| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| FAI 72<br>FAU 8071 | * | SANGAMON | 559 | 321 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT- | |

SHEET NO. 02
21 SHEETS

*(84-9-4)A,HBK,BY,BY-1 Contract No 72541

## GENERAL NOTES

Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$'' $\phi$, open holes $\frac{15}{16}$'' $\phi$, unless otherwise noted.

Calculated weight of Structural Steel: AASHTO M 270 Grade 50 = 165090 lbs.

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

Anchor bolts shall be set before bolting diaphragms over supports.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

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 and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

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 $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$'' adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

The Contractor shall drive one test pile in a permanent location at each substructure as directed by the Engineer before ordering the remainder of piles.

Concrete Sealer shall be applied to the seat area of the Abutments.

All Construction joints shall be bonded.

The Inorganic zinc rich primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green Munsell No. 7.5G 4/8. See Special Provisions for "Cleaning and Painting New Metal Structures".

No deck drains will be permitted in the span over tracks or within 10' of crossarms of a railroad pole line.

An unconfined compressive strength of 1.5 tons is required during placement of embankment material.

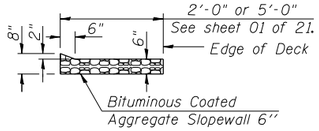
The piles at the abuments shall be driven through 18'' $\phi$ pre-cored holes extending to Elev. 600.5 at the E. Abut. and 600.7 at the W. Abut. or to the present ground elevation or whichever occurs first. The annular spacing around the pile shall then be backfilled with dry loose sand. The cost of complying with these requirements shall be included with driving steel piles.

Drains shall be located clear of all diaphragms.

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

The Steel H-piles shall be according to AASHTO M270 Grade 50.

The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.




SECTION A-A




Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

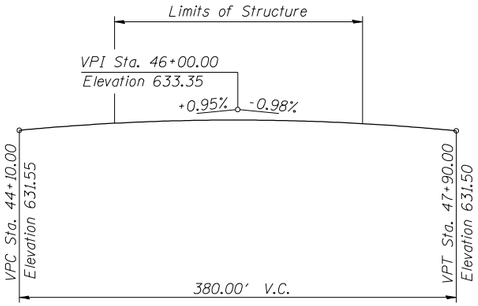
SECTION THRU ABUTMENT AND SLOPE WALL
(Dimensions at Rt. <'s to Bk. of Abutment)

## INDEX OF SHEETS



STATION 46+01.97
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. 72 SEC. (84-9-4)A,HBK,BY,BY1
LOADING HS20-44
STR. NO. 084-0516

NAME PLATE
See Std. 515001




PROFILE GRADE
(Along Ramp C)

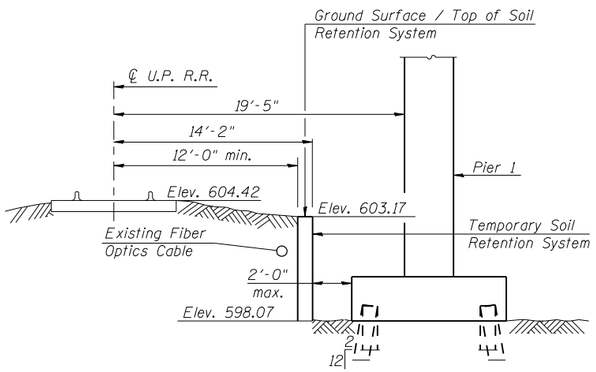
| West Rail | | East Rail | |
|---|---|---|---|
| Station | Elevation | Station | Elevation |
| 0+00.00 | 605.31 | 0+00.03 | 605.33 |
| 0+67.95 | 605.32 | 0+67.76 | 605.35 |
| 1+83.47 | 605.26 | 1+83.48 | 605.25 |
| 2+80.82 | 605.24 | 2+80.71 | 605.24 |
| 3+81.80 | 605.12 | 3+81.74 | 605.13 |
| 4+81.65 | 605.26 | 4+81.69 | 605.24 |
| 5+78.38 | 605.39 | 5+78.51 | 605.36 |

EXISTING TOP OF RAIL ELEVATIONS UP R.R.

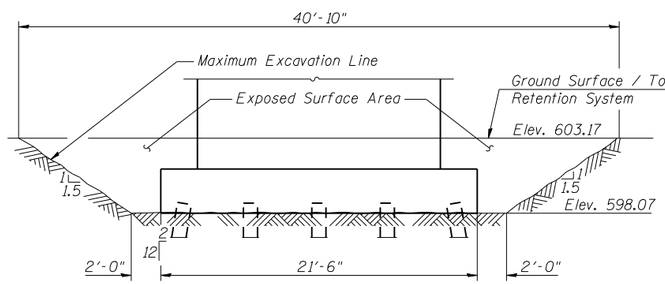
Note:
The elevations of the existing top-of-rail profile shall be verified before beginning construction. All discrepencies shall be brought to the attention of the Chief Engineer Bridges and Structures.

## TOTAL BILL OF MATERIAL

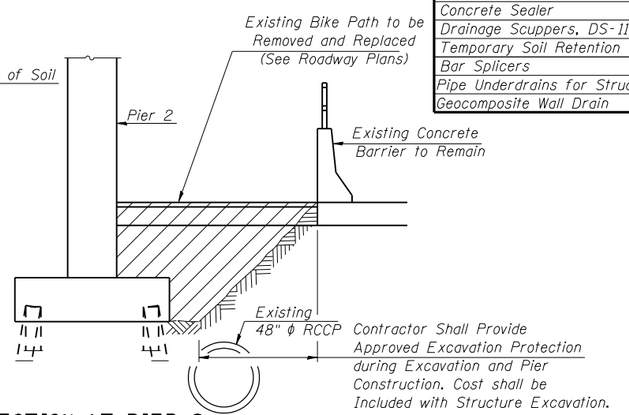
| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---|---|---|---|
| Porous Granular Embankment, Special | Cu. Yd. | - | 94 | 94 |
| Structure Excavation | Cu. Yd. | - | 399 | 399 |
| Floor Drains | Each | 4 | - | 4 |
| Neoprene Expansion Joint 2" | Foot | 60.5 | - | 60.5 |
| Concrete Structures | Cu. Yd. | - | 307.1 | 307.1 |
| Concrete Superstructure | Cu. Yd. | 214.4 | - | 214.4 |
| Bridge Deck Grooving | Sq. Yd. | 595 | - | 595 |
| Protective Coat | Sq. Yd. | 856 | - | 856 |
| Elastomeric Bearing Assembly, Type II | Each | 10 | - | 10 |
| Furnishing and Erecting Structural Steel Bridge No. 4 | L. Sum | 1 | - | 1 |
| Stud Shear Connectors | Each | 3690 | - | 3690 |
| Reinforcement Bars, Epoxy Coated | Pound | 51660 | 44700 | 96360 |
| Slope Wall 4'' | Sq. Yd. | - | 36 | 36 |
| Bituminous Coated Aggregate Slopewall 6" | Sq. Yd. | - | 464 | 464 |
| Furnishing Steel Piles HP10x57 | Foot | - | 1475 | 1475 |
| Driving Piles | Foot | - | 1475 | 1475 |
| Test Pile Steel HP10x57 | Each | - | 5 | 5 |
| Name Plates | Each | 1 | - | 1 |
| Concrete Sealer | Sq. Ft. | - | 177 | 177 |
| Drainage Scuppers, DS-11 | Each | 2 | - | 2 |
| Temporary Soil Retention System | Sq. Ft. | - | 169 | 169 |
| Bar Splicers | Each | - | 57 | 57 |
| Pipe Underdrains for Structures 4" | Foot | - | 79 | 79 |
| Geocomposite Wall Drain | Sq. Yd. | - | 45 | 45 |




SECTION AT PIER 1
Distances shown perpendicular to ℄ U.P. R.R.




ELEVATION AT PIER 1
Slopes and distances shown along alignment of sheeting and pier.




SECTION AT PIER 2

TEMPORARY SOIL RETENTION SYSTEM DETAILS

| | | |
|---|---|---|
| LAYOUT | MNM | 06/21/03 |
| DRAWN | DAP | 01/04/05 |
| REVIEWED | JNM | 02/24/05 |

$FILE$
12/16/2006

Corporate License Number 184-001-084

GENERAL NOTES & BILL OF MATERIAL
I-72/MACARTHUR BLVD. RAMP C OVER UPRR
SECTION (84-9-4)A,HBK,BY,BY-1
SANGAMON COUNTY
STATION 46+01.97
STRUCTURE NUMBER 084-0516



HANSON

JOB* 96S2002B

DATE: 11/16/05