DIVISION5.GR5 **Surface Treatments and Pavements**

5-01.GR5 **Cement Concrete Pavement Rehabilitation**

5-01.1.GR5 **Description**

5-01.1.INST1.GR5 (Section 5-01.1 is supplemented with the following)
Must use once preceding any of the following:

5-01.1.OPT1.GR5 (Partial Depth Spall Repair)
(September 7, 2021)
Use in projects that have the Bid item "Partial Depth Spall Repair", by force account.
Must also use **5-01.2.OPT1.GR5 & 5-01.3(5).OPT1.GR5**.

5-01.2.GR5 **Materials**

5-01.2.INST1.GR5 (Section 5-01.2 is supplemented with the following)
Must use once preceding any of the following:

5-01.2.OPT1.GR5 (Partial Depth Spall Repair)
(November 4, 2024)
Use in projects that have the Bid item "Partial Depth Spall Repair", by force account.
Must also use **5-01.1.OPT1.GR5 & 5-01.3(5).OPT1.GR5**.

5-01.3.GR5 **Construction Requirements**

5-01.3(5).GR5 **Partial Depth Spall Repair**

5-01.3(5).INST1.GR5 (Section 5-01.3(5) is revised to read)
Must use once preceding any of the following:

5-01.3(5).OPT1.GR5 (Partial Depth Spall Repair)
(November 4, 2024)
Use in projects that have the Bid item "Partial Depth Spall Repair", by force account.
Must also use **5-01.1.OPT1.GR5 & 5-01.2.OPT1.GR5**.

5-01.3(9).GR5 **Portland Cement Concrete Pavement Grinding**

5-01.3(9).INST1.GR5 (Section 5-01.3(9) is supplemented with the following)
Must use once preceding any of the following:

5-01.3(9).OPT1.GR5 (April 1, 2013)
Use in projects that require 10,000 or more square yards of cement concrete pavement grinding.

5-01.3(10).GR5 **Pavement Smoothness**

5-01.3(10).INST1.GR5 (Section 5-01.3(10) is supplemented with the following)
Must use once preceding any of the following:

5-01.3(10).OPT1.GR5 (February 6, 2023)
Use in projects where Weigh-in-Motion (WIM) weight sensors are being installed in pavement where Section 5-01 applies. Must include a WIM Site Index Station in the Plans.

5-02.GR5 Bituminous Surface Treatment

5-02.3.GR5 Construction Requirements

5-02.3(3).GR5 Application Of Asphalt Emulsion and Aggregate

5-02.3(3).INST1.GR5 (Section 5-02.3(3) is supplemented with the following)
Must use once preceding any of the following:

5-02.3(3).OPT1.FR5 (BST New Construction)
(August 5, 2013)
May use with **5-02.3(3).OPT2.FR5.**
Use in projects requiring a Bituminous Surface Treatment on a newly constructed roadway.)
(2 fill-ins)

5-02.3(3).OPT2.FR5 (BST Seal Coat)
(August 5, 2013)
May use with **5-02.3(3).OPT1.FR5**.
Use in projects requiring a Bituminous Surface Treatment seal coat on an existing roadway.
(1 fill-in)

5-02.4.GR5 Measurement

5-02.4.INST1.GR5 (Section 5-02.4 is supplemented with the following)
Must use once preceding any of the following:

5-02.4.OPT2.GR5 (BST existing road approaches)
(March 13, 1995)
Must also use **5-02.5.OPT2.GR5**.
Use in BST projects when there are a substantial number of existing road approaches to be paved and the extra cost of labor for paving approaches becomes a factor in determining the bid price for BST.

5-02.5.GR5 Payment

5-02.5.INST1.GR5 (Section 5-02.5 is supplemented with the following)
Must use once preceding any of the following:

5-02.5.OPT2.GR5 (Bituminous Surface Treatment For Road Approach)
(February 5, 2001)
Must include with **5-02.4.OPT2.GR5**.
Use in BST projects when there are a substantial number of existing road approaches to be paved and the extra

cost of labor for paving approaches becomes a factor in determining the bid price for BST.

5-02.5.OPT3.GR5 (CRS-2P Cost Price Adjustment Payment)
(August 5, 2013)
Include in all BST projects.
Must include **standard item #5294**.
To determine the Engineer's Estimate for this bid item, refer to the guidance at: https://wsdot.wa.gov/engineering-standards/project-management-training/project-management/cost-risk-assessment.

5-02.5.OPT4.GR5 (AC-15P Cost Price Adjustment Payment)
(January 3, 2017)
Include in all BST projects.
Must include **standard item #5280**.

5-04.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.

5-04.3.GR5 Construction Requirements

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

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)
Use in projects where Weigh-in-Motion (WIM) weight sensors are being installed in pavement where Section 5-04 applies. Must include a WIM Site Index Station in the Plans.

5-04.3(14).GR5 Planing Bituminous Pavement

5-04.3(14).INST1.GR5 (Section 5-04.3(14) is supplemented with the following)
Must use once preceding any of the following:

5-04.3(14).OPT1.FR5 (January 5, 2004)
Use in projects when it is necessary to control the time the planed area will be open and exposed to traffic prior to paving.
(1 fill-in)

5-04.3(14).OPT2.GR5 (Requires test section and smoothness requirements)
(January 5, 2004)
Use in projects with large quantities of planing. When using this GSP consider the need to control the amount of time the planed area is open to traffic by adding **5-04.3(14).OPT1.FR5** where appropriate.

5-04.3(14).OPT3.GR5 (Vertical Edge Planing)
(March 13, 1995)
Use in projects when planed lanes shall be paved prior to being open to traffic.

5-04.3(14).OPT4.GR5 (Beveled Edge Planing)
(August 3, 2009)
Use in projects when a beveled edge is required on a planed lane that will be opened to traffic prior to paving. The GSP is required for depths greater than 0.20 feet and may be used with the recommendation of the Region Construction Engineer for depths up to 0.20 feet. When using this GSP consider the need to control the amount of time the planed area is open to traffic by adding **5-04.3(14).OPT1.FR5** where appropriate.

5-04.5.GR5 Payment

5-04.5.INST2.GR5 (Section 5-04.5 is supplemented with the following)
Must use once preceding any of the following:

5-04.5.OPT1.FR5 (Surface Smoothness)
(January 5, 2015)
Must include with **5-04.3(13).OPT1.FR5**.

Fill-in is the appropriate Pay Adjustment Schedule as determined using the criteria below.

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)
Use in projects requiring color treatment, textured treatment or both for roundabout truck aprons, splitter islands, and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a landscape architect.

Use the following table to determine the correct combination of GSPs 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 when a colored release agent is not required.
5-05.OPT3.FR5	Use to specify a pattern or texture for concrete when a colored release agent is required.
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.

5-05.2.GR5 Materials

5-05.2.INST1.GR5 (Section 5-05.2 is supplemented with the following)
Must use once preceding the following:

5-05.2.OPT1.GR5 (“Brick Red” pigmented cement concrete pavement)
(November 20, 2023)
Use in projects requiring brick red in roundabout truck aprons, splitter islands, and mainline crossings. Concrete color must contrast with pavement color.

5-05.2.OPT2.FR5 (Other pigments for cement concrete pavement
(November 20, 2023)
Use in projects requiring color treatment in roundabout truck aprons, splitter islands, and mainline crossings. Concrete color must contrast with pavement color.

Requires approval by the Region Landscape Architect or the State Landscape Architect for regions without a landscape architect.
(1 fill-ins)

Get Primary Pigment from Region Landscape Architect or the HQ Roadside and Site Development Manager and then list all the Manufactures and Pigment Color for that Primary Pigment as fill-in information from list shown below:

5-05.3.GR5 Construction Requirements

5-05.3.INST1.GR5 (Section 5-05.3 is supplemented with the following)
Must use once preceding any of the following:

5-05.3.OPT1.GR5 (Test Panel)
(August 6, 2012)
Use in projects requiring pigmented colored cement concrete pavement in roundabout truck aprons, splitter islands and mainline crossings.

Requires approval by the Region Landscape Architect or the 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 (if a colored release agent is required, use **5-05.3.OPT3.FR5** instead):

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”

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”

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)
(If a colored release agent is not required, use **5-05.3.OPT2.FR5** instead.)

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.

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.