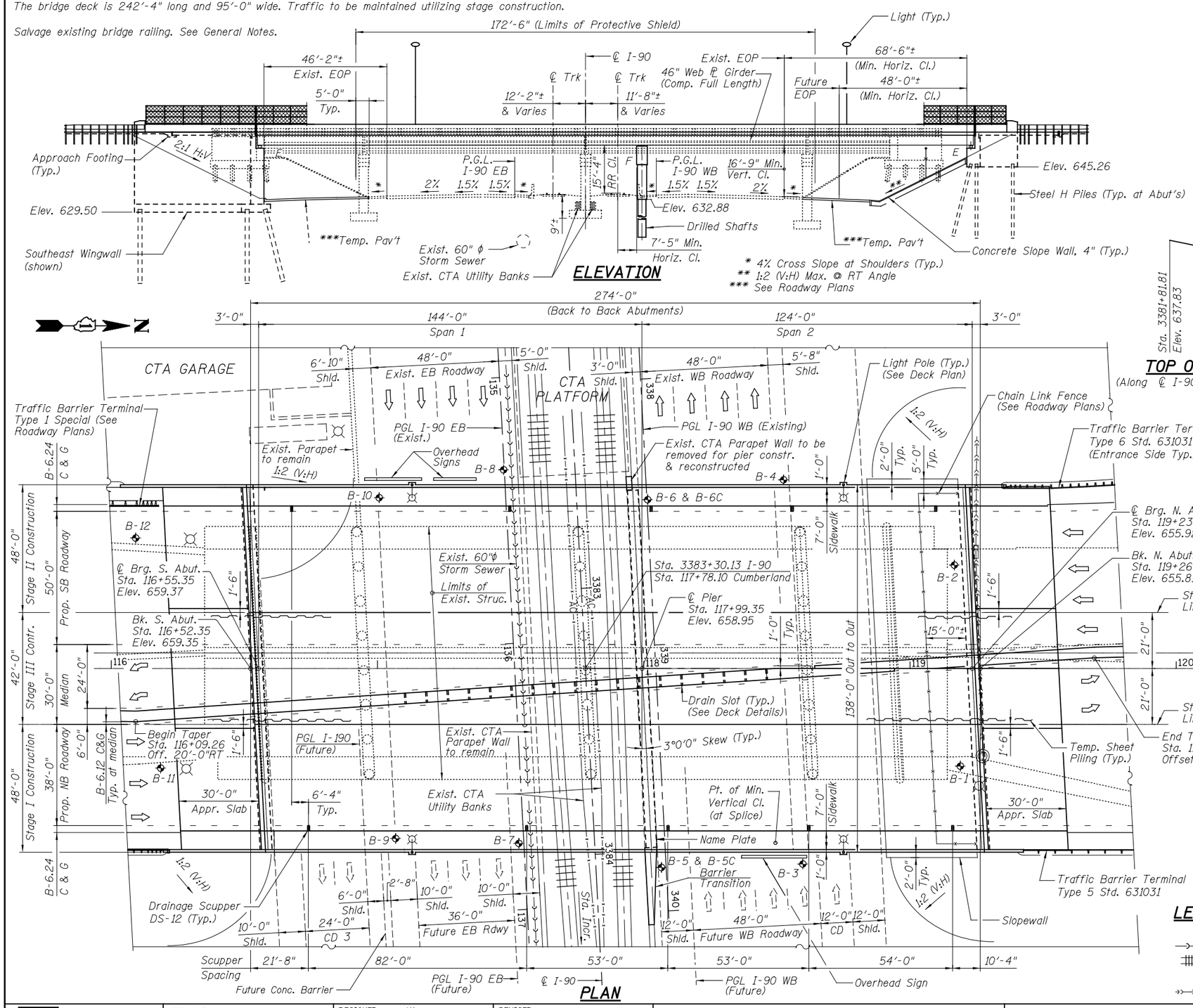
Bench Mark: PK nail on shoulder, 162′ north of the center pier, Sta. 119+42.50 Offset 46.5′ RT, Elev. 653.65.

Existing Structure: S.N. 016-0700 built as F.A.U. 2746 under Sec. 267-1616 F-15D in 1958. The existing bridge has four simple spans which consist of a 7" reinforced concrete deck slab resting on 48" PPC I-beams. Span lengths are 31′-9", 81′-9", 81′-9", and 38′-3". The bridge deck is 242′-4" long and 95′-0" wide. Traffic to be maintained utilizing stage construction.

Salvage existing bridge railing. See General Notes.



DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications
with 2010 Interims

LOADING HL-93

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

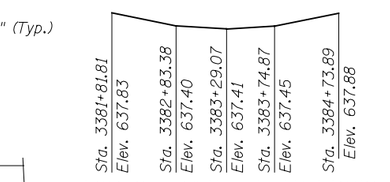
DESIGN STRESSES

FIELD UNITS

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

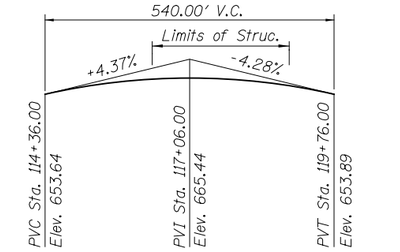
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acc. at 0.2 sec (SDS) = 0.145g
Design Spectral Acc. at 1.0 sec (SD1) = 0.084g
Soil Site Class = D



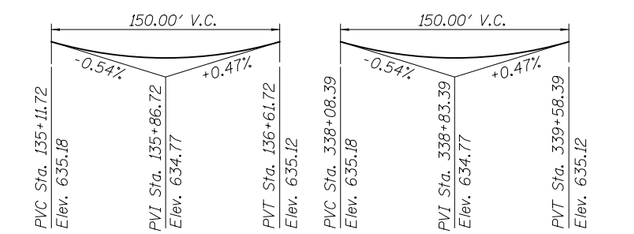
TOP OF RAIL ELEVATIONS

(Along ℄ I-90 - Existing from CTA Rail Survey)



PROF. GRADE- CUMBERLAND AVE.

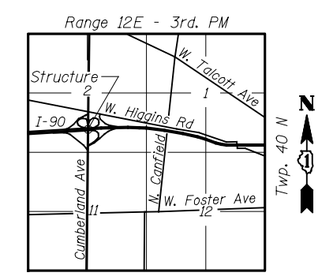
(along PGL Cumberland Avenue)



EB WB

PROFILE GRADE- KENNEDY EXPRWY.

(Along PGL I-90 - Existing from Survey Elevations)



LOCATION SKETCH

PATRICK ENGINEERING, INC.

STATE OF ILLINOIS
ATALAY YARGICOGLU
081-005358
LICENSED STRUCTURAL ENGINEER
CHICAGO, IL

ATALAY YARGICOGLU, S.E.
081-005358
EXP 11/30/2014
DATE 2/18/2013

LEGEND

- Soil Boring
- Exist. Sewer
- CTA Track
- Exist. Light Pole
- Exist. Drain

GENERAL PLAN
IL ROUTE 171 (CUMBERLAND AVENUE) OVER INTERSTATE 90 (KENNEDY EXPRESSWAY)
COOK COUNTY
STATION 117+78.10
STRUCTURE NO. 016-1250

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AY	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN STRUCTURE NO. 016-1250	F.A.U RTE. 2746	SECTION 1616B
		DRAWN - AY	REVISED			COUNTY COOK	TOTAL SHEETS 404
	PLOT SCALE =	CHECKED - RLD	REVISED			SHEET NO. 270	CONTRACT NO. 60J14
	PLOT DATE =	DATE - 2/18/2013	REVISED		SCALE: NONE SHEET NO. S1 OF S59 SHEETS	ILLINOIS	FED. AID PROJECT

G:\IDOT\21050_006_CumberlandAve\Drawings\CADD Sheets\D160J14-sht-tsl-GPE.dgn