

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 17	6000 M-1	CARROLL	20	17
FED. ROAD DIST. NO.	ILL. PROJ.	FED. AID PROJECT		

15 SHEETS

**SUBSTRUCTURE REPAIR SCHEDULE**

KEY	①	②	③	④	⑤	⑥	⑦	⑧	⑨	
ITEM	Structural Repair of Concrete (Depth ≤ 5")	Structural Repair of Concrete (Depth > 5")	Epoxy Crack Injection	Fiber Reinforcement Protection	Acrylic Coating	Jacking & Cribbing	Clean & Paint Steel H-Piles	Remove Channels, Clean, Paint, and Reinstall	Remove Post Tension Rods, Clean, Paint, & Reinstall	Concrete Sealer
UNIT	Sq. Ft.	Sq. Ft.	Foot	Sq. Ft.	Sq. Yd.	Each	**	**	**	Sq. Ft.
Pile Bent 1 *	2									78
Pile Bent 2			9				X			143
Pile Bent 3										0
Pile Bent 4	18	30	25	395	44	1			X	0
Pile Bent 5	10	20		269	30			X		44
Pile Bent 6		90	10				X			143
Pile Bent 7	20	1	10					X		44
Pile Bent 8	2	20	10	84	9	1			X	44
Pile Bent 9										44
Pile Bent 10										143
Pile Bent 11										44
Pile Bent 12		8	8	81	9	1		X		44
Bent 1			20							44
Bent 2	8	4	10			1				44
Bent 3		24	60	820	91					0
Bent 4		12	12					X		44
Bent 5		2	2							44
Bent 6		12	15							44
Pier 1										88
Pier 2										88
Pier 3										142
Pier 4										142
Pier 5		40	20	340	38					88
<b>TOTAL</b>	<b>60</b>	<b>266</b>	<b>211</b>	<b>1,989</b>	<b>221</b>	<b>4</b>	<b>**</b>	<b>**</b>	<b>**</b>	<b>1,539</b>

\* Pile Bent 1 is at West Abutment.  
\*\* Included in Cleaning and Painting.

**PILE BENT CAP NOTES ⑧**

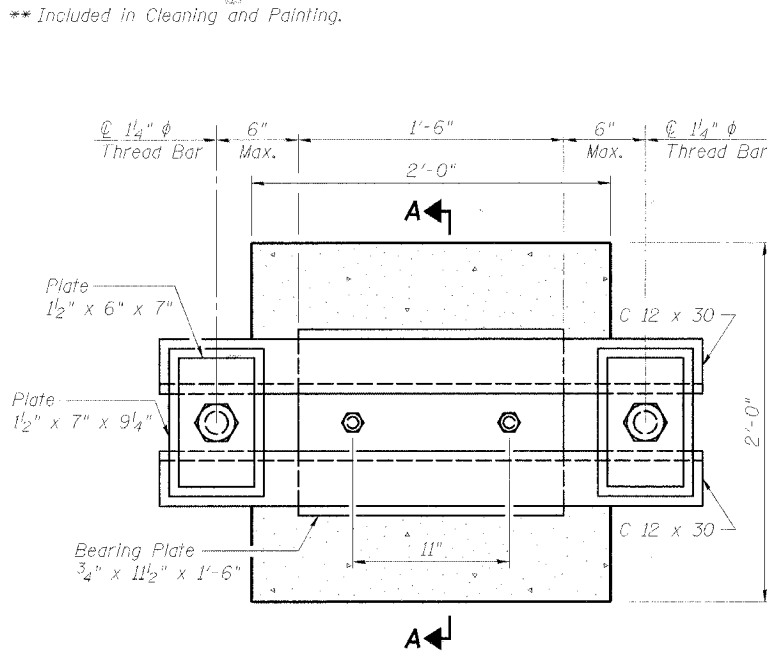
(Cleaning and Painting Existing Post-Tensioning of Pile Bent Cap: PB3, PB4, and PB8; Showing Details from 1985 Repair Plans)

1. Remove, clean, paint, and re-install existing post-tensioning steel. Portions which can be thoroughly cleaned and painted in place may be so treated at Engineer's direction.
2. Reinstall post tensioning plates and threadbars after concrete repairs are made.
3. Post-tension (jack) each threadbar to 60 kips seven days after placement of non-shrink grout. Each pair of bars shall be tensioned such that unbalance of force in bars does not exceed 5 kips during tension operations.

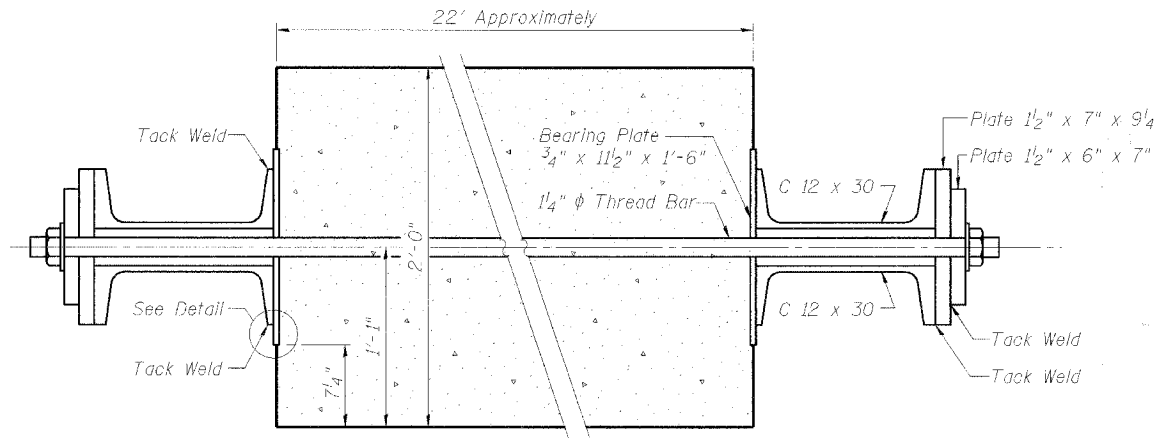
**PILE CAP STEEL NOTES ⑦**

(Cleaning and Painting of Pile Cap Steel: PB5, PB7, PB12, and B4)

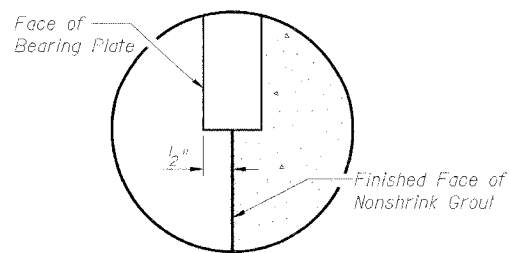
1. Remove the existing channels on each side of the pile caps and bent caps before concrete repairs are performed.
2. Sandblast clean each entire channel to SSPC SP6 (Commercial Blast)
3. Apply Paint.
4. Existing bolts fastening channels to pile and bent caps may be re-used except those that, in the judgement of the Engineer are too corroded for re-use, shall be replaced. Payment for replacement bolts shall be made in accordance with Article 109.04 of the Standard Specifications.
5. Reinstall each channel to the specific pile cap after completion of concrete repairs (if required).



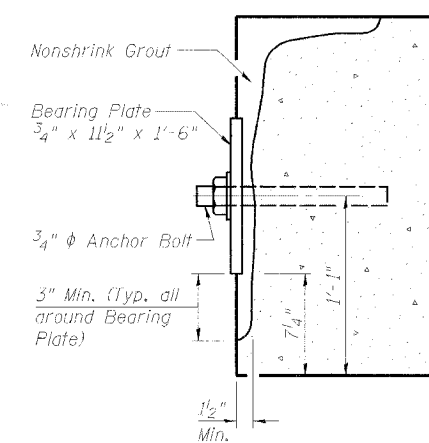
**END VIEW - EXISTING PILE CAP BENT ⑧**



**FRONT ELEVATION - EXISTING PILE CAP BENT ⑧**



**EXISTING DETAIL ⑧**



**EXISTING SECTION A-A ⑧**

DESIGNED	PJL
CHECKED	LLV
DRAWN	MGM
CHECKED	PJL

**SUBSTRUCTURE  
REPAIR PROCEDURES  
F.A.P. RTE. 17 (US 52/IL 64)  
OVER MISSISSIPPI RIVER  
SECTION 6000 M-1  
CARROLL COUNTY (IL)  
JACKSON COUNTY (IA)  
STRUCTURE NO. 008-6000**

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