

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	07-00453-00-BR	SANGAMON	33	15
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT			CONTRACT NO. 93476	

Sheet 1 of 9 Sheets

BENCH MARKS:

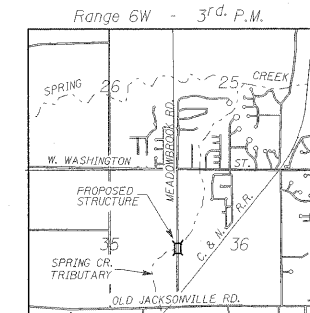
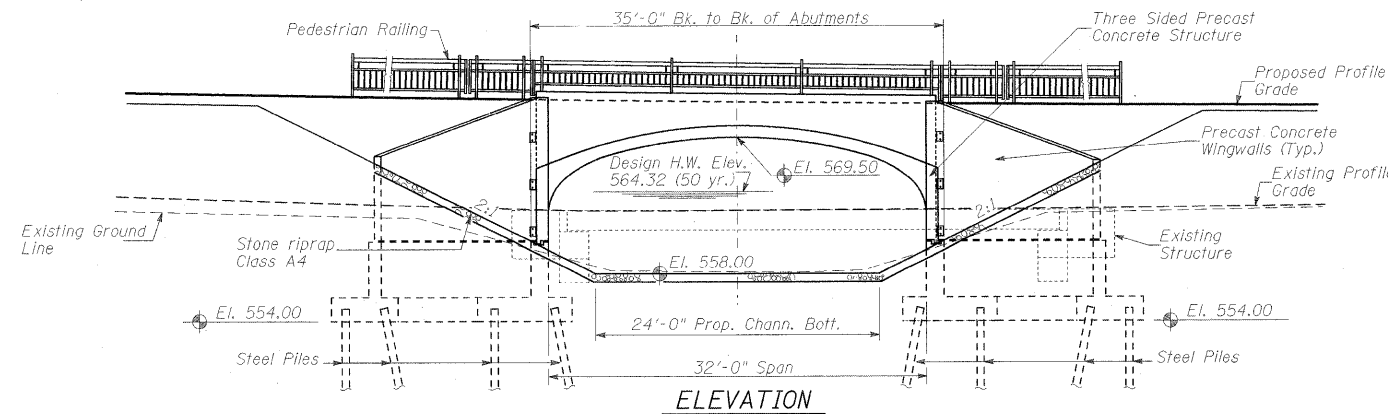
Chiseled "□" N.W. Abutment of Existing Bridge over Spring Creek Tributary at Meadowbrook Rd. Elev. = 563.08

EXISTING STRUCTURE:

Original structure was a single span reinforced concrete deck beam bridge on concrete abutments with bk.-to-bk. of abutment length of ±22'-0". The structure was widened in 1990 under Section 89-13112-00-BR, on both sides using prestressed concrete deck beams on concrete anchor blocks with bk.-to-bk. of anchor block length of 43'-0". Existing total clear deck width is 24'-10". No skew.

PROPOSED IMPROVEMENTS:

Existing structure to be removed and replaced with a three-sided precast concrete structure on pile supported reinforced concrete foundations. The road will be closed to traffic during construction period. No salvage of existing structure.



LOCATION SKETCH

SPRING CREEK TRIBUTARY
BUILT 200 BY
CITY OF SPRINGFIELD
SEC. 07-00453-00-BR
STATION 172+95.00
STR. NO. 084-6015 LOADING HS 20

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges"

DESIGN STRESSES

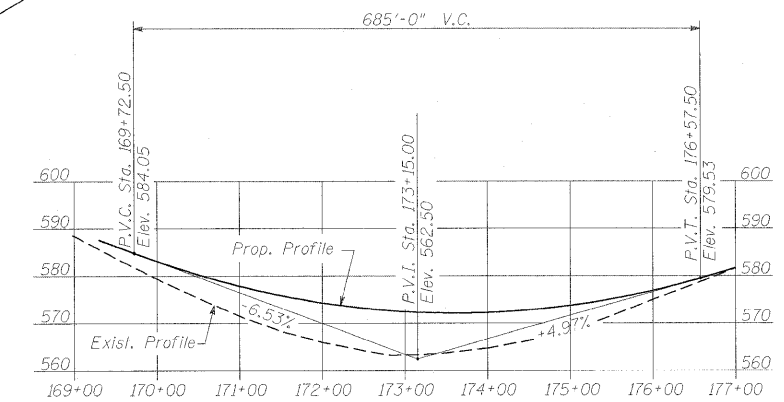
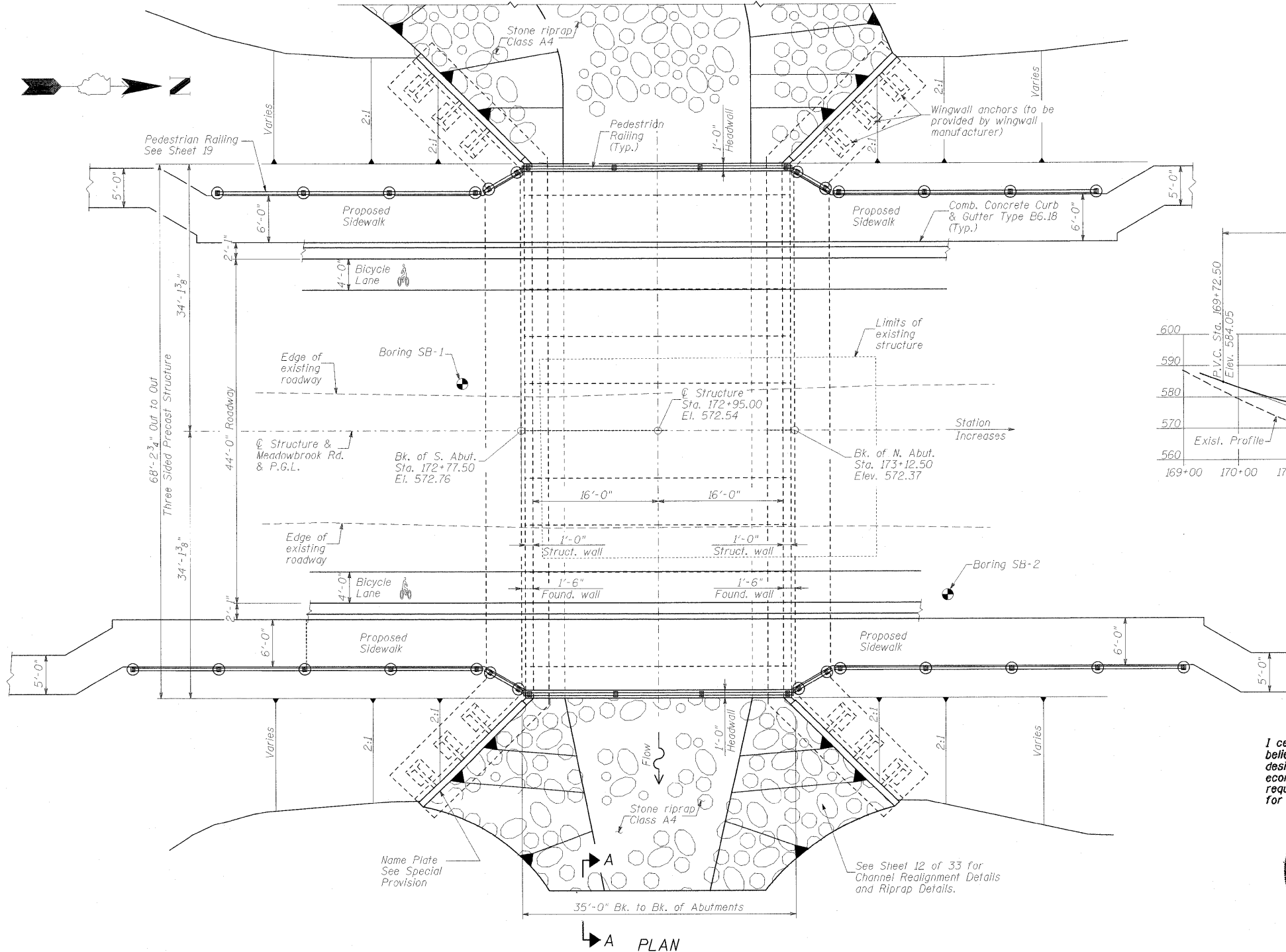
FIELD UNITS

f'_c = 3,500 psi (Cast-in-place)
 f'_c = 4,000 psi (Precast)
 f_y = 60,000 psi (reinforcement)
 f_y = 36,000 psi (AASHTO M270 Grade 36)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.05
Site Coefficient (S) = 1.2

LOADING HS20-44

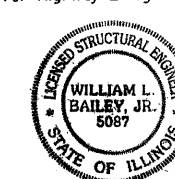


PROFILE GRADE
(Along Center Roadway)

BORING DATA

BORING NO.	STATION	OFFSET
SB-1	172+70	8' LT. ϕ
SB-2	173+32	19' RT. ϕ

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges."



William L. Bailey, Jr.
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License Number: 081-005087
Expiration Date: November 30, 2008