

Bench Mark

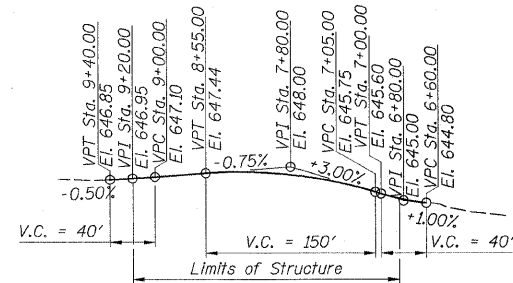
Chiseled square on east side of light pole foundation located off of the south shoulder of Eastbound I-90, 255' west of the existing bridge. Elev. 627.00.

Existing Structure

S.N. 016-1104 built as F.A. Rte. 173 Sec. 267-1414 F-15D in 1958. The existing bridge has four simple spans which consist of a reinforced concrete deck 235'-10" long by 65'-0" wide supported on 48" PPC I-beams. The existing bridge superstructure shall be removed and replaced. The existing substructure shall be retained and rehabilitated. Traffic to be maintained utilizing stage construction.

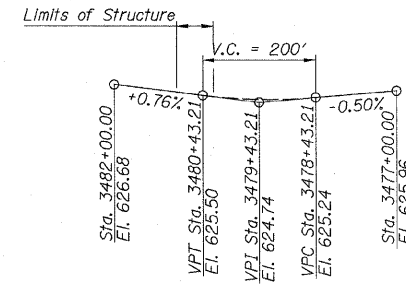
Salvage existing metal handrails.

Contractor is to verify existing vertical clearances prior to construction. Cost included in Construction Layout pay item.



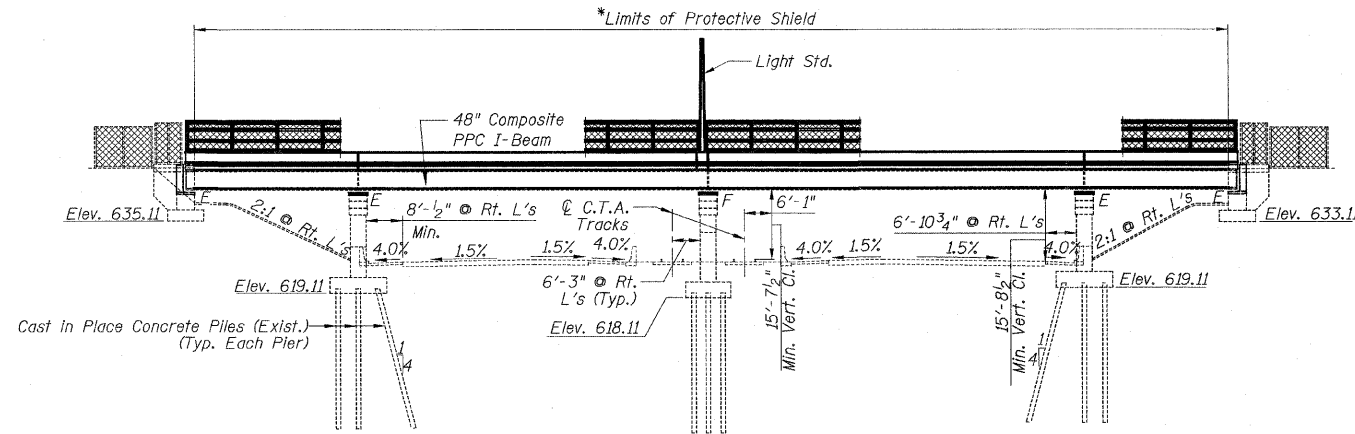
PROFILE GRADE SAYRE AVE.

(Along PGL Roadway)

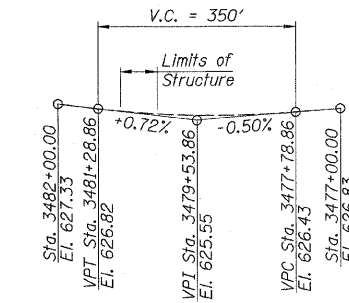


PROFILE GRADE I-90 (KENNEDY EXPRWY.)

(Along PGL Roadway - Existing)



ELEVATION



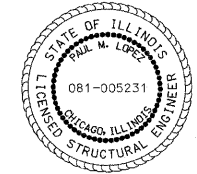
PROFILE GRADE G.T.A. TRACKS

(Top of Rail - Existing)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PATRICK ENGINEERING INC.
PAUL M. LOPEZ, S.E.

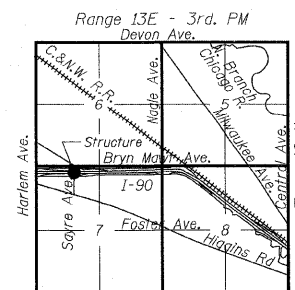


Paul M. Lopez
PAUL M. LOPEZ, S.E.
IL. REG. NO. 081-005231
EXP 11-30-08
DATE 1-31-08

* Protective shield already exists between pier 1 and pier 3 and between the existing fascia beams. Existing protective shield shall be removed and salvaged per note on sheet S2 and new protective shield installed to the limits shown prior to removal of existing deck.

STATION 8+02.48
REBUILT 200... BY
STATE OF ILLINOIS
F.A. RT. 173 SEC. 267-1414-15D
LOADING HS20
STR. NO. 016-1104

NAME PLATE
See Standard 515001
(Existing name plate shall be cleaned and relocated next to new name plate, cost included with name plates.)



LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 36,000 psi (M270 Gr. 36)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" low lax. strands)
fsi = 201,960 psi (1/2" low lax. strands)

DESIGN SPECIFICATIONS

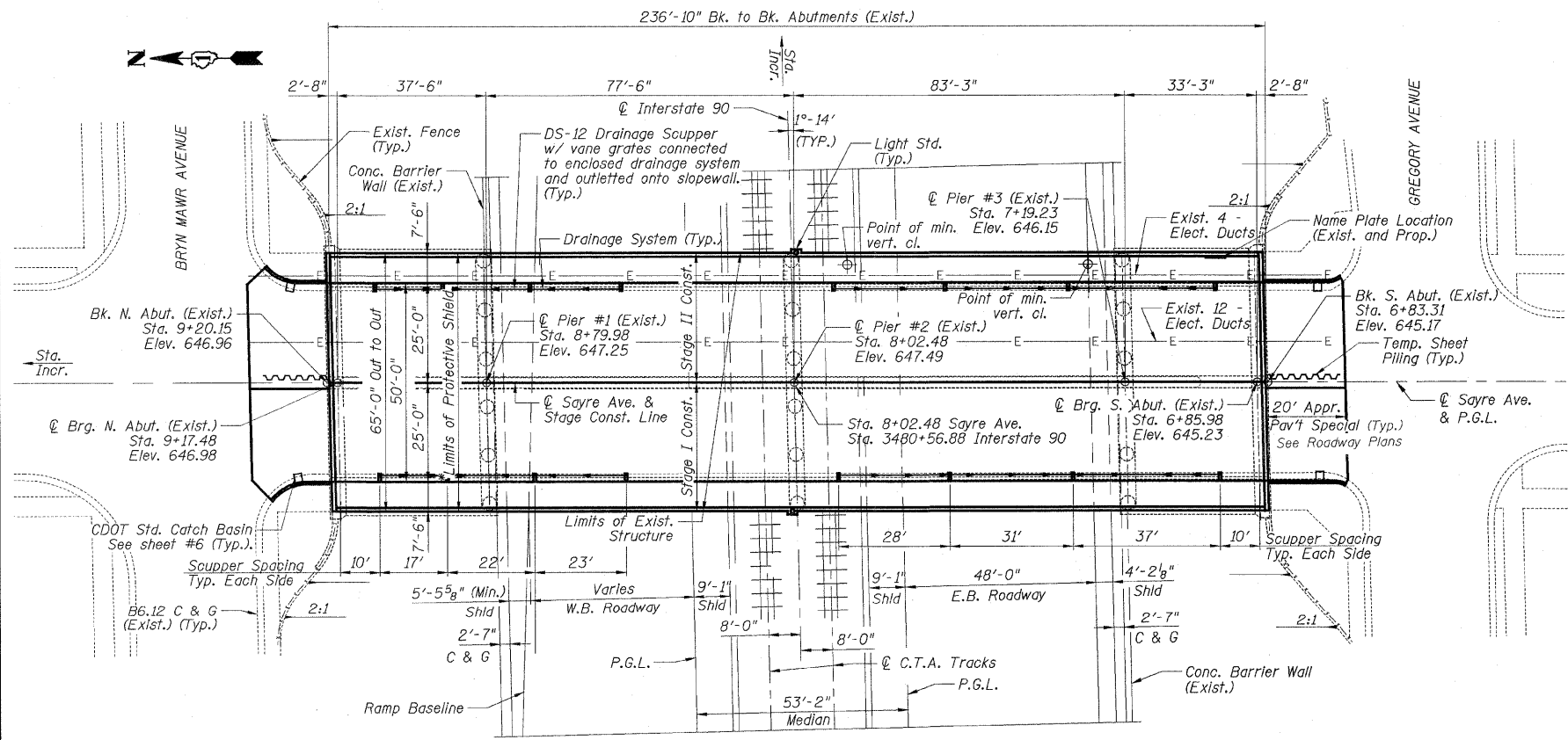
1996 AASHTO Standard Specifications for Highway Bridges and 1997-1999 Interims

LOADING HS20

Allowance for Future Wearing Surface = 50 lb/ft²

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0



PLAN

PATRICK
ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
FA ROUTE 173 (SAYRE AVENUE) OVER
INTERSTATE 90 (KENNEDY EXPRESSWAY)
COOK COUNTY STATION 8+02.48
SECTION 267-1414-15D
STRUCTURE NO. 016-1104
SCALE: NONE DRAWN BY: S. Benson
DATE: DEC. 2007 CHECKED BY: G. Hatlestad