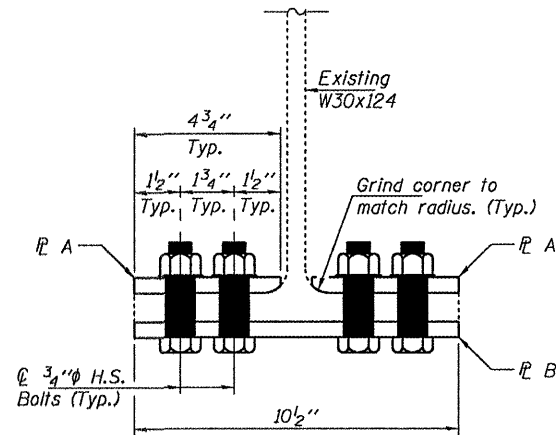
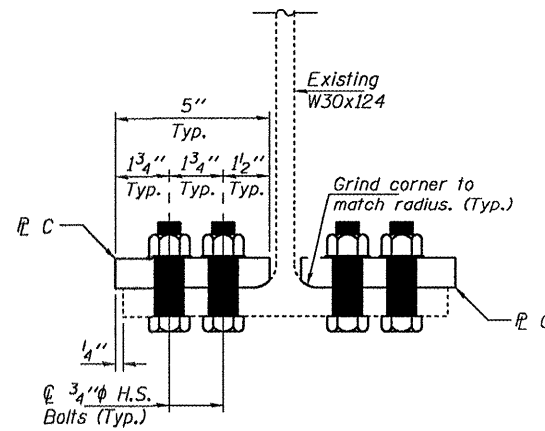


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

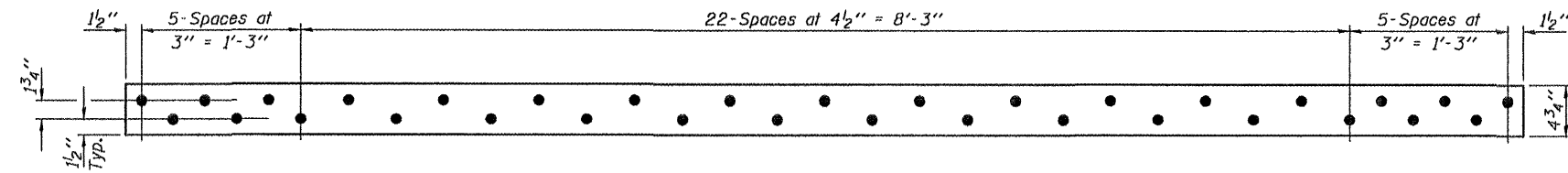
Note:
Field drill holes in existing flange using
holes in Strengthening P's as template.



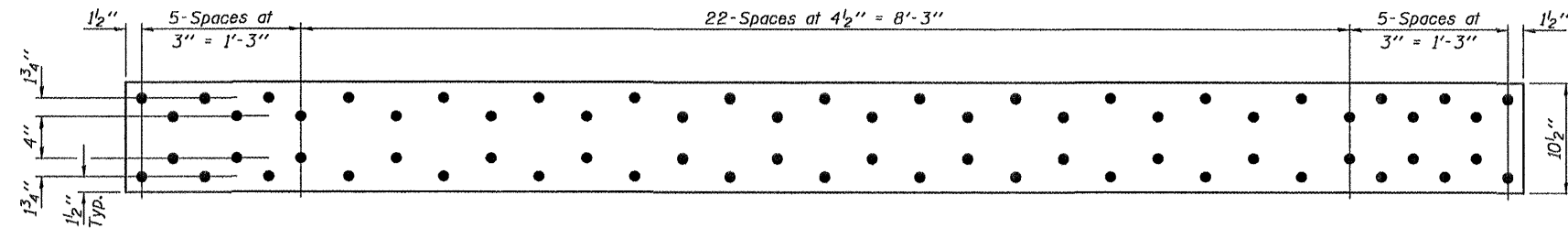
**SPAN 2 - BEAMS 4 & 5
STRENGTHENING DETAIL**



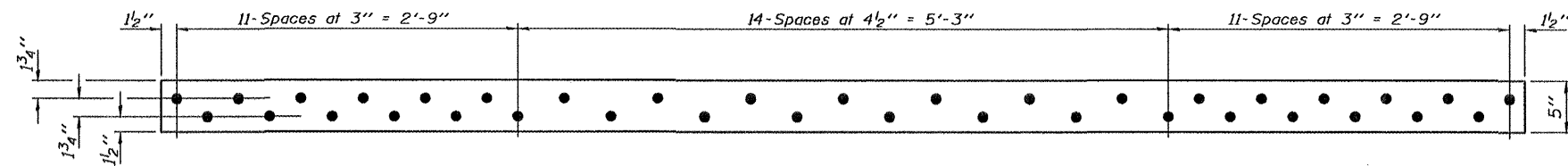
**SPAN 3 - BEAM 1
STRENGTHENING DETAIL**



STRENGTHENING P A
P 1/2" x 4 3/4" x 11'-0" (NTR)
(4 Required)



STRENGTHENING P B
P 1/2" x 10 1/2" x 11'-0" (NTR)
(2 Required)



STRENGTHENING P C
P 1" x 5" x 11'-0" (NTR)
(2 Required)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	850

**BEAM STRENGTHENING DETAILS
SN 016-2121**

DESIGNED	ATH
CHECKED	GGE
DRAWN	Kyle M. Steffen
CHECKED	ATH GGE

APRIL 27, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 5 5 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	332	0101.1 I-3	COOK	11	10
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60G33					