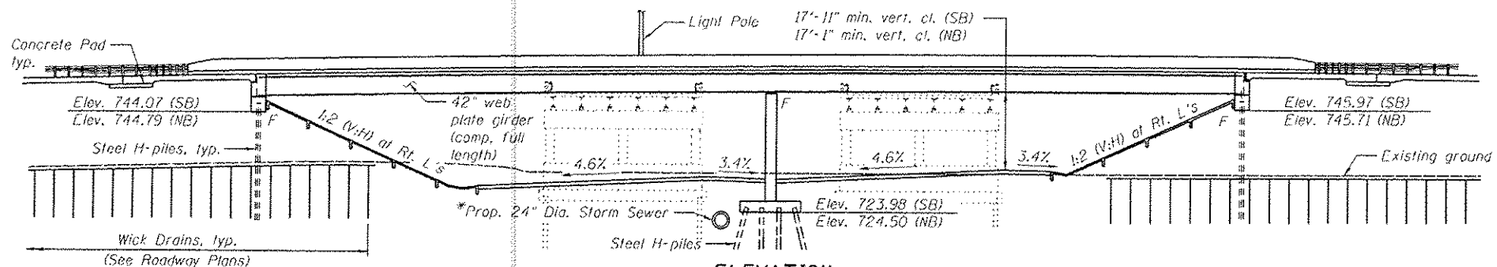
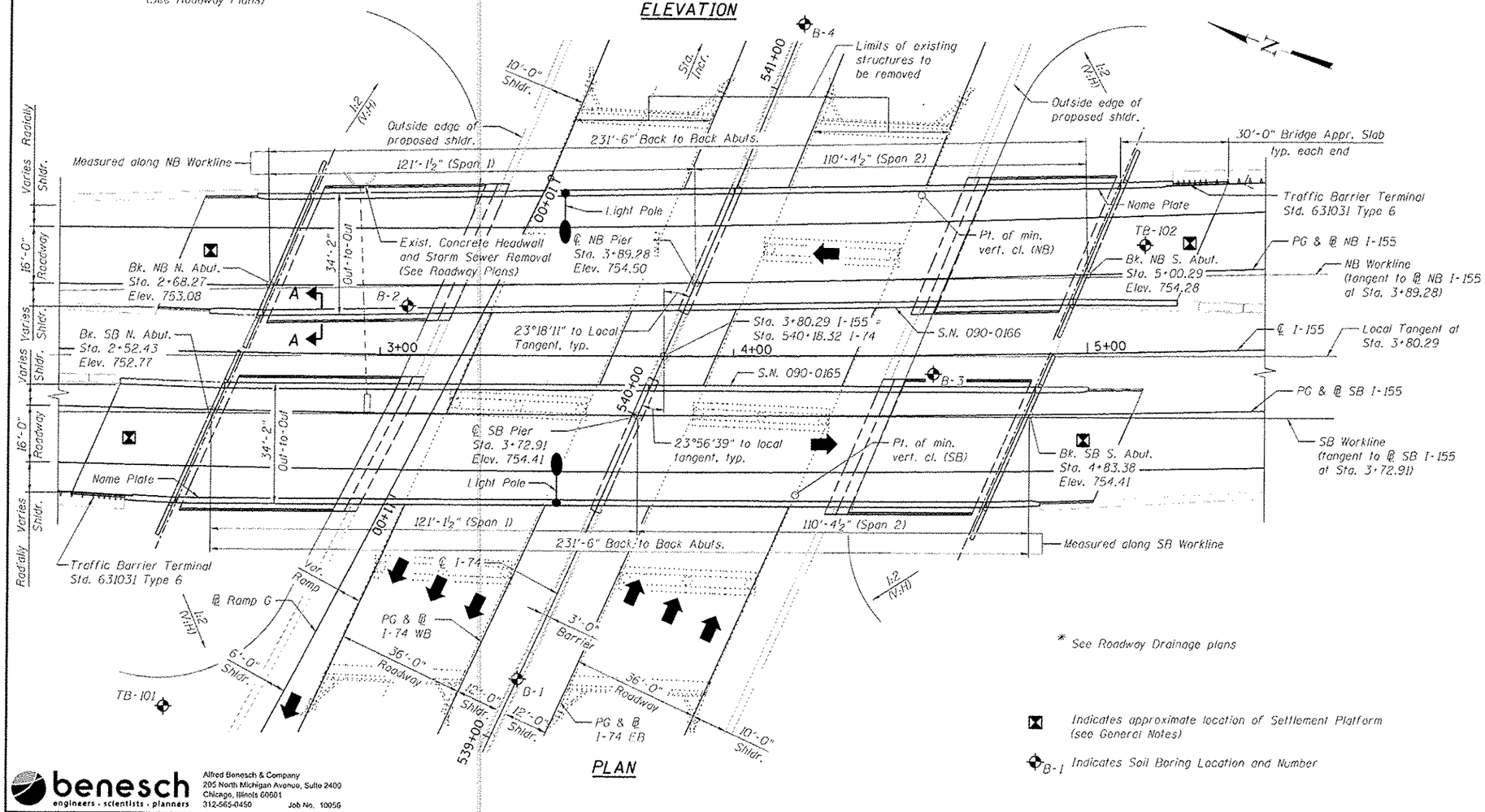
Bench Mark: Chiseled "LI" on Crashwall of W.B.L. I-74 Bridge, C. Pier over Ramps for 155, Elev. 731.95

Existing Structures: S.N. 090-0012 (W.B) and S.N. 090-0013 (E.B.), built 1961 as F.A.I. Route 74 over F.A.I. Route I-155, Section 90-14HB-4. Structure consists of dual 4-span continuous steel WF superstructures, skewed 21°23'12". Abutments are reinforced concrete stub abutments supported by concrete piles. The reinforced concrete multi-column piers are supported by creosoted timber piles. The existing total bridge lengths are 176'-9" back to back of abutments. The superstructure width for each structure is 35'-8". The contractor shall remove and replace these bridges with dual, two-span steel structures. Traffic on I-155 will be detoured during bridge construction. I-74 traffic to be maintained with two lanes in each direction utilizing a four-lane temporary runaround south of the I-74 & I-155 Interchange.

No salvage.



ELEVATION



PLAN

* See Roadway Drainage plans

▣ Indicates approximate location of Settlement Platform (see General Notes)

◆B-1 Indicates Soil Boring Location and Number

STATION 3+80.29
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I RTE. 74
SEC. 90-[14R;(14HB-4,14,14HVB)BR]
LOADING HL-93
STRUCTURE NO. 090-0165

NAME PLATE
(See Std. 515001)

STATION 3+80.29
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I RTE. 74
SEC. 90-[14R;(14HB-4,14,14HVB)BR]
LOADING HL-93
STRUCTURE NO. 090-0166

NAME PLATE
(See Std. 515001)

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

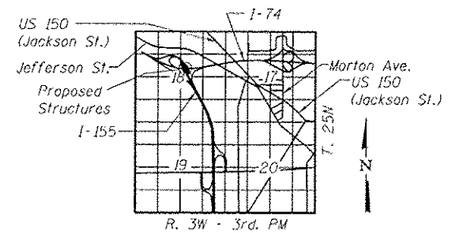
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.115g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.183g
Soil Site Class = D



LOCATION SKETCH

MARK R. BENDOK
081-006516
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

EXPIRATION DATE 11-30-2012
DATE: 8/17/12

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

GENERAL PLAN AND ELEVATION
I-155 OVER I-74
F.A.I. RTE. 74
SEC. 90-[14R;(14HB-4,14,14HVB)BR]
TAZEWELL COUNTY
STATION 3+80.29
STRUCTURE NO. 090-0165 (SB)
STRUCTURE NO. 090-0166 (NB)

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450
Job No. 10056

FILE NAME = 090165_68620_01_gpe.dgn	USER NAME = mbecker	DESIGNED - MFB/DTS	REVISED -
		CHECKED - MRB/AAY	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
	PLOT DATE = 8/17/2012	CHECKED - MRB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 090-0165 / 0166
SHEET NO. SA1 OF SA47 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90-[14R;(14HB-4,14,14HVB)BR]	TAZEWELL	2433	1865
		CONTRACT NO. 68620		
	ILLINOIS FED. AID PROJECT			

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