78F for a two inch by three inch test sample.
4. Unfilled PTFE shall have a hardness of 50 to 65 Durometer D, at 78F, in accordance with ASTM D 2240.

Stainless Steel Sheet

Stainless steel sheet shall be no less than 14 gage meeting ASTM A 240 Type 304L specifications. Stainless steel in contact with the PTFE shall be polished to a Number 8 mirror finish.

Welded Shear Connectors

Welded shear connectors shall conform to Section 9-06.15.

Bolts, Nuts and Washers

Bolts, nuts and washers shall conform to Section 9-06.5(3), and shall be galvanized after fabrication in accordance with AASHTO M 232.

Anchor Bolts, Nuts and Washers

Anchor bolts, nuts and washers shall conform to Section 9-06.5(4). The top 1'-0", minimum, of the exposed end of the anchor bolts, and the associated nuts and washers, shall be galvanized after fabrication in accordance with AASHTO M 232.

Concrete Inserts

Concrete inserts shall be as specified in the Plans.

Silicone Grease and Epoxy Gel

Silicone grease shall conform to SAE AS 8660.

Epoxy gel shall be Type I, Grade 3, Class A, B, or C, conforming to Section 9-26.1.

Submittals of Test Reports, Certifications, and Samples

The Contractor shall submit Type 2 Working Drawings consisting of the following test reports, certifications, and samples:

1. Manufacturer's Certificate of Compliance for the PTFE, pre-formed fabric pad duck, silicone grease, and epoxy gel.

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- 2. Certified mill test reports for all steel and stainless steel in the bearing assemblies.
- 3. Certified test reports confirming that the pre-formed fabric pads meet the specified requirements of proof load.
- 4. Samples of the pre-formed fabric pads, size six inches by six inches by one inch, and PTFE sheet, size six inches by six inches by 1/8 inch, from the production material.

6-02.2.OPT39.BSP.GB6

(*****)

Cylindrical Bearing

Unless other materials are specified in the Plans, cylindrical bearing assembly components shall conform to the following requirements for those components shown and specified in the Plans:

Steel Plates and Bars

Steel plates and bars (base plates, bearing plates, guide bars, masonry plates, and sole plates) shall conform to ASTM A 36, and the dimensions shall comply with the details as shown in the Plans. The surface of the steel plates and bars in contact with stainless steel shall have an average surface roughness of 125 microinches or less. The surface within the recess of steel plates and bars retaining PTFE shall have an average surface roughness of 250 microinches or less. All other steel plate and bar surfaces in contact with other cylindrical bearing assembly components shall have an average surface roughness of 500 microinches or less.

Polytetrafluoroethylene (PTFE)

PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction Specifications, current edition and latest interims.

Stainless Steel

Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in contact with PTFE shall be polished to a Number 8 mirror finish.

Stainless steel countersunk screws shall be hexagon socket type conforming to ANSI B 18.3 and shall conform to ASTM F 593 Type 304L.

Silicone Grease and Epoxy Gel

Silicone grease shall conform to US Navy QPL AS8660-2.

Epoxy gel shall be Type I, Grade 3, Class A, B, or C, conforming to Section 9-26.1.

Bolts, Nuts and Washers

Bolts, nuts and washers shall conform to Section 9-06.5(3) and shall be galvanized after fabrication in accordance with AASHTO M 232.

Anchor Bolt Assembly

Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental requirements S2, S3, and S5. Nuts shall conform to ASTM A 563 Grade DH.

1 Washers shall conform to ASTM F 436. Bars shall conform to ASTM A 36. Pipe shall
2 conform to ASTM A 53 Grade B Type E or S, black. The upper portion of the anchor
3 bolts, and associated nuts and washers, to six inches minimum below the concrete
4 surface, shall be galvanized after fabrication in accordance with AASHTO M 232.

5
6 **Resin Filler**
7 Resin filler shall conform to Section 6-02.2 as supplemented in these Special
8 Provisions.

9
10 **Submittals of Acceptance Test Reports and Certificates**
11 The Contractor shall submit the following production samples, and test reports and
12 certificates, to the Engineer for review, testing, and approval:

- 13
14 1. Manufacturer's certificate of compliance for the PTFE, resin filler, and
15 silicone grease, in accordance with Section 1-06.3.
16
17 2. A six inch by six inch by 1/8 inch sample of PTFE taken from the lot of
18 production material.
19
20 3. Certified mill test reports for all steel and stainless steel materials
21 incorporated in the bearings.
22

23 The Contractor shall not ship the bearings from the fabricator's facility until receiving
24 the Engineer's written approval of all production samples, and test reports and
25 certificates.
26

27 6-02.2.OPT4.GB6
28 **(November 2, 2022)**
29 ***Epoxy Crack Sealing Materials***

30 Epoxy sealing paste shall be a thixotropic compound.
31
32 Epoxy injection resin shall be a moisture-insensitive, two-component material capable of
33 restoring the structural integrity of a structure by structurally bonding cracks,
34 delaminations and hollow planes. Resin formulations shall be hydrophilic with variable
35 viscosity to allow full depth penetration in cracks having a width of 6 mils and greater.
36

37 Epoxy injection resin, when mixed with the hardener in accordance with the
38 manufacturer's written instructions, shall cure to a non-shrink solid material. The material
39 shall be capable of curing in less than 24 hours.
40

41 Epoxy injection resin shall have the following physical properties:

42

43 Solids Content, by weight (minimum)	98 percent
44 Viscosity (maximum) at 77F (Brookfield)	700 cps
45 Compressive Yield Strength (minimum)	12,000 psi
46 Minimum Flexural Strength (ASTM D 790)	10,000 psi
47 Bond Strength (minimum)	500 psi

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1 The Contractor shall submit a Type 2 Working Drawing consisting of sample of the
2 material of the epoxy sealing paste and epoxy injection resin together with sufficient
3 directions and technical data for its use.
4

5 The Contractor shall submit a Type 1 Working Drawing consisting of the Safety Data
6 Sheet (SDS) for each type of epoxy sealing paste and epoxy injection resin.
7

8 6-02.2.OPT40.BSP.GB6

9 (*********)

10 ***Disc Bearing***

11 Unless other materials are specified in the Plans, disc bearing assembly components
12 shall conform to the following requirements for those components shown and specified in
13 the Plans:
14

15 **Steel Plates and Bars**

16 Steel plates and bars (sliding plates, bearing plates, guide bars, masonry plates, and
17 sole plates) shall conform to ASTM A 36, and the dimensions shall comply with the
18 details as shown in the Plans. The surface of the steel plates and bars in contact
19 with stainless steel shall have an average surface roughness of 125 microinches or
20 less. The surface of steel plates in contact with the polyether urethane disc, and the
21 surface within the recess of steel plates and bars retaining PTFE, shall have an
22 average surface roughness of 250 microinches or less. All other steel plate and bar
23 surfaces in contact with other disc bearing assembly components shall have an
24 average surface roughness of 500 microinches or less.
25

26 **Polyether Urethane**

27 Polyether urethane shall conform to Section 18.3.2.8 and Table 18.3.2.8-1 of the
28 AASHTO LRFD Bridge Construction Specifications, current edition and latest
29 interims.
30

31 **Polytetrafluoroethylene (PTFE)**

32 PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE
33 conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction
34 Specifications, current edition and latest interims.
35

36 **Stainless Steel**

37 Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in
38 contact with PTFE shall be polished to a Number 8 mirror finish.
39

40 Stainless steel countersunk screws shall be hexagon socket type conforming to ANSI
41 B 18.3 and shall conform to ASTM F 593 Type 304L.
42

43 **Silicone Grease and Epoxy Gel**

44 Silicone grease shall conform to US Navy QPL AS8660-2.
45

46 Epoxy gel shall be Type I, Grade 3, Class A, B, or C, conforming to Section 9-26.1.
47

48 **Bolts, Nuts and Washers**

49 Bolts, nuts and washers shall conform to Section 9-06.5(3) and shall be galvanized
50 after fabrication in accordance with AASHTO M 232.
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Anchor Bolt Assembly

Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental requirements S2, S3, and S5. Nuts shall conform to ASTM A 563 Grade DH. Washers shall conform to ASTM F 436. Bars shall conform to ASTM A 36. Pipe shall conform to ASTM A 53 Grade B Type E or S, black. The upper portion of the anchor bolts, and associated nuts and washers, to six inches minimum below the concrete surface, shall be galvanized after fabrication in accordance with AASHTO M 232

Resin Filler

Resin filler shall conform to Section 6-02.2 as supplemented in these Special Provisions.

Submittals of Acceptance Test Reports and Certificates

The Contractor shall submit the following production samples, and test reports and certificates, to the Engineer for review, testing, and approval:

1. Manufacturer’s certificate of compliance for the polyether urethane, PTFE, resin filler, and silicone grease, in accordance with Section 1-06.3.
2. A six inch by six inch by 1/8 inch sample of PTFE taken from the lot of production material.
3. Certified mill test reports for all steel and stainless steel materials incorporated in the bearings.

The Contractor shall not ship the bearings from the fabricator’s facility until receiving the Engineer’s written approval of all production samples, and test reports and certificates.

6-02.2.OPT41.BSP.GB6

(*****)

Spherical Bearing

Unless other materials are specified in the Plans, spherical bearing assembly components shall conform to the following requirements for those components shown and specified in the Plans:

Steel Plates and Bars

Steel plates and bars (base plates, bearing plates, guide bars, keeper bars and plates, masonry plates, and sole plates) shall conform to ASTM A 36, and the dimensions shall comply with the details as shown in the Plans. The surface of the steel plates and bars in contact with stainless steel shall have an average surface roughness of 125 microinches or less. The surface within the recess of steel plates and bars retaining PTFE shall have an average surface roughness of 250 microinches or less. All other steel plate and bar surfaces in contact with other spherical bearing assembly components shall have an average surface roughness of 500 microinches or less.

Polytetrafluoroethylene (PTFE)

PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction Specifications, current edition and latest interims.

1 **Stainless Steel**
2 Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in
3 contact with PTFE shall be polished to a Number 8 mirror finish.
4

5 Stainless steel countersunk screws shall be hexagon socket type conforming to ANSI
6 B 18.3 and shall conform to ASTM F 593 Type 304L.
7

8 **Silicone Grease and Epoxy Gel**
9 Silicone grease shall conform to US Navy QPL AS8660-2.

10 Epoxy gel shall be Type I, Grade 3, Class A, B, or C, conforming to Section 9-26.1.

11 **Bolts, Nuts and Washers**
12 Bolts, nuts and washers shall conform to Section 9-06.5(3) and shall be galvanized
13 after fabrication in accordance with AASHTO M 232.
14

15 **Anchor Bolt Assembly**
16 Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental
17 requirements S2, S3, and S5. Nuts shall conform to ASTM A 563 Grade DH.
18 Washers shall conform to ASTM F 436. Bars shall conform to ASTM A 36. Pipe shall
19 conform to ASTM A 53 Grade B Type E or S, black. The upper portion of the anchor
20 bolts, and associated nuts and washers, to six inches minimum below the concrete
21 surface, shall be galvanized after fabrication in accordance with AASHTO M 232
22

23 **Resin Filler**
24 Resin filler shall conform to Section 6-02.2 as supplemented in these Special
25 Provisions.
26

27 **Submittals of Acceptance Test Reports and Certificates**
28 The Contractor shall submit the following production samples, and test reports and
29 certificates, to the Engineer for review, testing, and approval:
30

- 31 1. Manufacturer's certificate of compliance for the PTFE, resin filler, and
32 silicone grease, in accordance with Section 1-06.3.
33 2. A six inch by six inch by 1/8 inch sample of PTFE taken from the lot of
34 production material.
35 3. Certified mill test reports for all steel and stainless steel materials
36 incorporated in the bearings.
37

38 The Contractor shall not ship the bearings from the fabricator's facility until receiving
39 the Engineer's written approval of all production samples, and test reports and
40 certificates.
41

42 6-02.2.OPT46(A).GB6
43 (June 26, 2000)
44 Inserts shall be of the type and model specified in the Plans. Inserts shall be galvanized
45 in accordance with AASHTO M 111.
46

47 6-02.2.OPT46(B).GB6
48 (September 3, 2019)
49

1 Hanger rods, and associated nuts and washers, shall conform to Section 9-06.5(1), and
2 shall be galvanized in accordance with ASTM F2329.
3
4 Steel bars and plates shall conform to ASTM A 36 and shall be galvanized in accordance
5 with AASHTO M 111.
6
7 6-02.2.OPT46(C).GB6
8 (September 3, 2019)
9 Horizontal strut bolts or threaded rods, and associated nuts and washers, shall conform
10 to Section 9-06.5(1), and shall be galvanized in accordance with ASTM F2329.
11
12 Pre-formed fabric pads shall be composed of multiple layers of duck, impregnated and
13 bound with high quality oil resistant synthetic rubber, compressed into resilient pads. The
14 pre-formed fabric pads shall conform to latest edition of MIL C 882 and the following
15 requirements. The number of plies shall be as required to produce the specified
16 thickness, after compression and vulcanizing.
17
18 Pre-formed fabric pads shall have a shore A hardness of 90±5 in accordance with ASTM
19 D 2240.
20
21 Pre-formed fabric pads for bridge utility supports will be accepted based on the
22 Manufacturer's Certificate of Compliance that the material furnished conforms to these
23 specifications.
24
25 6-02.2.OPT46(D).GB6
26 (June 26, 2000)
27 Pipe rolls or pipe saddles shall be of the type and model specified in the Plans.
28
29 6-02.2.OPT46(E).GB6
30 (September 3, 2019)
31 Anchor straps shall conform to ASTM A 36 and shall be galvanized after fabrication in
32 accordance with AASHTO M 111.
33
34 Anchor bolts, and associated nuts and washers, shall conform to Section 9-06.5(4), and
35 shall be galvanized in accordance with ASTM F2329.
36
37 6-02.2.OPT46.GB6
38 **Bridge Supported Utilities**
39
40 6-02.2.OPT48.GB6
41 **(April 30, 2001)**
42 **Bridge Drain Risers**
43 Spacer bars and riser bars for the drain riser assembly shall conform to ASTM A 36.
44
45 6-02.2.OPT56.BSP.GB6
46 **(*****)**
47 **Resin Filler**
48 Resin filler shall be a two component, resin and catalyst, liquid thermoset material.
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50 The properties of the resin and catalyst shall be:
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52 1. The components shall be supplied in separate containers.

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2. The viscosity of the resin-catalyst mixture shall be $35,000 \pm 5,000$ cP at 75F immediately after mixing.
3. The flash point shall be 100F minimum.
4. After mixing, the resin-catalyst mixture shall be pourable for a minimum of eight minutes at 60F and shall harden in fifteen minutes maximum. Heating of the mixture after placing to a maximum temperature of 250F is permissible to obtain a full cure.

The properties of the cured resin shall be:

1. The fully cured compressive strength shall be 12,000 psi minimum.
2. The maximum allowable shrinkage shall be 2 percent. To control shrinkage, an inert filler may be used in the resin provided that the viscosity requirements are met.
3. The hardness shall be between 40 and 55 in accordance with ASTM D 2583.

A resin material known to meet the specified requirements herein is used in the wire rope industry for resin socketing.

The Contractor shall submit a Manufacturer's Certificate of Compliance in accordance with Section 1-06.3 to the Engineer for approval prior to using the resin filler.

6-02.2.OPT58.GB6

(September 8, 2020)

Core Drilled Bridge Deck Drain

Bridge deck drain pipe sleeve shall be any smooth wall, non-perforated, PVC pipe of the diameter and minimum wall thickness specified in the Plans.

Epoxy bonding agent shall be Type II conforming to Section 9-26.1. The grade and class of the epoxy bonding agent shall be as recommended by the bonding agent manufacturer.

6-02.2.OPT60(B).GB6

(April 6, 2015)

Steel pipe shall conform to ASTM A 53, Grade B, Type E or S, galvanized. The pipe shall be Schedule 40, except as otherwise specified in the Plans.

PVC pipe shall be any smooth wall, non-perforated, PVC pipe of the diameter and minimum wall thickness or Schedule specified in the Plans.

6-02.2.OPT60(C).GB6

(November 20, 2023)

Steel bars, plates and shapes shall conform to ASTM A36 except that structural shapes may conform to ASTM A992.

Epoxy bonding agent, where shown in the Plans for bonding steel components to concrete, shall be Type II as specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as recommended by the bonding agent manufacturer.

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All steel components and assemblies for seismic restrainers, except as otherwise specified, shall be galvanized after fabrication in accordance with AASHTO M 111.

Bolts, nuts, and washers shall conform to Section 9-06.5(3) and shall be galvanized after fabrication in accordance with ASTM F2329.

Resin bonded anchors shall conform to Sections 6-02.3(18)A and 9-06.4. Additionally, the threaded anchor rods for seismic retrofit elements shall conform to either ASTM A193 Grade B7 or ASTM F1554 Grade 105, and shall conform to the appropriate supplemental requirements for grade and manufacturer's identification, and charpy impact testing (15-foot-pounds minimum at 40F). Results of the charpy impact testing for the production lot(s) including the anchor rods furnished for seismic retrofit components and assemblies shall be submitted to the Engineer along with the Manufacturer's Certificate of Compliance.

6-02.2.OPT60(D).GB6

(September 8, 2020)

High-strength steel rods for longitudinal seismic restrainer assemblies shall conform to ASTM F 1554 Grade 105, including Supplemental Requirements S2, S3, and S5. Nuts, and couplers if required, shall conform to ASTM A 563 Grade DH. Washers shall conform to ASTM F 436.

High-strength steel rods and associated couplers, nuts and washers shall be galvanized after fabrication in accordance with ASTM F2329.

6-02.2.OPT60(E).GB6

(April 6, 2015)

Pre-formed fabric pads shall be composed of multiple layers of duck impregnated and bound with high quality oil resistant synthetic rubber compressed into resilient pads. The pre-formed fabric pads shall conform to the latest edition of MIL-C-882 and the following requirements. The number of plies shall be as required to produce the specified thickness, after compression and vulcanizing. Pre-formed fabric pads shall have a shore A hardness of 90 ± 5 in accordance with ASTM D 2240.

Pre-formed fabric pads for seismic restrainers will be accepted based on the Manufacturer's Certificate of Compliance that the material furnished conforms to these specifications.

6-02.2.OPT60(F).GB6

(September 8, 2020)

Column Jacketing Materials

All metal components shall conform to ASTM A 36, and shall be painted in accordance with Section 6-07.3(9), and Section 6-03.3(30) as supplemented in these Special Provisions. Metal surfaces in contact with grout shall be considered in contact with concrete for the purposes of Section 6-07.3(9).

Grout shall conform to the requirements of Section 9-20.3(4) and the following requirements:

The grout shall be a pumpable mix capable of filling the annulus between the concrete column and steel column jacket assembly. The grout shall be free of

1 lumps and undispersed cement, and shall not show any visible signs of
2 separation of water and cement during pumping operations.
3
4 Aggregate conforming to Section 9-03.1(5) with a maximum aggregate size of 3/8
5 inch may be used to extend the grout. Mortar shall conform to Section 9-20.4(2).
6
7 Epoxy bonding agent for filling grout voids shall be Type II, as specified in Section 9-
8 26.1. The grade and class of epoxy bonding agent shall be as recommended by the
9 bonding agent manufacturer.
10
11 6-02.2.OPT60.GB6
12 **(April 6, 2015)**
13 **Seismic Retrofit Materials**
14 Components fabricated and constructed for seismic retrofit work shall conform to the
15 following requirements:
16
17 6-02.2.OPT61.BSP.GB6
18 **(*****)**
19 **Precast Prestressed Concrete Stay-In-Place Panels**
20 Concrete shall have an initial strength at strand release, and a 28 day minimum
21 compressive strength, as specified in the Plans.
22
23 Prestressing reinforcement shall conform to Section 9-07.10, except that the diameter
24 shall be as specified in the Plans.
25
26 Grout shall conform to Section 9-20.3(2).
27
28 Leveling bolts shall conform to Section 9-06.5(1), and shall be galvanized after fabrication
29 in accordance with AASHTO M 232.
30
31 Backer rod shall be closed cell expanded polyethylene foam.
32
33 6-02.2.OPT61.GB6
34 **(September 8, 2020)**
35 **Precast Prestressed Concrete Stay-In-Place Panels**
36 Concrete shall have an initial strength at strand release of at least 5,000 psi, and a 28
37 day minimum compressive strength as specified in the Plans.
38
39 Prestressing reinforcement strand shall conform to Section 9-07.10, except that the
40 diameter shall be as specified in the Plans. The strand shall be provided by a
41 manufacturer and facility capable of producing ½" diameter strand with an average bond
42 pull-out force of 16.0 kips when tested in accordance with ASTM A1081. Test reports for
43 ASTM A1081 shall be submitted with the Manufacturer's Certificate of Compliance, and
44 testing shall have been performed on strand produced within the previous 36 months.
45
46 Grout shall conform to Section 9-20.3(2).
47
48 Leveling bolts shall conform to Section 9-06.5(1), and shall be galvanized after fabrication
49 in accordance with AASHTO M 232.
50
51 Backer rod shall be closed cell expanded polyethylene foam.
52

1 6-02.3.GR6

2 **Construction Requirements**

3

4 6-02.3.INST1.GR6

5 Section 6-02.3 is supplemented with the following:

6

7 6-02.3.OPT1.GB6

8 ***(September 7, 2021)***

9 ***Epoxy Crack Sealing***

10 The materials being used may be dermatetic. The Contractor's contact with and use of
11 the materials shall conform to the requirements specified in the SDS for each material,
12 and all personnel shall be provided with appropriate clothing and protective garments.

13

14 All materials shall be stored and protected from ignition sources as recommended by the
15 material manufacturer.

16

17 The cracks shall be cleaned of efflorescence, deteriorated concrete and other surface
18 debris, by vacuuming, flushing, routing, sawing or other means as required.

19

20 Entry ports shall consist of tubes, tees or other valve devices as recommended by the
21 resin manufacturer. The ports shall be placed at intervals along each crack in accordance
22 with the manufacturer's written instructions for the resin being used. The holes for the
23 entry ports shall be drilled with a hollow bit with an attached vacuum chuck to prevent
24 concrete dust from becoming embedded in the crack.

25

26 The exposed crack surfaces and the areas around the entry ports shall be sealed with
27 epoxy sealing paste and cured in accordance with the resin manufacturer's written
28 instructions, to attain a seal capable of withstanding the applied injection pressures.

29

30 The Contractor shall furnish the services of a factory trained technical representative to
31 perform the epoxy crack sealing injection.

32

33 Injection shall be accomplished with a pressure or injection machine compatible with the
34 resin selected for use and shall begin at the lowest port and continue until there is
35 evidence of the resin at the entry port directly above and adjacent to the port being
36 pumped. When material travel is indicated, the nozzle shall be moved to the port that
37 shows resin. The previously pumped port shall be sealed. Injection shall continue until
38 the crack is completely filled. On wide cracks where resin travel between ports will be
39 rapid, two or more ports may be pumped simultaneously. On exceptionally large cracks,
40 a formulation (dependent upon crack width, ambient temperature, modulus requirements
41 and other variables) of epoxy resin and fine sands shall be used as recommended by the
42 resin manufacturer.

43

44 After all ports have been pumped and the crack is full, the epoxy resin shall be cured
45 without disturbance in accordance with the resin manufacturer's written instructions as
46 necessary to ensure development of the full bond capacity of the material.

47

48 After the epoxy has cured completely, the epoxy sealing paste and port stems shall be
49 ground flush with the original surface of the concrete.

50

51 At the discretion of the Engineer, cores shall be taken after the repair is completed to
52 confirm penetration and bonding. The number and locations of such cores will be as

1 specified by the Engineer. These cores shall be submitted to the Engineer for testing in
2 the State Materials Laboratory. The Contractor shall submit a Working Drawing for repair
3 of core holes in accordance with Section 6-01.16.
4

5 6-02.3.OPT10.GB6

6 **(January 7, 2019)**

7 **Elastomeric Concrete**

8 Elastomeric concrete shall be composed of the following three components – two-
9 component polyurethane resin binder, and aggregate, in accordance with Section 6-02.2
10 as supplemented in these Special Provisions.
11

12 **Manufacturer's Technical Representative**

13 The Contractor shall have the services of a qualified elastomeric concrete
14 manufacturer's technical representative physically present at the job site. The
15 manufacturer's technical representative shall assist the Contractor in training the
16 Contractor's personnel and providing technical assistance in preparing the header
17 blockout surface, applying primer, and mixing, placing, and curing the elastomeric
18 concrete.
19

20 **Delivery and Storage of Materials**

21 All materials shall be delivered in their original containers bearing the manufacturer's
22 label, specifying date of manufacturing, batch number, trade name brand, and
23 quantity. Each shipment of polyurethane resin binder shall be accompanied by a
24 Safety Data Sheet (SDS).
25

26 The materials shall be stored in accordance with the manufacturer's
27 recommendations.
28

29 Sufficient material to perform the entire elastomeric concrete application shall be in
30 storage at the site prior to any field preparation.
31

32 **Equipment and Containment**

33 The Contractor shall submit a Type 1 Working Drawing consisting of all equipment
34 for cleaning the concrete and steel surfaces, and mixing and applying the elastomeric
35 concrete.
36

37 The abrasive blasting materials shall be contained and restricted to the surface
38 receiving the elastomeric concrete only and shall not escape to the surrounding
39 environment. The Contractor shall submit a Type 1 Working Drawing consisting of
40 the method and materials used to collect and contain the abrasive blasting materials.
41

42 **Surface Preparation**

43 The concrete and steel surfaces shall be prepared by removing all material which
44 may act as a bond breaker between the surface and the elastomeric concrete,
45 including the removal of all loose, deteriorated, or otherwise unsound concrete. Steel
46 surfaces shall be cleaned and prepared to an SSPC SP-10 surface condition.
47 Surface cleaning shall be by abrasive blasting.
48

49 Precautions shall be taken to ensure that no dust or debris leaves the bridge deck
50 and that all traffic is protected from rebound and dust.
51

1 If the concrete or steel surfaces become contaminated, the contaminated areas shall
2 be recleaned by abrasive blasting.
3
4 Freshly placed concrete shall be cured for a minimum of 14 calendar days before
5 application of primer and elastomeric concrete.
6
7 **Application of Prime Coat**
8 Application of the prime coat and the elastomeric concrete shall not begin if rain is
9 forecast within 12-hours of completion of the Work. The area receiving the prime coat
10 shall be dry and had no rain within the past 12 hours. Immediately prior to applying
11 the prime coat, the surfaces shall be cleaned to remove accumulated dust and any
12 other loose material.
13
14 The concrete bridge deck surface shall be between 50F and 85F when applying the
15 prime coat.
16
17 The Contractor shall apply primer in accordance with the elastomeric concrete
18 manufacturer's recommendations and shall limit the extent of primer application to
19 that surface area that can be covered by a layer of elastomeric concrete before
20 primer cure.
21
22 If the primed surface becomes contaminated, the contaminated area shall be cleaned
23 by abrasive blasting and reprimed.
24
25 **Mixing Components**
26 The Contractor shall mix the elastomeric concrete components and the resultant
27 mixture in accordance with the equipment and procedure recommended by the
28 elastomeric concrete manufacturer.
29
30 **Elastomeric Concrete Placement**
31 The elastomeric concrete shall be placed on the liquid prime coat within the time
32 limits specified by the manufacturer. Elastomeric concrete shall be placed in layers
33 not to exceed the maximum depth recommended by the elastomeric concrete
34 manufacturer. At locations deep enough to require placement of multiple layers of
35 elastomeric concrete, each layer shall be cured, and the top of the previous layer
36 roughened, as recommended by the elastomeric concrete manufacturer before
37 placement of the next layer.
38
39 Elastomeric concrete shall be placed within five minutes of initiation.
40
41 The surface temperature of the area receiving the elastomeric concrete shall be the
42 same as specified above for the prime coat.
43
44 **Finished Elastomeric Concrete Surface**
45 The finished surface of the elastomeric concrete shall be smooth and uniform as to
46 crown and grade in accordance with Section 6-02.3(10)D3.
47
48 Finishing tools or equipment used shall strike off the elastomeric concrete to the
49 established grade and cross section.
50
51 The finished surface of elastomeric concrete shall receive an abrasive sand finish.
52 The sand finish shall be applied by hand immediately after strike-off and before

1 gelling occurs. Sand shall be broadcast onto the surface to affect a uniform coverage
2 of a minimum of 0.8 pounds per square yard.
3
4 **Curing**
5 The elastomeric concrete shall be cured in accordance with the manufacturer's
6 recommendations. The Contractor shall measure the compressive strength of the
7 cured elastomeric concrete with a rebound hammer in accordance with ASTM C805.
8 The readings of the rebound hammer used shall be correlated to the compressive
9 strength of the elastomeric concrete product in accordance with ASTM C805 Section
10 5.4, and the Contractor shall submit a Type 1 Working Drawing of this correlation.
11
12 Traffic and equipment shall not be permitted on the elastomeric concrete until it
13 achieves a compressive strength of 2500 psi based on the rebound hammer readings
14 and the correlation chart for the rebound hammer used.
15
16 6-02.3.OPT2(A).GB6
17 (August 3, 2015)
18 The Contractor shall furnish and install inserts for the bridge utility supports as shown in
19 the Plans. The Contractor shall verify that the hanger rods freely hang plumb in their
20 inserts, and shall make adjustments to the inserts as necessary and as accepted by the
21 Engineer prior to utility installation.
22
23 6-02.3.OPT2(B).GB6
24 (June 26, 2000)
25 The Contractor shall furnish and install the bridge utility supports, and the utility pipe or
26 conduit pipe, as shown in the Plans.
27
28 6-02.3.OPT2(C).FB6
29 (June 26, 2000)
30 The Utility Company will furnish material for and install *** \$1\$ \$***. The Contractor shall
31 install *** \$2\$ \$*** furnished by the *** \$3\$ \$***.
32
33 The Contractor shall notify the utility company a sufficient time in advance and shall
34 cooperate with the utility company in order that the utility furnished items may be installed
35 in the structure.
36
37 6-02.3.OPT2.GB6
38 **Bridge Supported Utilities**
39
40 6-02.3.OPT8(B).GB6
41 (April 6, 2015)
42 **Seismic Retrofit Demolition Plan**
43 The Contractor shall submit Type 2 Working Drawings showing the method of
44 removing the specified portions of the existing bridges required by the seismic retrofit
45 work. The Working Drawings shall show the sequence of demolition and removal,
46 the type of equipment to be used in all demolition and removal operations, and details
47 of the methods and equipment used for containment, collection, and disposal of all
48 debris. The Working Drawings shall show all stages of demolition.
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6-02.3.OPT8(C).GB6

(April 6, 2015)

Column Jacket Installation Plan

The Contractor shall submit Type 2E Working Drawings describing the column jacket installation plan. The submittal shall include at a minimum, the following:

1. Step by step installation procedure.
2. The methods of cleaning and preparing the existing column surfaces prior to installing the column jacket assembly.
3. The methods of containing, collecting, and disposing of the debris generated by cleaning and preparing the existing column surfaces.
4. The methods of containing, collecting, and disposing of all excess grout generated during the grouting process.
5. The locations of grout injection valves, and the methods and materials used to remove them following use, and to fill the void following removal.
6. The method of sealing the gap between the existing column surface and the column jacket assembly prior to grouting.
7. The method and materials used to clamp and brace the column jacket assembly in place during field assembly and grouting.
8. The proposed grout mix with manufacturer's data sheets.
9. The equipment used to pump the grout and monitor the grout pressure and the quantity of grout injected.
10. The method, materials, and equipment used to fill grout voids within the column jacket assembly, and to finish the exposed surface flush after repair.
11. The method, materials, and equipment used to field repair all damaged primer coatings, and to field apply the intermediate and finish coats of paint.

6-02.3.OPT8(D).GB6

(April 6, 2015)

Column Jacket Shop Drawings

The Contractor shall submit column jacket shop drawings as Type 2 Working Drawings. The shop drawings shall include, at a minimum, the following:

1. Plan, elevation, and sections of the jacket system and all components, with all dimensions and tolerances.
2. Field measurements of the existing column(s).
3. All material designations.
4. Location of horizontal and vertical splices.

- 1 5. Location of spacers and method of attachment.
- 2
- 3 6. Welds and welding procedures.
- 4

5 6-02.3.OPT8(E).GB6
6 **(September 8, 2020)**

7 **Field Measuring Existing Bridge Columns**

8 The Contractor shall field measure the dimensions (diameter, or width and thickness,
9 as appropriate for column shape) of the existing bridge columns receiving column
10 jackets prior to preparing column jacket assembly shop drawings. The following
11 locations shall be field measured as a minimum for each column:

- 12
- 13 1. Top of footing or footing pedestal.
- 14
- 15 2. Bottom of crossbeam.
- 16
- 17 3. Mid-height of column.
- 18

19 The Contractor shall field measure the column height from top of footing or footing
20 pedestal to bottom of crossbeam for each column.

21

22 The Contractor shall tabulate these field measured dimensions and submit them to
23 the Engineer along with the column jacket assembly shop drawings.

24

25 Where site conditions, such as traffic control requirements or deeply buried
26 foundations, create difficulties for field measuring buried portions of the bridge
27 columns, the Contractor may request a waiver of the pre-fabrication field measuring
28 requirements for specific columns. If the Engineer concurs with the Contractor's
29 request for a waiver of the pre-fabrication field measuring requirement for specific
30 columns, and for columns identified in the Special Provisions as already designated
31 with a waiver, the Contractor shall:

- 32
- 33 1. Field measure the diameter, or width and thickness, as appropriate for the
34 column shape, of the above ground portion of the column receiving the
35 waiver.
- 36
- 37 2. Fabricate the column jacket to a length exceeding the column height (2'-0"
38 or ten percent of the estimated column height, whichever is greater) based
39 on the original plans and other available site data. The shop drawing details
40 shall specify the column jacket fabrication length, and the assumed column
41 height based on the available information.
- 42
- 43 3. Submit the method, template, and equipment used to field cut the top of the
44 column jacket assembly at installation.
- 45

46 The Contractor shall submit the request for a waiver of the pre-fabrication field
47 measuring requirement prior to preparing column jacket assembly shop drawings,
48 and shall not submit shop drawings until receiving the Engineer's confirmation of the
49 waiver request and completing all field measurements still required.

50

51 6-02.3.OPT8(F).FB6
52 (April 6, 2015)

1 The column(s) at the Bridge and Pier location(s) specified below has (have) received
2 a waiver of the pre-fabrication field measuring requirement, and no separate waiver
3 request from the Contractor is required for this (these) specific column(s):
4

5 *** \$\$1\$\$ ***
6

7 However, the Contractor shall conform to all other requirements specified above for
8 columns receiving a waiver of the pre-fabrication field measuring requirement.
9

10 6-02.3.OPT8(G).FB6
11 **(April 6, 2015)**
12 **Field Measuring for Seismic Retrofit Components**
13 The Contractor shall field measure dimensions of existing items and members of
14 Bridge No(s). *** \$\$1\$\$ *** prior to preparing shop drawings for fabricated steel
15 components and assemblies.
16

17 The Contractor shall field measure dimensions of the following items:
18

19 *** \$\$2\$\$ ***
20

21 The Contractor shall tabulate these field measured dimensions and submit them to
22 the Engineer along with the shop drawing submittals for the corresponding steel
23 components and assemblies.
24

25 6-02.3.OPT8(H).GB6
26 **(April 6, 2015)**
27 **Removing Portions of Existing Concrete**
28 The Contractor shall remove portions of existing concrete required by the seismic
29 retrofit work in accordance with Section 2-02.3(2)A2 and as shown in the Plans.
30

31 The Contractor shall dispose of all materials removed by the demolition operations
32 in accordance with Section 2-02.3.
33

34 The Contractor shall roughen, clean, and saturate the existing concrete surfaces
35 bonding to the fresh concrete in accordance with Section 6-02.3(12).
36

37 6-02.3.OPT8(J).GB6
38 **(April 6, 2015)**
39 **Drilling Holes and Setting Steel Reinforcing Bars, and Placing Concrete**
40 The Contractor shall drill holes for, and set, steel reinforcing bars into the existing
41 concrete as shown in the Plans in accordance with Section 6-02.3(24)C as
42 supplemented in these Special Provisions.
43

44 6-02.3.OPT8(K).GB6
45 **(April 6, 2015)**
46 **Installing and Tensioning High-Strength Steel Bar Reinforcement**
47 The Contractor shall furnish and install high-strength steel bars as shown in the
48 Plans. The hole through existing concrete shall be core drilled. The concrete surface
49 in contact with the high-strength steel bar bearing plate shall be coated with epoxy
50 bonding agent just prior to stressing the high-strength steel bar. After stressing, the
51 high-strength steel bar shall be grouted in accordance with Section 6-02.3(26)H.
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6-02.3.OPT8(L).GB6

(November 20, 2023)

Longitudinal Seismic Restrainers

The Contractor shall submit Type 1 Working Drawings consisting of shop drawings of the steel components of the longitudinal seismic restrainer assemblies in accordance with Section 6-03.3(7).

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)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

1 the top of the column jacket assembly using the method, template, and equipment
2 as specified in the pre-fabrication field measuring waiver request submittal.
3
4 The Contractor shall position the steel column jacket around the existing column
5 using spacers to center the assembly. The spacers may be welded to the inside of
6 the jacket and, if used, shall be placed and attached as shown in the shop drawings.
7
8 Field welded complete penetration groove welds of the column jacket assemblies
9 shall be inspected in accordance with Section 6-03.3(25)A. Field weld inspection
10 shall be performed by a certified welding inspector (CWI). The Contractor shall not
11 begin welding until receiving acceptance of the joint fit-up from the CWI. The CWI
12 shall randomly monitor the intermediate stages of welding. The CWI's daily reports
13 and nondestructive testing reports indicating compliance with contract requirements
14 shall be submitted as a Type 1 Working Drawing upon completion of the last column
15 jacket in the Contract.
16
17 The Contractor shall install external grout injection valves for use in filling the cavity
18 with grout. The valves shall be spaced such that the grout will uniformly fill the gap
19 between the jacket assembly and the column surface. The grout pump shall be
20 equipped with a pressure gauge to monitor grout pressures. The grouting equipment
21 shall be sized to enable the grout to be pumped in one continuous operation. The
22 mixer shall be capable of continuously agitating the grout.
23
24 The production grout compressive strength shall be measured using four inch
25 diameter by eight inch cylinders, cast and cured in accordance with Section 6-
26 02.3(5)H. The cylinders shall attain a 7-day minimum compressive strength of 4,000
27 psi.
28
29 The gap between the column jacket assembly and the existing column surface at the
30 base of the assembly shall be sealed in accordance with the column jacket
31 installation plan.
32
33 The grouting operation shall conform to Section 6-02.3(6)A.
34
35 The grouting operation shall begin from the base of the assembly and from the base
36 of each successive lift. The Contractor shall pump grout into the assembly while
37 maintaining a uniform level grout head around the column.
38
39 The Contractor shall limit the height of each lift of grout to minimize undulations and
40 displacements of the surface of the column jacket assembly during grouting. For
41 column jacket assemblies of circular (constant radius) cross section, the height of
42 each lift of grout shall be limited to 20 feet maximum, except as otherwise accepted
43 by the Engineer. For column jacket assemblies with cross sections of all other
44 shapes, the height of each lift of grout shall be limited to 8 feet maximum, except as
45 otherwise accepted by the Engineer.
46
47 The Contractor may restrain the column jacket assembly within the specified
48 tolerances during grouting operations by using a bracing system in accordance with
49 the column jacket installation plan. Except as otherwise shown in the Plans, restraints
50 for the bracing system shall not pass through the column. Except when a bracing
51 system is used, placement of the next grout lift shall not begin until the previous grout
52 lift has hardened.

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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.

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.OPT8.GB6

Seismic Retrofit

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.

1 The Contractor shall prepare and submit a Type 1 Working Drawing consisting of the
2 polyester concrete design mix and mixing procedure. The mix design shall include a
3 recommended initiator percentage for the expected application temperature, and the
4 recommended amount of polyester resin binder as a percentage of the dry weight of
5 aggregate. The amount of peroxide initiator used shall result in a polyester concrete
6 set time between 30 and 120 minutes during placement as determined by California
7 Test 551, Part 2, "Method of Test For Determination of Set Time of Concrete Overlay
8 and Patching Materials", by Gilmore Needles. Accelerators or inhibitors may be
9 required as recommended by the polyester resin binder supplier.

10
11 **Delivery and Storage of Materials**

12 All materials shall be delivered in their original containers bearing the manufacturer's
13 label, specifying date of manufacturing, batch number, trade name brand, and
14 quantity. Each shipment of polyester resin binder and HMWM resin shall be
15 accompanied by a Safety Data Sheet (SDS).

16
17 The material shall be stored in accordance with the manufacturer's
18 recommendations.

19
20 Sufficient material to perform the entire polyester concrete application shall be in
21 storage at the site prior to any field preparation.

22
23 **Equipment and Containment**

24 The Contractor shall submit a Type 1 Working Drawing consisting of all equipment
25 for cleaning the concrete and steel surfaces, and mixing and applying the polyester
26 concrete.

27
28 The HMWM resin, and abrasive blasting materials, shall be contained and restricted
29 to the surface receiving the polyester concrete only, and shall not escape to the
30 surrounding environment. The Contractor shall submit a Type 1 Working Drawing
31 consisting of the method and materials used to collect and contain the HMWM resin,
32 and abrasive blasting materials.

33
34 **Surface Preparation**

35 The concrete and steel surfaces shall be prepared by removing all material which
36 may act as a bond breaker between the surface and the polyester concrete. Surface
37 cleaning shall be by abrasive blasting. Precautions shall be taken to ensure that no
38 dust or debris leaves the bridge deck and that all traffic is protected from rebound
39 and dust.

40
41 If the concrete or steel surfaces become contaminated, the contaminated areas shall
42 be recleaned by abrasive blasting.

43
44 **Application of Prime Coat**

45 Application of the HMWM prime coat and the polyester concrete shall not begin if
46 rain is forecast within 12-hours of completion of the Work. The area receiving the
47 prime coat shall be dry and had no rain within the past 12 hours. Immediately prior
48 to applying the prime coat, the surfaces shall be cleaned to remove accumulated
49 dust and any other loose material.

50
51 The concrete bridge deck surface shall be between 50F and 85F when applying the
52 prime coat.

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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 Engineer verifies that the HMWM resin was properly promoted and initiated, as evidenced by the HMWM batch sample.

If the primed surface becomes contaminated, the contaminated area shall be cleaned by abrasive blasting and reprimed.

Mixing Equipment for Polyester Concrete

Polyester concrete shall be mixed in mechanically operated mixers in accordance with the mix design as approved by the Engineer. The mixer size shall be limited to a nine cubic yard maximum capacity, unless otherwise approved by the Engineer.

The aggregate and resin volumes shall be recorded for each batch 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 mixing operations.

Mixing Components

The polyester resin binder in the polyester modified concrete shall be approximately 12 percent by weight of the dry aggregate. The Contractor shall specify the exact percentage in the mix design Working Drawing submittal.

The polyester resin binder shall be initiated and thoroughly blended just prior to mixing the aggregate and binder. The polyester concrete shall be thoroughly mixed prior to placing.

Polyester Concrete Placement

The polyester concrete shall be placed within two hours of placing the prime coat.

Polyester concrete shall be placed within 15 minutes following initiation. Polyester concrete that is not placed within this time shall be discarded.

The surface temperature of the area receiving the polyester concrete shall be the same as specified above for the HMWM prime coat.

The polyester concrete shall be consolidated in accordance with the manufacturer's recommendations.

Finished Polyester Concrete Surface

The finished surface of the polyester concrete shall be smooth and uniform as to crown and grade in accordance with Section 6-02.3(10)D3.

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Finishing equipment used shall strike off the polyester concrete to the established grade and cross section.

The polyester 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 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(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:~~

~~6-02.3(5)G.OPT1.2025.GR6~~

~~(November 20, 2023)~~

~~Sampling and testing will be performed before concrete placement from the first load and then randomly performed from one load for every 100 cubic yards. Concrete shall not be placed until all tests have been completed by the Engineer, and the results indicate that the concrete is within acceptable limits. If at any time the concrete is not within acceptable limits, sampling and testing will continue before concrete placement for each load until two successive loads meet all of the applicable acceptance requirements. After two successive tests indicate that the concrete is within specified limits, the testing frequency may decrease to one for every 100 cubic yards. Sampling shall be performed in accordance with FOP for WAQTC TM 2 and random samples shall be selected in accordance with WSDOT T 716. After the first acceptable load of concrete, up to 1/2 cubic yard may be placed from subsequent loads to be tested prior to testing for acceptance.~~

~~6-02.3(5)L.GR6~~

~~**Concrete With Non-Conforming Strength**~~

~~6-02.3(5)L2.GR6~~

~~**Girder Lateral Stability and Stress Analysis**~~

~~6-02.3(5)L2.INST1.GR6~~

~~The table in Item No. 4 in the first paragraph of Section 6-02.3(25)L2 is revised to read:~~

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6-02.3(5)L2.OPT1.2025.GR6
(November 20, 2023)

Condition	Stress	Location	Allowable Stress (ksi)
Temporary Stress at Transfer and Lifting from Casting Bed	Tensile	In areas without bonded reinforcement sufficient to resist the tensile force in the concrete	$0.0949\lambda \sqrt{f'_{ci}} \leq 0.2$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.24\lambda \sqrt{f'_{ci}}$
	Compressive	All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered	$0.7 f'_{ci}$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.24\lambda \sqrt{f'_{ci}}$
	Compressive	All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered	$0.7 f'_{ci}$
Final Stresses at Service Load	Tensile	Precompressed tensile zone	0.0
	Compressive	Effective prestress and permanent loads	$0.45 f'_c$
		Effective prestress, permanent loads and transient (live) loads	$0.60 f'_c$
Final Stresses at Fatigue Load	Compressive	Fatigue I Load Combination plus one-half effective prestress and permanent loads	$0.40 f'_c$

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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:

6-02.3(6)B.OPT1.GB6
(June 26, 2000)

If, in the opinion of the Engineer, water conditions at the time of construction do not require seals for footing construction, the Engineer may specify that the seals be omitted. In such a case the Contractor shall lower and construct the footing, as shown in the Plans, at the elevation shown in the Plans for the bottom of seal. The height of the pier shaft or columns shall be adjusted accordingly.

1 No adjustment will be allowed in the unit contract prices for concrete, steel
2 reinforcing bar, and excavation by reason of any increase or decrease in
3 quantities involved due to the deletion of seals.
4
5 6-02.3(6)B.OPT2.GB6
6 (June 26, 2000)
7 If, in the opinion of the Engineer, water conditions at the time of construction do
8 not require seals for construction, the Engineer may specify that the seals be
9 omitted. In such a case, the Contractor shall excavate only to the bottom of
10 footing elevation and shall construct the footing as shown in the Plans.
11
12 No adjustment will be allowed in the unit contract prices for concrete, steel
13 reinforcing bar, and excavation by reason of any increase or decrease in
14 quantities involved due to the deletion of seals.
15
16 6-02.3(9).GR6
17 **Precast Concrete Panels**
18
19 6-02.3(9)A.GR6
20 **Shop Drawings**
21
22 6-02.3(9)A.INST2.GR6
23 The list included in the third paragraph of Section 6-02.3(9)A is supplemented with
24 the following:
25
26 6-02.3(9)A.OPT6.GB6
27 (September 8, 2020)
28 7. Construction sequence and method of forming the precast prestressed
29 concrete stay-in-place panels.
30
31 8. Details of additional reinforcement, if any, provided at lifting and support
32 locations.
33
34 9. Method and equipment used to support the precast prestressed concrete
35 stay-in-place panels during storage, transporting, and erection.
36
37 10. Method used to identify the precast prestressed concrete stay-in-place
38 panel's location for calculating its position accounting for profile grade and
39 transverse slope, and for ensuring correct placement during erection.
40
41 11. Erection sequence, including the method of lifting the panels, placing and
42 adjusting the panels to proper alignment and grade, and supporting the
43 panels during leveling and grouting operations.
44
45 12. Method for forming the grout pad on the exterior face of the prestressed
46 concrete girder flange, if an alternative method is proposed, and at the
47 interior face of the stay-in-place panel to the dimensions detailed in the
48 Plans.
49
50 6-02.3(9)E.GR6
51 **Finishing**
52

1 6-02.3(9)E.INST1.GR6
 2 Section 6-02.3(9)E is supplemented with the following:
 3
 4 6-02.3(9)E.OPT6.GB6
 5 (September 8, 2020)
 6 The Contractor shall furnish a Class 2 surface finish, as specified in Section 6-
 7 02.3(14)B, on all surfaces of the precast prestressed concrete stay-in-place
 8 panels, except as otherwise noted. The top surface of all panels shall be
 9 textured using a metal tined comb. It shall leave striations in the fresh concrete
 10 1/4-inch deep by at least 1/8-inch wide, spaced at 2 to 3 times the groove width
 11 apart, and oriented perpendicular to the prestressing strand. The timing and
 12 method used shall produce the required texture without displacing larger
 13 particles of aggregate. Areas of mortar buildup more than 1/4 inch above the top
 14 surface of the panel shall be removed.
 15

16 6-02.3(9)F.GR6

17 **Tolerances**

18
 19 6-02.3(9)F.INST1.GR6

20 Section 6-02.3(9)F is supplemented with the following:
 21

22 6-02.3(9)F.OPT1.GB6

23 (September 8, 2020)

24 The precast prestressed concrete stay-in-place panels shall not exceed the
 25 following scalar tolerances:
 26

27	Length (perpendicular to strands):	± 3/16 inch
28		
29	Width (parallel to strands):	± 1/4 inch
30		
31	Thickness:	+ 1/4, -1/8 inch
32		
33	Squareness (difference in diagonal lengths):	± 1/4 inch
34		per 5 feet,
35		± 1/2" max.
36		
37	Vertical location of strand group C.G.:	± 1/16 inch
38		
39	Vertical location of individual strands:	± 1/8 inch
40		
41	Horizontal location of strands:	± 1/4 inch
42		
43	Strand or bar projection from ends:	± 1/2 inch
44		
45	Camber (either upward or downward)	± 1/4 inch
46	at time of placement on structure:	per ten feet
47		

48 Precast prestressed concrete stay-in-place panels with tolerances exceeding
 49 those specified above, or with hairline cracks visibly apparent radiating from the
 50 strand at the end of the panel and extending more than three inches along the
 51 panel will be subject to evaluation by the Engineer for possible rejection.
 52

1 6-02.3(9)G.GR6

2 **Handling and Storage**

3

4 6-02.3(9)G.INST1.GR6

5 Section 6-02.3(9)G is supplemented with the following:

6

7 6-02.3(9)G.OPT6.GB6

8 (September 8, 2020)

9 Precast prestressed concrete stay-in-place panels shall be maintained in a flat
10 and level position, without any twisting, at all times. Supports shall be oriented
11 transverse to the prestressed strands, extend the full width of the panel, and be
12 located in a manner to minimize elastic and time-dependent deformation of the
13 panels.

14

15 Unloading and reloading at a site other than the bridge site will be permitted only
16 under the direct supervision of the Engineer. The panels shall not be stacked,
17 unless otherwise allowed by the Engineer. If such permission is granted, the
18 panel supports shall be in the same vertical plane and shall be of sufficient height
19 to prevent damage to the lifting bar loops. The Contractor shall have received
20 the Engineer's verification that the bottom panel of the stack is flat and level,
21 without any twisting, prior to stacking additional panels. The Contractor shall
22 not stack panels on top of adjacent girders of the structure.

23

24 6-02.3(9)I.GR6

25 **Erection**

26

27 6-02.3(9)I.INST1.GR6

28 Section 6-02.3(9)I is supplemented with the following:

29

30 6-02.3(9)I.OPT6.GB6

31 (September 8, 2020)

32 The precast prestressed concrete stay-in-place panels shall be at least 60 days
33 old at the time of placing bridge deck concrete. The Contractor shall place the
34 panels atop the prestressed girders as shown in the Plans, adjusting the leveling
35 bolts as required to match the level of adjacent panels and accommodate
36 camber.

37

38 The grout pad shall be placed after the panels have been fully adjusted for grade
39 and camber. The exposed portion of the grout pad forms that are intended to
40 be left in place permanently shall be tinted to match the color of the adjacent
41 concrete surfaces and shall be secured with an accepted adhesive or other
42 method as accepted by the Engineer.

43

44 Prior to placing the bridge deck steel reinforcing bars and concrete, the
45 Contractor shall place a backer rod at the intersection between panels as shown
46 in the Plans. All intersections between panels shall be sealed to prevent leakage
47 during concrete placement. Prior to placing the bridge deck concrete, the
48 surface of the panels shall be cleaned of all foreign materials and saturated with
49 water for a minimum of 4 hours before fresh concrete is placed.

50

1 6-02.3(10)D.GR6
2 **Concrete Placement, Finishing, and Texturing**
3
4 6-02.3(10)D.INST1.GR6
5 Section 6-02.3(10)D is supplemented with the following:
6
7 6-02.3(10)D.OPT1.GB6
8 **(August 4, 2008)**
9 **Repairing Slab Left Exposed After Removing Existing Curb or Sidewalk**
10 The concrete exposed by the removal of the existing curb or sidewalk shall be
11 removed to a depth of 1-inch below finished grade or to the top of the existing
12 roadway deck steel reinforcing bars, whichever is less. The Contractor shall not
13 remove concrete below the top of the existing steel reinforcing bars. The
14 Contractor shall not damage the bond between the existing steel reinforcing bars
15 and the concrete.
16
17 After roughening, cleaning and wetting the surface in accordance with Section
18 6-02.3(12), the Contractor shall place concrete over the surface to the finish
19 grade of the adjacent concrete roadway deck using a modified Class 4000
20 concrete mix. The maximum aggregate size in the modified Class 4000
21 concrete mix shall be 3/8 inch. The finished portion of the deck shall have the
22 same texture, slope and grade as that of the existing deck.
23
24 6-02.3(10)D.OPT2.GB6
25 **(August 4, 2008)**
26 **Repairing Slab Left Exposed After Removing Existing Curb and Railbase**
27 After roughening and cleaning the concrete exposed by the removal of the
28 existing curb and railbase, that portion of the exposed surface not covered by
29 the new traffic barrier shall be coated with epoxy mortar and finished to have the
30 same texture, slope and grade as that of the existing deck.
31
32 6-02.3(10)D.OPT3.GB6
33 **(August 3, 2015)**
34 **Bridge Drain Risers**
35 The Contractor shall submit a Type 2 Working Drawing consisting of the method
36 of removing the bridge drain grate nipple extrusion, the method of grinding the
37 existing curb as necessary for bridge drain riser installation, and the method of
38 cleaning the existing drain casting surfaces in contact with the drain risers. The
39 shop drawings and weld procedures for the drain riser assemblies shall be
40 submitted in accordance with Sections 6-03.3(7) and 6-03.3(25).
41
42 The existing bridge drain grate bolt, debris from removing the nipple extrusion
43 and cleaning the drain casting contact surfaces, and all debris in the bridge drain
44 cavity, shall be disposed of in accordance with Section 2-02.3.
45
46 After cleaning the bridge drain casting contact surfaces, the Contractor shall
47 install the spacer bars and riser bars of the bridge drain riser assembly as shown
48 in the Plans.
49
50 All exposed surfaces of the spacer bars and riser bars following installation shall
51 be painted with two coats of paint conforming to Section 9-08.1(2)F. Each coat
52 shall have a minimum dry film thickness of two mils.

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6-02.3(10)D.OPT3(A).GB6

(August 4, 2008)

A minimum of four slotted holes, each 2 inches long and 3/4 inches high, shall be provided on each bridge drain riser. The slotted holes shall be located at the bottom of the riser, two on the traffic side of the assembly and one each on the 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.

1 6-02.3(10)D.OPT12.GB6
2 **(April 6, 2015)**
3 **Core Drilled Bridge Deck Drain**
4 The Contractor shall core drill drain holes through the bridge deck of the bridges
5 and in the locations shown in the Plans. The Contractor shall grind the concrete
6 bridge deck to provide a taper at the top of the cored hole if shown in the Plans.
7 The Contractor shall contain, collect and dispose of the concrete cores and
8 debris in accordance with Section 2-02.3.
9
10 The Contractor shall coat the surfaces of the cored holes with epoxy bonding
11 agent, and shall set a bridge deck drain pipe sleeve in place as shown in the
12 Plans. The Contractor shall ensure that the void between the cored hole surface
13 and the outside of the pipe sleeve is completely filled with epoxy bonding agent.
14 The Contractor shall take appropriate measures to prevent the epoxy bonding
15 agent from escaping from the void and shall secure the pipe sleeve in position
16 until the epoxy bonding agent is cured.
17
18 6-02.3(10)F.GR6
19 **Bridge Approach Slab Orientation and Anchors**
20
21 6-02.3(10)F.INST1.GR6
22 Section 6-02.3(10)F is supplemented with the following:
23
24 6-02.3(10)F.OPT2.GB6
25 (August 4, 2008)
26 The pavement end of the bridge approach slab shall be constructed parallel to
27 the pavement seat.
28
29 6-02.3(10)F.OPT3.FB6
30 (August 4, 2008)
31 The pavement end of the bridge approach slab shall be constructed parallel to
32 the pavement seat for bridge(s) No. *** \$\$1\$\$ **. The pavement end of the
33 bridge approach slab shall be constructed normal to the roadway center line for
34 bridge(s) No. *** \$\$2\$\$ **.
35
36 6-02.3(13).GR6
37 **Expansion Joints**
38
39 6-02.3(13).INST1.GR6
40 Section 6-02.3(13) is supplemented with the following:
41
42 6-02.3(13).OPT7.GB6
43 **Expansion Joint Modification**
44
45 6-02.3(13).OPT7(B).GB6
46 **(April 6, 2015)**
47 **Expansion Joint Demolition Plan**
48 The Contractor shall submit Type 2 Working Drawings showing the method of
49 removing the specified portions of the existing bridge expansion joints. The
50 Working Drawings shall show the sequence of demolition and removal, the type
51 of equipment to be used in all demolition and removal operations, and details of

1 the methods and equipment used for containment, collection, and disposal of all
2 debris. The Working Drawings shall show all stages of demolition.
3
4 6-02.3(13).OPT7(C).GB6
5 **(April 6, 2015)**
6 **Joint Preparation and Installation Procedure**
7 The Contractor shall submit a Type 1 Working Drawing consisting of the sealant
8 manufacturer's recommended joint preparation and installation procedure.
9
10 6-02.3(13).OPT7(D).FB6
11 **(April 6, 2015)**
12 **Field Measuring Existing Bridge Expansion Joints**
13 The Contractor shall field measure the following dimensions of the existing
14 bridge expansion joints of Bridge No(s). *** \$\$1\$\$ ***:
15
16 1. Length along the roadway surface and the horizontal and vertical
17 surfaces of the concrete curb.
18
19 2. Opening width at both curb lines and at the centerline of the roadway
20 surface.
21
22 The Contractor shall submit a Type 1 Working Drawing consisting of the field
23 measured dimensions.
24
25 6-02.3(13).OPT7(E).FB6
26 **(April 6, 2015)**
27 **Removing Portions of Existing Bridge Expansion Joints**
28 The Contractor shall remove all concrete, expansion joint materials, overlay, dirt
29 and debris at the bridge expansion joints of Bridge No(s). *** \$\$1\$\$ *** within
30 the blockout dimensions shown in the Plans.
31
32 Concrete removal shall conform to Section 2-02.3(2)A2 and the following
33 restriction on power driven tools:
34
35 1. Jack hammers no heavier than the nominal 30 pound class.
36
37 2. Chipping hammers no heavier than the nominal 15 pound class.
38
39 No other power driven equipment shall be used to remove concrete in the vicinity
40 of the bridge expansion joints. The power driven tools shall be operated at
41 angles less than 45 degrees as measured from the surface of the deck to the
42 tool.
43
44 The Contractor shall dispose of all materials removed from the bridge expansion
45 joints in accordance with Section 2-02.3.
46
47 For polyester concrete headers, or elastomeric concrete headers, the Contractor
48 shall clean and prepare all existing concrete surfaces bonding to the header in
49 accordance with the **Polyester Concrete** or **Elastomeric Concrete** subsection,
50 respectively, to Section 6-02.3 as supplemented in these Special Provisions.
51 For concrete headers, the Contractor shall clean and prepare all existing

1 concrete surfaces bonding to the header in accordance with Section 6-
2 02.3(12)B.
3
4 6-02.3(13).OPT7(F).GB6
5 **(April 6, 2015)**
6 **Drilling Holes and Setting Steel Reinforcing Bars**
7 The Contractor shall drill holes for, and set, steel reinforcing bars into the existing
8 concrete as shown in the Plans in accordance with Section 6-02.3(24)C as
9 supplemented in these Special Provisions.
10
11 6-02.3(13).OPT7(G).GB6
12 **(April 6, 2015)**
13 **Placing Polyester Concrete or Elastomeric Concrete Headers**
14 The Contractor shall form the polyester concrete or the elastomeric concrete
15 headers in accordance with either the ***Polyester Concrete*** or the ***Elastomeric***
16 ***Concrete*** subsection to Section 6-02.3 as supplemented in these Special
17 Provisions. The Contractor shall remove all forms from the bridge expansion
18 joints after casting and curing the polyester concrete or the elastomeric concrete
19 headers.
20
21 6-02.3(13).OPT7(H).GB6
22 **(September 8, 2020)**
23 **Placing Concrete Headers**
24 The Contractor shall form, cast, and cure, the concrete headers in accordance
25 with Section 6-02.3 and as shown in the Plans. Unless the Plans or Special
26 Provisions specify a different strength, the concrete headers shall have attained
27 a minimum compressive strength of 2,500 psi before the Contractor may allow
28 traffic to pass across the expansion joint.
29
30 6-02.3(13).OPT7(I).GB6
31 **(September 8, 2020)**
32 **Placing Expansion Joint Sealant**
33 The Contractor shall have the services of a qualified sealant manufacturer's
34 technical representative physically present at the job site to assist in assuring
35 the proper installation of the rapid cure silicone sealant, provide technical
36 assistance for the use of the joint sealant, train the Contractor's personnel
37 installing the joint sealant, and to observe and inspect the installation of at least
38 the first complete joint.
39
40 The joint sealant shall not be placed against concrete until at least seven days
41 after concrete placement. The joint sealant shall not be placed against polyester
42 concrete or elastomeric concrete until a time period recommended by the
43 sealant manufacturer.
44
45 The Contractor shall clean the bridge expansion joints of all forms, dirt, form oil,
46 grease, and other deleterious material. The Contractor shall clean and prepare
47 the entire joint surface receiving the joint sealant in accordance with the
48 manufacturer's joint preparation procedure, and as recommended by the
49 sealant manufacturer's technical representative, including two stage abrasive
50 blasting surface preparation and compressed air cleaning. All steel surfaces to
51 be in contact with the joint sealant shall be cleaned to an SSPC-SP10 condition.
52 The joint receiving the sealant shall be sound, clean, dry, and frost free.

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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.

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.

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

1 technical representative, including two stage abrasive blasting surface
2 preparation and compressed air cleaning. All steel surfaces to be in contact with
3 the joint sealant shall be cleaned to an SSPC-SP10 condition. The joint
4 receiving the sealant shall be sound, clean, dry, and frost free.

5
6 After the cleaned and prepared joint has received the Engineer's acceptance for
7 joint dimensions, alignment, and preparation, the Contractor shall apply the
8 primer, as recommended by the sealant manufacturer, to all surfaces to be in
9 contact with the joint sealant. The primer shall dry and cure for the time period
10 recommended by the sealant manufacturer for the surface type.

11
12 After the primer is cured, the Contractor shall place the backer rod, and place
13 the rapid cure silicone sealant in accordance with the joint installation procedure.

14
15 If the joint width at the time of installation is less than 1-inch or greater than three
16 inches, the Contractor shall not proceed with the expansion joint modification
17 until the installation procedure is revised as recommended by the sealant
18 manufacturer's technical representative and as approved by the Engineer.

19
20 After installing the rapid cure silicone sealant, the Contractor shall flood the joint
21 area with water. If leakage is detected, the bridge expansion joint system shall
22 be repaired by the Contractor, as recommended by the sealant manufacturer.

23
24 6-02.3(13)C.GR6

25 **Modular Expansion Joint System**

26
27 6-02.3(13)C.INST1.GR6

28 Section 6-02.3(13)C is supplemented with the following:

29
30 6-02.3(13)C.OPT1.FB6

31 **(September 8, 2020)**

32 **Acceptable Manufacturers**

33 The following manufacturers are known to have prequalified modular expansion
34 joint system details by successfully completing fatigue testing in accordance with
35 Section 6-02.3(13)C:

- 36
37 1. The D.S. Brown Company
38 P.O. Box 158
39 300 E. Cherry Street
40 North Baltimore, Ohio 45872-0158
41 Tel. (419) 257-3561
42 Fax (419) 257-2200
43 www.dsbrown.com
44
45 2. Watson Bowman ACME Corporation
46 95 Pineview Drive
47 Amherst, New York 14228-2166
48 Tel. (716) 691-7566
49 Fax (716) 691-9239
50 www.wbacorp.com
51
52 3. Mageba USA, LLC

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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 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

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- 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

6-02.3(14).GR6

Finishing Concrete Surfaces

6-02.3(14)C.GR6

Pigmented Sealer for Concrete Surfaces

6-02.3(14)C.INST1.GR6

Section 6-02.3(14)C is supplemented with the following:

6-02.3(14)C.OPT1.GB6

(April 6, 2009)

The color of the pigmented sealer shall be Washington Gray.

6-02.3(14)C.OPT2.GB6

(April 6, 2009)

The color of the pigmented sealer shall be Mt. St. Helens Gray.

6-02.3(14)C.OPT3.GB6

(April 6, 2009)

The color of the pigmented sealer shall be Mt. Baker Gray.

6-02.3(14)C.OPT4.GB6

(April 6, 2009)

The color of the pigmented sealer shall be Cascade Green.

6-02.3(14)C.OPT5.FB6

(April 6, 2009)

The color for the following structure feature(s) shall match the specified color(s):

Structure and Feature

*** \$1\$\$ ***

Pigmented Sealer Color

*** \$2\$\$ ***

6-02.3(17).GR6

Falsework and Formwork

6-02.3(17)C.INST1.GR6

Section 6-02.3(17)C is supplemented with the following:

6-02.3(17)C.OPT1.FB6

(October 3, 2022)

Falsework opening over railroad tracks shall be approved by the Railroad Company in accordance with Section 1-07.28 and the Special Provisions. The Contractor shall notify the Railroad Company at least *** \$1\$\$ *** working days

1 prior to erecting falsework over a track, and shall include the dimensions of the
2 opening and the duration of the restricted clearance in the submittal.
3

4 6-02.3(17)K.GR6
5 **Concrete Forms on Steel Spans**
6

7 6-02.3(17)K.INST1.GR6
8 The first paragraph of Section 6-02.3(17)K is revised to read as follows:
9

10 6-02.3(17)K.OPT1.GB6
11 (August 3, 2015)

12 Except as otherwise specified, concrete forms on all steel structures shall be
13 removable and shall not remain in place. Where needed, the forms shall have
14 openings for truss or girder members. Each opening shall be large enough to
15 leave at least 1-1/2 inches between the concrete and steel on all sides of the
16 steel member after the forms have been removed. Unit contract prices cover all
17 costs related to these openings.
18

19 Permanent metal forms may be used to form that portion of the concrete slab
20 inside the webs of the steel box girders, subject to the following requirements:
21

- 22 1. Metal forms shall be 18 gage minimum thickness, zinc coated, steel
23 sheet conforming to ASTM A 653 Coating Designation G 210. All
24 accessories shall conform to ASTM A 36 or Section 9-06.1 with a zinc
25 coating of 2.0 ounces per square foot.
26
- 27 2. Forms shall be designed by the Contractor to support the plastic
28 concrete, metal forms, steel reinforcing bars, and a construction live
29 load of 60 pounds per square foot. Deflection of the metal form shall
30 not exceed 1/360 of the span. Camber of the metal form shall not
31 exceed the anticipated deflection. The working unit stress shall not
32 exceed 0.725 of the specified yield strength of the metal form
33 material.
34
- 35 3. The metal forms shall provide for the full depth of the deck slab above
36 the uppermost portions of the form. Bottom transverse steel
37 reinforcing bars of the deck slab shall be at least 1 inch clear of the
38 metal forms at all points. Forms or supports shall not be welded to
39 girder flanges.
40
- 41 4. The bridge deck concrete shall be placed continuously between the
42 transverse construction joints shown in the Plans, except in an
43 emergency when the Engineer authorizes an interruption in the
44 concrete placement. In such an emergency, the Contractor shall
45 construct a transverse joint at the bottom of a flute and shall field drill
46 1/4 inch weep holes through the metal form at 12 inch centers along
47 the line of the joint.
48
- 49 5. All zinc coating on exposed metal form damaged or removed during
50 construction shall be repaired with one coat of paint conforming to
51 Section 9-08.1(2)B, two mils minimum dry film thickness.
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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)L.GR6

Handling and Storage

6-02.3(25)L2.GR6

Girder Lateral Stability and Stress Analysis

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)

Condition	Stress	Location	Allowable Stress (ksi)
Temporary Stress at Transfer and Lifting from Casting Bed	Tensile	In areas without bonded reinforcement sufficient to resist the tensile force in the concrete	$0.0948\lambda\sqrt{f'_{ci}} \leq 0.2$
		In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.24\lambda\sqrt{f'_{ci}}$
	Compressive	All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered	$0.7f'_{ci}$

	Tensile	In areas with bonded reinforcement sufficient to resist the tensile force in the concrete	$0.24\lambda\sqrt{f'_{ci}}$
	Compressive	All locations (except as noted) At section extremities (i.e., flange tips) when lateral bending is explicitly considered	$0.7f'_{ci}$
Final Stresses at Service Load	Tensile	Precompressed tensile zone	0.0
	Compressive	Effective prestress and permanent loads	$0.45f'_c$
		Effective prestress, permanent loads and transient (live) loads	$0.60f'_c$
Final Stresses at Fatigue Load	Compressive	Fatigue I Load Combination plus one-half effective prestress and permanent loads	$0.40f'_c$

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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.

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.

1
2 6-02.4.OPT24.GB6
3 (August 6, 2012)
4 Epoxy crack sealing will be measured by the linear foot along the sealed crack at the
5 concrete surface.
6
7 6-02.4.OPT26.GB6
8 (June 26, 2000)
9 Modify bridge drain will be measured per each for each bridge drain modified.
10
11 6-02.4.OPT27.GB6
12 (June 26, 2000)
13 Plugging existing bridge drain will be measured per each for each bridge drain plugged.
14
15 6-02.4.OPT3.FB6
16 (September 8, 2020)
17 "Modular Expansion Joint System____" contains the following approximate quantities of
18 materials and work:
19
20 *** \$\$1\$\$ ***
21
22 The quantities are listed only for the convenience of the Contractor in determining the
23 volume of work involved and are not guaranteed to be accurate. The prospective bidders
24 shall verify these quantities before submitting a bid. No adjustments other than for
25 accepted changes will be made in the applicable modular expansion joint system lump
26 sum Contract price for "Modular Expansion Joint System____" even though the actual
27 quantities required may deviate from those listed.
28
29 6-02.4.OPT32.GB6
30 (April 6, 2015)
31 Core drilled bridge deck drain will be measured per each for each bridge deck drain core
32 drilled and completed with a PVC pipe sleeve.
33
34 6-02.4.OPT43.GB6
35 (April 6, 2015)
36 Longitudinal seismic restrainer will be measured per each.
37
38 6-02.4.OPT44.FB6
39 (September 8, 2020)
40 Seismic retrofit contains the following approximate quantities of materials and work:
41
42 *** \$\$1\$\$ ***
43
44 The quantities are listed only for the convenience of the Contractor in determining the
45 volume of work involved and are not guaranteed to be accurate. The prospective bidders
46 shall verify these quantities before submitting a bid. No adjustments other than for
47 accepted changes will be made in the lump sum Contract price for "Seismic Retrofit -
48 _____" even though the actual quantities required may deviate from those listed.
49
50 6-02.4.OPT45.FB6
51 (September 8, 2020)
52 Column jacketing contains the following approximate quantities of materials and work:

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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 "Column Jacketing - _____" 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.

6-02.5.GR6

Payment

6-02.5.INST3.GR6

The fifth and sixth bid items under Section 6-02.5 are supplemented with the following:

6-02.5.INST4.GR6

Section 6-02.5 is supplemented with the following:

6-02.5.OPT20.GB6

(April 6, 2015)

The contract quantity specified for "Steel Reinf. Bar for Bridge" includes the quantity for the epoxy-coated steel reinforcing bars located in the substructure of the bridge(s) included in this project.

6-02.5.OPT26.FB6

(August 2, 2010)

"Bridge Deck - _____", lump sum.

The lump sum contract price for "Bridge Deck - _____" shall be full pay for constructing the reinforced concrete portions of the steel bridge superstructure, including *** \$\$1\$\$

6-02.5.OPT33.GB6

(April 6, 2015)

"Expansion Joint Modification _____", lump sum.

6-02.5.OPT49.GB6

(August 1, 2011)

"Epoxy Crack Sealing", per linear foot.

1
2 Payment for taking and submitting cores to the Engineer for testing, as specified by the
3 Engineer, will be by force account in accordance with Section 1-09.6. For the purpose of
4 providing a common Proposal for all Bidders, the Contracting Agency has entered an
5 amount for the item "Force Account Epoxy Crack Sealing Cores" in the bid proposal to
6 become a part of the total bid by the Contractor.
7
8 6-02.5.OPT51.GB6
9 (June 26, 2000)
10 "Modify Bridge Drain", per each.
11
12 6-02.5.OPT52.GB6
13 (June 26, 2000)
14 "Plugging Existing Bridge Drain", per each.
15
16 6-02.5.OPT53.FB6
17 (June 26, 2000)
18 All costs in connection with *** \$\$1\$\$ *** bridge drains as specified shall be included in
19 the unit contract price per square yard for *** \$\$2\$\$ ***.
20
21 6-02.5.OPT58.GB6
22 (April 6, 2015)
23 "Core Drilled Bridge Deck Drain", per each.
24
25 6-02.5.OPT59.FB6
26 (April 6, 2015)
27 All costs in connection with constructing the core drilled bridge deck drains as specified
28 shall be included in the *** \$\$1\$\$ ***.
29
30 6-02.5.OPT71.GB6
31 (April 6, 2015)
32 "Longitudinal Seismic Restrainer", per each.
33
34 6-02.5.OPT72.GB6
35 (April 6, 2015)
36 "Seismic Retrofit - _____", lump sum.
37
38 6-02.5.OPT73.GB6
39 (April 6, 2015)
40 "Column Jacketing - _____", lump sum.
41
42 6-02.5.OPT91.FB6
43 **(June 26, 2000)**
44 **Bridge and Structures Minor Items**
45 For the purpose of payment, such bridge and structures items as *** \$\$1\$\$ *** etc., for
46 which there is no pay item included in the proposal, are considered as bridge and
47 structures minor items. All costs in connection with furnishing and installing these bridge
48 and structures minor items as shown and noted in the Plans and as outlined in these
49 specifications and in the Standard Specifications shall be included in the *** \$\$2\$\$ ***
50

1 6-02.5.OPT92.FB6
2 **(June 26, 2000)**
3 **Bridge Supported Utilities**
4 All costs in connection with placing *** \$\$1\$\$ *** through the superstructure of *** \$\$2\$\$
5 *** as shown in the Plans, including all *** \$\$3\$\$ ***, shall be included in the *** \$\$4\$\$.
6 ***
7
8 6-02.5.OPT93.GB6
9 (June 26, 2000)
10 No additional compensation will be made by reason of any delay or other expense to the
11 Contractor caused by coordination with the utility company or by installing utility company
12 furnished items. However, any unavoidable delays to the Contractor caused by
13 coordination with the utility company or resulting from installing utility company furnished
14 items will be adjusted in accordance with Section 1-08.8.

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1 6-10.GR6
2 **Concrete Barrier**
3
4 6-10.3.GR6
5 **Construction Requirements**
6
7 6-10.3(4).GR6
8 ***Joining Precast Concrete Barrier to Cast – In – Place Barrier***
9
10 6-10.3(5).GR6
11 ***Temporary Barrier***
12
13 6-10.3(5).INST1.GR6
14 The first paragraph of Section 6-10.3(5) is revised to read:
15
16 6-10.3(5).OPT1.GR6
17 (February 3, 2020)
18 For temporary barrier, the Contractor shall use precast concrete barrier type F.
19 Temporary concrete barrier type F shall comply with Standard Plan requirements and
20 cross-sectional dimensions, except that: (1) it may be made in other lengths than
21 those shown in the Standard Plan, and (2) it may have permanent lifting holes no
22 larger than 4 inches in diameter or lifting loops.
23
24 ~~6-10.3(5).INST2.GR6~~
25 ~~The first sentence of Section 6-10.3(5) is revised to read:~~
26
27 ~~6-10.3(5).OPT2.2025.GR6~~
28 ~~(February 26, 2024)~~
29 ~~For temporary barrier, the Contractor may use Type F precast concrete barrier, Type~~
30 ~~2 precast concrete barrier fabricated on or before December 31, 2019, or temporary~~
31 ~~steel barrier.~~
32
33 6-10.3(6).GR6
34 ***Placing Concrete Barrier***
35
36 6-10.5.GR6
37 **Payment**
38
39 6-10.5.INST1.GR6
40 Section 6-10.5 is supplemented with the following:
41
42 6-10.5.OPT1.GR6
43 (August 1, 2016)
44 The following paragraph is added immediately following the bid item, "Temporary Barrier":
45
46 The unit contract price per linear foot for "Temporary Barrier" shall include all costs
47 for furnishing, placing, maintaining, replacing, and cleaning barrier delineation.
48
49 6-10.5.OPT2.FB6
50 (March 6, 2000)
51 All costs in connection with constructing *** \$\$1\$\$ *** barrier shall be included in the ***
52 \$\$2\$\$ ***.

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1 ~~6-11.GR6~~
2 **Reinforced Concrete Walls**

3
4 ~~6-11.1.GR6~~
5 **Description**

6
7 ~~6-11.2.GR6~~
8 **Materials**

9
10 ~~6-11.2.INST1.GR6~~
11 Section 6-11.2 is supplemented with the following:

12
13 ~~6-11.2.OPT1.2025.GR6~~
14 ~~(November 20, 2023)~~

15	Sealing Band	9-04.12
16	Welded Wire Reinforcement	9-07.7
17	Concrete Surface Treatments	9-08.3
18	Grout	9-20.3(2)

19

20 ~~6-11.3.GR6~~
21 **Construction Requirements**

22
23 ~~6-11.3.INST1.GR6~~
24 Section 6-11.3 is replaced in its entirety with the following:

25
26 ~~6-11.3.OPT1.2025.GR6~~
27 ~~(November 20, 2023)~~

28 **~~6-11.3(1) Submittals~~**

29 ~~All components of reinforced concrete retaining walls, regardless of the combination of~~
30 ~~precast and cast in place components shall be submitted simultaneously as a~~
31 ~~comprehensive submittal.~~

32
33 ~~The Contractor shall submit Type 2E Working Drawings consisting of shoring plans in~~
34 ~~accordance with Section 2-09.3(3)D.~~

35
36 **~~6-11.3(1)A Precast Reinforced Concrete Retaining Walls~~**

37 ~~When a precast reinforced concrete retaining wall using Standard Plan D-20.10 is~~
38 ~~detailed in the Plans, the Contractor shall submit a Type 2 Working Drawing of the~~
39 ~~precast unit shop drawings in accordance with Section 6-02.3(9)A. When cast in-~~
40 ~~place footing keys are required, the precast unit shop drawing shall also include the~~
41 ~~following:~~

- 42
43 ~~1. The construction method option selected from the Plans.~~
44
45 ~~2. The anticipated trench excavation wall slopes.~~
46
47 ~~3. The methods for dewatering, if required.~~
48
49 ~~4. The methods for maintaining stability of the walls prior to and during~~
50 ~~placement of the footing key concrete.~~
51
52 ~~5. The location and size of block outs and closure holes.~~

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~~**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 Section 6-02.3(16) and Section 6-02.3(17).~~

~~**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 Section 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 Section 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.~~

1
2 When the Contractor elects to use precast stem panels as described in 6-11.3(1)B1,
3 precast reinforced concrete stem panels shall be Class 4000 concrete unless
4 otherwise shown in the Plans. The precast wall stem panels shall be fabricated full
5 height and shall be fabricated in lengths of 8, 16, or 24 feet.
6

7 **6-11.3(3)A1 Fabrication Tolerances**

8 The construction tolerances for the precast reinforced concrete retaining wall
9 units for Standard Plan D-20.10 and the precast reinforced concrete wall stem
10 panels shall be as follows:

11

12	Height	±¼ inch
13	Width	±¼ inch
14	Thickness	+¼ inch, ⅙ inch
15	Concrete cover for steel reinforcing bar	+¾ inch, ⅙ inch
16	Width of precast concrete wall stem panel joints	±¼ inch
17		
18	Offset of precast concrete wall stem panels	±¼ inch
19	(Deviation from a straight line extending 5 feet on each side of the panel joint)	

20

21 When precast reinforced concrete retaining walls are called out in the Plans to
22 be constructed in accordance with Standard Plan D-20.10, the precast
23 reinforced concrete retaining wall shall be constructed with a joint between
24 adjacent units. The wall and footing joints shall be constructed as shown in the
25 Standard Plans. The joints shall be continuous and shall be of uniform width
26 over the entire height of the precast wall and footing.
27

28 When the Contractor elects to use precast stem panels as described in Section
29 6-11.3(1)B1, precast concrete wall stem panels shall be constructed with a
30 mating shear key between adjacent panels. The shear key shall have beveled
31 corners and shall be 1½ inches in thickness. The width of the shear key shall be
32 3½ inches minimum and 5½ inches maximum. The shear key shall be
33 continuous and shall be of uniform width over the entire height of the precast
34 reinforced wall stem panel.
35

36 **6-11.3(3)A2 Finishing**

37 For precast reinforced concrete retaining wall units for Standard Plan D-20.10
38 and precast reinforced concrete wall stem panels, the Contractor shall provide
39 the specified exterior concrete surface finish as noted, and to the limits shown,
40 in the Plans. Surface finishes shall conform to Section 6-02.3(14). Rolled on
41 textured finishes shall not be used. If the Plans call for a form liner texture on
42 both sides of the wall, it shall be cast in a vertical position.
43

44 **6-11.3(3)A3 Erection**

45 When precast reinforced concrete retaining walls are called out in the Plans to
46 be constructed in accordance with Standard Plan D-20.10, all joints shall be
47 constructed with sealing band installed on the rear (backfill) side of the precast
48 reinforced concrete retaining walls. When cast in place footing keys are
49 required, the precast reinforced concrete retaining walls shall be secured in
50 place during placement and curing of the Class 4000 cast in place footing key.
51 The Contractor shall ensure the concrete is fully consolidated around all headed
52 reinforcing bars that are wet inserted into the Class 4000 concrete.

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~~When the Contractor elects to use precast stem panels as described in Section 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 1/2 inch per foot to facilitate 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 1 1/2 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, 1/2 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.~~

1 **6-11.3(5) Traffic Barrier and Pedestrian Barrier**
2 When shown in the Plans, traffic barrier and pedestrian barrier shall be constructed in
3 accordance with Section 6-02.3(11)A and Section 6-10.3(2), and the details shown in the
4 Plans.
5

6 ~~6-11.4.GR6~~
7 **Measurement**
8

9 ~~6-11.4.INST1.GR6~~
10 Section 6-11.4 is replaced with the following:
11

12 ~~6-11.4.OPT1.2025.GR6~~
13 ~~(November 20, 2023)~~
14 ~~Concrete Class 4000 for retaining wall will be measured as specified in Section 6-02.4.~~
15

16 ~~Except as noted below, concrete Class 7000 for precast retaining wall will be measured~~
17 ~~as specified in Section 6-02.4.~~
18

19 ~~Except as noted below, all reinforcing steel for retaining wall and precast retaining wall~~
20 ~~will be measured as specified in Section 6-02.4.~~
21

22 ~~Exception: When precast retaining walls are called out in the Plans to be constructed in~~
23 ~~accordance with Standard Plan D 20.10 with footing keys, the construction of the footing~~
24 ~~keys shall be incidental to wall construction. The concrete and reinforcing steel, including~~
25 ~~dowels, for the construction of footing keys will not be measured.~~
26

27 ~~Traffic barrier and pedestrian barrier will be measured as specified in Section 6-10.4 for~~
28 ~~cast in-place concrete barrier.~~
29

30 ~~6-11.5.GR6~~
31 **Payment**
32

33 ~~6-11.5.INST1.GR6~~
34 Section 6-11.5 is replaced with the following:
35

36 ~~6-11.5.OPT1.2025.GR6~~
37 ~~(November 20, 2023)~~
38 ~~Payment will be made for each of the following Bid items when they are included in the~~
39 ~~Proposal:~~
40

41 ~~Structure Excavation Class A and Shoring or Extra Excavation Class A will be paid~~
42 ~~for in accordance with Section 2-09.5.~~
43

44 ~~Traffic and Pedestrian Barrier shall be paid for in accordance with Section 6-10.5.~~
45

46 ~~“Conc. Class 4000 For Retaining Wall”, per cubic yard.~~
47 ~~All costs in connection with furnishing and installing PVC pipe for weep holes,~~
48 ~~premolded joint filler, grout, exterior surface finish, and pigmented sealer (when~~
49 ~~specified), shall be included in the unit Contract price per cubic yard for “Conc. Class~~
50 ~~4000 For Retaining Wall”.~~
51

52 ~~“Conc. Class 7000 For Precast Retaining Wall”, per cubic yard.~~

1 All costs in connection with furnishing and installing PVC pipe for weep holes,
2 premolded joint filler, joint sealant, external sealing bands, weld tie assemblies,
3 footing keys, wall joints, footing joints, grout, exterior surface finish, and pigmented
4 sealer (when specified), shall be included in the unit Contract price per cubic yard for
5 "~~Conc. For Retaining Wall~~".
6
7 "~~St. Reinf. Bar For Retaining Wall~~", per pound.
8
9 "~~Epoxy Coated St. Reinf. Bar For Retaining Wall~~", per pound.
10
11 "~~St. Reinf. Bar For Precast Retaining Wall~~", per pound.
12
13 "~~Epoxy Coated St. Reinf. Bar For Precast Retaining Wall~~", per pound.
14
15 Structure Excavation Class A and Shoring or Extra Excavation Class A will be paid
16 in accordance with Section 2-09.5.
17
18 Traffic and Pedestrian Barrier will be paid in accordance with Section 6-10.5.

1 6-15.GR6

2 **Soil Nail Walls**

3

4 6-15.2.GR6

5 **Materials**

6

7 6-15.2.INST1.GR6

8 Section 6-15.2 is supplemented with the following:

9

10 6-15.2.OPT1.GB6

11 **(August 3, 2015)**

12 **Permanent Soil Nail Materials and Components**

13 A soil nail system is a structural system used to transfer tensile loads to soil. A soil nail
14 system may also be specified in the Plans as a nail. A soil nail system includes all steel
15 reinforcing bars, anchorage devices, grout, coatings, sheathings and couplers if used.

16

17 The Contractor shall either select a soil nail system from the Qualified Products List, or
18 submit a Type 2 Working Drawing consisting of the following information:

19

- 20 1. Catalogue cuts or Manufacturer's Certificates of Compliance for centralizers and
21 grout admixtures.
- 22
- 23 2. Manufacturer's Certificate of Compliance for bearing plates, nuts, steel
24 reinforcing bars, tendon encapsulation tubing, and welded shear studs. The
25 Manufacturer's Certificate of Compliance for the nuts shall confirm compliance
26 with the specified strength requirements.

27

28 If the Contractor selects a permanent soil nail system from the Qualified Products List
29 (QPL), the Contractor shall submit a Type 1 Working Drawing consisting of a certificate
30 from the permanent soil nail system fabricator/supplier confirming that the material
31 specifications of the permanent soil nail system components as furnished conform to
32 those specified in the QPL.

33

34 **Component Material Specifications**

35 Bearing plates shall conform to ASTM A 36, ASTM A 529, ASTM A 536, ASTM A 572,
36 ASTM A 588, or AASHTO M 270.

37

38 Centralizers shall be fabricated from plastic, steel, or material which is
39 nondetrimental to the prestressing steel. Wood shall not be used.

40

41 Grout shall be a neat cement grout or a sand-cement grout conforming to Section 9-
42 20.3(4). The compressive strength for the grout shall be as required by the soil nail
43 manufacturer. Grout components shall be as follows:

44

45 Admixtures shall conform to the requirements of Section 9-23.6. Expansive
46 admixtures and accelerators will not be permitted. Admixtures shall be mixed in
47 accordance with the manufacturer's recommendations.

48

49 Aggregates shall conform to the requirements of Section 9-03.

50

51 Cement shall conform to the requirements of Section 9-01, and shall not contain
52 lumps or other indications of hydration.

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Nuts shall conform to either ASTM A 563, Grade B, Hexagonal, ASTM A 536 Grade 100-70-03, ASTM A 29 Grades 12L14, 1215, or C1045, AASHTO M 169 Grades 1117 or 12L14, ASTM A 513 Type 5 Grade 1026, ASTM A 521 Class CF, ASTM A 897 Grade 125/80/10M, or ASTM A 519 Grade 1026, and shall be capable of developing 100 percent of the GUTS of the soil nail. The nuts shall be fitted, where necessary, with a special wedge washer or spherical seat such that the nut bears uniformly on the bearing plate.

Washers shall conform to either ASTM F 436, ASTM A 536 Grade 80-55-06 or ASTM A 47 Grade 32510.

Soil nails shall be deformed steel reinforcing bars conforming to AASHTO M 31, Grade 60 minimum, and Section 9-07.2. All soil nails, except those specified in the Plans to be encapsulated, shall be epoxy-coated in accordance with Sections 6-02.3(24)H and 9-07.3. The soil nails shall be of the type and size specified in the Plans. The soil nails shall not be spliced. The soil nails shall be threaded at the bearing plate end a minimum of six inches. The threading shall be continuous spiral deformed ribbing. Alternatively, threads may be cut into the soil nail if the bar size is increased to the next larger size from the size specified in the Plans at no additional cost to the Contracting Agency.

Tendon encapsulation, when specified in the Plans to provide additional corrosion protection, shall be fabricated from one of the following:

1. High density corrugated polyethylene (PE) tubing conforming to the requirements of ASTM D 3350 Class PE335520C or Class PE335400C, ASTM D 1248, and AASHTO M 252 and having a nominal wall thickness of 40 mils.
2. Corrugated, polyvinyl chloride (PVC) tubing conforming to ASTM D 1784, Class 13464-B, and having a nominal wall thickness of 40 mils.

The soil nails shall be centralized within the sheathing with a minimum 0.2 inch grout cover over the soil nail inside the sheath. The encapsulation shall be constructed at the factory under controlled conditions. Field construction of the encapsulation will not be permitted.

Welded shear studs shall conform to Section 9-06.15, and shall be welded in accordance with Section 6-03.3(25).

6-15.3.GR6

Construction Requirements

6-15.3(8).GR6

Soil Nail Testing And Acceptance

~~6-15.3(8).INST1.GR6~~

~~The second sentence in the fourth paragraph of Section 6-15.3(8) is revised to read:~~

~~6-15.3(8).OPT1.2025.GR6~~

~~(February 13, 2024)~~

1 ~~The pressure gauge shall be selected to place the maximum test load within the~~
2 ~~upper 1/3 of the range of the gauge.~~

3
4 6-15.3(8)A.GR6
5 **Verification Testing**

6
7 6-15.3(8)A.INST1.GR6
8 Section 6-15.3(8)A is supplemented with the following:

9
10 6-15.3(8)A.OPT1.FB6
11 (April 5, 2004)
12 Soil nail verification tests shall be conducted as follows:

13	14	15	16
17	Verification Test Limits	Soil Nail Row	Number of Successful Verification Tests Required
	\$\$1\$\$	***\$\$2\$\$***	***\$\$3\$\$***

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1 ~~6-16.GR6~~
2 **Soldier Pile and Soldier Pile Tieback Walls**
3
4 ~~6-16.3.GR6~~
5 **Construction Requirements**
6
7 ~~6-16.3(3).GR6~~
8 ***Shaft Excavation***
9
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.~~
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1 6-17.GR6

2 **Permanent Ground Anchors**

3

4 6-17.1.GR6

5 **Description**

6

7 6-17.1.INST1.GR6

8 Section 6-17.1 is supplemented with the following:

9

10 6-17.1.OPT1.GB6

11 (January 7, 2013)

12 This work also consists of furnishing, field locating, installing, stressing and testing rock
13 bolts and rock dowels.

14

15 6-17.2.GR6

16 **Materials**

17

18 6-17.2.INST1.GR6

19 Section 6-17.2 is supplemented with the following:

20

21 6-17.2.OPT1.GB6

22 ***(November 2, 2022)***

23 ***Permanent Ground Anchor Materials and Components***

24 A permanent ground anchor system is a structural system used to transfer tensile loads
25 to soil or rock. A permanent ground anchor system may also be specified in the Plans as
26 an anchor, a ground anchor, or a tieback. A permanent ground anchor system includes
27 all prestressing steel, anchorage devices, grout, coatings, sheathings and couplers if
28 used.

29

30 The Contractor shall either select a permanent ground anchor system from the Qualified
31 Products List or submit a Type 2 Working Drawing consisting of the following information:

32

- 33 1. Catalogue cuts or Manufacturer's Certificates of Compliance for anchorage
34 covers, bond breaker, centralizers, corrosion inhibiting grease, end caps, grout
35 admixtures, and strand tendon spacers.
- 36
- 37 2. Manufacturer's Certificates of Compliance for anchor heads, anchor head
38 wedges, bar tendon nuts, bar tendon couplers, tendon encapsulation tubing,
39 trumpet assemblies, and bar tendons or strand tendons. The Manufacturer's
40 Certificates of Compliance for the anchorhead wedges (grippers), and bar
41 tendon nuts and couplers, shall confirm compliance with the specified strength
42 requirements.

43

44 If the Contractor selects a permanent ground anchor system from the Qualified Products
45 List (QPL), the Contractor shall submit a Type 1 Working Drawing consisting of a
46 certificate from the permanent ground anchor system fabricator/supplier confirming that
47 the material specifications of the permanent ground anchor system components as
48 furnished conform to those specified in the QPL.

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Component Material Specifications

Anchorage covers shall have a minimum thickness of 0.20 inches and shall conform to either ASTM A 53 for pipe, or ASTM A 500 for tubing, or ASTM A 36, ASTM A 529, ASTM A 572, ASTM A 588, or AASHTO M 270 for fabricated steel.

Anchorheads shall conform to either ASTM A 36, AASHTO M 169 Grades 1040 or 1045, ASTM A 521 Grade 1045, ASTM A 576 Grade 1045, or ASTM A 536 Grade 80-55-06.

Bearing plates shall conform to either ASTM A 36, ASTM A 572, ASTM A 588, AASHTO M 270, ASTM A 529, or ASTM A 536.

Anchorhead wedges (grippers) shall conform to AASHTO M 169 Grade 12L14, case hardened 0.012 to 0.015 inches deep to Rockwell C 59 to 65.

Bar tendon nuts shall conform to either ASTM A 29 Grade C1045, ASTM A 521 Class CF, AASHTO M 169 Grades 1117 or 1144, or ASTM A 536 Grade 100-70-03, and shall be capable of developing 100 percent of the GUTS of the bar tendon.

Bondbreaker shall conform to the requirements of Section 4.7 of the Post-Tensioning Institute "Recommendations for Prestressed Rock and Soil Anchors", and shall be fabricated from a smooth plastic tube or pipe having the following properties:

1. Resistant to chemical attack from aggressive environments, grout or grease;
2. Resistant to aging by ultra-violet light;
3. Fabricated from material nondetrimental to the tendon;
4. Capable of withstanding abrasion, impact, and bending during handling and installation;
5. Enable the tendon to elongate during testing and stressing; and
6. Allow the tendon to remain unbonded after lock-off.

Centralizers shall be fabricated from plastic, steel, or material which is nondetrimental to the prestressing steel. Wood shall not be used.

Corrosion inhibiting grease shall conform to the requirements of Section 3.2.5 of the Post-Tensioning Institute, "Specification For Unbonded Single Strand Tendons".

Couplers for bar tendons, if required, shall be furnished by the manufacturer of the bar tendons and shall be AASHTO M 169 Grades 1045, 1117 or 1144, ASTM A 519 Grade 1026, or equivalent steel developing 100 percent of the GUTS of the bar tendon without evidence of any failure. Couplers shall not be placed in the bond zone. Couplers for strand tendons will not be allowed.

End caps shall conform to ASTM D 3350 Class PE324420C, Class PE334410C, or Class PE335400C, ASTM D 1248, and AASHTO M 252, ASTM D 1784 Class 1346B, ASTM A 653, or ASTM A 36.

Grout shall be a neat cement grout or a sand-cement grout conforming to Section 9-20.3(4). The compressive strength for the grout shall be as required by the tieback manufacturer. Grout components shall be as follows:

1 Admixtures shall conform to the requirements of Section 9-23.6. Expansive
2 admixtures shall only be added to the grout used for filling sealed
3 encapsulations, trumpets and anchorage covers. Accelerators will not be
4 permitted. Admixtures shall be compatible with prestressing steels and mixed
5 in accordance with the manufacturer's recommendations.
6

7 Aggregates shall conform to the requirements of Section 9-03.
8

9 Cement shall conform to the requirements of Section 9-01, and shall not contain
10 lumps or other indications of hydration.
11

12 Prestressing steel shall consist of either bar tendons with an ultimate tensile strength
13 of 150 ksi conforming to AASHTO M 275 Type II, or strand tendons with an ultimate
14 tensile strength of 270 ksi conforming to AASHTO M 203. The Contractor shall
15 submit Type 1 Working Drawings consisting of certified mill test results and typical
16 stress-strain curves along with samples from each heat, properly marked, for the
17 prestressing steel. The typical stress-strain curve shall be obtained by conventional
18 industry standard practices. The guaranteed ultimate strength, yield strength,
19 elongation, and composition shall be specified.
20

21 Strand tendon spacers shall be fabricated from plastic, steel, or material which is
22 nondetrimental to the prestressing steel. Wood shall not be used.
23

24 Tendon encapsulation, when specified in the Plans to provide additional corrosion
25 protection, shall be fabricated from one of the following:
26

- 27 1. High density corrugated polyethylene (PE) tubing conforming to the
28 requirements of ASTM D 3350 Class PE334410C, Class PE335520C or
29 Class PE335400C, ASTM D 1248, and AASHTO M 252 and having a
30 nominal wall thickness of 40 mils or greater.
31
- 32 2. Corrugated, polyvinyl chloride (PVC) tubing conforming to ASTM D 1784,
33 Class 13464-B, and having a nominal wall thickness of 40 mils or greater.
34

35 Trumpet providing the transition from the bearing plate to the unbonded length
36 corrosion protection shall be fabricated from a steel pipe or tube conforming to the
37 requirements of ASTM A 53 for pipe or ASTM A 500 for tubing. The trumpet shall
38 have a minimum wall thickness of 0.20 inches, and shall be seal welded to the
39 bearing plate. The seal weld shall be visually inspected only, in accordance with
40 Section 6-03.3(25)A.
41

42 6-17.2.OPT2.GB6

43 **(September 8, 2020)**

44 ***Rock Bolt and Rock Dowel Materials***

45 Rock bolts shall be continuously threaded steel reinforcement bars conforming to either;
46 AASHTO M 31 Grade 60 or 75 deformed bar, ASTM 615 Grade 60 or 75 deformed bar,
47 ASTM A 706 Grade 60 or 80 deformed bar, ASTM A 722 Grade 150 Type II, or AASHTO
48 M 275 Grade 150 Type II and shall be capable of being post-tensioned to the design
49 loads, performance test loads, and proof loads specified. The bending requirements of
50 AASHTO M 31, ASTM 615, and ASTM 706 shall be waived.
51

1 Rock dowels shall be continuously threaded steel reinforcement bars conforming to
2 either; AASHTO M 31 Grade 60 or 75 deformed bar, ASTM A 615 Grade 60 or 75
3 deformed bar, or ASTM A 706 Grade 60 or 80 deformed bar with a minimum size of a No.
4 7 bar for Type 1 rock dowels, and a minimum size of a No.11 bar for Type 2 rock dowels.
5 The bending requirements of AASHTO M 31, ASTM 615, and ASTM 706 shall be waived.
6

7 Anchor bar steel for rock bolts and dowels shall be provided with epoxy coating in
8 accordance with either AASHTO M 284, ASTM A 775, or ASTM A 934. The patching
9 material, compatible with coating material and inert in grout selected for use, shall be
10 supplied with each shipment.
11

12 Bearing plated shall be galvanized in accordance with either AASHTO M 111, AASHTO
13 M 232, ASTM A 123, or ASTM A 153, and shall conform to ASTM A 36 Grade 36 or ASTM
14 A 572 Grade 50. Bearing plate size will be reviewed and approved by the Engineer in
15 accordance with Section 6.10 of Post Tensioning Institute "Recommendations for
16 Prestressed Rock and Soil Anchors". Bearing plate thickness shall be not less than 3/4
17 inch and its dimensions not less than 2 inches greater than the drill hole diameter.
18

19 Nuts and couplers shall be galvanized in accordance with either AASHTO M 232 or ASTM
20 A 153 and exceed 100 percent of the MUTS (Minimum Ultimate Tensile Strength) of the
21 bar. For Grades 60, 75, and 80 bar the nuts and coupler shall conform to either AASHTO
22 M 169 or ASTM A 108. For Grade 150 bar the nuts shall conform to either ASTM A 29 or
23 ASTM A 536, couplers shall conform to ASTM A 29.
24

25 Washers shall be galvanized in accordance with AASHTO M 232 or ASTM A 153 and
26 conform to ASTM F 436. Spherical and beveled washers shall be galvanized in
27 accordance with AASHTO M 232 or ASTM A 153 and conform to ASTM A 536 or ASTM A
28 47.
29

30 Centralizers shall be fabricated from plastic or material which is non-detrimental to the
31 pre-stressing steel. Wood shall not be used.
32

33 Grout shall conform to Section 9-20.3(2).
34

35 Sleeved bondbreakers for rock bolts shall be fabricated from plastic tube or pipe having
36 the following properties:
37

- 38 1. Resistant to chemical attack from aggressive environment, grout or corrosion
39 inhibiting compound.
40
- 41 2. Resistant to aging by ultra-violet light.
42
- 43 3. Non-detrimental to bolt. Resistant to damage caused by abrasion, impact,
44 crushing and bending during handling and installation.
45
- 46 4. Enable the bolt to elongate during testing.
47
- 48 5. Resistant to distortion caused by heat generated by the curing of the grout.
49

50 The wall thickness of sleeved bondbreaker shall meet the following:
51

Type	Nominal	Minimum
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HDPE/PP	0.060 in. (1.5 mm)	0.050 in. (1.25 mm)
PVC	0.040 in. (1.0 mm)	0.035 in. (0.9 mm)

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Corrosion inhibiting compounds shall be provided by the manufacturer or shall be either a grease, wax, or gel and conforms to the following:

Properties	Test Method	Criteria		
		Grease	Wax ¹	Gel ¹
Dropping Point, °F min.	ASTM D 566	300°	N/A	N/A
Melting Point, °F min.	ASTM D 127 ⁽²⁾	N/A	145°	500°
Oil Separation @160°F, max.	FTMS 791B Method 321.2	0.5	N/A (product is liquid)	0.5
Water, % max.	ASTM D 95	0.1	0.4	0.4
Flash Point °F, min.	ASTM D 92	300°	300°	
Accelerated Corrosion Test: Salt Fog @ 100°F @ 5 mils, hrs. min.	ASTM B 117	1000	1000	1000
Water Soluble Ions, ppm max.				
a. Chloride	ASTM D 512	10	10	10
b. Sulfides	APHA 4500S ² -E	10	10	10
c. Nitrates	ASTM D 3867	10	10	10
Soak Test: Salt Fog 50/50 Immersion, hrs.	ASTM B 117 Modified	720+	720+	720+
Sheathing Compatibility @150°F				
a. Hardness % max change	ASTM D 4289	15% change	15% change	15% change
b. Volume % max change	ASTM D 4289	10% change	10% change	10% change
c. Tensile Strength % max change	ASTM D 638	30% change	30% change	30% change
Note 1: A combination of wax and gel is possible when approved by the Engineer.				
Note 2: ASTM D 566 may be used when the wax product consistency warrant it.				

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Anchorage covers for rock bolts shall be galvanized in accordance with either AASHTO M 111 or ASTM F 2329 as applicable, and have a minimum thickness of 0.20 inches; and shall conform to either ASTM A 53 for pipe, or ASTM A 500 for tubing, or ASTM A 36, ASTM A 529, ASTM A 572, ASTM A 588, or AASHTO M 270 for fabricated steel.

6-17.3(8).GR6

Testing And Stressing

~~6-17.3(8).INST1.2025.GR6~~

The third sentence in the third paragraph of Section 6-17.3(8) is revised to read:

1 ~~6-17.3(8).OPT1.2025.GR6~~
2 ~~(February 13, 2024)~~
3 ~~The pressure gauge shall be selected to place the maximum test load within the~~
4 ~~upper 1/3 of the range of the gauge.~~

5
6 6-17.3(8).INST1.GR6
7 Section 6-17.3(8) is supplemented with the following:
8

9 6-17.3(8).OPT1.GB6
10 **(January 7, 2013)**
11 **Rock Dowel Proof Testing**

12 At the discretion of the Engineer, up to five percent, but not less than three installed
13 production rock dowels as selected by the Engineer shall be proof tested. The
14 Contractor shall conduct the proof test, and the Engineer will interpret the results.

15
16 The rock dowel shall be tensioned to 25 kips for Type 1 rock dowels, with a calibrated
17 hollow-ram hydraulic jack using a bar extension and coupler attached to the rock
18 dowel. The test load specified for the particular type of rock dowel shall be held for
19 ten minutes. If no loss of load occurs over the ten minute hold period, the rock dowel
20 is acceptable.

21
22 The Engineer may require additional proof testing above the specified five percent
23 maximum if rock dowels fail the proof testing. All failed rock dowels shall be replaced
24 with an additional rock dowel installed in a separate hole at no additional expense to
25 the Contracting Agency.

26
27 Upon acceptance by the Engineer, the Contractor shall permanently stamp or etch
28 the bearing plate of or otherwise label each rock dowel with a unique number
29 assigned by the Engineer, the installation date and the total anchor length.

30
31 **Rock Bolt Testing**

32 The Contractor shall conduct rock bolt testing in accordance with the requirements
33 specified in this Section for permanent ground anchors, including testing equipment,
34 and test load monitoring, recording and documentation.

35
36 **Rock Bolt Performance Testing**

37 At the Engineer's discretion, the Contractor shall conduct up to three
38 performance tests to demonstrate the effectiveness of the construction method
39 for each rock bolt design, and when a significant change is proposed in the
40 construction method.

41
42 Rock bolts shall be tensioned to 120 percent of the design load of the rock bolt
43 for a holding time period of not more than 60 minutes. The Contractor shall
44 monitor the test load and shall document the results in accordance with the
45 requirements specified in this Section.

46
47 The Engineer will analyze the rock bolt performance test results and determine
48 whether the rock bolt is acceptable. A rock bolt is acceptable if both the following
49 conditions are satisfied:
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1. The total elastic movement obtained at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the stressing length.
2. The rock bolt carries the maximum test load with a creep rate that does not exceed 0.04 inches between one and ten minutes, or 0.08 inches per log cycle of time between the six and 60 minute readings.

If the Contractor fails to successfully achieve these testing criteria, the Engineer may require additional rock bolt performance tests to be completed at no additional expense to the Contracting Agency.

Production rock bolting shall not begin until the Contractor has completed performance testing of the design rock bolts and the test results have been accepted by the Engineer.

Rock Bolt Proof Testing

Each production rock bolt shall be proof tested. Proof testing shall consist of tensioning the rock bolt to 120 percent of the design load and holding that load for ten minutes. If no loss of load occurs in this time period, the rock bolt is accepted. If a rock bolt fails this proof test, the rock bolt shall be replaced with an additional rock bolt installed in a separate hole.

After tensioning and achieving a successful rock bolt proof test, the load shall be locked off at 100 percent of the design load and the remaining portion of the rock bolt grouted, if appropriate. The end of the completed rock bolt shall be trimmed to within six inches of the rock face.

Upon acceptance by the Engineer, the Contractor shall permanently stamp or etch the bearing plate of or otherwise label each rock bolt with a unique number assigned by the Engineer, the installation date, the stressing load, and the total anchor length.

6-17.3(8)A.GR6

Verification Testing

6-17.3(8)A.INST1.GR6

Section 6-17.3(8)A is supplemented with the following:

6-17.3(8)A.OPT1.GB6

(August 3, 2015)

Verification tests shall be performed to verify the design of the anchor system. These ground anchor test results shall verify the Contractor's design and be accepted by the Engineer prior to ordering anchor material for the tieback retaining walls. The tests shall be performed on sacrificial test anchors. A minimum of two successful verification tests shall be conducted. The locations shall be close to the anchor location of the production anchors. The test locations shall be selected by the Contractor and accepted by the Engineer, except where specific permanent ground anchor rows between specific station limits are shown in the Plans.

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Verification test anchors shall be constructed using the same procedures and anchor geometry (drill hole diameter, bond length, unbonded length) as the production anchors.

The anchor tested shall be loaded to 150 percent of the factored design load (FDL). The prestressing tendon shall be proportioned such that the maximum stress does not exceed 80 percent of the ultimate strength of the steel. The jack shall be positioned at the beginning of the test such that unloading and repositioning of the jack during the test will not be required.

The verification tests shall be made by incrementally loading the anchors in accordance with the following schedule.

AL - Anchor Alignment Load
FDL - Factored Design Load

<u>Load</u>	<u>Hold Time</u>
AL	1 Min.
0.25FDL	10 Min.
0.50FDL	10 Min.
0.75FDL	10 Min.
1.00FDL	10 Min.
1.15FDL	60 Min.
1.25FDL	10 Min.
1.50FDL	10 Min.
AL	1 Min.

The test load shall be applied in increments of 25 percent of the factored design load. Each load increment shall be held for at least 10 minutes. Measurement of anchor movement shall be obtained at each load increment. The load-hold period shall start as soon as the test load is applied and the anchor movement, with respect to a fixed reference, shall be measured and recorded at 1 minute, 2, 3, 4, 5, 6, 10, 20, 30, 40, 50, and 60 minutes.

The verification test will be considered successful if the anchor meets the criteria for a performance tested ground anchor in Section 6-17.3(9), and in addition, a pull-out failure does not occur at the 1.50FDL maximum load.

The Engineer will give the Contractor a written order concerning ground anchor construction within seven working days after completion of the verification tests. This written order will either confirm the bond lengths as shown in the Contractor's plans for ground anchors or reject the anchors based upon the result of the verification tests.

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:

1 6-17.3(8)B.OPT1.GB6
2 (January 3, 2011)
3 Performance Test Schedule
4

5 Load
6 AL
7 0.25FDL
8 AL
9 0.25FDL
10 0.50FDL
11 AL
12 0.25FDL
13 0.50FDL
14 0.75FDL
15 AL
16 0.25FDL
17 0.50FDL
18 0.75FDL
19 1.00FDL
20 AL
21 0.25FDL
22 0.50FDL
23 0.75FDL
24 1.00FDL
25 1.15FDL
26 AL
27 Jack to lock-off load
28

29 Where: AL - is the alignment load
30 FDL - is the factored design load.
31
32

33 6-17.3(8)C.GR6
34 **Proof Testing**
35

36 6-17.3(8)C.INST1.GR6
37 The proof test schedule following the first paragraph of Section 6-17.3(8)C is revised
38 to read:
39

40 6-17.3(8)C.OPT1.GB6
41 (January 3, 2011)
42 Proof Test Schedule
43

44 Load
45
46 AL
47 0.25FDL
48 0.50FDL
49 0.75FDL
50 1.00FDL
51 1.15FDL
52 Jack to lock-off load

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Where: AL - is the alignment load
FDL - is the factored design load

6-17.3.GR6

Construction Requirements

6-17.3.INST1.GR6

Section 6-17.3 is supplemented with the following:

6-17.3.OPT1.GB6

(September 8, 2020)

Rock Bolt and Rock Dowel Construction Requirements

Rock Bolt and Rock Dowel Installation Experience Requirements

The Contractor's foreman supervising the rock bolt and rock dowel work shall have installed a minimum of 3,000 linear feet of post-tensioned rock bolts or rock dowels on a minimum of five projects within the past five years.

The Contractor's rock bolt and rock dowel drill operators shall have installed a minimum of 1,000 linear feet of post-tensioned rock bolts or rock dowels on a minimum of three projects within the past five years.

The Contractor shall submit a Type 2 Working Drawing consisting of a list documenting the rock bolt and rock dowel work experience of the foreman and drill operators working on the project. This list shall include a brief description of each project and a reference shall be included for each project listed. As a minimum, the reference shall include an individual's name and current phone number.

Rock Bolt and Rock Dowel Submittals

The Contractor shall submit Type 2 Working Drawings consisting of a rock bolt and rock dowel plan. The rock bolt and rock dowel plan shall include the following:

1. The proposed construction sequence and schedule.
2. The proposed drilling method and equipment.
3. The proposed drill hole diameter.
4. The minimum bond zone length for the rock bolts.
5. The proposed anchor steel bars, couplers, nut, bearing plate, flat washer, and beveled washer specifications, including manufacturer's data sheets and mill certificates. Manufacturer's verification for the bearing plate thickness for the specified rock bolt and rock dowel capacities.
6. The proposed grout mix design, including manufacturer's certificate of compliance and the procedures for placing the grout. For rock bolts, if two-stage grouting is used, the means for determining the level of the primary grout for the bond zone. If single-stage grouting is used, the fabrication details for the bondbreaker in the free-stressing length, including corrosion inhibiting compounds.

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- 7. The proposed corrosion protection for the rock bolt and rock dowel systems.
- 8. The proposed stressing procedures and stressing equipment.
- 9. The proposed construction method for upwardly inclined anchors.
- 10. The proposed equipment for measuring and recording the volume of grout injected for production rock bolts and rock dowels.
- 11. The calibration data for each load cell, test jack, pressure gauge and master pressure gauge to be used in the proof testing, in accordance with the calibration requirements specified in Section 6-17.3(3).

Rock Bolt and Rock Dowel Preconstruction Conference

A rock bolt and rock dowel preconstruction conference may be held at the discretion of the Engineer in accordance with Section 6-17.3(4).

Rock Bolt and Rock Dowel Storage and Handling

Rock bolt and rock dowel storage and handling shall conform to the Section 6-17.3(6) requirements for permanent ground anchor tendons.

Field handling procedures for epoxy-coated rock bolts and rock dowels shall conform to Sections 6-02.3(24)H, including providing padding between contact points during storage and lifting, and covering epoxy-coated rock bolts and rock dowels to minimize ultraviolet exposure.

Rock Bolt and Rock Dowel Grout

Grout shall meet the requirements of Section 9-20.3(2).

The use of epoxy or polyester resin as bonding agents will not be allowed.

Rock Bolt and Rock Dowel Installation

General Requirements

The Contractor shall install rock bolts and rock dowels at the location and orientation in accordance with the rock bolt and rock dowel plan accepted by the Engineer. For rock bolts, the Engineer will designate the required free-stressing length. For rock dowels, the Engineer will designate the minimum length.

The rock bolts and rock dowels shall be installed within five degrees of the orientation angle specified by the Engineer. Unless otherwise specified by the Engineer, the angle of installation shall be perpendicular to the rock face and inclined slightly downward at the rock bolt and rock dowel location.

In all cases, at least three-quarters of the bearing plate shall be in contact with the rock face. The orientation of the bearing plate against the rock surface should be within twenty degrees of normal to the bar. Beveled washers shall be used to accommodate all non-perpendicular installations, but should not exceed twenty degrees. If the axis of the anchor is not within five degrees of perpendicular to the rock surface, or within the angle provided by the beveled washer up to a maximum of twenty degrees, or if the rock beneath the bearing plate is not sound or is highly irregular as determined by the Engineer, a bearing pad accepted by the Engineer shall be constructed so that the bar is not bent

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when the nut is torqued during lock-off of the anchor. The Engineer may also require the use of over-sized bearing plates, when the rock surface is weak or highly weathered.

The use of hand drills for advancing the hole will not be allowed without the written permission of the Engineer and demonstrated effectiveness by the Contractor. The drill hole shall be sized to provide a minimum of 1/2 inches of grout cover around the rock bolt or rock dowel. The Contractor shall flush the drill hole of all drill cuttings and debris prior to installing the rock bolt or rock dowel. Holes determined by the Engineer to be unacceptable for rock bolt and rock dowel installation shall be re-drilled by the Contractor at no additional expense to the Contracting Agency.

Rock bolts and rock dowels shall not be precut at the factory to lengths shown in the Plans, but rather shall be delivered to the job site in bulk lengths and field cut to the appropriate lengths. Each rock bolt and rock dowel shall be fitted with a bearing plate, nut, and washers. Prior to placing rock bolts and rock dowels in the drilled holes, all mill scale, flaking rust and grease shall be removed from the rock bolt and rock dowel.

Centralizers shall be placed along the rock bolt or rock dowel at ten foot centers prior to grouting, with a minimum of one centralizer per rock bolt or rock dowel. The lowermost centralizer shall be located within 12 inches of the end of the rock bolt or rock dowel. Centralizers shall be of sufficient strength to support the weight of the anchor bar in the drilled hole and provide a minimum of 0.5 inches of grout cover.

The grout equipment shall produce a grout free of lumps and undispersed cement. The pump shall be equipped with a pressure gauge near the discharge end to monitor grout pressures. The grouting equipment shall be sized to enable the grout to be pumped in one continuous operation. The grout shall be injected from the lowest point of the drill hole. Sufficient grout shall be placed in the drill hole to ensure full encapsulation of the rock bolt or rock dowel. The volume of grout injected, and the corresponding grout injection pressure, for each production rock bolt and rock dowel shall be measured using the methods and equipment specified in the rock bolt and rock dowel plan.

The entire length of the rock bolt and rock dowel shall be corrosion-protected with grout. Bare steel from field cutting of the anchor bar and any damaged galvanizing on the bearing plates, nuts and washers shall be painted in accordance with Section 6-07.3(10)P with one coat of galvanizing repair paint conforming to Section 9-08.1(2)B.

Specific Rock Dowel Requirements

The Contractor shall install Type 1 rock dowels to achieve the design load specified in the Plans; if the design load is not specified in the Plans a 25 kip design load should be used. When the grout has reached final set, the Contractor shall install the bearing plate, washers and nut. The nut shall be torqued to a nominal 100 foot-pounds to ensure proper seating against the rock face. The end of the completed rock dowel shall be trimmed to within six inches of the rock face.

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Specific Rock Bolt Requirements

The Contractor shall select the type of rock bolt and construction method to be used. The Contractor shall embed and install rock bolts to achieve the design load specified in the Plans. The rock bolt shall be sized so that the design load does not exceed 60 percent of the minimum ultimate tensile strength (MUTS) of the rock bolt. In addition, the rock bolt shall be sized so that the maximum test load does not exceed 80 percent of the MUTS for Grade 150 bar or 90 percent of the minimum yield strength for Grade 75 bar. The end of the completed rock bolt shall be trimmed to within six inches of the rock face, and fitted with a galvanized steel anchorage cover filled with a corrosion-inhibiting compound.

6-17.4.GR6

Measurement

6-17.4.INST1.GR6

Section 6-17.4 is supplemented with the following:

6-17.4.OPT1.GB6

(January 4, 2010)

Rock bolts will be measured by the linear foot of rock bolt (unbonded plus bonded length) installed, successfully proof tested, and accepted.

Rock dowels will be measured by the linear foot of rock dowel installed and accepted.

6-17.5.GR6

Payment

6-17.5.INST1.GR6

Section 6-17.5 is supplemented with the following:

6-17.5.OPT1.GB6

(January 4, 2010)

"Rock Bolt", per linear foot.

The unit contract price per linear foot for "Rock Bolt" shall be full pay for performing the work as specified, including all performance and proof testing, and all grout injection up to 200 percent of that calculated at each production rock bolt location.

"Rock Dowel Type _", per linear foot.

The unit contract price per linear foot for "Rock Dowel Type _" shall be full pay for performing the work as specified, including all proof testing, and all grout injection up to 200 percent of that calculated at each production rock dowel location.

"Force Account Rock Bolt & Rock Dowel Grout Exceedance", force account.

Payment for "Force Account Rock Bolt & Rock Dowel Grout Exceedance", for all grout injection over 200 percent of that calculated at each production rock bolt and rock dowel location, will be by force account as provided in Section 1-09.6. Wasted grout will not be measured for payment.

For the purposes of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Force Account Rock Bolt & Rock Dowel Grout Exceedance" in the bid proposal to become a part of the total bid by the Contractor.

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1 6-18.GR6

2 **Shotcrete Facing**

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4 6-18.2.GR6

5 **Materials**

6

7 6-18.2.INST1.GR6

8 Section 6-18.2 is supplemented with the following:

9

10 6-18.2.OPT2.GB6

11 **(August 3, 2015)**

12 ***Coloration for Shotcrete Facing Finishing Alternative C***

13 If shotcrete facing finishing Alternative C is specified, the Contractor shall provide
14 shotcrete coloration for finishing the sculptured shotcrete to match the color of the natural
15 surroundings. Acceptance of the final appearance of the coloration will be based on the
16 pre-production test panel. Acceptance of the long-term properties of the coloration
17 material will be based on a manufacturer's certification, submitted as a Type 1 Working
18 Drawing which verifies the following to be true about the product:

19

- 20 1. Resistance to alkalis in accordance with ASTM D 543.
- 21 2. Demonstrates no change in coloration after 1,000 hours of testing in accordance
22 with ASTM D 822.
- 23 3. Does not oxidize when tested in accordance with ASTM D 822.
- 24 4. Demonstrates resistance to gasoline and mineral spirits when tested in
25 accordance with ASTM D 543.
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31 Additionally, the certification shall provide the product name, proposed mix design and
32 application method, and evidence of at least one project where the product, using the
33 proposed mix and application method, was applied and which has provided at least five
34 years or more of acceptable durability and color permanency.

35

36 6-18.2.OPT3.GB6

37 **(August 3, 2015)**

38 ***Fiber Reinforcement for Shotcrete Facing***

39 Fiber reinforcement for shotcrete facing shall be either steel fibers or macro synthetic
40 fibers.

41

42 Steel fibers shall be cold drawn, deformed steel Type 1 or Type 4 fibers conforming to
43 ASTM A 820 with a minimum tensile strength of 120 ksi. Steel fibers shall have a length
44 between 1.0 and 1.50 inches and shall have a length to diameter ratio of less than 80.
45 The steel fibers used shall be manufactured specifically for shotcrete applications.

46

47 Macro synthetic fibers shall be deformed polyolefin Type 3 fibers conforming to ASTM C
48 1116. Macro synthetic fibers shall have a length between 1.0 and 2.0 inches and shall be
49 between 0.02 and 0.04 inches in diameter. The macro synthetic fibers used shall be
50 manufactured specifically for shotcrete applications.

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52 Fiber reinforcement will be accepted based on the Manufacturer's Certificate of
Compliance.

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6-18.SA1.2025.GR6

VACANT

Section 6-18 including the title is revised and replaced with the following:

~~(November 20, 2023)~~

~~**6-18 Shotcrete Facing**~~

~~**6-18.1 Description**~~

~~This Work consists of constructing permanent shotcrete facing using the wet-mixing method as shown on the Plans. Shotcrete constructed as concrete slope protection shall be constructed in accordance with Section 8-16.~~

~~**6-18.2 Materials**~~

~~Materials shall meet the requirements of the following sections:~~

Cement	9-01.2(1)
Aggregates for Portland Cement Concrete	9-03.1
Premolded Joint Filler	9-04.1(2)
Steel Reinforcing Bar	9-07.2
Epoxy-Coated Steel Reinforcing Bar	9-07.3
Concrete Curing Materials and Admixtures	9-23
Fly Ash	9-23.9
Ground Granulated Blast Furnace Slag	9-23.10
Microsilica Fume	9-23.11
Water	9-25.1

~~Aggregate for shotcrete shall meet the following gradation requirements expressed as percentages by weight:~~

Sieve Size	Percent Passing
1/2 inch	100
3/8 inch	90 to 100
No. 4	70 to 85
No. 8	50 to 70
No. 16	35 to 55
No. 30	20 to 35
No. 50	8 to 20
No. 100	2 to 10
No. 200	0 to 2.5

~~**6-18.3 Construction Requirements**~~

~~**6-18.3(1) Submittals**~~

~~The Contractor shall submit Type 2 Working Drawings prior to beginning construction of all mix design panels. The submittal shall consist of the following:~~

- ~~1. The shotcrete mix design, all mix design test panel measurements,~~
- ~~2. Planned method, equipment, means of access, joint formwork, and materials for placement, finishing and curing of each shotcrete facing specified.~~

- 1 ~~3. A detailed construction sequence which includes order of operations and maximum~~
- 2 ~~timing between operations (including placing, flash coating, finishing, fogging,~~
- 3 ~~curing). The sequence will also include the anticipated crew size and production rate~~
- 4 ~~for the work.~~
- 5 ~~4. Documentation of the certification of each nozzle operator placing permanent~~
- 6 ~~shotcrete facing. Nozzle operator shall be certified for the method and position~~
- 7 ~~required by the Plans.~~

8

9 ~~The Contractor shall submit all test results as a Type 2 Working Drawing after construction of~~

10 ~~all mix design panels as described in these Special Provisions. The Contractor shall give the~~

11 ~~Contracting Agency ample time to review the test results.~~

12

13 ~~**6-18.3(2) Preconstruction Meeting**~~

14 ~~Prior to placing production shotcrete, the Contractor shall participate in a preconstruction~~

15 ~~meeting with the Engineer. At a minimum, attendance at this meeting shall include~~

16 ~~representatives from the Contractor, shotcrete subcontractor, and shotcrete supplier.~~

17 ~~Discussion will include shotcrete testing and acceptance, shotcrete production testing,~~

18 ~~placement and curing.~~

19

20 ~~**6-18.3(3) Shotcrete Testing**~~

21 ~~The Contractor shall retain a testing Laboratory to perform the tests required in these~~

22 ~~provisions. Testing Laboratories' equipment shall be calibrated within 1 year prior to testing~~

23 ~~and testers shall be either ACI certified or qualified in accordance with AASHTO R 18."~~

24

25 ~~All cylinder specimens tested under ASTM C1604 shall be constructed with a L/D ratio of 2:1~~

26

27 ~~**6-18.3(3)A Mix Design Test Panel**~~

28

29 ~~The Contractor shall prepare mix design test panels for each mix design in accordance~~

30 ~~with ASTM C1140 and the following requirements:~~

- 31 ~~1. The panels shall be of adequate size and thickness to complete all required~~
- 32 ~~testing.~~
- 33 ~~2. The nozzle operators producing the panels do not need to be the same~~
- 34 ~~personnel who will be placing the permanent shotcrete facing.~~

35

36 ~~Prior to shotcrete placement for the mix design test panels, the Contractor shall measure~~

37 ~~the air content of the freshly mixed shotcrete in accordance with WAQTC FOP for~~

38 ~~AASHTO T 152.~~

39

40 ~~The Contractor shall obtain cores from the mix design test panels in accordance with~~

41 ~~ASTM C1604. Core diameters shall be at least 4 inches.~~

42

43 ~~The cores shall be tested as follows and shall meet the following criteria:~~

- 44 ~~1. Determine density in accordance with ASTM C1604.~~
- 45 ~~2. Determine compressive strength in accordance with ASTM C1604, except that~~
- 46 ~~the cores shall be cured per Standard Curing in a moist condition per AASHTO~~
- 47 ~~T 23. Minimum compressive strength shall be 4000 psi at 28 days.~~
- 48 ~~3. Determine the chloride ion content in accordance with AASHTO T 260. Chloride~~
- 49 ~~ion content shall not exceed the limits of Section 6-02.3(2) for reinforced~~
- 50 ~~concrete.~~
- 51 ~~4. Satisfy one of the following requirements:~~

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- 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%.~~
- 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.~~

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2 **6-18.3(3)B2 – Preproduction Test Panels for Verification of Placement Methods**

3 One preproduction test panel shall be constructed for each combination of mix
4 design, anticipated shooting orientation, and wall reinforcing layout. The test panels
5 shall be constructed per ASTM C1140. The minimum test panel size shall be 48
6 inches by 48 inches. Test panels shall be constructed to the same thickness shown
7 in the Plans and shall include the same reinforcing type, size and layout and shall
8 have the same finish as specified for the permanent shotcrete facing.
9

10 At the completion of the curing period, the Contractor shall take three cores from
11 each panel in accordance with ASTM C1604. Core diameters shall be at least 4
12 inches. Cores shall be taken at locations where reinforcing steel is present. These
13 cores shall be visually graded as follows:

14 **Grade 1** – Shotcrete specimens are solid; there are no laminations, sandy areas
15 or voids. Small air voids with maximum diameter of 1/8 inch and maximum length
16 of 1/4 inch are normal and acceptable. Sand pockets or voids behind continuous
17 reinforcing steel are unacceptable. The surface against the form or bond plane
18 shall be sound, without sandy texture or voids.

19 **Grade 2** – Shotcrete specimens shall have no more than two laminations or
20 sandy areas with dimensions not to exceed 1/8 inch thick by 1 inch long. The
21 height, width, and depth of voids shall not exceed 3/8 inch. Porous areas behind
22 reinforcing steel shall not exceed 1/2 inch in any direction except along length
23 of reinforcing steel. The surface against the form or bond plane shall be sound,
24 without sandy texture or voids.

25 **Grade 3** – Shotcrete specimens shall have no more than two laminations or
26 sandy areas with dimensions exceeding 3/16 inch thick by 1-1/4 inches long, or
27 one major void, sand pocket, or lamination containing loosely bonded sand not
28 to exceed 5/8 inch thick and 1-1/4 inches in width. The surface against the form
29 or bond plane may be sandy, with voids containing overspray to a depth of 1/16
30 inch.

31 **Grade 4** – Core shall meet, in general, requirements of Grade 3 cores, but may
32 have two major flaws such as described for Grade 3, or may have one flaw with
33 maximum dimension of 1 inch perpendicular to the face of the core, with
34 maximum width of 1-1/2 inches. The end of the core that was shot against the
35 form may be sandy, with voids containing overspray to a depth of 1/8 inch.

36 **Grade 5** – Core that does not meet criteria of core grades 1 through 4, by being
37 of poorer quality, shall be classified as Grade 5.
38

39 For the purpose of qualifying the nozzle operator, the panel will be acceptable if all
40 of the following are met:

- 41 1. The mean grade of the cores is 2.5 or less.
 - 42 2. No core is graded at 4 or higher.
- 43

44 If the mean grade of the cores exceeds 2.5, the Contractor may take three additional
45 cores and calculate a mean based on all six cores. If the mean grade of the six cores
46 is 2.5 or less, the panel will be acceptable.
47

48 The measurements, scaled photographs of the cores and grading shall be submitted
49 to the Engineer as a Type 2 Working Drawing. Cores shall be provided to the
50 Engineer upon request.
51

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~~**

12
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.~~

40
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 1/2 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”.~~

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1 6-19.GR6
2 **Shafts**
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4 6-19.2.GR6
5 **Materials**
6
7 6-19.2(9-36.2(2)).GR6
8 **Shaft Slurry**
9 **Synthetic Slurry**
10 Section 9-36.2(2) is supplemented with the following:
11
12 6-19.2(9-36.2(2)).OPT1.GB6
13 (January 2, 2012)
14 Salt water shall not be used with synthetic slurry for shafts. Fresh water only
15 shall be used.
16
17 6-19.2(9-36.4).GR6
18 **Access Tubes and Caps**
19 The first paragraph of Section 9-36.4 is revised to read:
20
21 6-19.2(9-36.4).OPT1.GR6
22 (October 3, 2022)
23 Access tubes for CSL or TIP testing shall be steel pipe of 0.145 inches minimum wall
24 thickness and at least 1½ inch inside diameter, or shall be Sonitec V2 CSL Tubes
25 manufactured in America by Dextra. Dextra CSL tubes shall use Dextra caps and
26 connectors.
27
28 6-19.3(3).GR6
29 **Shaft Excavation**
30
31 6-19.3(3).INST1.GR6
32 Section 6-19.3(3) is supplemented with the following:
33
34 6-19.3(3).OPT1.GB6
35 (January 2, 2012)
36 Variations in the bearing layer elevation from that shown in the Plans are anticipated.
37 The Contractor shall have equipment on-site capable of excavating an additional 20
38 percent of depth below that shown in the Plans.
39
40 6-19.3(3)B.GR6
41 **Temporary and Permanent Shaft Casing**
42
43 6-19.3(3)B.INST1.GR6
44 Section 6-19.3(3)B is supplemented with the following:
45
46 6-19.3(3)B.OPT2.GB6
47 (January 2, 2012)
48 Shaft casing shall be equipped with cutting teeth or a cutting shoe, and installed
49 by either rotating or oscillating the casing. Installing the casing by vibratory
50 means will not be allowed.
51

1 6-19.3(3)B4.GR6
2 **Temporary Telescoping Shaft Casing**
3
4 6-19.3(3)B4.INST1.GR6
5 The second paragraph of Section 6-19.3(3)B4 is revised to read as follows:
6
7 6-19.3(3)B4.OPT1.GB6
8 (January 2, 2012)
9 Temporary telescoping casing will not be allowed for bridge end pier shafts.
10
11 6-19.3(3)I.GR6
12 **Required Use of Slurry in Shaft Excavation**
13
14 6-19.3(3)I.INST1.GR6
15 Section 6-19.3(3)I is supplemented with the following:
16
17 6-19.3(3)I.OPT1.GB6
18 (August 3, 2015)
19 If the Contractor is utilizing casing that is adequately sealed into competent soils
20 such that the water cannot enter the excavation, the Contractor may, with the
21 Engineer's permission, continue excavation in wet soils without slurry provided
22 the water level within the casing does not rise or exhibit flow.
23
24 6-19.3(4).GR6
25 **Slurry Installation Requirements**
26
27 6-19.3(4)A.GR6
28 **Slurry Technical Assistance**
29
30 6-19.3(4)A.INST1.GR6
31 Section 6-19.3(4)A is supplemented with the following:
32
33 6-19.3(4)A.OPT1.FB6
34 (January 2, 2012)
35 The slurry manufacturer's representative shall be present during construction
36 and completion of the first shaft excavated at the following specific shaft sites:
37
38 *** \$\$1\$\$ ***
39
40 6-19.3(5).GR6
41 **Assembly and Placement of Reinforcing Steel**
42
43 6-19.3(5).INST1.GR6
44 Section 6-19.3(5) is supplemented with the following:
45
46 6-19.3(5).OPT1.GB6
47 (August 1, 2016)
48 For those shafts with a specified minimum penetration into the bearing layer and no
49 specified tip elevation, the Contractor shall furnish each shaft steel reinforcing bar
50 cage, including access tubes for non-destructive QA testing in accordance with
51 Section 6-19.3(6), 20 percent longer than specified in the Plans. The Contractor shall
52 add the increased length to the bottom of the cage. The Contractor shall trim the

1 shaft steel reinforcing bar cage to the proper length prior to placing it into the
2 excavation. If trimming the cage is required and access tubes are attached to the
3 cage, the Contractor shall either shift the access tubes up the cage, or cut the access
4 tubes provided that the cut tube ends are adapted to receive the watertight cap as
5 specified.
6

7 6-19.3(6).GR6
8 **Contractor Furnished Accessories for Nondestructive QA Testing**
9

10 6-19.3(6)E.GR6
11 **Thermal Wire and Thermal Access Points (TAPs)**
12

13 6-19.3(6)E.INST1.GR6
14 Section 6-19.3(6)E is supplemented with the following:
15

16 6-19.3(6)E.OPT1.GB6
17 (January 2, 2018)
18 The thermal wire and associated couplers shall be obtained from the following
19 source:
20

21 Pile Dynamics, Inc.
22 30724 Aurora Road
23 Cleveland, OH 44139
24 (216) 831-6131
25 FAX: (216) 831-0916
26 www.pile.com
27

28 6-19.3(7).GR6
29 **Placing Concrete**
30

31 6-19.3(7)D.GR6
32 **Requirements for Placing Concrete Underwater**
33

34 6-19.3(7)D.INST1.GR6
35 Section 6-19.3(7)D is supplemented with the following:
36

37 6-19.3(7)D.OPT1.GB6
38 (January 2, 2012)
39 The Contractor may use a tremie instead of a concrete pump, subject to the
40 following conditions:
41

- 42 1. The tremie shall have a hopper at the top that empties into a
43 watertight tube at least eight inches in diameter.
- 44 2. The discharge end of the tube on the tremie shall include a device to
45 seal out water while the tube is first filled with concrete.
46

47 ~~6-19.3(7)F.GR6~~
48 ~~**Shaft Construction Joint**~~
49

50 ~~6-19.3(7)F.INST1.GR6~~
51 ~~The second paragraph of Section 6-19.3(7)F is revised to read:~~
52

1
2 ~~6-19.3(7)F.OPT1.2025.GR6~~
3 ~~(February 13, 2024)~~
4 ~~Crosshole sonic log testing operations specified in Section 6-19.3(9) may be~~
5 ~~performed prior to preparing the shaft construction joint as specified herein.~~
6
7 6-19.4.GR6
8 **Measurement**
9
10 6-19.4.INST2.GR6
11 Section 6-19.4 is supplemented with the following:
12
13 6-19.4.OPT3.GB6
14 (January 2, 2012)
15 Fresh water for shaft slurry will be measured in accordance with Section 2-07.4.
16
17 6-19.5.GR6
18 **Payment**
19
20 6-19.5.INST1.GR6
21 Section 6-19.5 is supplemented with the following:
22
23 6-19.5.OPT2.GB6
24 (January 2, 2012)
25 "Fresh Water for Shaft Slurry", per M gal.

1 6-20.GR6

2 **Buried Structures**

3

4 6-20.1.GR6

5 **Description**

6

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 2. Maximum size of coarse aggregate = 3/8-inch.
- 48 3. Fine aggregate proportions shall be 50 ± 5 -percent of the total
49 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

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diameter, by more than 2-inches or one-percent of the dimension, whichever is smaller.

Composite Arch System Placement and Assembly

The CAS structural components shall be erected in accordance with Section 6-20.3(8) and the following:

Assignment of Responsibility

The supplier shall furnish the Contractor the FRP composite hollow tubes, FRP deck panels, stainless steel fasteners, and the structural adhesive at the project site on the date requested by the Contractor.

The Contractor is responsible for the complete installation of the FRP composite hollow tubes including but not limited to unloading and storing the tubes at the project site, erecting and setting the tubes into the reinforced concrete foundation, filling the tubes with ESCC, inspecting the filled tubes for voids, and filling such voids if any are found.

After receiving the accepted fabrication shop drawings, the Contractor shall notify the fabricator to fabricate and deliver the FRP composite hollow tubes, FRP deck panels, stainless steel fasteners, and the structural adhesive to the project site.

Handling and Storage at the Project Site

Care shall be taken when handling the FRP composite hollow tubes such that no damage is caused to the unfilled tubes. When moved or placed by hand, tubes shall be stabilized to prevent tipping over. When moved by hoist, straps shall provide at least 2 inches of padded contact area.

The Contractor is responsible for receiving, unloading, and storing the FRP deck panels. All FRP deck panels shall be handled with care and protected from cuts, scratches, and abrasions. FRP deck panels shall be stored on blocking off the ground and kept clean and dry. Damaged panels shall be replaced at no additional expense to the Contracting Agency.

FRP Tube and FRP Panel Placement and Assembly

The Contractor is advised that the FRP composite hollow tubes have some flexibility prior to filling with ESCC, and tubes out of tolerance without any outside loading may be brought into tolerance with a small force applied at each end. All tubes shall be clearly marked by the fabricator in accordance with the designation in the fabrication shop drawings.

The FRP composite hollow tubes shall be erected in a vertical position and FRP deck panels installed prior to filling the tubes with ESCC. The maximum allowable variation of installed tubes shall be $\pm 1/2$ -inch in-plane and out-of-plane. The FRP deck panels shall be installed over the tubes after the tubes are erected and aligned. The tubes shall be set into the reinforced concrete foundation as shown in the Plans. Care shall be taken when placing the foundation and vibrating around the base of the tubes as to not damage or 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~~
Design

~~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.~~

~~6-20.3(1)D.GR6~~
Geotechnical Considerations

~~6-20.3(1)D.INST1.GR6~~
~~Section 6-20.3(1)D is supplemented with the following:~~

~~6-20.3(1)D.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.~~

- 1 6-20.5.GR6
- 2 **Payment**
- 3
- 4 6-20.5.INST1.GR6
- 5 Section 6-20.5 is supplemented with the following:
- 6
- 7 6-20.5.OPT1.GB6
- 8 (January 10, 2022)
- 9 Payment for the Composite Arch System will be made with the lump sum item, "Contractor
- 10 Designed Buried Structure No. ____" shall be full payment for the Work as specified.

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1 ~~6-21.SA1.2025.GR6~~

2 ~~**Modified Concrete Overlay – Microsilica or Fly Ash**~~

3 ~~Section 6-21 is supplemented with the following new Section immediately before Section 6-~~
4 ~~21.2(1):~~

5

6 ~~**(February 13, 2024)**~~

7 ~~**6-21.2 – Materials**~~

8 ~~Materials shall meet the requirements of the following sections:~~

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~~High Molecular Weight Methacrylate~~

12

~~(HMWM) Resin for Crack and Cold Joint Sealing _____ 6-21.2(3)~~

13

~~Sand for Abrasive Finish of Cracks and Cold Joints _____ 6-21.2(3)~~

14

~~Portland Cement _____ 9-01.2(1)~~

15

~~Blended Hydraulic Cement _____ 9-01.2(1)B~~

16

~~Fine Aggregate _____ 9-03.1~~

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~~Coarse Aggregate _____ 9-03.1~~

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~~Mortar _____ 9-20.4~~

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~~Burlap Cloth _____ 9-23.5~~

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~~Admixtures _____ 9-23.6~~

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~~Fly Ash _____ 9-23.9~~

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~~Microsilica Fume _____ 9-23.11~~

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~~Water for Concrete _____ 9-25.1~~

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1 **6-23 POLYESTER CONCRETE OVERLAY**
2 **(September 3, 2024)**

3 **6-23.1 Description**

4 This Work consists of installing polyester concrete bridge deck overlays, preparing the surface
5 of the concrete bridge deck, removing and replacing unsound concrete (deck repair),
6 surveying, and other Work.

7
8 **6-23.1(1) Definitions**

9 **Existing Bridge Deck Surface** - The surface of the existing concrete bridge deck. It
10 follows wheel ruts and other anomalies.

11
12 **Polyester Concrete Overlay System** - All component materials used to complete the
13 system, including the polyester concrete (which is composed of polyester concrete binder
14 and aggregate), primer, initiators, promoters, catalysts, accelerators, inhibitors, sand for
15 abrasive finish, and crack sealing resin. All component materials of the polyester concrete
16 system shall be provided through a single System Provider.

17
18 **System Provider** – The single corporate entity that provides the Polyester Concrete
19 Overlay System that will be installed on this Contract. There shall be only one System
20 Provider.

21
22 **System Provider Technical Representative** - A duly authorized agent of the System
23 Provider, who has the requisite skills and experience.

24
25 **6-23.1(2) Qualifications**

26 The following shall have the minimum experience as described.

27
28 **6-23.1(2)A System Provider**

29 The proposed System Provider shall have had direct control and responsibility for
30 the proposed polyester concrete overlay system for the qualifying projects for the
31 overlay system. Qualifying Projects - The Polyester Concrete Overlay System shall
32 have been successfully placed on three overlay projects of similar size and scope to
33 the proposed installation within the past ten years. Previously installed overlay must
34 be in service for a minimum of two years showing no signs of installation deficiency,
35 major distress, excessive wear, non-reflective in-service cracks, insufficient skid
36 resistance, or delamination.

37
38 **6-23.1(2)B System Provider Technical Representative**

39 The System Provider Technical Representative shall have a minimum of two years
40 of experience with the exact polyester concrete overlay system to be used on this
41 Contract and be completely competent in all aspects of the Work. The Technical
42 Representative shall have experience on a minimum of three successful projects of
43 similar size and scope to the proposed installation. Thin polymer (broadcast) overlay
44 experience will not be accepted.

45
46 **6-23.1(2)C Polyester Concrete Placement Contractor and Workers**

47 The Contractor that performs the work of placing the polyester concrete system shall
48 have experience on three projects within the past two years placing polyester
49 concrete overlays using equipment as specified herein. Thin polymer (broadcast)
50 overlay experience will not be accepted.

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The following employees shall also meet these qualifications:

1. One on-site supervisor.
2. One volumetric mixer operator.
3. One finishing machine operator.

6-23.2 Materials

Materials shall meet the requirements of the following sections:

<u>Polyester Concrete Binder</u>	<u>6-23</u>
<u>Primer</u>	<u>6-23</u>
<u>Aggregate for Polyester Concrete</u>	<u>6-23</u>
<u>Sand for Abrasive Finish</u>	<u>6-23</u>
<u>Crack Sealing Materials</u>	<u>6-23</u>
<u>Portland Cement</u>	<u>9-01.2(1)</u>
<u>Blended Hydraulic Cement</u>	<u>9-01.2(1)B</u>
<u>Fine Aggregate</u>	<u>9-03.1</u>
<u>Coarse Aggregate</u>	<u>9-03.1</u>
<u>Admixtures</u>	<u>9-23.6</u>
<u>Water for Concrete</u>	<u>9-25.1</u>

6-23.2(1) Polyester Concrete System

All components of the polyester concrete system shall be provided by the System Provider.

1. Manufacturer's Certificates of Compliance - The Contractor shall submit a separate Manufacturer's Certificate of Compliance meeting the requirements of Section 1-06.3 for each of the following components of the polyester concrete system: primer, polyester concrete binder, polyester concrete aggregates, polyester concrete, and sand for abrasive finish. Each Manufacturer's Certificate of Compliance shall identify the applicable lot(s) by lot number.
2. Certified Test Results - Each Manufacturer's Certificate of Compliance shall be accompanied by certified test reports from independent labs for all the properties described in Sections 6-23.2(1)A, B, C, D, and E of this Special Provision, which are associated with each component. Each certified test report shall identify the lot(s) represented by the test report by lot number.
3. Sampling - The Contracting Agency reserves the right to obtain and test samples of components of the polyester concrete overlay system. This includes requiring submittal of samples prior to the first installation or on-site sampling during construction.

6-23.2(1)A Primer

Primer for the substrate concrete surface shall be a wax-free low odor, high molecular weight methacrylate primer, and consist of a resin, initiator, and promoter. The primer shall conform to the following requirements:

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Resin		
Property	Requirement	Test Method
<u>Viscosity</u>	<u>25 cps maximum (Brookfield RVT with UL adapter, 50 RPM at 77°F)</u>	<u>ASTM D2196</u>
<u>Volatile Content</u>	<u>30% maximum</u>	<u>ASTM D2369</u>
<u>Specific Gravity</u>	<u>0.90 minimum at 77°F</u>	<u>ASTM D1475</u>
<u>Vapor Pressure</u>	<u>1.0 mm Hg, maximum at 77°F</u>	<u>ASTM D 323</u>

2

Resin with Initiator		
Property	Requirement	Test Method
<u>Flash Point</u>	<u>180°F minimum</u>	<u>ASTM D 3278</u>
<u>Initiator for the methacrylate resin shall consist of a metal drier and peroxide. If supplied separately from the resin, the metal drier shall not be mixed with the peroxide directly; a VIOLENT EXOTHERMIC REACTION will occur.</u>		

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6-23.2(1)B Polyester Concrete Binder

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Polyester concrete binder shall have the following properties:

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1. Be an unsaturated isophthalic polyester-styrene co-polymer.
2. The binder content shall be 12% +/-1% of the weight of the dry aggregate.
3. Be used with a promoter that is compatible with suitable methyl ethyl ketone peroxide and cumene hydroperoxide initiators.
4. Meet the requirements of the following tables.

15

Resin		
Requirement	Test Method	Requirement
<u>Viscosity</u>	<u>75 – 200 cps (RVT No.1 Spindle, 20 RPM at 77°F)</u>	<u>ASTM D2196</u>
<u>Specific Gravity</u>	<u>1.05 to 1.10 at 77°F</u>	<u>ASTM D1475</u>

Resin with Initiator		
Property	Property	Property
<u>Contain gamma-methacryloxypropyltrimethoxysilane, an organosilane ester silane coupler</u>	<u>>1%</u>	<u>Nuclear Magnetic Resonance</u>
<u>Elongation</u>	<u>35 percent, minimum Type I specimen, thickness 0.25 ± 0.03” at Rate = 0.45 inch/minute.</u>	<u>ASTM D638</u>
	<u>Sample Conditioning: 18/25/50+5/70</u>	<u>ASTM D618</u>
<u>Tensile Strength</u>	<u>2,500 psi, minimum Type I specimen, thickness 0.25 ± 0.03”</u>	<u>ASTM D638</u>

	<u>at Rate = 0.45 inch/minute.</u>	
	<u>2,500 psi, minimum Type I specimen, thickness 0.25 ± 0.03” at Rate = 0.45 inch/minute.</u>	<u>ASTM D618</u>

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6-23.2(1)C Polyester Concrete Aggregates

The polyester concrete aggregate (coarse and fine) shall be thoroughly washed and kiln dried.

Polyester concrete aggregates shall be manufactured from sand and gravel in accordance with the provisions of Section 3-01. Fine aggregate shall consist of natural sand only. Reclaimed concrete aggregate shall not be used.

Polyester concrete aggregate shall have the following properties:

<u>Polyester Concrete Aggregate Gradation</u>	
<u>Sieve Size</u>	<u>Percent Passing</u>
<u>1/2”</u>	<u>100</u>
<u>3/8”</u>	<u>98 minimum</u>
<u>#4</u>	<u>62-85</u>
<u>#8</u>	<u>45-67</u>
<u>#16</u>	<u>29-50</u>
<u>#30</u>	<u>16-36</u>
<u>#50</u>	<u>5-20</u>
<u>#100</u>	<u>0-7</u>
<u>#200</u>	<u>0-3</u>

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<u>Properties of Polyester Concrete Aggregate</u>		
<u>Property</u>	<u>Test Method</u>	<u>Requirement</u>
<u>Los Angeles Wear</u>	<u>AASHTO T96</u>	<u>35% max at 500 rev</u>
<u>Degradation Factor</u>	<u>WSDOT T113</u>	<u>30 minimum</u>
<u>Clay lumps and Friable Particles</u>	<u>AASHTO M6</u>	<u>3.0% by weight</u>
<u>Coal and lignite</u>	<u>AASHTO M6</u>	<u>0.25% by weight</u>
<u>Particles of specific gravity less than 2.0</u>	<u>AASHTO M6</u>	<u>1.0% by weight</u>
<u>Crushed particles</u>	<u>AASHTO T335</u>	<u><45% Crushed Particles, retained on the No. 8 Sieve</u>
<u>Weighted-average aggregate absorption</u>	<u>AASHTO T84 and T85</u>	<u><1%</u>
<u>Mohs Hardness</u>	<u>Mohs Hardness Test</u>	<u>≥7 (≥6.5 if system has demonstrated more than 10 years of success on large scale installations)</u>
<u>Aggregate shall comply with the following properties at the time of mixing the polyester concrete:</u>		

The polyester concrete aggregate shall have a weighted-average moisture content when tested under AASHTO Test Method T255 of not more than one half of the weighted-average aggregate absorption.

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6-23.2(1)D Polyester Concrete

The properties of the polyester concrete, when the polyester resin and polyester concrete aggregates are combined in the proportions of the approved mix design, shall be as follows:

<u>Property</u>	<u>Test Method</u>	<u>Requirement</u>
<u>Portland Cement Concrete Saturated Surface Dry Bond Strength</u>	<u>California Test 551</u>	<u>500 psi minimum at 24 hrs. and 70° ± 1° F (without primer, at 12% resin content by weight of the dry aggregate, on Saturated Surface Dry Specimen)</u>
<u>PCC Saturated Surface-Dry Bond Strength (Adhesive)</u>	<u>California Test 551</u>	<u>700 psi, minimum at 24 hours and 70° ± 1°F (at 12% resin content by weight of the dry aggregate), HMWM primed surface</u>
<u>Abrasion Resistance</u>	<u>California Test 550</u>	<u><2g weight loss (at 12% resin content by weight of the dry aggregate)</u>
<u>Modulus of Elasticity</u>	<u>ASTM C 469</u>	<u>1,000,000 psi to 2,000,000psi (at 12% resin content by weight of the dry aggregate)</u>
<u>Portland Cement Concrete Dry Surface Bond Strength (Adhesive) – Primer installation window verification</u>	<u>California Test 551</u>	<u>700 psi, minimum at 24 hours and 70° ± 1°F (at 12% resin content by weight of the dry aggregate), HMWM primed surface. Polyester concrete placed against primed surface two hours after Primer application.</u>

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6-23.2(1)E Sand for Abrasive Finish

Sand for abrasive finish shall have the following properties:

1. Be commercial-quality blast sand.
2. Have a minimum of 85 percent passing the No. 8 sieve and a maximum of 10 percent passing the No. 20 sieve when tested under AASHTO Test Method T27.
3. Be kiln dried and protected from moisture until time of placement. At the time of application on the polyester concrete, the moisture content of the sand for abrasive finish shall not exceed 0.5 percent.

1 **6-23.2(1)F Shipping, Storing and Handling Polyester Concrete Materials**

2 All components shall be shipped in strong, substantial containers bearing the
3 manufacturers label specifying batch/lot number, brand name, and quantity. If bulk
4 resin is to be used, the contractor shall notify the Engineer in writing 10 days prior to
5 the delivery of the bulk resin to the job site. Bulk resin is any resin that is stored in
6 containers in excess of 250 gallons.

7
8 All materials shall be delivered in their original containers bearing the manufacturer's
9 label, specifying date of manufacturing, batch number, trade name brand, quantity,
10 and mixing ratio. Each shipment of polyester concrete binder and primer shall be
11 accompanied by a Safety Data Sheet (SDS). Bulk resin containers shall be identified
12 by one of the following methods:

- 13
14 1. A label on each container as specified above, or
15
16 2. A marking on each container that uniquely identifies the container,
17 accompanied by documentation that unequivocally identifies the
18 Manufacturer's Certificate of Compliance that is associated with the
19 material in that container.

20
21 The material shall be stored to prevent damage by the elements and to ensure the
22 preservation of their quality and fitness for the Work. The storage space shall be kept
23 clean and dry and shall contain a high-low thermometer. The temperatures of the
24 storage space shall not fall below nor rise above that recommended by the
25 manufacturer. Every precaution shall be taken to avoid contact with flame.

26
27 Stored materials shall be inspected prior to their use and shall meet the requirements
28 of these Special Provisions at the time of use.

29
30 Material which is rejected because of failure to meet the required tests or that has
31 been damaged shall be immediately replaced at no additional expense to the
32 Contracting Agency.

33
34 Sufficient material to perform the entire polyester concrete overlay application shall
35 be in storage at the site prior to field preparations, so that there shall be no delay in
36 procuring the materials for each day's application.

37
38 Prior to Work, a copy of the Contractor's safety plan addressing worker protective
39 clothing, protective breathing devices, measures to address inadvertent contact with
40 chemicals and other appropriate safety measures shall be submitted to the Engineer
41 in accordance with Section 1-07.1(2).

42
43 **6-23.2(2) Concrete Class M**

44 Concrete Class M shall be proportioned in accordance with the following mix design:

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46

<u>Portland Cement Type 1 or Type 2, or</u>	
<u>Blended Hydraulic Cement Type IL(X)</u>	<u>705 pounds</u>
<u>Fine Aggregate</u>	<u>1,280 pounds</u>
<u>Coarse Aggregate</u>	<u>1,650 pounds</u>
<u>Water/Cement Ratio</u>	<u>0.37 maximum</u>
<u>Air (± 1½ percent)</u>	<u>6 percent</u>

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Slump (± 1 inch) 5 inches

Fine aggregate shall be Class 1. Coarse aggregate shall be AASHTO grading No. 7 or No. 8.

The use of a water-reducing admixture conforming to AASHTO M 194 Type A will be required to produce Concrete Class M with the desired slump. Air entraining admixtures shall conform to AASHTO M 154. The use of accelerating admixtures or other types of admixtures is not allowed.

Concrete Class M shall be mixed in batch-plants and transported in ready-mix trucks conforming to Section 6-02.3(4)A.

The maximum allowable and actual water/cementitious ratios shall be calculated using all the available mix water, including water added at the plant, water added in transit and at the job site, water in all admixtures, and the free water in the aggregates but not the water absorbed by the aggregates. The following are considered cementitious materials: Portland Cement and blended hydraulic cement.

6-23.2(3) Crack Sealing Materials

6-23.2(3)A Crack Sealing Resin

Resin for sealing cracks in the polyester concrete overlay shall meet the requirements for polyester concrete binder.

6-23.2(3)B Crack Sealing Sand

Sand for topping the crack sealing resin shall meet the requirements for sand for abrasive finish.

6-23.3 Construction Requirements

6-23.3(1) Sequence of Operations

The sequence of the Work shall be as follows. This sequence is in addition to other sequence and timing requirements in this Special Provision:

1. Shotblasting existing Bridge Deck Surface
2. Surveying of Existing Bridge Deck Surface
3. Perform Type 1 and Type 2 Deck Repair
4. Sandblast, and clean the finished surface
5. Place and cure the primer, polyester concrete overlay, and sand for abrasive finish
6. Check for bond and repair as required
7. Crack Sealing
8. Grind for smoothness
9. Texturing Polyester Concrete

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6-23.3(1)A Traffic Restrictions on Sequence of Operations

Traffic shall not be allowed on shotblasted bridge deck surfaces until step 9 of Section 6-23.3(1) of this Special Provision is completed.

6-23.3(2) Equipment

In addition to meeting the equipment requirements herein, equipment shall meet, and be operated in accordance with, the System Provider Technical Representative's recommendations.

6-23.3(2)A Shot Blaster

The shotblaster shall be a self-contained mobile unit using steel shot to texture the sound concrete to produce a concrete surface profile of CSP-6 or greater in accordance with International Concrete Repair institute (ICRI) 310.2R. The machine shall blast a minimum width of 2 feet per pass. The shotblasting machine shall shotblast, vacuum and store all material removed from the blasted concrete surface in a self-contained unit.

The shotblaster vacuum shall allow the shotblaster to be operated in air pollution sensitive areas and shall be equipped to not contaminate the deck during final preparation for concrete placement.

6-23.3(2)B Power Driven Hand Tools

Power driven hand tools are limited to the following:

1. Jack hammers no heavier than the nominal 30-pound class.
2. Chipping hammers no heavier than the nominal 15-pound class.
3. Other mechanical means acceptable to the Engineer.

Power driven hand tools shall not be operated at angles greater than 45 degrees as measured from the surface of the deck to the tool.

6-23.3(2)C Air Compressor

Air compressors shall be equipped with oil traps to eliminate oil from being blown onto the bridge deck.

6-23.3(2)D Vacuum Machine

Vacuum machines, separate from and in addition to the vacuum built in to the shotblaster, shall be capable of collecting all remaining dust, concrete chips, and other debris encountered while vacuuming. The machines shall be equipped with collection systems that allow the machines to be operated in air pollution sensitive areas and shall be equipped to not contaminate the deck during final preparation for concrete placement.

6-23.3(2)E Polyester Concrete Mixers

A continuous automated mixer shall be used for all polyester concrete overlay applications. The continuous mixer must be capable of mixing the polyester binder resin components with dry aggregate, maintain proper ratios, and achieve set and cure times within the specified limits.

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The Contractor shall submit current certification documents showing that mixing equipment has been calibrated (California Test 109 or similar accepted) with the exact polyester concrete overlay system to be installed. If required by the Engineer, the Contractor shall demonstrate that the proposed volumetric mixing equipment is accurately calibrated through on-site verification. The actual weights of the polyester concrete materials discharged from the volumetric mixer truck shall be accurately represented by the printout ticket measurement produced by the on-board computer tracking system. To demonstrate this the Contractor shall dispense individual aggregate and resin batches and weigh with certified scales. The Engineer will compare certified scale weights to print out ticket measurements. Results of each comparison will be considered within calibration tolerance when ticket measurements and certified scale weights are within 2% of each other. Mixing equipment calibration verification should be considered successfully completed after three consecutive successful results, witnessed by a representative of the Contracting Agency.

The Contractor shall submit a documented history of the use of the placement equipment to successfully install Polyester Polymer Concrete overlays on bridge projects for review and approval by the Engineer. Acceptable experience shall be from installations matching the scope of the proposed project, including thickness and grade establishment requirements.

The continuous mixer shall:

1. Employ an auger screw/chute device capable of sufficiently mixing catalyzed resin with dry aggregate.
2. Employ a plural component pumping system capable of handling polyester binder resin and additives while maintaining proper ratios to achieve set/cure times within the specified limits, evenly across the placement. Resin and all field additives, including catalyst and accelerator, shall flow through a static mix tube for sufficient duration to completely mix the liquid system prior to combination with aggregates.
3. Be equipped with an automatic metering device that measures and records aggregate and resin volumes. Record volumes at least every five minutes, including time and date. Submit recorded volumes at the end of the work shift.
4. Have a visible readout gage that displays running totals of aggregate and resin being recorded.
5. Produce a satisfactory mix consistently during the entire placement, and maintain appropriate resin content, catalyst, and accelerator levels to produce desired outcome.
6. Discharge mixed material directly into the finishing machine.

A portable mechanical mixer of appropriate size for proposed batches, as recommended by the System Provider Technical Representative and approved by

1 the Engineer, may be used for patching applications and for smaller area overlay
2 applications if recommended by the System Provider Technical Representative and
3 approved by the Engineer.

4
5 **6-23.3(2)F Polyester Concrete Paving Machine**

6 Except under the conditions described in Section 6-23.3(2)F1 of this Special
7 Provision, the polyester concrete overlay shall be placed with a self-propelled slip-
8 form paving machine that places, consolidates, and finishes the polyester concrete
9 overlay in one continuous operation. It shall be modified or specifically built to
10 effectively place the polyester concrete overlay in a manner that meets Contract
11 requirements. In addition, the paving machine shall:

- 12
13 1. Employ a vibrating pan to consolidate and finish the polyester concrete.
14 Paver primary finishing pan size shall measure not less than 2 feet in the
15 dimension parallel to the direction of paver travel. Secondary profile
16 finishing attachments, bolt on sections, and trailing pan extensions shall not
17 be included in this measurement.
- 18
19 2. Shall have the necessary adjustments to produce the required cross
20 section, line, and grade, including the ability to recreate transverse grade
21 breaks within 6 inches left or right of existing transverse grade breaks.
- 22
23 3. Be fitted with hydraulically controlled grade automation devices on both
24 sides of the machine to establish the finished profile and cross-slope. These
25 devices shall either (1) average 15 feet in front and behind the center of
26 automation sensors, or (2) the sensor shall be constructed to work with
27 string-line control. It is acceptable to match grade when placing lanes
28 adjacent to polyester concrete overlay placed on this Contract. String line
29 grade establishment may be required to establish proposed grades if
30 required by plan note or elsewhere in the Contract, in which case grade
31 averaging beams will not be acceptable.
- 32
33 4. Have sufficient engine power and weight to provide adequate vibration of
34 the finishing pan while maintaining consistent forward placement speed.
- 35
36 5. Be capable of both forward and reverse motion under its own power.
- 37
38 6. Demonstrate successful performance with the trial overlay.

39
40 Wheel or rubber tire mounted paving machines will not be allowed.

41
42 **6-23.3(2)F1 Vibratory Screed and Small Surfaces**

43 Roller type screeds will not be accepted.

44
45 A vibratory screed riding on preset forms or rails set at a maximum width of 12
46 feet may be used on structures that have live load paving train restrictions.

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48 Shoulder pours of 6 feet wide or less may be placed without the use of a paving
49 machine.

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Finishing of patch areas shall be completed using hand concrete finishing tools. Patches shall be placed flush with the top of the existing deck surface.

6-23.3(2)G Smoothness Grinding Equipment

Equipment for grinding polyester concrete overlay that does not meet the surface smoothness requirements shall use diamond embedded saw blades gang mounted on a self-propelled machine that is specifically designed to smooth and texture concrete pavement or polyester concrete overlays. The equipment shall not damage the underlying surface, cause fracture, or spalling of any joints. The final surface texture shall be uniform in appearance with longitudinal corduroy type texture. The grooves shall be between $\frac{3}{32}$ and $\frac{5}{32}$ inches wide, and no deeper than $\frac{1}{16}$ inch. The land area between the grooves shall be between $\frac{1}{16}$ and $\frac{1}{8}$ inches wide.

6-23.3(2)H Texturing Equipment

Equipment for texturing the polyester concrete overlay shall use diamond tipped saw blades mounted on a power driven, self-propelled machine that is designed to texture concrete surfaces. The grooving equipment shall provide grooves that are $\frac{1}{8}'' \pm \frac{1}{64}''$ wide, $\frac{3}{16}'' \pm \frac{1}{16}''$ deep, and spaced at $\frac{3}{4}'' \pm \frac{1}{8}''$.

In locations where saw cutting cannot be done the Contractor is allowed to use the spring tining method for texturing. The spring tining shall provide the same groove, spacing and depth of the saw cut texture.

The Contractor shall demonstrate that the method and equipment for texturing the bridge deck will not chip, spall or otherwise damage the overlay.

6-23.3(3) Submittals

The Contractor shall submit the following Working Drawings in accordance with Section 1-05.3:

1. A Type 2 Working Drawing of the shot-blasting equipment with associated background information and catalog cuts.
2. A Type 2 Working Drawing of the Debris Containment and Disposal Plan. This plan shall describe the methods and materials used to contain, collect, and dispose of all concrete debris generated by all operations, including but not limited to shotblasting, Type 1 Deck Repair, Type 2 Deck Repair, sandblasting, and cleaning. The Working Drawing shall also address provisions for protecting adjacent traffic from flying debris.
3. A Type 2 Working Drawing of the polyester concrete mix design meeting the requirements of Section 6-23.2(1) of this Special Provision. The mix design shall include a recommended initiator percentage for the expected application temperature.
4. A Type 1 Working Drawing of the mix design for concrete Class M. This submittal shall be on WSDOT Form 350-040 and shall provide a unique identification for each mix design. A unique identification for the mix design is composed of the combination of the Mix Design Number and the Concrete Plant Number.

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5. A Type 2 Working Drawing of 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 concrete binder.
 - b. One pint minimum of the primer.
 - c. 100 pounds minimum of polyester concrete aggregate.
6. A Type 2 Working Drawing of the paving equipment specifications and details of how the paver will maintain the required longitudinal and transverse grades.
7. A Type 1 Working Drawing of the survey data collected as required in Section 6-23.3(6) of this Special Provision.
8. A Type 1 Working Drawing of the measurements documenting the deck patching areas as required by Section 6-23.3(7)B of this Special Provision.
9. A one-pint sample of each batch of promoted/initiated primer shall be retained and submitted to the Engineer at the time of primer application to verify proper catalyzation.
10. A Type 1 Working Drawing of the readings of the rebound hammer used shall be correlated to the compressive strength of the polyester concrete product in accordance with Section 5.4 of ASTM C805 and the Contractor.
11. A Type 2 Working Drawing of the qualifications of on-site supervisors, volumetric mixer operators, and finishing machine operators, in accordance with Section 6-23.1(2)C of this Special Provision.
12. A Type 2 Working Drawing of the method and materials used to contain primer and polyester concrete within the deck area specified to receive the overlay.
13. A Type 2 Working Drawing of the Contractor's Safety plan addressing worker protective clothing, protective breathing devices, measures to address inadvertent contact with chemicals and other appropriate safety measures.
14. A Type 2 Working Drawing of the equipment to be used for texturing.
15. A Type 2 Working Drawing of the Certified test results as required in Section 6-23.2(1) of this Special Provision.
16. A Type 1 Working Drawing of the Documentation of the System Provider Technical Representative's experience, demonstrating compliance with the experience requirements, including the following:
 - a. Years of Experience with the proposed Polyester Concrete Overlay System
 - b. Project location
 - c. Project construction date

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d. Overlay quantities

e. Reference name and contact information for owner representative

17. A Type 2 Working Drawing of the Documentation of the Polyester Concrete Overlay System and System Provider experience, demonstrating compliance with experience requirements. Submit written installation instructions, safety data sheets, and independent test results for approval. Projects of similar scope shall be evaluated considering placement temperature, traffic return, allowable cure time, placement thickness, average daily traffic, surface texture, environmental conditions, and any other factors unique to the application. System failure examples obtained from other Public Agencies may be considered for evaluation and rejection whether submitted by the Contractor or obtained otherwise. Submit documentation and references of the polyester concrete overlay system experience including the following:

a. Project location

b. Contracting Agency

c. Project construction date

d. Overlay quantities and component details

e. Reference name and contact information for owner representative

18. A Type 2 Working Drawing of the Documentation of the experience of the Polyester Concrete Placement Contractor and Workers that will place the polyester concrete overlay system. The documentation of Contractor and employee qualifications shall include the following:

a. Project location

b. Contracting Agency

c. Project construction date

d. Overlay volume and area quantities

e. Reference name and contact information for owner representative

19. A Type 2 Working Drawing of the certification and test reports of the polyester concrete mixer and documented history of the use of the placement equipment to successfully install Polyester Polymer Concrete overlays.

20. A Type 2 Working Drawing of the Overlay Placement Plan. The Contractor shall submit an Overlay Placement Plan that includes the following:

a. Schedule of overlay work and testing for each bridge

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- b. Staging plan describing overlay placement sequence including:
 - i. Construction joint locations
 - ii. Sequence of placement
 - iii. Paving widths
 - iv. Anticipated paving lengths
 - v. Paving directions
 - vi. Joint locations
 - vii. Location of proposed trial overlay(s)
- c. Description of equipment used for:
 - i. Surface preparation including grinding and shot blasting
 - ii. Applying primer
 - iii. Measuring, mixing, placing, and finishing the polyester concrete overlay
 - iv. Applying sand for abrasive finish
- d. Method of protecting and finishing inlets and bridge drains
- e. Method for isolating expansion joints
- f. Method for ensuring shotblasting achieves a concrete surface profile of ICRI 310.2R CSP-6 or greater
- g. Method for measuring and maintaining overlay thickness and profile
- h. Cure time for polyester concrete
- i. Storage and handling of primer and polyester concrete components
- j. Procedure for disposal of excess primer, polyester concrete, and containers
- k. Procedure for cleanup of mixing and placement equipment

6-23.3(4) Operations on the Bridge Deck

The following apply to all Contractor operations on the bridge deck, including but not limited to cleaning concrete surfaces, Type 1 and Type 2 Deck Repair, sandblasting, shot-blasting, placing, consolidating, finishing, curing, sawing, and crack sealing the overlay.

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1. The Contractor shall not use water on the bridge deck nor allow water from their operations to come into contact with the concrete bridge deck at any time, except for the following:
 - a. Placing and curing Class M concrete. Using water for this application shall be carefully controlled to prevent the water from coming into contact with the bridge deck outside of the patch.
2. The Contractor shall protect adjacent traffic from flying debris in accordance with its Debris Containment and Disposal Plan submitted in accordance with Section 6-23.3(3) of this Special Provision.
3. The Contractor shall collect, contain, and dispose of all concrete debris in accordance with its Debris Containment and Disposal Plan submitted in accordance with Section 6-23.3(3) of this Special Provision.
4. Rainwater and stormwater runoff that comes in contact with the bridge deck shall be considered process wastewater and shall be managed in accordance with Section 8-01.

6-23.3(5) Initial Surface Preparation

Initial surface preparation is for the purpose of exposing the concrete substrate for chain dragging and deck repair.

6-23.3(5)A Prerequisites to Initial Surface Preparation

Initial surface preparation shall not begin until the Contractor has completed all the following:

1. Demonstrated that all Work, for a given bridge, needed to complete items 1, 2, 3, 4, 5, 6, 7, 8, and 9 of Section 6-23.3(1) of this Special Provision can and will be completed in one and only one construction season.
2. Submitted all submittals required in Section 6-23.3(3) of this Special Provision and addressed all the Engineer's comments to the satisfaction of the Engineer.

6-23.3(5)B Shotblasting

For newly constructed bridge decks, the deck concrete shall cure a minimum of 28 days and attain design concrete compressive strength prior to shotblasting.

The areas to receive polyester concrete overlay shall be shotblasted, or sandblasted if the shotblast equipment cannot access areas to be prepared, to produce a concrete surface profile of CSP-6 or greater in accordance with International Concrete Repair Institute (ICRI) 310.2R. All weak or loose surface mortar shall be removed, aggregates within the concrete exposed, and open pores in the concrete exposed, as well as a visible change in the concrete color.

Dust and debris generated during shotblasting shall be picked up and stored in the vacuum unit built into the shotblaster and minimal dust shall be created during the blasting operation.

1 **6-23.3(6) Surveying of Existing Bridge Deck**

2 After shotblasting the concrete surface as specified in these Provisions, the Contractor
3 shall complete a survey of the Existing Bridge Deck Surface(s) specified to receive
4 Polyester concrete overlay for use in establishing the existing cross section and profile
5 grade elevations.

6
7 The Engineer will provide the Contractor with primary survey control information
8 consisting of descriptions of two primary control points used for the horizontal and vertical
9 control. Primary control points will be described by reference to the bridge or project-
10 specific stationing and elevation datum. The Engineer will also provide horizontal
11 coordinates for the beginning and ending points and for each Point of Intersection (PI) on
12 each centerline alignment included in the project. The Contractor shall provide the
13 Engineer 21 calendar days' notice in advance of scheduled concrete surface shotblasting
14 work to allow the Engineer time to provide the primary survey control information.

15
16 The Contractor shall verify the primary survey control information furnished by the
17 Engineer and shall expand the survey control information to include secondary horizontal
18 and vertical control points as needed for the project. The Contractor's survey records shall
19 include descriptions of all survey control points, including coordinates and elevations of
20 all secondary control points.

21
22 The Contractor shall maintain detailed survey records, including a description of the work
23 performed on each shift, the methods utilized to conduct the survey, and the control points
24 used. The record shall be of sufficient detail to allow the survey to be reproduced. A Type
25 1 Working Drawing of each day's survey record shall be provided to the Engineer within
26 3 working days after the end of the shift. The Contractor shall compile the survey
27 information in an electronic file format acceptable to the Engineer (file formats submitted
28 shall be compatible with InRoads and MicroStation).

29
30 Survey information collected shall include station, offset, and elevation for each lane line
31 and curb line. Survey information shall be collected at even 20-foot station intervals and
32 at the centerline of each bridge expansion joint. The Contractor shall ensure a surveying
33 accuracy to within ± 0.01 feet for vertical control and ± 0.2 feet for horizontal control. The
34 survey shall extend 100 feet beyond the bridge back of pavement seat.

35
36 Except for the primary survey control information and final grade profile and cross-
37 section furnished by the Engineer, the Contractor shall be responsible for all calculations,
38 surveying, and measuring required for setting, maintaining, and resetting equipment and
39 materials necessary for the construction of the overlay to the final grade profile and cross-
40 section. The Engineer may post-check the Contractor's surveying, but these post-checks
41 shall not relieve the Contractor of responsibility for internal survey quality control.

42
43 The Engineer will establish the final grade profile and cross-section based on the
44 Contractor's survey and will provide the final grade profile and cross-section to the
45 Contractor within five working days after receiving the Contractor's survey information.

46
47 The Contractor shall not begin shotblasting concrete surface work as specified in these
48 Provisions until receiving the final grade profile from the Engineer.

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50 **6-23.3(7) Deck Repair**

51 Deck repair Work shall not commence until shotblasting operations are complete.

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6-23.3(7)A Classification

Deck repair will be classified as Type 1 Deck Repair or Type 2 Deck Repair. The determination of whether an area will be classified as Type 1 or Type 2 will be made after completion of deck repair excavation, repair of steel reinforcing bars, and removal of concrete debris.

6-23.3(7)B Chain Drag

After the entire lane or strip to be overlaid has been shotblasted and cleaned as required in Section 6-23.3(5) of this Special Provision, the entire surface shall be inspected by the Contractor, in the presence of the Engineer, in accordance with ASTM D4580, Method B. Based on that inspection, the Contractor shall mark those areas, meeting any of the following criteria, for removal:

1. Unsound concrete in accordance with ASTM D4580, Method B.
2. Lack of bond between existing concrete and reinforcing steel.
3. All existing nonconcrete patches.

After all deck repair excavation is complete, the Contractor shall measure and submit to the Engineer as a Type 1 Working Drawing the location and size of each area identified above by station, offset, length, width, average depth, and deck repair type, using the form provided by the Engineer.

6-23.3(7)C Deck Repair Excavation

The areas marked for removal in Section 6-23.3(7)B of this Special Provision shall be excavated with equipment as described in Section 6-23.3(2)B of this Special Provision. Excavation shall be to the depth necessary to remove all loose and unsound material, without damaging reinforcing steel or sound concrete.

Care shall be taken in removing the deteriorated material to not damage the existing sound concrete or steel reinforcing bars that are to remain in place. All removal shall be accomplished by making vertical edges at the boundaries of the repair area. In no case shall the depth of a sawn vertical cut exceed ¾ inch or to the top of the top steel reinforcing bars, whichever is less.

Bridge deck areas outside the repair area damaged by the Contractor's operations shall be repaired by the Contractor at no additional expense to the Contracting Agency, and to the satisfaction of the Engineer.

6-23.3(7)D Repair of Steel Reinforcing Bars

Where existing steel reinforcing bars inside deck repair areas show natural deterioration greater than 20-percent section loss, the Contractor shall furnish and place steel reinforcing bars alongside the deteriorated bars in accordance with the details shown in the Standard Plans. Payment for such extra Work will be by force account as provided in Section 1-09.6.

All reinforcing steel damaged due to the Contractor's operations shall be repaired by the Contractor. Damage to rebar shall be understood to include damage to epoxy coating.

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The repair shall be as follows or as directed by the Engineer:

1. Damage to epoxy coating, when present on existing steel reinforcing bars, shall be repaired in accordance with Section 6-02.3(24)H.
2. Damage to bars resulting in a section loss of 20 percent or more of the bar area shall be repaired by chipping out the adjacent concrete and splicing a new bar of the same size. Concrete shall be removed to provide a 3/4-inch minimum clearance around the bars. The splice bars shall extend a minimum of 40 bar diameters beyond each end of the damage.
3. All bars partially or completely removed from the deck shall have the damaged portions removed and spliced with new bars as outlined in item 2 above.

For bridge decks not constructed under the same Contract as the polyester concrete overlay, responsibility for costs to repair damage shall be allocated as follows:

1. Repairing damage that occurs during shotblasting to coatings on existing reinforcing steel shall be paid for in accordance with Section 1-09.6.
2. Repairing damage to existing reinforcing steel that is caused by the Contractor's negligence shall be at no additional expense to the Contracting Agency.

6-23.3(7)E Type 1 Deck Repair

An area will be classified as a Type 1 Deck Repair when the completed concrete excavation either (a) exposes no more than one-half the periphery of a bottom bar of the top layer of steel reinforcement, or (b) the length of an exposed bar does not exceed 12-continuous inches along the length of the bar.

The scope of Work for Type 1 Deck Repair includes:

1. Excavating and disposing of the unsound concrete and unsound nonconcrete patches within the repair area.
2. Repair of steel reinforcing bars damaged by the Contractor.
3. Sandblast the surface and exposed rebar.
4. Providing a CSP-6 surface roughness on existing nonconcrete patches that are sound.

6-23.3(7)F Type 2 Deck Repair

An area will be classified as a Type 2 Deck Repair when the completed concrete excavation either exposes more than one-half the periphery of a bottom bar of the top layer of steel reinforcement or the length of an exposed bar exceeds 12-continuous inches along the length of the bar.

The scope of Work for Type 2 Deck Repair includes:

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1. Excavating and disposing of the unsound concrete and unsound nonconcrete patches within the repair area, below the shotblasted depth.
2. Repairing steel reinforcing bars damaged by the Contractor.
3. Sandblasting the area and exposed rebar prior to placing deck patching concrete.
4. Saturating and removing freestanding water.
5. All work related to patching and curing the excavated area with Class M concrete in accordance with Section 6-23.2(2) of this Special Provision.

6-23.3(7)G Filling and Curing Deck Repair Areas

Type 1 Deck Repairs shall be filled with polyester concrete as part of placing the polyester concrete overlay. Payment for filling Type 1 deck repairs with Polyester Concrete shall be incidental to bid item "Polyester Concrete Overlay".

Type 2 Deck Repairs shall be patched with concrete class M. The top of these patches shall be finished with a wood float, flush with the top of the shotblasted surface. All Type 2 deck repair patching shall be performed well enough in advance of the polyester concrete overlay to allow all patches to cure as required below.

Before placing Class M concrete in the Type 2 deck repairs, the Contractor shall clean the surfaces to which the concrete will be applied (including rebar) by sandblasting and blowing clean with oil-free air. The Contractor shall make sure the existing concrete is well saturated at the time of placing concrete in the Type 2 deck repairs but shall remove all freestanding water prior to placing the concrete. The Contractor shall place concrete class M in the Type 2 deck repair areas while the existing concrete is wet. It shall be consolidated in accordance with Section 6-02.3(8). Concrete Class M shall be wet-cured a minimum of 42 hours, as follows:

1. The concrete shall be immediately covered with a single layer of clean, new or used, wet burlap. The burlap shall have a maximum width of 6 feet. The Engineer will determine the suitability of the burlap for reuse, based on the cleanliness and absorption ability of the burlap. Care shall be exercised to ensure that the burlap is well drained and laid flat with no wrinkles on the deck surface. Adjacent strips of burlap shall have a minimum overlap of 6 inches.
2. Once in place the burlap shall be lightly fog sprayed with water. A separate layer of white, reflective type polyethylene sheeting shall immediately be placed over the wet burlap.
3. As an alternative to the application of burlap and fog spraying described above, the Contractor may propose a curing system using proprietary curing blankets specifically manufactured for bridge deck curing. The Contractor shall submit a Type 2 Working Drawing consisting of details of the proprietary curing blanket system, including product literature and details of how the system is to be installed and maintained.

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4. The burlap shall be kept wet continuously and the wet curing regimen as described shall remain in place for a minimum of 42-hours.

During the curing period of concrete placed in Type 2 deck repairs, all vehicular and foot traffic shall be prohibited in the repair area.

6-23.3(7)H Filling Existing Bridge Deck Wheel Ruts

Existing Bridge Deck Ruts shall be filled with polyester concrete as part of placing the polyester concrete overlay.

6-23.3(8) Polyester Concrete Trial Overlay

Prior to constructing the overlay, the Contractor shall place one or more trial overlays of primer and polyester concrete using the equipment, materials, and procedures proposed for production, as approved by the Engineer in accordance with Section 6-23.3(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 shotblast, clean the concrete pad surface, mix, place, finish, and cure the polyester concrete overlay. The Contractor need not perform further deck preparation, or place sand for abrasive finish provided that all other conditions of Sections 6-23.3(9), (10), and (12) of this Special Provision are satisfied.

The Contractor shall arrange for soundness testing and three pull-off tests as described in Section 6-23.3(13) to be performed by an independent testing laboratory. The independent testing laboratory 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 and Contractor.

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.

If significant successful experience is demonstrated by both the installer, System Provider, and System Provider Technical Representative together, the first shift of polyester concrete overlay installation may be considered as the Trial Application if approved by the Engineer. Rejection of all or part of the trial in this case will be required to be removed and disposed of at no additional cost to the Contracting Agency. If no further overlay is allowed due to full rejection after multiple trials, the site will be restored to initial in-service condition at no additional cost to the Contracting Agency.

The number of trial applications required shall be as many as necessary for the Contractor to demonstrate the ability to construct an acceptable trial overlay section and competency

1 to perform the work. However, the installer, proposed equipment/techniques, or material
2 may be rejected if not shown to be acceptable after two trials.

3
4 **6-23.3(9) Polyester Concrete Overlay**

5 **6-23.3(9)A Pre-Overlay Conference**

6 Five to ten working days prior to polyester concrete overlay placement, a pre-overlay
7 conference shall be held to discuss final deck preparation, equipment, temperature
8 and weather requirements, aggregate and deck dryness requirements, construction
9 procedures, sequencing, and personnel. Inspection procedures shall also be
10 reviewed to ensure coordination. Attendees shall include representatives from all
11 parties involved in the work including inspectors, installer, and System Provider
12 Technical Representative. If necessary, teleconferencing of attendees may be
13 approved by the Engineer.

14
15 If the project includes more than one bridge deck, an additional conference shall be
16 held just before placing the polyester concrete overlay for each subsequent bridge
17 deck.

18
19 **6-23.3(9)B Restrictions on Other Work**

20 To ensure the best possible bond and integrity of the polyester concrete overlay, the
21 Contractor shall ensure that dust, debris, moisture, or any other deleterious materials
22 do not enter a work area from the start of final surface preparation in that work area
23 until completion of curing time for the polyester concrete overlay in that work area.
24 This work area during this timeframe shall be referred to as the protected work area.
25 In addition to other measures, the Contractor shall comply with the following:

- 26
27 1. Perform no work within 100 feet of the protected work area which generates
28 dust or debris (including hand tool chipping, shotblasting, sandblasting,
29 vacuuming, and cleaning).
30
31 2. Dust or debris generating work may be allowed beyond this 100 feet
32 boundary provided dust and debris will not drift onto the limits of the
33 protected work area.

34
35 If the shotblasting impedes or interferes in any way with the final cleaning or overlay
36 placement within the protected area as determined by the Engineer, the shotblasting
37 Work shall be terminated immediately and the equipment shall be moved away from
38 the protected area to eliminate the conflict.

39
40 Traffic other than required construction equipment will not be permitted within the
41 protected work area unless allowed by the Engineer. To prevent contamination, all
42 equipment allowed within the protected work area shall be equipped with drip guards.

43
44 **6-23.3(9)C Final Surface Preparation**

45 Following the completion of all Type 1 and Type 2 Deck Repairs (including placement
46 and curing of patches in Type 2 Deck Repair areas), the entire lane or strip being
47 overlaid shall undergo final cleaning. Final cleaning shall be accomplished in one
48 shift and consists of the following, in the sequence shown:

- 49
50 1. Remove grease, slurry, oils, paint, dirt, striping, cure compound, rust,
51 membrane, milling slurry, weak surface mortar or any other contaminants

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that could interfere with the proper adhesion of the overlay system. These materials shall be removed by abrasive blasting.

2. All steel surfaces that will be in contact with the overlay shall be cleaned in accordance with SSPC-SP No. 10, Near-White Blast Cleaning, except that wet blasting methods shall not be allowed.
3. Remove loose or trapped particles using magnets and vacuuming. Vacuum shall be capable of collecting all remaining dust, concrete chips, and other debris to the extent necessary to ensure the oil-free compressed air in the next step complies with environmental requirements.
4. Oil-free compressed air shall be used as the final step to remove all remaining dust and debris.
5. Cleaned surfaces shall not be exposed to Contractor or public vehicular traffic. If the deck becomes contaminated before placing the overlay, the Contractor shall shotblast or sandblast the contaminated areas to the satisfaction of the Engineer at no additional cost to the Contracting Agency.
6. The Contractor shall provide suitable coverings (e.g. heavy duty drop cloths) as needed to protect all exposed areas not to receive primer and overlay, such as curbs, sidewalks, parapets, etc. All damage or defacement resulting from this application shall be cleaned and/or repaired to the Engineer's satisfaction at no additional cost.

6-23.3(9)D Overlay Finishing Equipment Setup

Construction joints between passes shall be within 1 foot of the stripe lines or centered within a lane.

When grade will be established for a paving machine from a paving wire, or when a vibrating screed is allowed, grade pins and screed rails shall be placed outside the area to be overlaid. Hold-down devices shot into the concrete are not permitted. Hold-down devices of other types leaving holes in the exposed area will be allowed provided the holes are subsequently filled with polyester concrete. Hold-down devices shall not penetrate the existing deck by more than ¾ inch.

6-23.3(9)E Quality Assurance for Polyester Concrete Overlay

All acceptance testing shall be performed by an independent testing laboratory provided by the Contractor, in the presence of the Engineer's representative. The Engineer reserves the right to self-perform any acceptance tests it deems in its best interests. The Contractor's independent testing laboratory shall perform the following tests:

1. Moisture content of polyester concrete aggregate and sand for abrasive finish.
2. Temperature of deck surface and aggregates before mixing.
3. ASTM C805 Rebound Hammer (Schmidt hammer).

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- 4. Smoothness quality testing.
- 5. Sounding using ASTM D4580, Method B.
- 6. Direct Tension Bond Testing, ASTM C1583.

The Contractor shall arrange to have the System Provider Technical Representative furnish technical service relating to application of material and health and safety training for personnel who are to handle the polyester concrete and the primer, at the following times:

- 1. At the pre-paving conference.
- 2. During the trial overlay.
- 3. During paving machine setup.
- 4. During a minimum of the first two days of paving.

6-23.3(9)F Moisture and Temperature Requirements

It is critically important for the long-term performance of the polyester concrete system that the concrete substrate and all other surfaces (primer and polyester overlay) be (1) at the proper temperature and (2) moisture-free. Unless otherwise noted below, the time period for these requirements begins with the start of applying primer and ends two hours after placing the polyester overlay and sand for abrasive finish. Therefore, the following requirements for temperature and moisture shall be strictly enforced. Failure to follow these requirements may result in removal and replacement of the polyester concrete system at no additional expense to the Contracting Agency.

- 1. During the 24-hour period immediately preceding start of primer placement, the area of bridge deck to receive primer shall not be exposed to moisture or water in any form. Additionally, during this 24-hour period, the concrete substrate shall be exposed to the atmosphere to freely allow moisture to evaporate. Covering the concrete substrate during this period with material that will hinder evaporation in any way, such as visqueen, shall not be allowed.
- 2. Primer application shall not begin if rain is forecast any time between start of primer application and 2 hours after the planned completion of polyester concrete and sand for abrasive surface.
- 3. Primer application shall not begin until after morning dew has evaporated.
- 4. Before starting primer, the concrete substrate surface must be free of any surface darkening that would indicate locations of previously standing water. The entire concrete substrate surface must appear to be uniformly light in color and show no further lightening when drying methods such as blowing compressed air are applied. Cracks in the concrete substrate must also be dry.

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5. The concrete surface temperature shall be between 40°F (and rising) and 100°F. Night work may be required when temperatures cannot be met during the day.

6-23.3(9)G Primer Application

The primer placement shall start not more than 24 hours after the start of sandblasting operations in Final Surface Preparation.

In the interim between completion of final surface preparation described in Section 6-23.3(9)C of this Special Provision and applying the primer, any contaminants that have accumulated which could interfere with the proper adhesion of the overlay system shall be removed to the satisfaction of the Engineer. Immediately prior to applying the primer, the surface receiving the primer shall be blown off with oil free and moisture free compressed air to remove accumulated dust and any other loose material.

After the exposed surfaces have been prepared and are dry, primer shall be applied in accordance with the System Provider Technical Representative's recommendations. Primer shall be placed within 5 minutes of mixing at approximately 90 sf/gal or the rate that provides substrate saturation acceptable to the Engineer.

Primer shall be applied by flooding and uniformly spread to completely cover surfaces to receive overlay. Care shall be taken to avoid heavy application that results in excess puddling. Excess material shall be removed or distributed to meet the required saturation without excessive puddling. Primer shall be reapplied to any areas that appear dry 15 minutes after primer placement, prior to overlay placement.

The prepared concrete surface shall receive one coat of promoted/initiated primer. The promoted/initiated primer shall be worked into the concrete in a manner to effect complete coverage of the area. A one-pint sample of each batch of promoted/initiated primer shall be retained and submitted to the Engineer at the time of primer application to verify proper catalyzation.

Under no circumstances shall resin be allowed to run into drains and expansion joints, or otherwise escape the Contractor's collection and containment system.

If the primed surface becomes contaminated, the contaminated area shall be cleaned by abrasive blasting and reprimed at no additional expense to the Contracting Agency. The primer shall cure for a minimum of 30 minutes before placing the polyester concrete overlay.

6-23.3(9)H Mixing Polyester Concrete

Polyester concrete shall be mixed in volumetric mixers conforming to Section 6-23.3(2)E of this Special Provision and in accordance with the mix design accepted by the Engineer.

At the time of mixing, the polyester concrete aggregate shall:

- 1. Have a temperature between 45°F and 100°F.

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2. Have a weighted-average moisture content, when tested under AASHTO Test Method T255, of not more than one half of the weighted-average aggregate absorption.

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 concrete binder supplier.

The polyester concrete binder shall be initiated and thoroughly blended just prior to mixing the polyester concrete aggregate and binder. The polyester concrete shall be thoroughly mixed prior to placing.

6-23.3(9)I Placing Polyester Concrete

The polyester concrete overlay shall be placed, consolidated, and finished to the profile grade and cross-section provided by the Engineer using a paving machine meeting the requirements of Section 6-23.3(2)F of this Special Provision. The Contractor shall perform a dry run with the paving machine before placing Polyester Concrete. Based on the dry run, adjustments to the final grade may be allowed provided minimum thickness requirements are met.

The minimum thickness of polyester concrete overlay system shall be ¾ inches, measured from the top of the Polyester Overlay to the highest point of the shotblasted concrete surface as shown in the Plans.

Placement of the polyester concrete shall not proceed until the Engineer verifies that the primer was properly promoted and initiated, as evidenced by the primer batch sample.

During overlay application, the Contractor shall provide suitable coverings (e.g., heavy duty drop cloths) as needed to protect all exposed areas not to receive overlay, such as curbs, sidewalks, parapets, etc. All damage or defacement resulting from this application shall be cleaned and/or repaired to the Engineer's satisfaction at no additional cost.

The polyester concrete shall be placed on the primer after 15 minutes and within 2 hours after the primer has been applied. The polyester concrete shall be placed prior to gelling or 15 minutes following addition of initiator, whichever occurs first.

Polyester concrete shall have an initial set time of at least 20 minutes and at most 90 minutes following resin catalyzation. The initial set time can be determined in the field when the in-place polyester concrete cannot be deformed by pressing with a finger, indicating that the resin binder is no longer in a liquid state. If the initial set is not within 90 minutes of catalyzation, the material shall be removed and replaced at no additional cost to the Contracting Agency.

If, for any reason, polyester concrete is not placed over the primer within the two-hour time limit, the Contractor shall apply a fresh coat of primer. Prior to applying the polyester concrete overlay, the surface shall be re-cleaned in accordance with Section 6-23.3(9)G of this Special Provision.

1
2 Expansion joints shall be protected from all polyester concrete overlay operations to
3 the satisfaction the Engineer. Saw cutting at bridge expansion joints shall not be
4 allowed. The surface temperature of the area receiving the polyester concrete shall
5 be the same as specified for the primer.
6

7 **6-23.3(10) Finishing Polyester Concrete**

8 The finished surface of the polyester concrete overlay shall conform to the straight-edge
9 requirements of Section 6-23.3(15) of this Special Provision and the following:

- 10
11 1. The polyester concrete shall be struck off, finished, and consolidated in
12 accordance with the profile grade and cross-section provided by the Engineer
13 with adjustments allowed in Section 6-23.3(9) of this Special Provision.
14
15 2. Binder content shall be as specified in Section 6-23.2(1)B of this Special
16 Provision and yield a polyester concrete consistency that requires surface
17 applied consolidation and finishing to consolidate the polyester concrete and
18 yield a slight sheen of bleed binder on top surface yet does not yield excess
19 bleed binder.
20
21 3. Although the paver should yield a finished surface, additional finishing may be
22 necessary. Hand finishing of seam area between passes shall produce a
23 consistent surface across the junction of the placements. Polyester concrete
24 shall be finished as necessary through traditional concrete finishing methods,
25 producing a smooth surface, with slight resin sheen indicating complete
26 consolidation of aggregates. Polyester concrete patches shall be finished by
27 traditional concrete hand finishing methods.
28

29 **6-23.3(11) Sand for Abrasive Finish**

30 The polyester concrete overlay shall receive an abrasive finish using sand as specified.
31 The abrasive finish shall be applied immediately after overlay strike-off and before gelling
32 occurs. Where spring tining is allowed, the tining shall be performed after sufficient sand
33 broadcast.
34

35 At the time of application on the polyester concrete, the moisture content of the sand for
36 abrasive finish shall not exceed 0.5 percent.
37

38 At least 2.2 lbs. per square yard shall be applied evenly to refusal by hand broadcasting
39 onto the glossy surface immediately after sufficient finishing and before resin gelling
40 occurs. To ensure adequate pavement friction, the completed polyester concrete overlay
41 surface (including the sand for abrasive finish) shall be free of any smooth or "glassy"
42 areas such as those resulting from insufficient quantities of surface aggregate. Any such
43 surface defects shall be repaired by the Contractor in the manner recommended by the
44 System Provider Technical Representative and approved by the Engineer at no additional
45 cost to the Contracting Agency.
46

47 **6-23.3(12) Curing Polyester Concrete**

48 The polyester concrete overlay shall be cured in accordance with the manufacturer's
49 recommendations. Protect the overlay from moisture, traffic, and equipment for at least 2
50 hours after final finishing. The Engineer may extend protection time if sufficient strength
51 or adhesion is not achieved. The in-place material must achieve test reading from a

1 calibrated Schmidt Hammer of at least 3,000 psi within four hours after final finishing, and
2 before traffic or equipment is allowed on the overlay. Proper cure rate necessary to
3 achieve sufficient initial and final strength depends on proper initiator/accelerator levels
4 to account for field conditions such as ambient and substrate temperatures.

5
6 The Contractor shall measure the compressive strength of the cured polyester concrete
7 overlay with a rebound hammer in accordance with ASTM C805. The readings of the
8 rebound hammer used shall be correlated to the compressive strength of the polyester
9 concrete product in accordance with ASTM C805 Section 5.4 and the Contractor shall
10 submit a Type 1 Working Drawing of this correlation.

11
12 Traffic and equipment shall not be permitted on the polyester concrete overlay for at least
13 four hours and until the polyester overlay has reached a minimum compressive strength
14 of 3,000 psi based on the rebound hammer readings and the correlation chart for the
15 rebound hammer used.

16
17 Areas in the polyester concrete that do not totally cure, or that fail to attain the minimum
18 compressive strength specified above, shall have the deficiencies addressed in
19 accordance with Section 1-05.7.

20
21 The Contractor shall prevent any cleaning chemicals from reaching the polyester mix
22 during the overlay applications.

23
24 **6-23.3(13) Checking Polyester Concrete for Bond**

25 **6-23.3(13)A Sounding**

26 After the requirements for curing have been met, the entire overlay surface shall be
27 inspected by the Contractor's independent testing entity, in the presence of the
28 Engineer, in accordance with ASTM D4580, Method B. Any areas of delamination
29 shall be removed and replaced at no additional expense to the Contracting Agency.
30 Extensive unbonded areas may be grounds for rejection of the entire installation if
31 ordered by the Engineer.

32
33 **6-23.3(13)B Direct Tension Bond Testing**

34 Vertical axis adhesion tests shall be performed not more than 24 hours after the
35 placement of the Polyester concrete overlay by an independent testing company,
36 arranged by the Contractor, in accordance with ASTM C1583, cost to be included in
37 polyester concrete Overlay Placement item. At a minimum, two adhesion tests, at
38 randomly selected locations, shall be performed on the first bridge and Trial Overlay.
39 For bridges with deck areas greater than 25,000 square feet, or multiple bridge
40 projects, additional tests shall be performed at a frequency of one test per 25,000
41 square feet of additional deck area, if required by the Engineer. If substrate and
42 surface preparation remain consistent and sufficient, a single test set may be
43 sufficient and subsequent tests may be waived if allowed by the Engineer. Additional
44 testing may be required as directed by the Engineer if any element of the substrate,
45 surface prep, polyester concrete overlay system, or placement changes after initial
46 testing.

47
48 Test cores shall be drilled a minimum of 0.25" but no greater than 0.50" below the
49 substrate to overlay bond line.

50

1 The minimum bond strength of the polyester concrete overlay system on normal
2 weight concrete shall be 250 psi. An acceptable test will demonstrate that the overlay
3 bond strength is sufficient by producing a concrete subsurface failure area greater
4 than 50% of the test surface area ("type a" per test method). Failure at the
5 epoxy/overlay interface ("type d" per test method) is also acceptable provided the
6 failure occurs at not less than 250 psi. The Contractor shall repair all bond test
7 locations with polyester concrete overlay in accordance with this Special Provision.
8

9 **6-23.3(14) Crack Sealing Polyester Concrete**

10 If cracks appear in the overlay after a significant cure period, they shall be filled with
11 properly catalyzed and mixed HMWM primer material. Care shall be taken to fill the cracks
12 only, and ensure minimal primer is left on the finished surface of the overlay.
13

14 If cracking is extensive, yet no other defects exist, the area shall be shot blast cleaned
15 and flood coated with properly catalyzed and mixed crack sealer followed by broadcasting
16 sand meeting the requirements for sand for abrasive finish.
17

18 **6-23.3(15) Surface Smoothness**

19 After crack sealing is complete, the Contractor shall test the entire deck/slab for flatness
20 (allowing for crown, camber, and vertical curvature). The testing shall be done with a 10-
21 foot straightedge held on the surface. The straightedge shall be advanced in successive
22 positions parallel to the centerline, moving not more than one half the length of the
23 straightedge each time it advances. This procedure shall be repeated with the
24 straightedge held perpendicular to the centerline. An acceptable surface shall be both (1)
25 free from deviations of more than 1/8-inch under the 10-foot straightedge, and (2) free from
26 cyclical/repetitive vertical deviations greater than 1/16".
27

28 If smoothness testing identifies areas that deviate from the smoothness requirements, the
29 Contractor shall grind these down with a diamond grinder meeting the requirements of
30 Section 6-23.3(2)G of this Special Provision. Prior to diamond grinding, areas showing
31 low spots of more than 1/4 inch in 10 feet shall be marked and prepared with shot blasting
32 or sandblasting, primed, and filled with either catalyzed resin and broadcast sand or mixed
33 polyester concrete slurry material if ordered by the Engineer. The use of resin or mixed
34 slurry material shall be as recommended by the System Provider Technical
35 Representative and approved by the Engineer. Grinding removal of the fill area boundary
36 may be required if directed by the Engineer. Retesting and refinishing shall continue until
37 a surface conforming to the requirements specified above is produced. The grinding depth
38 of high areas after initial finishing shall not exceed 1/4 inch.
39

40 **6-23.3(16) Texturing Polyester Concrete**

41 After the Contractor has completed all work required to meet the requirements for surface
42 smoothness, the polyester concrete overlay surface shall receive a longitudinally sawn
43 texture using equipment as described in Section 6-23.3(2)H of this Special Provision. The
44 Contractor shall texture the bridge deck surface to within 3-inches minimum and 12-
45 inches maximum of the edge of concrete at expansion joints, within 1-foot minimum and
46 2-feet maximum of the curb line, and within 3-inches minimum and 9-inches maximum of
47 the perimeter of bridge drain assemblies.
48

49 The Contractor shall contain and collect all concrete dust and debris generated by the
50 bridge deck texturing process and shall dispose of the collected concrete dust and debris
51 in accordance with its Debris Containment and Disposal Plan.

1
2 After texturing polyester concrete surface, the Engineer shall test the surface texture of
3 polyester concrete for uniformity and it shall have a skid number (SN) of not less than 35
4 as determined by ASTM E 274.
5

6 **6-23.3(17) Replacement of Defective Overlay**

7 A defective overlay, or portion thereof, as evidenced by insufficient strength, lack of sound
8 bond to substrate, or failing overlay adhesion test results shall be removed and replaced
9 at the Contractor's expense. The Contractor shall submit a written corrective action plan
10 to the Engineer, which shall include the methods and procedures that will be used. The
11 Contractor shall not commence corrective work until the methods and procedures have
12 been approved in writing by the Engineer. The Engineer's approval shall not relieve the
13 Contractor of the responsibility of producing work in conformity with the Contract.
14

15 **6-23.3(18) Opening to Traffic**

16 Prior to opening the overlay area to vehicular traffic, the finished overlay shall be power
17 swept to remove excess loose aggregate and loose sand for abrasive finish. The
18 Contractor shall demonstrate to the satisfaction of the Engineer that the power broom
19 equipment will not damage the finished overlay. Damage to the finished overlay caused
20 by the power broom shall be repaired at no additional expense to the Contracting Agency.
21

22 **6-23.4 Measurement**

23 Shotblasting concrete surface will be measured by the square yard of surface shotblasted.
24

25 Type 1 Deck Repair and Type 2 Deck Repair will be measured by the square foot of surface
26 area of deck concrete removed in accordance with Section 6-23.3(7) of this Special Provision.
27 Determination of whether a deck repair is Type 1 or Type 2 shall be in accordance with Section
28 6-23.3(7) of this Special Provision.
29

30 Polyester concrete overlay will be measured by the square yard of overlay surface actually
31 placed.
32

33 **6-23.5 Payment**

34 Payment will be made for each of the following Bid Items that are included in the Bid Proposal:
35

36 "Surveying for Polyester Concrete Overlay", lump sum.

37 The lump sum contract price for "Surveying for Polyester Concrete Overlay" shall be full
38 pay to perform the Work as specified, including establishing secondary survey control
39 points, performing survey quality control, and recording, compiling, and submitting the
40 survey records to the Engineer, and all other surveying required to complete the polyester
41 concrete overlay.
42

43 "Type 1 Deck Repair", per square foot.

44 The unit contract price per square foot for Type 1 Deck Repair shall be full pay for
45 performing the Work as specified, including excavating and disposing concrete and
46 nonconcrete materials, and repair of concrete or rebar damaged by the Contractor's
47 operations.
48

49 "Type 2 Deck Repair", per square foot.

50 The unit contract price per square foot for Type 2 Deck Repair shall be full pay for
51 performing the Work as specified, including: excavating and disposing concrete;

1 sandblasting; placing, consolidating, finishing, and curing concrete patches in Type 2
2 deck repairs; repair of concrete or rebar damaged by the Contractor's operations.

3
4 "Polyester Concrete Trial Overlay", lump sum.
5 The lump sum contract price for "Polyester Concrete Trial Overlay" shall be full pay for
6 performing the Work as specified, including establishing a location for the trial overlay,
7 construction, removal, and disposal of the concrete pad and trial overlay.

8
9 "Polyester Concrete Overlay", per square yard.
10 The unit contract price per square yard for "Polyester Concrete Overlay" shall be full pay
11 for performing the Work as specified, including dry run, initial surface preparation, final
12 surface preparation, placing primer, placing, finishing, and curing the overlay, placing
13 sand for abrasive finish, sounding, direct tension bond testing, meeting surface
14 smoothness requirements, texturing, crack sealing, and replacement of defective overlay.
15 Polyester concrete overlay placed in excess of the thickness specified in the Plans due
16 to surface irregularities in the bridge deck such as rutting or excess concrete surface
17 shotblasting shall be considered incidental to the unit Contract price per square yard for
18 "Polyester Concrete Overlay".

19
20 Payment for the following shall be considered incidental to and included in the unit contract
21 items included in the Contract:

- 22
23 1. All Work and related costs for implementing the debris containment and disposal
24 plan.
25
26 2. All Work and related costs for protecting adjacent traffic from flying debris.
27
28 3. All Work and related costs for managing and disposing of process wastewater.
29
30 4. Submittals.

1 **DIVISION8.GR8** **Miscellaneous Construction**

2
3 **8-01.GR8** **Erosion Control and Water Pollution Control**

4
5 ~~**8-01.2.GR8**~~ ~~**Materials**~~

6
7 ~~8-01.2(9-14.6(4)A).GR8~~ ~~(Check Dams)~~
8 ~~(Section 9-14.6(4) is revised to read)~~
9 ~~Must use preceding the following:~~

10
11 ~~8-01.2(9-14.6(4)A).OPT1.2025.GR8~~ ~~(No Wattles in Check Dams)~~
12 ~~(February 13, 2024)~~
13 ~~Use in all projects that require or may require check~~
14 ~~dams.~~

15
16 **8-01.3.GR8** **Construction Requirements**

17
18 **8-01.3(1).GR8** **General**

19
20 8-01.3(1).INST1.GR8 (The tenth paragraph of Section 8-01.3(1) is revised to
21 read)
22 Must use once preceding any of the following:

23
24 8-01.3(1).OPT1.GR8 (Erodible Soil Eastern Washington)
25 (January 25, 2010)
26 Use for projects east of the Cascade range in areas
27 receiving 12 inches or less annual precipitation. Do not
28 use if any portion of the project lies in areas that
29 receive more than 12 inches of annual precipitation.
30 See [https://wsdot.wa.gov/engineering-](https://wsdot.wa.gov/engineering-standards/design-topics/hydraulics-hydrology)
31 [standards/design-topics/hydraulics-hydrology.](https://wsdot.wa.gov/engineering-standards/design-topics/hydraulics-hydrology)

32
33 8-01.3(1).INST2.GR8 (Section 8-01.3(1) is supplemented with the following)
34 Must use once preceding any of the following:

35
36 8-01.3(1).OPT8.FR8 (Side Slope Treatment)
37 (April 1, 2002)
38 Use on projects where erodible soils are anticipated
39 and it is desired to have the newly exposed slopes
40 walked before final erosion control can be
41 accomplished, in accordance with recommendation
42 from environmental office.
43 (1 fill-in)

44
45 **8-01.3(1)B.GR8** **Erosion and Sediment Control (ESC) Lead**

46
47 8-01.3(1)B.INST1.GR8 (Item number 3 and 4 in the second paragraph of
48 Section 8-01.3(1)B are revised to read)
49 Must use once preceding any of the following:

50
51 8-01.3(1)B.OPT1.GR8 (October 3, 2022)
52 Use on projects without a CSWGP that require
53 an ESC lead.
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8-01.3(1)C.GR8 Water Management

8-01.3(1)C4.GR8 Management of Off-Site Water

8-01.3(1)C4.INST1.GR8 (Section 8-01.3(1)C4 is supplemented with the following)
Must use once preceding any of the following:

8-01.3(1)C4.OPT1.FR8 (Off-site stormwater routed through or around Project site)
(August 6, 2012)
Use when there are known locations where stormwater enters the project site and it is desired to prevent this stormwater from flowing uncontrolled through the project site.
(1 fill-in)

8-01.3(2).GR8 Temporary Seeding and Mulching

8-01.3(2)B.GR8 Temporary Seeding

8-01.3(2)B.INST1.GR8 (Section 8-01.3(2)B is supplemented with the following)
Must use once preceding any of the following:

8-01.3(2)B.OPT1.FR8 (Composition, proportion, quality and application rate of grass seed)
(August 4, 2014)
Use on projects where a common, non-native or non-source-identified seed can be used. This mix will generally be used within urban areas on small areas of disturbance. The fill-ins for the seed should be provided by the Region Landscape Architect or Headquarters Roadside and Site Development for regions without a Landscape Architect.
(2 fill-ins) (Fill-ins with dollar signs only are to be used as required)

8-01.3(2)B.OPT2.FR8 (Composition, proportion, quality and application rate of grass seed)
(August 4, 2014)
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.)

8-01.3(2)B.OPT3.GR8 (Seeding by hand)
(September 3, 2019)

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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.

8-01.3(2)B.OPT4.FR8 (One application of fertilizer)
(January 3, 2006)
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\$\$.)

8-01.3(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)

~~8-01.3(6).GR8 Check Dams~~

~~8-01.3(6).INST1.GR8 (The second and third paragraphs of Section 8-01.3(6) are revised to read)
Must use once preceding any of the following:~~

~~8-01.3(6).OPT1.2025.GR8 (No Wattles in Check Dams)
(February 13, 2024)
Use in all projects that require or may require check dams.~~

8-02.GR8 Roadside Restoration

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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.
Must also use **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, **8-02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8**.

8-02.2.GR8

Materials

8-02.2.INST1.GR8

(Section 8-02.2 is supplemented with the following)
Must use once preceding the following:

8-02.2.OPT1.GR8

(Conservation Grade Plant Material)
(January 3, 2011)
Use in projects that include “conservation grade” plant material in the plant list. Use requires approval of the Region Landscape Architect or HQ Region Liaison Landscape Architect.

8-02.2.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**, **8-02.3.OPT1.GR8**, **8-02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8**.

1 8-02.2(9-14).GR8 (Erosion Control and Roadside Planting)

2
3 8-02.2(9-14).INST1.GR8 (Section 9-14 is supplemented with the following)
4 Must use once preceding the following:

5
6 8-02.2(9-14).OPT1.FR8 (Weed Barrier Mats)
7 (January 3, 2011)
8 Use in projects requiring weed barrier mats.
9 (1 fill-in) Fill-in is the staple length.
10 Contact the Region Landscape Architect or HQ Region
11 Liaison Landscape Architect for fill-in information.

12
13 8-02.2(9-14.2).GR8 (Topsoil)

14
15 8-02.2(9-14.2(1)).GR8 (Topsoil Type A)
16 (Section 9-14.1(1) is supplemented with the
17 following)
18 Must use once preceding any of the following:

19
20 8-02.2(9-14.2(1)).OPT1.FR8 (February 25, 2021)
21 For use on projects where Topsoil Type A is
22 needed for stormwater BMPs and for plant
23 growth and establishment. Contact the
24 Landscape Architect for fill-ins and depth of
25 application.
26 (4 fill-ins)

27
28 8-02.2(9-14.5).GR8 (Mulch and Amendments)

29
30 8-02.2(9-14.5(8)).GR8 (Compost)
31 (Section 9-14.5(8) is supplemented with the
32 following)
33 Must use once preceding any of the following:

34
35 8-02.2(9-14.5(8)).OPT2.GR8 (September 3, 2019)
36 May be used to allow biosolids compost on
37 projects that do not use compost on
38 stormwater BMPs. Use with concurrence
39 of the Hydraulics Engineer.

40
41 **8-02.3.GR8 Construction Requirements**

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43 8-02.3.INST1.GR8 (Section 8-02.3 is supplemented with the following)
44 Must use once preceding any of the following:

45
46 8-02.3.OPT1.GR8 (Biotic Soil Amendments)
47 (April 1, 2019)
48 Use on projects to amend poor quality soils (which have a
49 lack of organic matter and little to no bioactivity) using
50 Biotic Soil Amendments (BSAs). Should only be used if
51 the soil is determined to be deficient from the results of a
52 soil organic matter test or the soil analysis and the
53 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)

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:

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)
(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

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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:

8-10.1.OPT1.~~NEW~~.GR8 (Linear delineation panels)
(November 20, 2023)
Use in projects where linear delineation panels will be used.

Must also use **8-10.2.OPT1.~~NEW~~.GR8**, **8-10.3.OPT1.~~NEW~~.GR8**, **8-10.4.OPT1.~~NEW~~.GR8**, and **8-10.5.OPT1.~~NEW~~.GR8**.

8-10.2.GR8 Materials

8-10.2.INST1.GR8 (Section 8-10.2 is supplemented with the following)
Must use once preceding any of the following:

8-10.2.OPT1.~~NEW~~.GR8 (Linear delineation panels)
(November 20, 2023)
Use in projects where linear delineation panels will be used.

Must also use **8-10.1.OPT1.~~NEW~~.GR8**, **8-10.3.OPT1.~~NEW~~.GR8**, **8-10.4.OPT1.~~NEW~~.GR8**, and **8-10.5.OPT1.~~NEW~~.GR8**.

8-10.3.GR8 Construction Requirements

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2 8-10.3.INST1.GR8 (Section 8-10.3 is supplemented with the following)
3 Must use once preceding any of the following:
4

5 8-10.3.OPT1.~~NEW~~.GR8 (Linear delineation panels)
6 November 20, 2023)
7 Use in projects where linear delineation panels will be
8 used.
9

10 Must also use **8-10.1.OPT1.~~NEW~~.GR8**, **8-**
11 **10.2.OPT1.~~NEW~~.GR8**, **8-10.4.OPT1.~~NEW~~.GR8**, and **8-**
12 **10.5.OPT1.~~NEW~~.GR8**.
13

14 **8-10.4.GR8 Measurement**

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16 8-10.4.INST1.GR8 (Section 8-10.4 is supplemented with the following)
17 Must use once preceding any of the following:
18

19 8-10.4.OPT1.~~NEW~~.GR8 (Linear delineation panels)
20 November 20, 2023)
21 Use in projects where linear delineation panels will be
22 used.
23

24 Must also use **8-10.1.OPT1.~~NEW~~.GR8**, **8-**
25 **10.2.OPT1.~~NEW~~.GR8**, **8-10.3.OPT1.~~NEW~~.GR8**, and **8-**
26 **10.5.OPT1.~~NEW~~.GR8**.
27

28 **8-10.5.GR8 Payment**

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30 8-10.5.INST1.GR8 (Section 8-10.5 is supplemented with the following)
31 Must use once preceding any of the following:
32

33 8-10.5.OPT1.~~NEW~~.GR8 (Linear delineation panels)
34 November 20, 2023)
35 Use in projects where linear delineation panels will be
36 used.
37

38 Must also use **8-10.1.OPT1.~~NEW~~.GR8**, **8-**
39 **10.2.OPT1.~~NEW~~.GR8**, **8-10.3.OPT1.~~NEW~~.GR8**, and **8-**
40 **10.4.OPT1.~~NEW~~.GR8**.
41

42 **8-11.GR8 Guardrail**

43
44 **8-11.1.GR8 Description**

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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)
(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)
(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 **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 **8-11.2(9-16.3(4)).OPT1.GB8, and 8-11.3(1)A.OPT2.GB8.**

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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 **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 **Either 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.
(4 fill-ins)
Fill-in #1 is the box culvert location SR & MP.
Fill-in #2 is the contact name, phone number, and address for delivery of box culvert steel post assemblies.

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Fill-in #3 is the box culvert location SR & MP.
Fill-in #4 is the contact name, phone number, and address for delivery of box culvert steel post assemblies.

8-11.3.OPT2.FR8 (High-Tension Cable Barrier System 4 Cable)
(November 20, 2023)
Must also use **8-11.1.OPT1.GR8, 8-11.2.OPT2.FR8, 8-11.4.OPT2.GR8, 8-11.5.OPT7.GR8, and 8-11.5.OPT8.GR8.**
Fill-in is the location(s) of Contracting Agency sites to deliver complete sets of Additional High-Tension Cable Barrier Components.
(1 fill-in)

8-11.3.OPT4.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 **8-11.1.OPT2.GR8, 8-11.2.OPT4.GR8, 8-11.4.OPT4.GR8, and 8-11.5.OPT1.GR8.**

8-11.3.OPT5.FR8 (Installing Steel Posts on New Box Culverts)
(October 3, 2022)
Use in projects requiring the construction of steel guardrail posts on top of new concrete box culverts either by embedding or bolting through the culvert wall.
Must also use **8-11.4.OPT1.GR8 and 8-11.5.OPT6.GR8.**
(4 fill-ins)
Fill-in #1 is the box culvert location SR & MP.
Fill-in #2 is the contact name, phone number, and address for delivery of box culvert steel post assemblies.
Fill-in #3 is the box culvert location SR & MP.
Fill-in #4 is the contact name, phone number, and address for delivery of box culvert steel post assemblies.

8-11.3(1).GR8 Beam Guardrail

8-11.3(1).INST1.GR8 (Section 8-11.3(1) is supplemented with the following)
Must use once preceding any of the following:

8-11.3(1).OPT1.GR8 Post Selection
(April 5, 2010)
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:

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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 **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 **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 **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)
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 **8-11.2(9-16.3(2)).OPT1.GB8,** **8-11.2(9-**

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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 **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 **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:

8-11.3(1)H.OPT1.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 **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)D.OPT1.GB8.**

8-11.4.GR8 Measurement

8-11.4.INST1.GR8 (Section 8-11.4 is supplemented with the following)

Must use once preceding any of the following:

- 8-11.4.OPT1.GR8 (Box Culvert Guardrail Steel Posts)
(October 3, 2022)
Must include with 8-11.3.OPT1.FR8 or 8-11.3.OPT5.FR8, and 8-11.5.OPT6.GR8.
Use in projects requiring the construction of steel guardrail posts on top of existing or new concrete box culverts.
- 8-11.4.OPT2.GR8 (High-Tension Cable Barrier System 4 Cable)
(February 3, 2020)
Must also use **8-11.1.OPT1.GR8, 8-11.2.OPT2.FR8, 8-11.3.OPT2.FR8, 8-11.5.OPT7.GR8, and 8-11.5.OPT8.GR8.**
- 8-11.4.OPT4.GR8 (Aesthetic Treatment for Beam Guardrail)
(April 2, 2018)
Use in all projects that require Aesthetic Treatment for Beam Guardrail.
Must also use **8-11.1.OPT2.GR8, 8-11.2.OPT4.GR8, 8-11.3.OPT4.GR8, and 8-11.5.OPT1.GR8.**

8-11.5.GR8 Payment

- 8-11.5.INST2.GR8 (Section 8-11.5 is supplemented with the following)
Must use once preceding any of the following:
- 8-11.5.OPT1.GR8 (Aesthetic Treatment for Beam Guardrail)
(April 2, 2018)
Use in all projects that require Aesthetic Treatment for Beam Guardrail.
Must also use **8-11.1.OPT2.GR8, 8-11.2.OPT4.GR8, 8-11.3.OPT4.GR8, and 8-11.4.OPT4.GR8.**
- 8-11.5.OPT6.GR8 (Box Culvert Guardrail Steel Posts)
(October 3, 2022)
Use in projects requiring the construction of steel guardrail posts on top of existing or new concrete box culverts.
Must include with **8-11.3.OPT1.FR8 or 8-11.3.OPT5.FR8, and 8-11.4.OPT1.GR8.**
- 8-11.5.OPT7.GR8 (High-Tension Cable Barrier)
(February 3, 2020)
Must also use **8-11.1.OPT1.GR8, 8-11.2.OPT2.FR8, 8-11.3.OPT2.FR8, 8-11.4.OPT2.GR8 and 8-11.5.OPT8.GR8.**
- 8-11.5.OPT8.GR8 (Additional High-Tension Cable Barrier Components)
(February 3, 2020)
Must also use **8-11.1.OPT1.GR8, 8-11.2.OPT2.FR8, 8-11.3.OPT2.FR8, 8-11.4.OPT2.GR8 and 8-11.5.OPT7.GR8.** No Federal funding participation. Must be in state funds group.

1 **8-12.GR8 Chain Link Fence and Wire Fence**

2
3 **8-12.2.GR8 Materials**

4
5 8-12.2.INST1.GR8 (Section 8-12.2 is supplemented with the following)
6 Must use once preceding any of the following:

7
8 8-12.2.OPT1.FR8 (Coated chain link fence)
9 (September 8, 2020)
10 Use in projects requiring the construction of coated chain
11 link fence. Must include **8-12.5.OPT1.GR8**.
12 (1 fill-in)

13
14 ~~8-12.2.OPT6.GB8 (Cable Fence)~~
15 ~~(November 20, 2023)~~
16 ~~Use in projects with cable fence. Include with **8-**~~
17 ~~**12.3.OPT1(B).GB8, 8-12.4.OPT1.GB8, and 8-**~~
18 ~~**12.5.OPT6.GB8. Include with **8-12.3.OPT1(A).GB8** when**~~
19 ~~anchoring the cable fence posts to existing concrete~~
20 ~~structures. Include with **8-12.3.OPT1(C).GB8** when~~
21 ~~painting of the galvanized fence posts is required.~~

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23 ~~**8-12.3.GR8 Construction Requirements**~~

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25 ~~8-12.3.INST1.GR8 (Section 8-12.3 is supplemented with the following)~~
26 ~~Must use once preceding any of the following:~~

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28 ~~8-12.3.OPT1.GB8 (Cable Fence)~~
29 ~~Use once preceding the following:~~

30
31 ~~8-12.3.OPT1(A).GB8 (Field Measuring For Cable Fence)~~
32 ~~(April 6, 2015)~~
33 ~~Use in projects with cable fence when anchoring the~~
34 ~~cable fence posts to existing concrete structures.~~
35 ~~Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8,**~~
36 ~~**8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8. Include**~~
37 ~~with **8-12.3.OPT1(C).GB8** when painting of the~~
38 ~~galvanized fence posts is required.~~

39
40 ~~8-12.3.OPT1(B).GB8 (Cable Fence)~~
41 ~~(November 20, 2023)~~
42 ~~Use in projects with cable fence. Include with **8-**~~
43 ~~**12.2.OPT6.GB8, 8-12.4.OPT1.GB8, and 8-**~~
44 ~~**12.5.OPT6.GB8. Include with **8-12.3.OPT1(A).GB8****~~
45 ~~when anchoring the cable fence posts to existing~~
46 ~~concrete structures. Include with **8-12.3.OPT1(C).GB8**~~
47 ~~when painting of the galvanized fence posts is~~
48 ~~required.~~

49
50 ~~8-12.3.OPT1(C).GB8 (Cable Fence)~~
51 ~~(January 2, 2018)~~
52 ~~Use in projects with cable fence. Include with **8-**~~
53 ~~**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**

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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:

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-

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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 of riprap)
(The last paragraph of Section 8-14.5 is deleted)
(February 5, 2001)
Must also use **8-15.5.OPT1.GR8**.
Use in projects with small quantities of riprap or upon recommendation of the Construction and Materials Division.

8-15.5.GR8 Payment

8-15.5.INST1.GR8 (The first sentence of the second paragraph of Section 8-15.5 is revised to read)
Must use once preceding any of the following:

8-15.5.OPT1.GR8 (Excavation for riprap is included in cost of riprap)
(March 13, 1995)
Must include with **8-15.4.OPT5.GR8**.
Use in projects with small quantities of riprap or upon recommendation of the Construction and Materials Division.

8-15.5.INST2.GR8 (Section 8-15.5 is supplemented with the following)
Must use once preceding the following:

1	8-15.5.OPT8.GR8	(Special excavation)
2		(September 30, 1996)
3		Must include with 8-15.4.OPT3.GR8 .
4		Use in projects requiring excavation outside the limits of
5		structure excavation for riprap at bridge piers located
6		within streams.
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8	8-16.GR8	Concrete Slope Protection
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10	8-16.3.GR8	Construction Requirements
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12	8-16.3(2).GR8	Placing Semi-Open Concrete Masonry Units
13		
14	8-16.3(2).INST1.GR8	(Section 8-16.3(2) is supplemented with the following)
15		Must use once preceding any of the following:
16		
17	8-16.3(2).OPT1.GR8	(Requirements for semi-open precast masonry
18		units)
19		(December 19, 2005)
20		Must include with 8-16.5.OPT1.GR8 .
21		Use in projects requiring semi-open concrete masonry
22		slope protection.
23		
24	8-16.5.GR8	Payment
25		
26	8-16.5.INST1.GR8	(Section 8-16.5 is supplemented with the following)
27		Must use once preceding any of the following:
28		
29	8-16.5.OPT1.GR8	(Semi-open Conc. Masonry Slope Protection)
30		(September 30, 1996)
31		Must include with 8-16.3(2).OPT1.GR8 .
32		Use in projects requiring semi-open concrete masonry
33		slope protection.
34		
35	8-20.GR8	Illumination, Traffic Signal Systems, Intelligent Transportation
36		Systems, and Electrical
37		
38	8-20.2.GR8	Materials
39		
40	8-20.2.INST1.GR8	(Section 8-20.2 is supplemented with the following)
41		Must use once preceding any of the following:
42		
43	8-20.2.OPT1.GB8	(Traffic Signal Shaft Foundation Shaft Casing and
44		Slurry)
45		(April 6, 2015)
46		Use in traffic signal projects with shaft foundations in weak
47		soils, with the concurrence of the Materials Laboratory
48		Geotechnical Branch. Include with 8-20.3(4).OPT1.FB8
49		and 8-20.5.OPT1.GB8 .
50		
51	8-20.2(9-29.1).GR8	(Conduit, Innerduct, and Outerduct)
52		
53	8-20.2(9-29.1(11)).GR8	(Foam Conduit Sealant)
54		(Section 9-29.1(11) is supplemented with the following)

Must use once preceding any of the following:

8-20.2(9-29.1(11)).OPT1.GR8(January 7, 2019)

Use in projects where new conduit is installed, wiring is added to existing conduit, or wiring is removed from existing conduit.

8-20.2(9-29.2).GR8 (Junction Boxes, Cable Vaults, and Pull Boxes)
(Section 9-29.2 is supplemented with the following):
Must use once preceding any of the following:

8-20.2(9-29.2).OPT1.GR8 (Slip-Resistant Surfacing)
(September 3, 2019)

Use in projects where junction boxes, cable vaults, pull boxes, or Structure mounted boxes require slip-resistant surfacing.

8-20.2(9-29.6).GR8 (Light and Signal Standards)
(Section 9-29.6 is supplemented with the following)
Must use once preceding any of the following:

8-20.2(9-29.6).OPT1.GR8 Light Standards With Type 1 Luminaire Arms
(January 13, 2021)

Use in projects requiring Type 1 luminaire arms and the Engineer is not required to verify the H1 distances shown in the Plans.

8-20.2(9-29.6).OPT2.GR8 Light Standards With Type 1 Luminaire Arms
(January 13, 2021)

Use in projects requiring Type 1 luminaire arms and H1 distances are not shown in the Plans or the Engineer is required to verify the H1 distances shown in the Plans.

8-20.2(9-29.6).OPT5.GR8 Traffic Signal Standards
(January 10, 2022)

Use in projects requiring traffic signal standards, or combination traffic signal/light standards with Type 1 luminaire arms, or both.

~~8-20.2(9-29.6(2)).GR8 (Slip Base Hardware)
(The second sentence of Section 9-29.6(2) is revised to read)
Must use preceding the following:~~

~~8-20.2(9-29.6(2)).OPT1.2025.GR8(November 20, 2023)~~

~~Use in all projects with light or signals with slip bases.~~

8-20.2(9-29.6(3)).GR8 (Timber Light Standards, Timber Strain Poles, Timber Service Supports)
(Section 9-29.6(3) is supplemented with the following)
Must use preceding the following:

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8-20.2(9-29.6(3)).OPT1.GR8 (November 20, 2023)
Use in all projects with timber poles.

8-20.2(9-29.6(5)).GR8 (Foundation Hardware)
(Section 9-29.6(5) is supplemented with the following)
Must use once preceding any of the following:

8-20.2(9-29.6(5)).OPT1.GR8 (January 13, 2021)
Use in all projects where light standards
are to be installed on Traffic Barrier.

8-20.2(9-29.13).GR8 (Control Cabinet Assemblies)
(Section 9-29.13 is supplemented with the following)
Must use once preceding any of the following:

8-20.2(9-29.13).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.

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)

8-20.2(9-29.13(10)D).INST2.GR8 (9-29.13(10)D is supplemented with
the following)
Must use once preceding any of the
following:

8-20.2(9-29.13(10)D).OPT2.GR8 (February 6, 2023)
Use in all projects where
removable cabinet door
handles are required.

8-20.2(9-29.13(11)).GR8(Traffic Data Accumulator and Ramp Meters)
(Section 9-29.13(11) is supplemented with the
following)
Must use once preceding any of the following:

8-20.2(9-29.13(11)).OPT1.GR8 (November 20, 2023)
Use in all projects where a Ramp Meter or ITS
Data Station controller is required.

8-20.2(9-29.13(11)).OPT2.GR8 (February 6, 2023)
Use in all projects where removable cabinet door
handles are required.

8-20.2(9-29.13(12)).GR8(Type 331L ITS Cabinet)

8-20.2(9-29.13(12)).INST2.GR8 (Item 3 of Section 9-29.13(12) is
supplemented with the following)
Must use once preceding any of the following:

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8-20.2(9-29.13(12)).OPT2.GR8 (February 6, 2023)
Use in all projects where removable cabinet door handles are required.

8-20.2(9-29.15).GR8 (Flashing Beacon Control)
(Section 9-29.15 is supplemented with the following)
Must use once preceding any of the following:

8-20.2(9-29.15).OPT1.GR8 Rapid Flashing Beacons (RFB)
(January 7, 2019)
Use in projects where Rectangular Rapid Flashing Beacons (RRFBs) are required.

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:

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2
3 8-20.2(1).OPT1.GR8 (Light standards when H1 dimension is
4 shown on the Plans)
5 (March 13, 1995)
6 Use in projects with illumination systems and the
7 lighting standard H1 dimension is shown in the Plans
8 and verification by the Engineer is not required prior to
9 fabrication.
10
11 8-20.2(1).OPT2.GR8 (Light standards when H1 dimension is not
12 Shown on the Plans or must be verified prior to
13 fabrication)
14 (March 13, 1995)
15 Use in projects with illumination systems and the
16 lighting standard H1 dimension is not shown in the
17 Plans or the dimension shown in the Plans must be
18 verified by the Engineer prior to fabrication.
19
20 8-20.2(1).OPT3.GR8 (Traffic signal standards, strain pole standards
21 or combination traffic signal/lighting standards)
22 (March 13, 1995)
23 Use in projects with traffic signal systems when
24 standards are to be installed.

25
26 **8-20.3.GR8 Construction Requirements**

27
28 **8-20.3(1).GR8 General**

- 29
30 8-20.3(1).INST1.GR8 (Section 8-20.3(1) is supplemented with the following)
31 Must use once preceding any of the following:
32
33 8-20.3(1).OPT1.FR8 (Salvaged Equipment)
34 (November 20, 2023)
35 Use in projects with equipment to be removed which
36 will stay the property of WSDOT.
37 (Five fill-ins).

38
39 **8-20.3(4).GR8 Foundations**

- 40
41 8-20.3(4).INST1.GR8 (Section 8-20.3(4) is supplemented with the following)
42 Must use once preceding any of the following:
43
44 8-20.3(4).OPT1.FB8 (Shafts for Signal Standard Foundations)
45 (August 7, 2017)
46 Use in traffic signal projects with shaft foundations in
47 weak soils, with the concurrence of the Materials
48 Laboratory Geotechnical Branch. The fill-in specifies
49 the location(s) of the shaft(s) requiring construction
50 under these construction requirements. Include with
51 **8-20.2.OPT1.GB8 and 8-20.5.OPT1.GB8.**
52 (One fill-in).
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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

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)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.

8-20.5.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**.

8-21.GR8 Permanent Signing

8-21.2.GR8 Materials

8-21.2(9-06.16).GR8 (Roadside Sign Structures)

(Section 9-06.16 is supplemented with the following)
Must use once preceding the following:

8-21.2(9-06.16).OPT1.GR8 (January 3, 2011)
Use in projects with perforated steel square sign posts.

8-21.2(9-28.11).GR8 (Hardware)
(Section 9-28.11 is supplemented with the following)
Must use once preceding any of the following:

8-21.2(9-28.11).OPT1.GB8 (Overhead Sign Structure Locknuts)
(August 3, 2015)
Use in all projects with overhead sign structures (sign
bridge, cantilever sign structure, bridge mounted sign
bracket).

8-21.2(9-28.14).GR8 (Sign Support Structures)
(Section 9-28.14 is supplemented with the following)
Must use once preceding any of the following:

8-21.2(9-28.14).OPT6.GR8 (Roadside Signing Material and Fabrication)
(September 8, 2020)
Use in all projects that have steel sign supports.

8-21.3.GR8 Construction Requirements

8-21.3(9).GR8 Sign Structures

8-21.3(9)A.GR8 Fabrication of Sign 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)
Must use once preceding any of the following:

8-21.3(9)A1.OPT1.FB8 (Non-Conventional Paint Color)
(September 8, 2020)
Use in projects with monotube sign bridges
and/or monotube cantilever sign structures
painted a color other than the conventionally
specified gray color. Include with **8-
21.4.OPT1.FB8**. The fill-in specifies the SAE
AMS Standard 595 color number, or the color
name if no number.
(1 fill-in)

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)

Must use once preceding any of the following:

8-21.3(9)E.OPT1.FB8 (Bridge Mounted Sign Brackets)
(November 20, 2023)
Use in projects with bridge mounted sign brackets. The first and third fill-ins specify the sign bracket number(s). The second fill-in itemizes the structural carbon steel quantity for each sign bracket. The fourth fill-in specifies the quantity of hole drilling required for the resin bonded anchors for each sign bracket.
(4 fill-ins)

8-21.3(9)F.GR8 Foundations

8-21.3(9)F1.GR8 Fabrication of Monotube Sign Bridges and Cantilever Sign Structures

8-21.3(9)F1.INST1.GR8 (Section 8-21.3(9)F1 is supplemented with the following)

Must use once preceding any of the following:

8-21.3(9)F1.OPT1.FB8 (Temporary Casing Requirements)
(September 8, 2020)
Use in sign structure projects with shaft foundations where the shaft diameter is 48 inches or greater, or where the shaft depth is 15 feet or greater, or where the Materials Laboratory Geotechnical Branch identifies the foundation soils as sufficiently weak to require use of this specification. The fill-in specifies the location(s) of the shaft(s) requiring construction under these construction requirements.
(1 fill-in)

8-21.4.GR8 Measurement

8-21.4.INST1.GR8 (Section 8-21.4 is supplemented with the following)
Must use once preceding any of the following:

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

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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:

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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.
8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8, 8-25.4.OPT1.GR8, and 8-25.5.OPT1.GR8.

8-25.2.GR8 Materials

8-25.2.INST1.GR8 (Section 8-25.2 is supplemented with the following)
Must use once preceding any of the following:

8-25.2.OPT1.GR8 (April 1, 2002)

1 Use in projects when the work zone analysis determines
2 the need for temporary barrier screening.
3 Must use with **8-25.1.OPT1.GR8, 8-25.3.OPT1.GR8, 8-**
4 **25.4.OPT1.GR8, and 8-25.5.OPT1.GR8.**

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6 **8-25.3.GR8 Construction Requirements**

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8 8-25.3.INST1.GR8 (Section 8-25.3 is supplemented with the following)
9 Must use once preceding any of the following:

10
11 8-25.3.OPT1.GR8 (April 1, 2002)
12 Use in projects when the work zone analysis determines
13 the need for temporary barrier screening.
14 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.4.OPT1.GR8,**
15 **and 8-25.5.OPT1.GR8.**

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17 **8-25.4.GR8 Measurement**

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19 8-25.4.INST1.GR8 (Section 8-25.4 is supplemented with the following)
20 Must use once preceding any of the following:

21
22 8-25.4.OPT1.GR8 (April 1, 2002)
23 Use in projects when the work zone analysis determines
24 the need for temporary barrier screening.
25 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8,**
26 **and 8-25.5.OPT1.GR8.**

27
28 **8-25.5.GR8 Payment**

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30 8-25.5.INST1.GR8 (Section 8-25.5 is supplemented with the following)
31 Must use once preceding any of the following:

32
33 8-25.5.OPT1.GR8 (April 1, 2002)
34 Use in projects when the work zone analysis determines
35 the need for temporary barrier screening.
36 **8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8,**
37 **and 8-25.4.OPT1.GR8.**

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39 **8-29.GR8 Wire Mesh Slope Protection**

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41 **8-29.1.GR8 Description**

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43 8-29.1.INST1.GR8 (Section 8-29.1 is supplemented with the following)
44 Must use once preceding any of the following:

45
46 8-29.1.OPT1.GR8 (Cable Net Slope Protection)
47 (April 5, 2010)
48 Use in projects with cable net slope protection. Include
49 with **8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8, 8-**
50 **29.4.OPT1.GR8 and 8-29.5.OPT1.GR8.**

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52 **8-29.2.GR8 Materials**

1	8-29.2.INST1.GR8	(Section 8-29.2 is supplemented with the following) Must use once preceding any of the following:
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4	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 .
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10	8-29.3.GR8	Construction Requirements
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12	8-29.3.INST1.GR8	(Section 8-29.3 is supplemented with the following) Must use once preceding any of the following:
13		
14		
15	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 .
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21	8-29.4.GR8	Measurement
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23	8-29.4.INST1.GR8	(Section 8-29.4 is supplemented with the following) Must use once preceding any of the following:
24		
25		
26	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 .
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32	8-29.5.GR8	Payment
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34	8-29.5.INST1.GR8	(Section 8-29.5 is supplemented with the following) Must use once preceding any of the following:
35		
36		
37	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 .
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43	8-30.GR8	Water Crossings
44		
45	8-30.3.GR8	Construction Requirements
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47	8-30.3(2).GR8	General
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49	8-30.3(2).INST1.GR8	(Section 8-30.3(2) is supplemented with the following) Must use once preceding any of the following:
50		
51		
52	8-30.3(2).OPT1.FR8	(Blending Streambed Aggregates) (February 13, 2024)
53		

Use in projects with streambed aggregates.

8-31.GR8 Temporary Stream Diversion

8-31.3.GR8 Construction Requirements

8-31.3(1).GR8 General

8-31.3(1)A.GR8 General TSD Requirements

8-31.3(1)A.INST1.GR8 (Section 8-31.3(1)A is supplemented with the following)

Must use once preceding any of the following:

8-31.3(1)A.OPT1.FR8 (Minimum Stream Flows)
(October 3, 2022)
Use in all projects requiring a temporary stream diversion. Contact the HQ Hydraulics Office for fill-in information.
If a contingency system is required, must also use **8-31.3(1)A.OPT2.FR8**.
(1 fill-in)
Fill-in #1 is the minimum flow rate for the temporary stream diversion.

8-31.3(1)A.OPT2.FR8 (Minimum Stream Flows (Contingency System))
(October 3, 2022)
Use in all projects requiring a contingency system for temporary stream. Contact the HQ Hydraulics Office for fill-in information.
Must also use **8-31.3(1)A.OPT1.FR8**.
(1 fill-in)
Fill-in #1 is the minimum flow rate for the contingency system.

8-31.3(3).GR8 Fish Block Net Installation and Fish and Aquatic Species Exclusion

8-31.3(3)B.GR8 Contracting Agency Provided Materials

8-31.3(3)B.INST1.GR8 (Section 8-31.3(1)B is supplemented with the following)

Must use once preceding any of the following:

8-31.3(3)B.OPT1.FR8 (Contracting Agency Furnished Materials)
(October 3, 2022)
Use in all projects where the Contracting Agency is supplying fish exclusion materials such as nets, sandbags, posts, or other materials required to complete fish exclusion including installing fish block nets.
(1 fill-in)

Fill-in #1 is the materials that will be supplied by the Contracting Agency.

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8-SA1.GR8

Field Office Building

(August 7, 2017)

Use in projects when a field office building is required.

8-SA2.GR8

Bollards

(October 3, 2022)

Use in projects requiring bollards.

Contact Headquarters Design Standard Plans Office for plan details on Type 3 Bollards.

8-SA3.GR8

(Environmental Compliance)

(August 6, 2018)

For use on projects where the project has a high risk of soil erosion due to soil type, slope gradient and work in or has proximity to waters of the State (Hydraulics Runoff Manual (HRM) defines projects susceptible for high-risk soil erosion). Also for use on projects where there is extensive monitoring of environmental permit compliance.

The Region Construction Engineer and Region Environmental Office should be consulted for use as the provision introduces an Environmental Compliance Lead person that incorporates, expands, and replaces the duties of the ESC Lead person.

8-SA5.GR8

(Woody Material)

(October 3, 2022)

For use on projects that have logs with or without rootwads or slash materials.

1 8-01.GR8
2 **Erosion Control and Water Pollution Control**

3
4 ~~8-01.2.GR8~~
5 **Materials**

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7 ~~8-01.2(9-14.6(4)A).GR8~~
8 ***Biodegradable Check Dams***
9 Section 9-14.6(4)A is revised to read:

10
11 ~~8-01.2(9-14.6(4)A).OPT1.2025.GR8~~
12 ~~(February 13, 2024)~~
13 ~~Biodegradable check dams shall meet the following requirements:~~

14
15 Compost Sock _____ Section 9-14.6(6)
16 Coir Log _____ Section 9-14.6(7)

17
18 ~~The Contractor may substitute a different biodegradable check dam as long as it~~
19 ~~complies with the following and is accepted by the Engineer:~~

- 20
21 ~~1. Made of natural plant fiber unaltered by synthetic material.~~
22
23 ~~2. Netting, if present, shall be made of natural plant fibers unaltered by~~
24 ~~synthetic materials. Materials shall effectively perform the intended erosion~~
25 ~~control function until permanent vegetation has been established or for a~~
26 ~~minimum of 6 months, whichever comes first.~~
27
28 ~~3. Straw bales shall not be used as check dams.~~
29
30 ~~4. Wattles shall not be used as check dams.~~

31
32 8-01.3.GR8
33 **Construction Requirements**

34
35 8-01.3(1).GR8
36 **General**

37
38 8-01.3(1).INST1.GR8
39 The tenth paragraph of Section 8-01.3(1) is revised to read:

40
41 8-01.3(1).OPT1.GR8
42 **(January 25, 2010)**
43 **Erodible Soil Eastern Washington**
44 Erodible soil not being worked whether at final grade or not, shall be covered within
45 the following time period using an approved soil cover practice:

46
47 July 1 through September 30 30 days
48 October 1 through June 30 15 days

49
50 8-01.3(1).INST2.GR8
51 Section 8-01.3(1) is supplemented with the following:

52

1 8-01.3(1).OPT8.FR8
2 **(April 1, 2002)**
3 **Side Slope Treatment**
4 Slopes shall be compacted within *** \$\$1\$\$ *** days of exposure of a new section of
5 cut and construction of a new portion of an embankment.
6
7 8-01.3(1)B.GR8
8 **Erosion and Sediment Control (ESC) Lead**
9
10 8-01.3(1)B.INST1.GR8
11 Item number 3 and 4 in the second paragraph of Section 8-01.3(1)B are revised to
12 read:
13
14 8-01.3(1)B.OPT1.GR8
15 (October 3, 2022)
16 3. Submit to the Engineer no later than the end of the next working day
17 following the inspection a TESC Inspection Report that includes:
18
19 a. When, where, and how BMPs were installed, maintained, modified,
20 and removed.
21
22 b. Observations of BMP effectiveness and proper placement.
23
24 c. Recommendations for improving future BMP performance with
25 upgraded or replacement BMPs when inspections reveal TESC BMP
26 deficiencies.
27
28 d. Identify for each discharge point location whether there is compliance
29 with state water quality standards in WAC 173-201A for turbidity and
30 pH.
31
32 8-01.3(1)C.GR8
33 **Water Management**
34
35 8-01.3(1)C4.GR8
36 **Management of Off-Site Water**
37
38 8-01.3(1)C4.INST1.GR8
39 Section 8-01.3(1)C4 is supplemented with the following:
40
41 8-01.3(1)C4.OPT1.FR8
42 **(August 6, 2012)**
43 **Off-site Stormwater**
44 Stormwater is known to enter the project site at the following locations:
45
46 *** \$\$1\$\$ ***
47
48 8-01.3(2).GR8
49 **Temporary Seeding and Mulching**
50

1 8-01.3(2)B.GR8
 2 **Temporary Seeding**
 3
 4 8-01.3(2)B.INST1.GR8
 5 Section 8-01.3(2)B is supplemented with the following:
 6
 7 8-01.3(2)B.OPT1.FR8
 8 (August 4, 2014)
 9 Seed of the following mix, rate, and analysis shall be applied at the rates shown
 10 below on all areas requiring ***\$1\$*** seeding within the project:

Seed by Common Name and <u>(Botanical name)</u>	<u>Pounds Pure Live Seed (PLS) Per Acre</u>
*** \$2\$\$	\$\$
\$\$	\$\$
\$\$	<u>\$\$</u>
Total	\$\$ ***

22
 23 The seed shall be certified in accordance with WAC 16-302 and meet the
 24 following requirements:

26 Prohibited Weed	0% max.
27 Noxious Weed	0% max.
28 Other Weed	0.20% max.
29 Other Crop	0.40% max.

31
 32 8-01.3(2)B.OPT2.FR8
 33 (August 4, 2014)
 34 Seed of the following mix, rate, and analysis shall be applied at the rates shown
 35 below on all areas requiring ***\$1\$*** seeding within the project:

Seed by Common Name, (Botanical Name), and <u>"Source Identification"</u>	<u>Pounds Pure Live Seed (PLS) Per Acre</u>
*** \$2\$\$	\$\$
\$\$	\$\$
\$\$	<u>\$\$</u>
Total	\$\$ ***

44
 45 Source Identified seed shall be generation four or less. Non-Source Identified
 46 seed shall meet or exceed Washington State Department of Agriculture Certified
 47 Seed Standards and be from within the appropriate genetic zones of the ***
 48
 49
 50
 51

1 \$\$\$ *** Ecoregion(s) as defined by the US Environmental Protection Agency
2 (EPA).
3

4 The seed certification class shall be Certified (blue tag) in accordance with WAC
5 16-302 and meet the following requirements:
6

7	Prohibited Weed	0% max.
8	Noxious Weed	0% max.
9	Other Weed	0.20% max.
10	Other Crop	0.40% max.

11
12 The Contractor shall document all Source Identified seed by providing the
13 Association of Official Seed Certifying Agents (AOSCA) yellow seed label for
14 each species in the mix. Site Identification Logs can be supplied for collections
15 where the AOSCA yellow label is not available.
16

17 8-01.3(2)B.OPT3.GR8

18 (September 3, 2019)

19 Grass seed shall be a commercially prepared mix, made up of low growing
20 species which will grow without irrigation at the project location, and approved
21 by the Engineer. The application rate shall be two pounds per 1000 square feet.
22 Fertilizer shall be a commercially prepared mix of 10-20-20 and shall be applied
23 at the rate of 10 pounds per 1000 square feet.
24

25 8-01.3(2)B.OPT4.FR8

26 (January 3, 2006)

27 Sufficient quantities of fertilizer shall be applied to supply the following amounts
28 of nutrients:
29

30 Total Nitrogen as N - *** \$\$\$ *** pounds per acre.

31
32 Available Phosphoric Acid as P₂O₅ - *** \$\$\$ *** pounds per acre.

33
34 Soluble Potash as K₂O - *** \$\$\$ *** pounds per acre.
35

36 *** \$\$\$ *** pounds of nitrogen applied per acre shall be derived from
37 isobutylidene diurea (IBDU), cyclo-di-urea (CDU), or a time release,
38 polyurethane coated source with a minimum release time of 6 months. The
39 remainder may be derived from any source.
40

41 The fertilizer formulation and application rate shall be approved by the Engineer
42 before use.
43

44 8-01.3(2)B.OPT8.FR8

45 (August 4, 2014)

46 Seed of the following mix, rate, and analysis shall be applied at the rates shown
47 below on all areas requiring *** \$\$\$ *** seeding within the project:
48

49	Seed by Common Name,	
50	(Botanical Name), and	Pure Live Seed
51	<u>"Source Identification"</u>	<u>Pounds (PLS) Per Acre</u>

52

1	*** \$\$2\$\$	\$\$
2		
3	\$\$	\$\$
4		
5	\$\$	<u>\$\$</u>
6		
7	Total	\$\$ ***

9 Seed shall meet or exceed Washington State Department of Agriculture Certified
 10 Seed Standards and be from within the *** \$\$3\$\$ *** Ecoregion(s) as defined by
 11 the US Environmental Protection Agency (EPA).

13 The seed certification class shall be Certified (blue tag) in accordance with WAC
 14 16-302 and meet the following requirements:

16	Prohibited Weed	0% max.
17	Noxious Weed	0% max.
18	Other Weed	0.20% max.
19	Other Crop	0.40% max.

21 8-01.3(2)D.GR8
 22 **Temporary Mulching**

24 8-01.3(2)D.INST1.GR8
 25 Section 8-01.3(2)D is supplemented with the following:

27 8-01.3(2)D.OPT1.FR8
 28 (January 5, 2015)
 29 *** \$\$1\$\$ *** shall be applied at a rate of *** \$\$2\$\$ *** pounds per acre with no
 30 more than *** \$\$3\$\$ *** pounds per acre applied in a single lift.

32 ~~8-01.3(6).GR8~~
 33 ***Check Dams***

35 ~~8-01.3(6).INST1.GR8~~
 36 ~~The second and third paragraphs of Section 8-01.3(6) are revised to read:~~

38 ~~8-01.3(6).OPT1.2025.GR8~~
 39 ~~(February 13, 2024)~~
 40 ~~Coir logs and compost sock used as check dams shall not be trenched in and shall~~
 41 ~~be installed as shown in the Standard Plans.~~

43 ~~When coir logs and compost socks are used as check dams they shall be measured~~
 44 ~~and paid as check dam in accordance with Section 8-01.4 and Section 8-01.5.~~

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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 8-10.2.GR8

17 **Materials**

18

19 8-10.2.INST1.GR8

20 Section 8-10.2 is supplemented with the following:

21

22 | 8-10.2.OPT1.~~NEW~~.GR8

23 (November 20, 2023)

24 Linear delineation panels shall consist of one of the following products:

25

26 1. 3M Linear Delineation System – Series 340 – 6” high for barrier.

27

28 2. 3M Linear Delineation System – Series 340, 1-1/2” high for guardrail.

29

30 3. Luciol Systems Bidirectional Linear Delineation M.S. for barrier or guardrail.

31

32 Only one system shall be selected and installed for the project.

33

34 Adhesives and mechanical fasteners for linear delineation shall meet the requirements of
35 the manufacturer.

36

37 Reflective sheeting shall be in accordance with Section 9-28.12.

38

39 8-10.3.GR8

40 **Construction Requirements**

41

42 8-10.3.INST1.GR8

43 Section 8-10.3 is supplemented with the following:

44

45 | 8-10.3.OPT1.~~NEW~~.GR8

46 **(November 20, 2023)**

47 **General**

48 Installation of linear delineation panels shall follow manufacturer recommendations but
49 shall not be installed on top of concrete barriers or guardrail.

50

51 Spacing of linear delineation panels shall be as specified in the plans. Delineator color
52 shall be white on the right of traffic and yellow on the left of traffic.

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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.

8-10.4.GR8

Measurement

8-10.4.INST1.GR8

Section 8-10.4 is supplemented with the following:

8-10.4.OPT1.~~NEW~~.GR8

(November 20, 2023)

Linear delineation panels will be measured by each panel furnished and installed.

8-10.5.GR8

Payment

8-10.5.INST1.GR8

Section 8-10.5 is supplemented with the following:

8-10.5.OPT1.~~NEW~~.GR8

(November 20, 2023)

"Linear Delineation Panel for Concrete Barrier", per each.

"Linear Delineation Panel for Guardrail", per each.

1 8-12.GR8
2 **Chain Link Fence and Wire Fence**

3
4 8-12.1.GR8
5 **Description**

6
7 8-12.2.GR8
8 **Materials**

9
10 8-12.2.INST1.GR8
11 Section 8-12.2 is supplemented with the following:

12
13 8-12.2.OPT1.FR8
14 **(September 8, 2020)**
15 **Coated Chain Link Fence**

16 Chain link fence fabric shall be hot-dip galvanized with a minimum of 0.8 ounce per square
17 foot of surface area.

18
19 Fencing materials shall be coated with an ultraviolet-insensitive plastic or other inert
20 material at least 2 mils in thickness. Any pretreatment or coating shall be applied in
21 accordance with the manufacturer's written instructions. The Contractor shall provide the
22 Engineer with the manufacturer's written specifications detailing the product and method
23 of fabrication. The color shall match SAE AMS Standard 595 color number *** \$1\$ \$ ***.

24
25 Samples of the coated fencing materials shall have received the Engineer's acceptance
26 prior to installation on the project.

27
28 The Contractor shall supply the Engineer with 10 aerosol spray cans containing a
29 minimum of 14 ounces each of paint of the color specified above. The touch-up paint
30 shall be compatible with the coating system used.

31
32 ~~8-12.2.OPT6.GB8~~
33 ~~**(November 20, 2023)**~~

34 ~~**Cable Fence**~~

35 ~~Steel pipe shall conform to ASTM A53, Grade B, Type E or S.~~

36
37 ~~Steel bars, plates, and shapes shall conform to ASTM A36.~~

38
39 ~~Steel components shall be galvanized after fabrication in accordance with AASHTO M~~
40 ~~411.~~

41
42 ~~Resin bonded anchors shall conform to Section 6-02.3(18)A and Section 9-06.4.~~

43
44 ~~Proof coil chain shall conform to ASTM A413 Grade 30.~~

45
46 ~~Spelter sockets and turnbuckles shall conform to the size and breaking strength~~
47 ~~requirements specific in the Plans, shall be compatible with the wire rope selected by the~~
48 ~~Contractor, and shall be galvanized after fabrication in accordance with AASHTO M 232.~~

49
50 ~~Wire rope shall conform to one of the following:~~

- 51
52 ~~1. ASTM A603 with Class A weight zinc coated wires throughout.~~

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~~2.—ASTM A1023 with drawn galvanized wires throughout in accordance with ASTM A1007. Acceptance of ASTM A1023 wire rope is contingent upon the Contractor furnishing a Type 1 Working Drawing certifying that the lot of supplied wire rope has a minimum modulus of elasticity of 15,000 ksi when tested in accordance with ASTM A931 Section 3.2.17.~~

~~3.—Phillystran HPTG 27000 I as manufactured by:~~

~~Phillystran, Inc.
151 Commerce Drive
Montgomeryville, PA 18936-9628
(215) 368-6611
www.phillystran.com~~

~~8-12.3.GR8~~

Construction Requirements

~~8-12.3.INST1.GR8~~

~~Section 8-12.3 is supplemented with the following:~~

~~8-12.3.OPT1.GB8~~

Cable Fence

~~8-12.3.OPT1(A).GB8~~

~~(April 6, 2015)~~

~~The Contractor shall field measure the slope of the top of the existing retaining wall at each location of cable fence end post and intermediate brace. The Contractor shall submit Type 1 Working Drawings consisting of the tabulated field measured slope data.~~

~~8-12.3.OPT1(B).GB8~~

~~(November 20, 2023)~~

~~The Contractor shall submit shop drawings of the cable fence in accordance with Section 6-03.3(7). The shop drawings shall include, at a minimum, the following:~~

- ~~1.—Plan, elevation, and section views of the cable fence and all components, with dimensions and tolerances.~~
- ~~2.—Material designations for all components.~~
- ~~3.—Socketing procedure for the spelter sockets.~~
- ~~4.—Erection plan for installing the posts, installing and connecting the cable to the posts, and tensioning the cable.~~

~~The Contractor shall install resin bonded anchors in accordance with Section 6-02.3(18)A and Section 9-06.4.~~

~~The cable shall be tensioned to 400 pounds with six inches minimum of take up still available in the turnbuckle.~~

1 ~~8-12.3.OPT1(C).GB8~~
2 ~~(January 10, 2022)~~
3 ~~The Contractor shall clean, prepare, and shop paint or powder coat all exposed~~
4 ~~galvanized surfaces of the cable fence post assemblies in accordance with Section 6-~~
5 ~~07.3(11). The color of the finish coat, when dry, shall match SAE AMS Standard 595 Color~~
6 ~~No. 20045. After installation of the cable fence posts, any surfaces with paint or powder~~
7 ~~coating damage shall be repaired in accordance with Section 6-07.3(10)P or Section 6-~~
8 ~~07.3(11)B6, respectively.~~
9
10 ~~8-12.4.GR8~~
11 **Measurement**
12
13 ~~8-12.4.INST1.GR8~~
14 ~~Section 8-12.4 is supplemented with the following:~~
15
16 ~~8-12.4.OPT1.GB8~~
17 ~~(April 6, 2015)~~
18 ~~Cable fence will be measured by the linear foot along the line and slope at the base of~~
19 ~~the completed fence.~~
20
21 ~~8-12.5.GR8~~
22 **Payment**
23
24 ~~8-12.5.INST1.GR8~~
25 ~~Section 8-12.5 is supplemented with the following:~~
26
27 ~~8-12.5.OPT1.GR8~~
28 ~~(April 1, 2002)~~
29 ~~“Coated Chain Link Fence Type _____”, per linear foot.~~
30 ~~Payment for clearing of fence line for “Coated Chain Link Fence Type _____” shall be in~~
31 ~~accordance with Section 2-01.5.~~
32 ~~“Coated End, Gate, Corner, Pull Post for Chain Link Fence”, per each.~~
33 ~~“Double 14 Ft. Coated Chain Link Gate”, per each.~~
34 ~~“Double 20 Ft. Coated Chain Link Gate”, per each.~~
35 ~~“Single 6 Ft. Coated Chain Link Gate”, per each.~~
36
37 ~~8-12.5.OPT6.GB8~~
38 ~~(April 6, 2015)~~
39 ~~“Cable Fence”, per linear foot.~~

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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-
8		02.4(2) 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		(February 26 <u>September 3</u> , 2024)
21		Use in all projects.

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1 **(February 26, 2024 ~~September 3, 2024~~)**

2 **Standard Plans**

3 The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-
4 01, effective October 23, 2023, is made a part of this contract.

5
6 The Standard Plans are revised as follows:

7
8 A-10.30

9 RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table):
10 The RISER RING detail is deleted from the plan.

11
12 INSTALLATION detail, SECTION A: The "1/4"" callout is revised to read "+/- 1/4" (SEE
13 CONTRACT ~ Note: The + 1/4" installation is shown in the Section A view)"

14
15 A-40.20

16 Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

- 17
18 1. Use the 1/2 inch joint details for bridges with expansion length less than 100 feet
19 and for bridges with L type abutments. Use the 1 inch joint details for other
20 applications.
21
22 2. Use detail 5, 6, 7 on steel trusses and timber bridges with concrete bridge deck
23 panels.
24
25 3. For details 1, 2, 3, and 4, the item "HMA Joint Seal at Bridge End" shall be used
26 for payment. For details 5 and 6, the item "HMA Joint Seal at Bridge Deck Panel
27 Joint" shall be used for payment. For detail 7, the item "Clean and Seal Bridge
28 Deck Panel Joint" shall be used for payment.
29

30 Sheet 2, Detail 8 reference to "6-09.3(6)" is revised to read "6-21.3(7)".

31
32 A-50.40

33 Sheet 1, Plan View: The callout "BEAM GUARDRAIL TYPE 31 TRANSITION SECTION
34 TYPE 21 OR TYPE 24 (SEE STANDARD PLAN C-25.20 OR C-25.30)" is revised to read
35 "BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21, 24, OR 25 (SEE
36 STANDARD PLAN C-25.20, C-25.30, OR C-25.32)"

37
38 A-60.40

39 Note 2 reference to "6-09.3(6)" is revised to read "6-21.3(7)".

40
41 B-90.40

42 Valve Detail – DELETED

43
44 C-2c60.10

45 ~~DELETED~~ Sheet 1 of 2, Side view, add new callout pointing to the outer edges of the 3" x
46 12" lifting slots at bottom of barrier. New callout reads "PERMISSIBLE 3/4" CHAMFER."
47 Sheet 1 of 2, Side view, add 2 inch diameter lifting holes centered 32" from each end of
48 the barrier and 15" from the top face (2 lifting holes total). Add new callout pointing to the
49 new lifting holes. New callout reads "PERMISSIBLE 2" DIAM. LIFTING HOLE"

50
51 C-4f

1 DELETED
2
3 C-20.42
4 DELETED
5
6 C-23.70
7 Sheet 2, ANCHOR BRACKET ASSEMBLY DETAIL, dimension, "R. 5/16" is revised to
8 read; R. 15/16"
9 ANCHOR PLATE DETAIL, weld callout (fillet), 1/4" is revised to read; 3/16"
10
11 C-81.15
12 Sheet 1, General Notes, Add Note 7, to read;"7. The concrete class for the moment slab
13 shall be class 4000 typically and class 4000A when the top of the slab is used as the
14 roadway, or sidewalk, surface. The concrete class for the barrier is defined in Standard
15 Specification Section 6-10.3."
16
17 C-85.11
18 On Section B, the callout "3" EXPANDED POLYSTYRENE AROUND COLUMN (TYP.)" is
19 revised to read "3" EXPANDED POLYSTYRENE OR POLYETHYLENE FOAM AROUND
20 COLUMN (TYP.)"
21
22 D-3.09
23 Sheet 1, Geosynthetic Wall with 2 FT Traffic Surcharge detail, callout – "BARRIER ON
24 WALL ~ SEE Standard Plan D-3.15 or D-3.16" is revised to read: "BARRIER ON WALL ~
25 SEE Standard Plan C-81.10 and/or C-81.15"
26
27 D-3.10
28 Sheet 1, Typical Section, callout – "FOR WALLS WITH SINGLE SLOPE TRAFFIC
29 BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-
30 3.15" is revised to read; "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER, SEE
31 CONTRACT PLANS"
32 Sheet 1, Typical Section, callout – "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER.
33 USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.16" is revised
34 to read; "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER, SEE CONTRACT PLANS"
35
36 D-3.11
37 Sheet 1, Typical Section, callout – "'B" BRIDGE APPROACH SLAB (SEE BRIDGE
38 PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD
39 PLANS D-3.15 OR D-3.16" is revised to read; "B" BRIDGE APPROACH SLAB OR
40 MOMENT SLAB (SEE CONTRACT PLANS)
41 Sheet 1, Typical Section, callout – "TYPICAL BARRIER ON BRIDGE APPROACH SLAB
42 (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE
43 STANDARD PLANS D-3.15 OR D-3.16" is revised to read; "TYPICAL BARRIER ON
44 BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)
45
46 D-10.10
47 Note 7, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-
48 15.30" is revised to read "Traffic Barriers shall not be structurally connected to the
49 Reinforced Concrete Retaining Wall Type 1 and 1SW". ~~Wall Type 1 may be used if no~~
50 ~~traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of~~
51 ~~the wall are considered non-standard and shall be designed in accordance with the~~

1 current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15
2 Bridge Design memorandum.

3
4 D-10.15

5 Note 7, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-
6 15.30" is revised to read "Traffic Barriers shall not be structurally connected to the
7 Reinforced Concrete Retaining Wall Type 2 and 2SW". Wall Type 2 may be used if no
8 traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of
9 the wall are considered non standard and shall be designed in accordance with the
10 current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design
11 memorandum.

12
13 D-10.30

14 Wall Type 5 may be used in all cases.

15
16 D-10.35

17 Wall Type 6 may be used in all cases.

18
19 D-10.40

20 Note 5, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-
21 15.30" is revised to read "Traffic Barriers shall not be structurally connected to the
22 Reinforced Concrete Retaining Wall Type 7". Wall Type 7 may be used if no traffic barrier
23 is attached on top of the wall. Walls with traffic barriers attached on top of the wall are
24 considered non standard and shall be designed in accordance with the current WSDOT
25 BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

26
27 D-10.45

28 Note 5, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-
29 15.30" is revised to read "Traffic Barriers shall not be structurally connected to the
30 Reinforced Concrete Retaining Wall Type 8". Wall Type 8 may be used if no traffic barrier
31 is attached on top of the wall. Walls with traffic barriers attached on top of the wall are
32 considered non standard and shall be designed in accordance with the current WSDOT
33 BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design
34 memorandum.

35
36 F-10.18

37 General Note 1; "Construct curb joints at concrete pavement transverse joint locations. If
38 all adjacent pavement is HMA, see Standard Plam F-30.10 for Curb Expansion and
39 Contraction Joint Spacing." Is revised to read – "See Standard Plan F-30.10 and Standard
40 Specification Section 8-04.3 for Curb Expansion and Contraction Joint details and
41 spacing." Note 2, "Region Traffic engineer approval is needed to install a truck apron lower
42 than 3"." – DELETED

43
44 F-30.10

45 All five instances of the "2.0% MAX." are replaced with "2.1% MAX."

46
47 F-40.12

48 The one instance of "2.0% MAX." is replaced with "2.1% MAX."

49 Note 7 is replaced with the following:

50 7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted
51 herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for
52 details. Use a single constant slope from bottom of ramp to top of ramp to match into the

1 landing. Do not include the abutting landing in the Curb Ramp length measurement. When
2 a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius
3 along the back of the walkway.
4 Section B is amended as follows:
5 Delete: "15' – 0" MAX. (TYP.)"
6 Section C is amended as follows:
7 Delete: "15' – 0" MAX. (TYP.)"
8
9 F-40.14
10 The one instance of "2.0% MAX." is replaced with "2.1% MAX."
11 Note 7 is replaced with the following:
12 7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted
13 herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for
14 details. Use a single constant slope from bottom of ramp to top of ramp to match into the
15 landing. Do not include the abutting landing in the Curb Ramp length measurement. When
16 a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius
17 along the back of the walkway.
18 Section A is amended as follows:
19 Delete: "15' – 0" MAX. (TYP.)"
20 Section C is amended as follows:
21 Delete: "15' – 0" MAX. (TYP.)"
22
23 F-40.15
24 The one instance of "2.0% MAX." is replaced with "2.1% MAX."
25 Note 7 is replaced with the following:
26 7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted
27 herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for
28 details. Use a single constant slope from bottom of ramp to top of ramp to match into the
29 landing. Do not include the abutting landing in the Curb Ramp length measurement.
30 Section A is amended as follows:
31 Delete: "15' – 0" MAX. (TYP.)"
32
33 F-40.16
34 The one instance of "2.0% MAX." is replaced with "2.1% MAX."
35 Note 8 is replaced with the following:
36 7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted
37 herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for
38 details. Use a single constant slope from bottom of ramp to top of ramp to match into the
39 landing. Do not include the abutting landing in the Curb Ramp length measurement.
40 Section A is amended as follows:
41 Delete: "15' – 0" MAX. (TYP.)"
42 Section B is amended as follows:
43 Delete: "15' – 0" MAX. (TYP.)"
44
45 F-80.10
46 The one instance of "2.0% MAX." is replaced with "2.1% MAX."
47 Note 6 is replaced with the following:
48 The running slope of the Pedestrian Ramp shall not exceed 8.3% maximum except as
49 noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract
50 plans for details. Use a single constant slope from bottom of ramp to top of ramp to match
51 into the sidewalk.
52 Section A is amended as follows:

1 Delete: "15" Max."
2
3 J-10.10
4 Sheet 4 of 6, "Foundation Size Reference Table", PAD WIDTH column, Type 33xD=6' –
5 3" is revised to read: 7' – 3". Type 342LX / NEMA P44=5' – 10" is revised to read: 6' – 10"
6 Sheet 5 of 6, Plan View, "FOR EXAMPLE PAD SHOWN HERE:, "first bullet" item, "-
7 SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6" (IN)" IS REVISED
8 TO READ: "SPACE BETWEEN TYPE B MOD. CABINET (BACK OF ALL CHANNEL
9 STEEL) AND 33x CABINET IS 6" (IN) (CHANNEL STEEL ADDS ABOUT 5" (IN)"
10
11 J-10.16
12 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
13
14 J-10.17
15 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
16
17 J-10.18
18 Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14
19
20 J-20.26
21 Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton
22 post."
23 Add General Note 2, to read: "Signs shown are for locations with pedestrian signal
24 displays (Accessible Pedestrian Signals/APS). Accessible information device (AID)
25 pushbuttons signs not shown."
26 Revise View Titles (Both Sheets) to read: "ACCESSIBLE PEDESTRIAN PUSHBUTTON
27 ASSEMBLY"
28
29 J-20.16
30 View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE
31
32 J-21.10
33 Sheet 1, Anchor Bolt Template, callout; "9" (IN) BOLT CIRCLE" is revised to read: "9" (IN)
34 DIA.BOLT CIRCLE"
35 Base Plate Detail, callout; "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/6"
36 (IN)" IS REVISED TO READ; "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE +
37 1/16" (IN)"
38 Flat Foundation Detail – Elevation, callout; "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL
39 THREAD ~ THREE REQ'D. PER ASSEMBLY" is revised to read; "ANCHOR BOLTS ~ 3/4"
40 (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"
41 Flat Foundation Detail – Elevation, dimension; 4' – 0" is revised to read; "4' – 0" ROUND
42 OR 3' – 0" SQUARE" Sheet 1 of 2, Elevation View, Round Concrete Foundation Detail,
43 callout – "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER
44 ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL
45 THREAD ~ FOUR REQ'D. PER ASSEMBLY"
46 Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top
47 of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete – "(TYP.)"
48 from the 2 1/2" CLR. dimension, depicting the distance from the bottom of the foundation
49 to find 2 # 4 reinf. Bar.
50 Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top
51 of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete – "(TYP.)" from

1 ~~the 2 1/2" 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 1/2" 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 1/2" 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 1/2" DIAM., is revised to read; CHASE
19 NIPPLE ~ 1 1/2" (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 1/2" DIAM. is revised to read; CHASE~~
27 ~~NIPPLE ~ 1 1/2" (IN) DIAM.~~
28
29 J-40.10
30 ~~Sheet 2 of 2, Detail F, callout, "12 - 13 x 1 1/2" S.S. PENTA HEAD BOLT AND 12" S. S.~~
31 ~~FLAT WASHER" is revised to read; "12 - 13 x 1 1/2" 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-75.55
51 Notes, Note A1, Revise reference, was – G-90.29, should be – G-90.20.
52

1 ~~L-5.10~~
 2 ~~Sheet 1, General Note 8, third sentence — was; “For traffic barrier having no deflection~~
 3 ~~distance, the fence shall be placed a minimum horizontal distance of 3’—6’ as measured~~
 4 ~~form the top front face of the barrier.” Is revised to read; “For traffic barrier having no~~
 5 ~~deflection distance, the fence shall be placed a minimum horizontal distance of 2’—6” as~~
 6 ~~measured form the top front face of the barrier.”~~

7
 8 ~~Sheet 2, Reinforcing Steel Bending Diagram, (mark) B detail, callout —“128 deg.” is~~
 9 ~~revised to read: “123 deg.”, callout —“51 deg.” is revised to read: “57 deg.”~~

10
 11 M-40.10
 12 Guide Post Type ~ Reflective Sheeting Applications Table, remove reference - “(SEE

13 NOTE 5)”
 14
 15 The following are the Standard Plan numbers applicable at the time this project was
 16 advertised. The date shown with each plan number is the publication approval date
 17 shown in the lower right-hand corner of that plan. Standard Plans showing different dates
 18 shall not be used in this contract.

19	A-10.10-00..... 8/7/07	A-30.35-00..... 10/12/07	A-50.10-02 1 8/17/21 7/18/24
	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-40.50-03..... 9/12/23	A-60.40-00 8/31/07
20	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-30.40-03 2/27/18	B-70.60-01 1/26/17
	B-10.20-03..... 8/23/23	B-30.70-04 2/27/18	B-75.60-00 6/8/06
	B-10.40-02..... 8/17/21	B-30.80-01 2/27/18	B-80.20-00 6/8/06
	B-10.70-03..... 8/23/23	B-30.90-02 1/26/17	B-80.40-00 6/1/06
	B-15.20-01..... 2/7/12	B-35.20-00 6/8/06	B-85.10-01 6/10/08
	B-15.40-01..... 2/7/12	B-35.40-01 8/23/23	B-85.20-00 6/1/06
	B-15.60-02..... 1/26/17	B-40.20-00 6/1/06	B-85.30-00 6/1/06
	B-20.20-02..... 3/16/12	B-40.40-02 1/26/17	B-85.40-00 6/8/06
	B-20.40-04..... 2/27/18	B-45.20-01 7/11/17	B-85.50-01 6/10/08
	B-20.60-03..... 3/15/12	B-45.40-01 7/21/17	B-90.10-00 6/8/06
	B-25.20-02..... 2/27/18	B-50.20-00 6/1/06	B-90.20-00 6/8/06
	B-25.60-03..... 8/23/23	B-55.20-03 8/17/21	B-90.30-00 6/8/06
	B-30.05-00..... 9/9/20	B-60.20-02 9/9/20	B-90.40-01 1/26/17
	B-30.10-03..... 2/27/18	B-60.40-01 2/27/18	B-90.50-00 6/8/06
	B-30.15-00..... 2/27/18	B-65.20-01 4/26/12	B-95.20-02 8/17/21
	B-30.20-04..... 2/27/18	B-65.40-00 6/1/06	B-95.40-01 6/28/18
	B-30.30-03..... 2/27/18	B-70.20-01 3/15/22	
21	C-1..... 9/8/22	C-22.16-08 10/17/23	C-60.60-01 0 8/47/21/24
	C-1b..... 10/12/23	C-22.40-11 0 10/7/21 6/24 3	C-60.70-01 9/8/22
	C-1d..... 10/31/03	C-22.45-07 6 7/9/21 8/24 2	C-60.80-02 1 7/21/19 8/24 2
	C-2c 8/12/19	C-23.70-01 10/16/23	C-70.15-01 0 8/47/21/24
	C-4f 8/12/19	C.24.10-05 4 10/16/23 7/21/24 3	C-70.10-04 10/16/23

	C-6a..... 9/8/22	C-24.15-00 3/15/22	C-75.10-02 9/16/20
	C-7..... 9/8/22	C-25.20-07 8/20/21	C-75.20-03 8/20/21
	C-7a..... 9/8/22	C-25.22-06 8/20/21	C-75.30-03 8/20/21
	C-20.10-09..... 10/12/23	C-25.26-05 8/20/21	C-80.10-03 10/16/23
	C-20.14-05..... 9/8/22	C-25.30-01 8/20/21	C-80.20-01 6/11/14
	C-20.15-03..... 10/12/23	<u>C-25.32-00 7/29/24</u>	C-80.30-02 8/20/21
	C-20.18-04..... 9/8/22	C-25.80-05 8/12/19	C-80.40-01 6/11/14
	C-20.40-10..... 10/12/23	C-60.10-04 3/10/21 <u>7/21/24</u> ³	C-85.10-00 4/8/12
	C-20.41-05 4/8/22 <u>7/18/24</u> ²	C-60.15-01 7/8/21 <u>7/24</u> ⁴	C-85.11-01 9/16/20
	C-20.42-06..... 10/12/23	C-60.20-01 9/8/22	C-85.15-03 10/17/23
	C-20.43-01 7/18/24 <u>7/18/24</u> ²	C-60.30-02 4/8/21 <u>7/21/24</u>	C-85.18-03 9/8/22
	<u>C-20.44-00..... 8/13/24</u>	C-60.40-01 8/4/21 <u>7/21/24</u>	C-81.10-00 9/12/23
	C-20.45-03..... 9/8/22	C-60.45-01 8/4/21 <u>7/21/24</u>	C-81.15-00 9/12/23
	<u>C-20.55-00..... 7/30/24</u>	C-60.50-01 8/4/21 <u>7/21/24</u>	
1	D-2.36-03..... 6/11/14	D-3.11-03 6/11/14	D-10.25-01 8/7/19
	D-2.46-02..... 8/13/21	D-4 12/11/98	D-10.30-00 7/8/08
	D-2.84-00..... 11/10/05	D-6 6/19/98	D-10.35-00 7/8/08
	D-2.92-01..... 4/26/22	D-10.10-01 12/2/08	D-10.40-01 12/2/08
	D-3.09-00..... 5/17/12	D-10.15-01 12/2/08	D-10.45-01 12/2/08
	D-3.10-01..... 5/29/13	D-10.20-01 8/7/19	D-20.10-00 10/9/23
2	E-1..... 2/21/07	E-4 8/27/03	E-20.10-00 9/12/23
	E-2..... 5/29/98	E-4a 8/27/03	E-20.20-00 10/4/23
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-10.18-04 3/6/28/24 ²	F-30.10-04..... 9/25/20	F-45.10-05 4/10/16/4/24 ³
	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-24.50-05 8/7/19	G-90.10-03 7/11/17
	G-20.10-03 8/20/21	G-24.60-05 6/28/18	G-90.20-05 7/11/17
	G-22.10-04 6/28/18	G-25.10-05 9/16/20	G-90.30-04 7/11/17
	G-24.10-00 11/8/07	G-26.10-00 7/31/19	G-95.10-02 6/28/18
	G-24.20-01 2/7/12	G-30.10-04 6/23/15	G-95.20-03 6/28/18
	G-24.30-02 6/28/18	G-50.10-03 6/28/18	G-95.30-03 6/28/18
	G-24.40-07 6/28/18		
5	H-10.10-01 6/2/24 <u>7/3/08</u>	H-30.10-00 10/12/07	H-70.10-02 8/17/21
	<u>H-10.11-00..... 6/2/24</u>	H-32.10-00 9/20/07	H-70.20-02 8/17/21
	H-10.15-01 6/2/24 <u>7/3/08</u>	H-60.10-01 7/3/08	
	<u>H-10.16-00..... 6/2/24</u>	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-26.10-03 7/21/16	J-50.05-00 7/21/17
	J-10 7/18/97	J-26.15-01 5/17/12	J-50.10-01 7/31/19

J-10.10-04	.....9/16/20	J-26.20-01	.....6/28/18	J-50.11-02	.....7/31/19
J-10.12-00	.....9/16/20	J-27.10-01	.....7/21/16	J-50.12-02	.....8/7/19
J-10.14-00	.....9/16/20	J-27.15-00	.....3/15/12	J-50.13-01	.....8/30/22
J-10.15-01	.....6/11/14	J-28.01-00	.....8/30/22	J-50.15-01	.....7/21/17
J-10.16-02	.....8/18/21	J-28.10-02	.....8/7/19	J-50.16-01	.....3/22/13
J-10.17-02	.....8/18/21	J-28.22-00	.....8/07/07	J-50.18-00	.....8/7/19
J-10.18-02	.....8/18/21	J-28.24-02	.....9/16/20	J-50.19-00	.....8/7/19
J-10.20-04	.....8/18/21	J-28.26-01	.....12/02/08	J-50.20-00	.....6/3/11
J-10.21-02	.....8/18/21	J-28.30-04 3	.....6/18 4 4 2 4	J-50.25-00	.....6/3/11
J-10.22-03	.....10/4/23	J-28.40-02	.....6/11/14	J-50.30-00	.....6/3/11
J-10.25-01 076/421/2417		J-28.42-01	.....6/11/14	J-60.05-01	.....7/21/16
J-10.26-00	.....8/30/22	J-28.43-01	.....6/28/18	J-60.11-00	.....5/20/13
J-12.15-00	.....6/28/18	J-28.45-03	.....7/21/16	J-60.12-00	.....5/20/13
J-12.16-00	.....6/28/18	J-28.50-03	.....7/21/16	J-60.13-00	.....6/16/10
J-15.10-01	.....6/11/14	J-28.60-03	.....8/27/21	J-60.14-01	.....7/31/19
J-15.15-02	.....7/10/15	J-28.70-04	.....8/30/22	J-75.10-02	.....7/10/15
J-20.01-01 0.8/306/21/242		J-29.10-02	.....8/26/22	J-75.20-01	.....7/10/15
<u>J-20.05-00</u>	.....<u>6/21/24</u>	J-29.15-01	.....7/21/16	J-75.30-02	.....7/10/15
J-20.10-05	.....10/4/23	J-29.16-02	.....7/21/16	J-75.50-00	.....8/30/22
J-20.11-03	.....7/31/19	J-30.10-01	.....8/26/22	J-75.55-00	.....8/30/22
J-20.15-04 3	.....<u>6/21</u> 30/4 24	J-40.01-00	.....8/30/22	J-80.05-00	.....8/30/22
J-20.16-02	.....6/30/14	J-40.05-00	.....7/21/16	J-80.10-01	.....8/18/21
J-20.20-02	.....5/20/13	J-40.10-04	.....4/28/16	J-80.12-00	.....8/18/21
J-20.26-01	.....7/12/12	J-40.20-03	.....4/28/16	J-80.15-00	.....6/28/18
J-21.10-05 4	.....<u>6/21</u> 30/4 24	J-40.30-04	.....4/28/16	J-81.10-02	.....8/18/21
J-21.15-01	.....6/10/13	J-40.35-01	.....5/29/13	J-81.12-00	.....9/3/21
J-21.16-02 4	.....<u>6/21</u> 0/24 13	J-40.36-02	.....7/21/17	J-84.05-00	.....8/30/22
J-21.17-01	.....6/10/13	J-40.37-02	.....7/21/17	J-86.10-00	.....6/28/18
J-21.20-01	.....6/10/13	J-40.38-01	.....5/20/13	J-90.10-03	.....6/28/18
J-22.15-03 26/21/247/10/15		J-40.39-00	.....5/20/13	J-90.20-03	.....6/28/18
J-22.16-03	.....7/10/15	J-40.40-02	.....7/31/19	J-90.21-02	.....6/28/18
<u>J-22.17-00</u>	.....<u>6/21/24</u>	J-45.36-00	.....7/21/17	J-90.50-00	.....6/28/18
1					
K-70.20-01	.....6/1/16	K-80.32-00	.....8/17/21	K-80.35-01	.....9/16/20
K-80.10-02	.....9/25/20	K-80.34-00	.....8/17/21	K-80.37-01	.....9/16/20
2					
L-5.10-02 4	.....<u>6/7</u> 5/17/24 3	L-20.10-03	.....7/14/15	L-40.20-02	.....6/21/12
L-5.15-00	.....9/19/22	L-30.10-02	.....6/11/14	L-70.10-01	.....5/21/08
L-10.10-02	.....6/21/12	L-40.15-01	.....6/16/11	L-70.20-01	.....5/21/08
3					
M-1.20-04	.....9/25/20	M-9.60-00	.....2/10/09	M-24.66-00	.....7/11/17
M-1.40-03	.....9/25/20	M-11.10-04	.....8/2/22	M-40.10-04	.....10/17/23
M-1.60-03	.....9/25/20	M-12.10-03 4	.....<u>6/28</u> 24/22	M-40.20-00	.....10/12/07
M-1.80-03	.....6/3/11	M-15.10-02	.....7/17/23	M-40.30-01	.....7/11/17
M-2.20-03	.....7/10/15	M-17.10-02	.....7/3/08	M-40.40-00	.....9/20/07
M-2.21-00	.....7/10/15	M-20.10-04	.....8/2/22	M-40.50-00	.....9/20/07
M-3.10-04	.....9/25/20	M-20.20-02	.....4/20/15	M-40.60-00	.....9/20/07
M-3.20-04	.....8/2/22	M-20.30-05 462/289/2446		M-60.10-01	.....6/3/11
M-3.30-04	.....9/25/20	M-20.40-03	.....6/24/14	M-60.20-03	.....8/17/21
M-3.40-04	.....9/25/20	M-20.50-02	.....6/3/11	M-65.10-03	.....8/17/21
M-3.50-03	.....9/25/20	M-24.20-02	.....4/20/15	M-80.10-01	.....6/3/11
M-5.10-03	.....9/25/20	M-24.40-02	.....4/20/15	M-80.20-00	.....6/10/08

1 M-7.50-011/30/07 M-24.60-04..... 6/24/14 M-80.30-00..... 6/10/08
M-9.50-026/24/14 M-24.65-00..... 7/11/17