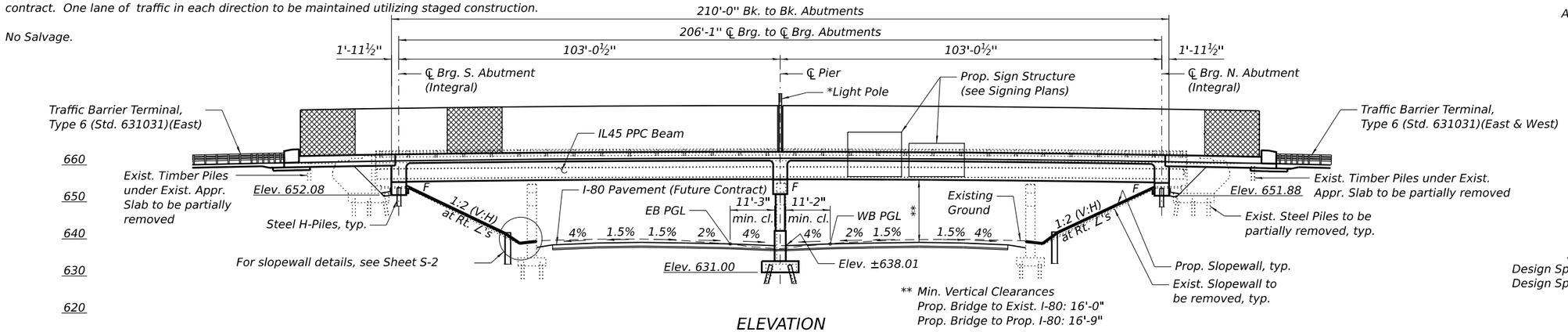
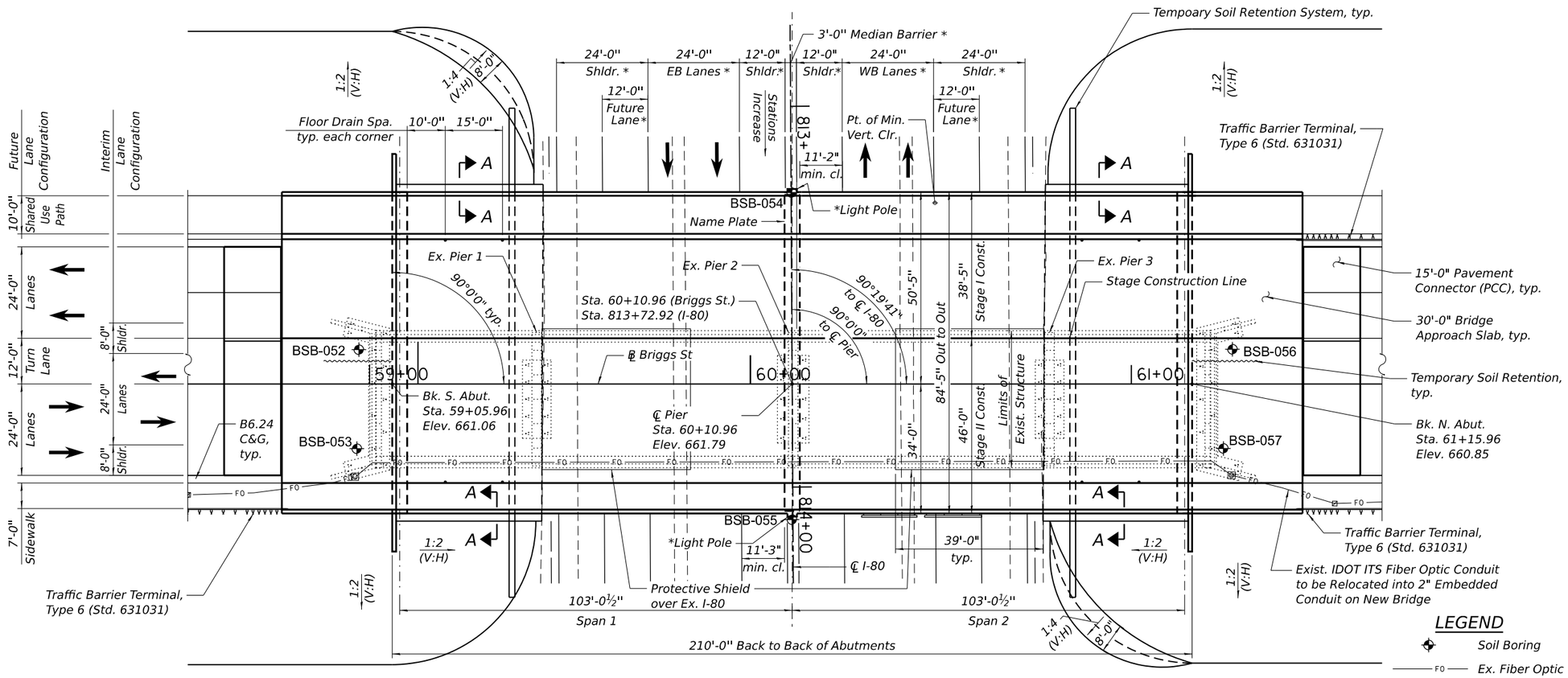
Benchmark: Set "□" on top of north end of NE wingwall for Briggs St. bridge over I-80. Sta. 61+31.30, 20.78' Rt, Elev. 660.75

Existing Structure: SN 099-0216 was constructed in 1965 as Project I-80-4(42)136, Section 99-4-1HB at Sta. 524+81.29 (I-80). The existing bridge is a continuous four-span steel rolled beam bridge supporting a non-composite reinforced concrete deck. The substructure consists of stub abuments and hammerhead piers, all on steel pile foundations. Span lengths are 41'-6", 67'-4", 67'-4" and 41'-6". The out-to-out deck width is 36'-0" and the overall structure length is 221'-3". The structure is to be removed and replaced. Portions of existing Piers 1 and 3 will be removed in future contract. One lane of traffic in each direction to be maintained utilizing staged construction.

No Salvage.



ELEVATION



Note: for Section A-A, see Sheet S-2.

PLAN

* Not in Contract (Future Contract)

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

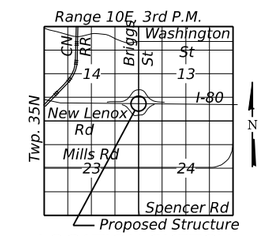
f'c = 3,500 psi (Substructure)
f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 8,500 psi
f'ci = 6,500 psi
fpu = 270,000 psi (0.6" ∅ low lax. strands)
fpbt = 202,300 psi (0.6" ∅ low lax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.125g
Soil Site Class = C



LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed:
Date: 12/15/22
Exp: 11/30/2024
Sheets: S-1 thru S-37

LEGEND

- Soil Boring
- FO — Ex. Fiber Optic
- Ex. Junction Box
- Ex. Handhole

GENERAL PLAN & ELEVATION
BRIGGS ST. OVER I-80
F.A.U. ROUTE 363 - SEC. FAI 80 22 BR
WILL COUNTY
STA. 60+10.96
STRUCTURE NO. 099-8307

1 REVISED SHEET 2/15/2023

MODEL: DEFAULT
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS08078\0998307-62R55-001-GPE1.DGN
1/25/2023

exp.

USER NAME =	DESIGNED - BAR	REVISED -	
	CHECKED - KK	REVISED -	
PLOT SCALE =	DRAWN - BAR	REVISED -	
PLOT DATE =	CHECKED - KK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 099-8307
SHEET S-1 OF S-37 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 22 BR	WILL	133	63
		CONTRACT NO. 62R55		
		ILLINOIS	FED. AID PROJECT	