Existing Structure: *Structure Number 099-0526 to be built in 2013 under Section 99-IHB-R, consists of a two span, continuous reinforced concrete deck on steel plate girders supported on integral abutments and a multi-column pier on Steel H-piles. Bridge measures 261'-9" back to back abuts. and 106'-7" out to out of parapets. Stuenkel Road is currently closed with detour.*

Salvage: *None.*

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.094
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.160
Soil Site Class = D

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications, 5th Edition with 2010 Interims

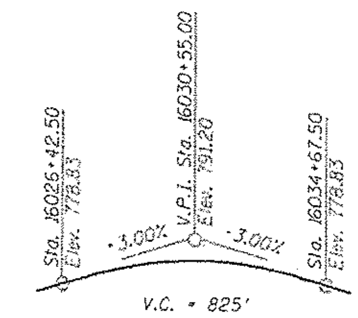
LOADING HL-93

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

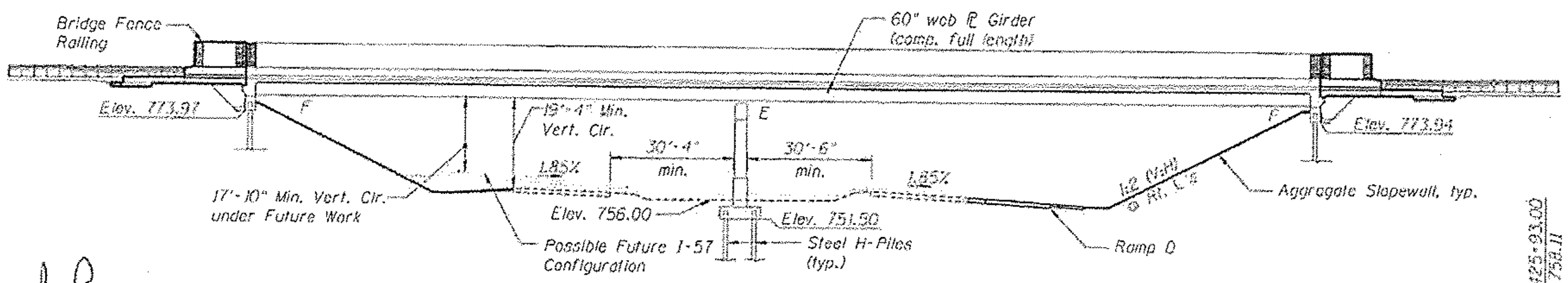
DESIGN STRESSES

FIELD UNITS

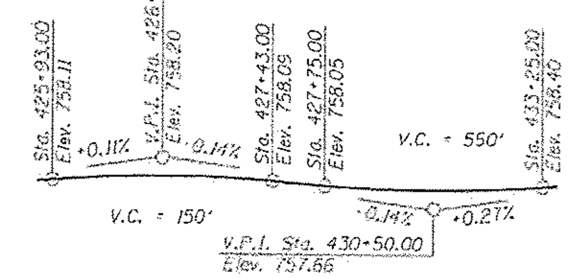
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)



PROFILE GRADE STUENKEL RD.



ELEVATION
(Looking North)

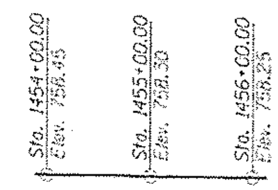


PROFILE GRADE RAMP D

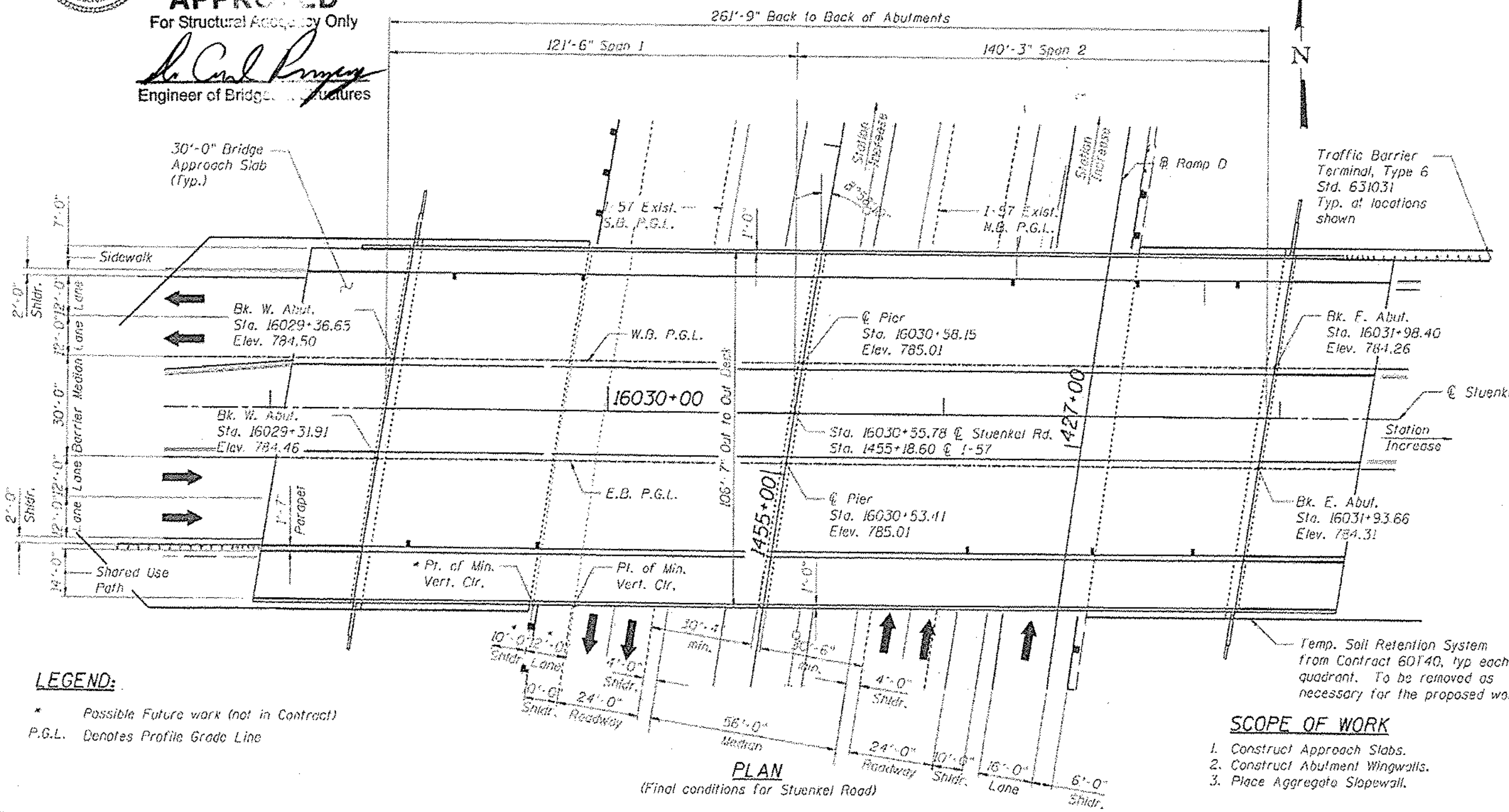
STATE OF ILLINOIS SPIROS PANTAZIS 081-006448 CHICAGO, ILLINOIS LICENSED STRUCTURAL ENGINEER

Signed [signature]
Spiros Pantazis, S.E. IL. Lic. No. 081-006448 Expires 11-30-2014
Date 1/3/14

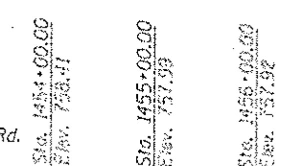
APPROVED
For Structural Adequacy Only
[signature]
Engineer of Bridges and Structures



PROFILE GRADE NB I-57
(From Existing Survey)



PLAN
(Final conditions for Stuenkel Road)



PROFILE GRADE SB I-57
(From Existing Survey)

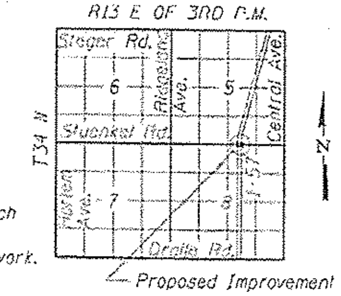
CURVE DATA

I-57 Exist. (MAIII-1)
Δ = 14° 07' 38" (RT)
D = 0° 29' 59"
T = 1,420.98'
L = 2,827.55'
E = 87.70'
R = 11,467.60'
S.E. = 1.85%
P.C. = Sta. 1443+88.41
P.T. = Sta. 1472+15.95
P.I. = Sta. 1458+09.39

CURVE DATA

Ramp D (RDIII-4)
Δ = 8° 56' 47" (RT)
D = 0° 30' 09"
T = 891.84'
L = 1,750.05'
E = 34.83'
R = 11,400.00'
S.E. = 2.0%
P.C. = Sta. 423+68.01
P.T. = Sta. 441+18.05
P.I. = Sta. 432+59.85

R13 E OF 3RD P.M.



LOCATION SKETCH
Stuenkel Rd. over I-57

LEGEND:

* Possible Future work (not in Contract)
P.G.L. Denotes Profile Grade Line

SCOPE OF WORK

1. Construct Approach Slabs.
2. Construct Abutment Wingwalls.
3. Place Aggregate Slopewall.

GENERAL PLAN & ELEVATION
STUENKEL RD. OVER F.A.I. 57
F.A.I. RTE. 57 - SEC. 99-IHB-R1
WILL COUNTY
STATION 16030+55.78
STRUCTURE NO. 099-0526

TYLININTERNATIONAL	USER NAME =	DESIGNED - PK	REVISED - △ 1/6/2014 S.P.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION (FINAL CONDITION) STUENKEL ROAD OVER I-57	F.A.I. RTE. 57	SECTION 99-IHB-R1	COUNTY WILL	TOTAL SHEETS 679	SHEET NO. 353
	PLOT SCALE =	CHECKED - SP	REVISED		SHEET NO. SA-1 OF SA-10 SHEETS			CONTRACT NO. 60L69		
	PLOT DATE =	DRAWN - PK	REVISED				ILLINOIS FED. AID PROJECT			
		CHECKED - SP/PDF	REVISED							

△ Entire Sheet Revised