

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Bench Mark: BM #1 South most bolt of fire hydrant located at south west corner of Cicero Ave. and Winnemac Ave. Sta. 48+70.49, 126.75 RT

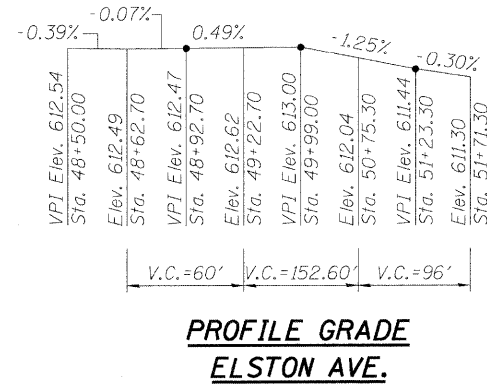
Existing Structure: No. 016-0610 constructed in 1957 as section 263-0101.8-MFT is a two span continuous non-composite rolled steel beam bridge with a 7 $\frac{1}{2}$ " deck. The beams are 147'-4 $\frac{1}{8}$ " long from ϕ bearing to ϕ bearing at the abutments and 69'-0" wide out to out. The bridge is supported by two high-walled closed abutments and a frame pier.

Reconstruction to include Superstructure, Pier, and Approach replacement. West stem wall will be replaced, and constructed utilizing existing spread footing. East abutment stem wall will be partial replaced with repairs to remaining portion of stem.

Traffic will be maintained utilizing stage construction.

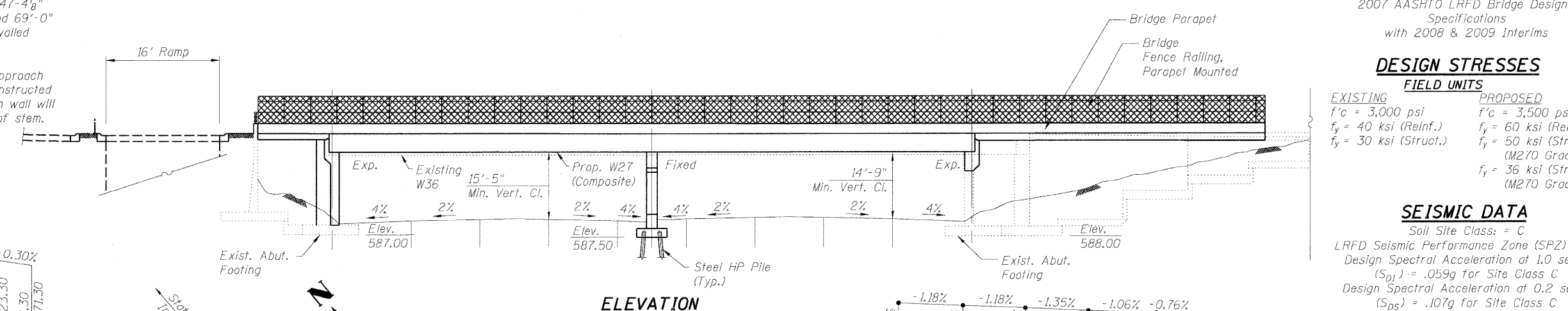
No Salvage

⊗ Indicates Soil Boring



**PROFILE GRADE
ELSTON AVE.**

ELEVATION



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

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications with 2008 & 2009 Interims

**DESIGN STRESSES
FIELD UNITS**

EXISTING	PROPOSED
$f'_c = 3,000$ psi	$f'_c = 3,500$ psi
$f_y = 40$ ksi (Reinf.)	$f_y = 60$ ksi (Reinf.)
$f_y = 30$ ksi (Struct.)	$f_y = 50$ ksi (Struct.) (M270 Grade 50)
	$f_y = 36$ ksi (Struct.) (M270 Grade 36)

SEISMIC DATA

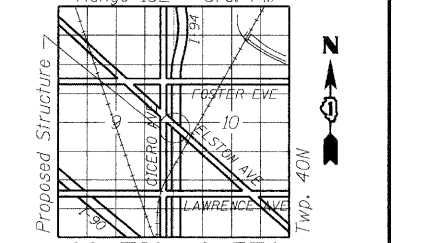
Soil Site Class: = C
LRFD Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = .059g for Site Class C
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = .107g for Site Class C

S.B. P.G.L. I-94

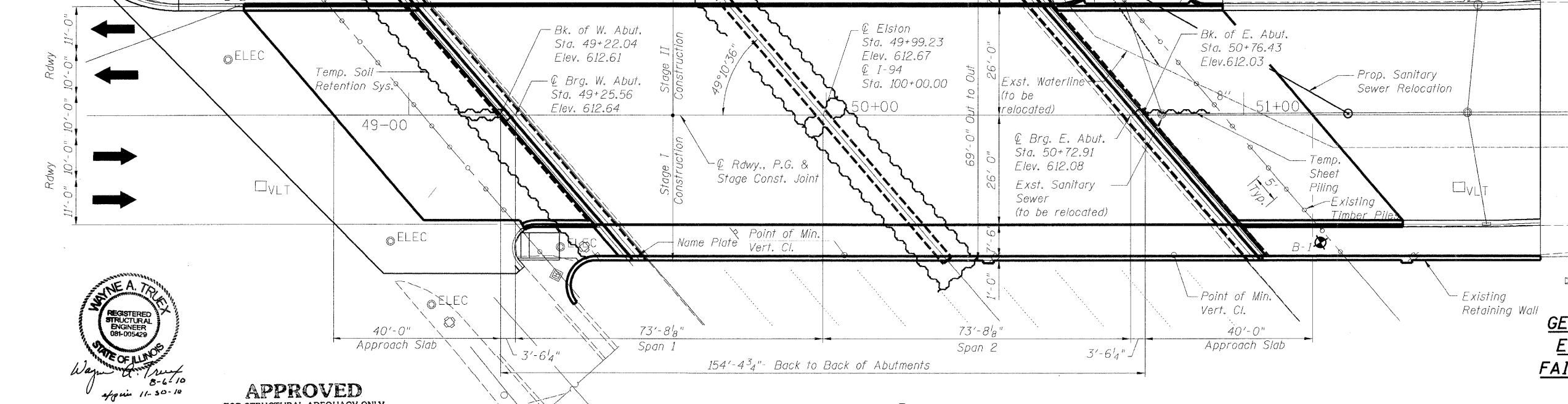
STATION 49+99.23
BUILT BY
STATE OF ILLINOIS
F.A. RT. 94 SEC. 0101.8B
LOADING HL - 93
STRUCTURE NO. 016-0610

NAME PLATE

See Std. 515001
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost to be included with Name Plates.



**GENERAL PLAN & ELEVATION
ELSTON AVENUE OVER I-94
FAI ROUTE 94 SECTION 0101.8B
COOK COUNTY
STATION 49+99.23
STRUCTURE NUMBER 016-0610**



PLAN



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (JTD)
ENGINEER OF BRIDGES AND STRUCTURES

DESIGNED	- ASP
CHECKED	- WSP
DRAWN	- BEM
CHECKED	- ASP

SHEET NO. 1 OF 42 SHEETS	F.A. RTE. 94	SECTION 0101.8B	COUNTY COOK	TOTAL SHEETS 139	SHEET NO. 77
CONTRACT NO. 60C18					
ILLINOIS FED. AID PROJECT					

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