

SUMMARY OF QUANTITIES

50% Iowa / 50% Illinois
Maintenance
100% Rural SFTY-2A

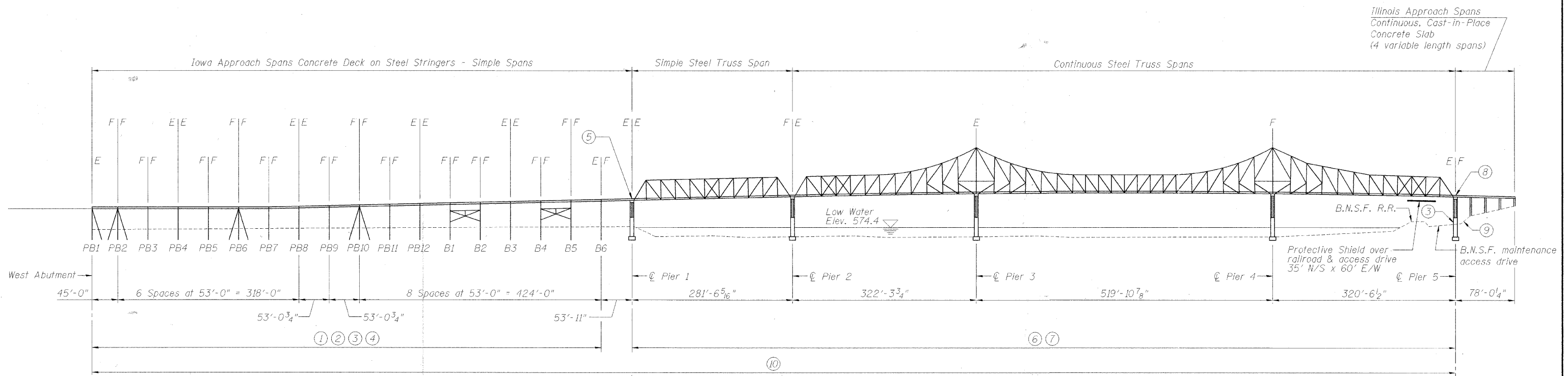
paycode	description	units	total quantity
20400800	FURNISHED EXCAVATION	CU YD	55
28100127	STONE RIPRAP, CLASS B4	SQ YD	395
28200200	FILTER FABRIC	SQ YD	395
50300300	PROTECTIVE COAT	SQ YD	213
50102400	CONCRETE REMOVAL	CU YD	66.7
50104710	REMOVAL OF EXISTING BEARINGS	EACH	76
50157300	PROTECTIVE SHIELD	SQ YD	233
50300255	CONCRETE SUPERSTRUCTURE	CU YD	66.7
50501005	JACK AND REPOSITION BEARINGS	EACH	1
50501105	OPEN STEEL FLOOR	SQ FT	16,619
50600300	CLEANING AND PAINTING STEEL BRIDGE	L SUM	1
50606400	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9,980
52000110	PREFORMED JOINT STRIP SEAL	FOOT	396
52100520	ANCHOR BOLTS, 1"	EACH	1
58700300	CONCRETE SEALER	SQ FT	1,539
59000200	EPOXY CRACK INJECTION	FOOT	211
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9
67100100	MOBILIZATION	L SUM	1
X0325925	REPAIR OF EXISTING OPEN STEEL FLOOR WELDS	EACH	18
X0325926	FURNISHING AND INSTALLING FABRIC BEARINGS	EACH	76
X0325927	REMOVE AND REPLACE NONSHRINK GROUT BEARING PEDESTALS	EACH	12
X0325748	ACRYLIC COATING	SQ YD	221
X0325749	FIBER WRAP	SQ FT	1,989
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100900	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316(SPECIAL)	EACH	4
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,500
70300500	PAVEMENT MARKING TAPE, TYPE III	FOOT	14,500
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	6,000
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5,900
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1100
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	266
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	60
X7013015	TRAFFIC CONTROL FOR ROAD CLOSURE	L SUM	1
Z0031200	JACKING AND CRIBBING	EACH	4
Z0032300	JACKING EXISTING SUPERSTRUCTURE	L SUM	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

△ REVISED 2/25/08
* SPECIALTY ITEM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 17	6000 M-1	CARROLL	20	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2
15 SHEETS



ELEVATION
(Looking Upstream, North)

SCOPE OF WORK SUMMARY

See also Special Provisions & Plan Details.

- ① Replace stringer bearings as scheduled, see Sht. 5 & 6 of 15.
- ② Remove & replace deck and parapet joint seals, see Sht. 7, 8, & 9 of 15.
- ③ Repair concrete substructure elements as scheduled, see Sht. 12, 13, & 14 of 15.
- ④ Clean & paint existing steel as scheduled, see Sht. 7, 8, & 12 of 15, and Note 4 this sheet.
- ⑤ Reset over-rotated north bearing of Iowa approach span at Pier 1. See Sht. 4 of 15.
- ⑥ Remove & replace existing steel grid deck as scheduled, and repair broken deck welds as scheduled, see Sht. 10 of 15.
- ⑦ Clean & paint existing bearings and grease bearing pins, typ. Pier 1 thru Pier 5, included in "Cleaning & Painting".
- ⑧ Add supplemental anchor bolt for steel truss, north bearing at Pier 5, see Sht. 4 of 15.
- ⑨ Remove existing timber retaining wall, place slope fill and stone riprap, see Sht. 15 of 15.
- ⑩ Clean bearing seats and apply concrete sealer as scheduled, see Sht. 12 of 15. (excludes PB4 and B3 which receive fiber fabric or geotextile wrap.)

NOTES

- 1.) Existing Structure No. 008-6000 was originally built in 1932 and was rehabilitated in 1985 by the Iowa Department of Transportation as Project No. BHF-52-1(40)-2L-49 and was repaired in 1999 by the Illinois Department of Transportation Section 6000 M.
- 2.) The bridge carries two lanes of traffic on a 20 ft. clear roadway width.
- 3.) Portions of the proposed work will be performed while the traffic is detoured.
- 4.) The existing 1985 paint system is Organic Zinc, Epoxy and Polyurethane (without any lead base paint). The new paint shall match existing paint system and color(s).

DESIGNED	PJL
CHECKED	LLV
DRAWN	MGM
CHECKED	PJL

REVISD 2/25/08

SCOPE OF WORK SUMMARY
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

STS CONSULTANTS
111 NE Jefferson Ave.
Peoria, Illinois 61602
Ph(309)676-8464
FAX(309)676-5445
IL Design Firm Reg. No. 184-001518

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 17	6000 M-1	CARROLL	20	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
15 SHEETS

GENERAL NOTES

- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas, and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- Concrete Sealer shall be applied to the designated areas of the horizontal bearing seats of substructure elements. See Schedule, Sht. 12 of 15.
- The existing structural steel coating may contain lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

ENVIRONMENTAL COMMITMENTS

- No in-stream repair work or work from the ground in backwater areas will be permitted for this project. Except as noted herein, the Contractor shall conduct all work over the river or its backwater areas from atop the bridge or from a barge.

The Contractor may erect nets or temporarily anchor a barge beneath the bridge to catch falling material. The Contractor shall remove all catchment measures prior to completion of the project.
- The intentional or accidental deposition of debris or other material into the river or backwater areas will not be permitted. The Contractor shall catch all materials falling from the bridge or retrieve all such fallen materials.

3. The Contractor will be permitted to drive temporary piling in connection with the Jacking and Cribbing at Pile Bents 4, 8 and 12 to make concrete repairs to the existing piles. The Contractor shall remove all temporary piles prior to completion of the project.
- On the Illinois shore, the Contractor shall be permitted to make the repairs to Pier 5 and to the adjacent proposed riprap Slopewall from ground level provided that such work is not conducted in river flood waters and provided that it is conducted in accordance with the applicable requirements of the adjacent BNSF Railroad.
- No separate payment will be made for compliance with these Environmental Commitment requirements. The costs for compliance with these requirements shall be included in the bid prices for associated items of work.

TOTAL BILL OF MATERIAL

PAY CODE	ITEM	UNIT	QUANTITY
20400800	Furnished Excavation	Cu. Yd.	55
28100127	Stone Riprap, Class B4	Sq. Yd.	395
28200200	Filter Fabric	Sq. Yd.	395
50102400	Concrete Removal	Cu. Yd.	66.7
50157300	Protective Shield	Sq. Yd.	233
50300255	Concrete Superstructure	Cu. Yd.	66.7
50300300	Protective Coat	Sq. Yd.	213
50501005	Jack and Reposition Bearings	Each	1
50501105	Open Steel Floor	Sq. Ft.	16,619
	Repair of Existing Open Steel Floor Welds	Each	18
	Furnishing and Installing Fabric Bearings	Each	76
	Remove and Replace Nonshrink Grout Bearing Pedestals	Each	12
	Cleaning and Painting Steel Bridge	L Sum	1
50606400	Containment and Disposal of Lead Paint Cleaning Residues	L Sum	1
50800205	Reinforcement Bars, Epoxy Coated	Pound	9,980
52000110	Preformed Joint Strip Seal	Foot	396
52100520	Anchor Bolts, 1"	Each	1
58700300	Concrete Sealer	Sq. Ft.	1,539
59000200	Epoxy Crack Injection	Foot	211
67000400	Engineer's Field Office, Type A	Cal. Mo.	9
67100100	Mobilization	L Sum	1
70101700	Traffic Control And Protection	L Sum	1
X0325303	Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.	266
X0325305	Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq. Ft.	60
	Fiber WRAP 3	Sq. Ft.	1,989
	Acrylic Coating	Sq. Yd.	221
Z0031200	Jacking and Cribbing	Each	4
Z0032300	Jacking Existing Superstructure	L Sum	1
Z0048665	Railroad Protective Liability Insurance	L Sum	1
	Removal Existing Bearings	Each	76

DESIGNED	PJL
CHECKED	LLV
DRAWN	MGM
CHECKED	PJL

**GENERAL NOTES &
TOTAL BILL OF MATERIAL
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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△ REVISED 2/25/08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 17	6000 M-1	CARROLL	20	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 12
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 WRAP	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	X	0
Pile Bent 5	10	20		269	30			X		44
Pile Bent 6		90	10				X			143
Pile Bent 7	20	4	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
TOTAL	60	266	211	1,989	221	4	**	**	**	1,539

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

PILE BENT CAP NOTES ⑧

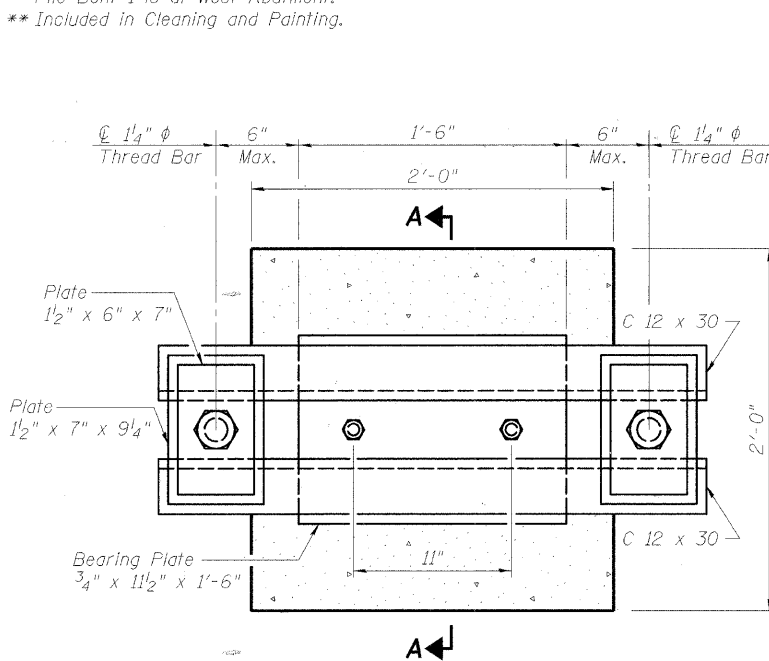
(Cleaning and Painting Existing Post-Tensioning of Pile Bent Cap: PB3, PB4, and PB8; Showing Details from 1985 Repair Plans)

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.

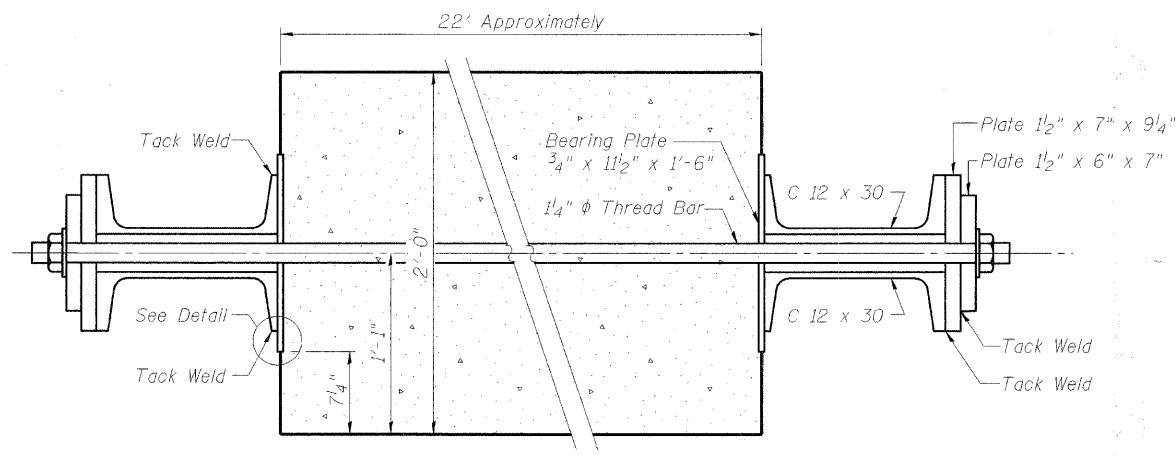
PILE CAP STEEL NOTES ⑦

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

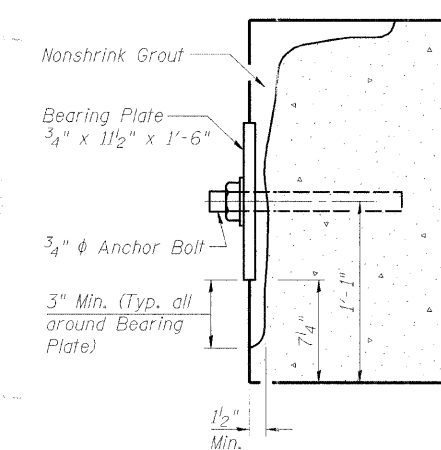
1. Remove the existing channels on each side of the pile caps and bent caps before concrete repairs are performed.
2. Sandblast clean each entire channel to SSPC SP6 (Commercial Blast)
3. Apply Paint.
4. Existing bolts fastening channels to pile and bent caps may be re-used except those that, in the 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).



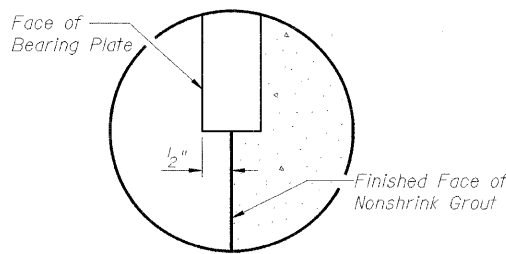
END VIEW - EXISTING PILE CAP BENT ⑧



FRONT ELEVATION - EXISTING PILE CAP BENT ⑧



EXISTING SECTION A-A ⑧



EXISTING DETAIL ⑧

DESIGNED	PJL
CHECKED	LLV
DRAWN	MGM
CHECKED	PJL

REVISÉD 2/25/08

**SUBSTRUCTURE
REPAIR PROCEDURES
F.A.P. RTE. 17 (US 52/IL 64)
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SECTION 6000 M-1
CARROLL COUNTY (IL)
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