## STRUCTURAL NOTES

Class SI Concrete shall be used in the Abutments and Piers.

Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered during construction.

Masonry material salvaged from the existing structure shall not be reused and shall be disposed of off site by the Contractor.

Riprap required to meet the limits shown on the plan shall be paid for as Riprap and shall be arouted. See Special Provisions.

Fasteners shall be high strength bolts. Bolts  $^3\!4''$   $\phi$  , open holes  $^1\!\!B_{\rm fb}$  "  $\phi$  , unless otherwise noted.

Calculated weight of Structural Steel= 67,933 lbs. (M270 Gr. 50W),

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

Anchor bolts shall be set before bolting diaphragms over supports.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions. This note supercedes notes on Abutment and Pier Sheets.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  ${}^{l}_{B}$  inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Two  ${}^{l}_{B}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all ather plates or shims.

The contractor shall drive 4 test piles in a permanent location, one at each abutment and one at each pier as directed by the Engineer before ordering the remainder of piles.

The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All construction joints shall be bonded.

Reinforced bars designated (e) shall be epoxy coated.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

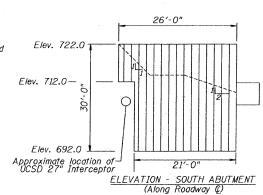
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

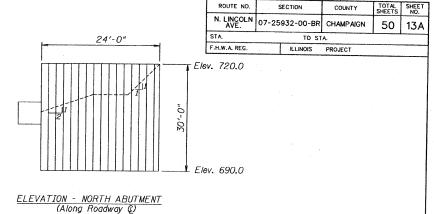
The Contractor is advised that the existing precast deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of heavy equipment on the existing beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

Wherever in the plans or specifications the term Standard Specifications is used, it shall be understood by the contractor to mean the Standard Specifications for Road and Bridge Construction as prepared by the Department of Transportation of the State of Illinois and adopted January 1, 2007.

The Contractor shall locate the 27" UCSD interceptor sewer South of the South abutment prior to driving temporary sheet piling and adjust sheet piling dimensions as necessary with the approval of the Engineer. If the Contractor exposes the interceptor, he shall notify UCSD 48 hours prior to any work in this area. Cost of locating the UCSD interceptor sewer and adjustments to the sheet piling are included with the cost of Temporary Sheet Piling and no other compensation will be allowed.





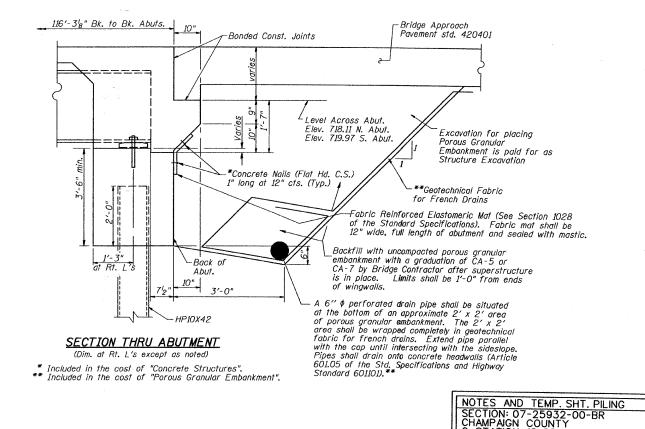
CONTRACT NUMBER 91402

## TEMPORARY SHEET PILING DETAILS FOR STAGE CONSTRUCTION

Contractor to anchor sheeting to back of existing abutment wall, connection to be approved by the Engineer. Cost is included with "Temporary Sheet Piling".

TEMPORARY SHEET PILING

South Abutment = 680 Sq.Ft. (Min.  $Sx = 20in^3/ft$ ) North Abutment = 720 Sq.Ft. (Min.  $Sx = 20in^3/ft$ ) Total = 1400 Sq. Ft.



NORTH LINCOLN AVE.

SECTION 07-25932-00-BR

CHAMPAIGN COUNTY

| Q STATION 10+00 | SHEET 13A OF 50 SHEETS

06156