Structures

General Requirements For Structures

Work Access and Temporary Structures

Section 6-01.5 is re-titled and revised to read:

Must use once preceding any of the following:

(Work Access)

April 1, 2019

Use in projects requiring the Contractor to construct work access to perform structure removal and construction, including work trestle construction for work within or above an environmentally sensitive area as required by resource agency environmental permits and restrictions. The fill-in specifies the name of the environmentally sensitive area or waterway. Include with 6-01.5.OPT1(B).GB6.

Must use once preceding any of the following:

(Waterway Clearance Requirements)

April 6, 2015

Use in projects requiring the Contractor to construct the work access structure to conform to navigation clearance requirements of the USCG. The first fill-in specifies the minimum horizontal clearance required for the channel span. The second fill-in specifies the minimum elevation required for the bottom of the work access structure superstructure. Include with 6-01.5.OPT1.FB6 and 6-01.5.OPT1(B).GB6.

(Payment)

April 6, 2015

Use in projects requiring the Contractor to construct work access to perform structure removal and construction, including work trestle construction for work within or above an environmentally sensitive area as required by resource agency environmental permits and restrictions. Include with 6-01.5.OPT1.FB6.

(Temporary Bridge)

August 6, 2018

Use in projects requiring construction of a temporary bridge. The first fill-in specifies the minimum overall length of the temporary bridge, and can also be used to specify requirements for number of spans and lengths of specific spans, if necessary. The second fill-in specifies the minimum roadway width required between barriers or railings. The third fill-in specifies the minimum vertical clearance dimension to the roadway, body of water, or surface, specified in the fourth fill-in. If the length, width or
vertical clearance of the temporary bridge is shown in the plans, the specific geometric requirement item text in the specification can be deleted (or if all are shown in the plans, the entire geometric requirements paragraph can be deleted).

(4 fill-ins)

**6-02.GR6**

Concrete Structures

**6-02.2.GR6**

Materials

**6-02.2.INST1.GR6**

(Section 6-02.2 is supplemented with the following)

Must use once preceding any of the following:

**6-02.2.OPT1.GR6**

(Resin Bonded Anchors)

(April 1, 2013)

Include in projects requiring resin bonded anchors for attaching and anchoring items to concrete structures. **Must also include 6-02.3(18).OPT1.GR6.**

**6-02.2.OPT2.GB6**

(Epoxy Bonding Agent For Surfaces And For Steel Reinforcing Bar Dowels)

(December 2, 2002)

Use in projects when epoxy resin is required for setting steel reinforcing bars into holes drilled into concrete.

Include with **6-02.3(24).OPT1.GB6.**

**6-02.2.OPT4.GB6**

(Epoxy Crack Sealing)

(August 3, 2015)

Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with **6-02.3.OPT1.GB6** and **6-02.5.OPT49.GB6.**

**6-02.2.OPT22.GB6**

(Modular Expansion Joint System)

(April 3, 2017)

Include in projects requiring a modular expansion joint system. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required.

Include with **6-03.3(30).OPT1.FB6.** Must use with **6-02.3(13).OPT3.FB6, 6-02.4.OPT3.FB6, and 6-02.5.OPT28.GB6.**

**6-02.2.OPT26.GB6**

(Rapid Cure Silicone Sealant)

(April 6, 2015)

Use in projects where rapid cure silicone sealant is used for expansion joint modification. Include with **6-02.3(13).OPT7(C).GB6, either 6-02.3(13).OPT7(I).GB6 or 6-02.3(13).OPT7(J).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).**

**6-02.2.OPT27.GB6**

(Polyester Concrete)
Use in projects where polyester concrete is required. Include with 6-02.3.OPT9.GB6.

(Elastomeric Concrete)
Use in projects where elastomeric concrete is required. Include with 6-02.3.OPT10.GB6.

(Bridge Supported Utilities)
Must use once preceding any of the following:

Use in projects with bridge supported utilities when the supports include concrete inserts. Include with 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and 6-02.5.OPT26.FB6.

Use in projects with bridge supported utilities when the supports include steel rods, bars, and plates. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.5.OPT92.FB6, and either 6-02.3.OPT2(B).GB6, or 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6.

Use in projects with bridge supported utilities when the supports include transverse braces. Include with 6-02.2.OPT46(A).GB6, 6-02.2.OPT46(B).GB6, 6-02.3.OPT2(A).GB6, and 6-02.5.OPT92.FB6, and either 6-02.3.OPT2(B).GB6, or 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6.

Use in projects with bridge supported utilities when the supports include pipe rolls or pipe saddles. Include with 6-02.5.OPT92.FB6 and other applicable bridge supported utility material and construction requirement GSP’s.

Use in projects with bridge supported utilities in concrete box girder bridges when the utilities are supported on anchor blocks on the bottom slab. Include with 6-02.5.OPT92.FB6 and other applicable bridge supported utility material and construction requirement GSP’s.

(Bridge Drain Risers)
(April 30, 2001)
Use in projects requiring the raising of bridge drains prior to asphalt or modified concrete overlay work on bridge decks. Include with \texttt{6-02.3(10)D.OPT3.GB6}. Also include with \texttt{6-02.3(10)D.OPT4.GB6} if the bridge deck is overlaid with membrane waterproofing and ACP. Include with \texttt{6-02.5.OPT53.FB6} if the work is included in the cost of the membrane waterproofing or modified concrete overlay. Include with \texttt{6-02.4.OPT26.GB6} and \texttt{6-02.5.OPT51.GB6} if the unit contract bid item “Modify Bridge Drain” is used to pay for the work.

\texttt{6-02.2.OPT58.GB6} \hspace{1cm} \textit{(Core Drilled Bridge Deck Drain)}
\hspace{1cm} (April 6, 2015)
Use in projects with core drilled bridge deck drains. Include with \texttt{6-02.3(10)D.OPT12.GB6}, and either \texttt{6-02.4.OPT32.GB6} and \texttt{6-02.5.OPT58.GB6}, or \texttt{6-02.5.OPT59.FB6}.

\texttt{6-02.2.OPT60.GB6} \hspace{1cm} \textit{(Seismic Retrofit Materials)}
\hspace{1cm} (April 6, 2015)
Use in projects with seismic retrofit construction. Must use once preceding any of the following:

\texttt{6-02.2.OPT60(B).GB6} \hspace{1cm} \textit{(Steel and PVC Pipe)}
\hspace{1cm} (April 6, 2015)
Use in projects with seismic retrofit work when steel and/or PVC pipe are used as materials. Include with \texttt{6-02.4.OPT44.FB6} and \texttt{6-02.5.OPT72.GB6}, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

\texttt{6-02.2.OPT60(C).GB6} \hspace{1cm} \textit{(Structural Steel and Steel Fastening Hardware)}
\hspace{1cm} (April 6, 2015)
Use in projects with seismic retrofit work when structural steel and steel fastening hardware are used as materials. Include with \texttt{6-02.4.OPT44.FB6} and \texttt{6-02.5.OPT72.GB6}, and all applicable other seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

\texttt{6-02.2.OPT60(D).GB6} \hspace{1cm} \textit{(High-Strength Steel Rods)}
\hspace{1cm} (April 6, 2015)
Use in projects with seismic retrofit work requiring the installation of longitudinal seismic restrainer assemblies. Include with \texttt{6-02.3.OPT8(L).GB6}, \texttt{6-02.4.OPT44.FB6} and \texttt{6-02.5.OPT72.GB6}, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

\texttt{6-02.2.OPT60(F).GB6} \hspace{1cm} \textit{(Column Jacketing Materials)}
\hspace{1cm} (April 6, 2015)
Use in projects with seismic retrofit work when column jacketing is required. Include with 6-
02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-
02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-
02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-
03.3(30).OPT1.FB6. Include with 6-
02.3.OPT8(F).FB6 when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.3.GR6 Construction Requirements

6-02.3.INST1.GR6 (Section 6-02.3 is supplemented with the following)
Must use once preceding any of the following:

6-02.3.OPT1.GB6 (Epoxy Crack Sealing)
(August 3, 2015)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-
02.2.OPT4.GB6, 6-02.4.OPT24.GB6, and 6-
02.5.OPT49.GB6.

6-02.3.OPT2.GB6 (Bridge Supported Utilities)
Must use once preceding any of the following:

6-02.3.OPT2(A).GB6 (Bridge Supported Utilities)
(August 3, 2015)
Use in projects with bridge supported utilities when the supports include concrete inserts. Include with 6-
02.2.OPT46.GB6, 6-02.4.OPT1.FB6, and 6-
02.5.OPT26.FB6.

6-02.3.OPT2(B).GB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the Contractor furnishes and installs the supports and the utility pipe or conduit pipe. Include with 6-
02.5.OPT92.FB6 and other applicable bridge supported utility material GSP’s. Include with 6-
02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-
02.4.OPT1.FB6, and 6-02.5.OPT26.FB6 when the supports include concrete inserts.

6-02.3.OPT2(C).FB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects with bridge supported utilities when the Utility Company furnishes, or furnishes and installs, some of the supports and pipe for the utilities. The first fill-in specifies the items to be furnished and installed by the Utility Company. The second and third fill-ins specify the items to be installed by the Contractor which are furnished by either the Utility Company or the Contractor. Include with 6-
02.5.OPT92.FB6 and 6-
02.5.OPT93.GB6, and other applicable bridge supported utility material GSP’s. Include with 6-
02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-
02.4.OPT1.FB6, and 6-02.5.OPT26.FB6 when the
supports include concrete inserts.

(3 fill-ins)

6-02.3.OPT8.GB6 (Seismic Retrofit)
Must use once preceding one of the following:

6-02.3.OPT8(B).GB6 (Seismic Retrofit Demolition Plan)
(April 6, 2015)
Use in seismic retrofit projects where removal of
portions of existing concrete and steel reinforcing bars,
or cleaning and preparing of existing concrete surfaces
is required. Include with 6-02.4.OPT44.FB6, 6-
02.3.OPT8(H).GB6, and 6-02.5.OPT72.GB6, and all
other applicable seismic retrofit GSPs supplementing
Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(C).GB6 (Column Jacket Installation Plan)
(April 6, 2015)
Use in projects with column jacketing of existing
bridges. Include with 6-02.2.OPT60(F).GB6, 6-
02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-
02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-
02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include
with 6-02.3.OPT8(F).FB6 when the pre-fabrication
field measuring requirements for specific existing
bridge columns are waived.

6-02.3.OPT8(D).GB6 (Column Jacket Shop Drawings)
(April 6, 2015)
Use in projects with column jacketing of existing
bridges. Include with 6-02.2.OPT60(F).GB6, 6-
02.3.OPT8(C).GB6, 6-02.3.OPT8(E).GB6, 6-
02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-
02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include
with 6-02.3.OPT8(F).FB6 when the pre-fabrication
field measuring requirements for specific existing
bridge columns are waived.

6-02.3.OPT8(E).GB6 (Field Measuring Existing Bridge Columns)
(April 6, 2015)
Use in projects where field measuring of existing
bridge columns is required. Include with 6-
02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-
02.3.OPT8(D).GB6, 6-02.3.OPT8(M).GB6, 6-
02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-
03.3(30).OPT1.FB6. Include with 6-
02.3.OPT8(F).FB6 when the pre-fabrication field
measuring requirements for specific existing bridge
columns are waived.
6-02.3.OPT8(F).FB6 (Field Measuring Waiver for Specific Existing Bridge Columns) (April 6, 2015)
Use in projects where the requirement of prefabrication field measuring of specific existing bridge columns is waived. The fill-in specifies the bridge(s) and pier(s) where the column receiving the waiver is located. Include with 6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6.
(1 fill-in)

6-02.3.OPT8(G).FB6 (Field Measuring for Seismic Retrofit Components) (April 6, 2015)
Use in projects where field measuring of existing bridge members is required for seismic retrofit components. The first fill-in specifies the bridge(s) where the field measuring work is required. The second fill-in specifies the members or components to be measured. Include with 6-02.4.OPT44.FB6 and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.
(2-fill-ins)

6-02.3.OPT8(H).GB6 (Removing Portions of Existing Concrete) (April 6, 2015)
Use in seismic retrofit projects where removal of portions of existing concrete and steel reinforcing bars, or cleaning and preparing of existing concrete surfaces is required. Include with 6-02.3.OPT8(B).GB6, 6-02.4.OPT44.FB6 and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(J).GB6 (Drilling Holes and Setting Steel Reinf. Bars, and Placing Concrete) (April 6, 2015)
Use in seismic retrofit projects requiring the construction of catcher blocks, girder stops, and other concrete appendages. Include with 6-02.3.OPT8(B).GB6, 6-02.3.OPT8(H).GB6, 6-02.3(24)C.OPT1.GB6, 6-02.4.OPT44.FB6, and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(K).GB6 (Installing and Tensioning High-Strength Steel Bar Reinforcement)
Use in seismic retrofit projects requiring the installation, stressing, and grouting of high-strength steel bar reinforcement. Include with 6-02.4.OPT44.FB6 and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(L).GB6 (Longitudinal Seismic Restainers) (April 6, 2015)
Use in seismic retrofit projects requiring the installation of longitudinal seismic restrainer assemblies. Include with 6-02.2.OPT60(B).GB6, 6-02.2.OPT60(C).BSP.GB6, 6-02.2.OPT60(D).GB6, 6-02.3(18).OPT1.GR6, either 6-02.4.OPT43.GB6 and 6-02.5.OPT71.GB6, or 6-02.4.OPT44.FB6 and 6-02.5.OPT72.GB6, and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.3.OPT8(M).GB6 (Column Jacketing) (April 6, 2015)
Use in projects with column jacketing of existing bridges. Include with 6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-02.4.OPT45.FB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include with 6-02.3.OPT8(F).FB6 when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.3.OPT9.GB6 (Polyester Concrete) (January 7, 2019)
Use in projects where polyester concrete is required. Include with 6-02.2.OPT27.GB6.

6-02.3.OPT10.GB6 (Elastomeric Concrete) (January 7, 2019)
Use in projects where elastomeric concrete is required. Include with 6-02.2.OPT28.GB6.

6-02.3(2).GR6 Proportioning Materials

6-02.3(2).INST1.GR6 (Section 6-02.3(2) is supplemented with the following) Must use once preceding any of the following:

6-02.3(2).OPT1.GB6 (Expansion Joint Header Concrete) (April 6, 2015)
Use in projects with expansion joint modifications where the headers for the modified joints are made of a high early strength concrete mix. Include with 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-
02.3(13).OPT7(H).GB6, or 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(6).GR6 Placing Concrete

6-02.3(6)B.GR6 Placing Concrete in Foundation Seals

6-02.3(6)B.INST1.GR6 (Section 6-02.3(6)B is supplemented with the following)
Must use once preceding any of the following:

6-02.3(6)B.OPT1.GB6 (Concrete Seals)
(June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is to be lowered to bottom of seal.

6-02.3(6)B.OPT2.GB6 (Concrete Seals)
(June 26, 2000)
Use in projects where there is the possibility of seals being omitted during construction, in which case the footing is not to be lowered.

6-02.3(10).GR6 Bridge Decks and Bridge Approach Slabs

6-02.3(10)D.GR6 Concrete Placement, Finishing, and Texturing

6-02.3(10)D.INST1.GR6 (Section 6-02.3(10)D is supplemented with the following)
Must use once preceding any of the following:

6-02.3(10)D.OPT1.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Sidewalk)
(August 4, 2008)
Use in projects when existing curbs or sidewalks are to be removed and the portion of the slab under the curb or sidewalk that is to remain exposed will be within two feet from the traffic lane.

6-02.3(10)D.OPT2.GB6 (Repairing Slab Left Exposed After Removing Existing Curb or Railbase)
(August 4, 2008)
Use in projects when existing curbs or railbases are to be removed and the portion of the slab under the curb or railbase that is to remain exposed will be more than two feet from the traffic lane.
6-02.3(10)D.OPT3.GB6  (Bridge Drain Risers)
(August 3, 2015)
Use in projects requiring the raising of bridge
drains prior to asphalt or modified concrete
overlay work on bridge decks. Include with 6-
02.2.OPT48.GB6. Include with 6-
02.3(10)D.OPT4.GB6 if the bridge deck is
overlaid with membrane waterproofing and ACP.
Include with 6-02.5.OPT53.FB6 if the work is
included in the cost of the membrane
waterproofing or modified concrete overlay.
Include with 6-02.4.OPT26.GB6 and 6-
02.5.OPT51.GB6 if the unit contract bid item
“Modify Bridge Drain” is used to pay for the work.
Must use once preceding any of the following:

6-02.3(10)D.OPT3(A).GB6  (Bridge Drain Risers)
(August 4, 2008)
Use in projects requiring the raising of
bridge drains prior to membrane
waterproofing and asphalt overlay work.
Include with 6-02.2.OPT48.GB6 and 6-
02.3(10)D.OPT3.GB6. Include with 6-
02.5.OPT53.FB6 if the work is included in
the cost of the membrane waterproofing.
Include with 6-02.4.OPT26.GB6 and 6-
02.5.OPT51.GB6 if the unit contract bid item
“Modify Bridge Drain” is used to pay for the work.

6-02.3(10)D.OPT5.GB6  (Plugging Existing Bridge Drain)
(August 3, 2015)
Use in projects requiring plugging of bridge
drains. Include with 6-02.5.OPT53.FB6 if the
work is included in the cost of the membrane
waterproofing or modified concrete overlay.
Include with 6-02.4.OPT27.GB6 and 6-
02.5.OPT52.GB6 if the unit contract bid item
“Plugging Existing Bridge Drain” is used to pay for the work.

6-02.3(10)D.OPT12.GB6  (Core Drilled Bridge Deck Drain)
(April 6, 2015)
Use in projects with core drilled bridge deck
drains. Include with 6-02.2.OPT58.GB6, and
either 6-02.4.OPT32.GB6 and 6-
02.5.OPT58.GB6, or 6-02.5.OPT59.FB6.

6-02.3(10)F.GR6  Bridge Approach Slab Orientation and Anchors

6-02.3(10)F.INST1.GR6  (Section 6-02.3(10)F is supplemented with
the following)
Must use once preceding any of the following:
6-02.3(10).F.OPT2.GB6  (Construct pavement end of approach slabs parallel to pavement seat)  
(August 4, 2008)  
Use in projects when the pavement ends of all approach slabs are constructed parallel to the pavement seat.

6-02.3(10).F.OPT3.FB6  (Construct pavement end of approach slabs both normal to the roadway centerline and parallel to pavement seat)  
(August 4, 2008)  
Use in projects when the pavement ends of the approach slabs are constructed both normal to the roadway centerline and parallel to the pavement seat.  
(2 fill-ins)

6-02.3(13).GR6  Expansion Joints

6-02.3(13).INST1.GR6  (Section 6-02.3(13) is supplemented with the following)  
Must use once preceding any of the following:

6-02.3(13).OPT3.FB6  (Modular Expansion Joint System)  
(August 6, 2018)  
Include in projects requiring a modular expansion joint system. The fill-in specifies the percentage of the amplified vertical load range to be used for the horizontal load range for fatigue design. The fill-in value shall be 20 percent except as otherwise specified. The fill-in value shall be 50 percent for all modular expansion joint systems installed at locations subject to significant braking and acceleration forces or to particularly large movement ranges. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.4.OPT3.FB6, 6-02.2.OPT2.22.GB6, and 6-02.5.OPT28.GB6.  
(1 fill-in)

6-02.3(13).OPT7.GB6  Expansion Joint Modification

6-02.3(13).OPT7(B).GB6  (Expansion Joint Demolition Plan)  
(April 6, 2015)  
Use in projects where removal of portions of the existing bridge expansion joint assembly, and/or adjacent concrete and steel reinforcing bars, is required. Include with 6-02.3(13).OPT7(E).FB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification...
GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(OPT7(C)).GB6  (Joint Preparation and Installation Procedure)  
(April 6, 2015)  
Use in projects where rapid cure silicone sealant is used for expansion joint modification. Include with 6-02.2.OPT26.GB6, either 6-02.3(13).OPT7(I).GB6 or 6-02.3(13).OPT7(J).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(OPT7(D)).FB6  (Field Measuring Existing Expansion Joint)  
(April 6, 2015)  
Use in projects where field measuring of the existing expansion joint is required. The fill-in specifies the bridge(s) included in the field measuring requirement. Include with 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).  
(1 fill-in)

6-02.3(OPT7(E)).FB6  (Removing Portions of Existing Bridge Expansion Joints)  
(April 6, 2015)  
Use in projects where removal of portions of the existing bridge expansion joint assembly, and/or adjacent concrete and steel reinforcing bars, is required. The fill-in specified the bridge(s) where the expansion joint removal work is required. Include with 6-02.3(13).OPT7(B).GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).  
(1 fill-in)

6-02.3(OPT7(F)).GB6  (Drilling Holes and Setting St. Reinf. Bars)  
(April 6, 2015)  
Use in projects with expansion joint modification where drilling holes and setting steel reinforcing bar dowels are required. Include with 6-02.2.OPT2.GB6, 6-02.3(24).OPT1.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).
6-02.3(13).OPT7(G).GB6 (Placing Polyester Concrete or Elastomeric Concrete Headers) (April 6, 2015)
Use in projects when the headers for modified bridge expansion joints are made of either polyester concrete or elastomeric concrete. Include with either 6-02.2.OPT7.GB6 and 6-02.3.OPT8.GB6, or 6-02.2.OPT9.GB6 and 6-02.3.OPT10.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(13).OPT7(H).GB6 (Placing Concrete Headers) (April 6, 2015)
Use in projects where the headers for modified bridge expansion joints are made of concrete. Include with 6-02.2.OPT2.GB6, 6-02.3(13).OPT2.GB6, 6-02.3(24).OPT1.GB6, 6-02.3(13).OPT2.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(13).OPT7(I).GB6 (Placing Expansion Joint Sealant) (April 6, 2015)
Use in projects where rapid cure silicone sealant is used for modified bridge expansion joints with concrete or polymer concrete or polyester concrete or elastomeric concrete headers. Include with 6-02.2.OPT26.GB6, 6-02.3(13).OPT26.GB6, 6-02.4.OPT8.FB6 and 6-02.5.OPT33.GB6, and all other applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

6-02.3(14).GR6 Finishing Concrete Surfaces
**6-02.3(14)C.GR6** Pigmented Sealer for Concrete Surfaces

6-02.3(14)C.INST1.GR6 (Section 6-02.3(14)C is supplemented with the following)

Must use once preceding any of the following:

6-02.3(14)C.OPT1.GB6 (Washington Gray Pigmented Sealer)
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with Washington Gray being the sole color.

6-02.3(14)C.OPT2.GB6 (Mt. St. Helens Gray Pigmented Sealer)
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. St. Helens Gray being the sole color.

6-02.3(14)C.OPT3.GB6 (Mt. Baker Gray Pigmented Sealer)
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with Mt. Baker Gray being the sole color.

6-02.3(14)C.OPT4.GB6 (Cascade Green Pigmented Sealer)
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with Cascade Green being the sole color.

6-02.3(14)C.OPT5.FB6 (Multiple Color Pigmented Sealer)
(April 6, 2009)
Use in projects requiring application of pigmented sealer to concrete surfaces, with two or more colors specified. Each fill-in pair is to be used to specify the structural features receiving a specific color of pigmented sealer.
(2 fill-ins)

**6-02.3(17).GR6** Falsework and Formwork

6-02.3(17)C.GR6 Falsework and Formwork at Special Locations

6-02.3(17)C.INST1.GR6 (Section 6-02.3(17)C is supplemented with the following)

Must use once preceding any of the following:

6-02.3(17)C.OPT1.FB6 (Falsework Adjacent to or over Railroad Tracks)
(September 3, 2019)
Use in bridge projects requiring falsework adjacent to or over railroad tracks.
1 (1 fill-in)
2 Contact the Railroad Liaison Engineer (360) 705-7271 for the fill in information.

6-02.3(17)K.GR6 Concrete Forms on Steel Spans

6-02.3(17)K.INST1.GR6 (The first paragraph of Section 6-02.3(17)K is revised to read as follows)
Must use once preceding any of the following:

6-02.3(17)K.OPT1.GB6 (Stay-in-place Metal forms for Steel Box Girders)
(August 3, 2015)
Use in projects with steel box girder bridges when stay-in-place metal forms are allowed by the Bridge and Structures Office Steel Specialist.
Include with 6-02.4.OPT1.FB6, 6-02.5.OPT26.FB6, 6-03.3(28).OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, and 6-03.4.OPT1.FB6.

6-02.3(18).GR6 Placing Anchor Bolts

6-02.3(18).INST1.GR6 (Section 6-02.3(18) is supplemented with the following)
Must use once preceding any of the following:

6-02.3(18).OPT1.GR6 (January 3, 2011)
Include in projects requiring resin bonded anchors for attaching and anchoring items to concrete structures.
Must also include 6-02.2.OPT1.GR6.

6-02.3(19).GR6 Bridge Bearings

6-02.3(19)B.GR6 Bridge Bearing Assemblies

6-02.3(19)B.INST1.GR6 (Section 6-02.3(19)B is supplemented with the following)
Must use once preceding any of the following:

6-02.3(19)B.OPT1.GB6 (Fabric Pad Bearing)
(August 3, 2015)
Use in projects requiring fabric pad bearings.
Include with 6-02.4.OPT13.FB6, 6-02.5.OPT38.GB6, and 6-03.3(30).OPT1.FB6.

6-02.3(19)B.OPT6.GB6 (Transverse Stop Bearing)
(April 6, 2015)
Use in projects with fabric pad transverse stop bearing assemblies. Include with 6-02.3(19)B.OPT1.GB6, 6-02.4.OPT18.GB6, 6-02.5.OPT43.GB6, and 6-03.3(30).OPT1.FB6.

6-02.3(24).GR6 Reinforcement
6-02.3(24)C.GR6  Placing and Fastening

6-02.3(24)C.INST1.GR6 (Section 6-02.3(24)C is supplemented with the following)
Must use once preceding any of the following:

6-02.3(24)C.OPT1.GB6 (Drilling Holes for, and Setting, Steel Reinforcing Bar Dowels)
(January 7, 2019)
Use in projects where holes are drilled into existing concrete and steel reinforcing bar dowels are set with epoxy resin. Include with 6-02.2.OPT2.GB6. Include the above with 2-02.1.OPT3.GR2, 2-02.3(2).OPT8.GB2, 2-02.3(2).OPT12.GR2, and either 2-02.5.OPT7.GR2 or 2-02.5.OPT10.GR2 when extending a conc. box culvert.

6-02.3(24)D.GR6  Splicing

6-02.3(24)D.INST1.GR6 (Section 6-02.3(24)D is supplemented with the following)
Must use once preceding any of the following:

6-02.3(24)D.OPT1.GB6 (Splicing of Hoop Reinforcement for Columns and Shafts)
(April 6, 2015)
Use in projects using steel reinforcing bar hoops for columns and shafts. Include with 6-02.3(24)E.OPT2.GB6.

6-02.3(24)E.GR6  Welding Reinforcing Steel

6-02.3(24)E.INST1.GR6 (Section 6-02.3(24)E is supplemented with the following)
Must use once preceding any of the following:

6-02.3(24)E.OPT2.GB6 (Welded Splice Requirements for Hoop Reinforcement)
(April 6, 2015)
Use in projects using steel reinforcing bar hoops for columns and shafts. Include with 6-02.3(24)D.OPT1.GB6.

6-02.3(26).GR6  Cast-in-Place Prestressed Concrete

6-02.3(26).INST1.GR6 (The third paragraph of Section 6-02.3(26) is revised to read as follows)
Must use once preceding any of the following:

6-02.3(26).OPT1.GB6 (Cast-in-Place Prestressed Concrete)
Use in projects with segmental post-tensioned structures. Check with the Region Construction Engineer to see if testing equipment is available.

Precast Concrete Panels

Shop Drawings

(The list included in the third paragraph of Section 6-02.3(28)A is supplemented with the following)

Must use once preceding any of the following:

Casting

(Section 6-02.3(28)B is supplemented with the following)

Must use once preceding any of the following:

Finishing

(Section 6-02.3(28)E is supplemented with the following)

Must use once preceding any of the following:

Tolerances

(Section 6-02.3(28)F is supplemented with the following)

Must use once preceding any of the following:

Handling and Storage

(Section 6-02.3(28)G is supplemented with the following)

Must use once preceding any of the following:

Erection

(Section 6-02.3(28)I is supplemented with the following)

Must use once preceding any of the following:

Measurement

(Summary of Quantities for Superstructure and Bridge Deck)

(August 2, 2010)
Use in bridge construction projects with lump sum items for superstructure or bridge deck. The first and third fill-in specify the appropriate bid item name (“Superstructure - _____” or “Bridge Deck - _____”). The second fill-in itemizes the approximate quantities included. Include with 6-02.5.OPT26.FB6 when the “Bridge Deck - _____” bid item is used.

(3 fill-ins)

6-02.4.OPT3.FB6 (Modular Expansion Joint System)
(August 2, 2010)
Include in projects requiring a modular expansion joint system. The fill-in is to itemize the quantities of work and materials included in the lump sum item. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with 6-03.3(30).OPT1.FB6. Must use with 6-02.2.OPT22.GB6, 6-02.3(13).OPT3.FB6, and 6-02.5.OPT28.GB6.
(1 fill-in)

6-02.4.OPT8.FB6 (Expansion Joint Modification)
(April 6, 2015)
Use in projects with lump sum item for expansion joint modification. The fill-in specifies the approximate quantities included. Include with 6-02.5.OPT33.GB6 and all applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).
(1 fill-in)

6-02.4.OPT13.FB6 (Bridge Bearing Assembly)
(June 26, 2000)
Use in projects with bridge bearing assemblies. The fill-in specifies the type of bridge bearing assembly. Include with 6-02.5.OPT38.GB6. Include with 6-02.3(19)B.OPT1.GB6, 6-03.3(30).OPT1.FB6 for fabric pad bearings.
(1 fill-in)

6-02.4.OPT18.GB6 (Transverse Stop Bearing)
(April 6, 2015)
Use in projects with fabric pad transverse stop bearing assemblies. Include with 6-02.3(19)B.OPT1.GB6, 6-02.3(19)B.OPT6.GB6, 6-02.5.OPT43.GB6, and 6-03.3(30).OPT1.FB6.

6-02.4.OPT24.GB6 (Epoxy Crack Sealing)
(August 6, 2012)
Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with 6-02.2.OPT4.GB6, 6-02.3.OPT1.GB6, and 6-02.5.OPT49.GB6.

6-02.4.OPT26.GB6 (Modifying Bridge Drain)
(June 26, 2000)
Use in projects where modifying bridge drains is a stand-alone bid item. Include with 6-02.2.OPT48.GB6, 6-02.3(10)D.OPT3.GB6, and 6-02.5.OPT51.GB6 with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 with membrane waterproofing and ACP overlay projects.

6-02.4.OPT27.GB6 (Plugging Existing Bridge Drain)  
(Plumbing Existing Bridge Drain)  
Use in projects where plugging existing bridge drains is a stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 and 6-02.5.OPT52.GB6.

6-02.4.OPT32.GB6 (Core Drilled Bridge Deck Drain)  
(Core Drilled Bridge Deck Drain)  
Use in projects where core drilled bridge deck drain is a stand-alone bid item. Include with 6-02.2.OPT58.GB6, 6-02.3(10)D.OPT12.GB6, and 6-02.5.OPT58.GB6.

6-02.4.OPT43.GB6 (Longitudinal Seismic Restrainer)  
(Longitudinal Seismic Restrainer)  
Use in projects where longitudinal seismic restrainer is a stand-alone bid item. Include with 6-02.2.OPT60(B).GB6, 6-02.2.OPT60(C).GB6, 6-02.2.OPT60(D).GB6, 6-02.3.OPT8(L).GB6, 6-02.3(18).OPT1.GR6, 6-02.5.OPT71.GB6 and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.4.OPT44.FB6 (Seismic Retrofit)  
(Seismic Retrofit)  
Use in projects with a lump sum item for seismic retrofit. The fill-in specifies the approximate quantities included. Include with 6-02.5.OPT72.GB6 and all other applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.  
(1 fill-in)

6-02.4.OPT45.FB6 (Column Jacketing)  
(Column Jacketing)  
Use in projects with a lump sum item for column jacketing. The fill-in specifies the approximate quantities included. Include with 6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-02.5.OPT73.GB6, and 6-03.3(30).OPT1.FB6. Include with 6-02.3.OPT8(F).FB6 when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.  
(1 fill-in)

6-02.5.GR6 Payment

6-02.5.INST3.GR6  
(The fifth and sixth bid items under Section 6-02.5 are supplemented with the following)
Must use once preceding any of the following:

**6-02.5.OPT20.GB6**  
(Epoxy-coated St. Reinf. Bar for Bridge)  
(April 6, 2015)

Use in projects with small amounts of epoxy-coated steel reinforcing bar in bridge substructure which is included in the quantity for “St. Reinf. Bar for Bridge” in lieu of a separate stand-alone bid item.

**6-02.5.INST4.GR6**  
(Section 6-02.5 is supplemented with the following)

Must use once preceding any of the following:

**6-02.5.OPT26.FB6**  
(Bridge Deck)  
(August 2, 2010)

Use in steel bridge construction projects with lump sum items for bridge deck. The fill-in specifies work items included in the bid item. Include with **6-02.4.OPT1.FB6**.

**6-02.5.OPT28.GB6**  
(Modular Expansion Joint System)  
(August 2, 2010)

Include in projects requiring a modular expansion joint system. Coordination with the Bridge and Structures Office Bearing and Expansion Joint Specialist is required. Include with **6-03.3(30).OPT1.FB6. Must use with 6-02.2.OPT22.GB6, 6-02.3(13).OPT3.FB6, and 6-02.4.OPT3.FB6.**

**6-02.5.OPT33.GB6**  
(Expansion Joint Modification)  
(April 6, 2015)

Use in projects where expansion joint modification is a lump sum item. Include with **6-02.4.OPT8.FB6** and all applicable expansion joint modification GSPs supplementing Sections 6-02.2 and 6-02.3(13).

**6-02.5.OPT38.GB6**  
(Bridge Bearing Assembly)  
(June 26, 2000)

Use in projects with bridge bearing assemblies. Include with **6-02.4.OPT13.FB6. Include with 6-02.3(19)B.OPT1.GB6, and 6-03.3(30).OPT1.FB6 for fabric pad bearings.**

**6-02.5.OPT43.GB6**  
(Transverse Stop Bearing)  
(April 6, 2015)

Use in projects with fabric pad transverse stop bearing assemblies. Include with **6-02.3(19)B.OPT1.GB6, 6-02.3(19)B.OPT6.GB6, 6-02.4.OPT18.GB6, and 6-03.3(30).OPT1.FB6.**

**6-02.5.OPT49.GB6**  
(Epoxy Crack Sealing)  
(August 1, 2011)

Use in projects which require sealing cracks in existing concrete with injected epoxy resin. Include with **6-
02.2.OPT4.GB6, 6-02.3.OPT1.GB6, and 6-02.4.OPT24.GB6.

6-02.5.OPT51.GB6 (Modify Bridge Drain)
(June 26, 2000)
Use in projects where modifying bridge drains is a stand-alone bid item. Include with 6-02.2.OPT48.GB6, 6-02.3(10)D.OPT3.GB6, and 6-02.4.OPT26.GB6 with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 with waterproof membrane and HMA overlay projects.

6-02.5.OPT52.GB6 (Plugging Existing Bridge Drain)
(June 26, 2000)
Use in projects where plugging existing bridge drains is a stand-alone bid item. Include with 6-02.3(10)D.OPT5.GB6 and 6-02.4.OPT27.GB6.

6-02.5.OPT53.FB6 (Modifying or Plugging Existing Bridge Drain)
(June 26, 2000)
Use in projects where payment for modifying or plugging existing bridge drains is included under either “Waterproof Membrane” or “Finishing and Curing Modified Concrete”. The first fill-in specifies whether the work is modifying or plugging existing bridge drains. The second fill-in specifies appropriate pay item for the work. Include with 6-02.2.OPT48.GB6, and 6-02.3(10)D.OPT3.GB6 for modifying bridge drains with modified concrete overlay projects. Include the above with 6-02.3(10)D.OPT4.GB6 for modifying bridge drains with waterproof membrane and HMA overlay projects. Include with 6-02.3(10)D.OPT5.GB6 for plugging existing bridge drains.
(2 fill-ins)

6-02.5.OPT58.GB6 (Core Drilled Bridge Deck Drain)
(April 6, 2015)
Use in projects where core drilled bridge deck drain is a stand-alone bid item. Include with 6-02.2.OPT58.GB6, 6-02.3(10)D.OPT12.GB6, 6-02.4.OPT32.GB6.

6-02.5.OPT59.FB6 (Core Drilled Bridge Deck Drain)
(April 6, 2015)
Use in projects where core drilled bridge deck drain is included in a separate bid item. The fill-in specifies the bid item including this work. Include with 6-02.2.OPT58.GB6 and 6-02.3(10)D.OPT12.GB6.
(1 fill-in)

6-02.5.OPT71.GB6 (Longitudinal Seismic Restrainer)
(April 6, 2015)
Use in projects where longitudinal seismic restrainer is a stand-alone bid item. Include with 6-02.2.OPT60(B).GB6, 6-02.2.OPT60(C).GB6, 6-02.2.OPT60(D).GB6, 6-02.3.OPT8(L).GB6, 6-02.3(18).OPT1.GR6, 6-
02.4.OPT43.GB6 and all applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.5.OPT72.GB6 (Seismic Retrofit)
(April 6, 2015)
Use in projects with seismic retrofit of bridges. Include with 6-02.4.OPT44.FB6 and all applicable seismic retrofit GSPs supplementing Sections 6-02.2 and 6-02.3.

6-02.5.OPT73.GB6 (Column Jacketing)
(April 6, 2015)
Use in projects with column jacketing of bridges. Include with 6-02.2.OPT60(F).GB6, 6-02.3.OPT8(C).GB6, 6-02.3.OPT8(D).GB6, 6-02.3.OPT8(E).GB6, 6-02.3.OPT8(M).GB6, 6-02.4.OPT45.FB6, and 6-03.3(30).OPT1.FB6. Include with 6-02.3.OPT8(F).FB6 when the pre-fabrication field measuring requirements for specific existing bridge columns are waived.

6-02.5.OPT91.FB6 (Bridge and Structures Minor Items)
(June 26, 2000)
Use in projects with bridges and other structures when there are minor items that are incidental to a lump sum or a unit price bid item. The first fill-in specifies the minor items. The second fill-in specifies the appropriate pay item(s) for the minor items.
(2 fill-ins)

6-02.5.OPT92.FB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects requiring installation of bridge supported utilities. The first fill-in specifies the type of utility. The second fill-in specifies the bridge(s). The third fill-in specifies the work performed by the Contractor (furnishing materials, installing materials, coordination with utility, etc.), excluding furnishing and installing inserts. The fourth fill-in specifies the pay item. Include with 6-02.3.OPT2(B).GB6, with appropriate bridge supported utility material GSP’s, if all materials and work are supplied and performed by the Contractor. Include with 6-02.3.OPT2(C).GB6 and 6-02.5.OPT93.GB6 if a utility company is supplying and performing a portion of the utility materials and work. Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and 6-02.5.OPT26.FB6 when the supports include concrete inserts.
(4 fill-ins)

6-02.5.OPT93.GB6 (Bridge Supported Utilities)
(June 26, 2000)
Use in projects requiring installation of bridge supported utilities where a utility company is supplying and performing a portion of the utility materials and work.
Include with 6-02.3.OPT2(C).GB6 and 6-02.5.OPT92.FB6, and appropriate bridge supported utility material GSP’s.

Include with 6-02.2.OPT46(A).GB6, 6-02.3.OPT2(A).GB6, 6-02.4.OPT1.FB6, and 6-02.5.OPT26.FB6 when the supports include concrete inserts.

6-03.GR6  Steel Structures

6-03.3.GR6  Construction Requirements

6-03.3.INST1.GR6  (Section 6-03.3 is supplemented with the following)

Must use once preceding any of the following:

6-03.3(7).GR6  Shop Plans

6-03.3(7)A.GR6  Erection Methods

6-03.3(7)A.INST1.GR6  (The list in the second paragraph of Section 6-03.3(7)A is supplemented with the following)

Must use once preceding any of the following:

6-03.3(7)A.OPT1.GB6  (Erection by Girder Launching)

(April 6, 2015)

Use in projects where girder launching may be used as an erection method.

6-03.3(7)A.OPT2.GB6  (Hand-held Drilling and Reaming)

(April 6, 2015)

Use in projects where drilling and reaming operations with hand-held devices is permissible.

Include with 6-03.3(27)B.OPT1.FB6.

(1 fill-in)

6-03.3(25).GR6  Welding and Repair Welding

6-03.3(25).INST1.GR6  (Section 6-03.3(25) is supplemented with the following)

Must use once preceding any of the following:

6-03.3(25).OPT2.GB6  (Narrow Gap Improved-Electroslag Welding (NGI-ESW) Procedure)

(April 6, 2015)

Use in projects with steel plate girder bridges and box girder bridges primarily with Grades 50 and 50W steel. Accompanying details are required in the Plans for NGI-ESW test joint configurations for WPS qualification and charpy v-notch test specimens.

6-03.3(27).GR6  High Strength Bolt Holes

6-03.3(27)B.GR6  Reamed and Drilled Holes

6-03.3(27)B.INST1.GR6  (The second sentence of the first paragraph
of Section 6-03.3(27)B is revised to read
Must use once preceding any of the following:

6-03.3(27)B.OPT1.FB6 (Hand-held Drilling and Reaming)
(April 6, 2015)
Use in projects where drilling and reaming
operations with hand-held devices is permissible.
The first fill-in specifies the members and items
being drilled and reamed, and the second fill-in
specifies the bridge(s) where the work is being
done. Include with 6-03.3(7)A.OPT2.GB6.
(2 fill-ins)

6-03.3(28).GR6 Shop Assembly

6-03.3(28)A.GR6 Method of Shop Assembly

6-03.3(28)A.INST1.GR6 (Section 6-03.3(28)A is supplemented with
the following)
Must use once preceding any of the following:

6-03.3(28)A.OPT1.GB6 (Progressive Transverse Shop Assembly)
(August 5, 2013)
Use in projects with new steel girder bridges that
have curved or skewed geometry, with the
concurrence of the Bridge and Structures Office
Steel Specialist. Include with 6-03.3(28)B.OPT1.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

6-03.3(28)B.GR6 Check of Shop Assembly

6-03.3(28)B.INST1.GR6 (Section 6-03.3(28)B is supplemented with
the following)
Must use once preceding any of the following:

6-03.3(28)B.OPT1.GB6 (Check of Shop Assembly)
(August 3, 2015)
Use in projects with new steel bridges. Include
with 6-03.3(30).OPT1.FB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

6-03.3(30).GR6 Painting

6-03.3(30).INST1.GR6 (Section 6-03.3(30) is supplemented with the
following)
Must use once preceding any of the following:

6-03.3(30).OPT1.FB6 (Color of Finish Coat)
(August 3, 2009)
Use in projects with new steel bridges and steel members to cover paint color requirements by specifying the SAE AMS Standard 595 Color Number, or the color name if no number. Include with 6-03.3(28).OPT1.GB6, 6-03.3(39).OPT1.GB6, 6-03.4.OPT1.FB6, and 6-03.5.OPT1.GB6.

Also include in projects with new minor steel items such as steel expansion joints (6-02.3(13).OPT3.FB6, 6-02.4.OPT3.FB6, 6-02.5.OPT28.GB6, and 6-02.2.OPT22.GB6) and bearings (6-02.3(19).B.OPT1.GB6).

(1 fill-in)

(Painting Galvanized Seismic Retrofit Components)
(April 6, 2015)
Use in seismic retrofit projects where galvanized steel components are attached to painted members of existing steel bridges to cover paint color requirements. The first fill-in specifies the galvanized components to be painted. The second fill-in specifies the SAE AMS Standard 595 Color Number, or the color name if no number.
(2 fill-ins)

Setting Steel Bridge Bearings

(Supplemental Instructions)
Must use once preceding any of the following:

(Pin Bearing)
(April 6, 2015)
Use in projects with pin bearing assemblies. Include with 6-03.3.OPT2.BSP.GB6, 6-03.3(30).OPT1.FB6, 6-03.4.OPT6.GB6, and 6-03.5.OPT12.GB6.

Placing Superstructure

(Supplemental Instructions)
Must use once preceding any of the following:

(Concrete Protection)
(August 3, 2015)
Use within projects with bridges having weathering steel superstructure members which remain unpainted at completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface. Include with 6-03.5.OPT7.FB6.

Swinging the Span
1. **6-03.3(INST)1.6** (Supplemental Instructions)
   Must use once preceding any of the following:

2. **6-03.3(OPT)1.6** (Girder Camber Field Measurements)
   (June 26, 2000)
   Use in projects with new steel bridges. Include with 6-03.3(28)B.OPT1.6, 6-03.3(30).OPT1.6, 6-03.4.OPT1.6, and 6-03.5.OPT1.6.

3. **6-03.4.6** Measurement

   6-03.4(INST)1.6 (Section 6-03.4 is supplemented with the following)
   Must use once preceding any of the following:

4. **6-03.4(OPT)1.6** (Structural Low Alloy Quantities)
   (August 6, 2007)
   Use in projects with new steel bridges. Include with 6-03.3(28)B.OPT1.6, 6-03.3(30).OPT1.6, and 6-03.3(OPT)1.6. Include with 6-03.4.OPT1.6 when the steel girder includes a pipe railing.
   (2 fill-ins)

5. **6-03.4(OPT)6.6** (Pin Bearing)
   (April 6, 2015)
   Use in projects with pin bearing assemblies. Include with 6-03.3(OPT)2.BSP.6, 6-03.3(30).OPT1.6, 6-03.3(OPT)37.6, and 6-03.5.OPT12.6.

6. **6-03.5.6** Payment

   6-03.5(INST)1.6 (The second bid item under Section 6-03.5 is supplemented with the following)
   Must use once preceding any of the following:

7. **6-03.5(OPT)1.6** (Payment for Steel Girder Railing)
   (August 6, 2007)
   Use in projects with new steel bridges when the steel girder includes a pipe railing. Include with 6-03.3(28)B.OPT1.6, 6-03.3(30).OPT1.6, 6-03.3(OPT)1.6, and 6-03.4.OPT1.6.

8. **6-03.5(INST)2.6** (Section 6-03.5 is supplemented with the following)
   Must use once preceding any of the following:

9. **6-03.5(OPT)7.6** (Payment for Concrete Protection)
   (June 26, 2000)
   Use in projects with bridges having weathering steel members which remain unpainted at the completion of construction, and which are above concrete surfaces which require protection from staining while the steel members develop their weathered protective surface.
   Include with 6-03.3(OPT)38.6.
6-03.5.OPT12.GB6  (Pin Bearing)
(April 6, 2015)
Use in projects with pin bearing assemblies. Include with
6-03.3.OPT2.BSP.GB6, 6-03.3(30).OPT1.FB6, 6-03.3(37).OPT1.GB6, and 6-03.4.OPT6.GB6.

6-04.GR6  Timber Structures

6-04.3.GR6  Construction Requirements

6-04.3(1).GR6  Storing and Handling Material

6-04.3(1).INST1.GR6  (Section 6-04.3(1) is supplemented with the following)
Must use once preceding any of the following:

6-04.3(1).OPT1.GB6  (Fire Prevention)
(March 6, 2000)
Use in all timber bridge construction and timber deck replacement projects. Include with 6-04.5.OPT1.FB6.

6-04.3(1).OPT2.GB6  (Top Flange Treatment)
(January 2, 2018)
Include in timber redecking projects. Include with 6-04.3(1).OPT1.GB6, 6-04.5.OPT1.FB6, and 6-04.5.OPT2.FB6.

6-04.5.GR6  Payment

6-04.5.INST1.GR6  (Section 6-04.5 is supplemented with the following)
Must use once preceding any of the following:

6-04.5.OPT1.GB6  (Fire Protection)
(March 6, 2000)
Use in all timber bridge construction and timber deck replacement projects. Include with 6-04.3(1).OPT1.GB6.
(1 fill-in)

6-04.5.OPT2.FB6  (Top Flange Treatment)
(March 6, 2000)
Use in timber deck replacement projects. Include with 6-04.3(1).OPT1.GB6, 6-04.3(1).OPT2.GB6, and 6-04.5.OPT1.FB6.
(1 fill-in)

6-05.GR6  Piling

6-05.2.GR6  Materials

6-05.2.INST1.GR6  (Section 6-05.2 is supplemented with the following)
Must use once preceding any of the following:

6-05.2.OPT1.GB6  Micropiles
Use in projects where micropiles are required. Include with 6-05.3.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-05.5.OPT6.GB6.

**6-05.3.GR6**

Construction Requirements

6-05.3.INST1.GR6 (Section 6-05.3 is supplemented with the following)

Must use once preceding any of the following:

6-05.3.OPT1.FB6

Micropiles

(April 6, 2015)

Use in projects where micropiles are required. The first fill-in specifies the top elevation of the micropile bond zone. The second fill-in specified the permanent casting minimum tip elevations. The third fill-in specifies the location(s) of micropile verification tests. Include with 6-05.2.OPT1.FB6, 6-05.4.OPT6.GB6, and 6-05.5.OPT6.GB6.

(3 fill-ins)

**6-05.3(5).GR6**

Manufacture of Steel Piles

6-05.3(5).INST1.GR6 (Section 6-05.3(5) is supplemented with the following)

Must use once preceding any of the following:

6-05.3(5).OPT1.GB6 (Furnishing St. Piling)

(August 3, 2015)

Use in projects with steel piling where the piling consists of hollow steel pipe that may or may not be filled with concrete and steel reinforcing bars for a portion of its length. Include with 6-05.3(6).OPT1.GB6.

**6-05.3(6).GR6**

Splicing Steel Casings and Steel Piles

6-05.3(6).INST1.GR6 (Section 6-05.3(6) is supplemented with the following)

Must use once preceding any of the following:

6-05.3(6).OPT1.GB6 (Furnishing St. Piling)

(August 3, 2015)

Use in projects with steel piling where the piling consists of hollow steel pipe that may or may not be filled with concrete and steel reinforcing bars for a portion of its length. Include with 6-05.3(5).OPT1.GB6.

**6-05.3(10).GR6**

Test Piles

6-05.3(10).INST1.GR6 (Section 6-05.3(10) is supplemented with the following)

Must use once preceding any of the following:
To include in projects having test piles, as recommended by the Materials Laboratory Geotechnical Branch. The first, third, and fourth fill-ins specify the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier).

6-05.3(11).GR6 Driving Piles

6-05.3(11)D.GR6 Achieving Minimum Tip Elevation and Bearing

6-05.3(11)D.INST.GR6 (Section 6-05.3(11)D is supplemented with the following)
Must use once preceding any of the following:

6-05.3(11)D.OPT2.GB6 (Vibration From Pile Driving)
(August 3, 2015)
Include in projects where minimizing vibration from driving piles is critical, as recommended by the Materials Laboratory Geotechnical Branch.

6-05.3(11)D.OPT3.FB6 (Preboring Piles)
(August 3, 2015)
Include in projects where preboring of piles is required to prevent downdrag from settlement, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with 6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.
(3 fill-ins)

6-05.3(11)D.OPT4.FB6 (Preboring Piles)
(August 3, 2015)
Include in projects where preboring of piles is required, as recommended by the Materials Laboratory Geotechnical Branch. The first fill-in specifies the pile type (cast-in-place conc., steel, timber, etc.). The second fill-in specifies the general location (bridge and pier). The third fill-in specifies the bottom elevation of the preboring. Include with 6-05.4.OPT1.FB6 and 6-05.5.OPT1.FB6.
(3 fill-ins)

6-05.3(11)D.OPT9.FB6 (Overdriving)
(April 6, 2015)
Include in projects where overdri
ving of piles is
anticipated in order to reach the minimum tip
elevation, as recommended by the Materials
Laboratory Geotechnical Branch. The first fill-in
specifies the general location(s) (bridge and pier)
of the anticipated pile overdriving. The second
fill-in specifies the approximate magnitude of
expected overdriving.
(2 fill-ins)

6-05.4.GR6  Measurement

6-05.4.INST1.GR6  (Section 6-05.4 is supplemented with the following)
Must use once preceding any of the following:

6-05.4.OPT1.FB6  (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as
recommended by the Materials Laboratory Geotechnical
Branch. The fill-in specifies the pile type (cast-in-place
conc., steel, timber, etc.). Include with 6-
05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-
05.5.OPT1.FB6.

6-05.4.OPT6.GB6  Micropiles
(April 6, 2015)
Use in projects where micropiles are required. Include
with 6-05.2.OPT1.FB6, 6-05.3.OPT1.FB6, and 6-
05.5.OPT6.GB6.

6-05.5.GR6  Payment

6-05.5.INST1.GR6  (Section 6-05.5 is supplemented with the following)
Must use once preceding any of the following:

6-05.5.OPT1.FB6  (Preboring Piles)
(March 6, 2000)
Use in projects where preboring of piles is required, as
recommended by the Materials Laboratory Geotechnical
Branch. Both fill-ins specify the pile type (cast-in-place
conc., steel, timber, etc.). Include with 6-
05.3(11)D.OPT3.FB6 or 6-05.3(11)D.OPT4.FB6, and 6-
05.4.OPT1.FB6.

6-05.5.OPT6.GB6  Micropiles
(April 6, 2015)
Use in projects where micropiles are required. Include
with 6-05.2.OPT1.FB6, 6-05.3.OPT1.FB6, and 6-
05.4.OPT6.GB6.

6-06.GR6  Bridge Railings
6-06.2.GR6  Materials

6-06.2.INST1.GR6  (Section 6-06.2 is supplemented with the following)
Must use once preceding any of the following:

6-06.2.OPT1.GB6  (Bridge Railing Type Chain Link Fence)
(January 5, 2004)
Use in projects with Bridge Railing Type Chain Link Fence. Include with 6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, and 6-06.3(2).OPT1.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.2.OPT2.GB6  (Bridge Railing Type Chain Link Fence)
(March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with 6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, 6-06.2.OPT1.GB6 and 6-06.3(2).OPT2.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ____”, or “Roadway Deck - ____”.

6-06.2.OPT7.GB6  (Tamper Proof Nuts for steel Bridge Railing Type BP)
(April 6, 2015)
Use in projects where steel Bridge Railing Type BP is used.

6-06.2.OPT8.FB6  (Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric Fence)
(May 28, 2020)
Use in projects with Bridge Railing Type Snow Fence or Bridge Railing Type Wire Fabric Fence. The fill-in specifies the Federal Standard 595 Color Number, or the color name if no number. Include with 6-06.3(2).OPT7.GB6.
(1 fill-in)

6-06.3.GR6  Construction Requirements

6-06.3(2).GR6  Metal Railings

6-06.3(2).INST1.GR6  (Section 6-06.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-06.3(2).OPT1.GB6  (Bridge Railing Type Chain Link Fence)
(March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are fastened into position with anchor bolts or resin bonded anchors. Include with 6-
02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, and 6-06.2.OPT1.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ___”, or “Roadway Deck - ___”.

6-06.3(OPT2).GB6 (Bridge Railing Type Chain Link Fence) (March 6, 2000)
Use in projects with Bridge Railing Type Chain Link Fence where the posts are set into blockouts with epoxy resin. Include with 6-02.2.OPT1.GR6, 6-02.3(18).OPT1.GR6, 6-06.2.OPT1.GB6 and 6-06.2.OPT2.GB6. Also include 6-06.5.OPT1.FB6 if the work is included as part of a separate bid item such as “Superstructure - ___”, or “Roadway Deck - ___”.

6-06.3(OPT7).GB6 (Bridge Railing Type Snow Fence and Bridge Railing Type Wire Fabric Fence) (May 28, 2020)
Use in projects with Bridge Railing Type Snow Fence or Bridge Railing Type Wire Fabric Fence. Include with 6-06.2.OPT8.FB6.

6-06.5.GR6 Payment
6-06.5.INST1.GR6 (Section 6-06.5 is supplemented with the following)
Must use once preceding any of the following:

6-06.5.OPT1.FB6 (Bridge Railing) (March 6, 2000)
Use in projects with bridge railing where the work is included as part of a separate bid item such as “Superstructure - ___”, or “Roadway Deck - ___”. The first fill-in specifies the bridge railing type. The second fill-in specifies the bid item name.

6-07.GR6 Painting
6-07.1.GR6 Description
6-07.1.INST1.GR6 (Section 6-07.1 is supplemented with the following)
Must use once preceding any of the following:

6-07.1.OPT1.FB6 (Scope of Work) (August 3, 2009)
Include in projects with cleaning and painting of existing steel bridge(s). Use to define limits of cleaning and painting by using the second fill-in to specify surfaces that are not to be painted (light fixtures, utilities, bridge attachments, etc.). Include with 6-07.3(10).D.OPT1.FB6 and/or 6-07.3(10).E.OPT1.FB6 as appropriate for the surface preparation requirements. Include with DESWORK2.FB1 and 6-07.3(10).J.OPT1.FB6. Include
with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway.

(2 fill-ins)

6-07.1.OPT2.FB6 (Scope of Work)

(August 3, 2009)

Include in projects with cleaning and painting of existing timber bridge(s). Use to define limits of cleaning and painting by using the second fill-in to specify the surfaces to be painted (railing, rail posts, wheelguards, etc.). Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Project specific Special Provisions supplementing Section 6-07.3(13) may be required to specify specific primer and top coat paint requirements.

(2 fill-ins)

6-07.3.GR6  Construction Requirements

6-07.3(10).GR6  Painting Existing Steel Structures

6-07.3(10).INST1.GR6 (Section 6-07.3(10) is supplemented with the following)

Must use once preceding any of the following:

6-07.3(10).OPT1.FB6 (Utility Conduits)

(August 3, 2009)

Include only when utility conduits are attached to the existing bridge(s) being painted. Fill-in to read "shall or "shall not". Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10).OPT1.FB6.

(1 fill-in)

6-07.3(10).OPT2.GB6 (Light Fixtures)

(August 3, 2009)

Include only when light fixtures are attached to existing bridge(s) being painted. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10).OPT1.FB6.

6-07.3(10).OPT3.GB6 (Railroad Facilities)

(August 3, 2009)

Include when paint could spill or drip on railroad right-of-way. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6, 1-07.18.OPT1.FR1, either 07183.GR1 or 1-07.18.OPT3.GR1, and 6-07.3(10).OPT1.FB6.

6-07.3(10).OPT4.GB6 (Cleaning Grid Deck)

(August 3, 2015)

Use with DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-07.3(10).OPT1.FB6, and 6-07.3(10).OPT1.GB6 if
the bridge has a grid roadway deck or steel grid catwalks which require cleaning and painting.

6-07.3(10)A.GR6 Containment

6-07.3(10)A.INST1.GR6 (Section 6-07.3(10)A is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)A.OPT1.GB6 (Protection of Existing Structure)
(August 3, 2009)
Use only when the bridge has mechanical equipment to protect such as a draw bridge.
Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6.

6-07.3(10)A.OPT2.FB6 (Containment System)
(January 2, 2018)
Use when a paint removal containment system must be removed from a bridge when winds at the site exceed a wind speed/gust threshold.
Fill-in #1 specifies the bridge(s) that have wind speed/gust thresholds.
Fill-in #2 specifies the wind speed/gust threshold.
(2 fill-ins)

6-07.3(10)D.GR6 Surface Preparation Prior to Overcoat Painting

6-07.3(10)D.INST1.GR6 (Section 6-07.3(10)D is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)D.OPT1.FB6 (Surfaces Requiring Overcoat Painting Surface Preparation)
(April 6, 2015)
Use in bridge painting projects with bridges and bridge members requiring surface preparation for overcoat painting. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6. Include with 6-07.3(10)E.OPT1.FB6 if the bridge(s) also have bridge members requiring full paint removal.
Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway. The first fill-in specifies the bridge(s) requiring overcoat painting surface preparation. The second fill-in specifies the bridge members requiring overcoat painting surface preparation.
(2 fill-ins)

6-07.3(10)E.GR6 Surface Preparation – Full Paint Removal
Section 6-07.3(10)E. INST1.GR6 (Section 6-07.3(10)E is supplemented with the following)
Use once preceding any of the following:

6-07.3(10)E.OPT1.FB6 (Surfaces Requiring Full Paint Removal Surface Preparation)
(April 5, 2010)
Use in bridge painting projects with bridges and bridge members requiring surface preparation for full paint removal. Include with DESWORK2.FB1, 6-07.1.OPT1.FB6 and 6-07.3(10)I.OPT1.FB6. Include with 6-07.3(10)D.OPT1.FB6 if the bridge(s) also have bridge members requiring overcoat painting. Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway. The first fill-in specifies the bridge(s) requiring full paint removal surface preparation. The second fill-in specifies the bridge members requiring full paint removal surface preparation.
(2 fill-ins)

6-07.3(10)I.GR6 Paint Color

6-07.3(10)I.INST1.GR6 (Section 6-07.3(10)I is supplemented with the following)
Must use once preceding any of the following:

6-07.3(10)I.OPT1.FB6 (Color of Top Coat)
(August 3, 2009)
Use in projects with existing steel bridges and bridge members to cover paint color requirements by specifying the SAE AMS Standard 595 Color Number, or the color name if no number. Use with DESWORK2.FB1, and 6-07.3(10)D.OPT1.FB6 and/or 6-07.3(10)E.OPT1.FB6 as appropriate for the surface preparation requirements. Include with 1-07.1.OPT2.FR1 if the existing bridge(s) contain lead paint. Include with 1-07.6.OPT4.GB1 if the bridge(s) cross a navigable waterway.
(1 fill-in)

6-07.3(10)N.GR6 Field Coating Application Methods

6-07.3(10)N.INST1.GR6 (Section 6-07.3(10)N is supplemented with the following)
Must use once preceding any of the following:
6-07.3(10).OPT1.GB6 (Painting Grid Deck) (August 3, 2009)
Use with DESWORK2.FB1, 6-07.1.OPT1.FB6, 6-07.3(10).OPT4.GB6 and 6-07.3(10).I.OPT1.FB6 if the bridge has a grid roadway deck or steel grid catwalks which require painting.

6-07.3(11).GR6 Painting or Powder Coating of Galvanized Surfaces

6-07.3(11).INST1.GR6 (Section 6-07.3(11) is supplemented with the following) Must use once preceding any of the following:

6-07.3(11).OPT1.FB6 (Coating Color) (August 3, 2009)
Use in projects requiring coating of galvanized surfaces with either paint or powder coating. The fill-in specifies the SAE AMS Standard 595 color number, or the color name if no number.
(1 fill-in)

6-08.GR6 Bituminous Surfacing on Structure Decks

6-08.3.GR6 Construction Requirements

6-08.3.INST1.GR6 (Section 6-08.3 is supplemented with the following) Must use once preceding the following:

6-08.3.OPT1.FB6 (Surfacing Removal and Paving Equipment Load and Spacing Restrictions) (January 2, 2018)
Use in bridge deck paving projects where specific bridges are subject to surfacing removal and paving equipment load and spacing restrictions as shown and specified in the Plans. The fill-in specifies the Bridge Number(s) of the bridge(s) affected by these restrictions.
(1-fill-in)

6-08.3(2).GR6 Contractor Survey for Grade-Controlled Structure Decks

6-08.3(2).INST1.GR6 (Section 6-08.3(2) is supplemented with the following) Must use once preceding any of the following:

6-08.3(2).OPT1.FB6 (Contractor Structure Survey Not Applicable) (January 3, 2017)
Use in projects where the Contracting Agency performs the Structure survey for Grade Controlled Structure Decks, and the Contract Plans were adjusted for Final Grade Profile and Adjusted Removal Depth as needed. The fill-in specifies the Bridge
number(s) where the Contracting Agency is performing the survey.
(1 fill-in)

6-08.3(5).GR6 Full Depth Removal of Bituminous Pavement from Bridge Decks

6-08.3(5).INST1.GR6 (Section 6-08.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-08.3(5).OPT1.FB6 (Rotary milling/planing equipment prohibited)
(January 2, 2018)
Use in bridge deck paving projects where equipment used to perform full depth removal of existing surfacing from specific Grade Controlled bridges is restricted to exclude rotary milling/planing equipment. Bridges in this category are generally identified in the Bridge Condition Report (BCR) prepared for the project by the Bridge Asset Management unit of the Bridge and Structures Office and provided to the Region Design PE Offices as part of the site data at the beginning of the project design phase. The fill-in specifies the Bridge Number(s) of the bridges affected by these restrictions.
(1 fill-in)

6-08.3(5).OPT2.FB6 (Rotary milling/planing equipment restricted to upper layer of existing surfacing)
(January 2, 2018)
Use in bridge deck paving projects where equipment used to perform full depth removal of existing surfacing from specific Grade Controlled bridges is restricted to allow rotary milling/planing equipment for the upper layer 0.10-feet above the bridge deck. Existing surfacing thicknesses at these bridges shall be 0.20-feet minimum. The fill-in specifies the Bridge Number(s) of the bridges affected by these restrictions.
(1 fill-in)

6-09.GR6 Modified Concrete Overlays

6-09.2.GR6 Materials

6-09.2.INST1.GR6 (Section 6-09.2 is supplemented with the following)
Must use once preceding any of the following:

6-09.3.GR6 Construction Requirements

6-09.3(1).GR6 Equipment

6-09.3(1).INST1.GR6 (Section 6-09.3(1) is supplemented with the following)
Must use once preceding any of the following:
6-09.3(2).GR6  Submittals

6-09.3(2).INST1.GR6 (Section 6-09.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(3).GR6  Concrete Overlay Mixes

6-09.3(3).INST1.GR6 (Section 6-09.3(3) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(3).OPT1.GB6 (FMC, LMC, and MMC)
(January 7, 2002)
Use in modified concrete overlay projects where all three concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(3).OPT2.GB6 (FMC or LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only fly ash modified concrete or latex modified concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(3).OPT3.GB6 (LMC Only)
(January 7, 2002)
Use in modified concrete overlay projects where only latex modified concrete overlay mixes are allowed. Include with either 6-09.3(5).OPT2.GB6 or 6-09.3(5).OPT1.GB6.

6-09.3(4).GR6  Storing and Handling

6-09.3(4).INST1.GR6 (Section 6-09.3(4) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(5).GR6  Scarifying Concrete Surface

6-09.3(5).INST1.GR6 (Section 6-09.3(5) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(5).OPT1.GB6 ( Rotary Mill, Hydro-Demolisher, or Shot Blaster)
(January 7, 2002)
Include in modified concrete overlay projects where all three types of scarifying machines are allowed. Include with either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6.

6-09.3(5).OPT2.GB6 (Hydro-Demolisher or Shot Blaster Only)
(January 7, 2002)

Include in modified concrete overlay projects where only hydro-demolisher or shot blaster scarifying machines are allowed. Include with either 6-09.3(3).OPT1.GB6, 6-09.3(3).OPT2.GB6, or 6-09.3(3).OPT3.GB6.

6-09.3(5).OPT7.GB6 (Hydro-Demolisher Only)  
(April 6, 2015)

Use in modified concrete overlay projects where only hydro-demolisher scarifying machines are allowed.

6-09.3(6).GR6 Further Deck Preparation

6-09.3(6)B.GR6 Deck Repair Preparation

6-09.3(6)B.INST1.GR6 (Section 6-09.3(6)B is supplemented with the following)
Must use once preceding any of the following:

6-09.3(6)B.OPT1.GB6 (Forms For Full Depth Deck Repair)  
(April 6, 2015)

Use in modified concrete overlay projects where the anticipated depth required for bridge deck repair following scarification of concrete surface may be full depth of the bridge deck. Include with 6-09.5.OPT11.GB6.

6-09.3(6)C.GR6 Placing Deck Repair Concrete

6-09.3(6)C.INST1.GR6 (Supplemental Instructions)
Must use once preceding any of the following:

6-09.3(8).GR6 Quality Assurance

6-09.3(8).INST1.GR6 (Section 6-09.3(8) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(9).GR6 Mixing Concrete for Concrete Overlay

6-09.3(9).INST1.GR6 (Section 6-09.3(9) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(10).GR6 Overlay Profile and Screed Rails

6-09.3(10).INST1.GR6 (Section 6-09.3(10) is supplemented with the following)
Must use once preceding any of the following:

6-09.3(11).GR6 Placing Concrete Overlay

6-09.3(11).INST1.GR6 (Section 6-09.3(11) is supplemented with the following)
Must use once preceding any of the following:
**6-09.3(12).GR6** Finishing Concrete Overlay

(Section 6-09.3(12) is supplemented with the following)
Must use once preceding any of the following:

**6-09.3(13).GR6** Curing Concrete Overlay

(Section 6-09.3(13) is supplemented with the following)
Must use once preceding any of the following:

**6-09.3(14).GR6** Checking For Bond

(Section 6-09.3(14) is supplemented with the following)
Must use once preceding any of the following:

**6-09.4.GR6** Measurement

(Section 6-09.4 is supplemented with the following)
Must use once preceding any of the following:

**6-09.5.GR6** Payment

(Section 6-09.5 is supplemented with the following)
Must use once preceding any of the following:

**6-09.5.OPT11.GB6** (Forms For Full Depth Deck Repair)
(April 6, 2015)
Use in projects where the anticipated depth required for bridge deck repair following scarification of concrete surface may be full depth of the bridge deck. Include with **6-09.3(6)B.OPT1.GB6**.

**6-10.GR6** Concrete Barrier

**6-10.3.GR6** Construction Requirements

**6-10.3(5).GR6** Placing Concrete Barrier

(The first paragraph of Section 6-10.3(5) is revised to read)
Must use once preceding any of the following:

**6-10.3(5).OPT1.GR6** (Type F Temporary Barrier)
(February 3, 2020)
Use in projects that have less than 1,000 linear feet of temporary barrier.
Do not use with **6-10.3(5).OPT2.GR6**.

**6-10.3(5).INST2.GR6** (The last sentence of the first paragraph of Section 6-10.3(5) is revised to read)
Must use once preceding any of the following:
6-10.3(5).OPT2.GR6  (Temporary Steel Barrier)
(February 3, 2020)
Use in projects that have 1,000 or more linear feet of
temporary barrier.
Do not use with 6-10.3(5).OPT1.GR6.

6-10.3(6).GR6  Placing Concrete Barrier

6-10.3(6).INST1.GR6  (Section 6-10.3(6) is supplemented with the
following)
Must use once preceding any of the following:

6-10.3(6).OPT1.GR6  (Use Permanent Barrier as Temporary)
(March 13, 1995)
Use in projects when permanent barrier may be used
as temporary barrier.

6-10.5.GR6  Payment

6-10.5.INST1.GR6  (Section 6-10.5 is supplemented with the following)
Must use once preceding any of the following:

6-10.5.OPT1.GR6  (Temporary barrier delineators)
(August 1, 2016)
Use in projects that require temporary barrier to be placed
adjacent to a travelled lane.

6-10.5.OPT2.FB6  (Bridge Concrete Barrier)
(March 6, 2000)
Use in projects with concrete barrier on bridges only
where the barrier is included as part of a separate bid item
such as “Superstructure - ___”, or “Roadway Deck - ___.
The first fill-in specifies the barrier type (traffic barrier,
traffic-pedestrian barrier, pedestrian barrier, etc.). The
second fill-in specifies the bid item name.
(2 fill-ins)

6-12.GR6  Noise Barrier Walls

6-12.2.GR6  Materials

6-12.2.INST1.GR6  (Section 6-12.2 is supplemented with the following)
Must use once preceding any of the following:

6-12.2.OPT1.GB6  (Precast Concrete Noise Barrier Walls)
(August 3, 2015)
Use in projects with noise barrier walls of precast concrete
panels. Include with 6-12.3(6).OPT1.FB6 and all other
applicable noise barrier wall GSP’s.

6-12.2.OPT2.FB6  (Masonry Noise Barrier Walls)
(August 3, 2015)
Use in projects with noise barrier walls of masonry block panels. The fill-in describes the surface texture and color requirements for the field, cap, accent, and other CMU blocks used for the masonry wall. Include with 6-12.3(7).OPT1.GB6 and all other applicable noise barrier wall GSP's.

(1 fill-in)

**6-12.3.GR6**

**Construction Requirements**

**6-12.3(1).GR6**

**Submittals**

6-12.3(1).INST1.GR6 (Section 6-12.3(1) is supplemented with the following)

Must use once preceding any of the following:

6-12.3(1).OPT1.GB6 (Noise Barrier Wall Existing Groundline Field Survey)

(August 3, 2015)

Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with 1-05.4.OPT1.GR1, 6-12.5.OPT1.GB6, and all other applicable noise barrier wall GSP's.

**6-12.3(6).GR6**

**Precast Concrete Panel Fabrication and Erection**

6-12.3(6).INST1.GR6 (Section 6-12.3(6) is supplemented with the following)

Must use once preceding any of the following:

6-12.3(6).OPT1.FB6 (Precast Concrete Panel Surface Finish Requirements)

(April 5, 2004)

Use in projects with noise barrier walls of precast concrete panels. The fill-ins specify the type or name of the formed finish on the traffic side and on the residential side of the precast concrete panels. Include with 6-12.2.OPT1.GB6 and all other applicable noise barrier wall GSP's.

(2 fill-ins)

**6-12.3(7).GR6**

**Masonry Wall Construction**

6-12.3(7).INST1.GR6 (Section 6-12.3(7) is supplemented with the following)

Must use once preceding any of the following:

6-12.3(7).OPT1.GB6 (Masonry Noise Barrier Wall Construction Requirements)

(August 3, 2015)
Use in projects with noise barrier walls of masonry block panels. Include with 6-12.2.OPT2.FB6 and all other applicable noise barrier wall GSP’s.

6-12.5.GR6 Payment

6-12.5.INST1.GR6 (Section 6-12.5 is supplemented with the following)
Must use once preceding any of the following:

6-12.5.OPT1.GB6 (Payment for Noise Barrier Wall Groundline Field Survey)
(April 5, 2004)
Use in noise barrier wall projects where the Contractor is required to perform and submit a field survey of the existing noise barrier wall alignment. Include with 1-05.4.OPT1.GR1, 6-12.3(1).OPT1.GB6, and all other applicable noise barrier wall GSP’s.

6-13.GR6 Structural Earth Walls

6-13.2.GR6 Materials

6-13.2.INST1.GR6 (Section 6-13.2 is supplemented with the following)
Must use once preceding any of the following:

6-13.2.OPT1.GB6 (Welded Wire Faced Structural Earth Wall Materials)
(June 4, 2020)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with 6-13.3.OPT1.GB6 and 6-13.3(2).OPT1.FB6.

6-13.2.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall Materials)
(January 2, 2018)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6.

6-13.2.OPT2(A).GB6 (Lock + Load Retaining Wall System Wall Materials)
(August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.
Include with 6-13.2.OPT2.GB6, 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3.OPT2(A).GB6, 6-

6-13.2.OPT3.GB6 (Concrete Block Faced Structural Earth Wall Materials) (January 2, 2018)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.3.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.

6-13.3.GR6 Construction Requirements

6-13.3.INST1.GR6 (Section 6-13.3 is supplemented with the following)
Must use once preceding any of the following:

6-13.3.OPT1.GB6 (Welded Wire Faced Structural Earth Wall) (April 4, 2011)
Use in projects with structural earth walls where welded wire faced walls are an acceptable alternative. Include with 6-13.2.OPT1.GB6 and 6-13.3(2).OPT1.FB6.

6-13.3.OPT2.GB6 (Precast Concrete Panel Faced Structural Earth Wall) (January 7, 2019)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.2.OPT2.GB6, 6-13.3(2).OPT1.FB6, 6-13.3(4).OPT1.GB6.

Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.

6-13.3.OPT3.GB6 (Concrete Block Faced Structural Earth Wall) (January 2, 2018)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.2.OPT3.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT2.GB6.
6-13.3(2).GR6  Submittals

6-13.3(2).INST1.GR6  (Section 6-13.3(2) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(2).OPT1.FB6  (Structural Earth Wall Geotechnical Design Parameters)
(January 3, 2011)
Use in projects with structural earth walls. The first fill-in identifies the wall by name or number, and the remaining fill-ins specify the values for various geotechnical design parameters as specified in the geotechnical report prepared for the project. The table may be repeated as necessary for additional walls with differing geotechnical design parameters.
(13 fill-ins)

6-13.3(4).GR6  Precast Concrete Facing Panel and Concrete Block Fabrication

6-13.3(4).INST1.GR6  (Section 6-13.3(4) is supplemented with the following)
Must use once preceding any of the following:

6-13.3(4).OPT1.GB6  (Specific Fabrication Requirements for Precast Concrete Panel Faced Structural Earth Walls)
(April 3, 2017)
Use in projects with structural earth walls where precast concrete panel faced walls are an acceptable alternative. Include with 6-13.2.OPT2.GB6, 6-13.3.OPT2.GB6, 6-13.3(2).OPT1.FB6, and 6-13.3(5).OPT1.GB6.

6-13.3(4).OPT1(A).GB6  (Lock + Load Retaining Wall System Walls)
(August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.

6-13.3(5).GR6  Precast Concrete Facing Panel and Concrete Block Erection
6-13.3(5).INST1.GR6 (Section 6-13.3(5) is supplemented with the following)
Must use once preceding any of the following:
6-13.3(5).OPT2.GB6 (Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls) (April 2, 2012)
Use in projects with structural earth walls where concrete block faced walls are an acceptable alternative. Include with 6-13.2.OPT3.GB6, 6-13.3.OPT3.GB6, and 6-13.3(2).OPT1.FB6.

6-13.3(7).GR6 Backfill
6-13.3(7).INST1.GR6 (Section 6-13.3(7) is supplemented with the following)
Must use once preceding any of the following:
6-13.3(7).OPT1.GB6 (Specific Backfill Requirements for Precast Concrete Panel Faced Structural Earth Walls) (August 3, 2015)
Use in projects with structural earth walls only when the following conditions apply:
1. Both precast concrete panel faced structural earth walls AND precast concrete block faced structural earth walls are included in the project as acceptable alternatives.
2. Lock + Load retaining wall system shall be constructed in areas where the wall will be constructed above the water table.

6-14.GR6 Geosynthetic Retaining Walls
6-14.2.GR6 Materials
6-14.2(9-33.2(2)).GR6 (Geosynthetic Properties For Retaining Walls and Reinforced Slopes) (Section 9-33.2(2) is supplemented with the following)
Must use once preceding any of the following:
6-14.2(9-33.2(2)).OPT1.FB6 (Geosynthetic Properties For Temporary Geosynthetic Retaining Walls) (August 7, 2006)
Use in projects with temporary geosynthetic retaining walls. The first fill-in identifies the wall location. The second fill-in specifies the reinforcement layer vertical spacing. The third fill-in specifies the dimension from the
top of wall to the reinforcement layer. The fourth fill-in specifies the geosynthetic tensile strength.

**6-15.GR6**  
Soil Nail Walls

**6-15.2.GR6**  
Materials

**6-15.2.INST1.GR6**  
(Section 6-15.2 is supplemented with the following)  
Must use once preceding any of the following:

**6-15.2.OPT1.GB6**  
(Permanent Soil Nail Materials and Components)  
(August 3, 2015)  
Use in projects with soil nail retaining walls. Include with 6-18.2.OPT1.GB6 and 6-15.3(8)A.OPT1.FB6.

**6-15.3.GR6**  
Construction Requirements

**6-15.3(8).GR6**  
Soil Nail Testing And Acceptance

**6-15.3(8)A.GR6**  
Verification Testing

**6-15.3(8)A.INST1.GR6**  
(Section 6-15.3(8)A is supplemented with the following)  
Must use once preceding any of the following:

**6-15.3(8)A.OPT1.FB6**  
(Soil Nail Verification Test Locations)  
(April 5, 2004)  
Use in projects with soil nail retaining walls. The fill-ins specify the soil nail verification test locations and the number of successful tests required at each location. Include with 6-15.2.OPT1.GB6 and 6-18.2.OPT1.GB6.  
(3 fill-ins)

**6-17.GR6**  
Permanent Ground Anchors

**6-17.1.GR6**  
Description

**6-17.1.INST1.GR6**  
(Section 6-17.1 is supplemented with the following)  
Must use once preceding any of the following:

**6-17.1.OPT1.GB6**  
(Rock Bolts and Rock Dowels)  
(January 7, 2013)  
Use in projects with rock bolts and/or rock dowels. Include with 6-17.2.OPT2.GB6, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

**6-17.2.GR6**  
Materials

**6-17.2.INST1.GR6**  
(Section 6-17.2 is supplemented with the following)  
Must use once preceding any of the following:
6-17.2.OPT1.GB6 (Permanent Ground Anchor Materials and Components) (August 3, 2015)
Use in projects with walls using permanent ground anchors.

6-17.2.OPT2.GB6 (Rock Bolt and Rock Dowel Materials) (January 7, 2013)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3.GR6 Construction Requirements

6-17.3.INST1.GR6 (Section 6-17.3 is supplemented with the following)
Must use once preceding any of the following:

6-17.3.OPT1.GB6 (Rock Bolt and Rock Dowel Construction Requirements) (January 7, 2019)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3(8).OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3(8).GR6 Testing And Stressing

6-17.3(8).INST1.GR6 (Section 6-17.3(8) is supplemented with the following)
Must use once preceding any of the following:

6-17.3(8).OPT1.GB6 Rock Bolt and Rock Dowel Testing (January 7, 2013)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3.OPT1.GB6, 6-17.4.OPT1.GB6 and 6-17.5.OPT1.GB6.

6-17.3(8).A.GR6 Verification Testing

6-17.3(8).A.INST1.GR6 (Section 6-17.3(8)A is supplemented with the following)
Must use once preceding any of the following:

6-17.3(8).A.OPT1.GB6 (August 3, 2015)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors as recommended by the WSDOT Materials Laboratory Geotechnical Services
6-17.3(8).GR6  Performance Testing

6-17.3(8).B.INST1.GR6  (The performance test schedule following the second paragraph of Section 6-17.3(8).B is revised to read)
Must use once preceding any of the following:

6-17.3(8).B.OPT1.GB6  (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with 6-17.3(8).A.OPT1.GB6 and 6-17.3(8).C.OPT1.GB6.

6-17.3(8).C.GR6  Proof Testing

6-17.3(8).C.INST1.GR6  (The proof test schedule following the first paragraph of Section 6-17.3(8).C is revised to read)
Must use once preceding any of the following:

6-17.3(8).C.OPT1.GB6  (January 3, 2011)
Use in projects with permanent ground anchors where the soil conditions require a verification testing program for the permanent ground anchors, as recommended by the WSDOT Materials Laboratory Geotechnical Services Division. Include with 6-17.3(8).A.OPT1.GB6 and 6-17.3(8).C.OPT1.GB6.

6-17.4.GR6  Measurement

6-17.4.INST1.GR6  (Section 6-17.4 is supplemented with the following)
Must use once preceding any of the following:

6-17.4.OPT1.GB6  (Rock Bolts and Rock Dowels)
(January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, and 6-17.5.OPT1.GB6.

6-17.5.GR6  Payment

6-17.5.INST1.GR6  (Section 6-17.5 is supplemented with the following)
Must use once preceding any of the following:

6-17.5.OPT1.GB6  (Rock Bolts and Rock Dowels)
(January 4, 2010)
Use in projects with rock bolts and/or rock dowels. Include with 6-17.1.OPT1.GB6, 6-17.2.OPT2.GB6, 6-
17.3.OPT1.GB6, 6-17.3(8).OPT1.GB6, and 6-17.4.OPT1.GB6.

6-18.GR6  Shotcrete Facing

6-18.2.GR6  Materials

6-18.2.INST1.GR6  (Section 6-18.2 is supplemented with the following)
Must use once preceding any of the following:

6-18.2.OPT1.GB6  (Shotcrete Facing)
(August 1, 2005)
Use in projects with shotcrete facing. Include with 6-15.2.OPT1.GB6 and 6-15.3(8)A.OPT1.FB6 for all soil nail retaining wall projects. Include with 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.2.OPT2.GB6  (Coloration for Shotcrete Facing Finishing Alternative C)
(August 3, 2015)
Use in projects with shotcrete facing where tinting of the finish coating of shotcrete is required. Include with 6-15.2.OPT1.GB6, 6-15.3(8)A.OPT1.FB6, and 6-18.2.OPT1.GB6 for all soil nail retaining wall projects with such requirements. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.2.OPT3.GB6  (Fiber Reinforcement for Shotcrete Facing)
(August 3, 2015)
Use in projects with shotcrete facing where fiber reinforcement in the shotcrete is specified. Include with 6-18.2.OPT1.GB6. Include with 6-18.2.OPT2.GB6, 6-18.3.OPT1.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6 for all projects with shotcrete facing for rock/soil slope stabilization.

6-18.3.GR6  Construction Requirements

6-18.3.INST1.GR6  (Section 6-18.3 is supplemented with the following)
Must use once preceding any of the following:

6-18.3.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)
(August 3, 2015)
Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.4.OPT1.GB6 and 6-18.5.OPT1.GB6.

6-18.4.GR6  Measurement
6-18.4.INST1.GR6  (Section 6-18.4 is supplemented with the following)
Must use once preceding any of the following:

6-18.4.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6 and 6-18.5.OPT1.GB6.

6-18.5.GR6  Payment
6-18.5.INST1.GR6  (Section 6-18.5 is supplemented with the following)
Must use once preceding any of the following:

6-18.5.OPT1.GB6  (Shotcrete Facing For Rock/Soil Slope Stabilization)
(April 5, 2010)
Use in projects with shotcrete facing for rock/soil slope stabilization. Include with 6-18.2.OPT1.GB6, 6-18.2.OPT2.GB6, 6-18.2.OPT3.GB6, 6-18.3.OPT1.GB6 and 6-18.4.OPT1.GB6.

6-19.GR6  Shafts
6-19.2.GR6  Materials
6-19.2(9-36.2(2)).GR6  Synthetic Slurry
(Section 9-36.2(2) is supplemented with the following)
Must use once preceding any of the following:

6-19.2(9-36.2(2)).OPT1.GB6  (Fresh Water For Synthetic Slurry)
(January 2, 2012)
Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.4.OPT3.GB6 and 6-19.5.OPT2.GB6.

6-19.3.GR6  Construction Requirements
6-19.3(3).GR6  Shaft Excavation
6-19.3(3).INST1.GR6  (Section 6-19.3(3) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(3).OPT1.GB6  (Variations In Bearing Layer Elevations)
(January 2, 2012)
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately

6-19.3(B).GR6  Temporary and Permanent Shaft Casing

6-19.3(B).INST1.GR6  (Section 6-19.3(B) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(B).OPT2.GB6  (Rotating/Oscillating Method Required)
(January 2, 2012)
Use in projects where the geotechnical report for the project recommends, and the ADSC/WSDOT Shaft Task Force concurs, that site conditions dictate the use of the rotating/oscillating method for shaft excavation.

6-19.3(B4).GR6  Temporary Telescoping Shaft Casing

6-19.3(B4).INST1.GR6  (The second paragraph of Section 6-19.3(B4) is revised to read as follows)
Must use once preceding any of the following:

6-19.3(B4).OPT1.GB6  (Temp. Telescoping Casing Not Allowed At End Piers)
(January 2, 2012)
Use in projects where design conditions exist where the option of temporary telescoping casing for shafts at bridge end piers is not appropriate for the overall design behavior of the overall bridge.

6-19.3(I).GR6  Required Use of Slurry in Shaft Excavation

6-19.3(I).INST1.GR6  (Section 6-19.3(I) is supplemented with the following)
Must use once preceding any of the following:

6-19.3(I).OPT1.GB6  (Exception For Casing Sealed Against Influx Of Water Into Excavation)
(August 3, 2015)
Use in projects where the geotechnical conditions, as documented in the geotechnical report for the project, allow the possibility of performing shaft excavation in a cased hole beneath the water table level without the need for slurry to ensure the stability of the bottom of the excavation.

6-19.3(4).GR6  Slurry Installation Requirements

6-19.3(4).A.GR6  Slurry Technical Assistance

6-19.3(4).A.INST1.GR6  (Section 6-19.3(4)A is supplemented
6-19.3(4)A.OPT1.FB6  (Slurry Manufacturer's Representative's Presence Required At Specific Shaft Sites) (January 2, 2012)
Use in projects where the geotechnical conditions vary enough from one shaft site to another to affect how the slurry is used at each shaft site. The fill-in identifies the specific shaft locations where the presence of the slurry manufacturer’s representative is required. (1 fill-in)

6-19.3(5).GR6  Assembly and Placement of Reinforcing Steel

6-19.3(5).INST1.GR6  (Section 6-19.3(5) is supplemented with the following) Must use once preceding any of the following:

6-19.3(5).OPT1.GB6  (Variations In Bearing Layer Elevations) (August 1, 2016)
Use in projects where shaft embedment to a minimum penetration into a bearing layer is required, and where the bearing layer elevation cannot be accurately specified with certainty. Include with 6-19.3(3).OPT1.GB6.

6-19.3(6).GR6  Contractor Furnished Accessories for Nondestructive QA Testing

6-19.3(6)E.GR6  Thermal Wire and Thermal Access Points (TAPs)

6-19.3(6)E.INST1.GR6  (Section 6-19.3(6)E is supplemented with the following) Must use once preceding any of the following:

6-19.3(6)E.OPT1.GB6  (Thermal Wire and Associated Couplers) (January 2, 2018)
Use in projects that include shaft construction requiring nondestructive testing. This includes all bridge foundation shafts, but may or may not include other shafts such as sign bridges, cantilever sign structures, signal standards, etc.

6-19.3(7).GR6  Placing Concrete

6-19.3(7)D.GR6  Requirements for Placing Concrete Underwater

6-19.3(7)D.INST1.GR6  (Section 6-19.3(7)D is supplemented with the following) Must use once preceding any of the following:

6-19.3(7)D.OPT1.GB6  (Tremie Allowed As An Alternative To Concrete
Use in projects where the construction site is at a remote location where it may be difficult to make arrangements to have a concrete pump at the site.

**6-19.4.GR6** Measurement

*6-19.4.INST2.GR6* (Section 6-19.4 is supplemented with the following)

Must use once preceding any of the following:

*6-19.4.OPT3.GB6* (Fresh Water For Synthetic Slurry) (January 2, 2012)

Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.5.OPT2.GB6.

**6-19.5.GR6** Payment

*6-19.5.INST1.GR6* (Section 6-19.5 is supplemented with the following)

Must use once preceding any of the following:

*6-19.5.OPT2.GB6* (Fresh Water for Synthetic Slurry) (January 2, 2012)

Use in projects with shafts constructed in salt water when the geotechnical report specifies that the use of fresh water for synthetic slurry is feasible and when the Contracting Agency restricts the water for synthetic slurry to fresh water only. Include with 6-19.2(9-36.2(2)).OPT1.GB6 and 6-19.4.OPT3.GB6.