

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
FAI ROUTE 70 (I-55/64/70)
POPLAR STREET BRIDGE APPROACHES
SECTION 82-3HVB-3R-3
PROJECT IM-70
PLANS FOR PROPOSED
ROADWAY REHABILITATION
ST. CLAIR COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	*	ST. CLAIR	111	68
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - IM-70		

* 82-3HVB-3R-3 SHEET S-1 OF S-44
 CONTRACT NO. 76305

**SET 2 OF
2 SETS**

ENCOMPASSING THE FOLLOWING ROADWAYS

- SN-082-0142 (RAMP S)
- SN-082-0254 (ROADWAY G)

LOADING HS20-44

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.12g
 Site Coefficient (S) = 1

DESIGN SPECIFICATIONS

2002 AASHTO
 1995 Seismic Retrofitting Manual for
 Highway Bridges FHWA-RD-94-052

HIGHWAY CLASSIFICATION

F.A.I. Route 70 - Poplar Street Complex
 Functional Class: Collector - Distributor
 Roadways
 A.D.T.: 990 (2005)
 D.H.V.: 100
 Design Speed: 50 mph
 Posted Speed: 50 mph

DESIGN STRESSES

FIELD UNITS (ORIGINAL)

f_c = 1,400 psi
 (Super-, and Sub-structures)
 f_s = 20,000 psi (A36 Structural Steel)
 f_s = 20,000 psi (Reinforcement)
 f_y = 40,000 psi (Reinforcement)

FIELD UNITS (Previous Repair)

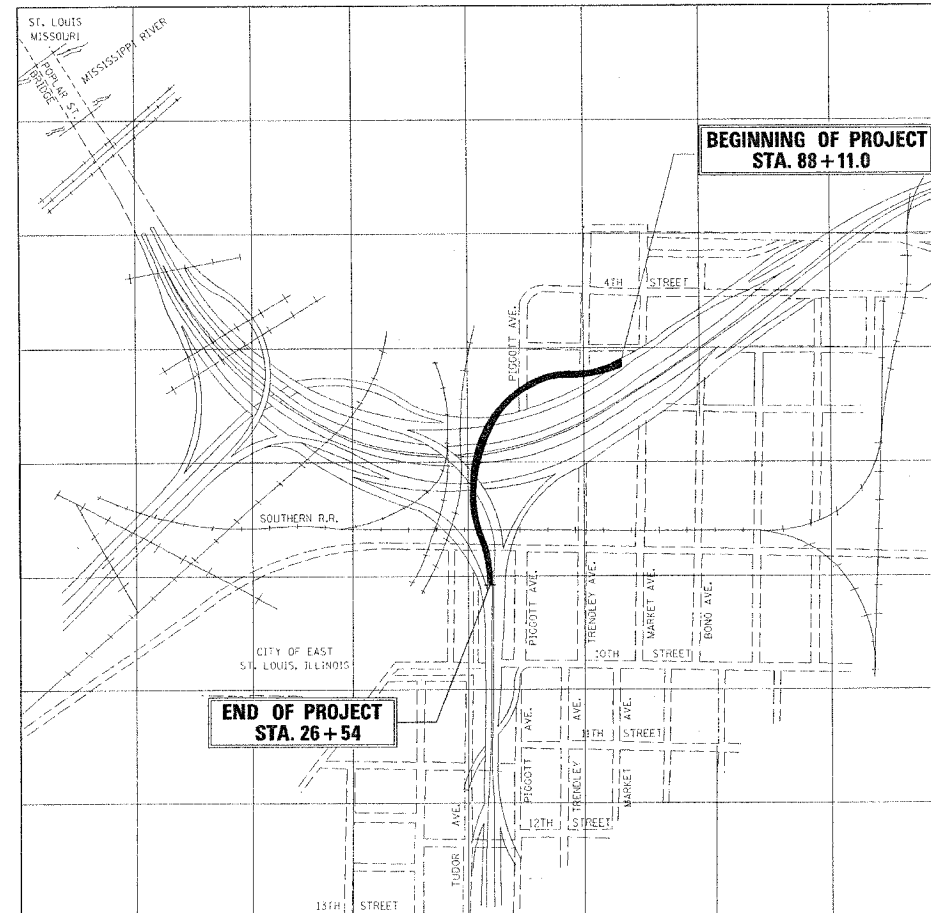
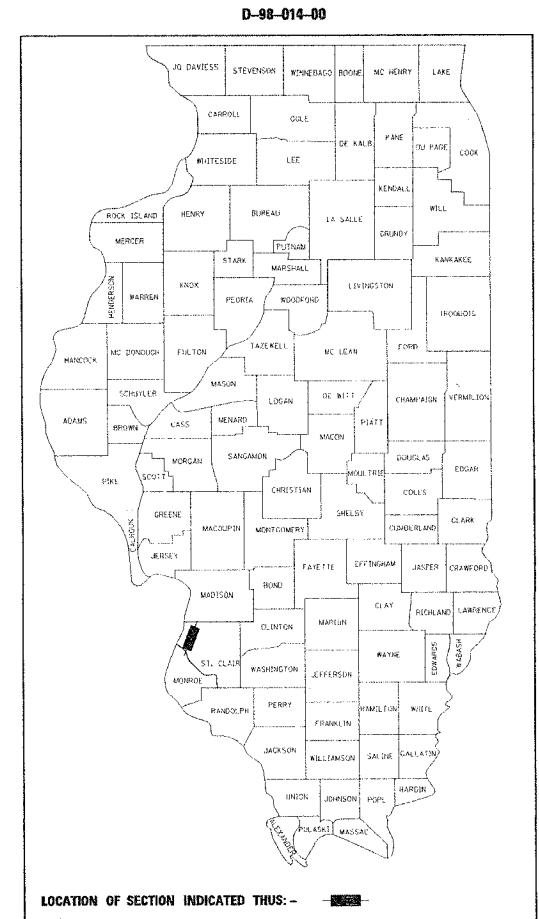
f_c = 3,500 psi
 f_y = Varies, 36,000 - 50,000 psi
 (Structural Steel)
 f_y = 60,000 psi (Reinforcement)

FIELD UNITS (NEW)

f_c = 4,000 psi
 f_y = 36,000 psi (M270 Grade 36)
 f_y = 50,000 psi (M270 Grade 50)
 f_y = 70,000 psi (M270 Grade HPS 70W)
 f_y = 60,000 psi (Reinforcement)

INDEX OF DRAWINGS

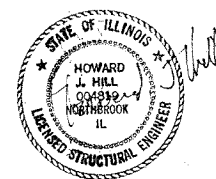
SHEET(S)	TITLE
S1	TITLE SHEET - RAMP S AND ROADWAY G
S2	GENERAL NOTES
S3	SCOPE OF WORK
S4	KEY PLAN
S5	TOTAL BILL OF MATERIAL
S6 - S8	PROJECT PLAN, ELEVATION, AND SECTIONS
S9 - S13	TABLES OF ROADWAY ELEVATIONS
S14 - S22	DECK AND PARAPET REPAIR PLANS
S23 - S31	INFRARED THERMOGRAPHIC MAPPING RESULTS
S32 - S34	CONCRETE PARAPET DETAILS
S35	CONCRETE REPAIR DETAILS
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S39 - S41	DECK DRAINAGE DETAILS
S42	STEEL PAINTING DETAILS
S43	BEARING REPLACEMENT DETAILS
S44	FATIGUE RETROFIT DETAILS



LOCATION PLAN

CONTRACT NO. 76305

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 License Expires: 11/30/06



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 27, 2006
May Chornie
 DEPUTY DIRECTOR OF HIGHWAYS
 REGION FIVE ENGINEER

 20
 ENGINEER OF DESIGN AND ENVIRONMENT

 20
 DIRECTOR, DIVISION OF HIGHWAYS

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