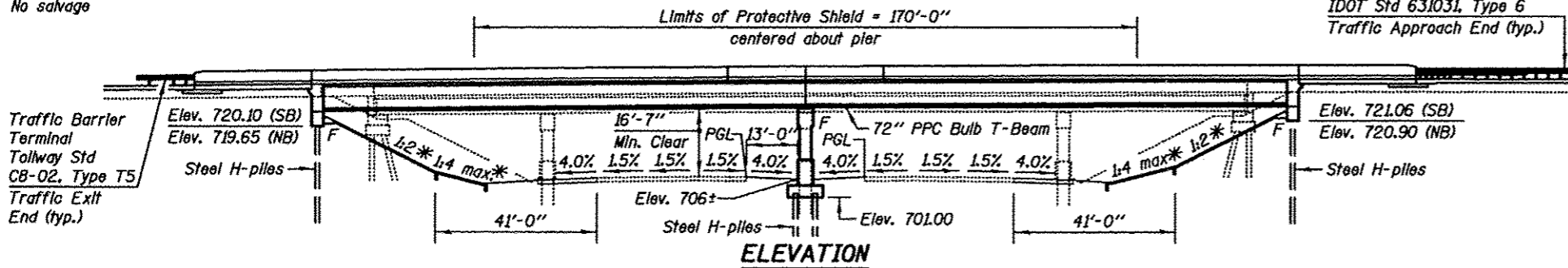


Bench Mark: BM #224 4059+52, 34 ft LT DuPage County Survey Disc at north end of the west bridge wall.
IL Route 59 over Interstate Route 88. Elev. 731.43

Existing Structure: SN 022-9900 (Tollway BN 825) built in 1957 at Sta. 7167+66.30 by the Illinois State Toll Highway Commission as Bridge No. E1-14. Widened to the west in 1980 as F.A. Route 108 Section E-1-14 BY-R(80) by the Illinois Department of Transportation. Structure consists of four span PPC I-beams (10-48", 2-42") on stub abutment supported on concrete piles and drilled shaft piers. 226'-11" back-to-back abutments. 73'-11" out-to-out deck. Structure to be removed and replaced using stage construction.

No salvage



DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications, 5th Edition, with 2010 Interim Revisions
Illinois State Toll Highway Authority
Structure Design Manual, March 2012

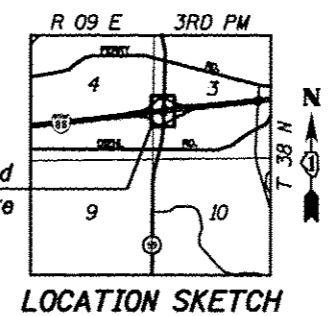
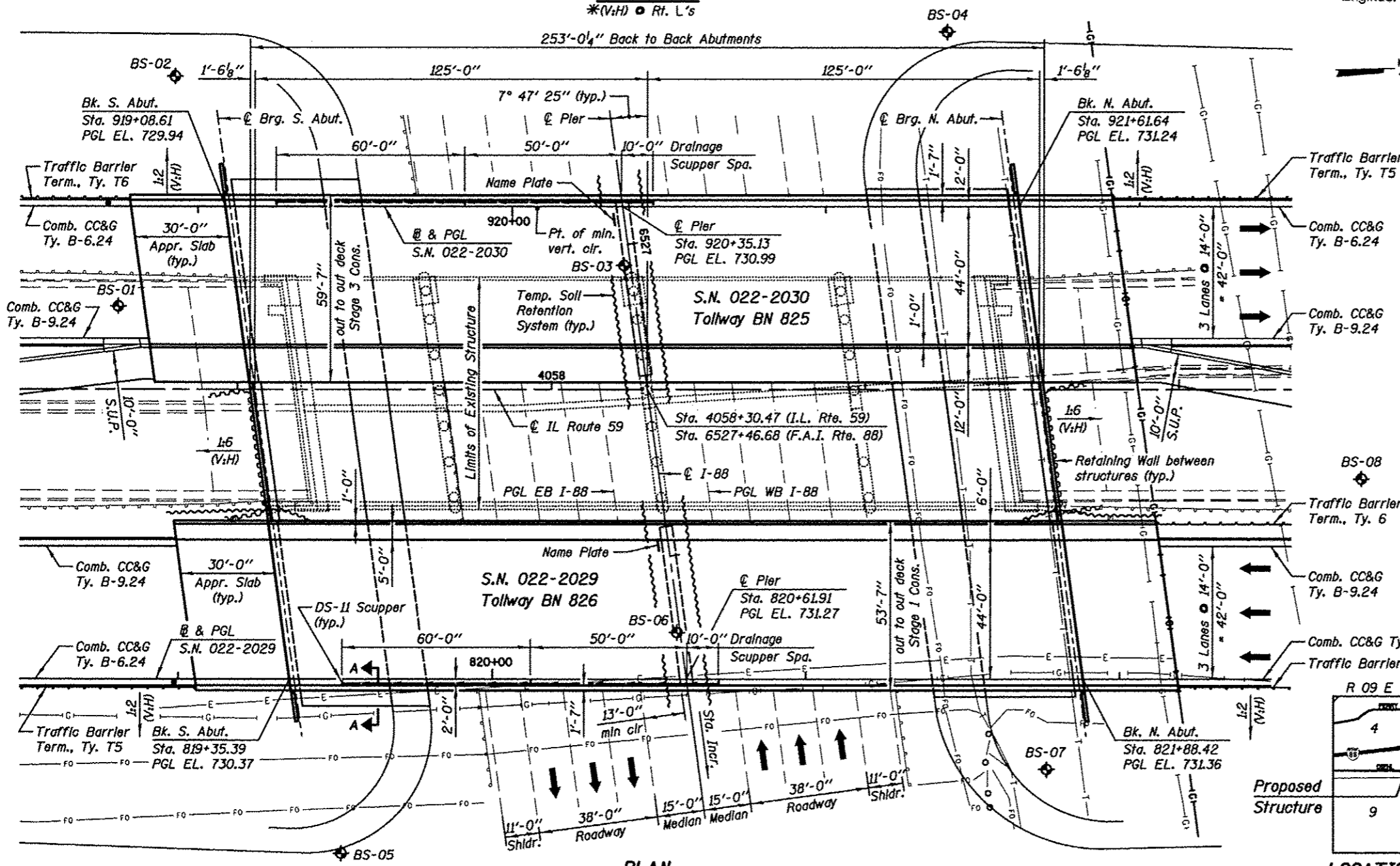
LOADING HL 93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (AASHTO M270 Gr. 50)

PRECAST PRESTRESSED UNITS
f_c = 7,000 psi
f_{ci} = 5,200 psi
f_{pu} = 270,000 psi (1/2" low lax strands)
f_{pb} = 201,960 psi (1/2" low lax strands)

APPROVED
For Structural Adequacy Only
D. Carl Perry, P.E.
Engineer of Bridges & Structures

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{d1}) = 0.086g
Design Spectral Acceleration at 0.2 sec. (S_{d5}) = 0.158g
Soil Site Class = D



Expire 11-30-2014
Date: 11/08/2012
for drawings SA-01 thru SA-63

STATION 4058+30.47
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 338 SEC. (112 & 113) WRS-5
LOADING HL-93
STRUCTURE NO. 022-2029

STATION 4058+30.47
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 338 SEC. (112 & 113) WRS-5
LOADING HL-93
STRUCTURE NO. 022-2030

NAME PLATES
See Std. 515001

LEGEND
◆ Soil Borings
F.F. Front Face NIC Not In Contract
B.F. Back Face S.U.P. Shared Use Path

Notes:
S.N. 022-2029 and S.N. 022-2030 are part of a Diverging Diamond Interchange (DDI).

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 59 OVER I-88
F.A.P. RTE. 338 SEC. (112 & 113) WRS-5
DUPAGE COUNTY
STATION 4058+30.47
S.N. 022-2029 (SB) TOLLWAY B.N. 826
S.N. 022-2030 (NB) TOLLWAY B.N. 825

KNIGHT
Engineers & Architects

DESIGNED - WPM
CHECKED - TB
DRAWN - TB
DATE - 10/15/2012

REVIS
REVIS
REVIS
REVIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N. 022-2029 (SB) TOLLWAY B.N. 826
S.N. 022-2030 (NB) TOLLWAY B.N. 825
SHEET NO. SA-01 OF 63 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(112 & 113) WRS-5	DUPAGE	963	585

CONTRACT NO. 60131
ILLINOIS FED. AID PROJECT