

Bench Mark: Cut square at center of door entrance to 707 W. Harrison St; South side of Harrison St. ±90' west of west line of Des Plaines. Elevation 597.47.
 A 1 cut in the SE anchor bolt of the 11th street light N. of Roosevelt on the W. side of Halsted. Elev. = 594.06

Existing Structure: S.N. 016-2449 was built in 1960 & carries NB I-90/94 traffic to WB I-290 over I-90/94 (Dan Ryan Expressway) & a ramp from I-90/94 SB to I-290 WB. The existing seven (7) span structure has an overall length of approx. 455'-7". The existing superstructure consists of simple span wide-flange beams with 7" thick concrete deck with 1 1/2" overlay. The existing substructure consists of reinforced concrete abutment and multi-column piers. Existing substructure units are supported on caissons. No Salvage.

Traffic Control: Traffic to be maintained on existing SN 016-2449 (NB I-90/94 to WB I-290) during construction.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
 6th Edition with 2013 Interim Revisions

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

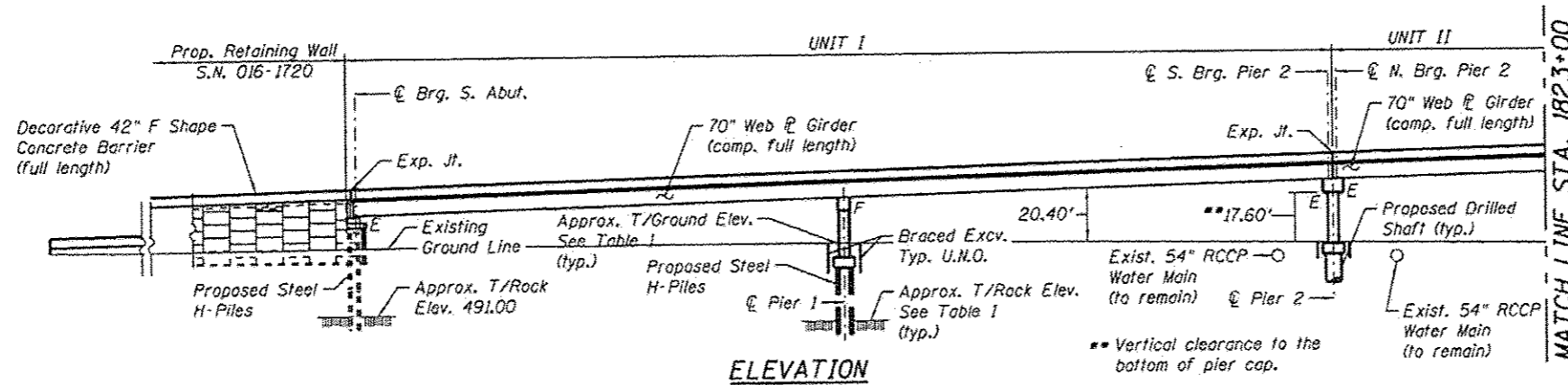
f'c = 3,500 psi
 f'c = 5,000 psi (Pier 3 & 8 - see Gen. Note 16)
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S₀₁) = 0.085g
 Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.144g
 Soil Site Class = D

SCUPPER LOCATION

Station	Offset
1818+56.67	13.00' L
1819+61.67	13.00' L
1820+41.42	13.00' L
1820+91.42	13.00' L
1821+60.00	13.00' L
1822+28.75	13.23' L
1822+28.75	26.18' R
1822+80.00	14.54' L
1823+30.00	15.96' L
1824+04.67	17.67' L
1824+09.67	17.80' L
1824+37.13	41.63' R
1825+78.67	22.00' L
1827+35.42	22.00' L
1828+68.42	22.00' L
1832+31.92	22.00' L
1834+83.92	22.00' L
1834+88.92	22.00' L
1835+21.78	22.00' L
1838+13.67	17.71' R



APPROVED

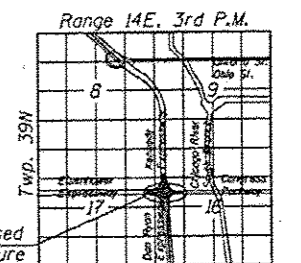
For Structural Adequacy Only

P. Carl Runyon, JR.
 Engineer of Bridges & Structures

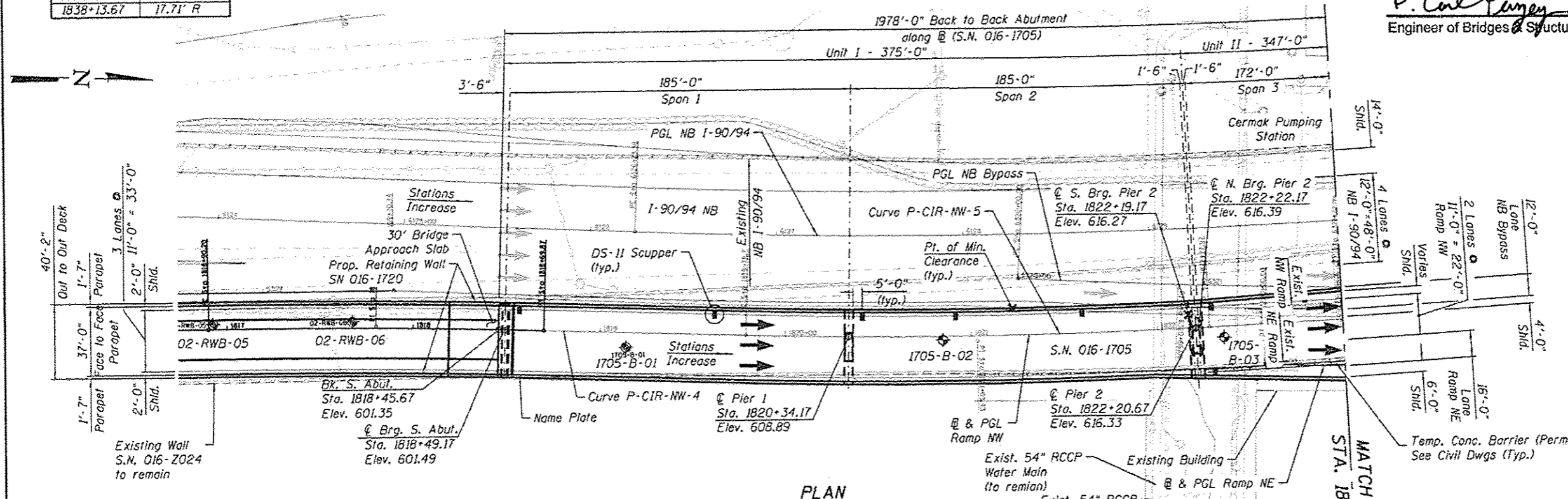


Amish T. Bhatt 4/28/14

AMISH T. BHATT
 LICENSE EXPIRES 11/30/2014



LOCATION SKETCH



PLAN

LEGEND:

- Telephone — T —
- Gas Line — G —
- Fire Hydrant — FH —
- Light Pole — LP —
- Point of Min. Clearance — X —
- Soil Boring Location — SB —
- Combined Sewer — CS —
- Electric — E —
- Fiber Optic — FO —
- Storm Sewer — SS —
- Water Line — W —

TABLE 1

Pier	Approx. T/Ground Elev.	Approx. T/Rock Elev.
1	586.98	497.10
2	584.10	497.00

NOTES:

- Span lengths are measured along @ & P.G.L. Ramp NW.
- All Substructure are oriented 90° to @ & P.G.L. Ramp NW unless noted otherwise.

GENERAL PLAN & ELEVATION - 1

RAMP NW OVER F.A.I. RTE. 90/94
(DAN RYAN EXPRESSWAY)
F.A.I. RTE. 90/94 - SECTION 2013-010R

COOK COUNTY
STATION 1829+59.43
STRUCTURE NO. 016-1705

016105-60w28-5001-CPE.dgn



USER NAME = fioresg	DESIGNED - DD	REVISED
	CHECKED - ATB	REVISED
PLOT SCALE = N.T.S.	DRAWN - MRK	REVISED
PLOT DATE = 5/7/2014	CHECKED - ATB	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SHEET NO. S-1 OF S-165 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-010R	COOK	747	317
CONTRACT NO.			60W28	
ILLINOIS FED. AID PROJECT				