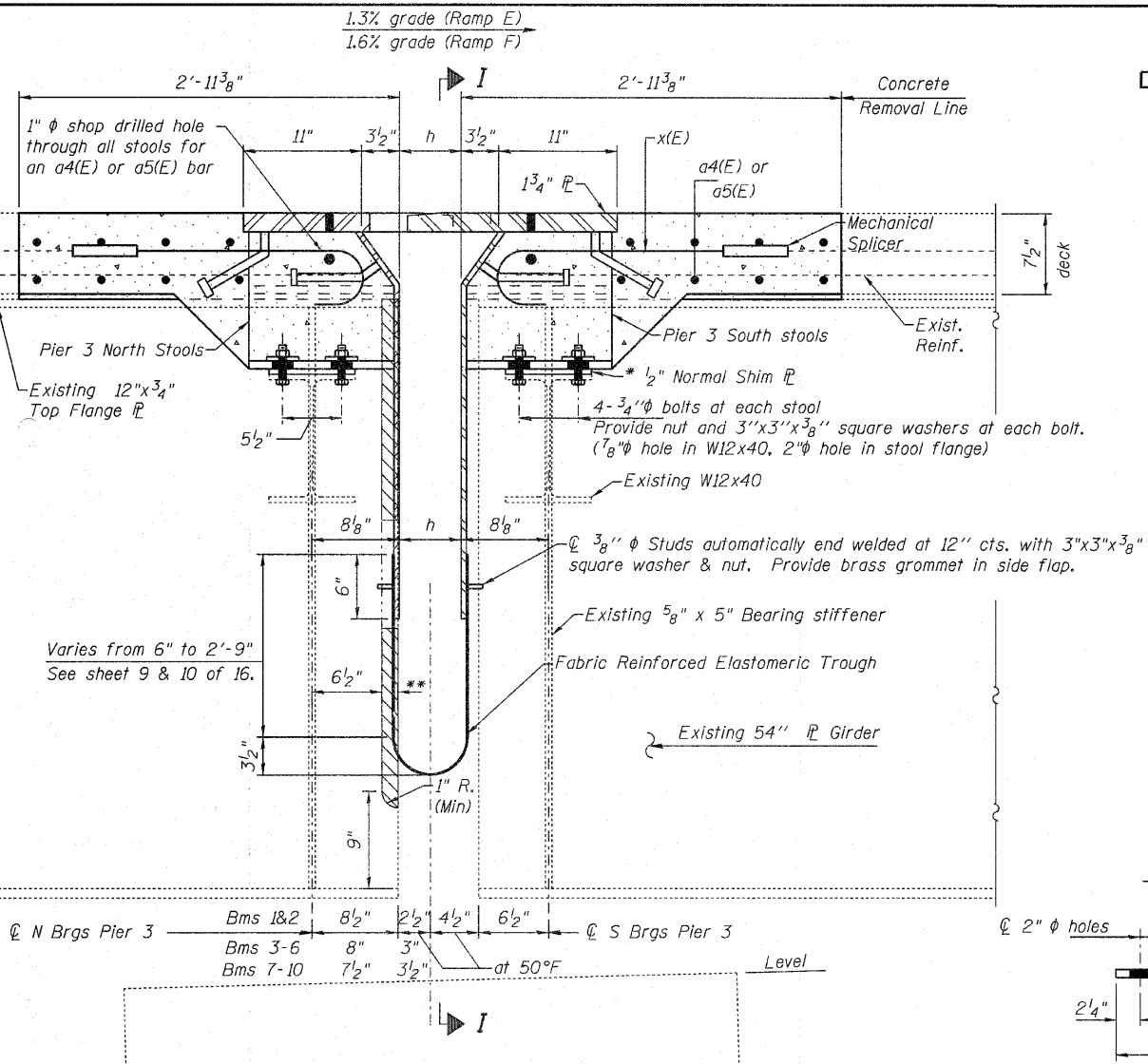
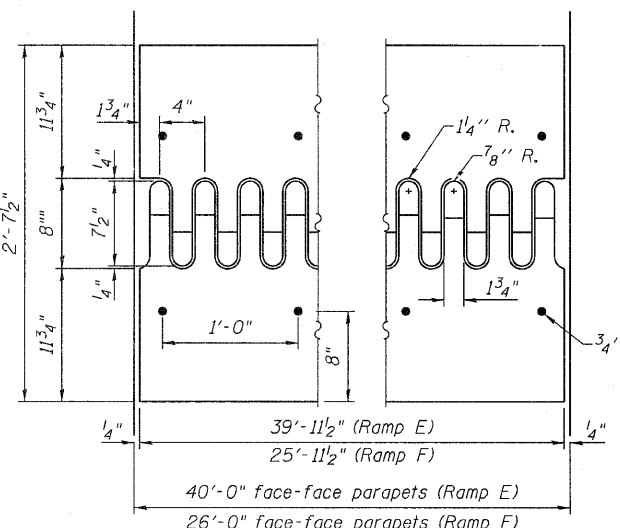


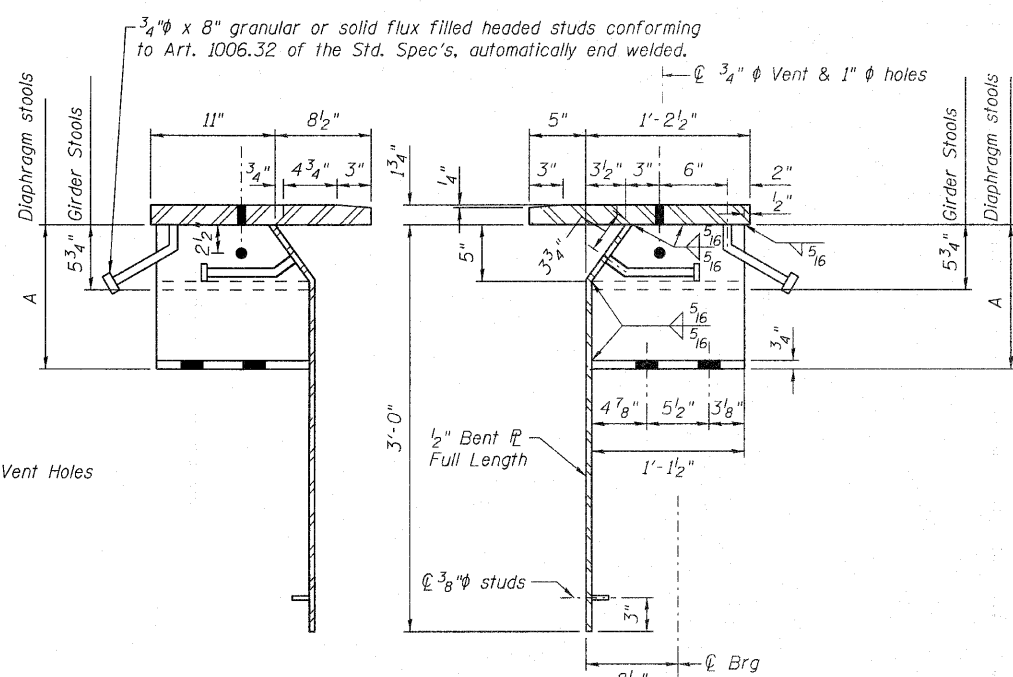
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



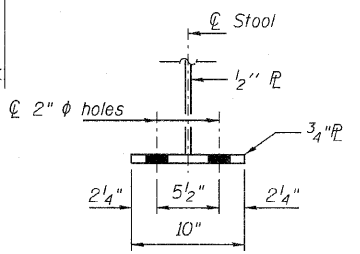
SECTION F-F
(Looking East)
(Section shown rotated level to grade)



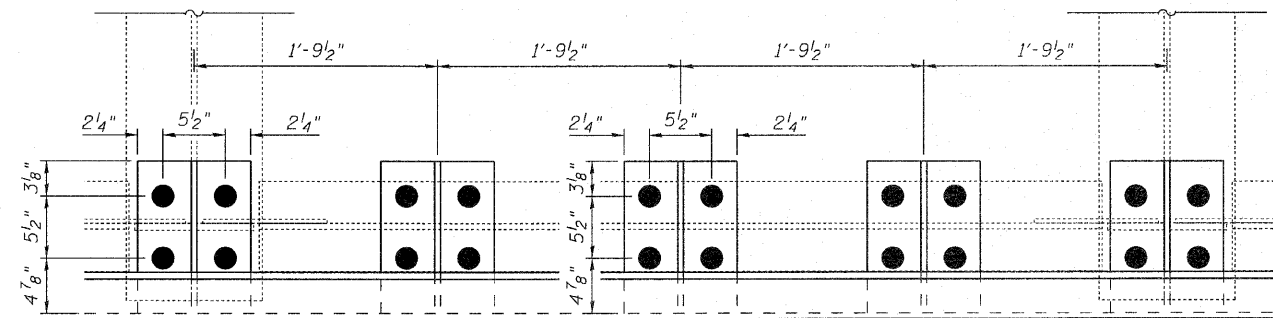
FLAME CUTTING DIAGRAM
(Cut from M270 Gr. 50 PL)



STOOLS
(Looking East)



STOOL SECTION



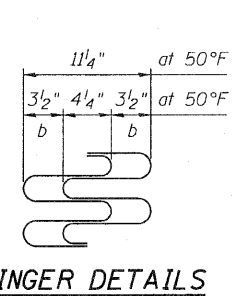
PARTIAL PLAN OF STOOLS

Notes: See sheets 9 & 10 of 16 for stool locations & Section I-I.

- Stool heights are measured at ϕ of bearings.
- All plates shall be AASHTO M270, Gr. 50.
- Existing shear studs that interfere with the finger plate stool shall be removed using the air-arc method and grind smooth all weld material remaining on the top flange. Cost included with Finger Plate Expansion Joint, 5".
- Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.
- Existing reinforcement shall extend 6" min. into the removal area to allow attachment of the mechanical splicers.

RAMP E DIMENSION A **RAMP F DIMENSION A**

Stool No.	Height	Stool No.	Height
A2	9 ¹⁵ / ₁₆ "	A23	13 ⁷ / ₁₆ "
A3	10 ³ / ₈ "	A24	13 ¹ / ₁₆ "
A4	10 ¹³ / ₁₆ "	A25	12 ³ / ₄ "
A6	11 ¹ / ₁₆ "	A27	12 ¹ / ₁₆ "
A7	12"	A28	11 ³ / ₄ "
A8	12 ⁵ / ₁₆ "	A29	11 ⁷ / ₁₆ "
A10	13"	A31	10 ³ / ₄ "
A11	13 ⁵ / ₁₆ "	A32	10 ³ / ₈ "
A12	13 ¹ / ₁₆ "	A33	9 ¹⁵ / ₁₆ "
A14	14 ³ / ₈ "		
A15	14 ¹ / ₁₆ "		
A16	15"		
A18	15 ¹ / ₁₆ "		
A19	15 ⁷ / ₈ "		
A20	15 ⁷ / ₁₆ "		



FINGER DETAILS

Pier 3 Ramp E (431' Expansion Length)			Pier 3 Ramp F (376' Expansion Length)		
Temp.	b	h	Temp.	b	h
-30°F	6 ¹ / ₈ "	8 ³ / ₈ "	-30°F	5 ⁷ / ₈ "	8 ¹ / ₈ "
50°F	3 ¹ / ₂ "	5 ³ / ₄ "	50°F	3 ¹ / ₂ "	5 ³ / ₄ "
130°F	7 ⁷ / ₈ "	3 ¹ / ₈ "	130°F	1 ¹ / ₈ "	3 ³ / ₈ "

- * 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.
- ** Cut off the top flange & webs of the 6 north side plate girders. Remove 2" (Beams 1 & 2), 1 1/2" (Beams 3-6), and 1" (Beams 7-10)

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

May 8, 2009
EXAMINED *De Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

**RAMP E & F
PIER 3 FINGER PLATE DETAILS
SN 082-0217 & 0218**

SHEET NO. 11 16 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-7HB-I	ST. CLAIR	43	18
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				CONTRACT NO. 76C33 IM-255()	