DIVISION2.GR2  Earthwork

2-01.GR2  Clearing, Grubbing, and Roadside Cleanup

2-01.1.GR2  Description

2-01.1.INST1.GR2  (Section 2-01.1 is supplemented with the following)
Must use once preceding any of the following:

2-01.1.OPT1.FR2  (Clearing and Grubbing)
(March 13, 1995)
Use when the payment for clearing and grubbing is either
lump sum or included in other work.
(1 fill-in) (Fill-in describes the longitudinal and lateral limits
of clearing and grubbing)

2-01.3.GR2  Construction Requirements

2-01.3(1).GR2  Clearing

2-01.3(1).INST1.GR2  (Item number 1 of Section 2-01.3(1) is revised to read)
Must use once preceding any of the following:

2-01.3(1).OPT1.GR2  (April 2, 2018)
Use in projects applying Programmatic Biological
Assessment Minimization Measure #88.

2-01.3(4).GR2  Roadside Cleanup

2-01.3(4).INST1.GR2  (Section 2-01.3(4) is supplemented with the following)
Must use once preceding any of the following:

2-01.3(4).OPT1.FR2  (Roadside Cleanup)
(January 5, 1998)
Use if additional work is required under the item
"Roadside Cleanup".
(fill-in)

2-01.5.GR2  Payment

2-01.5.INST1.GR2  (The first and second paragraphs of Section 2-01.5
are revised to read)
Must use once preceding any of the following:

2-01.5.OPT1.FR2  (Clearing and Grubbing)
(August 7, 2017)
Must be used with 2-01.1.OPT1.FR2 when the payment
for clearing and grubbing is included in other work.
(1 fill-in)

2-02.GR2  Removal of Structures and Obstructions

2-02.1.GR2  Description
2-02.1.INST1.GR2  (Section 2-02.1 is supplemented with the following)
Must use once preceding any of the following:

2-02.1.OPT1.GR2  (Removal of Misc. Traffic Items)
(March 13, 1995)
Must also use 2-02.3.OPT2.FR2 and 2-02.5.OPT8.GR2
Use in projects requiring the removal of minor quantities of
miscellaneous traffic items such as traffic islands, traffic
curb, lane markers, plastic traffic buttons, guide posts, etc.
when there is no pay item for Removal of Structures and
Obstructions and the cost of removing each type of item is
under $10,000.

2-02.1.OPT2.FR2  (Asbestos Handling and Removal)
(March 13, 1995)
Must also use 2-02.3.OPT5.GR2 and 2-02.5.OPT11.GR2.
Use in projects when asbestos removal is required.
(1 fill-in)

2-02.1.OPT3.GR2  (Removing Portions of Existing Box Culvert)
(March 13, 1995)
Use in projects requiring removal of portions of existing
box culverts prior to extending or widening the structure.
Include with 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-
02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, 6-
02.5.OPT5.GB6, and 2-02.5.OPT12.GR2.

2-02.1.OPT4.GR2  (Asbestos Handling and Removal)
(September 30, 1996)
Must also use 2-02.3.OPT4.GR2 and 2-02.5.OPT14.GR2.
Use in projects when there is a reason to suspect
asbestos may be encountered.

2-02.3.GR2  Construction Requirements

2-02.3.INST1.GR2  (Section 2-02.3 is supplemented with the following)
Must use once preceding any of the following:

2-02.3.OPT1.FR2  (Removal of Obstructions)
(February 17, 1998)
Use except when the combined cost of all obstruction
removal is $5,000 or less and payment is to be included in
other payment items.

Removal of obstructions that are readily measurable and
for which the cost of removal is $5,000 or less per
obstruction may be included in this pay item.

Removal of obstructions that are not readily measurable,
such as foundations, may be included in this item
regardless of the removal cost.
List all items and approximate quantities to be removed under "Removal of Structure and Obstruction".
(1 fill-in)

**2-02.3.OPT2.FR2** *(Removing Miscellaneous Traffic Items)*
(March 13, 1995)
Must include with **2-02.1.OPT1.GR2**.

**2-02.3.OPT3.FR2** *(Removal and Disposal of Hazardous Material)*
(August 1, 2005)
Must also use **2-02.4.OPT1.GR2** and **2-02.5.OPT7.GR2**.
Use only for subsurface removal of known or suspected hazardous or contaminated material. Fill-in is for type of material, depth of contamination in soil, and depth of contamination in water. Fill-in information is to be provided by the Region Environmental Staff.
(1 fill-in)

**2-02.3.OPT4.GR2** *(Asbestos Handling and Disposal)*
(September 30, 1996)
Must include with **2-02.1.OPT4.GR2**.

**2-02.3.OPT5.GR2** *(Asbestos Handling and Disposal)*
(September 30, 1996)
Must include with **2-02.1.OPT2.FR2**.

**2-02.3.OPT6.FB2** *(Salvage of Removed Structure Items)*
(June 26, 2000)
Use when removal items are to remain the property of the Contracting Agency. The first fill-in specifies the salvaged items. The second fill-in specifies the name and address (street address or highway milepost) of the material storage site. Include with either **2-02.3(2).OPT1.FB2**, **2-02.3(2).OPT2.FB2**, or **2-02.3(2).OPT3.FB2**, and **2-02.3(2).OPT10(B).FB2**.
(2 fill-ins)

**2-02.3(2).GB2** *(Removal of Bridges, Box Culverts, and other Drainage Structures)*

**2-02.3(2).INST1.GB2** *(Section 2-02.3(2) is supplemented with the following)*
Must use once preceding any of the following:

**2-02.3(2).OPT1.FB2** *(Removing Existing Bridge)*
(June 26, 2000)
Use in projects requiring the removal of existing bridge(s) in one stage. The first fill-in specifies the bridge(s). The second fill-in specifies where traffic is directed (onto the detour route or bridge, onto the new bridge, etc.). Include with **2-02.3(2).OPT10(B).FB2**.
*Include with 1-07.1.OPT2.FR1* if the bridge being removed has steel members with lead paint.
(2 fill-ins)
(Removing Existing Bridge)

Use in projects requiring the removal of existing bridge(s) in two or more stages. The fill-in specifies the bridge(s). Include with 1-07.1.OPT2.FR1 if the bridge being removed has steel members with lead paint.

(1 fill-in)

(Removing Portion of Existing Bridge)

Use in projects requiring the removal of portions of existing bridge(s). The first fill-in specifies the bridge(s). The second fill-in specifies the portions being removed. Include with 1-07.1.OPT2.FR1 if the bridge being partially removed has steel members with lead paint.

(2 fill-ins)

(Removal in Water)

Use in projects requiring the removal of existing bridge(s) when removal involves piers within the wetted perimeter of a stream, lake or bay. The first fill-in specifies the bridge(s). The second and fourth fill-ins specify the body of water. The third fill-in specifies the elevation of the removal level. Include with either 2-02.3(2).OPT1.FB2, 2-02.3(2).OPT2.FB2, or 2-02.3(2).OPT3.FB2, and 2-02.3(2).OPT10(B).FB2.

(Use of Explosives)

Must use once preceding any of the following:

(Structure Removal By Explosives)

Use in projects requiring removal of existing bridges only if explosives may be used. The fill-in specifies the bridge where the use of explosives is permitted for removal operations. Include with 2-02.3(2).OPT1.FB2. Include with 1-07.1.OPT2.FR1 if the bridge involved has steel members with lead paint.

(1 fill-in)

(Requirements for Closing Bridge Prior to Removal)

Use in projects requiring removal of existing bridges when it is necessary to close the bridge to traffic in order to complete removal as soon as possible.

Include with 2-02.3(2).OPT1.FB2 and 2-02.3(2).OPT10(B).FB2. Include with 1-07.1.OPT2.FR1 if the bridge involved has steel members with lead paint.
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6, and either 2-02.5.OPT12.GR2 or 2-02.5.OPT15.GR2.

2-02.3(3).GR2  Removal of Pavement, Sidewalks, Curbs, and Gutters

2-02.3(3).OPT1.GR2  (Removing Portions of Existing Box Culvert)
(June 26, 2000)
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6, and either 2-02.5.OPT12.GR2 or 2-02.5.OPT15.GR2.

- 2-02.3(3).GR2

2-02.3(3).OPT1.FR2  (September 8, 1997)
Include in projects when removal of pavement is outside the limits of roadway excavation, and the removal is to be paid by the square yard.
Must also use 2-02.4.OPT2.GR2 and 2-02.5.OPT13.FR2.
(2 fill-ins)

2-02.4.GR2  Measurement

2-02.4.INST1.GR2  (Section 2-02.4 is supplemented with the following)
Must use once preceding any of the following:

- 2-02.4.OPT1.GR2  (Removal and Disposal of Hazardous Material)
(December 4, 2006)
Must include with 2-02.3.OPT3.FR2 and 2-02.5.OPT7.GR2.

- 2-02.4.OPT2.GR2  (Pavement Removal)
(September 8, 1997)
Must include with 2-02.3(3).OPT1.FR2.

- 2-02.4.OPT3.GR2  (Sidewalk Removal)
(October 25, 1999)
Include in projects when removal of sidewalk is outside the limits of roadway excavation, and the removal is to be paid by the square yard.
Must include with 2-02.5.OPT16.FR2.

- 2-02.4.OPT4.GR2  (Curb Removal)
(September 8, 1997)
Include in projects when removal of curb is outside the limits of roadway excavation, and the removal is to be paid by the linear foot.
Must include with 2-02.5.OPT17.FR2.

2-02.5.GR2  Payment
2-02.5.INST1.GR2 (Section 2-02.5 is revised by the following)
Must use once preceding any of the following:

2-02.5.OPT1.FR2 (Removal of structures and obstructions included in other work)
(August 7, 2017)
(1 fill-in)

2-02.5.INST2.GR2 (Section 2-02.5 is supplemented with the following)
Must use once preceding any of the following:

2-02.5.OPT7.GR2 (Removal and Disposal of Hazardous Material)
(December 4, 2006)
Must include with 2-02.3.OPT3.FR2 and 2-02.4.OPT1.GR2.

2-02.5.OPT8.GR2 (Removing Miscellaneous Traffic Items)
(September 30, 1996)
Must include with 2-02.1.OPT1.GR2.

2-02.5.OPT11.GR2 (Removal and Disposal of Asbestos Material)
(September 30, 1996)
Must include with 2-02.1.OPT2.FR2.

2-02.5.OPT12.GR2 (Removing Portion of Conc. Box Culvert)
(June 26, 2000)
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure.
Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6.

2-02.5.OPT13.FR2 (Pavement Removal)
(September 30, 1996)
Must include with 2-02.3(3).OPT1.FR2.
(1 fill-in)

2-02.5.OPT14.GR2 (Asbestos removal as changed condition)
(September 30, 1996)
Must include with 2-02.1.OPT4.GR2.

2-02.5.OPT15.GR2 (Removal of portions of box culvert)
(June 26, 2000)
Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure.
Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6.

2-02.5.OPT16.FR2 (Sidewalk Removal)
(November 3, 1999)
Must include with 2-02.4.OPT3.GR2
(1 fill-in)
2-02.5.OPT17.FR2  (Removal of portions of Curb)
(September 8, 1997)
Must include with 2-02.4.OPT4.GR2.
(1 fill-in)

2-03.GR2  Roadway Excavation and Embankment

2-03.3.GR2  Construction Requirements

2-03.3(2).GR2  Rock Cuts

2-03.3(2).INST1.GR2  (Section 2-03.3(2) is supplemented with the following)
Must use once preceding any of the following:

2-03.3(2).OPT1.GR2  (Rock Slope Scaling and Removal and Disposal
of Rock Slope Scaling Debris)
(April 5, 2010)
Use in projects with rock slope scaling. Include with 2-03.4.OPT4.GR2 and 2-03.5.OPT3.GR2.

2-03.3(7).GR2  Disposal of Surplus Material

2-03.3(7).INST1.GR2  (Section 2-03.3(7) is supplemented with the following)
Must use once preceding any of the following:

2-03.3(7).OPT1.FR2  (Contracting Agency furnished waste site)
(March 13, 1995)
Use in projects with Contracting Agency provided waste sites.
(1 fill-in)

2-03.3(7).OPT2.FR2  (Waste material by embankment widening)
(March 13, 1995)
Use in projects where the Contracting Agency specifies embankments to be widened.
(2 fill-ins)

2-03.3(7).OPT3.GR2  (Contracting Agency provided sites are not mandatory)
(March 13, 1995)
Use, when applicable, with 2-03.3(7).OPT1.FR2 or 2-03.3(7).OPT2.FR2.

2-03.3(7).OPT4.GR2  (Contracting Agency provided sites are not of sufficient size)
(March 13, 1995)
Use, when applicable, with 2-03.3(7).OPT1.FR2 or 2-03.3(7).OPT2.FR2.

2-03.3(14).GR2  Embankment Construction

2-03.3(14)C.GR2  Compacting Earth Embankments
2-03.3(14).C.INST1.GR2 (Section 2-03.3(14)C is supplemented with the following)
Must use once preceding any of the following:

2-03.3(14).C.OPT1.GR2 (March 13, 1995)
Use in projects when no payment for embankment compaction (Method A) is included.

2-03.3(14).I.GB2 Embankments At Bridge And Trestle Ends.

2-03.3(14).I.INST1.GB2 (Section 2-03.3(14)I is supplemented with the following)
Must use once preceding any of the following:

2-03.3(14).I.OPT1.FB2 (March 13, 1995)
Use in projects when the bridge approach embankments must be constructed before the end piers.
(2 fill-ins)

2-03.4.GR2 Measurement

2-03.4.INST1.GR2 (Section 2-03.4 is supplemented with the following)
Must use once preceding any of the following:

2-03.4.OPT1.GR2 (Embankment In Place)
(March 13, 1995)
Must also include 2-03.5.OPT1.GR2.
Use in projects that require embankment widening for beam guardrail and no other grading pay items are included in the contract to construct the widening.

2-03.4.OPT2.GR2 (Measurement of roadway excavation and embankment)
(March 13, 1995)
Must include with 1-05.4.OPT2.GR1, Contractor surveying - roadway. May be used without Contractor surveying.

2-03.4.OPT3.GR2 (Measurement of roadway excavation and embankment)
(March 13, 1995)
Use in minor grading projects when the original cross-sections are satisfactory for construction payment.

2-03.4.OPT4.GR2 (Rock Slope Scaling and Rock Slope Scaling Debris Removal Including Haul)
(April 5, 2010)
Use in projects with rock slope scaling. Include with 2-03.3(2).OPT1.GR2 and 2-03.5.OPT3.GR2.

2-03.5.GR2 Payment

2-03.5.INST1.GR2 (Section 2-03.5 is supplemented with the following)
Must use once preceding any of the following:
2-03.5.OPT1.GR2 (Embankment In Place)  
(September 30, 1996)  
Must include with 2-03.4.OPT1.GR2.

2-03.5.OPT2.FR2 (Preparation of waste sites)  
(March 13, 1995)  
Use in projects when the preparation of waste sites is included in other work.  
(1 fill-in)

2-03.5.OPT3.GR2 (Rock Slope Scaling and Rock Slope Scaling Debris Removal Including Haul)  
(April 5, 2010)  
Use in projects with rock slope scaling. Include with 2-03.3(2).OPT1.GR2 and 2-03.4.OPT4.GR2.

2-06.GR2 Subgrade Preparation

2-06.3.GR2 Construction Requirements

2-06.3(1).GR2 Subgrade For Surfacing

2-06.3(1).INST1.GR2 (Section 2-06.3(1) is supplemented with the following)  
Must use once preceding any of the following:

2-06.3(1).OPT1.GR2 (Subgrade trimmer required)  
(March 13, 1995)  
Use in projects where a treated base or pavement will be placed directly on the subgrade.  
The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming.

2-06.3(1).OPT2.GR2 (Subgrade trimmer not required)  
(March 13, 1995)  
Use in grading-only projects where a treated base is planned for construction on a future project.  
The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming. The position of the future treated base is to shown on the plans.

2-09.GR2 Structure Excavation

2-09.3.GR2 Construction Requirements

2-09.3(1).GR2 General Requirements

2-09.3(1)C.GR2 Removal Of Unstable Base Material

2-09.3(1)C.INST1.GR2 (Section 2-09.3(1)C is supplemented
with the following)
Must use once preceding any of the following:

2-09.3(1)C.OPT1.FB2  (Soils that tend to liquify)
(March 13, 1995)
Use in bridge projects in where soil in the bottom
of footing excavation will tend to liquify.
(1 fill-in)

2-09.3(3).GR2  Construction Requirements, Structure Excavation,
Class A

2-09.3(3)B.GR2  Excavation Using Open Pits – Extra
Excavation

2-09.3(3)B.INST1.GR2  (Section 2-09.3(3)B is supplemented
with the following)
Must use once preceding any of the following:

2-09.3(3)B.OPT1.FB2  (Extra Excavation and Open Pit
Excavation Not Allowed)
(April 3, 2017)
Use in projects where extra excavation and
open pit excavation is not allowed at specific
locations. The fill-in specifies the location(s)
where extra excavation and open pit
excavation is not allowed.
(1 fill-in)

2-09.3(3)B.OPT2.FR2  (Extra Excavation and Open Pit Excavation)
(April 1, 2019)
Use in projects where temporary excavation
slopes are located beneath structures, critical
facilities, or where recommended by the
Geotechnical Office. The fill-in specifies the
location(s) where extra excavation and open
pit excavation is allowed.
(1 fill-in)

2-09.3(3)D.GR2  Shoring And Cofferdams

2-09.3(3)D.INST1.GR2  (Section 2-09.3(3)D is supplemented with the
following)
Must use once preceding any of the following:

2-09.3(3)D.OPT1.GB2  (Protecting existing pavement)
(March 13, 1995)
Use in projects when bridges are over or
adjacent to existing highways.

2-09.3(3)D.OPT2.GB2  (Protecting RR tracks)
(August 2, 2010)
Use in projects when bridges are over or
adjacent to existing railroad tracks.
2-09.3(3)D.OPT3.FB2  (March 13, 1995)
Use with 2-09.3(3)D.OPT2.GB2 when
construction is required near railroad tracks, or
structures which require extensive shoring.
(3 fill-ins)

2-09.4.GR2  Measurement

2-09.4.INST1.GR2  (The subsection Lower Limits of Section 2-09.4 is
supplemented with the following)
Must use once preceding any of the following:

2-09.4.OPT1.GB2  (January 4, 2010)
(Additional structure excavation under girders
at end piers)
Use in projects where excavation is required outside of
normal structure excavation limits for end pier footings.

2-12.GR2  Construction Geosynthetic

2-12.1.GR2  Description

2-12.1.INST1.GR2  (Section 2-12.1 is supplemented with the following)
Must use once preceding any of the following:

2-12.1.OPT1.GR2  Geosynthetic Reinforced Slope
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes.
Slope design should be performed by the Olympia Service
Center Materials Laboratory or a geotechnical consultant.
Use details from DETAILS.CEL Library; D225, D229,
D230, and D230A or D230B.

2-12.2.GR2  Materials

2-12.2(9-03.14).GR2  (Borrow)
(Section 9-03.14 is supplemented with the following)
Must use once preceding any of the following:

2-12.2(9-03.14).OPT1.FR2  (Borrow for Geosynthetic Reinforced Slopes)
(November 17, 1997)
Use in projects requiring geosynthetic reinforced
slopes.
(1 fill-in)

2-12.2(9-07.9).GR2  (Cold Drawn Wire)
(Section 9-07.9 is supplemented with the following)
Must use once preceding any of the following:

2-12.2(9-07.9).OPT1.GR2  (Cold Drawn Wire)
(November 17, 1997)
Use in projects where welded wire faced geosynthetic reinforced slopes are specified.

2-12.2(9-33.2(2)).GR2 (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:

2-12.2(9-33.2(2)).OPT1.FR2 (Geosynthetic Properties for Reinforced Slopes) (January 2, 2012)
Use in projects requiring geosynthetic reinforced slopes. The slope class must be identified in fill-in based on the following: Class 1 is typically reinforced slopes which support bridge abutments, buildings, critical utilities, or other facilities which the consequences of poor performance or failure would be severe. In general, slopes greater than 30 feet in height. Class 2 is all reinforced slopes not categorized as Class 1.

2-12.2(9-33.2(2)).OPT2.GR2 (Geosynthetic Properties for Turf Reinforcement Mat) (August 4, 2014)
Use in projects where geosynthetic reinforced slopes with a turf reinforcement mat facing are specified.

2-12.2(9-33.4(1)).GR2 (Source Approval) (Section 9-33.4(1) is supplemented with the following)
Must use once preceding any of the following:

2-12.2(9-33.4(1)).OPT1.GR2 (Geosynthetic Reinforced Slope) Primary Reinforcement (April 5, 2004)
Use in projects requiring geosynthetic reinforced slopes.

2-12.2(9-33.4(1)).OPT2.GR2 (Geosynthetic Reinforced Slope) Secondary Reinforcement (April 5, 2004)
Use in projects where geosynthetic reinforced slopes with secondary reinforcement are specified.

2-12.2(9-33.4(1)).OPT3.GR2 (Geosynthetic Reinforced Slope) Turf Reinforcement Mat (November 17, 1997)
Use in projects where geosynthetic reinforced slopes with turf reinforcement mat facing are specified.

2-12.2(9-33.4(3)).GR2 (Acceptance Samples) (Section 9-33.4(3) is supplemented with the following)
Must use once preceding any of the following:
2-12.2(9-33.4(3)).OPT1.GR2 (Geosynthetic Reinforced)  
Slope Primary Reinforcement  
(November 17, 1997)  
Use in projects requiring geosynthetic reinforced slopes.

2-12.2(9-33.4(3)).OPT2.GR2 (Geosynthetic Reinforced Slope)  
Secondary Reinforcement  
(April 5, 2004)  
Use in projects where geosynthetic reinforced slopes with secondary reinforcement are specified.

2-12.2(9-33.4(3)).OPT3.GR2 (Geosynthetic Reinforced Slope Turf)  
Reinforcement Mat  
(November 17, 1997)  
Use in projects where geosynthetic reinforced slopes with turf reinforcement mat facing are specified.

2-12.2(9-33.4(4)).GR2 (Acceptance by Certificate of Compliance)  
(Section 9-33.4(4) is supplemented with the following)  
Must use once preceding any of the following:

2-12.2(9-33.4(4)).OPT1.GR2 (Reinforced Slope)  
(November 17, 1997)  
Use in projects requiring geosynthetic reinforced slopes.

2-12.3.GR2  
Construction Requirements

2-12.3.INST1.GR2 (Supplemental Instructions)  
(Section 2-12.3 is supplemented with the following)  
Must use once preceding any of the following:

2-12.3.OPT1.GR2 (Geosynthetic Reinforced Slope Construction Requirements)  
(November 17, 1997)  
Use in projects requiring geosynthetic reinforced slopes. Slope facing options which include vegetative cover should only be used at sites where the average annual precipitation is 20 inches or more.

2-12.3.OPT2.FR2 (Turf Reinforced Mat Facing Construction)  
(August 2, 2010)  
Use in projects requiring geosynthetic reinforced slopes with turf reinforcement mat facing. In general, use for slopes no steeper than 1.2H:1V. (2 fill-ins)

2-12.3.OPT3.GR2 (Geosynthetic Wrapped Slope Facing Construction)  
(November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes with geosynthetic wrapped facing. Because of planting requirements, do not use this option for sites where the elevation is over 1500 feet. In general, use for slopes no steeper than 1H:1V.

2-12.3.OPT4.GR2 (Welded Wire Facing Construction) (November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes with welded wire facing. In general, use for slopes no steeper than 1H:2V.

2-12.3.OPT5.GR2 (Installing Guardrail Posts in Geosynthetic Reinforced Slopes) (November 17, 1997)
Use in projects requiring guardrail on geosynthetic reinforced slopes.

2-12.4.GR2 Measurement
2-12.4.INST1.GR2 (Supplemental Instructions) (Section 2-12.4 is supplemented with the following)
Must use once preceding any of the following:

2-12.4.OPT1.FR2 (Geosynthetic Reinforced Slope) (January 5, 1998)
Use in projects requiring geosynthetic reinforced slopes.
(1 fill-in)

2-12.5.GR2 Payment
2-12.5.INST1.GR2 (Supplemental Instructions) (Section 2-12.5 is supplemented with the following)
Must use once preceding any of the following:

2-12.5.OPT1.FR2 (Geosynthetic Reinforced Slope) (November 17, 1997)
Use in projects requiring geosynthetic reinforced slopes.
(1 fill-in)