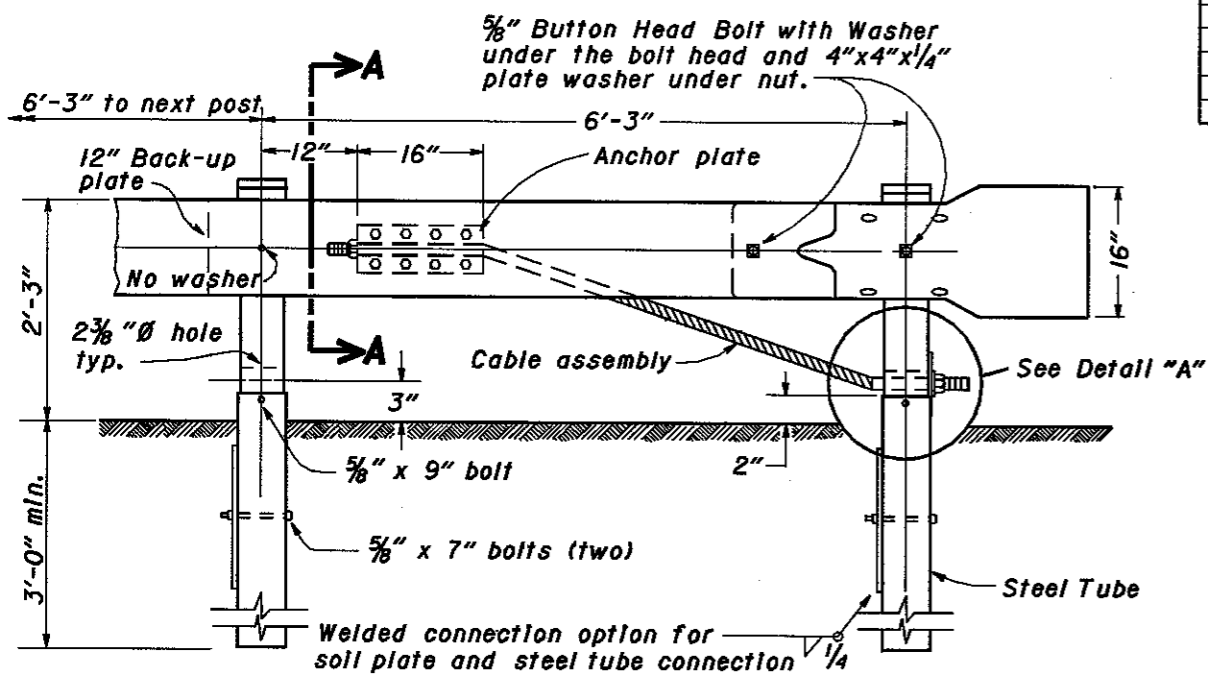
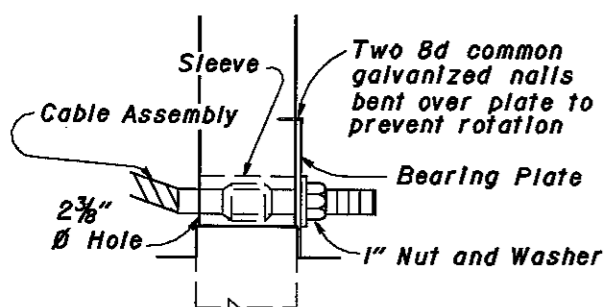


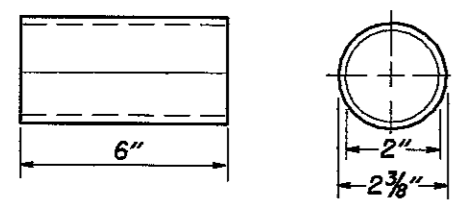
**PLAN**



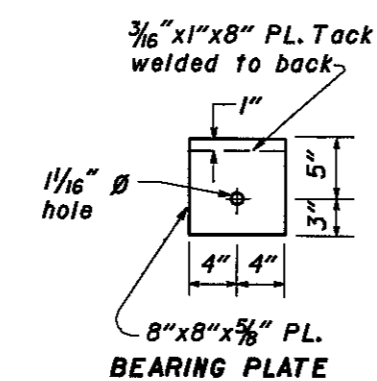
**ELEVATION**



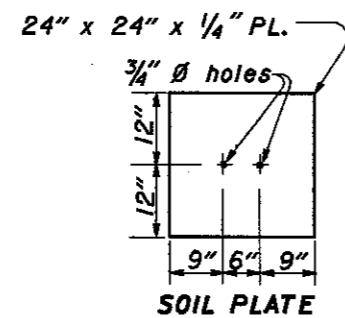
**DETAIL "A"**



**BREAKAWAY TERMINAL POST SLEEVE**



**BEARING PLATE**

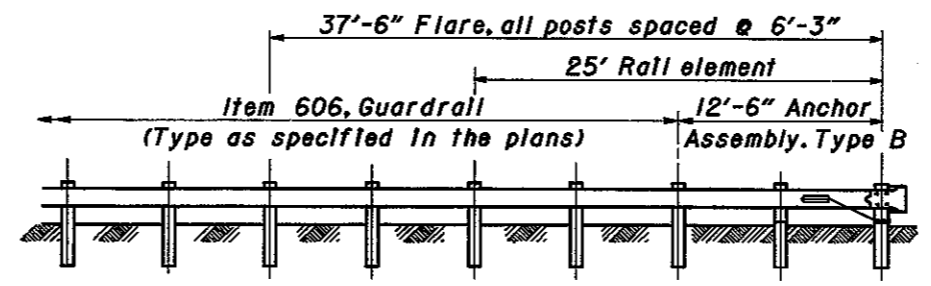
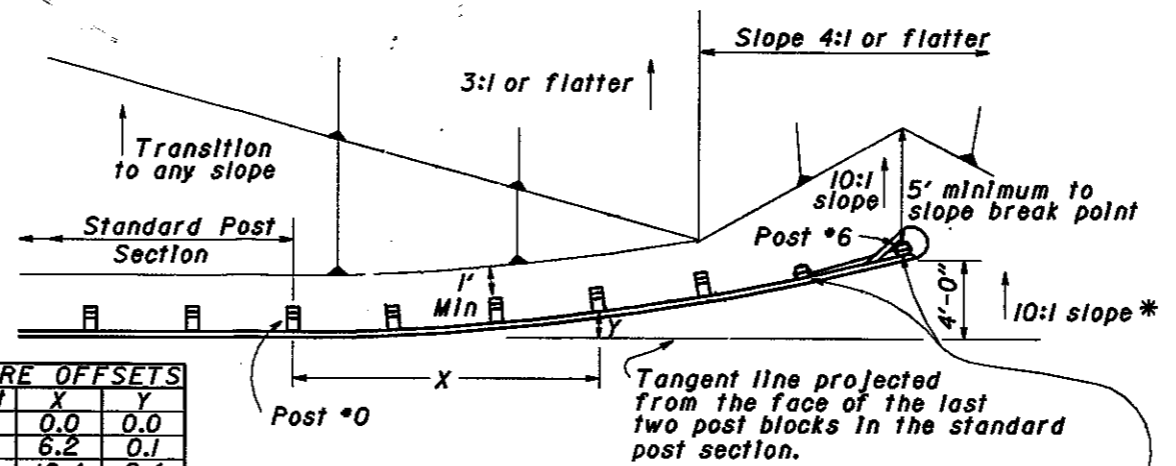


**SOIL PLATE**

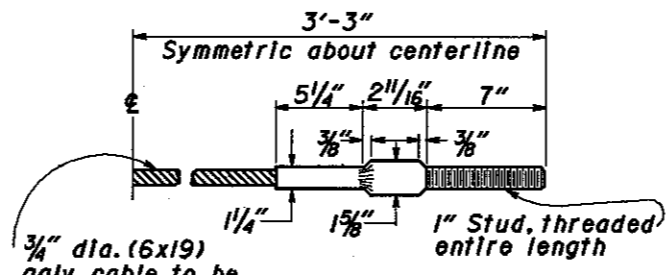
Post	X	Y
0	0.0	0.0
1	6.2	0.1
2	12.4	0.4
3	18.7	1.0
4	24.9	1.7
5	31.0	2.7
6	37.2	4.0

Two 6"x8" wood posts inserted in 8"x6"x0.1875" dia. steel tubes.  
NOTE: Offsets are measured to face of rail at post bolt holes.

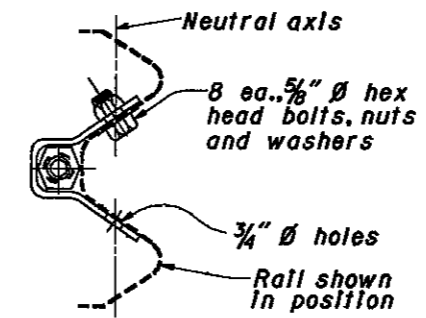
**PLAN**



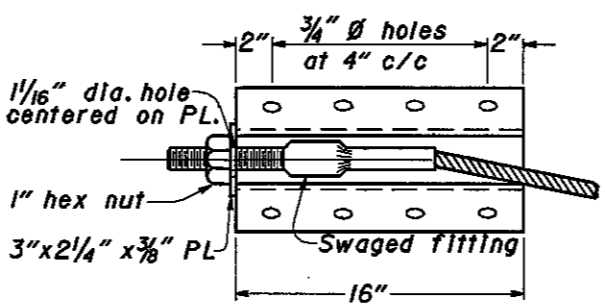
**ELEVATION**



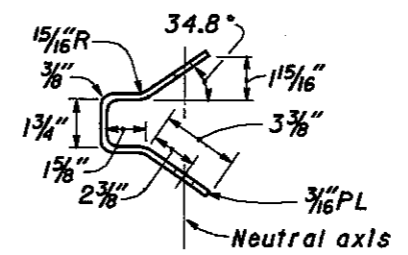
**STANDARD SWAGED FITTING AND STUD CABLE ASSEMBLY**



**SECTION A-A**



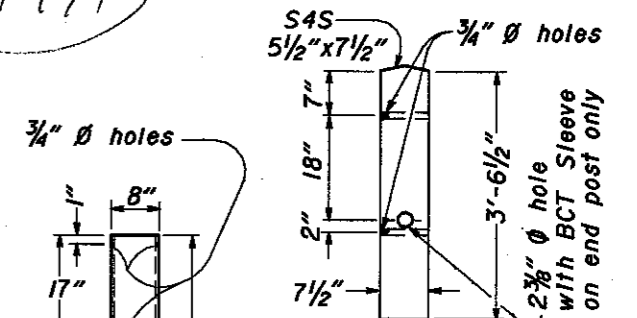
**FRONT VIEW**



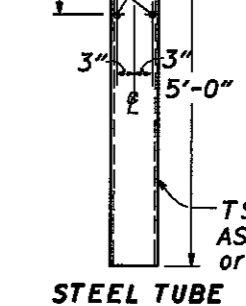
**SIDE VIEW**

**ANCHOR PLATE DETAILS**

1991



**WOOD POST FOR STEEL TUBE**



**STEEL TUBE**

**NOTES**

**PAYMENT:** All materials and labor for the 12'-6" Type B Anchor Assembly shown including any extra cost for using a 25' long rail element, grading required beyond the cross-section design shown on the Typical Sections and other costs involved in the flare, shall be included in the unit price bid for Item 606, Each, Anchor Assembly, Type B.

**GENERAL:** For details not shown, see Std. Const. Dwg. GR-1.1, GR-1.2 and other Std. Const. Dwg. pertaining to design of specific guardrail types.

**FLARE OFFSET:** The offset of posts #5 and #6 are taken to the face of the posts whereas others are to the blockouts. The 4'-0" offset to the face of post #6 must be projected from the tangent line extending from the face of the last two post blocks in the standard post section.

**STRENGTH:** The minimum breaking strength of the assembly shall be 40,000 pounds.

**GRADING OF SLOPES** and transitions as shown must be provided for the Type B Anchor Assembly to function correctly.

\* **THE 10:1 SLOPE** shall extend a minimum of 50' approaching the Assembly where it shall be smoothly transitioned to the graded shoulder slopes shown on the Typical Sections.

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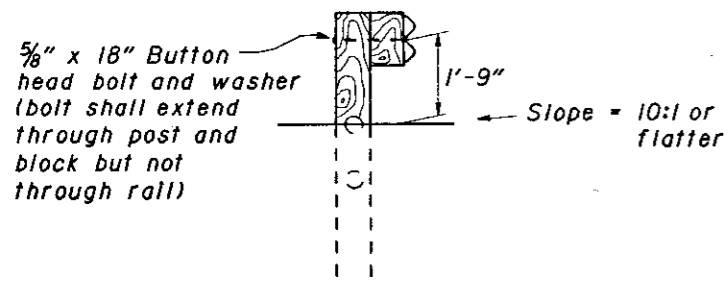
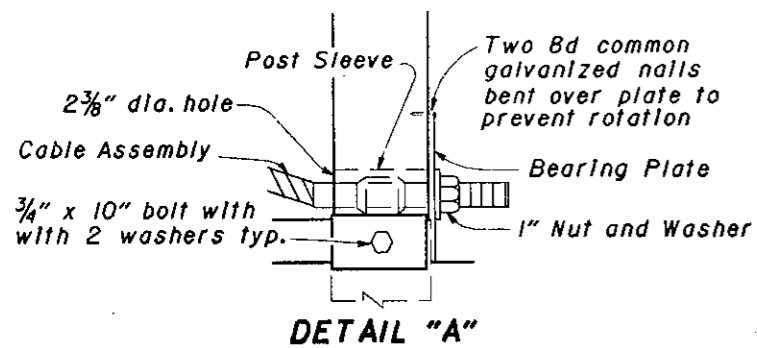
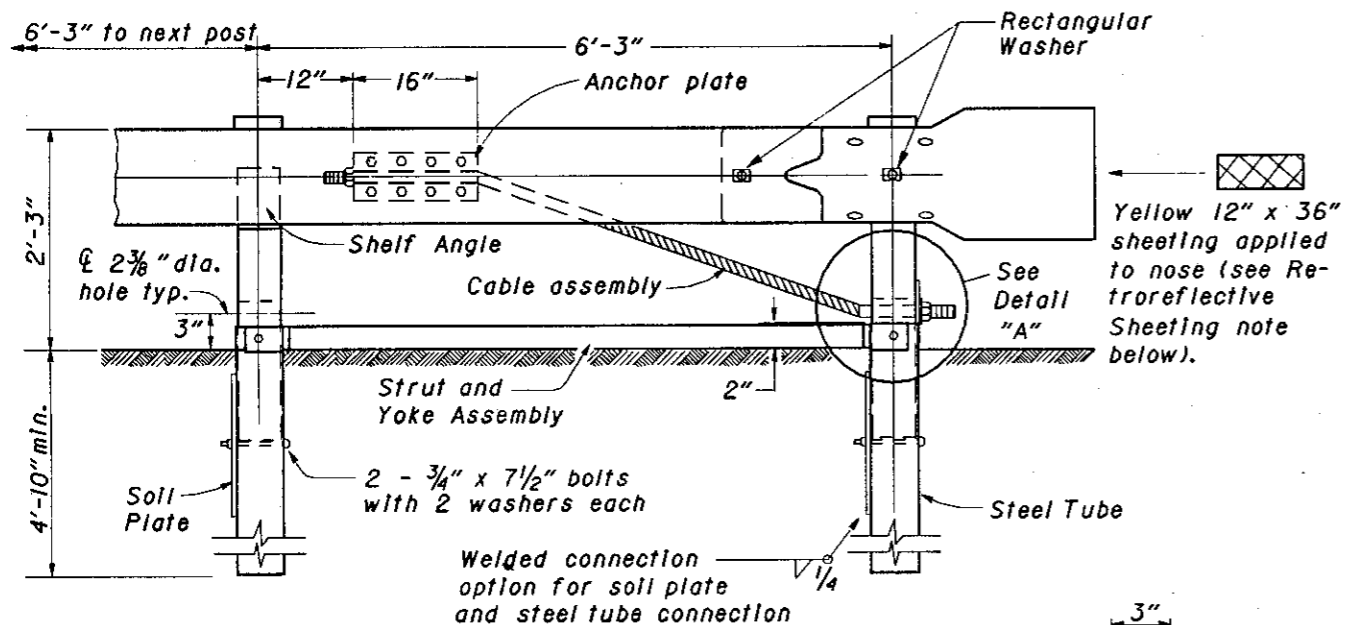
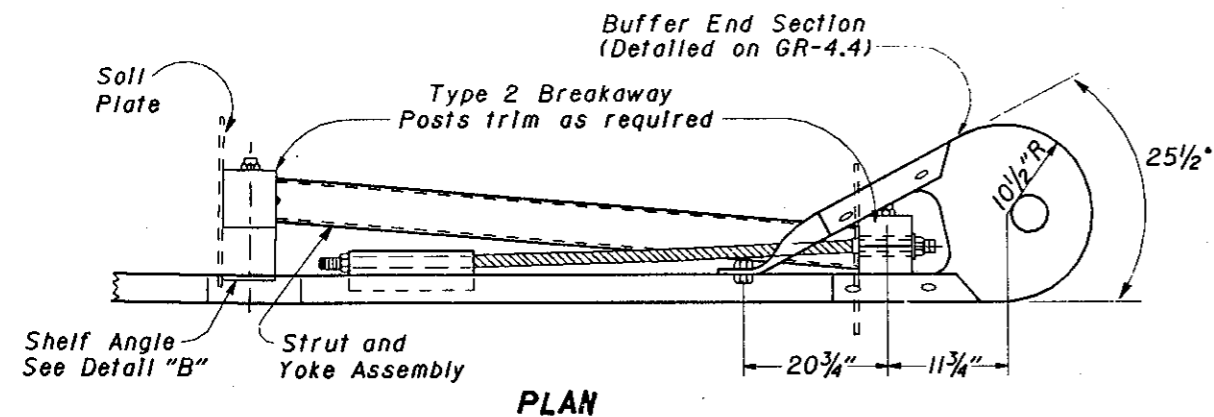
**TYPE B ANCHOR ASSEMBLY**

DATE  
2-5-82

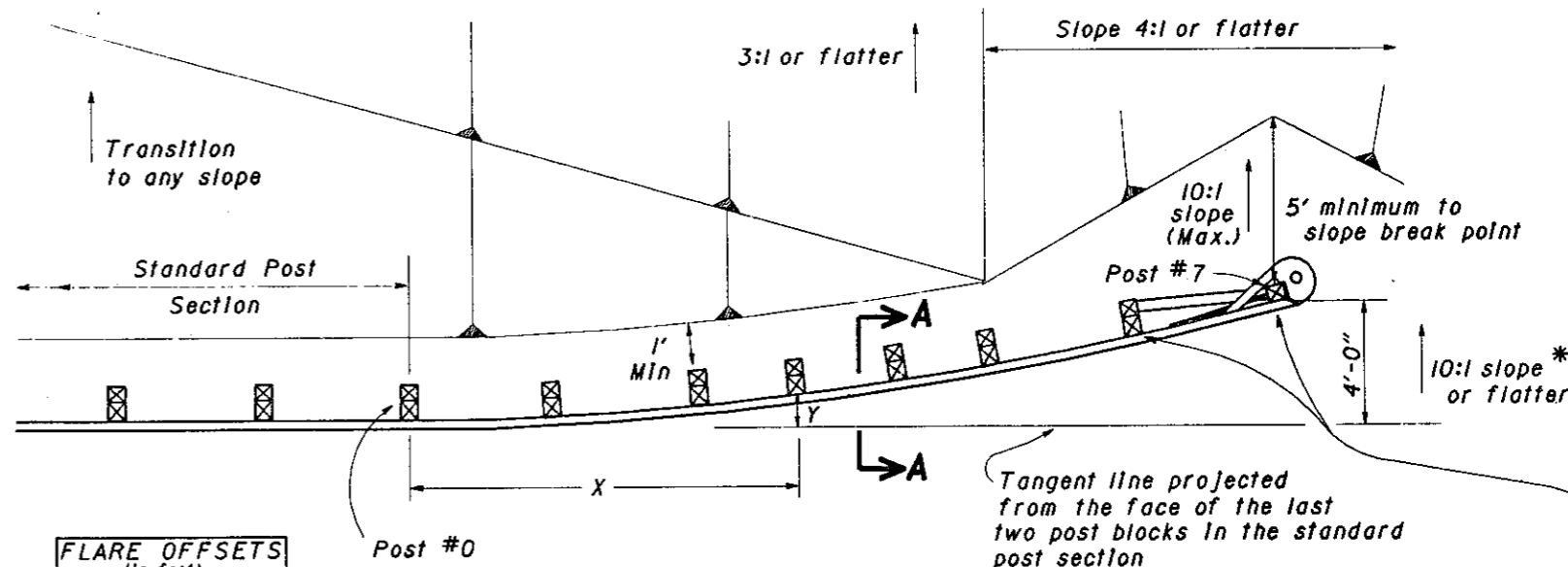
STANDARD CONSTRUCTION DRAWING

**GR-4.3**

APPROVED \_\_\_\_\_ ENGR., L. & D.

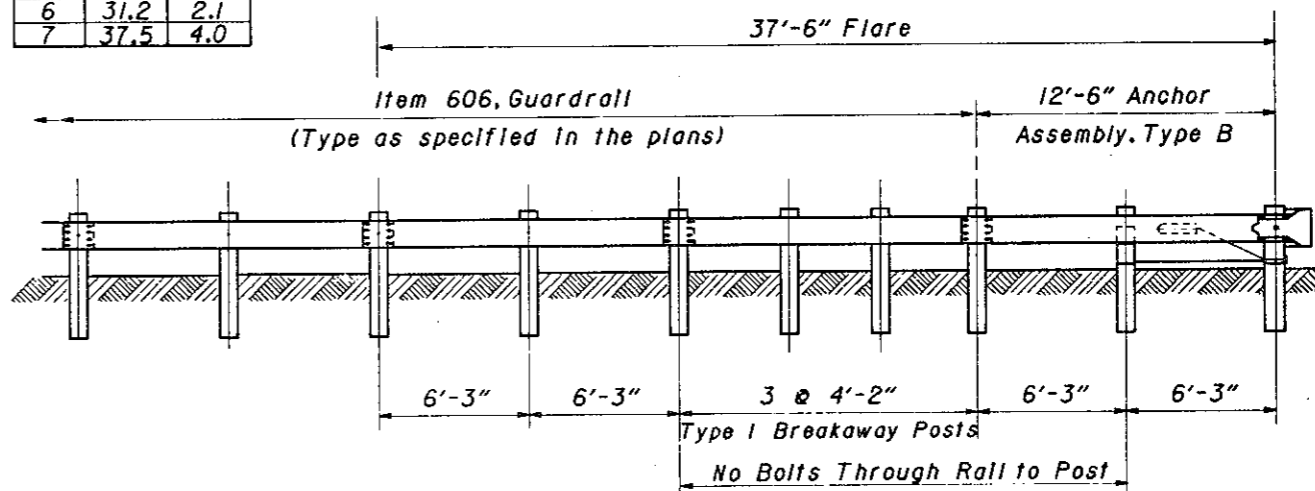


Type 1 Breakaway Post and Block



Post	X	Y
0	0.0	0.0
1	6.2	0.1
2	12.5	0.2
3	16.7	0.3
4	20.8	0.7
5	25.0	1.2
6	31.2	2.1
7	37.5	4.0

Two 5 1/2" x 7 1/2" wood posts inserted in 8" x 6" x 0.1875" dia. steel tubes



NOTES

**GENERAL:** For details not shown, see Std. Const. Dwgs. GR-1.1, GR-1.2, GR-1.3, GR-4.4 and other Std. Const. Dwgs. pertaining to design of specific guard-rail types. All angles, channels and plates shall conform to 711.01. Structural tubing shall conform to 707.10. All structural steel shall be galvanized as per 711.02.

**POST OFFSET DIMENSIONS** are given to the center of the face of the blockouts, except at Post #7, where the dimension is to the center of the face of the post.

**GRADING OF SLOPES** and transitions as shown must be provided for the Type B Anchor Assembly to function correctly.

\* **THE 10:1 SLOPE** shall extend a minimum of 50' approaching the Assembly where it shall be smoothly transitioned to the graded shoulder slopes shown on the Typical Sections.

**RETROREFLECTIVE SHEETING** shall not be required when the offset distance to the face of the Buffer End Section from the near edge of the adjacent pavement is 20 feet, or greater.

The sheeting shall be Standard, Type G, meeting the requirements of 730.19, and shall be applied as per manufacturers' recommended procedure. Sheeting shall not be applied when the ambient temperature is below 40°F.

**PAYMENT:** All materials and labor for the 12'-6" Type B Anchor Assembly shown, including any extra cost for using Breakaway Line Posts, shall be included in the unit price bid for Item 606, Each, Anchor Assembly, Type B. Payment for grading requirements shown herein shall be made under Item 203 as specified in the plans.

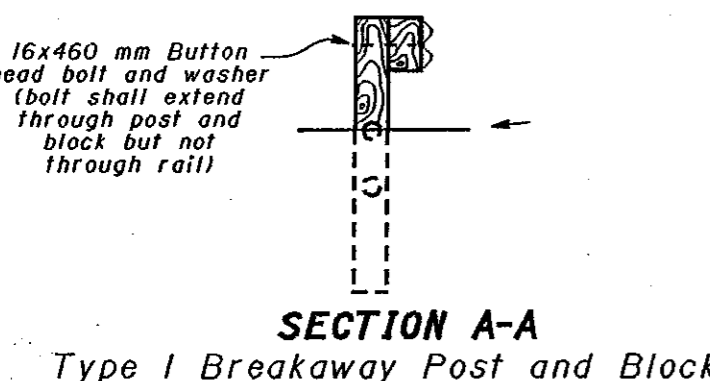
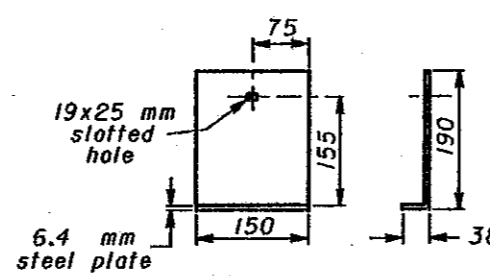
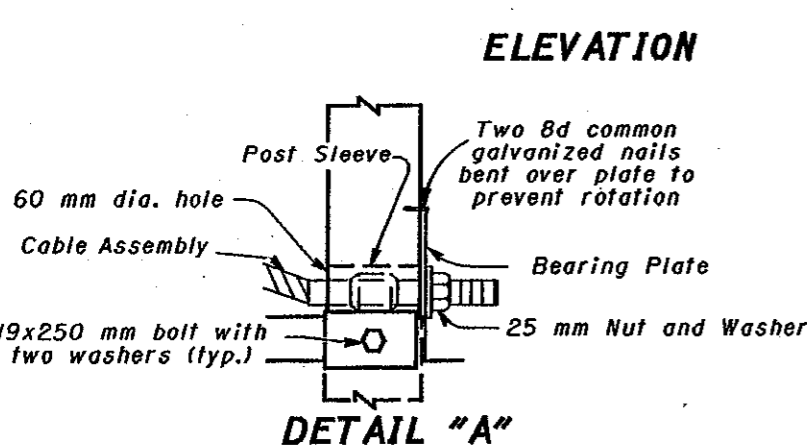
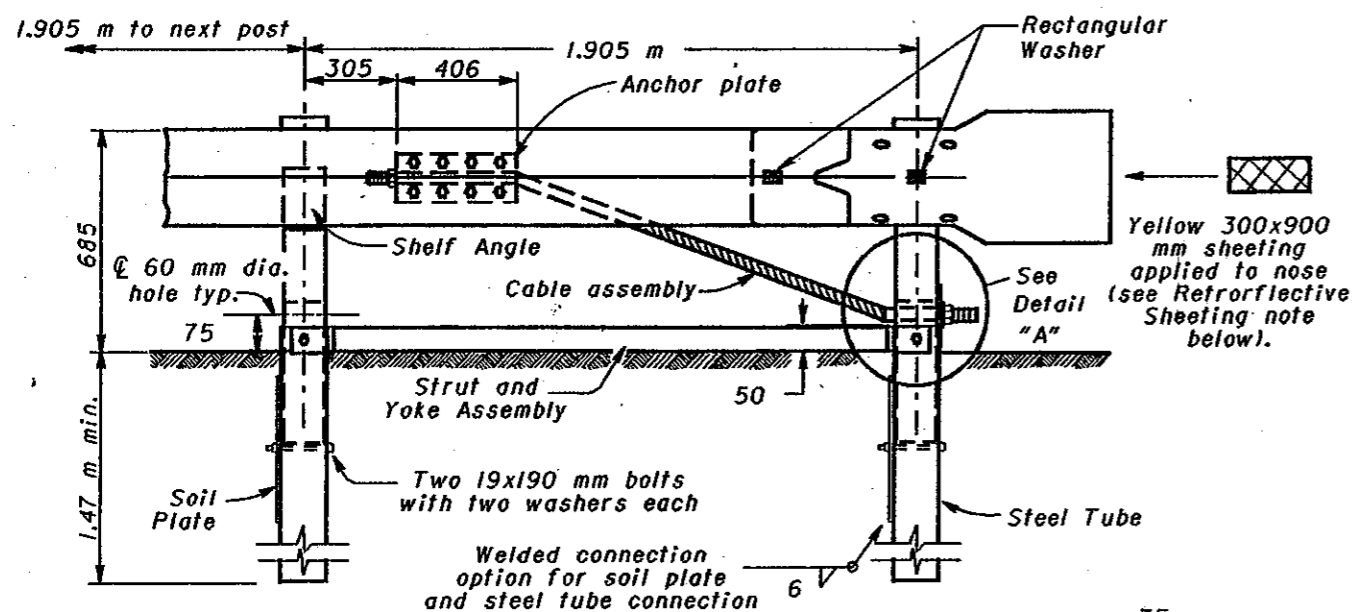
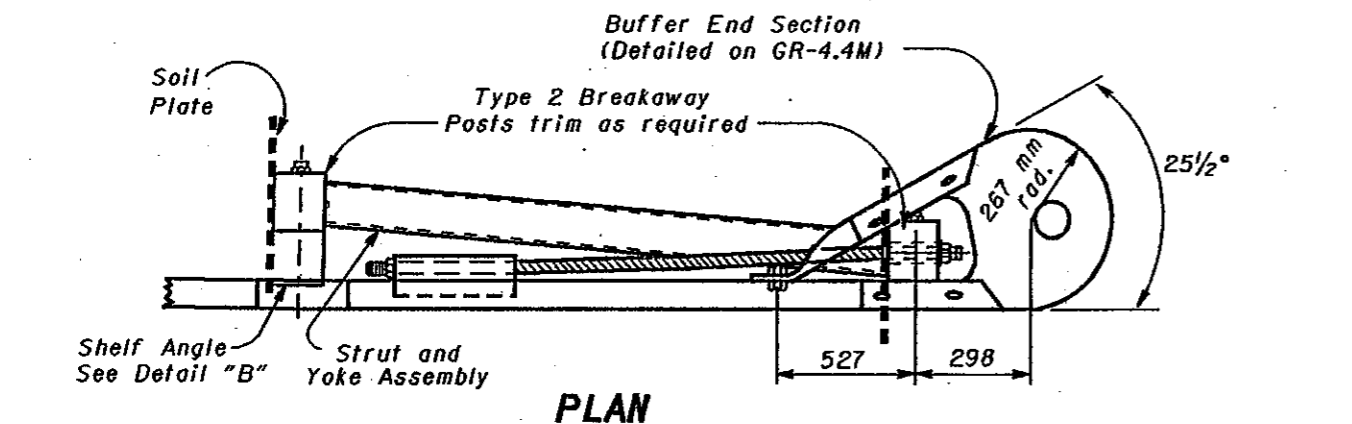
BUREAU OF LOCATION AND DESIGN  
OHIO DEPARTMENT OF TRANSPORTATION

**TYPE B  
ANCHOR  
ASSEMBLY**

DATE  
2-21-92

STANDARD  
CONSTRUCTION  
DRAWING  
**GR-4.3**

APPROVED *D.K. Hulman* ENGR., L. & O.

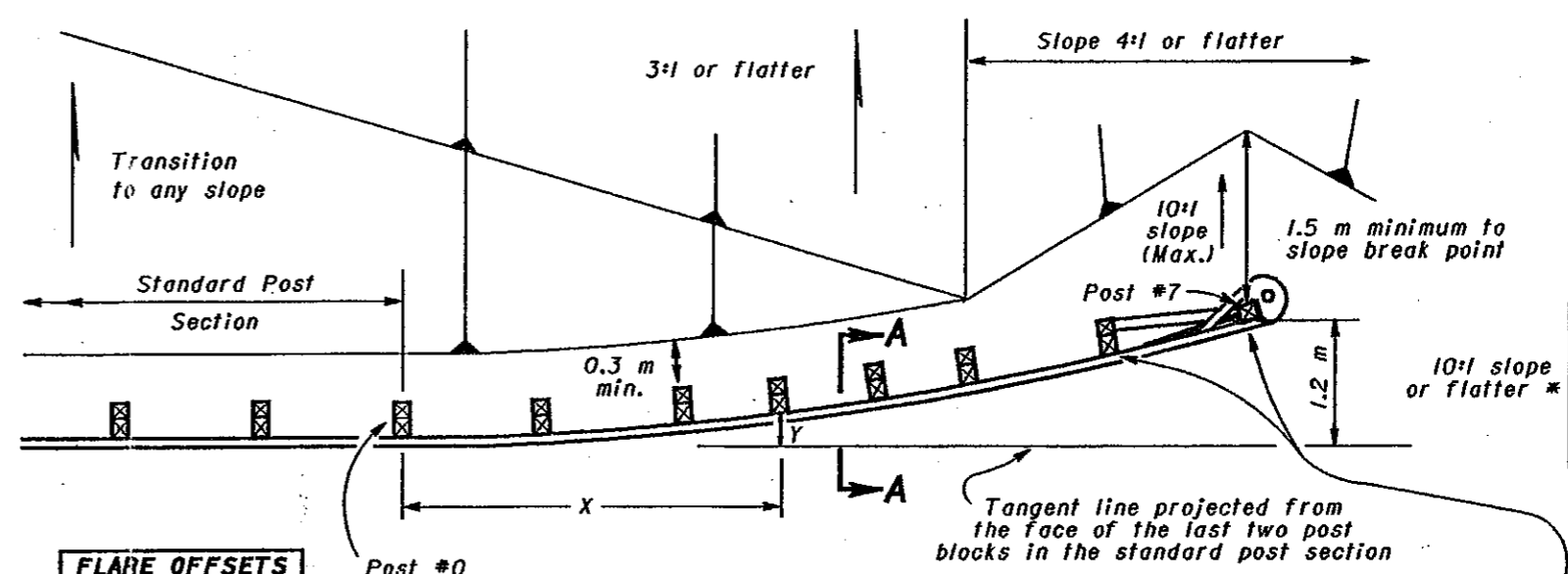


**GENERAL:** For details not shown, see Std. Constr. Dwg. GR-1.1M, GR-1.2M, GR-1.3M, GR-4.4M and other Drawings pertaining to design of specific guardrail types. All angles, channels and plates shall conform to CMS 711.01. Structural tubing shall conform to CMS 707.10. All structural steel shall be galvanized as per CMS 711.02.

**POST OFFSET:** Dimensions are given to the center of the face of the blockouts, except at Post #7, where the dimension is to the center of the face of the post.

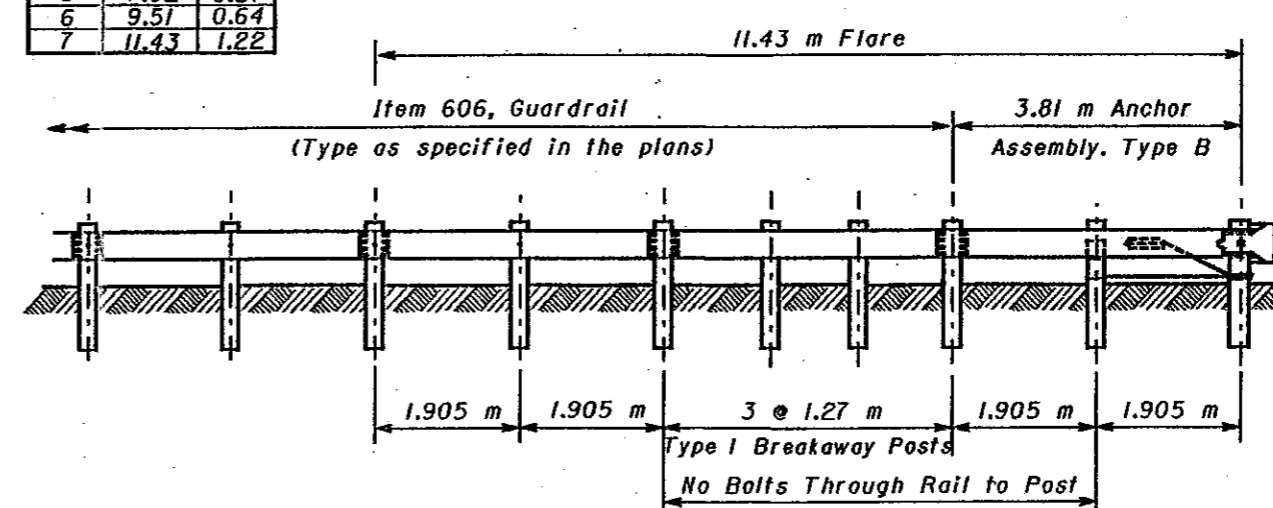
**GRADING OF SLOPES AND TRANSITIONS:** Grading must be provided as shown for the Type B Anchor Assembly to function correctly.

**\* 10:1 SLOPE:** This slope shall extend a minimum of 15 m approaching the Assembly where it shall be smoothly transitioned to the graded shoulder slopes shown on the Typical Sections.



**FLARE OFFSETS (in meters)**

Post	X	Y
0	0.0	0.0
1	1.89	0.03
2	3.81	0.06
3	5.09	0.09
4	6.34	0.21
5	7.62	0.37
6	9.51	0.64
7	11.43	1.22



**NOTES**

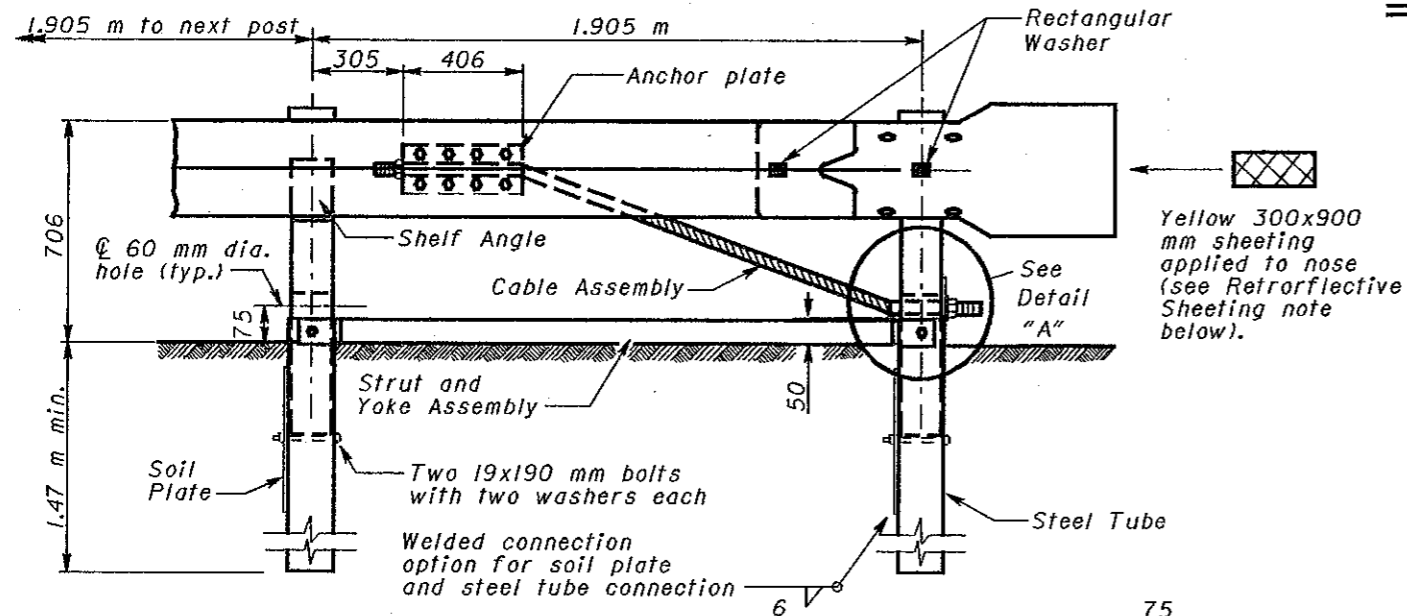
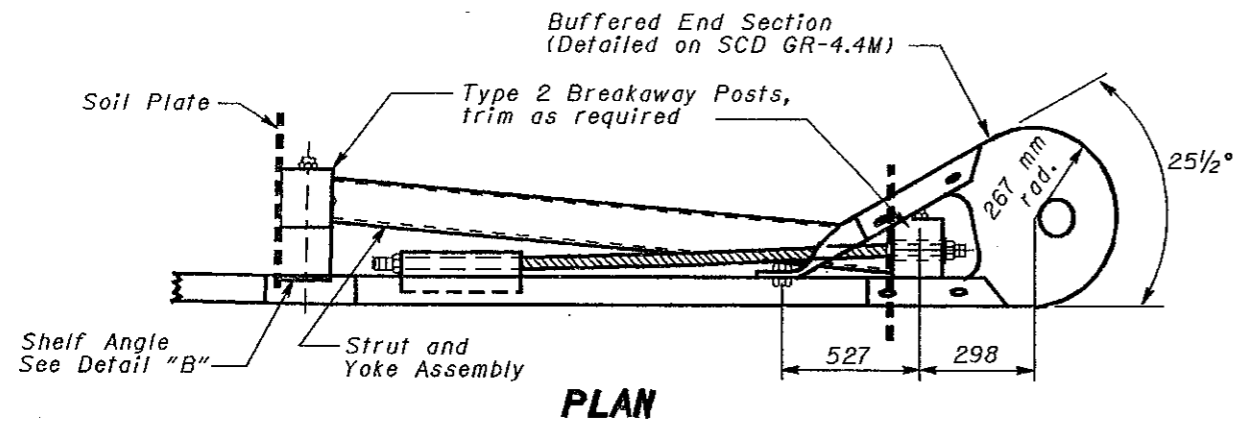
**SHEETING:** Retroreflective sheeting shall not be required when the offset distance to the face of the Buffer End Section from the near edge of the adjacent pavement is 6 m, or greater. The sheeting shall be Standard, Type G, meeting the requirements of CMS 730.19, and shall be applied as per manufacturers' recommended procedure. Sheeting shall not be applied when the ambient temperature is below 4 °C.

**PAYMENT:** All materials and labor for the 3.81 m Type B Anchor Assembly shown, including any extra cost for using Breakaway Line Posts, shall be included in the unit price bid for Item 606, Each, Anchor Assembly, Type B. Payment for grading requirements shown herein shall be made under Item 203 as specified in the plans.

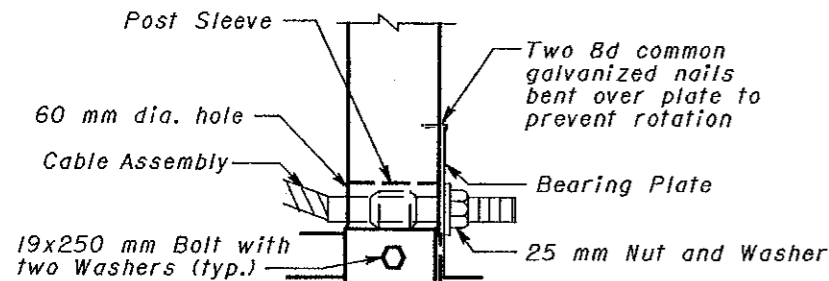
All dimensions are in millimeters unless otherwise noted.



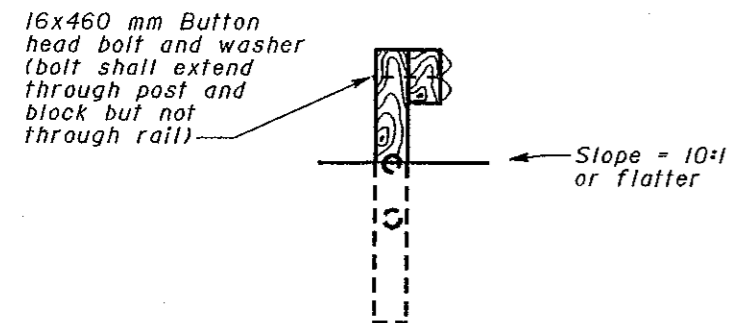
BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
<b>TYPE B ANCHOR ASSEMBLY</b>	
DATE 11-30-94	
STANDARD CONSTRUCTION <b>GR-4.3M</b>	
DRAWING	
APPROVED <i>W.K. Hulman</i>	
ENGR., L & D	



**ELEVATION**



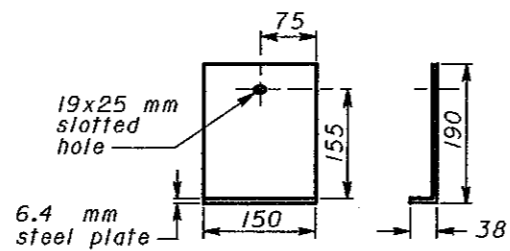
**DETAIL "A"**



**SECTION A-A**

Type I Breakaway Post and Block

**DETAIL "B" SHELF ANGLE**

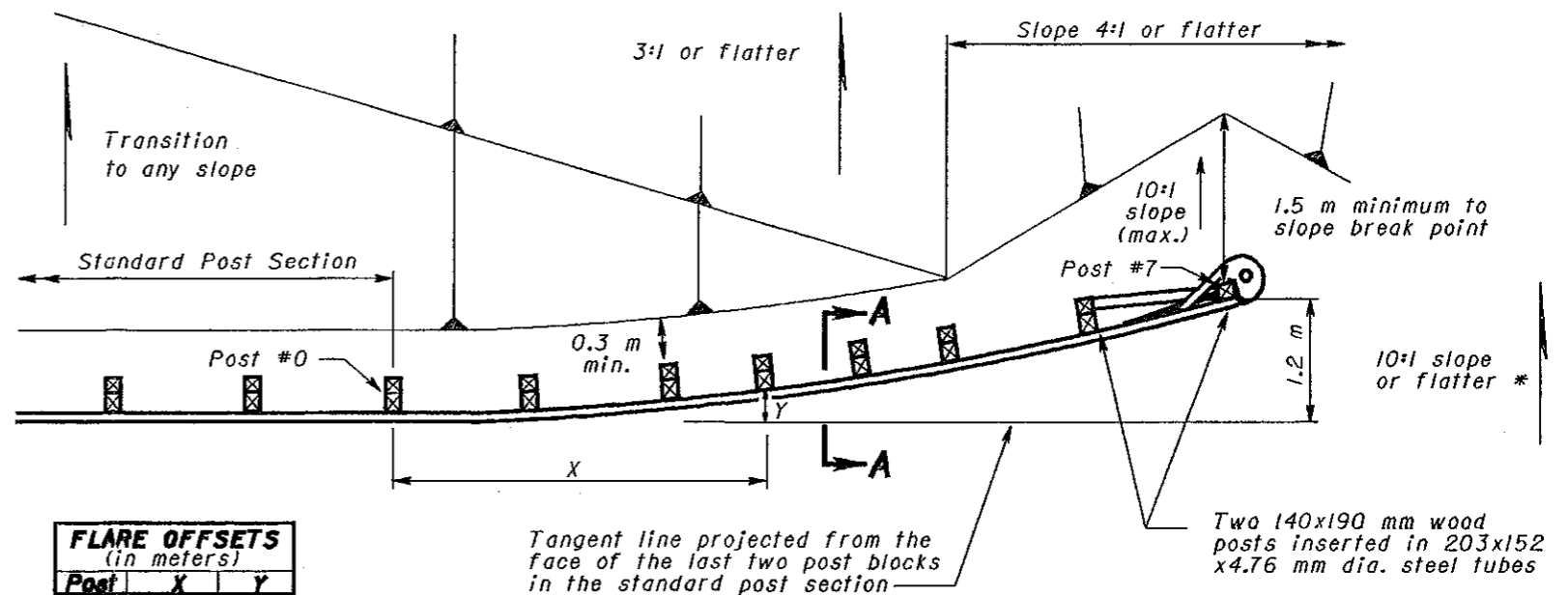


**GENERAL:** For details not shown, see SCD's GR-1.1M, GR-1.2M, GR-1.3M, GR-4.4M and other Drawings pertaining to design of specific guardrail types. All angles, channels and plates shall conform to CMS 711.01. Structural tubing shall conform to CMS 707.10. All structural steel shall be galvanized as per CMS 711.02.

**POST OFFSET:** Dimensions are given to the center of the face of the blockouts, except at Post #7, where the dimension is to the center of the face of the post.

**GRADING OF SLOPES AND TRANSITIONS:** Grading must be provided as shown for the Type B Anchor Assembly to function correctly.

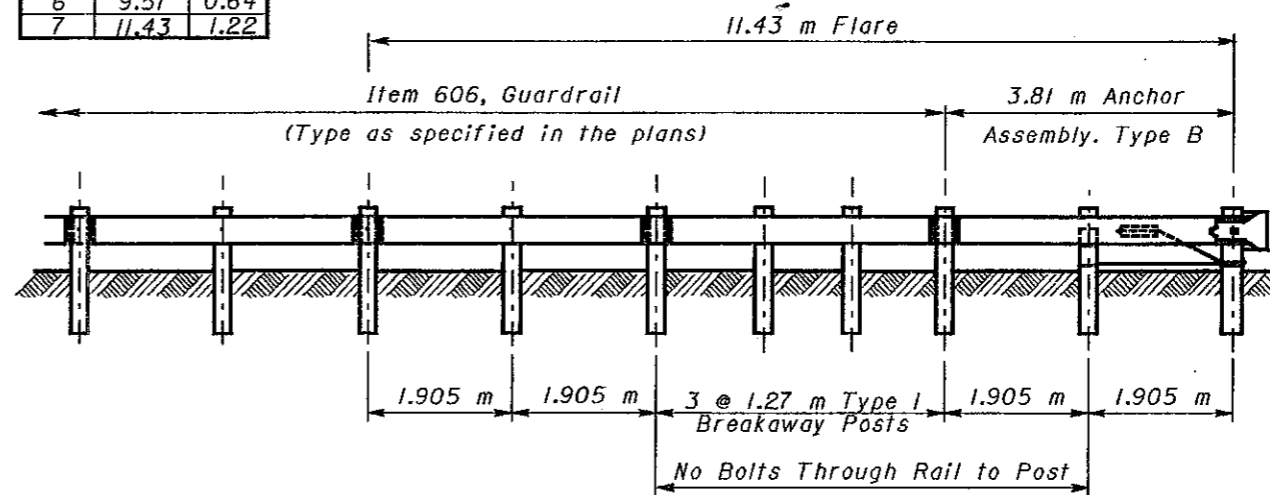
\* **10:1 SLOPE:** This slope shall extend a minimum of 15 m approaching the Assembly where it shall be smoothly transitioned to the graded shoulder slopes shown on the Typical Sections.



**FLARE OFFSETS (in meters)**

Post	X	Y
0	0.0	0.0
1	1.89	0.03
2	3.81	0.06
3	5.09	0.09
4	6.34	0.21
5	7.62	0.37
6	9.51	0.64
7	11.43	1.22

**PLAN**



**ELEVATION**

All dimensions are in millimeters unless otherwise noted.

**NOTES**

**SHEETING:** Retroreflective sheeting shall not be required when the offset distance to the face of the Buffer End Section from the near edge of the adjacent pavement is 6 m, or greater.

The sheeting shall be Standard, Type G, meeting the requirements of CMS 730.19, and shall be applied as per manufacturers' recommended procedure. Sheeting shall not be applied when the ambient temperature is below 4 °C.

**PAYMENT:** All materials and labor for the 3.81 m Type B Anchor Assembly shown, including any extra cost for using Breakaway Line Posts, shall be included in the unit price bid for Item 606, Each, Anchor Assembly, Type B. Payment for grading requirements shown herein shall be made under Item 203 as specified in the plans.



OHIO DEPARTMENT OF TRANSPORTATION

**TYPE B ANCHOR ASSEMBLY**

DATE  
11-30-94  
10-21-97

STANDARD CONSTRUCTION DRAWING **GR-4.3M**

APPROVED *[Signature]*