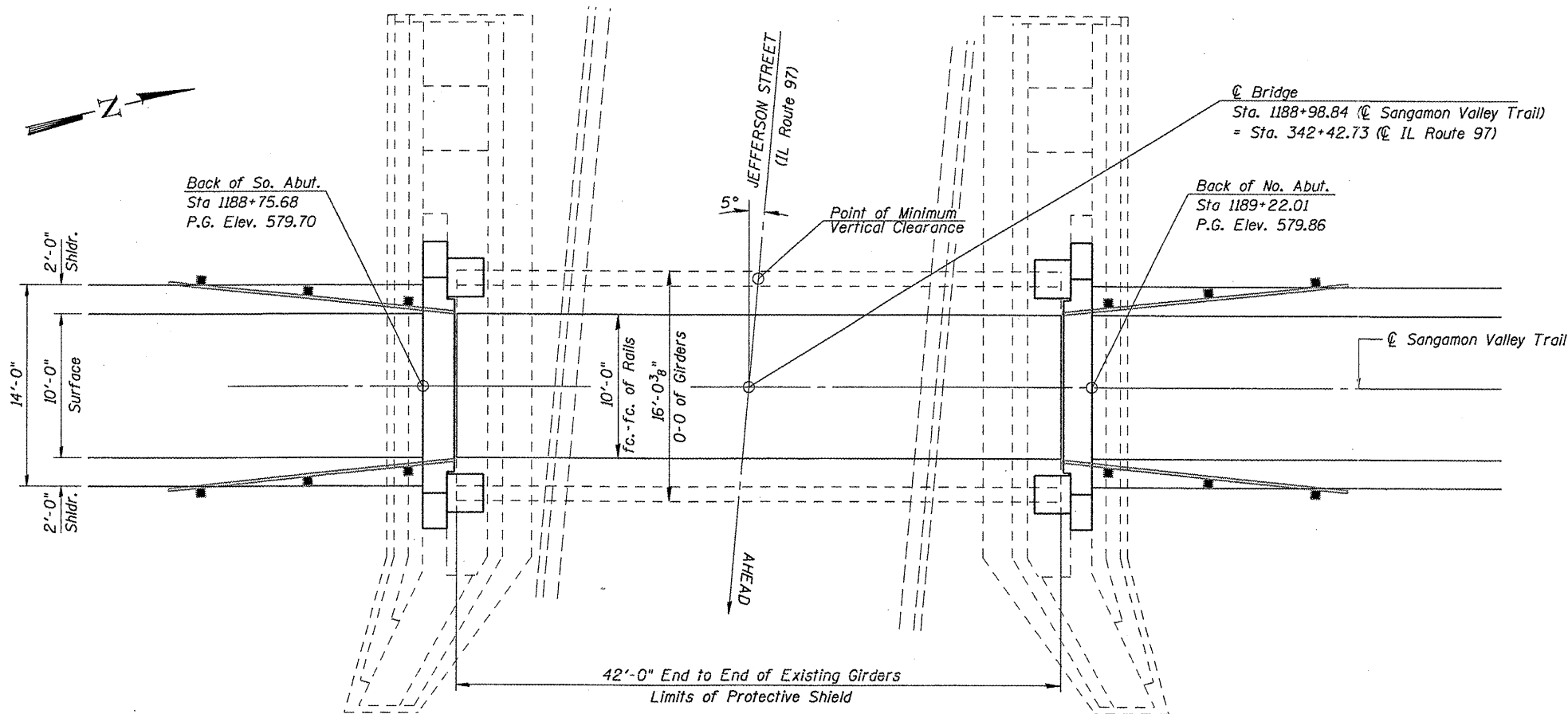
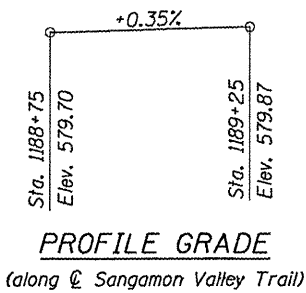
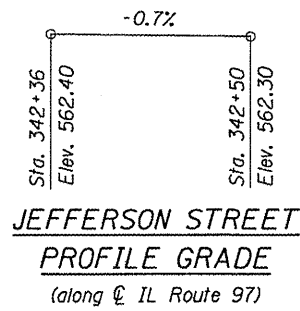
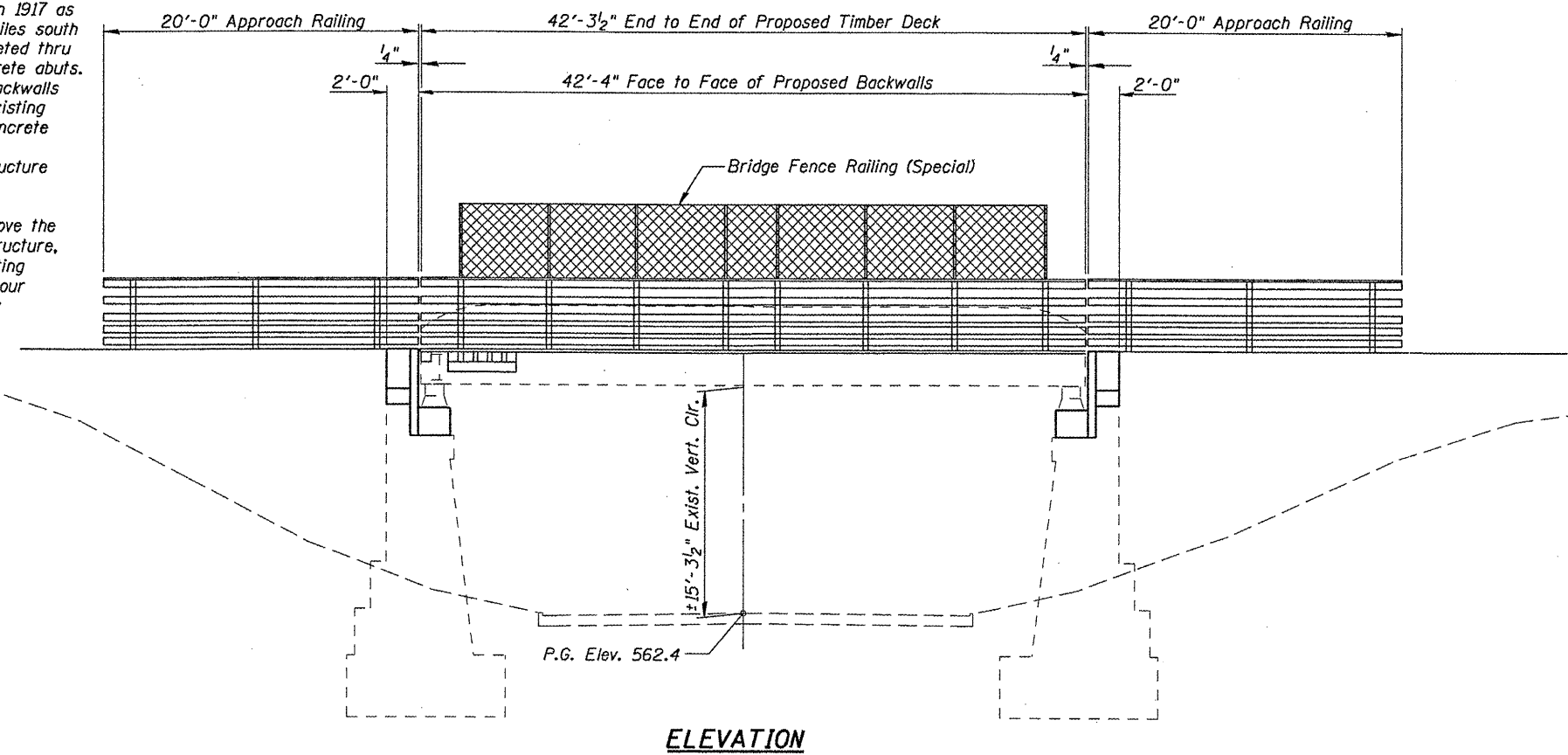
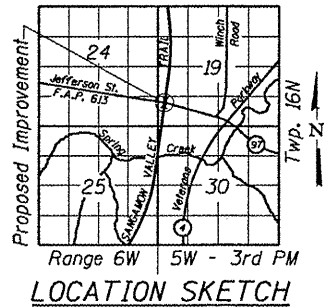


B.M. #23 Chiseled "+" on Steel Plate Southeast Corner Railroad Bridge (IL Rte 97), Station 1188+78.89, 5.99' Rt., Elev. 579.32

Existing Structure: SN 084-9936, originally built in 1917 as C&NW Railway Bridge No. 1862 over Highway 1.5 miles south of Bando. The existing structure is a 1-span riveted thru plate girder bridge on spread footing closed concrete abuts. The structure is 43'-4" fc.-to-fc of abutment backwalls with a 15'-0" c.-c. of girder deck width. The existing girders have been previously raised and set on concrete and timber bearing extensions. Existing backwalls have been extended with timbers. The existing structure will be rehabilitated to carry pedestrian traffic.

The Contractor will install a protective shield, remove the existing timber backwalls, will jack the existing structure, remove the existing railroad ties, replace the existing bearing extensions with new concrete pedestals, pour new concrete abutment backwalls, construct a new timber deck and railing, and install fencing.

No Salvage.



SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.05g
Site Coefficient (S) = 2.0

DESIGN SPECIFICATIONS

2002 AASHTO

1997 AASHTO "Guide Specifications for Design of Pedestrian Bridges".

LOADING

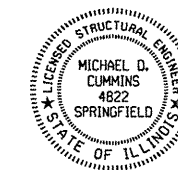
Vehicle Load: 10,000lb Emergency Vehicle
Pedestrian Load: 85 psf uniform load

DESIGN STRESSES

f_c = 3,500 psi (Substructure)
 f_y = 60,000 psi (Reinforcement)
 f_b = 1,500 psi (Timber)
 f_b = 1,850 psi (Timber Planking)

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures



"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 Guide Specifications for Design of Pedestrian Bridges'".

Michael D. Cummins 1/8/10
ILLINOIS STRUCTURAL NO. 4822 (Expires 11/30/10)

GENERAL PLAN & ELEVATION
SANGAMON VALLEY TRAIL
OVER JEFFERSON STREET (IL ROUTE 97)
SECTION 05-00173-00-BT
SANGAMON COUNTY
STATION 1188+98.84
SVT BRIDGE NO. 15
STRUCTURE NO. 084-9936

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB = 2192	DESIGNED M.D.C.
FILE = 2192jeff_gpe	CHECKED A.A.N.
DATE = 10/30/2009	DRAWN T.S.H.
	CHECKED M.D.C.

Sheet 1 of 6	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SVT	05-00173-00-BT	SANGAMON	173	107
	SANGAMON VALLEY TRAIL			CONTRACT NO.	
	FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT			93522	