Bench Mark: #408 stainless steel plug on wall Elev. 738.30. #410 cut square on wall Elev. 731.55

Existing Structure: S.N. 101-0042 was built in 1956 as F.A. Route 188, Section 1-HB-F at Station 24+71.4. It was widened in 1967 and rehabilitated in 1985 and 2001. Existing dual structures consist of four span simple supported steel WF straight beams and reinforced concrete deck supported by stub abutments on concrete piles and multi-column piers on timber piles. 250'-4 3/8" Bk. to Bk. abutments along the tangent. Varies from 119'-6" to 122'-6" out-to-out deck. Structures to be removed and replaced. Traffic to be maintained using stage construction.

No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOADING HL 93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 and 2009 Interims

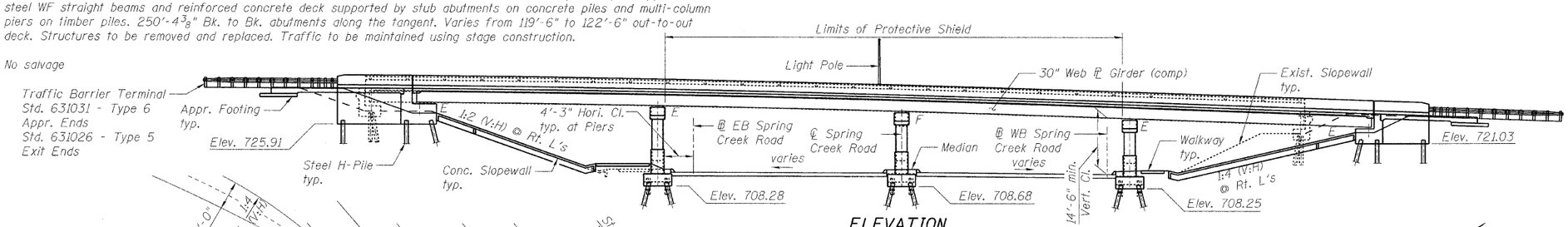
DESIGN STRESSES

FIELD UNITS

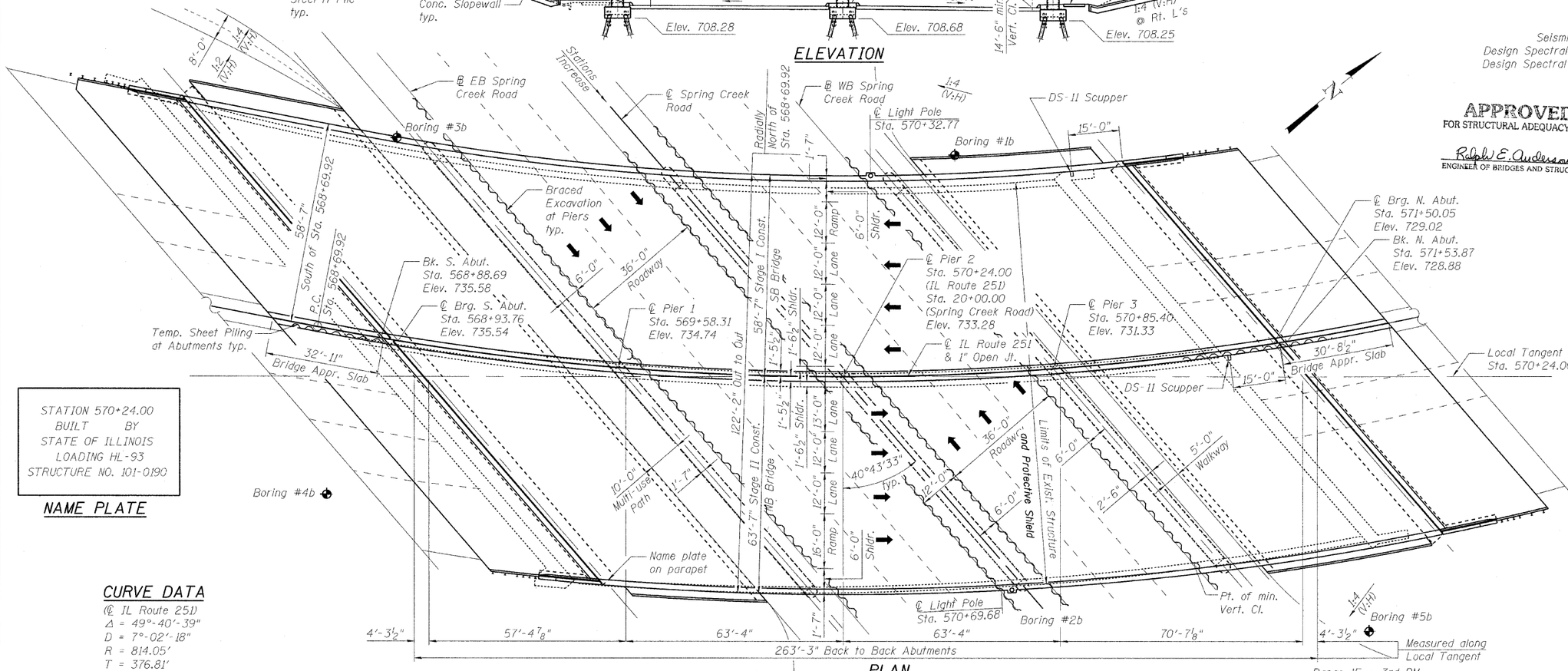
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 grade 50)

SEISMIC DATA

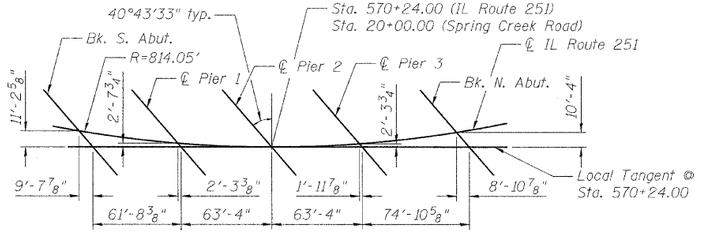
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.055g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.098g
Soil Site Class = C



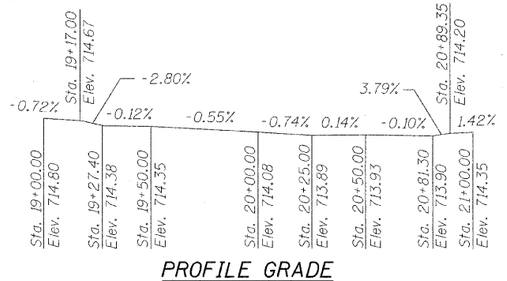
ELEVATION



PLAN

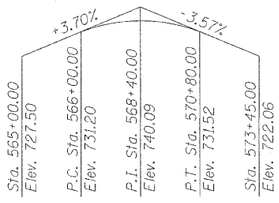


OFFSET SKETCH



PROFILE GRADE

(along ℄ Spring Creek Road from Survey)
(at Top of Median)



PROFILE GRADE

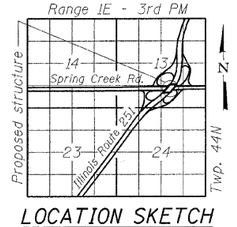
(along ℄ IL Route 251)

CURVE DATA

(℄ IL Route 251)
Δ = 49°-40'-39"
D = 7°-02'-18"
R = 814.05'
T = 376.81'
L = 705.81'
E = 82.98'
S.E. = 0.025 '/'
P.C. Sta. = 568+69.92
P.T. Sta. = 575+75.73
P.I. Sta. = 572+46.74

NAME PLATE

STATION 570+24.00
BUILT BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 101-0190



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TMD)
ENGINEER OF BRIDGES AND STRUCTURES

LICENSED STRUCTURAL ENGINEER
GARY S. POWELL
081-004771
CHICAGO
ILLINOIS
STATE OF ILLINOIS

Gary S. Powell
GARY S. POWELL, S.E.
IL. LIC. NO. 081-004771
EXP 11-30-2012
DATE 09-30-2010

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 251 OVER SPRING CREEK ROAD
F.A.P. 303 SEC. 1 - HBR
WINNEBAGO COUNTY
STATION 570+24.00
STRUCTURE NO. 101-0190

DESIGNED	JY
CHECKED	GSP
DRAWN	MJB
CHECKED	JY

SHEET NO. 1	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61 SHEETS	*	1-HBR & 1-2HB-D	WINNEBAGO	216	56
	IL RTE 251 & FOREST HILLS RD		CONTRACT NO. 64B79		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* F.A.P. 303 & F.A.U. 5146

ENTRAN

9/30/2010 3:16:08 PM g:\project\2082773_001\cadd\structural\sheets\1010190-64B79-001-GPE.dgn