

Benchmarks: MRC Horizontal/Vertical Control Monument No. 8 (Elevation 401.95) Aluminum disc set in the South end of a headwall to a box culvert under Illinois Route 3, 0.7 miles South of Canal Street, 0.1 miles South of Industrial Ave. and North of railroad track.

Existing Structure: None.

Traffic Barrier Terminal or Concrete Barrier Wall, typ. (See Plan View for types & locations)

Temporary Geotextile Retaining Wall

CURVE DATA

(Relocated IL. Rte. 3)

$\Delta = 39^\circ 34' 55''$ (LT)
 $D = 2^\circ 45' 00''$
 $R = 2,083.48'$
 $T = 749.73'$
 $L = 1,439.34'$
 $E = 130.79'$
 $e = 4.32'$
 $T.R. = 36'$
 $S.E. RUN = 102'$
 $P.C. STA. = 613+00.92$
 $P.T. STA. = 627+40.27$
 $P.I. STA. = 620+50.65$

CURVE DATA

(Ramp 1)

$\Delta = 13^\circ 00' 25''$ (RT)
 $D = 3^\circ 30' 00''$
 $R = 1637.02'$
 $T = 185.61'$
 $L = 371.62'$
 $E = 10.60'$
 $P.C. STA. = 4+91.06$
 $P.T. STA. = 8+62.68$
 $P.I. STA. = 6+77.67$
 $S.E. = 0.0441''$
 $S.E. ATTAINED = STA. 3+91 TO STA. 5+41$
 $S.E. REMOVAL = STA. 8+08 TO STA. 9+73$

CURVE DATA

(Ramp 2)

$\Delta = 16^\circ 49' 30''$ (LT)
 $D = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 211.84'$
 $L = 420.63'$
 $E = 15.58'$
 $P.C. STA. = 33+33.86$
 $P.T. STA. = 37+54.49$
 $P.I. STA. = 35+45.70$
 $S.E. = 0.0487''$
 $S.E. ATTAINED = STA. 32+12 TO STA. 33+84$
 $S.E. REMOVAL = STA. 36+96 TO STA. 38+71$

Contractor to monitor settlement after placing embankment. Drive piles when less than 0.4 in. of expected settlement remains. Total amount of expected settlement = 17". The approximate settlement time is 45 days.

Contractor to monitor settlement after placing embankment. Drive piles when less than 0.4 in. of expected settlement remains. Total amount of expected settlement = 12". The approximate settlement time is 45 days.

Limits of Temporary Geotextile Retaining Wall, typ.

End of Re-Embankment, typ.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Existing R.O.W.

Sta. 622+57.04, 76.58' LT.

Limits of Existing Structure (Above)

Traffic Barrier Terminal Type 5 Std. 631026

Back of South Abut. Sta. 622+96.97 Elev. 426.96

Point of min. vert. cl.

Sta. 622+72.54 (Rte. 3) = Sta. ±10+29.08 (Ramp 1)

Traffic Barrier Terminal Type 5 Std. 631026

IL. Rte. 3

Sta. 623+23.94 (Rte. 3) = Sta. ±62+59.91 (MLK Bridge)

Traffic Barrier Terminal Type 5 Std. 631026

Local Tangent Sta. 623+23.94

Back of South Abut. Sta. 622+89.09 Elev. 427.12

Point of min. vert. cl.

4" Perforated Pipe Drain, typ.

Name Plate Location (082-0385)

Point of min. vert. cl.

Staleness Increases

Concrete Headwall for Pipe Drain, typ. (Standard 601101), see Roadway Plans

Sta. 622+29.51, 83.39' RT.

Staleness Increases

Staleness Increases

Staleness Increases

ELEVATION

W36x135 (Composite Full Length)

Fabric Formed Concrete Revetment Mat, typ.

Metal Shell Piles

Metal Shell Piles

Metal Shell Piles

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© Ramp 1 (S.N. 082-0287)

© Martin Luther King Drive Bridge (S.N. 082-6003)

© Ramp 2 (S.N. 082-0288)

LOADING HL-93

Future Wearing Surface is not permitted due to geometric and crash testing requirements of the TL-6 barrier

DESIGN STRESSES

FIELD UNITS:
 $f'_c = 3,500$ psi (Cast-In-Place)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel - M270 Grade 50W)

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 5th Edition, with 2010 Interims

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.347g
 Design Spectral Acceleration at 0.2 sec. (SDs) = 0.766g
 Soil Site Class = E

INDEX OF SHEETS

SHEET NO.	TITLE
A1	GENERAL PLAN AND ELEVATION
A2-A3	GENERAL DATA
A4	TOP OF SLAB ELEVATION LOCATIONS
A5-A6	TOP OF SLAB ELEVATIONS
A7-A8	TOP OF APPROACH SLAB ELEVATIONS
A9-A10	SUPERSTRUCTURE DECK
A11	SUPERSTRUCTURE CROSS SECTIONS
A12-A15	RAIL DETAILS
A16-A19	DIAPHRAGM DETAILS
A20-A23	BRIDGE APPROACH SLAB DETAILS
A24-A26	STRUCTURAL STEEL
A27	FIXED BEARING DETAILS
A28-A31	ABUTMENTS, SOUTHBOUND
A32-A35	ABUTMENTS, NORTHBOUND
A36	TEMPORARY GEOTEXTILE RETAINING WALLS
A37	METAL SHELL PILE DETAILS
A38	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
A39-A48	SOIL BORING LOGS

NOTE:

*South Temporary Geotextile Retaining Wall to remain within the current Right-of-Way Line. North Temporary Geotextile Retaining Wall to allow Missouri Avenue to remain open during construction.



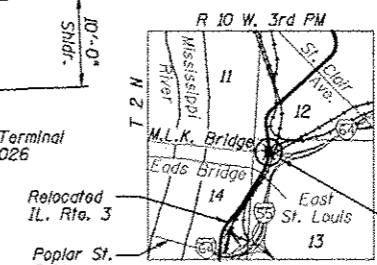
Joseph M. Lowrance Date 06-27-12
 JOSEPH M. LOWRANCE
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-006446
 Exp. Date 11/30/12

APPROVED
 For Structural Adequacy Only

Joseph M. Lowrance
 Engineer of Bridges & Structures

**GENERAL PLAN AND ELEVATION
 RELOCATED IL. ROUTE 3 UNDER
 MARTIN LUTHER KING DRIVE BRIDGE
 E.A.P. 788 - SECTION 520-1-2B
 ST. CLAIR COUNTY
 STATION 623+23.94
 STRUCTURE NO. 082-0385 NB
 STRUCTURE NO. 082-0386 SB**

LOCATION SKETCH



Relocated IL. Rte. 3
 Poplar St. Bridge

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
788	520-1-2B	ST. CLAIR	94	32

CONTRACT NO. 76F69
 ILLINOIS FED. AID PROJECT

SHEET NO. A1 OF 48 SHEETS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DESIGNED - TCR/JCZ	REVISED
CHECKED - JML	REVISED
DRAWN - DJM/JWK	REVISED
CHECKED - MSW	REVISED

DATE - 06/26/12

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