DIVISION5.GR5  Surface Treatments and Pavements

5-01.GR5  Cement Concrete Pavement Rehabilitation

5-01.1.GR5  Description

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

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

5-01.2.GR5  Materials

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

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

5-01.3.GR5  Construction Requirements

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

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

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

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

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

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

5-02.GR5  Bituminous Surface Treatment

5-02.3.GR5  Construction Requirements

5-02.3(3).GR5  Application Of Asphalt Emulsion and Aggregate
5-02.3(INST1.GR5) (Section 5-02.3 is supplemented with the following)
Must use once preceding any of the following:

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

5-02.3(OPT2.FR5) (BST Seal Coat)
(August 5, 2013)
May use with 5-02.3(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 Engineers Estimate for this bid item, refer to the guidance at:
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(1).GR5 How to Get an HMA Mix Design on the QPL

5-04.2(1)A.GR5 Mix Designs Containing Rap and/or RAS

5-04.2(1)A2.GR5 High Rap/Any RAS - Mix Design Submittals for Placement on QPL

5-04.2(1)A2.INST1.GR5 (Section 5-04.2(1)A2 is revised to read)  
Must use once preceding any of the following:

5-04.2(1)A2.OPT1.2024.GR5 (April 27, 2022)  
Include in all projects using HMA.

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).OPT1.2024.GR5 (April 27, 2022)  
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)D 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)C.GR5**  
**HMA Compaction Acceptance – Statistical Evaluation**

**5-04.3(10)C1.GR5**  
**HMA Compaction Statistical Evaluation – Lots and Sublots**

**5-04.3(10)C1.INST1.GR5** (The fourth paragraph of Section 5-04.3(10)C1 is revised to read)  
Must use once preceding any of the following:

**5-04.3(10)C1.OPT1.2023.GR5** (September 27, 2021)  
Include in all projects using HMA.

**5-04.3(10)D.GR5**  
**HMA Compaction – Visual Evaluation**

**5-04.3(10)D.INST1.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)
(Emma 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 ML PavementProfileTest@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(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) (April 4, 2016)

Must include with 5-04.3.OPT4.FR5.

5-05.GR5 Cement Concrete Pavement

5-05.1.GR5 Description

5-05.1.INST1.GR5 (Section 5-05.1 is supplemented with the following)

Must use once preceding any of the following:

5-05.1.OPT1.GR5 (Use when cement concrete pavement has pigmented or textured cement concrete in roundabout locations) (August 6, 2012)
Use in projects requiring color treatment, textured treatment or both for roundabout truck aprons, splitter islands, and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a landscape architect.

Use with 5-05.2.OPT1.FR5, 5-05.3.OPT1.GR5 or 5-05.3.OPT2.FR5 or both.

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.FR5 (Pigmented cement concrete pavement in roundabouts locations)
(August 6, 2012)
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 HQ Roadside and Site Development Manager for regions without a landscape architect.

(1 fill-ins)

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

Primary Pigment - Brick:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Pigment Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASF</td>
<td>“Red River Clay”, RC5006</td>
</tr>
<tr>
<td>Bomanite</td>
<td>“Brick Red”</td>
</tr>
<tr>
<td>Davis Colors</td>
<td>“Brick Red”, 160</td>
</tr>
<tr>
<td>Increte Systems</td>
<td>“Brick Red”</td>
</tr>
<tr>
<td>Solomon Colors</td>
<td>Brick”, 417</td>
</tr>
</tbody>
</table>

Primary Pigment - Brown:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Pigment Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis Colors</td>
<td>“River Bank”</td>
</tr>
<tr>
<td>Scofield</td>
<td>“Sand Buff”</td>
</tr>
<tr>
<td>Solomon Colors</td>
<td>“306 Canvas”</td>
</tr>
</tbody>
</table>

Primary Pigment - Dark Gray:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Pigment Color</th>
</tr>
</thead>
</table>
Use with 5-05.1.OPT1.GR5, 5-05.3.OPT1.GR5, 5-05.3.OPT2.FR5 (if textured pattern also needed) and 5-05.4.OPT1.GR5.

**Construction Requirements**

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

5-05.3.OPT1.GR5  
(Use when cement concrete pavement has pigmented color in roundabout locations)  
(August 6, 2012)
Use in projects requiring pigmented colored cement concrete pavement in roundabout truck aprons, splitter islands and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager for regions without a landscape architect.

5-05.3.OPT2.FR5  
(Use when cement concrete pavement has textured pattern in roundabout locations)  
(August 6, 2012)
Use in projects requiring textured cement concrete pavement patterns on roundabouts, truck aprons, splitter islands and mainline crossings.
Requires approval by the Region Landscape Architect or the HQ Roadside and Site Development Manager 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 :**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increte Systems, Inc.</td>
<td>“Ashlar Slate”</td>
</tr>
<tr>
<td>Renew Crete Systems</td>
<td>“Royal Ashlar”</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Pattern</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Bomanite</td>
<td>“Flagstone”</td>
</tr>
<tr>
<td></td>
<td><strong>Primary Pattern - Brick</strong></td>
</tr>
<tr>
<td>Bomanite</td>
<td>“Running Bond Cobblestone”</td>
</tr>
<tr>
<td>Brickform</td>
<td>“Pennsylvania Cobble-Sanded Joint”, TM820</td>
</tr>
<tr>
<td>Increte Systems, Inc</td>
<td>“Euro Cobble Running Bond”, SECR S001</td>
</tr>
<tr>
<td>Matcrete</td>
<td>“Large Cobblestone”, P-16</td>
</tr>
<tr>
<td>Renew-Crete Systems</td>
<td>“London Cobblestone”</td>
</tr>
<tr>
<td>Scofield</td>
<td>“Old Belgium Stone: Running Bond” (4530)</td>
</tr>
<tr>
<td></td>
<td><strong>Primary Pattern - River Rock</strong></td>
</tr>
<tr>
<td>Bomanite</td>
<td>River Rock</td>
</tr>
<tr>
<td>Increte Systems</td>
<td>Savannah Stone</td>
</tr>
<tr>
<td>Matcrete</td>
<td>Large River Rock</td>
</tr>
</tbody>
</table>

Use with 5-05.1.OPT1.GR5, 5-05.2.OPT1.FR5 (if pigmented color also needed), 5-05.3(1).OPT8.GR5 and 5-05.4.OPT1.GR5.

5-05.3(1).GR5  
Concrete Mix Design for Paving

5-05.3(1).INST1.GR5  
(Item number 1 of Section 5-05.3(1) is supplemented with the following:)  
Must use once preceding any of the following:

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).OPT8.GR5  
(Aggregate size for textured cement concrete pavement)  
(August 6, 2012)  
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.

Use with 5-05.1.OPT1.GR5, GSP 5-05.3.OPT2.FR5, and GSP 5-05.4.OPT1.GR5.

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(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.)

Use with 5-05.5.OPT2.GR5, GSP 5-05.5.OPT3.GR5 or 5-05.5.OPT4.GR5.

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.
Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.

5-05.5.OPT3.GR5 (August 6, 2012)
Textured cement concrete pavement per square yard.
Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.

5-05.5.OPT4.GR5 (August 6, 2012)
Textured and pigmented cement concrete pavement per square yard.
Use with 5-05.1.OPT1.GR5 and 5-05.4.OPT1.GR5.

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.