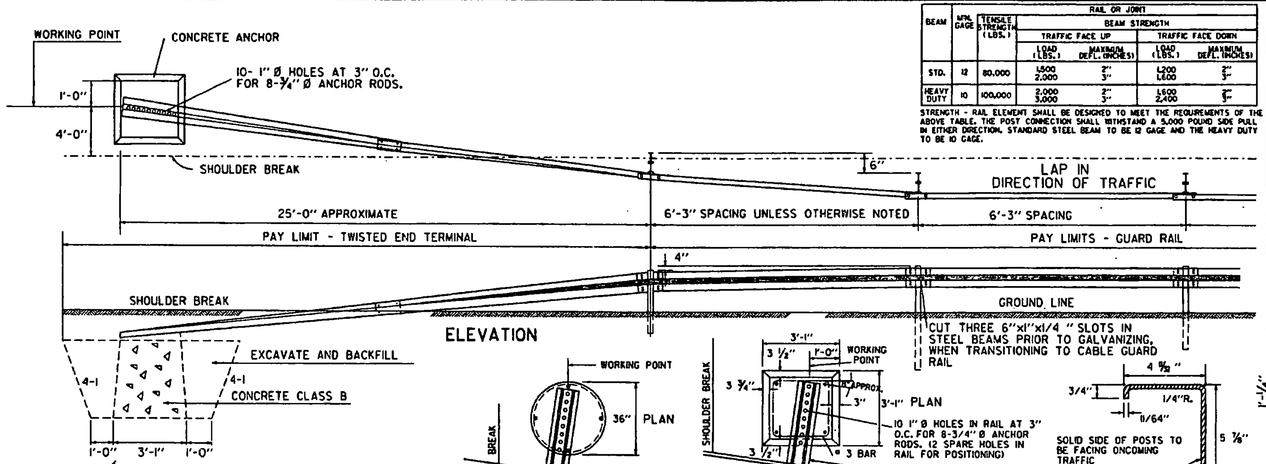
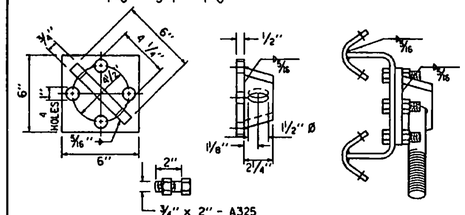
BEAM	MIN. GAGE	TENSILE STRENGTH (LBS.)	RAIL OR JOINT BEAM STRENGTH			
			TRAFFIC FACE UP		TRAFFIC FACE DOWN	
			LOAD (LBS.)	MAXIMUM DEFL. (INCHES)	LOAD (LBS.)	MAXIMUM DEFL. (INCHES)
STD.	12	60,000	1,500 2,000	2" 3"	1,200 1,600	2" 3"
HEAVY DUTY	10	100,000	2,000 3,000	2" 3"	1,600 2,400	2" 3"

STRENGTH - RAIL ELEMENT SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE ABOVE TABLE. THE POST CONNECTION SHALL WITHSTAND A 5,000 POUND SIDE PULL IN EITHER DIRECTION. STANDARD STEEL BEAM TO BE 12 GAGE AND THE HEAVY DUTY TO BE 10 GAGE.

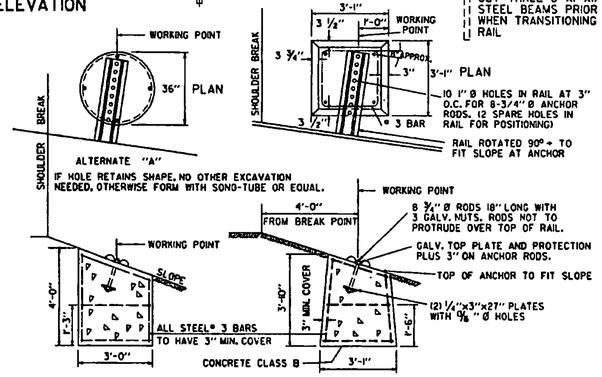


ELEVATION

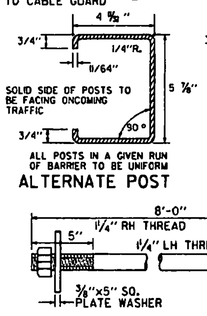
CUT THREE 6"x1"x1/4" SLOTS IN STEEL BEAMS PRIOR TO GALVANIZING, WHEN TRANSITIONING TO CABLE GUARD RAIL



ALTERNATE ANCHOR ROD CONNECTOR

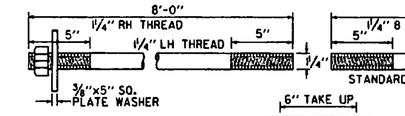


ELEVATIONS OF CONCRETE ANCHORS



ALL POSTS IN A GIVEN RUN OF BARRIER TO BE UNIFORM

ALTERNATE POST

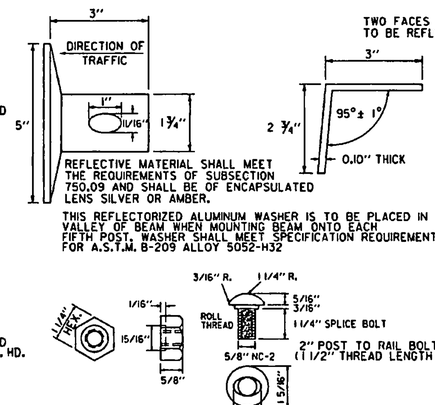


ANCHOR ROD

MIN. TENSILE STRENGTH 60,000 LBS. LOAD APPLIED THROUGH ASSEMBLY

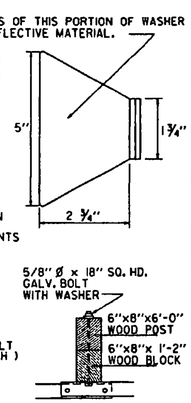
TURNBUCKLE

USE A 12" LONG FORMED BACK-UP PLATE OF STEEL BEAM GUARD RAIL AT EACH POST WHERE THERE IS A SINGLE THICKNESS OF BEAM RAIL. (NOT REQUIRED WITH WOOD POST SYSTEM).

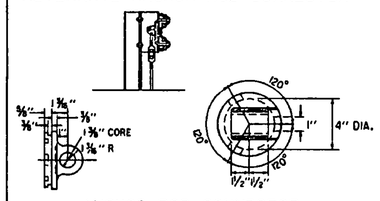


REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER.

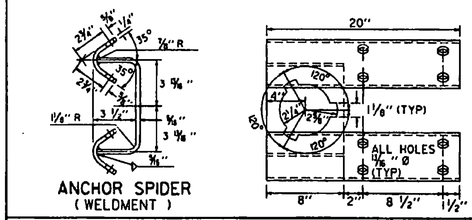
THIS REFLECTORIZED ALUMINUM WASHER IS TO BE PLACED IN VALLEY OF BEAM WHEN MOUNTING BEAM ONTO EACH FIFTH POST. WASHER SHALL MEET SPECIFICATION REQUIREMENTS FOR A.S.T.M. B-209 ALLOY 5052-H32



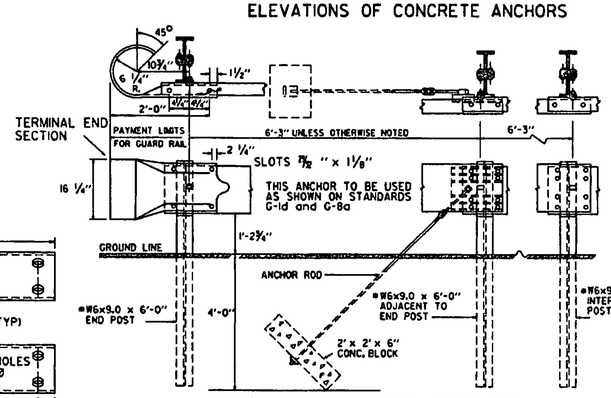
WITH 6" x 8" WOOD POST



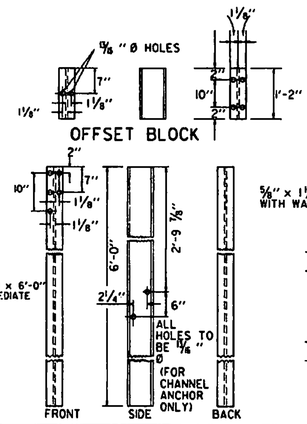
ANCHOR ROD CONNECTOR (MALLEABLE IRON CASTING OR EQUAL)



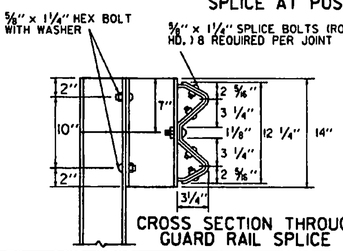
ANCHOR SPIDER (WELDMENT)



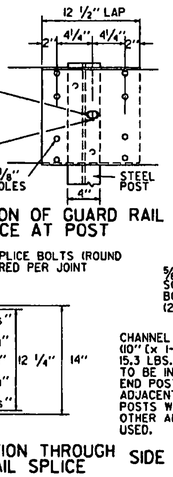
ANCHOR FOR STEEL BEAM RAIL
*W6x8.5 IS AN ACCEPTABLE ALTERNATE



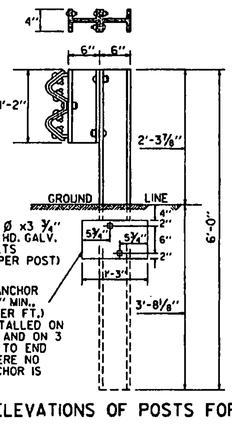
OFFSET BLOCK

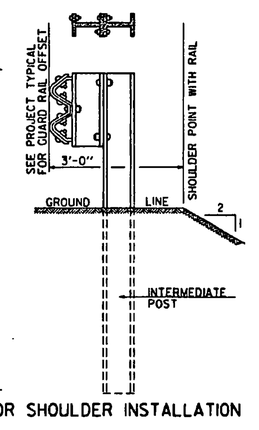


CROSS SECTION THROUGH GUARD RAIL SPLICE

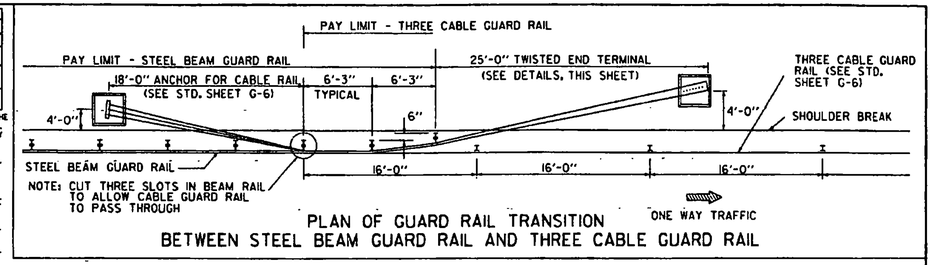


ELEVATION OF GUARD RAIL SPLICE AT POST





SIDE ELEVATIONS OF POSTS FOR SHOULDER INSTALLATION



NOTE: CUT THREE SLOTS IN BEAM RAIL TO ALLOW CABLE GUARD RAIL TO PASS THROUGH

PLAN OF GUARD RAIL TRANSITION BETWEEN STEEL BEAM GUARD RAIL AND THREE CABLE GUARD RAIL

REVISIONS AND CORRECTIONS

DEC. 8, 1971 - ORIGINAL APPROVAL DATE
APR. 10, 1972 - POST HEIGHT INCREASED
JAN. 17, 1978 - REVISED ANCHOR DETAIL
JUNE 1, 1978 - CHANNEL ANCHOR DETAILS CHANGED
MAY 28, 1979 - NOTE ON REFLECTIVE MATERIAL CHANGED
DEC. 18, 1980 - INCREASED SHOULDER WIDENING FOR GUARD RAIL
MAR. 12, 1984 - REVISED ANCHOR SPIDER DETAILS
JUNE 5, 1984 - POST SIZE AND BACK UP PLATE NOTE CHANGED
DEC. 21, 1984 - REMOVED POST WASHER
OCT. 31, 1985 - REVISED TO CONFORM TO 1986 SPECIFICATIONS
JUNE 1, 1994 - REISSUED. WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

Gordon A. MacArthur, P.E.
DIRECTOR OF ENGINEERING

John M. Murphy, P.E.
DESIGN ENGINEER

STEEL BEAM GUARD RAIL
HEAVY DUTY STEEL BEAM GUARD RAIL
TWISTED END TERMINAL
ANCHOR FOR STEEL BEAM RAIL

VERMONT AGENCY OF TRANSPORTATION

STANDARD
G-1