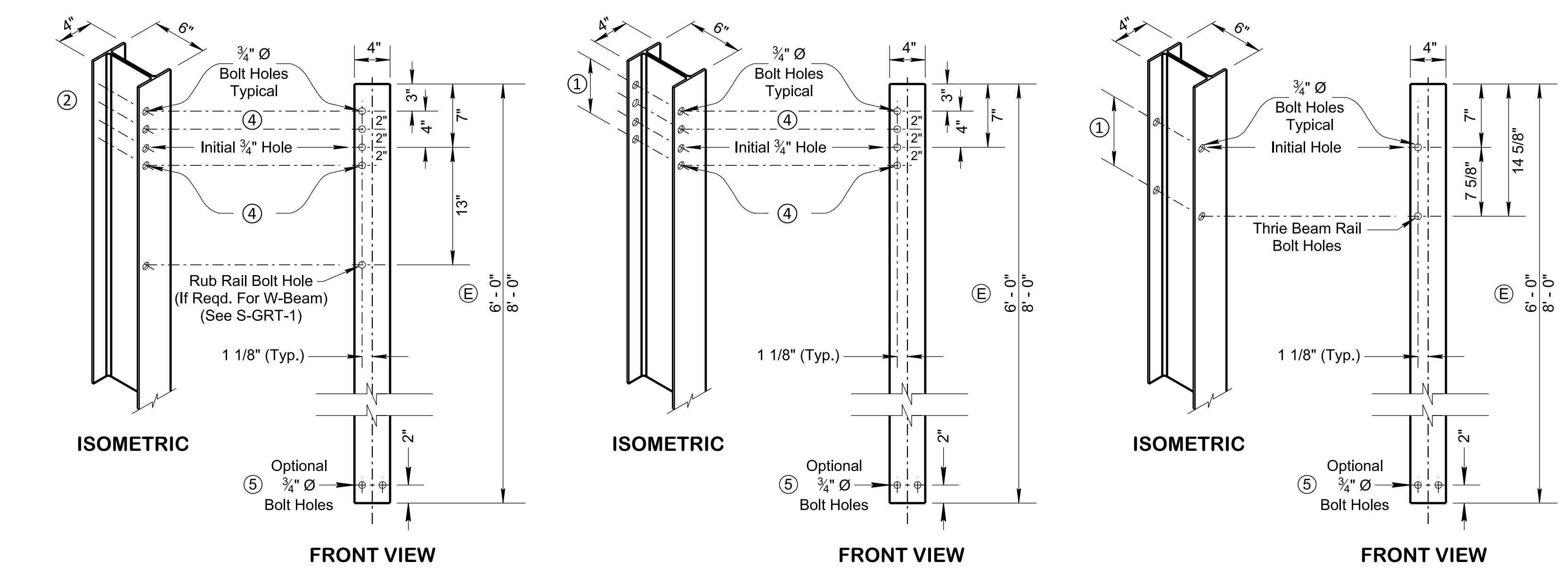
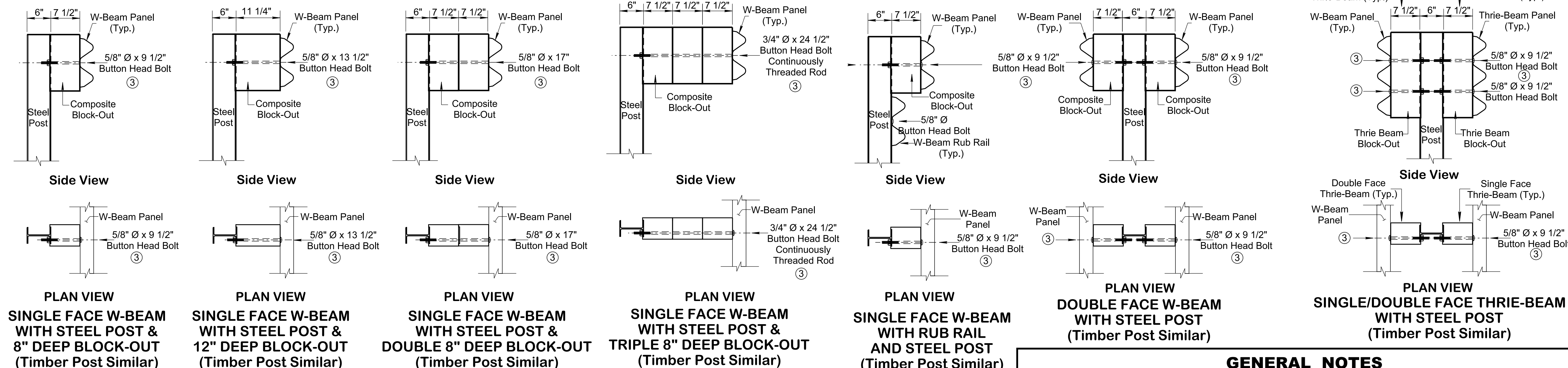


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STEEL POST GUARDRAIL DETAILS



FOOTNOTES	
①	BOLT HOLES ON THE BACKSIDE ARE FOR DOUBLE FACE GUARDRAIL (IF REQUIRED).
②	ADDITIONAL 3/4\"/>

GENERAL NOTES	
POST	<p>(A) THE CONTRACTOR MAY HAVE THE CHOICE OF EITHER HOT ROLLED OR WELDED STEEL W6 X 8.5 OR W6 X 9 OR 8\"/> </p>
(B)	STEEL POSTS SHALL CONFORM TO ASTM A36 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A123. BOLT HOLES SHALL BE APPROXIMATELY CENTERED BETWEEN WEB AND EDGE OF FLANGE OF SPACERS AND POSTS.
(C)	WOOD POSTS SHALL CONFORM WITH TDOT CONSTRUCTION STANDARD SPECIFICATIONS.
(D)	WELDED STEEL POSTS SHALL CONFORM TO ASTM A769 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
(E)	SEE STANDARD DRAWING S-PL-6 FOR POST LENGTH REQUIREMENTS AND PAID UNDER ITEM NUMBERS.
BLOCK-OUTS	
(F)	BLOCK OUTS SHALL BE WOOD CONFORMING TO THE REQUIREMENTS OF TDOT CONSTRUCTION STANDARD SPECIFICATIONS OR PLASTIC GUARDRAIL BLOCK-OUTS LISTED ON THE TDOT QUALIFIED PRODUCT LIST.
(G)	ONLY WOODEN BLOCK-OUTS MAY BE USED WITH WOODEN POSTS, PLASTIC OR WOODEN BLOCK-OUTS MAY BE USED WITH STEEL POSTS.
(H)	ALL BLOCK-OUTS SHALL MEET MASH GUIDELINES AND NCHRP-350 GUIDELINES.
(I)	FOR BLOCK-OUT DETAILS SEE STANDARD DRAWING S-GR31-1A.
(J)	RECYCLED PLASTIC GUARDRAIL BLOCK-OUTS LISTED ON THE TDOT QUALIFIED PRODUCTS LIST MAY BE SUBSTITUTED FOR WOOD BLOCK-OUTS. THE USE OF RECYCLED PLASTIC GUARDRAIL BLOCK-OUTS ARE SUBJECT TO THE FOLLOWING STIPULATIONS:
	<ol style="list-style-type: none"> THE MIXING OF BLOCK-OUTS ON A GIVEN PROJECT WILL BE AVOIDED IF POSSIBLE. SHOULD IT BECOME NECESSARY TO CHANGE THE BLOCK-OUT TYPE ON A GIVEN PROJECT, THE BLOCK-OUTS SHOULD NOT BE MIXED ON A GIVEN RUN OF GUARDRAIL. THE COST OF BLOCK-OUTS SHALL BE INCLUDED IN THE BID PRICE FOR GUARDRAIL.
FUTURE ADJUSTMENTS	
(K)	WOOD BLOCK OUTS SHALL HAVE ONE ADDITIONAL 3/4\"/>
(L)	INITIAL INSTALLATION REQUIRES ONE BOLT CONNECTION, EACH ADJUSTMENT THEREAFTER REQUIRES TWO BOLT CONNECTIONS.
END TREATMENTS	
(M)	ALL RUNS OF GUARDRAIL WILL BEGIN AND END WITH AN ANCHOR SYSTEM (SEE S-GRA-SERIES).
(N)	GUARDRAIL ENDS THAT ARE INSIDE THE CLEAR ZONE AND EXPOSED TO ONCOMING TRAFFIC SHALL HAVE A CRASH WORTHY END TERMINAL AS NOTED:
	<ol style="list-style-type: none"> ANY ROAD WITH SUITABLE BACK SLOPES SHALL USE END TERMINALS BURIED IN BACK SLOPE (SEE S-GRT-1). ALL HIGHWAY SYSTEM ROADS WITHOUT SUITABLE BACK SLOPES SHALL USE MASH TL-3 TANGENTIAL END TERMINALS (SEE S-GRT-2). ALL OTHER ROADS WITH POSTED SPEED < 45 MPH SHALL USE MASH TL-2 END TERMINALS UNLESS OTHERWISE NOTED (SEE S-GRT-3).
DESIGN	
(O)	4 FEET BEHIND GUARDRAIL SHALL BE CLEAR OF OBSTRUCTIONS FOR DEFLECTION.
(P)	REFER TO SAFETY PLAN STANDARDS FOR HOW TO DETERMINE THE LENGTH OF NEED.
(Q)	SEE STANDARD DRAWING S-GR31-1B FOR FASTENING HARDWARE DETAILS.

REV. 06-15-2021: REVISED GENERAL NOTES (A) AND (E). REVISED PLASTIC BLOCK-OUT TO COMPOSITE BLOCK-OUT ON SIDE VIEWS.
 REV. 07-07-2023: REVISED FOOT NOTE (J) AND GENERAL NOTE (J). ADDED PLAN VIEW AND SIDE VIEW DRAWINGS FOR 12\"/>

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

**GUARDRAIL
GENERAL NOTES
AND
POST DETAILS**