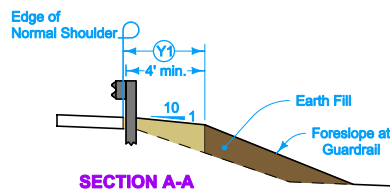


**PLAN**  
Guardrail Installation Line at Shoulder

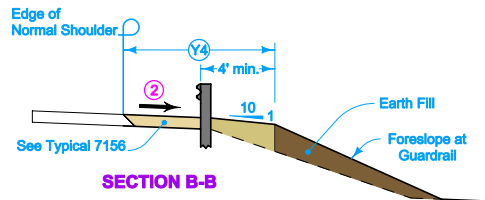
Construct earth fill in conformance with requirements for construction of embankments.

Guardrail may or may not be attached to face of obstacle.

- ① See Tabulation 107-23.
- ② Match slope of adjacent shoulder.
- ⊗ Measured from Location Station.
- Ⓨ Distance from edge of normal shoulder to toe of 10:1 slope



**SECTION A-A**



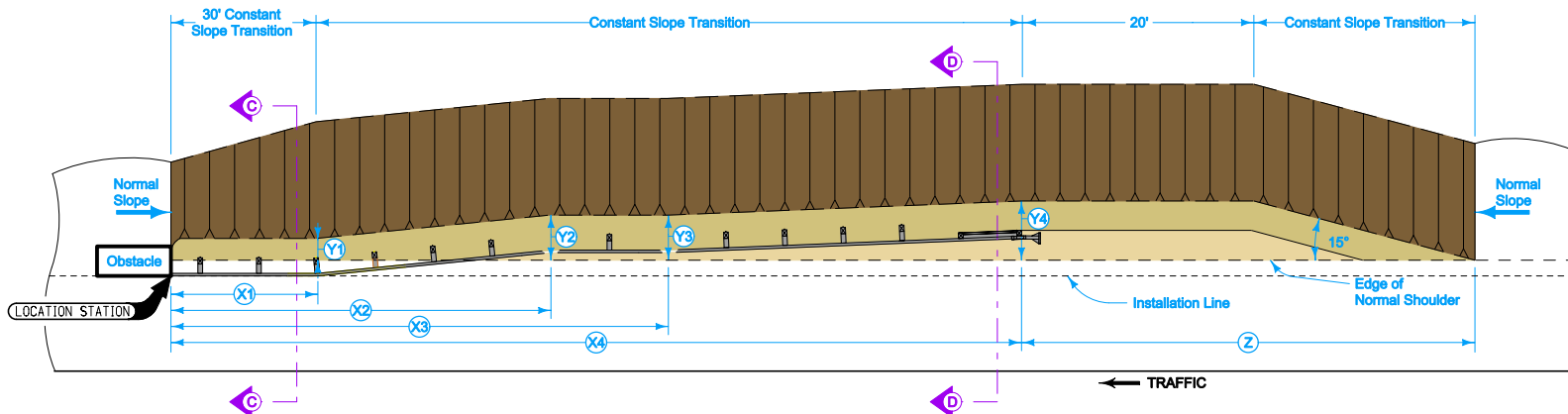
**SECTION B-B**

Ⓨ <sub>4</sub>	Ⓩ
feet	feet
4	35
5	39
6	43
7	47
8	50
9	54
10	57
11	61
12	65
13	69
14	72
15	76
16	80
17	83
18	87
19	91
20	95

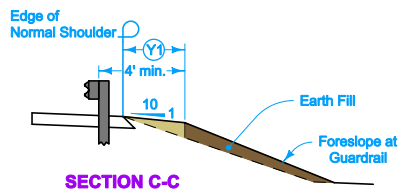
LEGEND	
	Foreslope at Guardrail ①
	Slope - 10:1
	Slope at Face of Guardrail ①②

Possible Tabulation:  
107-23

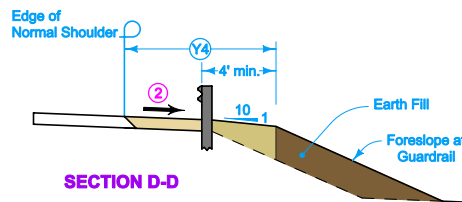
 Iowa Department of Transportation	REVISION
	2 04-20-10
	<b>RL-14A</b>
<b>STANDARD ROAD PLAN</b>	SHEET 1 of 4
<small>REVISIONS: Added third plan view and circle notes 2 and 3.</small>	
 APPROVED BY DESIGN METHODS ENGINEER	
<b>GUARDRAIL GRADING</b>	






**PLAN**  
Guardrail Installation Line within Shoulder



**SECTION C-C**




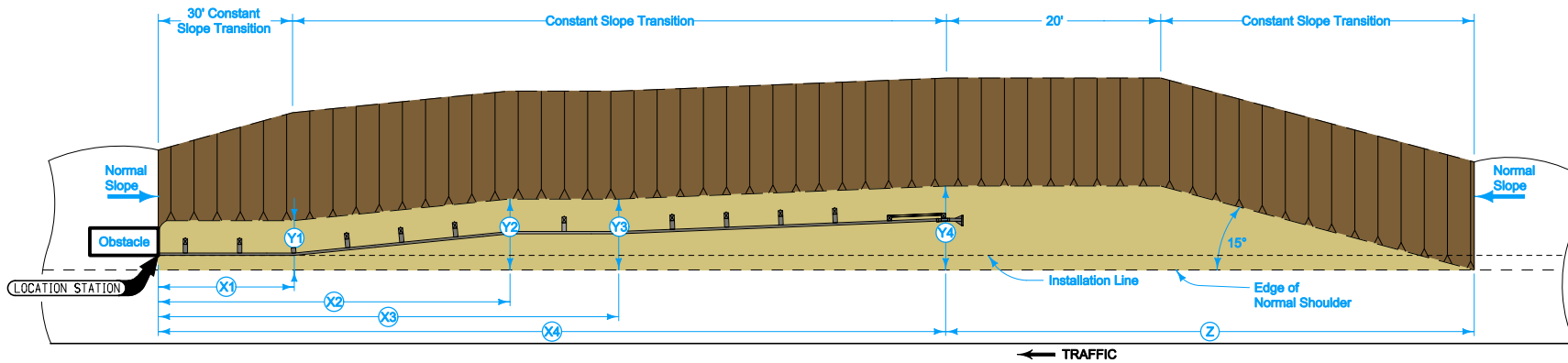
**SECTION D-D**

LEGEND	
	Foreslope at Guardrail ①
	Slope - 10:1
	Slope at Face of Guardrail ①②

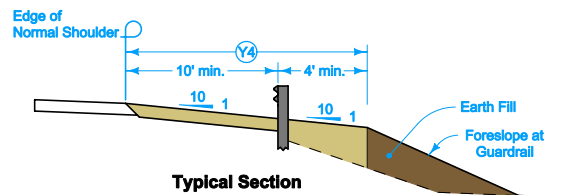
- ① See Tabulation 107-23.
- ② Match slope of adjacent shoulder.
- ⓧ Measured from Location Station.
- Ⓨ Distance from edge of normal shoulder to toe of 10:1 slope

Ⓨ <sub>4</sub>	Ⓩ
feet	feet
4	35
5	39
6	43
7	47
8	50
9	54
10	57
11	61
12	65
13	69
14	72
15	76
16	80
17	83
18	87
19	91
20	95

 Iowa Department of Transportation	REVISION	
	2	04-20-10
<b>STANDARD ROAD PLAN</b>	<b>RL-14A</b>	
REVISIONS: Added third plan view and circle notes 2 and 3.		
<i>Deanna McFalls</i> APPROVED BY DESIGN METHODS ENGINEER		
<b>GUARDRAIL GRADING</b>		



**PLAN**  
Guardrail Installation Line beyond Shoulder



**Typical Section**

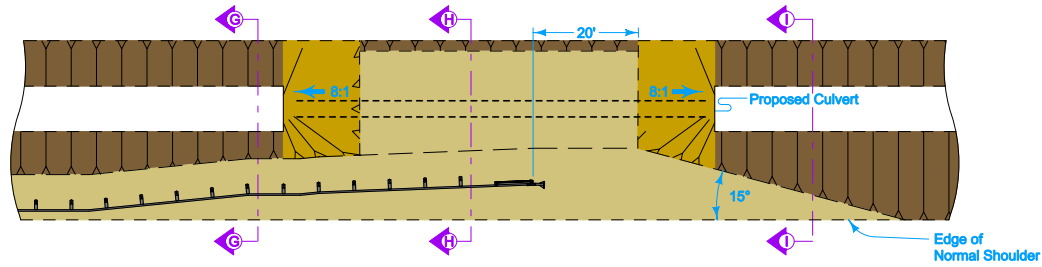
- ① See Tabulation 107-23.
- ⓧ Measured from Location Station.
- Ⓨ Distance from edge of normal shoulder to toe of 10:1 slope

Ⓨ	Ⓩ
feet	feet
4	35
5	39
6	43
7	47
8	50
9	54
10	57
11	61
12	65
13	69
14	72
15	76
16	80
17	83
18	87
19	91
20	95

**LEGEND**

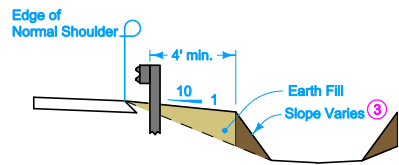
	Foreslope at Guardrail ①
	Slope - 10:1

 Iowa Department of Transportation	REVISION
	2 04-20-10
<b>STANDARD ROAD PLAN</b>	<b>RL-14A</b>
SHEET 3 of 4	
REVISIONS: Added third plan view and circle notes 2 and 3.	
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<b>GUARDRAIL GRADING</b>	

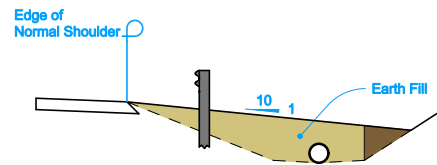


**PLAN**

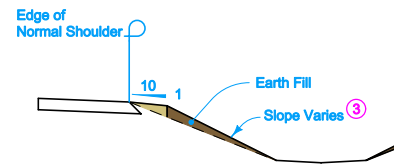
Guardrail Installation Line at Shoulder near Proposed Culvert



**SECTION G-G**



**SECTION H-H**



**SECTION I-I**

LEGEND	
	Foreslope at Guardrail ① ③
	Slope - 10:1
	Slope - 8:1

- ① See Tabulation 107-23.
- ③ Slope equal to normal slope. When 4 foot ditch cannot be maintained, steepen slope to meet width constraints. Slope to be no steeper than 4:1 in the median and 3:1 on the outside.

 Iowa Department of Transportation	REVISION
	2   04-20-10
<b>STANDARD ROAD PLAN</b>	<b>RL-14A</b>
SHEET 4 of 4	
REVISIONS: Added third plan view and circle notes 2 and 3.	
 Deanna McFalls	
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<b>GUARDRAIL GRADING</b>	