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. One lane of traffic in each direction 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
—E———E— 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. ($S_{D1}$) = 0.07g
Design Spectral Acceleration at 0.2 sec. ($S_{DS}$) = 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.)

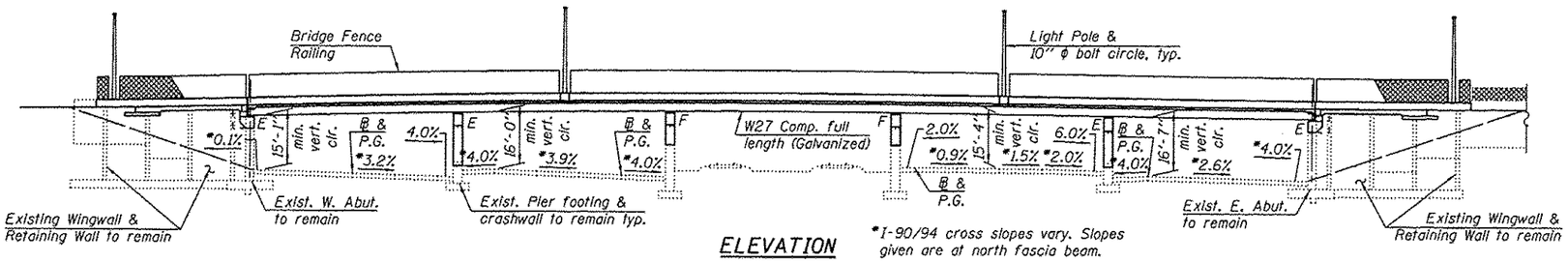
Allow 50#/sq. ft. for
future wearing surface

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

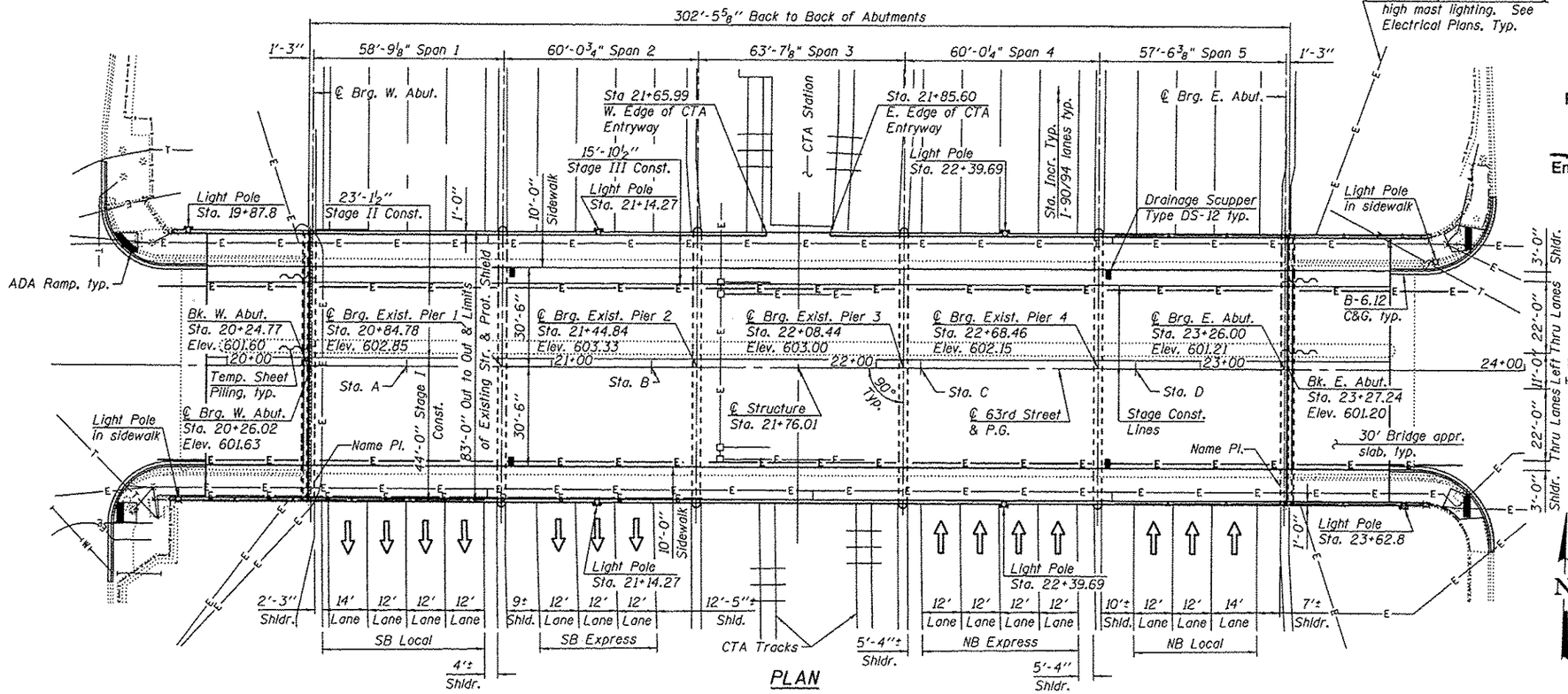
Sta. C = Sta. 22+13.83 ℄ ℄ 63rd Street
Sta. 2422+55.54 ℄ ℄ NB Express Lanes

Sta. D = Sta. 22+79.96 ℄ ℄ 63rd Street
Sta. 4422+54.06 ℄ ℄ NB Local Lanes



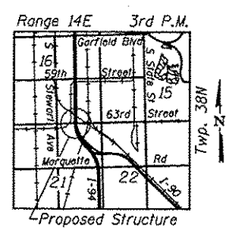

ELEVATION

*I-90/94 cross slopes vary. Slopes given are at north fascia beam.




PLAN

Maintain power to existing high mast lighting. See Electrical Plans, Typ.




LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
JOHN A. ZERFAS
061-004708
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

EXPIRES: 11/30/2014

# 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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GRÄEF
8501 W. Higgins Road Suite 280
Chicago, Illinois 60631 (773) 399-0112

| | | | |
|---|---|---|---|
| USER NAME = | DESIGNED - J.Z. | REVISED - | |
| | CHECKED - J.A.Z. | REVISED - | |
| PLOT SCALE = | DRAWN - E.E.J. | REVISED - | |
| PLOT DATE = | DATE - 5/17/2013 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-1149
SHEET NO. 51 OF 50 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 94 | 1920-B | COOK | 137 | 60 |
| | | CONTRACT NO. 60J15 | | |
| | ILLINOIS FED. AID PROJECT | | | |