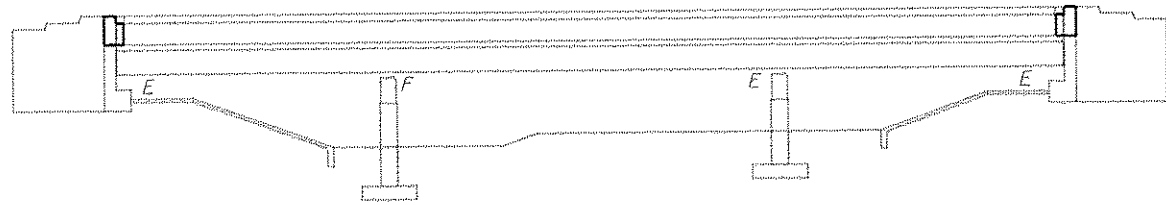
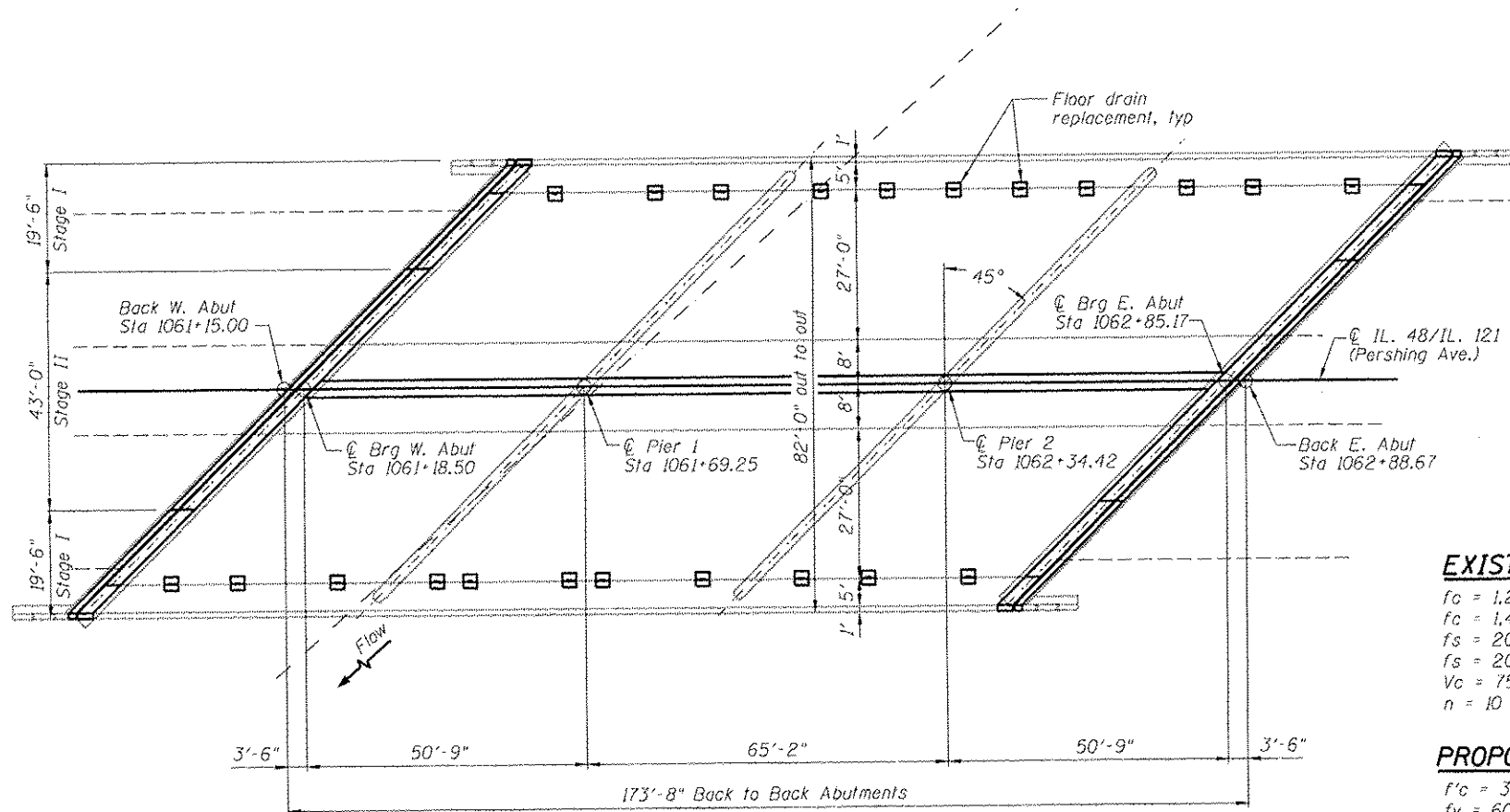


Existing Structure:
 SN 058-0050 built in 1971. Section 135 BR-1. Structure consists of 3 spans with an 8" deck on W33x141 beams supported by stub abutments and solid wall piers on timber piles.
 In 2005 the structure was rehabilitated. Repairs included deck drain removal, 2 1/4" microsilica overlay, deck patching and bearing replacement.



ELEVATION



PLAN

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 Construction Staging Details
- 3 Expansion Joint Replacement Details
- 4 Expansion Joint Replacement Details
- 5 Expansion Joint Replacement Details
- 6 Expansion Joint Replacement Details
- 7 Longitudinal Joint Replacement Details
- 8 Longitudinal Joint Replacement Details
- 9 Deck Drain And Rail Post Details
- 10 Preformed Joint Strip Seal
- 11 Structural Steel Repair Details
- 12 Bar Splicer Assembly and Mechanical Splicer Details
- 13 Temporary Concrete Barrier For Stage Construction

GENERAL NOTES:

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.

Fasteners shall be ASTM A325 Type I, mechanically galvanized bolts. Bolts 3/4" ϕ , holes 13/16" ϕ , unless otherwise noted.

All structural steel shall be AASHTO M 270 Grade 36.

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.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using 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 Specifications when the deck is poured at an ambient temperature other than 50° F.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be Interstate Green, Munsell No. 7.5G 4/8.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

Removal and reinstallation of the name plate attached to the structure will be necessary for construction of the expansion joints. This work and all materials shall be included in the contract unit price for Concrete Superstructure.

Removal and replacement of a portion of the sidewalk will be necessary to remove or replace the existing deck drains. This work and all materials shall be included in the contract unit price for Deck Slab Repair (Full Depth, Type II).

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	62.5
Concrete Superstructure	Cu. Yd.	62.5
Deck Slab Repair (Full Depth, Type II)	Cu. Yd.	15.4
Furnishing and Erecting Structural Steel	Pound	3220
Preformed Joint Strip Seal	Foot	235
Bar Splicers	Each	44
Floor Drains	Each	22
Reinforcement Bars, Epoxy Coated	Pound	12440
Structural Repair of Concrete (Depth < 5")	Sq. Ft.	150
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	338
Structural Steel Removal	Pound	3220

EXISTING DESIGN STRESSES

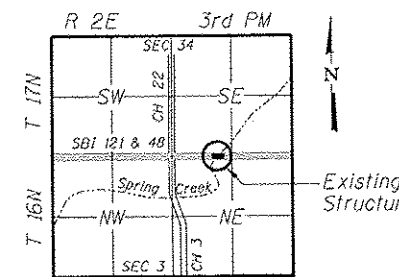
$f_c = 1,200$ psi (deck slab)
 $f_c = 1,400$ psi (curb, parapet, slab)
 $f_s = 20,000$ psi (reinf)
 $f_s = 20,000$ psi (struct)
 $V_c = 75$ psi (footings)
 $n = 10$

PROPOSED DESIGN STRESSES

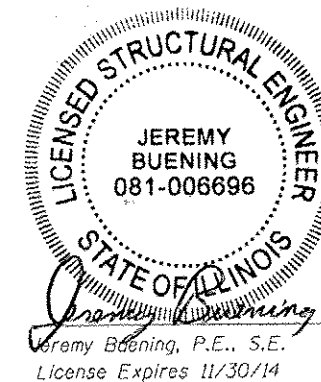
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (structural steel)

SCOPE OF WORK

1. Remove and replace abutment expansion joints with Preformed Joint Strip Seal.
2. Closure of longitudinal joint.
3. Remove and replace 8 steel end diaphragms.
4. Remove and replace all floor drains.
5. Median curb concrete repair.



LOCATION SKETCH



Jeremy Buening, P.E., S.E.
 Date 8/21/14
 License Expires 11/30/14

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 058-0050

SHEET NO. 1 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	1126XRS-2,135RS-1	MACON	119	99
	SN. 058-0050			CONTRACT NO. 74624

CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

USER NAME = jbuening
 PLOT TIME = 10:24:12 AM
 PLOT SCALE = 32,8000 1" = 32.8'
 PLOT DATE = 8/21/2014

DESIGNED - JMB
 CHECKED - ACB
 DRAWN - RLK
 CHECKED - JMB

REVISED -
 REVISED -
 REVISED -
 REVISED -

FILE NAME: I:\BDD\18289 - 87 Var - Var-Work Order - 3 - IL 121 Resurfacing\CH020.Structural\18289.dgn