

1	<b><u>DIVISION2.GR2</u></b>	<b>Earthwork</b>
2		
3	<b><u>2-01.GR2</u></b>	<b>Clearing, Grubbing, and Roadside Cleanup</b>
4		
5	<b><u>2-01.1.GR2</u></b>	<b>Description</b>
6		
7	<b><u>2-01.1.INST1.GR2</u></b>	(Section 2-01.1 is supplemented with the following) Must use once preceding any of the following:
8		
9		
10	<b><u>2-01.1.OPT1.FR2</u></b>	(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)
11		
12		
13		
14		
15		
16		
17	<b><u>2-01.3.GR2</u></b>	<b>Construction Requirements</b>
18		
19	<b><u>2-01.3(1).GR2</u></b>	<b>Clearing</b>
20		
21	<b><u>2-01.3(1).INST1.GR2</u></b>	(Item number 1 of Section 2-01.3(1) is revised to read) Must use once preceding any of the following:
22		
23		
24	<b><u>2-01.3(1).OPT1.GR2</u></b>	(April 2, 2018) Use in projects applying Programmatic Biological Assessment Minimization Measure #88.
25		
26		
27		
28	<b><u>2-01.3(4).GR2</u></b>	<b>Roadside Cleanup</b>
29		
30	<b><u>2-01.3(4).INST1.GR2</u></b>	(Section 2-01.3(4) is supplemented with the following) Must use once preceding any of the following:
31		
32		
33	<b><u>2-01.3(4).OPT1.FR2</u></b>	(Roadside Cleanup) (January 5, 1998) Use if additional work is required under the item "Roadside Cleanup". (fill-ins)
34		
35		
36		
37		
38		
39	<b><u>2-01.5.GR2</u></b>	<b>Payment</b>
40		
41	<b><u>2-01.5.INST1.GR2</u></b>	(The first and second paragraphs of Section 2-01.5 are revised to read) Must use once preceding any of the following:
42		
43		
44		
45	<b><u>2-01.5.OPT1.FR2</u></b>	(Clearing and Grubbing) (August 7, 2017) Must be used with <b>2-01.1.OPT1.FR2</b> when the payment for clearing and grubbing is included in other work. (1 fill-in)
46		
47		
48		
49		
50		
51	<b><u>2-02.GR2</u></b>	<b>Removal of Structures and Obstructions</b>
52		
53	<b><u>2-02.1.GR2</u></b>	<b>Description</b>

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

[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.GR2](#)

(Removal and Disposal of Asbestos Material)  
(October 4, 2021)  
Must also use **1-07.5(4)C.OPT1.FR1**, **2-02.3.OPT4.GR2** and **2-02.5.OPT11.GR2**.  
Use in projects when asbestos removal is required.

[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.OPT5.GR2](#)

(Decommissioning Wells)  
(February 25, 2021)  
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with **2-02.2.OPT1.GR2**, **2-02.3.OPT7.GR2**, and **2-02.5.OPT2.GR2**.

**[2-02.2.GR2](#)**

**Materials**

[2-02.2.INST1.GR2](#)

(Section 2-02.2 is supplemented with the following)  
Must use once preceding any of the following:

[2-02.2.OPT1.GR2](#)

(Decommissioning Wells)  
(February 25, 2021)  
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with **2-02.1.OPT5.GR2**, **2-02.3.OPT7.GR2**, and **2-02.5.OPT2.GR2**.

**[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)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

(September 7, 2021)  
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)  
(June 6, 2022)  
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](#)

(Removal and Disposal of Asbestos Material)  
(October 4, 2021)  
Must include with **1-07.5(4)C.OPT1.FR1**, **2-02.1.OPT2.GR2**, and **2-02.5.OPT11.GR2**.

[2-02.3.OPT5.GR2](#)

(Removal and Disposal of Asbestos Material)  
(October 4, 2021)  
Must include with **1-07.5(4)C.OPT2.FR1**.

[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.OPT7.GR2](#)

(Well Decommissioning)  
(February 25, 2021)

1 Include in projects when wells will not be removed prior to  
2 advertisement and will be removed as part of the Contract.  
3 Use with **2-02.1.OPT5.GR2**, **2-02.2.OPT1.GR2**, and **2-**  
4 **02.5.OPT2.GR2**.

5  
6 **2-02.3(2).GB2**

7 **Removal of Bridges, Box Culverts, and other Drainage**  
8 **Structures**

9 **2-02.3(2).INST1.GB2**

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

10  
11  
12 **2-02.3(2).OPT1.FB2**

(Removing Existing Bridge)  
(June 26, 2000)

13 Use in projects requiring the removal of existing  
14 bridge(s) in one stage. The first fill-in specifies the  
15 bridge(s). The second fill-in specifies where traffic is  
16 directed (onto the detour route or bridge, onto the new  
17 bridge, etc.). Include with **2-02.3(2).OPT10(B).FB2**.  
18 **Include with 1-07.1(2).OPT3.FR1** if the bridge being  
19 removed has steel members with lead paint.  
20 (2 fill-ins)  
21

22  
23 **2-02.3(2).OPT2.FB2**

(Removing Existing Bridge)  
(June 26, 2000)

24 Use in projects requiring the removal of existing  
25 bridge(s) in two or more stages. The fill-in specifies the  
26 bridge(s). Include with **1-07.1(2).OPT3.FR1** if the  
27 bridge being removed has steel members with lead  
28 paint.  
29 (1 fill-in)  
30

31  
32 **2-02.3(2).OPT3.FB2**

(Removing Portion of Existing Bridge)  
(June 26, 2000)

33 Use in projects requiring the removal of portions of  
34 existing bridge(s). The first fill-in specifies the  
35 bridge(s). The second fill-in specifies the portions  
36 being removed. Include with **1-07.1(2).OPT3.FR1** if the  
37 bridge being partially removed has steel members with  
38 lead paint.  
39 (2 fill-ins)  
40

41  
42 **2-02.3(2).OPT7.FB2**

(Removal in Water)  
(June 26, 2000)

43 Use in projects requiring the removal of existing  
44 bridge(s) when removal involves piers within the  
45 wetted perimeter of a stream, lake or bay. The first fill-  
46 in specifies the bridge(s). The second and fourth fill-ins  
47 specify the body of water. The third fill-in specifies the  
48 elevation of the removal level. Include with **either 2-**  
49 **02.3(2).OPT1.FB2**, **2-02.3(2).OPT2.FB2**, or **2-**  
50 **02.3(2).OPT3.FB2**, and **2-02.3(2).OPT10(B).FB2**.  
51

52  
53 **2-02.3(2).OPT10.GB2**

(Use of Explosives)

Must use once preceding any of the following:

[2-02.3\(2\).OPT10\(B\).FB2](#) (Structure Removal By Explosives)  
(January 2, 2018)  
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(2).OPT3.FR1** if the bridge involved has steel members with lead paint.  
(1 fill-in)

[2-02.3\(2\).OPT11.GB2](#) (Requirements for Closing Bridge Prior to Removal)  
(January 2, 2018)  
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(2).OPT3.FR1** if the bridge involved has steel members with lead paint.

[2-02.3\(2\).OPT12.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](#) Removal of Pavement, Sidewalks, Curbs, and Gutters**

[2-02.3\(3\).INST1.GR2](#) (Section 2-02.3(3) is supplemented with the following)  
Must use once preceding any of the following:

[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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

**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 1, 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.OPT2.GR2](#)

(Decommissioning Wells)  
(February 25, 2021)  
Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract.  
Use with **2-02.1.OPT5.GR2, 2-02.2.OPT1.GR2, and 2-02.3.OPT7.GR2.**

[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 **1-07.5(4)C.OPT1.FR1, 2-02.1.OPT.GR2, and 2-02.3.OPT4.GR2.**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

[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.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**

**[2-03.1.GR2](#) Description**

[2-03.1.INST1.GR2](#) (Section 2-03.1 is supplemented with the following)  
Must use once preceding any of the following:

[2-03.1.OPT1.GR2](#) (Geofoam Lightweight Fill)  
(July 2, 2024)  
Use in projects utilizing geofoam lightweight fill.  
Use with **2-03.2.OPT1.GR2, 2-03.3.OPT1.GR2, 2-03.4.OPT5.GR2,** and **2-03.5.OPT4.GR2.**

**[2-03.2.GR2](#) Vacant**

[2-03.2.INST1.GR2](#) (Section 2-03.2, including title, is deleted and replaced with the following:)  
Must use once preceding any of the following:

[2-03.2.OPT1.GR2](#) (Geofoam Lightweight Fill)  
(July 2, 2024)

1 Use in projects utilizing geofam lightweight fill.  
2 Use with **2-03.1.OPT1.GR2**, **2-03.3.OPT1.GR2**, **2-**  
3 **03.4.OPT5.GR2**, and **2-03.5.OPT4.GR2**.

4  
5 **2-03.3.GR2**                      **Construction Requirements**

6  
7 **2-03.3.INST1.GR2**            (Section 2-03.3 is supplemented with the following)  
8 Must use once preceding any of the following:

9  
10 **2-03.3.OPT1.GR2**            (Geofoam Lightweight Fill)  
11 (July 2, 2024)  
12 Use in projects utilizing geofam lightweight fill.  
13 Use with **2-03.1.OPT1.GR2**, **2-03.2.OPT1.GR2**, **2-**  
14 **03.4.OPT5.GR2**, and **2-03.5.OPT4.GR2**.

15  
16 **2-03.3(2).GR2**                **Rock Cuts**

17  
18 **2-03.3(2).INST1.GR2**        (Section 2-03.3(2) is supplemented with the following)  
19 Must use once preceding any of the following:

20  
21 **2-03.3(2).OPT1.GR2**        (Rock Slope Scaling and Removal and Disposal  
22 of Rock Slope Scaling Debris)  
23 (September 7, 2021)  
24 Use in projects with rock slope scaling. Include with **2-**  
25 **03.4.OPT4.GR2** and **2-03.5.OPT3.GR2**.

26  
27 **2-03.3(7).GR2**                **Disposal of Surplus Material**

28  
29 **2-03.3(7).INST1.GR2**        (Section 2-03.3(7) is supplemented with the following)  
30 Must use once preceding any of the following:

31  
32 **2-03.3(7).OPT1.FR2**        (Contracting Agency furnished waste site)  
33 (March 13, 1995)  
34 Use in projects with Contracting Agency provided  
35 waste sites.  
36 (1 fill-in)

37  
38 **2-03.3(7).OPT2.FR2**        (Waste material by embankment widening)  
39 (March 13, 1995)  
40 Use in projects where the Contracting Agency  
41 specifies embankments to be widened.  
42 (2 fill-ins)

43  
44 **2-03.3(7).OPT3.GR2**        (Contracting Agency provided sites are not mandatory)  
45 (March 13, 1995)  
46 Use, when applicable, with **2-03.3(7).OPT1.FR2**  
47 or **2-03.3(7).OPT2.FR2**.

48  
49 **2-03.3(7).OPT4.GR2**        (Contracting Agency provided sites are  
50 not of sufficient size)  
51 (March 13, 1995)  
52 Use, when applicable, with **2-03.3(7).OPT1.FR2**  
53 or **2-03.3(7).OPT2.FR2**.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

**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)  
(September 3, 2024)  
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**.



1 Use in grading-only projects where a treated base is  
2 planned for construction on a future project.  
3 The project should include a bid item for "Gravel  
4 Borrow Including Haul" or "Borrow Excavation Including  
5 Haul" to ensure that sufficient fine material is available  
6 for trimming. The position of the future treated base is  
7 to shown on the plans.  
8

9 **2-09.GR2**                      **Structure Excavation**

10  
11 **2-09.3.GR2**                      **Construction Requirements**

12  
13 **2-09.3(1).GR2**                      **General Requirements**

14  
15 **2-09.3(1)C.GR2**                      **Removal Of Unstable Base Material**

16  
17 **2-09.3(1)C.INST1.GR2** (Section 2-09.3(1)C is supplemented  
18 with the following)

19 Must use once preceding any of the following:

20  
21 **2-09.3(1)C.OPT1.FB2**                      (Soils Prone to Disturbance)  
22 (September 8, 2020)

23 Use in bridge projects in where soil in the bottom  
24 of footing excavation is susceptible to  
25 disturbance and may become unsuitable. Use at  
26 the recommendation of the State Geotechnical  
27 Office.

28 (1 fill-in)

29 Fill-in #1 is the location of the soils prone to  
30 disturbance.  
31

32 **2-09.3(3).GR2**                      **Construction Requirements, Structure Excavation,**  
33 **Class A**

34  
35 **2-09.3(3)B.GR2**                      **Excavation Using Open Pits – Extra**  
36 **Excavation**

37  
38 **2-09.3(3)B.INST1.GR2** (Section 2-09.3(3)B is supplemented  
39 with the following)

40 Must use once preceding any of the following:

41  
42 **2-09.3(3)B.OPT1.FB2**                      (Extra Excavation and Open Pit Excavation  
43 Not Allowed)  
44 (September 7, 2021)

45 Use in projects where extra excavation and  
46 open pit excavation is not allowed at specific  
47 locations. The fill-in specifies the location(s)  
48 where extra excavation and open pit  
49 excavation is not allowed.

50 (1 fill-in)

51  
52 **2-09.3(3)B.OPT2.FR2**                      (Extra Excavation and Open Pit Excavation)  
53 (April 1, 2019)

1 Use in projects where temporary excavation  
2 slopes are located beneath structures, critical  
3 facilities, or where recommended by the  
4 State Geotechnical Office. The fill-in specifies  
5 the location(s) where extra excavation and  
6 open pit excavation is allowed.  
7 (1 fill-in)  
8

9 **2-09.3(3)D.GR2**                    **Shoring And Cofferdams**

10  
11 **2-09.3(3)D.INST1.GR2** (Section 2-09.3(3)D is supplemented with the  
12 following)  
13 Must use once preceding any of the following:  
14

15 **2-09.3(3)D.OPT1.GB2**            (Protecting existing pavement)  
16 (March 13, 1995)  
17 Use in projects when bridges are over or  
18 adjacent to existing highways.  
19

20 **2-09.3(3)D.OPT2.GB2**            (Protecting RR tracks)  
21 (August 2, 2010)  
22 Use in projects when bridges are over or  
23 adjacent to existing railroad tracks.  
24

25 **2-09.3(3)D.OPT3.FB2**            (March 13, 1995)  
26 Use with **2-09.3(3)D.OPT2.GB2** when  
27 construction is required near railroad tracks, or  
28 structures which require extensive shoring.  
29 (3 fill-ins)  
30

31 **2-09.4.GR2**                        **Measurement**

32  
33 **2-09.4.INST1.GR2**                (The subsection **Lower Limits** of Section 2-09.4 is  
34 supplemented with the following)  
35 Must use once preceding any of the following:  
36

37 **2-09.4.OPT1.GB2**                (January 4, 2010)  
38 (Additional structure excavation under girders  
39 at end piers)  
40 Use in projects where excavation is required outside of  
41 normal structure excavation limits for end pier footings.  
42

43 **2-12.GR2**                        **Construction Geosynthetic**

44  
45 **2-12.1.GR2**                        **Description**

46  
47 **2-12.1.INST1.GR2**                (Section 2-12.1 is supplemented with the following)  
48 Must use once preceding any of the following:  
49

50 **2-12.1.OPT1.GR2**                Geosynthetic Reinforced Slope  
51 (November 17, 1997)  
52 Use in projects requiring geosynthetic reinforced slopes.  
53 Slope design should be performed by the State

1 Geotechnical Office or a geotechnical consultant. Use  
2 details from DETAILS.CEL Library; D225, D229, D230,  
3 and D230A or D230B.

4  
5 **2-12.2.GR2**

6 **Materials**

7 **2-12.2(9-03.14).GR2** (Borrow)  
8 (Section 9-03.14 is supplemented with the following)  
9 Must use once preceding any of the following:

10  
11 **2-12.2(9-03.14).OPT1.FR2** (Borrow for Geosynthetic Reinforced Slopes)  
12 (November 17, 1997)  
13 Use in projects requiring geosynthetic reinforced  
14 slopes.  
15 (1 fill-in)

16  
17 **2-12.2(9-07.7).GR2** (Welded Wire Reinforcement)  
18 (Section 9-07.7 is supplemented with the following)  
19 Must use once preceding any of the following:

20  
21 **2-12.2(9-07.7).OPT1.GR2** (Welded Wire Reinforcement)  
22 (February 6, 2023)  
23 Use in projects where welded wire faced geosynthetic  
24 reinforced slopes are specified.

25  
26 **2-12.2(9-33.2(2)).GR2** (Geosynthetic Properties for Retaining Walls and  
27 Reinforced Slopes)  
28 (Section 9-33.2(2) is supplemented with the following)  
29 Must use once preceding any of the following:

30  
31 **2-12.2(9-33.2(2)).OPT1.FR2** (Geosynthetic Properties for Reinforced  
32 Slopes)  
33 (January 2, 2012)  
34 Use in projects requiring geosynthetic reinforced  
35 slopes. The slope class must be identified in fill-in 6  
36 based on the following: Class 1 is typically reinforced  
37 slopes which support bridge abutments, buildings,  
38 critical utilities, or other facilities which the  
39 consequences of poor performance or failure would be  
40 severe. In general, slopes greater than 30 feet in  
41 height. Class 2 is all reinforced slopes not categorized  
42 as Class 1.  
43 (6 fill-ins)

44  
45 **2-12.2(9-33.2(2)).OPT2.GR2** (Geosynthetic Properties for Turf  
46 Reinforcement Mat)  
47 (April 5, 2004)  
48 Use in projects where geosynthetic reinforced slopes  
49 with a turf reinforcement mat facing are specified.

50  
51 **2-12.2(9-33.4(1)).GR2** (Source Approval)  
52 (Section 9-33.4(1) is supplemented with the following)  
53 Must use once preceding any of the following:

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53

[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)  
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](#) (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](#)

(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](#)

(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)

1  
2  
3

(November 17, 1997)  
Use in projects requiring geosynthetic reinforced slopes.  
(1 fill-in)