

WELDING INSTRUCTION
(VIEWED FROM BACK SIDE OF PLATE)

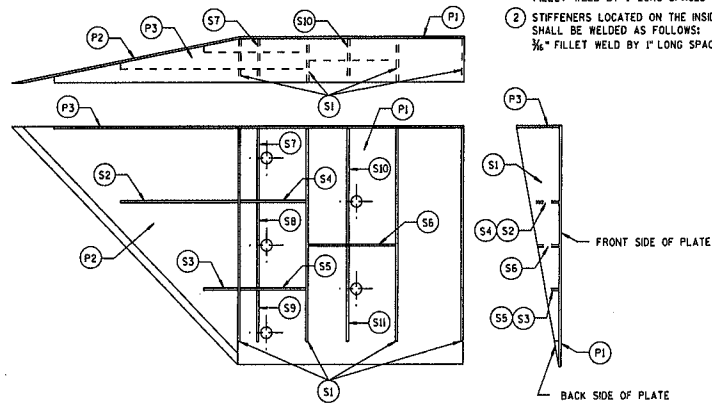


PLATE AND STIFFENER IDENTIFICATION
(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

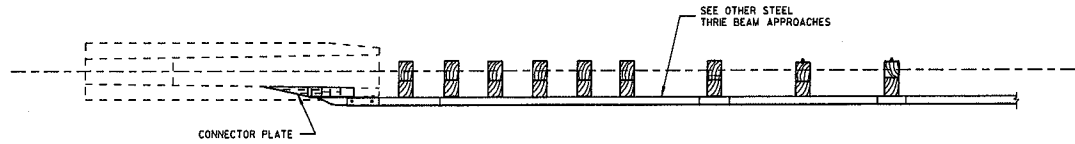
- COVER PLATE PANELS ARE 3/8" THICK.
- ALL STIFFENERS ARE 1/2" THICK.
- CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.
- FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.
- ALL HOLE DIAMETERS SHALL BE 1".
- FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

- ① STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/8" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
- ② STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/8" FILLET WELD BY 1" LONG SPACED AT 2".

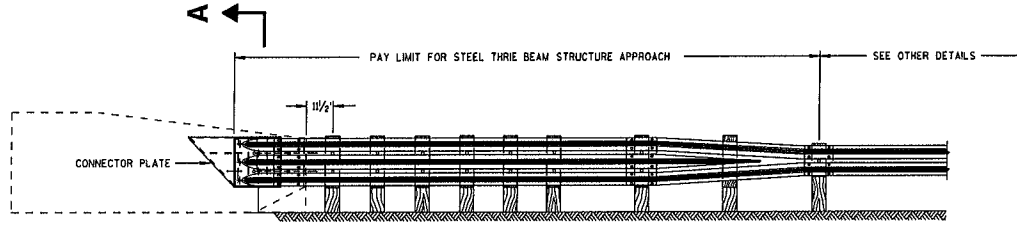
CONNECTOR PLATE DIMENSION (PER ASSEMBLY)				
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1	[Symbol]	20" x 20"	3/8"
P2	1	[Symbol]	20" x 20" x 28 3/8"	3/8"
P3	1	[Symbol]	39" x 3 3/8" x 20" x 19 1/2"	3/8"
S1	4	[Symbol]	18 1/8" x 3 3/8" x 18 3/4"	1/2"
S2	1	[Symbol]	10 1/4" x 2 1/8" x 10 3/8" x 1/2"	1/2"
S3	1	[Symbol]	3" x 1 1/8" x 3 1/8" x 1/2"	1/2"
S4	1	[Symbol]	6 1/8" x 2 1/8"	1/2"
S5	1	[Symbol]	6 1/8" x 1 1/8"	1/2"
S6	1	[Symbol]	7 1/4" x 1 3/4"	1/2"
S7	1	[Symbol]	2 3/8" x 6" x 3 3/8" x 5 3/8"	1/2"
S8	1	[Symbol]	1 1/2" x 7 1/2" x 2 1/2" x 7 3/8"	1/2"
S9	1	[Symbol]	6 1/8" x 6 3/8" x 1 1/2"	1/2"
S10	1	[Symbol]	1 1/2" x 9 3/8" x 3 3/8" x 9 1/8"	1/2"
S11	1	[Symbol]	8 1/2" x 8 3/4" x 1 3/8"	1/2"

STEEL THRIE BEAM STRUCTURE APPROACH

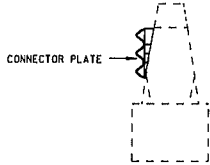
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-3-2010	/s/ Jeffry M. Zoog
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



PLAN VIEW

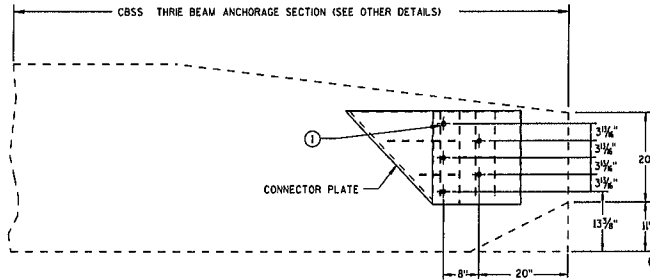


FRONT VIEW



SECTION A-A

SEE SDD 14B-20 FOR OTHER DETAILS.
 CONSTRUCT PER STANDARD SPECIFICATION 614.
 CONNECTOR PLATE INCIDENTAL TO STEEL THRIE BEAM STRUCTURE APPROACH.



CONNECTOR PLATE LOCATION

USE 7/8" DIAMETER A325 BOLT WITH HEX HEAD AND NUT, AND WASHER.
 EXTEND 7/8" DIAMETER BOLT COMPLETELY THROUGH BARRIER.
 BACK FACE OF BARRIER REQUIRES A HARDENED ROUND STEEL WASHER WITH 2 1/4" OUTER DIAMETER.
 GROUT ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	/s/ Jerry M. Zogg
6-3-2010	ROADWAY STANDARDS DEVELOPMENT ENGINEER
PHWA	

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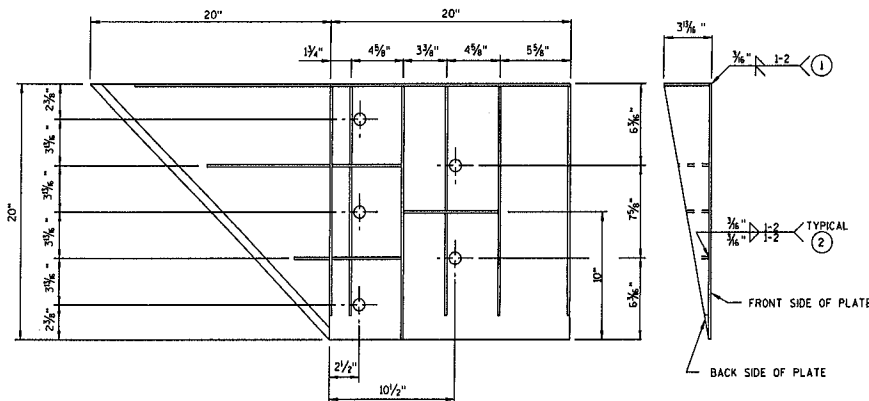
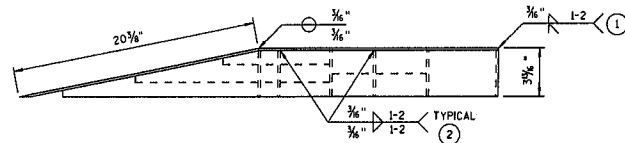
S.D.D. 14 B 20-99

S.D.D. 14 B 20-99

GENERAL NOTES

COVER PLATE PANELS ARE $\frac{3}{8}$ " THICK.
 ALL STIFFENERS ARE $\frac{1}{4}$ " THICK.
 CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.
 FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.
 ALL HOLE DIAMETERS SHALL BE 1".
 FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

- 1 STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
 SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND $\frac{3}{8}$ " FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
- 2 STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
 $\frac{3}{8}$ " FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

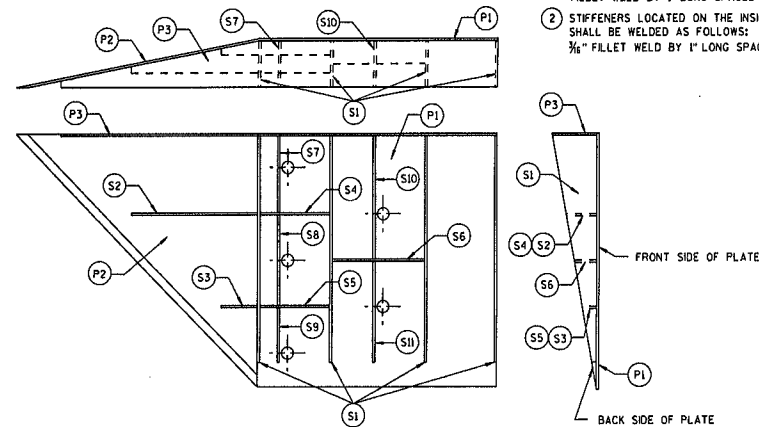


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)				
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	$\frac{3}{8}$ "
P2	1		20" x 20" x 28 3/8"	$\frac{3}{8}$ "
P3	1		39" x 3 3/8" x 20" x 19 3/8"	$\frac{3}{8}$ "
S1	4		18 3/8" x 3 3/8" x 18 3/8"	$\frac{1}{4}$ "
S2	1		10 1/4" x 2 1/8" x 10 3/8" x 1/2"	$\frac{1}{4}$ "
S3	1		3" x 1 1/8" x 3 1/8" x 1/2"	$\frac{1}{4}$ "
S4	1		6 1/8" x 2 1/8"	$\frac{1}{4}$ "
S5	1		6 1/8" x 1 1/8"	$\frac{1}{4}$ "
S6	1		7 3/8" x 1 3/8"	$\frac{1}{4}$ "
S7	1		2 3/8" x 6" x 3 3/8" x 5 3/8"	$\frac{1}{4}$ "
S8	1		1 3/8" x 7 1/2" x 2 1/2" x 7 3/8"	$\frac{1}{4}$ "
S9	1		6 1/8" x 6 3/8" x 1 3/8"	$\frac{1}{4}$ "
S10	1		1 1/8" x 9 1/8" x 3 3/8" x 8 3/8"	$\frac{1}{4}$ "
S11	1		8 1/2" x 8 3/4" x 1 3/8"	$\frac{1}{4}$ "

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THREE BEAM TRANSITION (MGS)

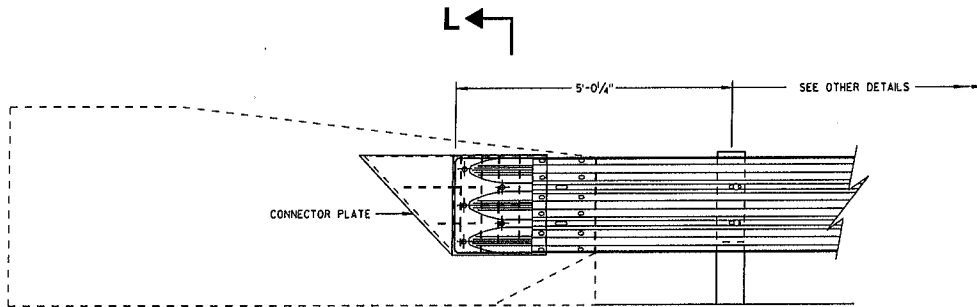
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 5-23-2008 /s/ Jerry M. 7000
 DATE ROADWAY STANDARDS 1030 JENT
 FHWA ENGINEER

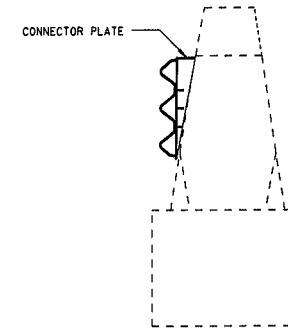
GENERAL NOTES

CONNECTION PLATE INCIDENTAL TO STEEL THRIE BEAM STRUCTURE APPROACH.

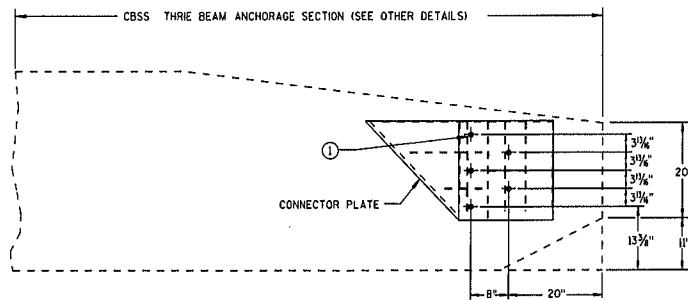
- ① USE 3/4" DIAMETER A325 BOLT WITH HEX HEAD AND, NUT, AND WASHER. EXTEND 3/8" DIAMETER BOLT COMPLETELY THROUGH BARRIER. BACK FACE OF BARRIER REQUIRES A HARDENED ROUND STEEL WASHER WITH 2 1/4" OUTER DIAMETER. GROUT ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



SECTION L-L



SINGLE SLOPE CONNECTION PLATE PLACEMENT

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5-23-2011	/s/ Jerry M. Zimm
DATE	ROADWAY STANDARDS 1031 INT ENGINEER
FHWA	