Benchmark: The benchmark is a control point. Northing: 1854350.090, Easting: 1098110.758, Elev.: 714.533, Sta.: 65+48.71, Offset: 58.65' LT.

Existing Structure: S.N. 016-0587 was originally constructed in 1959 as F.A.I. Route 55 Section 22-1HB as a four span wide flange structure with simply supported end spans supporting a reinforced concrete slab on multi column piers and spill thru stub abutments. In 1989 the bridge deck was patched and expansion joints were sealed. In 1995 the bridge was retrofitted to remove the pin connections over piers 1 and 3. At an unknown time the steel railings and curbs were removed and replaced with a concrete barrier. The structure is 288'-0" long back to back of abutments and 99'-0½" out-to-out of deck, at right angles to Centerline of Roadway. The Contractor will remove and replace existing superstructure and abutments. Traffic to be maintained using Stage Construction. All ramps will remain open during construction.

Salvage: Cathodic Protection Rectifier. Return to Cook County's Electrical Maintenance Contractor's Maintenance Facility. Cost included in Removal of Existing Superstructures.

SCOPE OF WORK

1. Remove and replace superstructure.
2. Remove existing stub abutments and construct integral abutments.
3. Repair slope wall and piers.

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8-in. ϕ, holes 15/16-in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 927,470 Pounds (926,590 Pounds Grade 50, 880 Pounds Grade 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

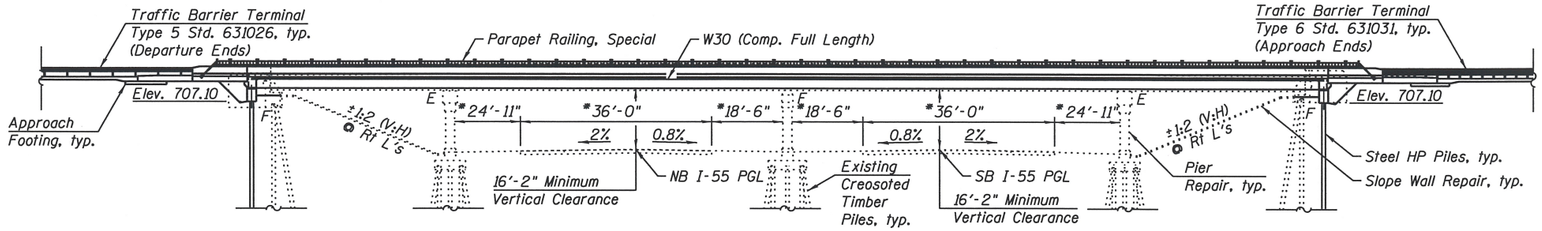
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of Pier 2.

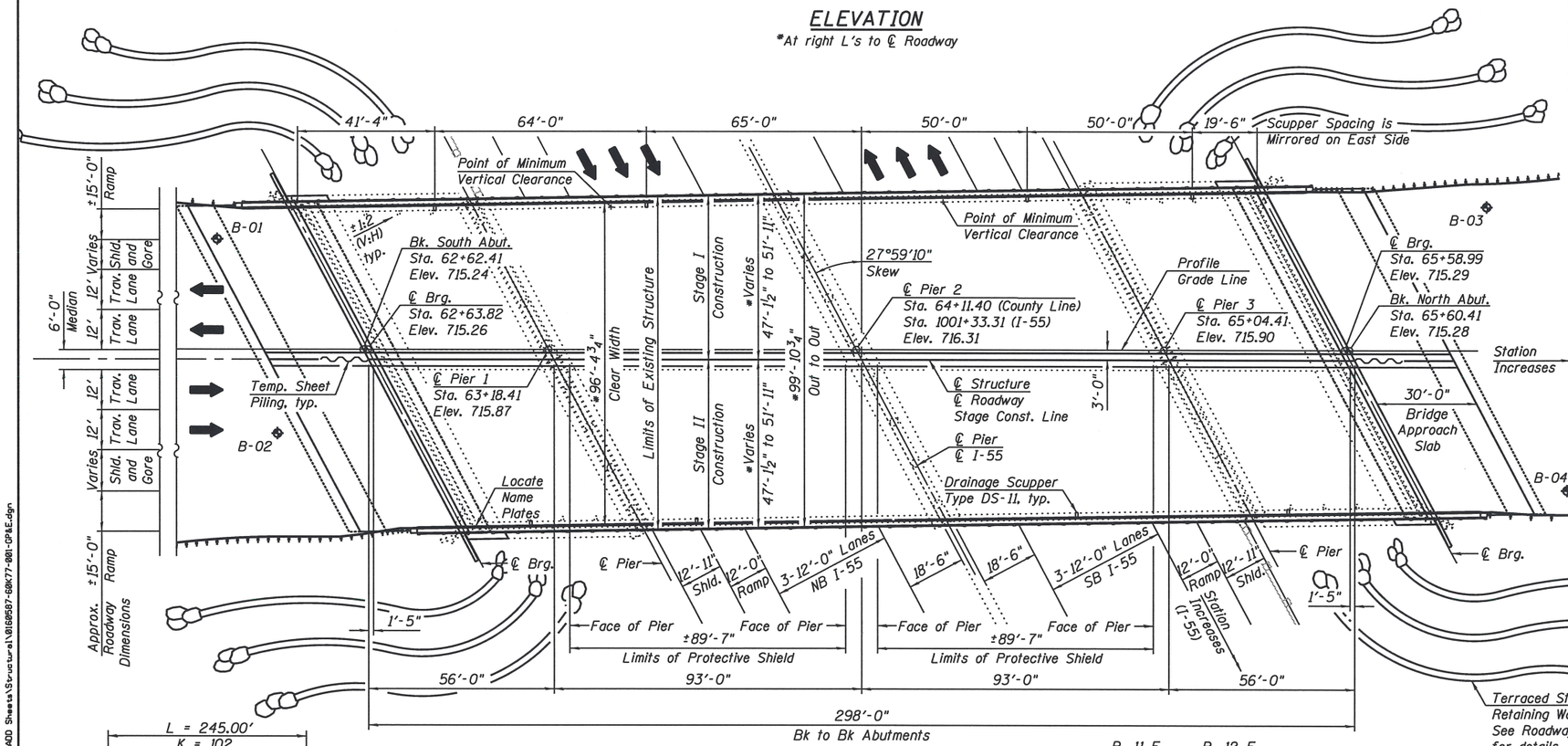
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.



ELEVATION

*At right L's to ℄ Roadway



INDEX OF SHEETS

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

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

FIELD UNITS (EXISTING CONSTRUCTION)

f'c = 3,500 psi
fy = 40,000 psi (Reinforcement)

LOADING HL-93 (NEW CONSTRUCTION)

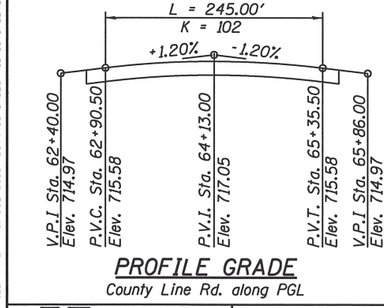
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

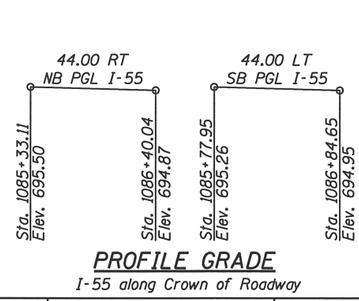
2012 AASHTO LRFD Bridge Design Specifications

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.09g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.158g
Soil Site Class = D

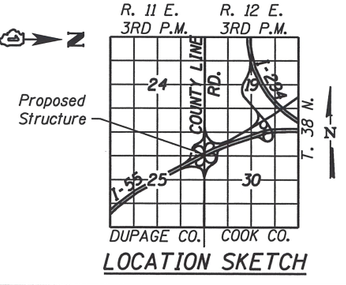


PROFILE GRADE
County Line Rd. along PGL



PROFILE GRADE
I-55 along Crown of Roadway

PLAN
*At right L's to ℄ Roadway



LOCATION SKETCH

ANTHONY J. STANOCH
081-005819
LICENSED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS

exp 11/2014

GENERAL PLAN & ELEVATION
COUNTY LINE RD OVER I-55
F.A.I. 55 SECTION 22-1HB-R
COOK/DUPAGE COUNTY
STA. 64+13.00
S.N. 016-0587

FILE NAME = S:\DOL\6300-6399\6346\028\Micros\CADD Sheets\Structural\0166587-60K77-001-GP&E.dgn

STRAND ASSOCIATES® IDFPR NO. 184-001273
1170 SOUTH HOUBOLT ROAD
JOLIET, ILLINOIS 60431
(815) 744-4200

USER NAME = brienf	DESIGNED - RRD	REVISED	
	CHECKED - AJS	REVISED	
PLOT SCALE =	DRAWN - BJF	REVISED	
PLOT DATE = 1/18/2013	CHECKED - RRD	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-0587
SHEET NO. 1 OF 42 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	22-1HB-R	COOK/DUPAGE	161	89
		CONTRACT NO. 60K77		
	ILLINOIS FED. AID PROJECT			