



**NOTES:**

1. THRIE-BEAM FIXED OBJECT ATTACHMENT IS FOR USE WITH THE CPRS, SSCP, AND KANSAS CORRAL VERTICAL FACE TERMINAL WALLS.
2. 5/8" BOLTS SHALL BE ASTM A325 A449 HEX BOLTS WITH ASTM A563 GR. DH OR A194 GR. 2H NUTS. A 3" x 3" x 0.315" A36 SQUARE PLATE WASHER IS REQUIRED FOR EACH BOLT ON THE BACK SIDE OF THE BRIDGE TERMINAL WALL.
3. NO BOLT PLACED IN LOWER HOLE OF GR-FOA-5 POST 9.
4. W-BEAM RAIL WILL BE INCLUDED WITH THE APPROACH GUARDRAIL OR TERMINAL. POST 11 IS INCLUDED WITH THE FOA-5.
5. SPLICE LOCATION IS DEPENDENT ON THE LENGTH OF W-BEAM RAIL USED. IF 12'-6" RAIL IS USED A SPLICE WILL BE AT THIS LOCATION.
6. STANDARD CG-3 CURB IS REQUIRED FROM POST 11 TO THE TERMINAL WALL. THE CURB WILL TRANSITION FROM THE FACE OF RAIL TO THE FRONT OF THE TERMINAL WALL CHAMFER OVER A 3'-0" DISTANCE.
7. STANDARD CG-3 CURB IS NOT INCLUDED WITH THE FOA-5 AND WILL BE QUANTIFIED AND PAID AS A SEPARATE BID ITEM IN ACCORDANCE WITH THE SPECIFICATIONS.
8. DROP INLETS OR FLUMES ARE NOT PERMITTED WITHIN THE PAY LIMITS OF THE GR-FOA-5.
9. GUARDRAIL COMPONENTS SHALL BE IN ACCORDANCE WITH VDOT ROAD AND BRIDGE STANDARDS.
10. ALL BOLTS, NUTS, WASHERS, AND OTHER STEEL ITEMS ARE TO BE GALVANIZED.
11. INSTALLATION OF THE FOA-5 ON A RADIUS OR FLARE IS NOT PERMITTED.
12. 4' WIDE GRADING FROM THE FACE OF RAIL TO THE HINGE POINT SHALL EXTEND A MINIMUM OF 3' PAST THE END OF THE TERMINAL WALL TO SUPPORT FOA POSTS.

| ITEM | MATERIAL/SPECIFICATIONS/NOTES   |
|------|---|
| ①    | STANDARD THRIE-BEAM TERMINAL CONNECTOR  |
| ②    | 5/8" x 2" LONG GUARDRAIL SPLICE BOLT & RECESSED NUT (SEE ST'D. MGS-HDW)                                       |
| ③    | 12'-6" 12-GAUGE THRIE-BEAM SECTION 2 SECTIONS NESTED  |
| ④    | 5/8" x 10" LONG GUARDRAIL BOLT & RECESSED NUT (SEE ST'D. MGS-HDW)   |
| ⑤    | 6'-3" 12-GAUGE THRIE-BEAM SECTION   |
| ⑥    | 10 GAUGE ASYMMETRICAL THRIE-BEAM TRANSITION   |
| ⑦    | 5/8" x 14" LONG GUARDRAIL BOLT & RECESSED NUT (SEE ST'D. MGS-HDW)   |
| ⑧    | STANDARD W-BEAM RAIL  |
| ⑨    | W6x15, 84" LONG STEEL POST WITH 6"x8"x19" TIMBER BLOCKOUT (POSTS 1, 2, & 3)                                   |
| ⑩    | W6 x 8.5 OR W6 x 9, 72" LONG STEEL POST WITH 6" x 12" x 19" LG. TREATED PINE BLOCK (POSTS 4, 5, 6, 7, 8, & 9) |
| ⑪    | 7/8" DIA. x 14" LONG HEAVY HEX BOLT AND NUT   |
| ⑫    | W6 x 8.5 OR W6 x 9, 72" LONG STEEL POST WITH 6" x 12" x 14" LG. TREATED PINE BLOCK (POSTS 10 & 11)            |
| ⑬    | 3" x 3" x 0.315" SQUARE PLATE WASHER ASTM A572 GR. 50   |

|                         |  |
|-------------------------|--|
| SPECIFICATION REFERENCE |  |
| 221<br>505              |  |

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

**THRIE-BEAM - FIXED OBJECT ATTACHMENT**

**FOR USE WITH VERTICAL FACE TERMINAL WALLS AND MGS GUARDRAIL**

VIRGINIA DEPARTMENT OF TRANSPORTATION

|                           |              |
|---------------------------|--------------|
| <b>VDOT</b>               |              |
| ROAD AND BRIDGE STANDARDS |              |
| REVISION DATE             | SHEET 1 OF 2 |
| NEW 04/19                 | 508.01       |