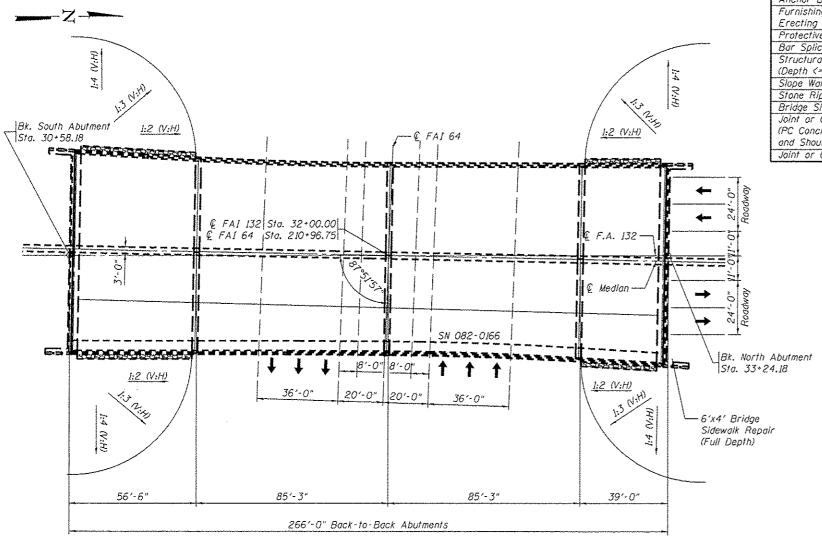
## Elev. 438.97 Break up Congrete Slopewall & leave Elev. 414.50 in place, riprap Pier 1

#### **ELEVATION**



## TOP PLAN

REVISED -

REVISED -

REVISED

REVISED

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DESIGNED - MBH

CHECKED - SJH

MBH

- 5.114

DRAWN

CHECKED

BENTON & ASSOCIATES, INC.

USER NAME .

PLOT SCALE =

PLOT DATE +

FILE NAME = Pr\ 10e2166-2\ Design\

Plans\ Ø82-Ø166

0020166-76022-001-GPE.dgn

## ORIGINAL DESIGN STRESSES

## FIELD UNITS

f'c = 1,400 psi (Piers and Supersstructure) f'c = 1.000 psi (Substructure w/ Earth Pressure) fy = 20,000 psi (Reinforcement)

fy = 20,000 psi (Structural Steel A36)

n = 10 N = 75 psi

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## INDEX OF SHEETS

General Plan & Elevation Staging 2-3 Temporary Concrete Barrier For Stage Construction Deck Repairs Concrete Removal & Replacement 6-7 1. Preformed Joint Strip Seal Substructure Repairs Bearing Details Bar Splicer Assembly Details

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	24.7
Concrete Superstructure	Cu. Yd.	24.5
Jack and Remove Existing Bearings	Each	14
Reinforcement Bars. Epoxy Coated	Pound	3460
Preformed Joint Strip Seal	Foot	182
Elastomeric Bearing Assembly. Type II	Each	14
Anchor Bolts, 1'4"	Eoch	28
Furnishing and Erecting Structual Steel	Pound	1740
Protective Shield	Sq. Yd.	34
Bar Splicers	Each	48
Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	325
Slope Wall Removal	Sq. Yd.	964
Stone Riprap, Class A4	Sq. Yd.	964
Bridge Sidewalk Repair	Sq. Ft.	24
Joint or Crack Routing (PC Concrete Pavement and Shoulder)	Ft.	266
Joint or Crack Filling	Pound	2200

# Structure R 9 W 3rd, P.M.

LOCATION SKETCH

#### GENERAL NOTES

- All new structural steel shall conform to AASHTQ Classification M270 Gr. 36 unless otherwise noted.
- Fasteners shall be AASHTO MI64 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts  $\frac{7}{8}$ , holes  $\frac{15}{16}$ ,  $\frac{19}{9}$ , unless
- No field welding is permitted except as specified in the contract documents.
- 4. Reinforcement bars designated (E) shall be epoxy coated.
- 5. 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.
- 6. 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 qualified personnel approved by the Engineer. Any cracks that can not be removed by grinding 4 in, deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing weided accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109,04 of the Standard Specifications.
- 7. Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.
- 8. 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.
- Joint openings shall be adjusted according to Article 520.04 of the Standard Specs. when the deck is poured at an ambient temperature other than 50° F.
- 10. Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.
- 11. All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300. Type 1. Color to match existing. Cost included with Furnishing and Erecting Structural Steel.
- 12. The existing structural steel contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 13. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provisions "Cleaning & Painting Contact Surface Areas of Existing Steel Structures".

MALDH. 081-004623 LICENSED STRUCTURAL ENGINEER

GENERAL PLAN & ELEVATION F.A. 132 (IL 111) OVER F.A.I. RTE. 64 - SEC. 82-3HB-1 ST. CLAIR COUNTY US 64 STA. 210+96.75 IL 111 STA. 32+00.00

SECTION COUNTY TOTAL SHEE 64 82-3HB-1 ST. CLAIR 208 187 CONTRACT NO. 76D22 FEO. ROAD DIST. NO. 8 | ILLINOIS FED. AID PROJECT

**GENERAL PLAN & ELEVATION** STRUCTURE NO. 082-0166 SHEET NO. 1 OF 11 SHEETS