

Bench Mark: MON 144 - Located East of Spine Road and West of Mannheim Road at the Southeastly side of O'Hare Airport. Elev. 643.22

Existing Structure: None

During Stage II construction two-way traffic will be maintained on N.B. Mannheim Road.

**DESIGN SPECIFICATIONS**  
2010 AASHTO LRFD Bridge Design Specifications  
with 2010 Interims

**LOADING HL-93**

Allow 50 #/sq. ft. for future wearing surface

**CURVE DATA ALONG C**  
**MANNHEIM ROAD**

**CURVE DATA ALONG B**  
**SB MANNHEIM EXIT RAMP**

PROP. CURVE MANN2  
PI STA. = 60+87.10  
 $\Delta = 55^\circ 18' 45"$  (LT)  
D = 1° 45' 00"  
R = 3,274.04'  
T = 1,715.72'  
L = 3,160.72'  
E = 422.32'  
e = 3.20%  
T.R. = 99'  
S.E. Run = 154'  
P.C. STA. = 43+71.38  
P.T. STA. = 75+32.09  
N.C. STA. = 79+09  
FULL S.E. STA. = 76+60

PROP. CURVE PRUNDER-2  
PI STA. = 21+60.04  
 $\Delta = 89^\circ 00' 23"$  (LT)  
D = 23° 52' 24"  
R = 240.00'  
T = 235.87'  
L = 372.83'  
E = 96.51'  
e = -6.0%  
T.R. = 0'  
S.E. Run = 97'  
P.C. STA. = 19+24.17  
P.T. STA. = 22+97.00

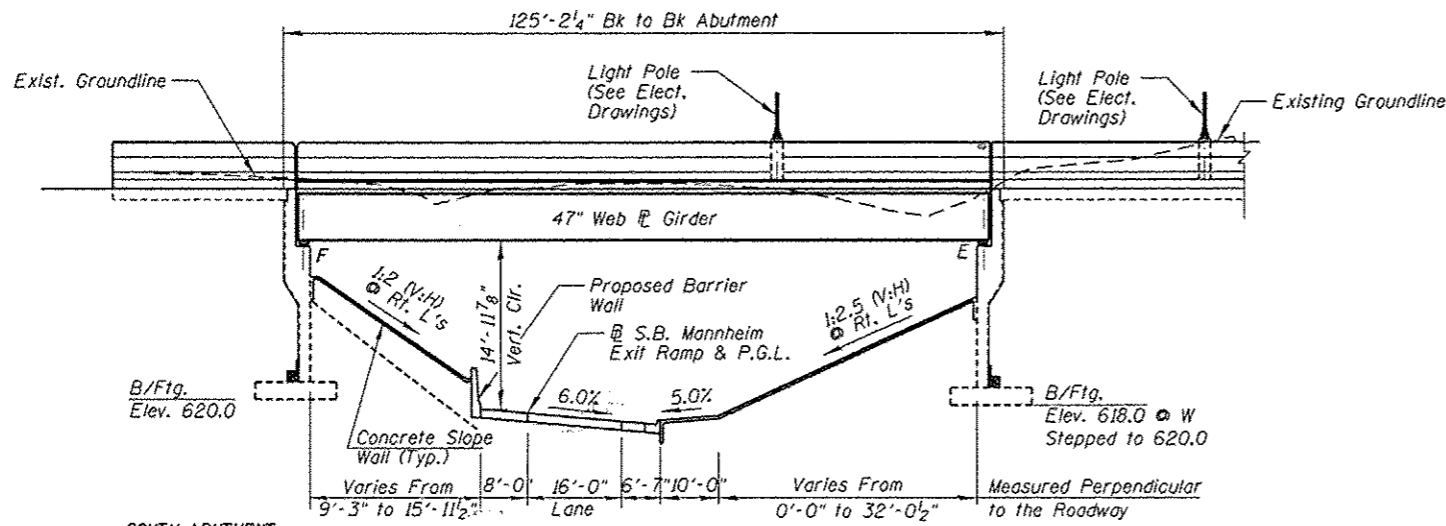
**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{p1}$ ) = 0.037g  
Design Spectral Acceleration at 0.2 sec. ( $S_{ps}$ ) = 0.090g  
Soil Site Class = C

**DESIGN STRESSES**

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 50,000$  psi (structural steel)  
(M270 Grade 50)  
 $f_y = 60,000$  psi (Reinf.)

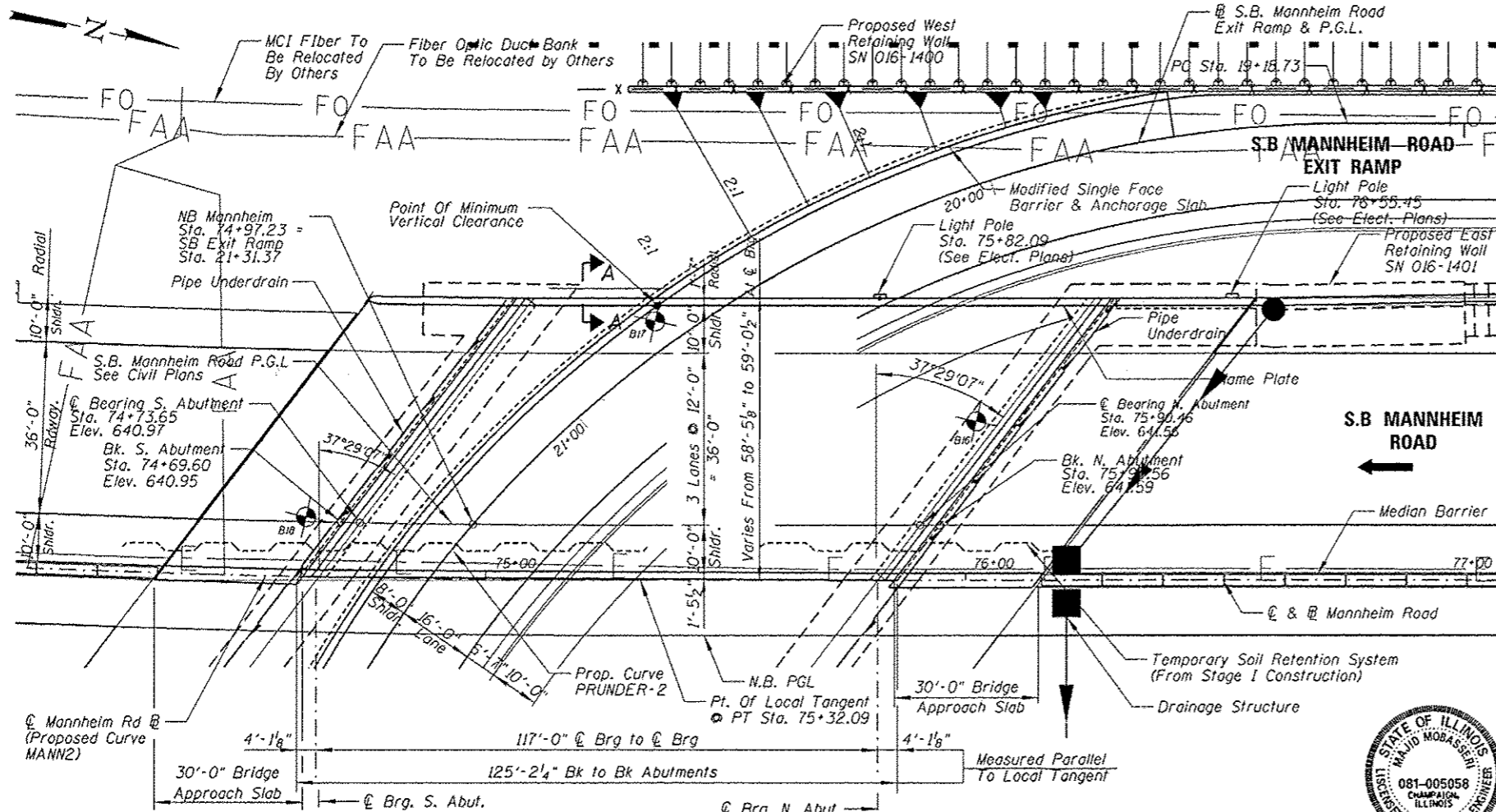
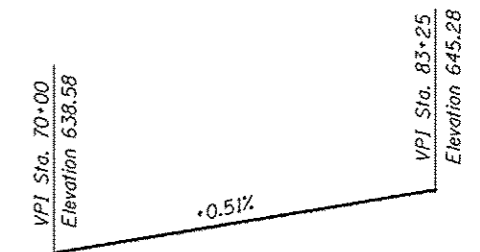


**ELEVATION**

**APPROVED**  
For Structural Adequacy Only

*Dr. Carl Kump*  
Engineer of Bridges & Structures

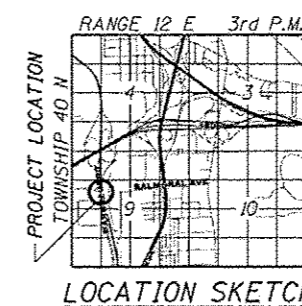
**PROFILE GRADE -**  
**S.B. MANNHEIM ROAD**



**PLAN**

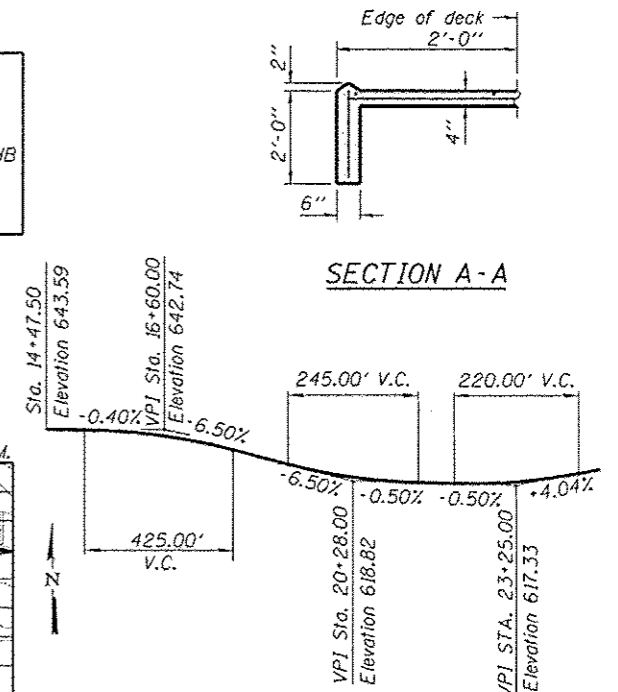
STATION 75+32.08  
BUILT BY  
STATE OF ILLINOIS  
F.A.P. RT. 330 SEC. 0105 WRS&HB  
LOADING HL-93  
STRUCTURE NO. 016-7942

**NAME PLATE**  
See Std. 515001



**LOCATION SKETCH**

**SECTION A-A**



**PROFILE GRADE - S.B. MANNHEIM**  
**ROAD EXIT RAMP**

**GENERAL PLAN AND ELEVATION**  
**S.B. MANNHEIM ROAD BRIDGE OVER**  
**SOUTHBOUND EXIT RAMP**

F.A.P. RTE. 330-SEC 0105 WRS&HB

COOK COUNTY

STATION 75+32.08

STRUCTURE NO. 016-7942



*Majid Mobasser*  
**MAJID MOBASSERI**  
ILLINOIS REGISTRATION No. 081-005058  
STRUCTURAL ENGINEER  
EXPIRATION DATE: 11/30/14

Note: All Stations Are Measured Along The Proposed C of Mannheim Road.

<p>CHRISTOPHER B. BURKE ENGINEERING, LTD. 123 W. Maple Road, Suite 100 Chicago, Illinois 60604 (312) 555-0000</p>	USER NAME *	DESIGNED - MM	REVISIONS	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p><b>GENERAL PLAN AND ELEVATION</b> <b>SB MANNHEIM ROAD BRIDGE - STRUCTURE NO. 016-7942</b></p>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE *	CHECKED - JMB	REVISIONS			330	0105 WRS&HB	COOK	605	363
	PLOT DATE *	DRAWN - PDR	REVISIONS			CONTRACT NO. 60G37				
		CHECKED - MM	REVISIONS			[ILLINOIS] FED. AID PROJECT				