

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.I.-94/ F.A.P. 346	2003-071 RS	COOK	91	80
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract # 62636

**STRUCTURAL NOTES**

- Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
  - Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.
  - Reinforcement bars designated (E) shall be epoxy coated.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with "Concrete Removal."
5. 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.
- Stage construction shall be utilized to maintain traffic during construction.
  - The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.
  - The Contractor shall provide a Protective Shield under the deck for Full Deck Slab repairs as per direction of the Engineer and as shown on the plans.
9. The Contractor may have to remove the Name Plate(s) that interfere with the parapet removal for joint reconstruction. The Contractor shall reinstall the Name Plate(s) as directed by the Engineer. The cost of removal and reinstallation of Name Plate(s) shall be included in the cost for "Concrete Removal" and "Concrete Superstructure."
- Protective coat shall be applied only to the new concrete provided for the reconstruction of the joints (top of deck slab, top and traffic face of parapet).
  - The Engineer shall determine extent, location and type of substructure and deck slab repairs in the field.
  - Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose 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 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 die penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that can not 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.

DESIGNED -	JSD
CHECKED -	DWH
DRAWN -	EF
CHECKED -	DWH

**LOCHNER**  
H.W. LOCHNER, INC., CHICAGO, ILLINOIS

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub.	Total
Concrete Removal	Cu. Yd.	25.7		25.7
Protective Shield	Sq. Yd.	873		873
Concrete Superstructure	Cu. Yd.	29.8		29.8
Bridge Deck Grooving	Sq. Yd.	791		791
Protective Coat	Sq. Yd.	83		83
Reinforcement Bars, Epoxy Coated	Pound	4,330		4,330
Bar Splicers	Each	52		52
Preformed Joint Strip Seal	Foot	240		240
Epoxy Crack Injection	Foot		200	200
Bridge Deck Microsilica Concrete Overlay, 2 1/2"	Sq. Yd.	770		770
Bridge Deck Hydro-Scarification, 1/2"	Sq. Yd.	770		770
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	5		5
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	39		39
Silicone Bridge Joint Sealer, 2"	Foot	66		66
Drainage Scuppers, DS-11	Each	2		2
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.		50	50

- Field welding of construction accessories will not be permitted to beams or girders.
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Protective shielding shall be installed to insure that all electrical appurtenances below the bridge deck are adequately protected.

**ABBREVIATION LIST**

Abut.	Abutment	F/	Face of	R or Rad.	Radius
Alt.	Alternate	Ft.	Foot or Feet	RR	Railroad
		Fig.	Footing	Req'd	Required
				Rt.	Right
Bk.	Back	Gr.	Grade	Sht.	Sheet
Brg.	Bearing			Spa.	Spaces or Spacing
Btwn.	Between			Sq.	Square
B/	Bottom of	Jt.	Joint	S.S.	Stainless Steel
Bot.	Bottom			Std.	Standard
		L	Angle	Sta.	Station
CIP	Cast in Place	Lf.	Left	Stl.	Steel
CL	Centerline	Lg.	Long	St.	Street
Cts.	Centers	Max.	Maximum	Sym.	Symmetrical
Cl.	Clear	Min.	Minimum		
Conc.	Concrete	Nom.	Nominal	Temp.	Temporary
CJ	Construction Joint	N.T.S.	Not to Scale	Thk.	Thick
Const(r).	Construction	No(s).	Number(s)	T.B.D.	To be determined
				T/	Top of
Dia.	Diameter	Opp.	Opposite	Typ.	Typical
Ea.	Each			UNO	Unless Noted Otherwise
E	East	Pavt.	Pavement		
E/	Edge of	PL	Plate	VIF	Verify in Field
El. or Elev.	Elevation	P.C.	Precast		
Exist.	Existing	P.J.F.	Preformed Joint Filler		
Exp.	Expansion	P.J.S.	Preformed Joint Sealer	W	West
Exp.	Expressway	PGL	Profile Grade Line	W/	With
		Prop.	Proposed		

**INDEX OF SHEETS**

- GENERAL PLAN & ELEVATION
- STRUCTURAL NOTES, TOTAL BILL OF MATERIAL AND INDEX OF SHEETS
- TYPICAL SECTION THRU BRIDGE
- CONSTRUCTION STAGING DETAILS
- EXPANSION JOINT REMOVAL & REPLACEMENT PLAN
- EXPANSION JOINT REMOVAL & REPLACEMENT DETAILS I
- EXPANSION JOINT REMOVAL & REPLACEMENT DETAILS II
- EXPANSION JOINT REMOVAL & REPLACEMENT DETAILS III
- BAR SPLICER ASSEMBLY DETAILS
- DRAINAGE SCUPPER REMOVAL & REPLACEMENT PLAN
- DRAINAGE SCUPPER DETAILS
- TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- SCARIFICATION AND OVERLAY DETAILS

Bar Size	Min. Lap
#4	1'-8"
#5	2'-2"
#5*	3'-0"
#6	2'-7"
#6*	3'-7"
#7	3'-5"
#8	4'-6"

\* Top Horizontal Bar

**STRUCTURAL NOTES, TOTAL BILL OF MATERIAL AND INDEX OF SHEETS**  
**F.A.I. 94/ (EDENS EXPRESSWAY)**  
**OVER SKOKIE RIVER**  
**COOK COUNTY**  
**STATION 394+08.55**  
**STRUCTURE NO. 016-0102**

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