Existing Structures:

Dual bridges over Richards Street, S/N 099-0064 carrying I-80 Eastbound and S/N 099-0065 carrying I-80 Westbound, were originally constructed in 1961 as a part of F.A.I. 80 Project, I-80-4(38)134, Section 99-4HB-1. The superstructures consist of 3 simple spans of steel wide flange beam units. The 7-inch thick deck is supported on reinforced concrete piers and abutments with footings that extend a minimum of one foot into solid rock. In 1990 and 1998 repairs were made to the decks, abutments, piers, deck joints, rail and drainage system. In 2001, repairs were made to deck and expansion joints; a new 2" polymerized bituminous concrete overlay with waterproofing membrane was installed.

--- € Pier 3

80'-0"±

Limits of Protective Shield (Permanent)

— € Richard Str.

662+00

I-80 Sta. 661+56.90

€ Richard Str.

Richard Str. Sta. 40+00

(See General Note 5)

ELEVATION

82'-25"

Span 2

166'-11'2" Back to Back Abutments

PLAN

Traffic shall be maintained utilizing stage construction.

Structural Repair of Concrete -

(Typ. at Piers and Abutments)

661+00

Replace Exist. Joint-

with Silicone Joint

Segler, 2

Bk. SW Abut.

Sta. 660+96.21

LEGEND

 \oplus

1'-104"

→ Bk. SW Abut.

PC Sta. 661+56.90

Permanent:

Protective

Shield

No salvaae.

INDEX OF SHEETS

- S1. General Plan, Notes, and Total Bill of Material S2. Construction Staging
- Deck, Approach Slab, and Expansion Joint Repairs
- S4. Abutment and Pier Repairs S5. Permanent Protective Shield
- S6. Temporary Concrete Barrier for Stage Construction
- SCOPE OF WORK:
- . Remove existing Hot-Mix Asphalt Overlay. 2. Install Protective Shield.
- Repair Deck Slab.
- Repair Approach Slab.
- Remove and replace deck joints with Silicone Joint Sealer.
- 6. Install Temporary Beam Shoring. 7. Repair structural concrete at Abutments and Piers.
- 8. Construct Hot-Mix Asphalt Overlay.

GENERAL NOTES:

- Reinforcement bars shall conform to the requirements of ASTM A 706 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 deck repairs are estimated. Actual type, location and dimension of deck repairs 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. After satisfactory completion of the deck repair work, an asphalt surface course shall be placed in sufficient thickness as to match the elevation of the original surface.
- 5. Protective shield shall be installed prior to start of Deck Slab Repair work.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges. 17th Edition

DESIGN STRESSES

SN 099-0065

WB Roadway

FIELD UNITS: f'c = 3,500 psi fy = 60,000 psi (Reinforcement)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, N80	Ton	62	-	62
Protective Shield (Permanent)	Sq. Yd.	284	-	284
Approach Slab Repair (Partial Depth)	Sq. Yd.	14	No.	14
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	548	-	548
Structural Repair of Concrete (Depth =< 5")	Sg. Ft.	-	193	193
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	-	188	188
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	35		35
Deck Slab Repair (Partial)	Sq. Yd.	103	-	103
Silicone Joint Sealer, 1"	Foot	75		75
Silicone Joint Sealer, 2"	Foot	38	-	38
Silicone Joint Sealer, 2 ³ 4"	Foot	38	-	38
Temporary Shoring and Cribbing	Each	5	-	5

Manuella SIGNED.

02/08/2011 FXP11/30/2012

SHEETS: S1 THRU S6

SCALE:

Range 10E - 3rd. PM 099-0064 LOCATION SKETCH

JSER NAME = ayargıcoglu(Rdwy_Lisle)	DESIGNED	-	A.Y./L.C.	REVISED	-
PLOT CONFIG= PDF(I-80_TopoGrey_Large).pl	DRAWN	~	L.C./A.Y.	REVISED	-
PLOT SCALE = 1:16	CHECKED	~~	A.Y./R.L.D.	REVISED	-
PLOT DATE = 2/8/2011	DATE	-	01/21/2011	REVISED	=

Replace Exist, Joint -

39'-11'4'

Span 1

with Silicone Joint Sealer, 1"

Temporary Shoring and Cribbing

Protective Shield (Permanent)

HB P

—— € Pier 4

5'-0" Typ.

Ea. Side of Rdwy

-£ I-80

- Deck Slab

Repair

© Pier 4

Sta. 662+20.21

-Replace Exist. Joint

with Silicone Joint.

Sealer, 23₄"

41'-138"

Span 3

.-- Bk. SE Abut.

— Crown of Roadway

Replace Exist. Joint

-Bk. SE Abut. Sta. 662+63.17

-£ SN 099-0064

-Existing 20 ft. Approach

EB Roadway -Appr. Slab Repair

Slab (Typ. Ea. End)

(Ea. End)

Measured along ∉ I-80

with Silicone Joint

.... Sealer, 1"

1'-1018"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	GENERAL PLAN, NOTES, AND TO		AL F.	A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
EASTBOUND I-80 OVER RICHARDS STREET			80	99 (2&3) RS-3	WILL	200	171	
	SN 099-00	64				CONTRACT	NO. 6	0М64
:	SHEET SI OF S6	STA. TO ST	ΓA. F	FED. ROAD D	IST. NO. 1 ILLINOIS FED. AI	D PROJECT		

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