F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	130
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580

STRUCTURAL GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

As built plan information is provided For Information Only. Key dimensions have been clarified. Inclusion of these sheets does not relieve the contractor of any responsibility for verifying such dimensions as indecated in the note above. These plans are available from the Department as specified in the Special Provisions for existing plans.

Traffic is to be maintained during construction, see Roadway Plans for Stage Construction Details.

All new fasteners shall be high strength bolts. Holes shall be $^{13}/_{16}$" dia. for $^{3}/_{4}$" dia. bolts, unless otherwise noted, holes shall be $^{15}/_{16}$" dia. for $^{7}/_{8}$" dia. bolts, unless otherwise noted.

All new structural steel shall conform to AASHTO Classification M-270 Gr. 36, except for the new bearing plate steel and finger plates which shall be Gr. 50.

Roadway expansion guards shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

The roadway expansion plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.

Field welding of construction accessories will not be permitted to beams or girders.

Reinforcement bars shall conform to the requirements of ASSHTO M31 or M322 Gr. 60.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Calculated weight of Structural Steel used for item "Erecting Structural Steel" = 210,630 Lbs. and itemized as follows: S.N. 016-1110 = 64,360 Lbs.
S.N. 016-1111 = 51,450 Lbs.
S.N. 016-1113 = 62,650 Lbs.
S.N. 016-1117 = 32,260 Lbs.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All construction joints shall be bonded.

The joints are to be removed in stages. Before starting the removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

The Contractor shall exercise care during the removal of the existing joints to ensure that the slab, beams & diaphragms integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams & diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.

The Contractor shall exercise extra care during the cleaning of the existing downspouts not to damage the pipes. The contractor shall repair any damage(s) 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 the Full Deck Slab repairs as per direction of the Engineer and as shown on the plans.

The Contractor is required to reconnect new FPJ Troughs to the existing drainage system. It has been estimated that 5 feet of drain pipe will require removal and replacement. This includes any required connections. The quantity for the 7 finger plate joint locations has been included in the quantity of "Bridge Drainage System Repairs".

The Contractor may have to remove the Name Plate(s) that interfere with the parapet removal for the joint reconstruction. The Contractor shall reinstall the Name Plate(s) as directed by the Engineer. The cost of removal and reinstallation of the Name Plate(s) shall be included in the cost for "Concrete Removal" and "Concrete Superstructure".

For location of Detector Loops see General Plan & Elevation Sheets. The Detector Loop locations indicated are approximate. The Contractor shall verify the exact locations and shall reference the Traffic System Center Sheets for the work required for the Detector Loops.

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).

DESIGN DATA

Design Specifications: 2002 AASHTO
Desing Loading: HS20

DESIGN STRESSES

f'c = 3500 psi
fy = 60,000 (Reinforcement)

MIN BAR LAPS

#5 : 2'-2"
#6 : 2'-7"
#7 : 3'-6"

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
NB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
STRUCTURAL
GENERAL NOTES

SCALE: N/A
DRAWN BY: BDC
DATE:10/14/2005
CHECKED BY: BLU