DIVISION8.GR8 **Miscellaneous Construction**

8-01.GR8 **Erosion Control and Water Pollution Control**

8-01.2.GR8 **Materials**

8-01.2(9-14.6(4)A).GR8 (Check Dams)
(Section 9-14.6(4) is revised to read)
Must use preceding the following:

8-01.2(9-14.6(4)A).OPT1.2025.GR8 (No Wattles in Check Dams)
(February 13, 2024)
Use in all projects that require or may require check dams.

8-01.3.GR8 **Construction Requirements**

8-01.3(1).GR8 **General**

8-01.3(1).INST1.GR8 (The tenth paragraph of Section 8-01.3(1) is revised to read)
Must use once preceding any of the following:

8-01.3(1).OPT1.GR8 (Erodible Soil Eastern Washington)
(January 25, 2010)
Use for projects east of the Cascade range in areas receiving 12 inches or less annual precipitation. Do not use if any portion of the project lies in areas that receive more than 12 inches of annual precipitation. See https://wsdot.wa.gov/engineering-standards/design-topics/hydraulics-hydrology.

8-01.3(1).INST2.GR8 (Section 8-01.3(1) is supplemented with the following)
Must use once preceding any of the following:

8-01.3(1).OPT8.FR8 (Side Slope Treatment)
(April 1, 2002)
Use on projects where erodible soils are anticipated and it is desired to have the newly exposed slopes walked before final erosion control can be accomplished, in accordance with recommendation from environmental office.
(1 fill-in)

8-01.3(1)B.GR8 **Erosion and Sediment Control (ESC) Lead**

8-01.3(1)B.INST1.GR8 (Item number 3 and 4 in the second paragraph of Section 8-01.3(1)B are revised to read)
Must use once preceding any of the following:

8-01.3(1)B.OPT1.GR8 (October 3, 2022)
Use on projects without a CSWGP that require an ESC lead.

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)

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 $$4$$ 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

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.**

8-02.2(9-14).GR8 (Erosion Control and Roadside Planting)

8-02.2(9-14).INST1.GR8 (Section 9-14 is supplemented with the following)
Must use once preceding the following:

8-02.2(9-14).OPT1.FR8 (Weed Barrier Mats)
(January 3, 2011)
Use in projects requiring weed barrier mats.
(1 fill-in) Fill-in is the staple length.
Contact the Region Landscape Architect or HQ Region Liaison Landscape Architect for fill-in information.

8-02.2(9-14.2).GR8 (Topsoil)

8-02.2(9-14.2(1)).GR8 (Topsoil Type A)
(Section 9-14.1(1) is supplemented with the following)
Must use once preceding any of the following:

8-02.2(9-14.2(1)).OPT1.FR8 (February 25, 2021)
For use on projects where Topsoil Type A is needed for stormwater BMPs and for plant growth and establishment. Contact the Landscape Architect for fill-ins and depth of application.
(4 fill-ins)

8-02.2(9-14.5).GR8 (Mulch and Amendments)

8-02.2(9-14.5(8)).GR8 (Compost)
(Section 9-14.5(8) is supplemented with the following)
Must use once preceding any of the following:

8-02.2(9-14.5(8)).OPT2.GR8 (September 3, 2019)
May be used to allow biosolids compost on projects that do not use compost on stormwater BMPs. Use with concurrence of the Hydraulics Engineer.

8-02.3.GR8 Construction Requirements

8-02.3.INST1.GR8 (Section 8-02.3 is supplemented with the following)
Must use once preceding any of the following:

8-02.3.OPT1.GR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to

steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.4.OPT2.GR8**, and **8-02.5.OPT4.FR8.**

8-02.3(4).GR8 Topsoil

8-02.3(4)A.GR8 Topsoil Type A

8-02.3(4)A.INST1.GR8 (Section 8-02.3(4)A is supplemented with the following)
Must use once preceding any of the following:

8-02.3(4)A.OPT1.FR8 (Topsoil Type A)
(August 3, 2015)
Must include with **8-02.2(9-14.2(1)).OPT1.FR8.**

8-02.3(5).GR8 Roadside Seeding, Lawn and Planting Area Preparation

8-02.3(5).INST1.GR8 (Section 8-02.3(5) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(5).OPT1.FR8 (Application of Compost)
(August 5, 2013)
Include when no incorporation of compost is required.
(1 fill-in)

8-02.3(5).OPT2.FR8 (Application of Compost)
(August 5, 2013)
Include when compost is to be incorporated into the soil and irrigation lines are included in the Contract.
(2 fill-ins)

8-02.3(5).OPT3.FR8 (Application of Compost)
(August 5, 2013)
Include when compost is to be incorporated onto the soil and there are no irrigation lines included in the Contract.
(2 fill-ins).

8-02.3(5).OPT4.GR8 (Removal of Buried Previously Fabricated Debris)
(August 4, 2014)
Must include with **8-02.1.OPT1.GR8 and 8-02.5.OPT2.GR8.**

8-02.3(6).GR8 Mulch and Amendments

8-02.3(6)B.GR8 Fertilizers

8-02.3(6)B.INST1.GR8 (Section 8-02.3(6)B is supplemented with the following)
Must use once preceding any of the following:

8-02.3(6)B.OPT1.FR8 (One application of fertilizer)
(September 3, 2019)
Use in projects requiring only one application of fertilizer.
(4 fill-ins) (The fill-ins for the fertilizer itself should be by consulting the State Horticulturist, the Region Landscape Architect, or Headquarters Roadside and Site Development. Fill-in $$4$$ should be 2/3 the amount of nitrogen in fill-in $$1$$.)

8-02.3(6)B.OPT2.FR8 (More than one application of fertilizer)
(September 3, 2019)
Use in projects when the Region Landscape Arch. recommends more than one fertilizer application.
(7 fill-ins) (The fill-ins for the fertilizer itself should be by consulting the Region Landscape Architect, or Headquarters Roadside and Site Development. Fill-in $$7$$ should be 2/3 the amount of nitrogen in fill-in $$4$$.)

8-02.3(6)B.OPT3.GR8 (Fertilizing by hand)
(September 3, 2019)
Must include with **8-02.3(9)B.OPT2.GR8**.
Use in projects with seeding and fertilizing of less than 1 acre, the use of mechanical equipment would not be cost effective, or on remote projects with many small areas.

8-02.3(6)B.OPT4.FR8 (Fertilizer Application in Eastern Washington)
(September 3, 2019)
Use this GSP for projects in eastern Washington where soils tests show excess potassium and phosphorous and high pH.

8-02.3(8).GR8 Planting

8-02.3(8).INST1.GR8 (Section 8-02.3(8) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(8).OPT1.FR8 (February 25, 2013)
Must use when the project requires a U.S. Army Corps of Engineers Nationwide Permit. Use the Environmental Commitment Meeting to determine applicability of this provision for the project.
(1 fill-in)

8-02.3(9).GR8 Seeding, Fertilizing, and Mulching

8-02.3(9)B.GR8 Seeding and Fertilizing

8-02.3(9)B.INST1.GR8 (Section 8-02.3(9)B is supplemented with the following)

Must use once preceding any of the following:

8-02.3(9)B.OPT1.FR8 (Composition, proportion, quality and application rate of grass seed)
(September 3, 2019)
Use in projects where the Region Landscape Architect recommends source identified (local genetics) native seed. The fill-ins should be provided by the Region Landscape Architect or Headquarters Roadside and Site Development for regions without a Landscape Architect.
(3 fill-ins) (Fill-ins with dollar signs only are to be used as required.)

8-02.3(9)B.OPT2.GR8 (Seeding by hand)
(September 3, 2019)
Use in projects with seeding and fertilizing of less than 1 acre, the use of mechanical equipment would not be cost effective, or on remote projects with many small areas.

8-02.3(9)B.OPT3.FR8 (Composition, proportion, quality and application rate of grass seed)
(September 3, 2019)
Use in projects where the Region Landscape Architect recommends native seed that is not source identified. The fill-ins should be provided by the Region Landscape Architect or Headquarters Roadside and Site Development for regions without a Landscape Architect.
(3 fill-ins)

8-02.3(11).GR8 Mulch

8-02.3(11).INST1.GR8 (Section 8-02.3(11) is supplemented with the following)
Must use once preceding any of the following:

8-02.3(11).OPT1.FR8 (Placement of Bark or Wood Chip Mulch)
(April 2, 2012)
Use in projects requiring bark and wood chip mulch. Use requires approval of the Region Landscape Architect or HQ Region Liaison Landscape Architect.
(1 fill-in)

8-02.3(11)A.GR8 Mulch for Seeding Areas

8-02.3(11)A.INST1.GR8 (Section 8-02.3(11)A is supplemented with the following)
Must use once preceding any of the following:

8-02.3(11)A.OPT1.FR8 (Type and rate of application of mulch)
(September 3, 2019)
Use in projects requiring the application of mulch when the application rate per acre or the

allowable pounds in any single lift are revised from the Standard Specifications.
(3 fill-ins)

8-02.4.GR8 Measurement

8-02.4.INST1.GR8 (Section 8-02.4 is supplemented with the following)
Must use once preceding any of the following:

8-02.4.OPT2.GR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, and **8-02.5.OPT4.FR8**.

8-02.5.GR8 Payment

8-02.5.INST1.GR8 (Section 8-02.5 is supplemented with the following)
Must use once preceding any of the following:

8-02.5.OPT2.GR8 (Removal of Buried Previously Fabricated Debris)
(September 7, 2021)
Must include with **8-02.1.OPT1.GR8** and **8-02.3(5).OPT4.GR8**.

8-02.5.OPT4.FR8 (Biotic Soil Amendments)
(April 1, 2019)
Use on projects to amend poor quality soils (which have a lack of organic matter and little to no bioactivity) using Biotic Soil Amendments (BSAs). Should only be used if the soil is determined to be deficient from the results of a soil organic matter test or the soil analysis and the application of compost or topsoil is not possible due to steepness or access. Use requires the approval of the Region Landscape Architect or the HQ Region Liaison Landscape Architect.
(1 fill-in) (Fill-in #1 indicates which seed item will be used in conjunction with the BSA. Consult with the Region Landscape Architect to determine which permanent seeding item to use.)
Must also use **8-02.1.OPT2.GR8**, **8-02.2.OPT2.GR8**, **8-02.3.OPT1.GR8**, and **8-02.4.OPT2.GR8**.

8-03.GR8 Irrigation Systems

8-03.3.GR8 Construction Requirements

8-03.3(6).GR8 Excavation

8-03.3(6)A.GR8 Trenches

8-03.3(6)A2.GR8 Within Critical Root Zone

8-03.3(6)A2.INST1.GR8 (Section 8-03.3(6)A2 is supplemented with the following)
Must use once preceding any of the following:

8-03.3(6)A2.OPT1.FR8 (Trenching in Critical Root Zone)
(October 3, 2022)
Use in projects when the Landscape Architect has indicated that locations of mechanical trenching will be allowed.
(1 fill-in)
Fill-in #1: Indicate locations where mechanical trenching within the critical root zone will be allowed. Contact Region Landscaping Office for assistance.

8-10.GR8 Guide Posts

8-10.1.GR8 Description

8-10.1.INST1.GR8 (Section 8-10.1 is supplemented with the following)
Must use once preceding any of the following:

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

8-10.3.INST1.GR8 (Section 8-10.3 is supplemented with the following)
Must use once preceding any of the following:

8-10.3.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, 8-10.2.OPT1.NEW.GR8, 8-10.4.OPT1.NEW.GR8,** and **8-10.5.OPT1.NEW.GR8.**

8-10.4.GR8 Measurement

8-10.4.INST1.GR8 (Section 8-10.4 is supplemented with the following)
Must use once preceding any of the following:

8-10.4.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, 8-10.2.OPT1.NEW.GR8, 8-10.3.OPT1.NEW.GR8,** and **8-10.5.OPT1.NEW.GR8.**

8-10.5.GR8 Payment

8-10.5.INST1.GR8 (Section 8-10.5 is supplemented with the following)
Must use once preceding any of the following:

8-10.5.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, 8-10.2.OPT1.NEW.GR8, 8-10.3.OPT1.NEW.GR8,** and **8-10.4.OPT1.NEW.GR8.**

8-11.GR8 Guardrail

8-11.1.GR8 Description

8-11.1.INST1.GR8 (Section 8-11.1 is supplemented with the following)
Must use once preceding any of the following:

8-11.1.OPT1.GR8 (High-Tension Cable Barrier System 4 Cable)
(February 3, 2020)
Must also use **8-11.2.OPT2.FR8, 8-11.3.OPT2.FR8, 8-11.4.OPT2.GR8**, **8-11.5.OPT7.GR8,** and **8-11.5.OPT8.GR8.**

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**.

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.

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:

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-**

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.

8-12.GR8 Chain Link Fence and Wire Fence

8-12.2.GR8 Materials

8-12.2.INST1.GR8 (Section 8-12.2 is supplemented with the following)
Must use once preceding any of the following:

8-12.2.OPT1.FR8 (Coated chain link fence)
(September 8, 2020)
Use in projects requiring the construction of coated chain link fence. Must include **8-12.5.OPT1.GR8**.
(1 fill-in)

8-12.2.OPT6.GB8 (Cable Fence)
(November 20, 2023)
Use in projects with cable fence. Include with **8-12.3.OPT1(B).GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.3.GR8 Construction Requirements

8-12.3.INST1.GR8 (Section 8-12.3 is supplemented with the following)
Must use once preceding any of the following:

8-12.3.OPT1.GB8 (Cable Fence)
Use once preceding the following:

8-12.3.OPT1(A).GB8 (Field Measuring For Cable Fence)
(April 6, 2015)
Use in projects with cable fence when anchoring the cable fence posts to existing concrete structures. Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.3.OPT1(B).GB8 (Cable Fence)
(November 20, 2023)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.3.OPT1(C).GB8 (Cable Fence)

(January 2, 2018)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.4.OPT1.GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures.

8-12.4.GR8 Measurement

8-12.4.INST1.GR8 (Section 8-12.4 is supplemented with the following)
Must use once preceding any of the following:

8-12.4.OPT1.GB8 (Cable Fence)
(April 6, 2015)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8, and 8-12.5.OPT6.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-12.5.GR8 Payment

8-12.5.INST1.GR8 (Section 8-12.5 is supplemented with the following)
Must use once preceding any of the following:

8-12.5.OPT1.GR8 (Coated chain link fence)
(April 1, 2002)
Use in projects requiring the construction of coated chain link fence.

8-12.5.OPT6.GB8 (Cable Fence)
(April 6, 2015)
Use in projects with cable fence. Include with **8-12.2.OPT6.GB8, 8-12.3.OPT1(B).GB8, and 8-12.4.OPT1.GB8**. Include with **8-12.3.OPT1(A).GB8** when anchoring the cable fence posts to existing concrete structures. Include with **8-12.3.OPT1(C).GB8** when painting of the galvanized fence posts is required.

8-13.GR8 Monument Cases

8-13.1.GR8 Description

8-13.1.INST1.GR8 (Section 8-13.1 is deleted and replaced by the following)
Must use once preceding any of the following:

8-13.1.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must also use **8-13.2.OPT1.GR8, 8-13.4.OPT1.GR8** and **8-13.5.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.2.GR8 **Materials**

8-13.2.INST1.GR8 (Section 8-13.2 is supplemented with the following)
Must use once preceding any of the following:

8-13.2.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.3.GR8 **Construction Requirements**

8-13.3(1).GR8 **Monument Case and Cover**

8-13.3(1).INST1.GR8 (The last paragraph of Section 8-13.3(1) is revised to read)
Must use once preceding any of the following:

8-13.3(1).OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Use in projects requiring that the monument pipes be installed by the Contractor.
Must include with **8-13.1.OPT1.GR8**.

8-13.3(2).GR8 **Adjust Monument Case and Cover**

8-13.3(2)B.GR8 **Reinstalling Monument Case and Cover**

8-13.3(2)B.INST1.GR8 (The first sentence of Section 8-13.3(2)B is revised to read)
Must use once preceding any of the following:

8-13.3(2)B.OPT1.GR8 (October 3, 2022)
Use in projects where it is desired to reinstall the monument case ¼" lower than grade, such as routes that are subjected to frequent snow plowing.

8-13.4.GR8 **Measurement**

8-13.4.INST1.GR8 (Section 8-13.4 is deleted and replaced by the following)
Must use once preceding any of the following:

8-13.4.OPT1.GR8 (Monument pipes included in work)
(March 13, 1995)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-13.5.GR8 **Payment**

8-13.5.INST1.GR8 (Section 8-13.5 is supplemented with the following)

Must use once preceding any of the following:

8-13.5.OPT1.GR8 (Monument pipes included in work)
(April 28, 1997)
Must include with **8-13.1.OPT1.GR8**.
Use in projects requiring that the monument pipes be installed by the Contractor.

8-14.GR8 Cement Concrete Sidewalks

8-14.2.GR8 Materials

8-14.2(9-19.1).GR8 (Surface Applied Detectable Warning Surface)

8-14.2(9-19.1(1)).GR8 (General Requirements)
(The first paragraph of Section 9-19.1(1) is revised to read)
Must use once preceding any of the following:

8-14.2(9-29.1(1)).OPT1.FR8 (Alternative color for detectable warning surfaces)
(October 3, 2022)
Use in projects where the color for detectable warning surfaces will not be yellow.
(1 fill-in)
Fill-in #1 is the color of the detectable warning surface.

8-14.2(9-19.2).GR8 (Cast-in-Place Detectable Warning Surface)

8-14.2(9-19.2(1)).GR8 (General Requirements)
(The first paragraph of Section 9-19.2(1) is revised to read)
Must use once preceding any of the following:

8-14.2(9-29.2(1)).OPT1.FR8 (Alternative color for detectable warning surfaces)
(October 3, 2022)
Use in projects where the color for detectable warning surfaces will not be yellow.

(1 fill-in)
Fill-in #1 is the color of the detectable warning surface.

8-14.3.GR8 Construction Requirements

8-14.3.INST1.GR8 (Section 8-14.3 is supplemented with the following)
Must use once preceding any of the following:

8-14.3.OPT1.GR8 (Pre-construction meeting for cement concrete sidewalks, curb ramps or other pedestrian access routes to discuss ADA issues before Work begins)
(October 3, 2022)

Use in projects where pedestrian access route Work (cement concrete sidewalks, curb ramps or other pedestrian access) is proposed and it is felt that a pre-construction meeting is needed by Region Construction Office to discuss ADA compliance.

8-14.3.OPT2.GR8 (Timing Restrictions)
(January 7, 2019)
Use in all projects that require any ADA Feature work where the closure of pedestrian routes is subject to time restrictions.
Must use with **1-05.4.OPT4.GR8**, and **8-14.3.OPT3.GR8**.

8-14.3.OPT3.GR8 (Layout and Conformance to Grades)
(January 7, 2019)
Use in all projects that require any ADA Feature work. Use with **1-05.4.OPT4.GR8**.

8-15.GR8 Riprap

8-15.4.GR8 Measurement

8-15.4.INST1.GR8 (Section 8-15.4 is supplemented with the following)
Must use once preceding any of the following:

8-15.4.OPT3.GR8 (Special excavation)
(March 13, 1995)
Must also use **8-15.5.OPT8.GR8**.
Use in projects requiring excavation outside the limits of structure excavation for riprap at bridge piers located within streams.

8-15.4.OPT5.GR8 (Excavation for riprap is included in cost 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:

8-15.5.OPT8.GR8 (Special excavation)
(September 30, 1996)
Must include with **8-15.4.OPT3.GR8**.
Use in projects requiring excavation outside the limits of structure excavation for riprap at bridge piers located within streams.

8-16.GR8 Concrete Slope Protection

8-16.3.GR8 Construction Requirements

8-16.3(2).GR8 Placing Semi-Open Concrete Masonry Units

8-16.3(2).INST1.GR8 (Section 8-16.3(2) is supplemented with the following)
Must use once preceding any of the following:

8-16.3(2).OPT1.GR8 (Requirements for semi-open precast masonry units)
(December 19, 2005)
Must include with **8-16.5.OPT1.GR8**.
Use in projects requiring semi-open concrete masonry slope protection.

8-16.5.GR8 Payment

8-16.5.INST1.GR8 (Section 8-16.5 is supplemented with the following)
Must use once preceding any of the following:

8-16.5.OPT1.GR8 (Semi-open Conc. Masonry Slope Protection)
(September 30, 1996)
Must include with **8-16.3(2).OPT1.GR8**.
Use in projects requiring semi-open concrete masonry slope protection.

8-20.GR8 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical

8-20.2.GR8 Materials

8-20.2.INST1.GR8 (Section 8-20.2 is supplemented with the following)
Must use once preceding any of the following:

8-20.2.OPT1.GB8 (Traffic Signal Shaft Foundation Shaft Casing and Slurry)
(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 **8-20.3(4).OPT1.FB8 and 8-20.5.OPT1.GB8**.

8-20.2(9-29.1).GR8 (Conduit, Innerduct, and Outerduct)

8-20.2(9-29.1(11)).GR8 (Foam Conduit Sealant)
(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)
(Section 9-29.6(2) is supplemented with the following)
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:

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.

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. Include with **8-20.3(14).OPT1.GR8.**

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:

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:

8-20.2(1).OPT1.GR8 (Light standards when H1 dimension is shown on the Plans)
(March 13, 1995)
Use in projects with illumination systems and the lighting standard H1 dimension is shown in the Plans and verification by the Engineer is not required prior to fabrication.

8-20.2(1).OPT2.GR8 (Light standards when H1 dimension is not Shown on the Plans or must be verified prior to fabrication)
(March 13, 1995)
Use in projects with illumination systems and the lighting standard H1 dimension is not shown in the Plans or the dimension shown in the Plans must be verified by the Engineer prior to fabrication.

8-20.2(1).OPT3.GR8 (Traffic signal standards, strain pole standards or combination traffic signal/lighting standards)
(March 13, 1995)
Use in projects with traffic signal systems when standards are to be installed.

8-20.3.GR8 **Construction Requirements**

8-20.3(1).GR8 **General**

8-20.3(1).INST1.GR8 (Section 8-20.3(1) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(1).OPT1.FR8 (Salvaged Equipment)
(November 20, 2023)
Use in projects with equipment to be removed which will stay the property of WSDOT.
(Five fill-ins).

8-20.3(4).GR8 **Foundations**

8-20.3(4).INST1.GR8 (Section 8-20.3(4) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(4).OPT1.FB8 (Shafts for Signal Standard Foundations)
(August 7, 2017)
Use in traffic signal projects with shaft foundations in weak soils, with the concurrence of the Materials Laboratory Geotechnical Branch. The fill-in specifies the location(s) of the shaft(s) requiring construction

under these construction requirements. Include with **8-20.2.OPT1.GB8 and 8-20.5.OPT1.GB8**. (One fill-in).

8-20.3(5).GR8 Conduit

8-20.3(5)E.GR8 Method of Conduit Installation

8-20.3(5)E.INST1.GR8 (Section 8-20.3(5)E is supplemented with the following)
Must use once preceding any of the following:

8-20.3(5)E.OPT1.GR8 (CDF Encased ITS Conduit)
(February 6, 2023)
Use in projects where 4-inch ITS conduits are required to be encased in Controlled Density Fill (CDF) when installed by open trenching.

8-20.3(8).GR8 **Wiring**

8-20.3(8).INST1.GR8 (Section 8-20.3(8) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(8).OPT1.GR8 Field Wiring Chart
(March 13, 1995)
Use in projects with traffic signal systems.

8-20.3(14).GR8 Signal Systems

8-20.3(14).INST1.GR8 (Section 8-20.3(14) is supplemented with the following)
Must use once preceding any of the following:

8-20.3(14).OPT1.GR8 Uninterruptible Power Supply (UPS)
(January 2, 2018)
With Region Traffic Engineer approval use in projects where Uninterruptible Power Supply (UPS) cabinets are required. Include with **8-20.2(9-29.13).OPT1.GR8**

8-20.3(14)A.GR8 Signal Controllers

8-20.3(14)A.INST1.GR8 (Section 8-20.3(14)A is supplemented with the following)
Must use once preceding any of the following:

8-20.3(14)A.OPT1.GR8 Testing
(August 2, 2010)
Use in projects with Contractor furnished signal controllers.

8-20.5.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

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:

8-25.1.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)
Use in projects when the work zone analysis determines the need for temporary barrier screening.
Must use with **8-25.1.OPT1.GR8, 8-25.3.OPT1.GR8, 8-25.4.OPT1.GR8, and 8-25.5.OPT1.GR8**.

8-25.3.GR8 Construction Requirements

8-25.3.INST1.GR8 (Section 8-25.3 is supplemented with the following)
Must use once preceding any of the following:

8-25.3.OPT1.GR8 (April 1, 2002)
Use in projects when the work zone analysis determines the need for temporary barrier screening.
8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.4.OPT1.GR8, and 8-25.5.OPT1.GR8.

8-25.4.GR8 Measurement

8-25.4.INST1.GR8 (Section 8-25.4 is supplemented with the following)
Must use once preceding any of the following:

8-25.4.OPT1.GR8 (April 1, 2002)
Use in projects when the work zone analysis determines the need for temporary barrier screening.
8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8, and 8-25.5.OPT1.GR8.

8-25.5.GR8 Payment

8-25.5.INST1.GR8 (Section 8-25.5 is supplemented with the following)
Must use once preceding any of the following:

8-25.5.OPT1.GR8 (April 1, 2002)
Use in projects when the work zone analysis determines the need for temporary barrier screening.
8-25.1.OPT1.GR8, 8-25.2.OPT1.GR8, 8-25.3.OPT1.GR8, and 8-25.4.OPT1.GR8.

8-29.GR8 Wire Mesh Slope Protection

8-29.1.GR8 Description

8-29.1.INST1.GR8 (Section 8-29.1 is supplemented with the following)
Must use once preceding any of the following:

8-29.1.OPT1.GR8 (Cable Net Slope Protection)
(April 5, 2010)
Use in projects with cable net slope protection. Include with **8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8, 8-29.4.OPT1.GR8 and 8-29.5.OPT1.GR8**.

8-29.2.GR8 Materials

8-29.2.INST1.GR8 (Section 8-29.2 is supplemented with the following)
Must use once preceding any of the following:

8-29.2.OPT1.GR8 (Cable Net Slope Protection Materials)
(January 2, 2018)
Use in projects with cable net slope protection. Include with **8-29.1.OPT1.GR8, 8-29.3.OPT1.GR8, 8-29.4.OPT1.GR8 and 8-29.5.OPT1.GR8**.

8-29.3.GR8 Construction Requirements

8-29.3.INST1.GR8 (Section 8-29.3 is supplemented with the following)
Must use once preceding any of the following:

8-29.3.OPT1.GR8 (Cable Net Slope Protection Construction Requirements)
(January 3, 2011)
Use in projects with cable net slope protection. Include with **8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.4.OPT1.GR8 and 8-29.5.OPT1.GR8**.

8-29.4.GR8 Measurement

8-29.4.INST1.GR8 (Section 8-29.4 is supplemented with the following)
Must use once preceding any of the following:

8-29.4.OPT1.GR8 (Cable Net Slope Protection)
(April 5, 2010)
Use in projects with cable net slope protection. Include with **8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8, and 8-29.5.OPT1.GR8**.

8-29.5.GR8 Payment

8-29.5.INST1.GR8 (Section 8-29.5 is supplemented with the following)
Must use once preceding any of the following:

8-29.5.OPT1.GR8 (Cable Net Slope Protection)
(January 3, 2011)
Use in projects with cable net slope protection. Include with **8-29.1.OPT1.GR8, 8-29.2.OPT1.GR8, 8-29.3.OPT1.GR8, and 8-29.4.OPT1.GR8**.

8-30.GR8 **Water Crossings**

8-30.3.GR8 **Construction Requirements**

8-30.3(2).GR8 **General**

8-30.3(2).INST1.GR8 (Section 8-30.3(2) is supplemented with the following)
Must use once preceding any of the following:

8-30.3(2).OPT1.FR8 (Blending Streambed Aggregates)
(February 13, 2024)
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.

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 gradiant 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.