

Benchmark #1: Cut square on Northeast corner of concrete base of traffic control box at Southeast corner of 63rd Street & Wentworth Ave., Elevation 603.07.

Existing Structure: S.N. 016-1149, originally built as F.A.I. Route 94, Section 066-1920-C.F., 63rd Street Grade Separation over South Route (present Dan Ryan) Expressway, project BUI-94-3(55)56 in 1960. The existing five span structure consists of simple span 33" deep PPC deck beams. A 5" thick reinforced concrete deck was added in 1994. The substructure consists of closed abutments and reinforced concrete piers consisting of a cap beam and multiple rectangular columns on a crashwall. The back to back abutment measures 302'-5 5/8" and the out to out of deck is 83'-0". The existing superstructure is to be removed and replaced. The substructure will remain, except that the piers will be rebuilt above the existing crashwalls and the abutment seats will be rebuilt. Pedestrian access to the CTA rail station shall be maintained at all times using staged construction.

No Salvage.

- Notes:
1. Min. vertical clearance points occur at north fascia beam typ.
 2. @ 63rd Street is approximately at CTA Sta. 249+50.

LEGEND

- E—E— Existing Electric
- P—P— Proposed Electric
- T—T— Telephone Cable
- W—W— Water Pipe

DESIGN STRESSES

FIELD UNITS (New Const.)

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

FIELD UNITS (Existing Const.)

f'c = 3,500 psi
 fy = 40,000 psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S₀₁) = 0.07g
 Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.11g
 Soil Site Class = C

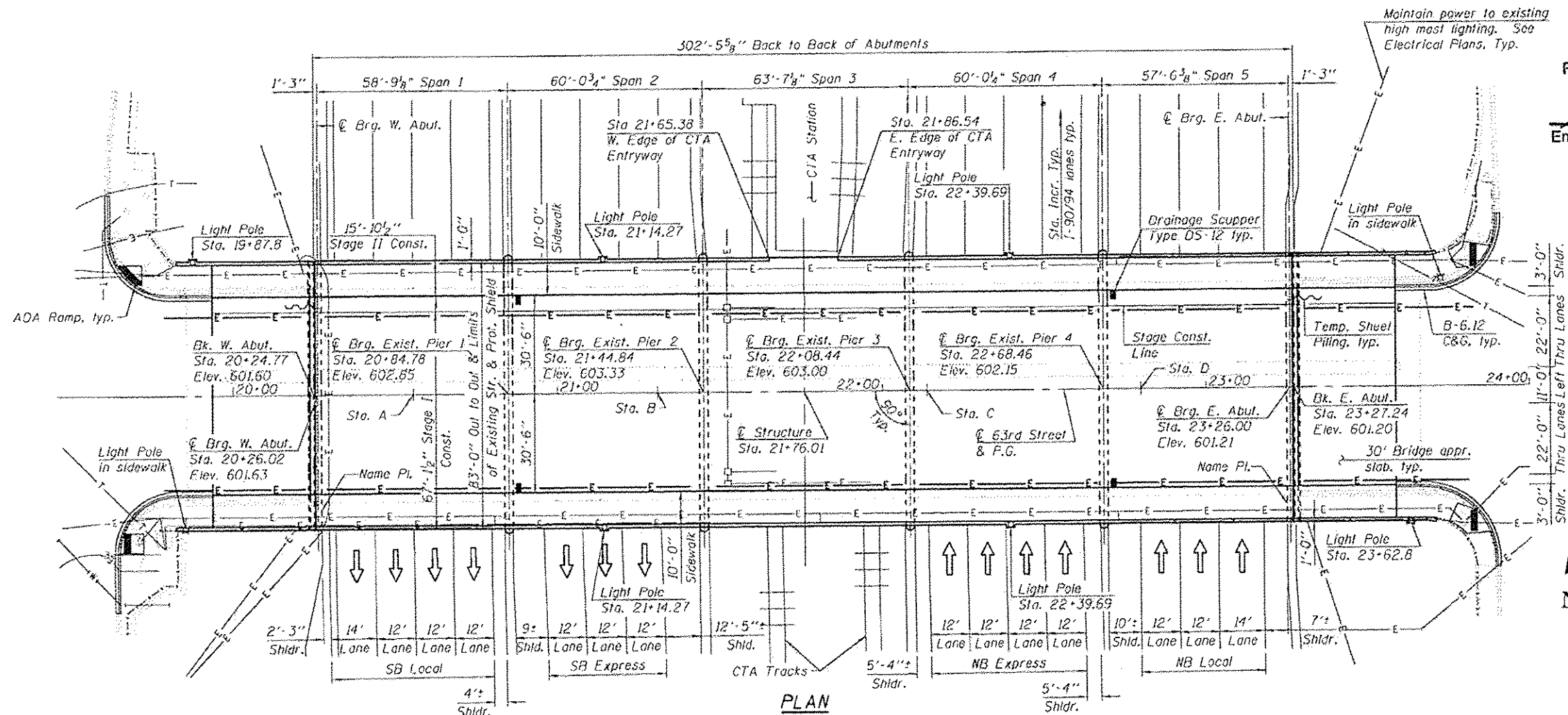
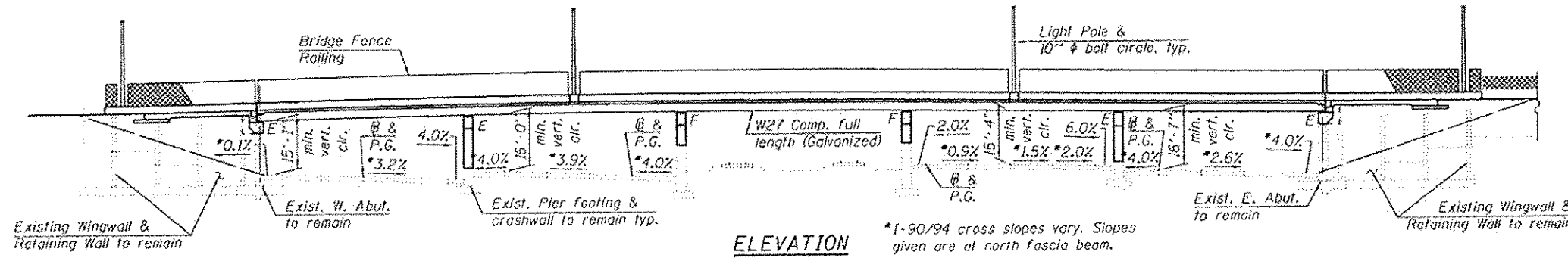
DESIGN SPECIFICATIONS (New Const.)

AASHTO LRFD Bridge Design Specifications
 5th Edition with 2010 Interims

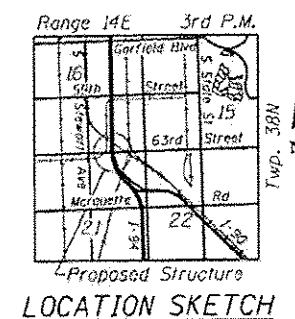
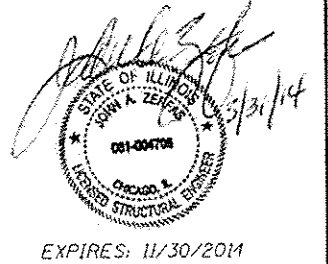
LOADING HL-93 (New Const.)

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

- Sta. A = Sta. 20+55.35 @ 63rd Street
 Sta. 3422+31.65 @ SB Local Lanes
- Sta. B = Sta. 21+31.12 @ 63rd Street
 Sta. 1422+37.79 @ SB Express Lanes
- Sta. C = Sta. 22+13.85 @ 63rd Street
 Sta. 2422+55.54 @ NB Express Lanes
- Sta. D = Sta. 22+79.96 @ 63rd Street
 Sta. 4422+54.06 @ NB Local Lanes



APPROVED
 For Structural Adequacy Only
Carl P. ...
 Engineer of Bridges & Structures



GENERAL PLAN & ELEVATION
63RD STREET OVER I-90/94
F.A.U. ROUTE 1519 - SEC. 1920-B
COOK COUNTY
STATION 21+76.01
STRUCTURE NO. 016-1149

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GRAF 8501 W. Higgins Road Suite 280 Chicago, Illinois 60631 (773) 399-0112	USER NAME :	DESIGNED - J.Z.	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION STRUCTURE NO. 016-1149 SHEET NO. 51 OF 50 SHEETS	F.A.U. RTE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE :	CHECKED - J.A.Z.	REVISIONS -			94	1920-B	COOK	142	65
PLOT DATE :	DRAWN - E.E.J.	REVISIONS -				CONTRACT NO. 60J15		ILLINOIS FED. AID PROJECT		
	DATE - 3/31/2014	REVISIONS -								