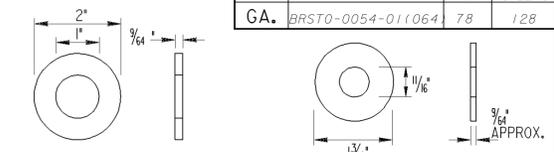


SEE SEPARATE STANDARD OR OTHER DETAILS FOR REQ'D. ANCHORAGES.



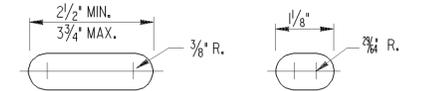
TYPE A WASHER (GALV.)
IF SLOTS IN SPECIAL END SHOE ARE 3\"/>

STEEL WASHER (GALV.)
(REQ'D. UNDER 5/8\"/>

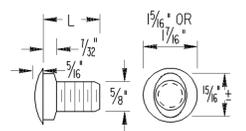
SPECIAL NOTE:
ALL GUARDRAIL SPLICES WILL BE PROPERLY SECURED WITH EIGHT (8) SPLICE BOLT CONNECTIONS. ALL NUTS WILL BE TIGHTENED. LOOSE NUTS, OMITTED BOLTS, OR OMITTED NUTS WILL BE CAUSE FOR REJECTION.

GUARDRAIL NOT ERECTED AT A 3\"/>

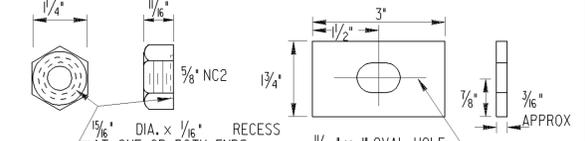
L	THREAD LENGTH
1/4"	FULL LENGTH
2"	1/2" MIN.
9/2"	1 3/4" MIN.
14"	2" MIN.



POST BOLT SLOT SPLICE BOLT SLOT



BUTTON HEAD (OR SPLICE) BOLT
(8 REQ'D PER SPLICE)

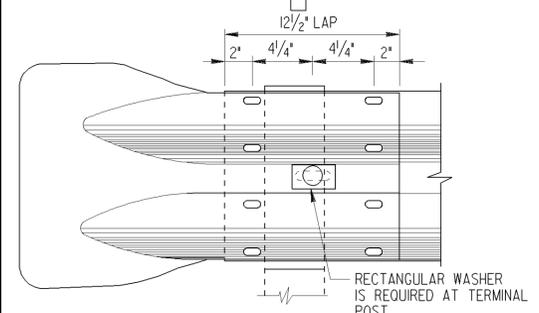


RECESS NUT RECTANGULAR WASHER (GALV.)
(FOR USE AT TERMINAL POST OR WHERE SPECIFIED)

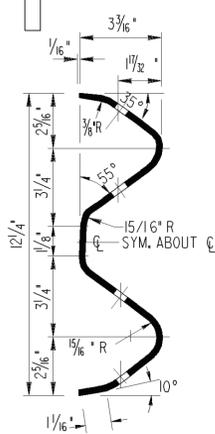
*** NOTE:**
A PRECURVED GUARDRAIL SECTION WILL BE REQUIRED WHERE TYPE I ANCHORAGE IS PERMITTED AT GUARDRAIL TERMINAL IF TRAFFIC FLOW IS TWO-WAY. SEE APPLICABLE STANDARDS.

TYPE I ANCHOR
SHOWN HERE FOR TRAILING END TREATMENT. OTHER ANCHORAGE MAY BE SPECIFIED

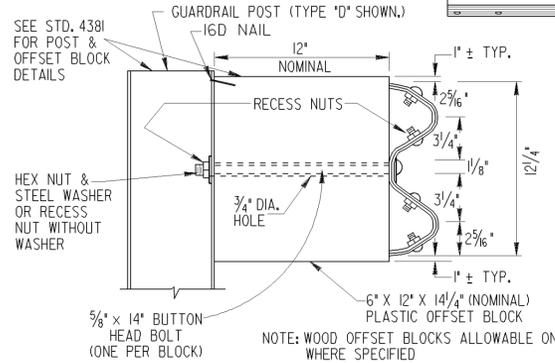
**** REDUCED POST SPACINGS** WILL BE REQUIRED AT TURNOUTS AROUND RADI, AT REDUCED OFFSETS TO FACE OF FIXED OBJECTS OR AT OTHER SPECIFIED LOCATIONS. SEE PLAN DETAILS OR APPLICABLE STANDARDS. PAYMENT FOR GUARDRAIL WILL INCLUDE THE ADDITIONAL POSTS REQUIRED.



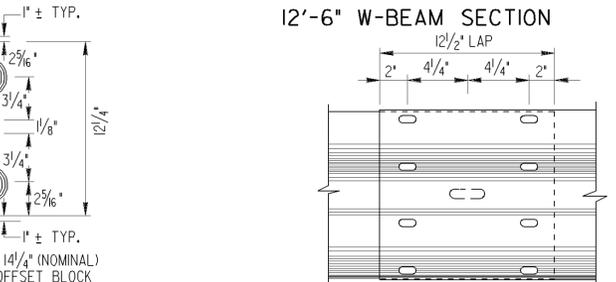
TERMINAL END PIECE (FLARED)



SECTION THROUGH RAIL ELEMENT

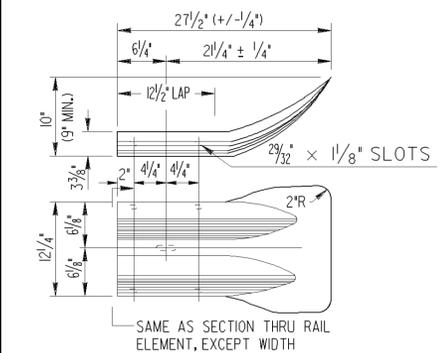


W BEAM OFFSET BLOCK DETAIL
NOTE: OFFSET BLOCKS FOR W BEAM GUARDRAIL WILL BE PLASTIC EXCEPT WHERE SPECIFIED OTHERWISE.

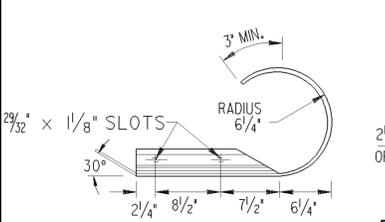


W BEAM SPLICE MID SPAN
NOTE: EIGHT (8) SPLICE BOLTS REQUIRED AT ALL RAIL SPLICES

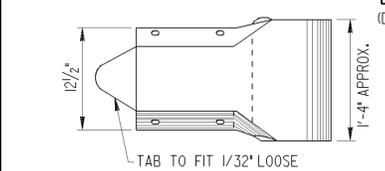
NOTE:
UNLESS SPECIFIED OTHERWISE, ALL REFERENCES TO GUARDRAIL ON STANDARDS AND/OR CONSTRUCTION DETAILS WILL MEAN W BEAM GUARDRAIL AS SHOWN ON THIS STANDARD.



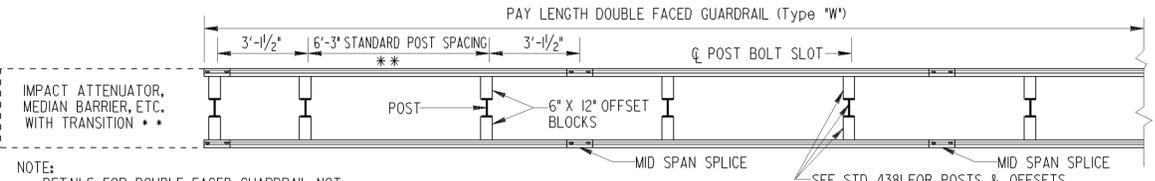
TERMINAL END PIECE (FLARED)



BUFFER END SECTION
(DETAILS NOT SHOWN ARE SIMILAR TO ROUNDED TERMINAL END PIECE.)

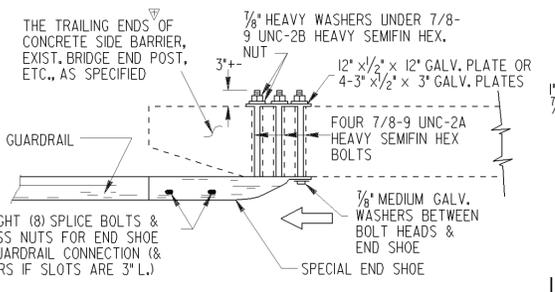


TERMINAL END PIECE (ROUNDED)



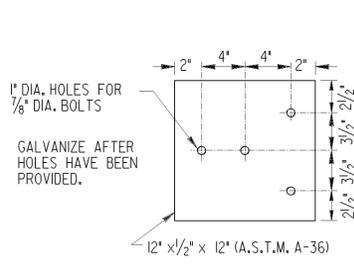
DOUBLE FACED GUARDRAIL (Type W)

NOTE:
DETAILS FOR DOUBLE FACED GUARDRAIL NOT SHOWN ARE SIMILAR TO THAT SHOWN FOR SINGLE FACED RAIL.



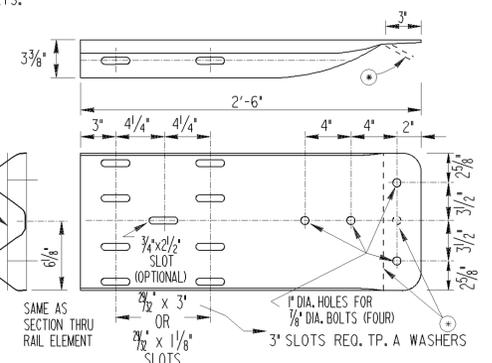
TYPICAL END SHOE CONNECTION
NOTE: THE W BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC.

*** W BEAM END CONNECTIONS** ARE NOT PERMITTED AT APPROACHES TO CONCRETE STRUCTURES. SEE SEPARATE STANDARDS FOR REQUIRED W BEAM CONNECTIONS.



1/2 GALVANIZED STEEL PLATE

(TO BE USED WITH SPECIAL END SHOE CONNECTION UNDER NUTS & WASHERS ON BACK OF BRIDGE END POST OR BACK OF CONCRETE SIDE BARRIER) (FOUR 3\"/>



SPECIAL END SHOE DETAIL

(FOR USE IN CONNECTING GUARDRAIL TO BRIDGE END POST, CONCRETE BARRIERS, ETC.) SPECIAL END SHOE WILL BE 10 GAUGE STEEL GALVANIZED ACCORDING TO A.A.S.H.T.O. M-III

APPLIES ONLY TO END SHOE WITH BUFFERED END ASSEMBLY OF ANCHORAGE.

- GENERAL NOTES:**
- SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
 - NUTS, BOLTS, WASHERS, RAIL, TERMINAL SECTIONS, END SHOES, BACK-UP PLATES, END SECTIONS AND OTHER GUARDRAIL HARDWARE ARE IN ACCORDANCE WITH THE CURRENT ARTBA TECHNICAL BULLETIN NO. 268 .. UNLESS SPECIFIED OTHERWISE, DIMENSIONS FOR POSTS AND OFFSET BLOCKS WILL BE ACCORDING TO GA. STANDARD 4381.
 - FOR DETAILS OF GUARDRAIL ANCHORAGES, SEE APPLICABLE STANDARDS AND/OR CONSTRUCTION DETAILS.
 - FOR LOCATION OF GUARDRAIL SEE APPLICABLE LOCATION STANDARDS.
 - ALL STEEL HARDWARE COMPONENTS WILL BE GALVANIZED AFTER FABRI-CATION. GALVANIZING REPAIR COMPOUND (SEC. 645) WILL BE FIELD APPLIED TO ANY COATINGS DAMAGED.
 - WHEN GUARDRAIL IS REQUIRED ON CURVES WITH RADII LESS THAN 150', PRECURVED RAIL WILL BE REQUIRED.
 - PAYMENT FOR GUARDRAIL (Type W) TO INCLUDE OFFSET BLOCKS, POST, BACK-UP PLATES WHERE REQUIRED, BOLTS, NUTS, WASHERS, TERMINAL SECTIONS, ADDITIONAL POST WHERE REQUIRED, & REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS, OR CATCH BASINS WHERE NECESSARY.
 - ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
 - STANDARD NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6\"/>
 - WHEN REPLACING EXISTING 27\"/>

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		STANDARD "W" BEAM GUARDRAIL 31 INCH GUARDRAIL HEIGHT	
NO SCALE		AUGUST 2011	
DES. G.L.O. (SUBMITTED)	BY	NO. 4380	NUMBER
CHK. B.R.E. (APPROVED)	REVIEW	4380	4380
REVIEW B.A.S.	DATE	STATE DESIGN POLICY ENGINEER CHIEF ENGINEER	