Existing Structure: SN 099-0062

The existing structure is a three span composite steel wide flange beam bridge. The beams support a 7" reinforced concrete slab and a 2" thick waterproof membrane system and polymerized bituminous concrete surface course. The substructure consists of reinforced concrete stub abutments founded on steel piles and multi-column piers founded on spread footings. The structure was originally constructed in 1964 as FAI Route 80, Section 99-48-1 and rehabilitated in 1990, 1998, and 2001.

Staging:
Traffic shall be maintained using staged
construction.

Salvage:
None

Exp | Fix | Exp | Repair Concrete (Typ.)

Repair Concrete (Typ.)

ELEVATION

# Remove & Replace Overlay & Repair Deck € FAI 80-651+00 652+00 654+00 Replace Joint, (Typ.)Replace Joint -(Typ.) Back SW Abut © Pier 3 Sta. 651+25.9 Sta. 652+14,88 Back SE Abut Sta. 653+02.38 Sta. 653+91.34 87'-6 86'-11'2 Span 4 Span 5 Span 6 265'-5" Back to Back of Abutments

PLAN

## TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	1,240		1,240
Deck Slab Repair (Partial)	Sq. Yd.	359		359
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	10		10
Deck Slab Repair (Full Depth, Type II).	Sq. Yd.	128	-	128
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, N80	Ton	140	adia dana mana di di 1999	140
Silicone Joint Sealer, 1"	Foot	54		54
Silicone Joint Sealer, 2.75"	Foot	163		163
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq. Ft.		1,020	1,020
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.		230	230
Temporary Shoring and Cribbing	Each	Programmer such	4	4
Protective Shield	Sq. Yd.	1,461		1,461

# SCOPE OF WORK

- 1. Remove the existing 2"± thick polymerized bituminous concrete surface course and replace it with a 2"± thick polymerized hot-mix asphalt surface course.
- 2. Perform partial and full depth repairs of the bridge deck,
- 3. Perform structural repairs on the abutments and the piers.
- 4. Replace the existing preformed joint sealers at the abutments and piers with silicone joint sealers.
- 5. Provide temporary shoring of existing fascia beams for repairs at Pier 4.

#### DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th, Edition.

#### DESIGN STRESSES

f'c = 3,500 psi fy = 60,000 psi

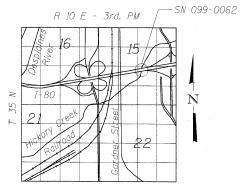
# GENERAL NOTES

- 1. Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.
- 2. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. Contractor should verify dimensions and make necessary approved adjustments prior to starting construction. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for actual quantity furnished and approved by Engineer at unit price bid for the work.
- 3. Areas of proposed repairs are estimated. Actual type, location and dimensions are to be determined by the Engineer during construction.
- 4. Contractor shall remove the existing asphalt wearing surface and, as necessary, adjust the milling depth to prevent damage to the existing waterproofing membrane system. After satisfactory completion of the deck repair work, an asphalt surface course shall be placed in sufficien thickness as to match the elevation of the original surface.
- 5. Protective shield shall be installed prior to any deck slab repair work.

  Protective shield required for environmentally sensitive creek.
- 6. Substructure repairs shall be done under staging when no live load is present over repair area.

## INDEX OF SHEETS

- S-1 General Plan & Elevation, Notes & Total Bill of Material
- S-2 Construction Staging
- S-3 Deck & Expansion Joint Repairs
- S-4 Abutment Repairs
- S-5 Pier 3 Repairs
- S-6 Pier 4 Repairs
- S-7 Temporary Concrete Barrier for Stage Construction



LOCATION SKETCH

	DESIGNED PCA	REVISED -
USER NAME = Isupencheck	DRAWN - RCW	REVISED -
PLOT SCALE = 10:1	CHECKED - ACF / PCA	REVISED
PLOT DATE = 19-JAN-2011	DATE - 01/21/2011	REVISED - '
FILE NAME = IP_PWP:dms34575\0996	0062-60M64-001-GPE.DGN	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION, NOTES & TOTAL BILL OF MATERIAL EASTBOUND FAI-80 OVER HICKORY CREEK STRUCTURE NO. 099-0062

SHEET NO. S-1 OF 7 SHEETS

PHILIP C

AZZARELLO

081-004245

1-19-11

11/30/2012

S-1 thru 7

Signed:

Date:

Exp:

Sheets:

F.A.I. SECTION							COUNTY TOTAL SHEETS		SHEET NO.	
80		99	9 (2	83	) RS-3			WILL	200	164
								CONTRACT	NO. 6	50M64
FED.	ROAD	DIST.	NO.	1	ILLINOIS	FED.	AID	PROJECT		

MENT OF TRANSPORTATION