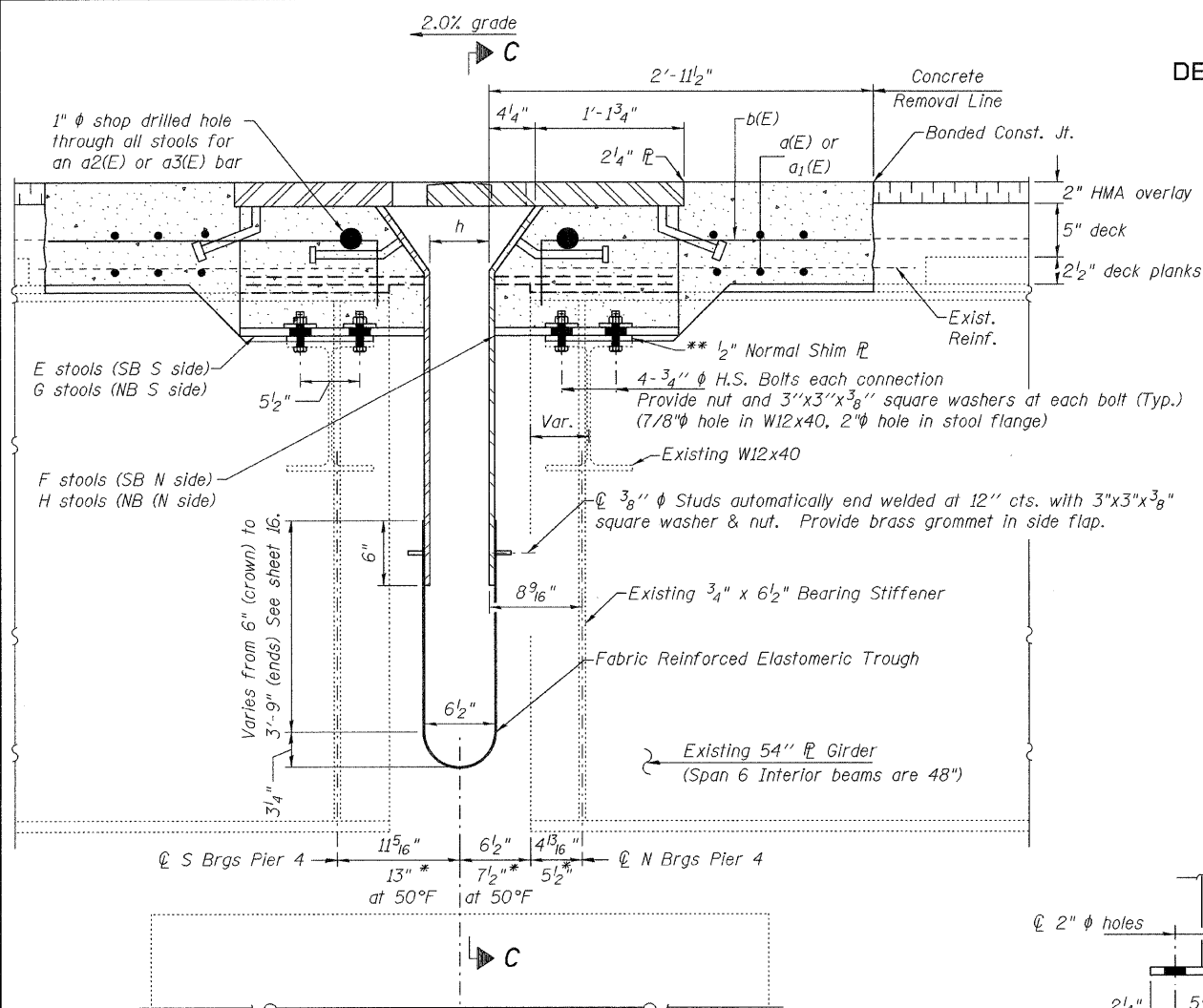
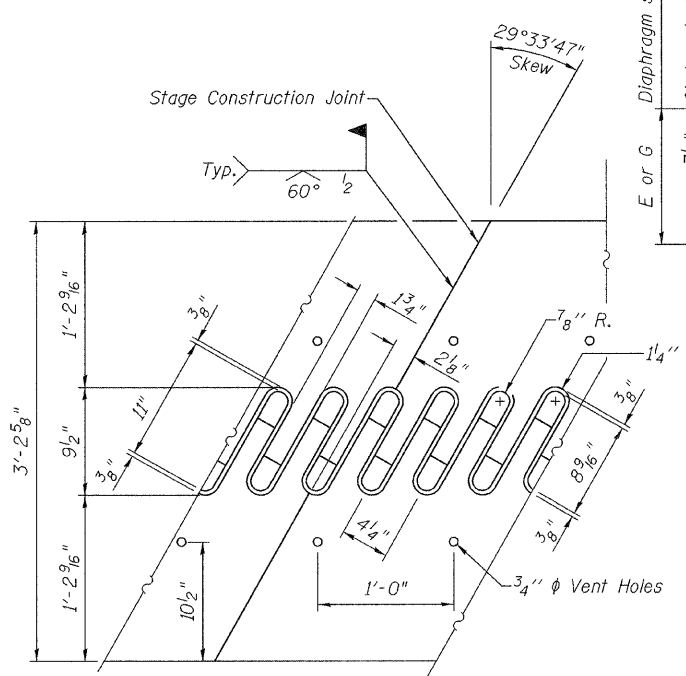


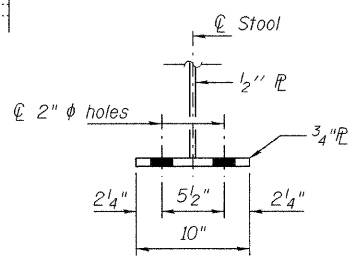
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



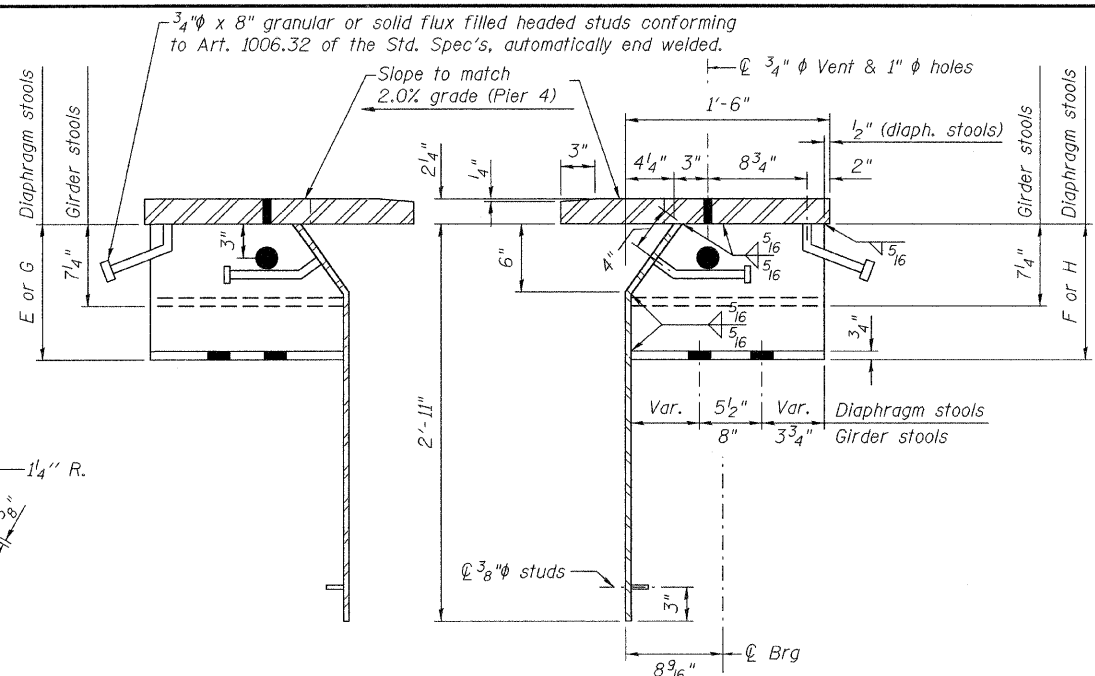
SECTION B-B
(Looking West)



FLAME CUTTING DIAGRAM
(Cut from 2 1/4" x 3'-2 5/8" M270 Gr. 50)

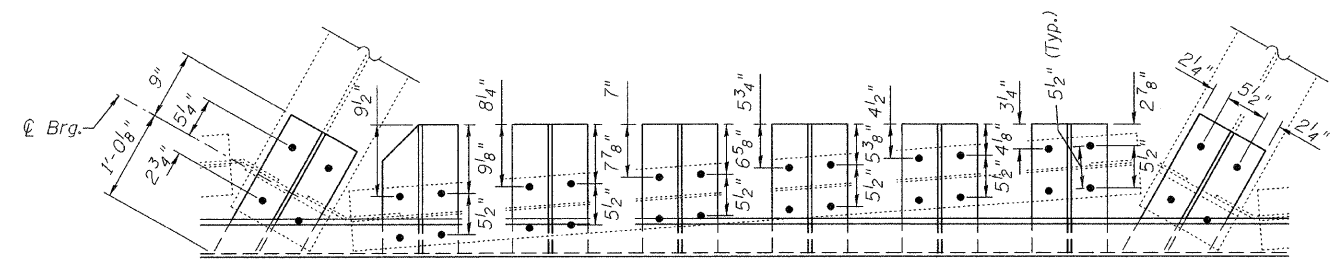


STOOL SECTION



E & G STOOLS
(Looking West)

F & H STOOLS
(Looking West)



PARTIAL PLAN OF STOOLS

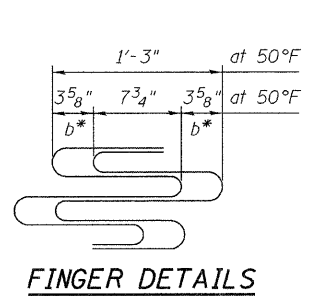
Notes: See sheet 13 of 20 for stool locations.
See sheet 16 of 20 for Section C-C.
Stool heights are measured along ϕ of bearings.

DIMENSIONS E & F (SB PIER 4)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
E2	11 3/8"	E23	15 5/16"	F2	11 5/16"	F23	15 7/8"
E3	11 5/8"	E24	16 8/16"	F3	11 9/16"	F24	16 1/16"
E4	11 7/8"	E25	16 5/16"	F4	11 13/16"	F25	16 3/16"
E5	12 1/8"	E26	16 7/16"	F5	12"	F26	16 3/8"
E6	12 5/16"	E27	16 2"	F6	12 1/4"	F27	16 7/16"
E7	12 9/16"	E28	16 1/4"	F7	12 1/2"	F28	16 8/16"
E9	13 1/16"	E30	15 5/8"	F9	13"	F30	15 9/16"
E10	13 5/16"	E31	15 5/16"	F10	13 1/4"	F31	15 1/4"
E11	13 9/16"	E32	15"	F11	13 7/16"	F32	14 5/16"
E12	13 3/4"	E33	14 11/16"	F12	13 11/16"	F33	14 5/8"
E13	14"	E34	14 3/8"	F13	13 5/16"	F34	14 5/16"
E14	14 1/4"	E35	14 8/16"	F14	14 3/16"	F35	14"
E16	14 3/4"	E37	13 7/16"	F16	14 11/16"	F37	13 3/8"
E17	15"	E38	13 1/16"	F17	14 7/8"	F38	13"
E18	15 1/2"	E39	12 11/16"	F18	15 1/16"	F39	12 5/8"
E19	15 5/16"	E40	12 5/16"	F19	15 1/4"	F40	12 1/4"
E20	15 1/2"	E41	11 5/16"	F20	15 3/8"	F41	11 13/16"
E21	15 5/8"	E42	11 9/16"	F21	15 9/16"	F42	11 7/16"

DIMENSIONS G & H (NB PIER 4)

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
G2	11 3/8"	G23	16"	H2	11 1/4"	H23	15 5/16"
G3	11 9/16"	G24	16 8/16"	H3	11 1/2"	H24	16 1/8"
G4	11 13/16"	G25	16 5/16"	H4	11 3/4"	H25	16 5/16"
G5	12 1/16"	G26	16 1/2"	H5	12"	H26	16 7/16"
G6	12 5/16"	G27	16 9/16"	H6	12 1/4"	H27	16 9/16"
G7	12 9/16"	G28	16 1/4"	H7	12 1/2"	H28	16 1/4"
G9	13 1/16"	G30	15 5/8"	H9	13"	H30	15 5/8"
G10	13 5/16"	G31	15 5/16"	H10	13 1/4"	H31	15 5/16"
G11	13 9/16"	G32	15 1/16"	H11	13 1/2"	H32	15"
G12	13 13/16"	G33	14 3/4"	H12	13 3/4"	H33	14 3/4"
G13	14"	G34	14 7/16"	H13	14"	H34	14 7/16"
G14	14 1/4"	G35	14 8/16"	H14	14 1/4"	H35	14 1/8"
G16	14 3/4"	G37	13 7/16"	H16	14 11/16"	H37	13 1/2"
G17	15"	G38	13 1/16"	H17	14 5/16"	H38	13 1/16"
G18	15 1/2"	G39	12 11/16"	H18	15 1/16"	H39	12 5/8"
G19	15 5/16"	G40	12 5/16"	H19	15 5/16"	H40	12 5/16"
G20	15 1/2"	G41	11 5/16"	H20	15 7/16"	H41	11 5/16"
G21	15 5/8"	G42	11 9/16"	H21	15 5/8"	H42	11 9/16"



FINGER DETAILS

SB & NB Pier 4
461' Expansion Length

Temp.	b	h
-30°F	6 1/2"	8"
50°F	3 5/8"	5 1/2"
130°F	3 1/4"	3"

* Measured along ϕ girder.
** Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 6".

PIER 4 FINGER PLATE DETAILS
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *A. Carl*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 11 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	36
			CONTRACT NO.	76926	
			FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT	IM-255()