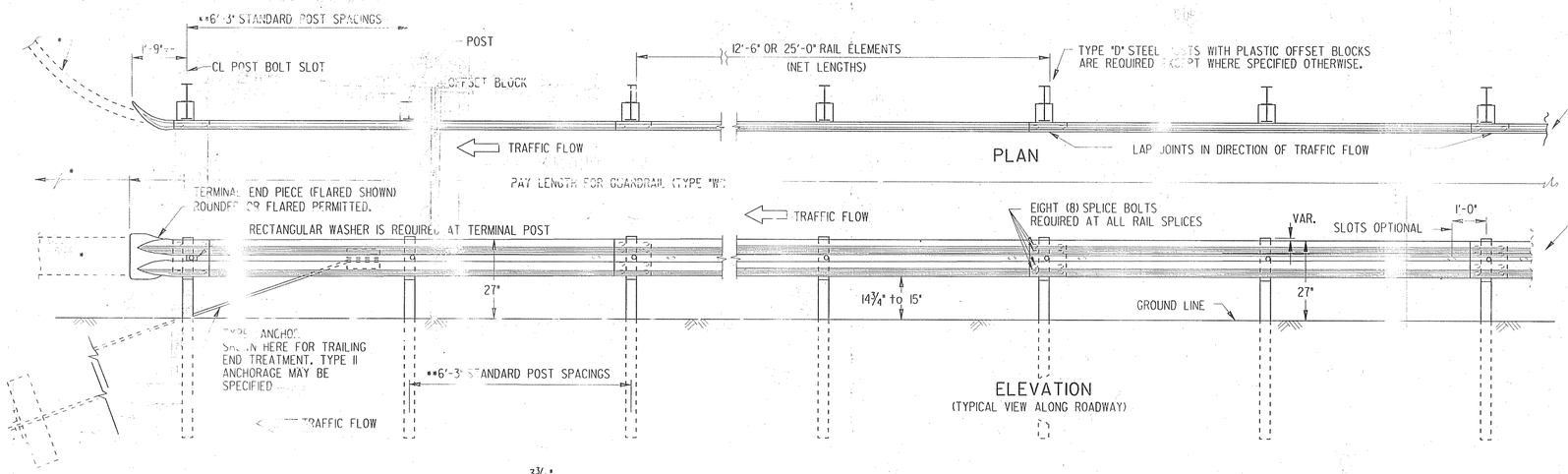
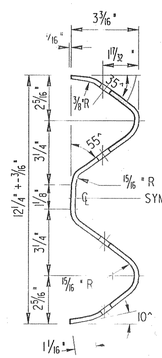
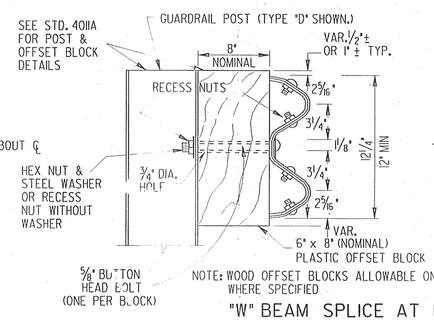


NOTE:
* A PRECURVED GUARDRAIL SECTION WILL BE REQUIRED WHERE TYPE I ANCHORAGE IS PERMITTED AT GUARDRAIL TERMINAL IF TRAFFIC FLOW IS TWO-WAY. SEE APPLICABLE STANDARDS.

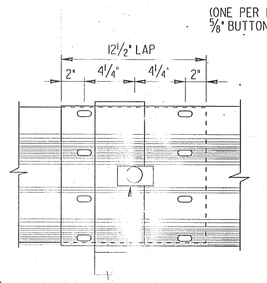
** REDUCED POST SPACINGS WILL BE REQUIRED AT TURNOUTS AROUND RADII, AT REDUCED OFFSETS TO FACE OF FIXED OBJECTS OR AT OTHER SPECIFIED LOCATIONS. SEE PLAN DETAILS OR APPLICABLE STANDARDS. PAYMENT FOR GUARDRAIL WILL INCLUDE THE ADDITIONAL POSTS REQUIRED.



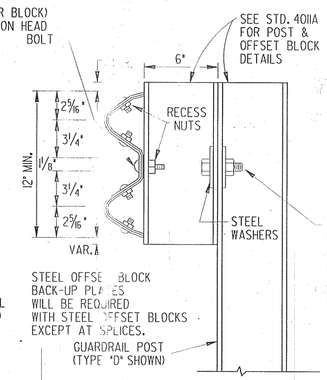
SECTION THROUGH RAIL ELEMENT



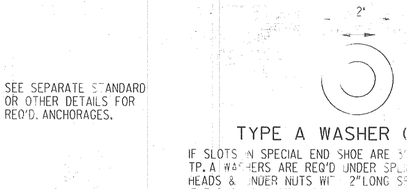
"W" BEAM SPLICE AT POST



WASHER HERE POST IS TERMINAL WHERE SPECIFIED)



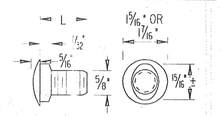
NOTE: STEEL OFFSET BLOCKS ARE NOT PERMITTED ON NEW INSTALLATIONS.



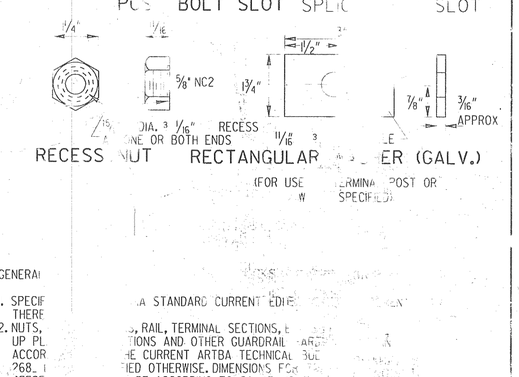
SPECIAL NOTE:
ALL GUARDRAIL SPLICES WILL BE PROPERLY SECURED WITH EIGHT SPLICE BOLT CONNECTIONS. ALL NUTS WILL BE TIGHTENED. LOOSE NUTS, OMITTED BOLTS, OR OMITTED NUTS WILL BE CAUSE FOR REJECTION.

GUARDRAIL NOT ERECTED AT A 27" TOP OF RAIL HEIGHT WILL BE CAUSE FOR REJECTION.

L	THREAD LENGTH
1¼"	FULL LENGTH
2"	1½" MIN.
9½"	1¾" MIN.
18"	2½" MIN.
25"	2" MIN.

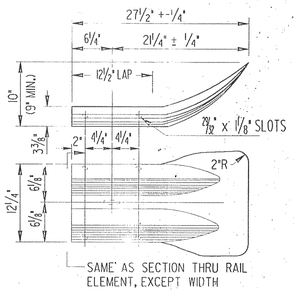


BUTTON HEAD (OR SPLICE) BOLT
(REQ'D PER SPLICE)

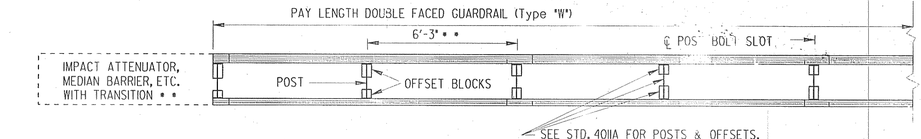


GENERAL

1. SPECIFICATIONS THERE IS A STANDARD CURRENT EDITION.
2. NUTS, BOLTS, RAIL, TERMINAL SECTIONS, END SHOE SLOTS, TP. A WASHERS, SPLICE BOLTS AND OTHER GUARDRAIL HARDWARE SHALL BE IN ACCORDANCE WITH THE CURRENT ARTBA TECHNICAL BULLETIN 268, UNLESS OTHERWISE SPECIFIED. DIMENSIONS FOR STEEL OFFSET BLOCKS SHALL BE ACCORDING TO GA. STANDARDS.
3. FOR DETAILS OF GUARDRAIL ANCHORAGES, SEE APPLICABLE STANDARDS AND/OR CONSTRUCTION DETAILS.
4. FOR LOCATION OF GUARDRAIL SEE APPLICABLE LOCATION STANDARDS.
5. ALL STEEL HARDWARE COMPONENTS WILL BE GALVANIZED. AFTER FABRICATION, GALVANIZING REPAIR COMPOUND (SEC. 645) WILL BE FIELD APPLIED TO ANY COATINGS DAMAGED.
6. WHEN GUARDRAIL IS REQUIRED ON CURVES WITH RADII LESS THAN 150', PRECURVED RAIL WILL BE REQUIRED.
7. PAYMENT FOR GUARDRAIL (Type "W") TO INCLUDE OFFSET BLOCKS, POST, BACKPLATES 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.
8. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
9. STANDARD NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0" AS SPECIFIED. SUCH LENGTHS SHALL BE ARRANGED TO PROVIDE AS NEARLY THE REQUIRED LENGTH FOR EACH INSTALLATION.



TERMINAL END PIECE (FLARED)

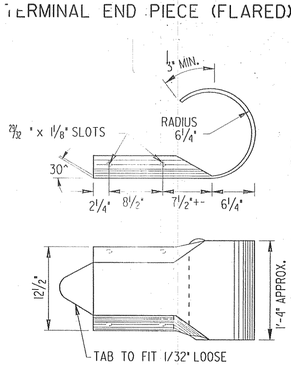


NOTE:
DETAILS FOR DOUBLE FACED GUARDRAIL NOT SHOWN ARE SIMILAR TO THAT SHOWN FOR SINGLE FACED RAIL.

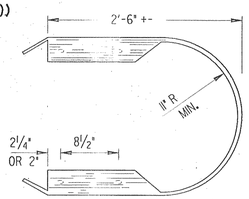
DOUBLE FACED GUARDRAIL (Type "W")

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

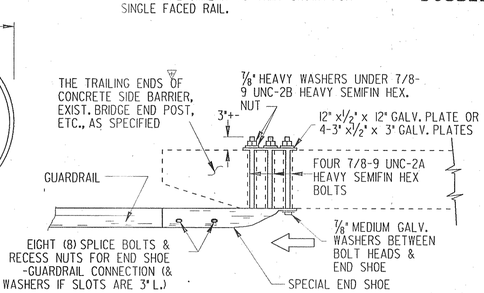
SPECIAL END SHOE WILL BE 10 GAUGE STEEL GALVANIZED ACCORDING TO A.A.S.H.T.O. M-111.



TERMINAL END PIECE (ROUNDED)



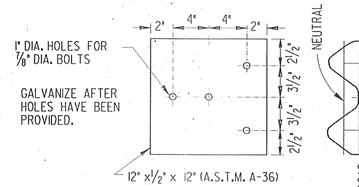
BUFFER END SECTION
(DETAILS NOT SHOWN ARE SIMILAR TO ROUNDED TERMINAL END PIECE.)



TYPICAL END SHOE CONNECTION

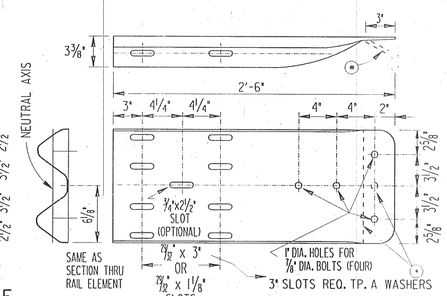
NOTE: THE "W" BEAM RAIL ELEMENT/END SHOE SPLICE SHALL BE LAPPED IN THE DIRECTION OF THE NEAREST TRAFFIC.

▽ "W" BEAM END CONNECTIONS ARE NOT PERMITTED AT APPROACHES TO CONCRETE STRUCTURES. SEE SEPARATE STANDARDS FOR REQUIRED "T" 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" x 1/2" x 3" GALV. PLATES WITH 1" DIA. HOLE CENTERED, MAY BE USED AS AN ALTERNATE)



SPECIAL END SHOE DETAIL
(FOR USE IN CONNECTING GUARDRAIL TO BRIDGE END POST, CONCRETE BARRIERS, ETC.)

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

BY	REVISION
G.J.P.	REDRAWN 6-30-98
R.M.U.	REVISE OFFSET BLOCKS 7-25-97
R.M.U.	CHG. TP. 9 TO TP. II 1-17-95
R.M.U.	END SHOE LAP 12-27-89
R.M.U.	GEN. REV. & UP DATING 3-29-89
R.M.U.	DELETE WOOD BLOCK 5-11-87
R.M.U.	ADD ALT 3"x1/2"x3" PLATES 7-14-86
R.M.U.	ADD TP.A WASH.,REV. RECT.W. 4-3-84
R.M.U.	ADD TYP. END SHOE CON. 10-31-80
R.M.U.	SPLICE BOLT D. BLOCK 7-1-80

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

"W" BEAM GUARDRAIL

SCALE

REDR. DECEMBER, 1979

JUN. '68 (SUBMITTED)
ACED
12'79
R.M.U.
(APPROVED)
ROAD & AIRPORTS ENGR.
STATE HIGHWAY

NUMBER 4010