

INDEX OF SHEETS

General Plan & Elevation	1
Staging	2-3
Temporary Concrete Barrier For Stage Construction	4
Deck Repairs	5
Concrete Removal & Replacement	6-7
Preformed Joint Strip Seal	8
Substructure Repairs	9
Bar Splicer Assembly Details	10

GENERAL NOTES

- All new structural steel shall conform to AASHTO Classification M270 Gr. 36 unless otherwise noted.
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts $\frac{1}{8}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- 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 $\frac{1}{4}$ " in. 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.
- 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.
- 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.
- Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.
- The existing structural steel contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 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.
- 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".

ORIGINAL DESIGN STRESSES

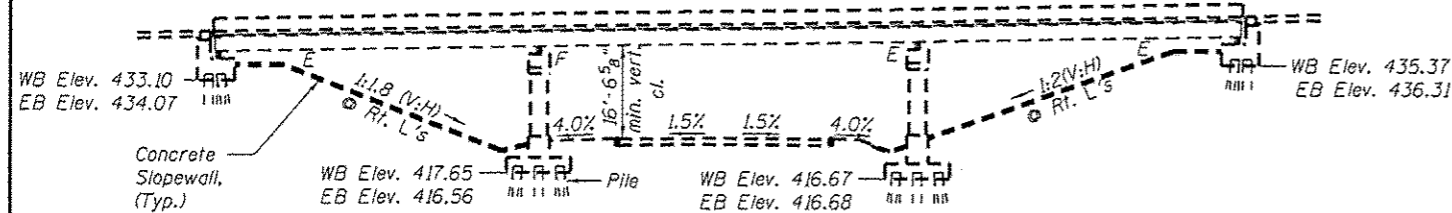
FIELD UNITS

$f'_c = 1,400$ psi (Piers and Superstructure)
 $f'_c = 1,000$ psi (Substructure w/ Earth Pressure)
 $f_y = 20,000$ psi (Reinforcement)
 $f_y = 20,000$ psi (Structural Steel A36)
 $n = 10$
 $N = 75$ psi

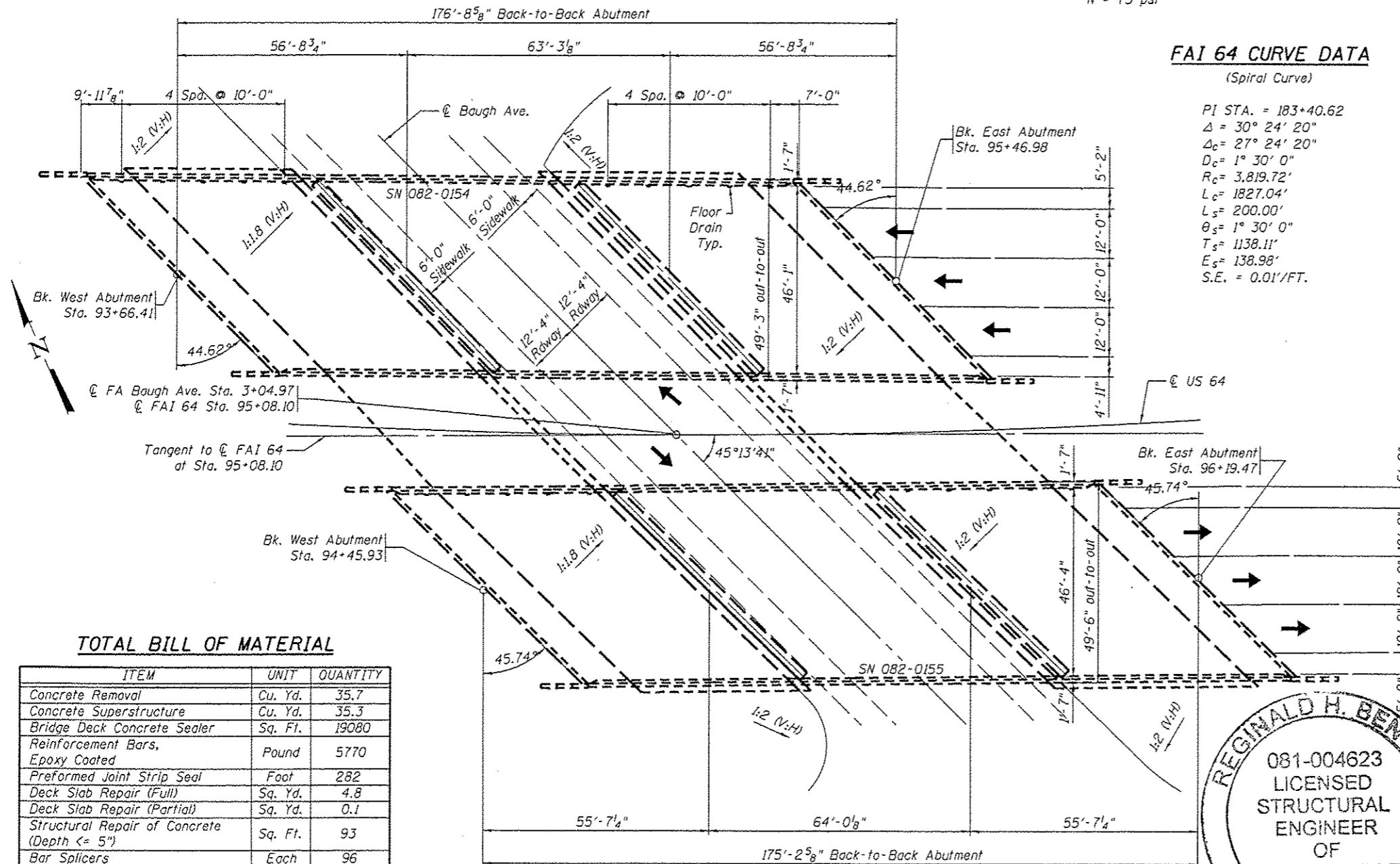
FAI 64 CURVE DATA

(Spiral Curve)

PI STA. = 183+40.62
 $\Delta = 30^\circ 24' 20"$
 $\Delta_c = 27^\circ 24' 20"$
 $D_c = 1^\circ 30' 0"$
 $R_c = 3,819.72'$
 $L_c = 1827.04'$
 $L_s = 200.00'$
 $\theta_s = 1^\circ 30' 0"$
 $T_s = 1138.11'$
 $E_s = 138.98'$
 $S.E. = 0.01'/FT.$



ELEVATION

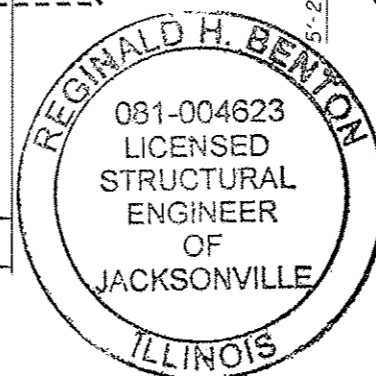


PLAN

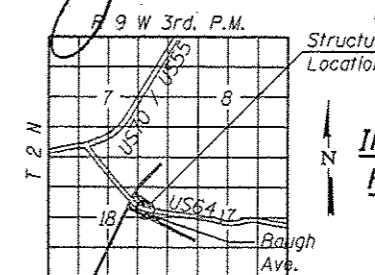
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	35.7
Concrete Superstructure	Cu. Yd.	35.3
Bridge Deck Concrete Sealer	Sq. Ft.	19080
Reinforcement Bars, Epoxy Coated	Pound	5770
Preformed Joint Strip Seal	Foot	282
Deck Slab Repair (Full)	Sq. Yd.	4.8
Deck Slab Repair (Partial)	Sq. Yd.	0.1
Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	93
Bar Splicers	Each	96
Furnishing and Erecting Structural Steel	Pound	3160
Anchor Bolts, 1"	Each	64

BENTON & ASSOCIATES, INC.



Reginald H. Benton
 10/3/13 Exp 11/30/14



GENERAL PLAN & ELEVATION
INTERSTATE 64 OVER BAUGH AVE.
F.A.I. RTE. 64 - SEC. 82-1HB1-3
ST. CLAIR COUNTY
US 64 STA. 95+08.103
BAUGH AVE. STA.