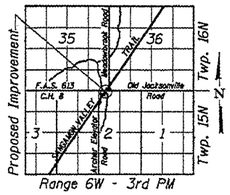
B.M. #9 Chiseled Square on Southwest Corner of Railroad Bridge South Abutment, Station 1053+27.3, 6.4' Lt., Elev. 602.75

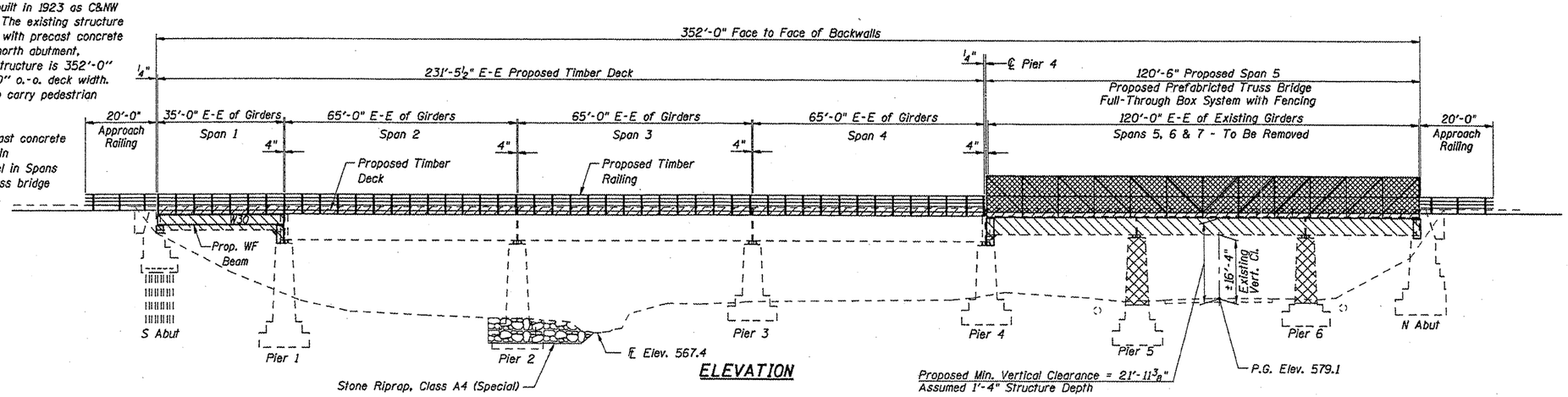
Existing Structure: SN 084-9912, originally built in 1923 as C&NW Railway Bridge 187.1 over Jacksonville Road. The existing structure is a 7-span riveted deck plate girder bridge with precast concrete units on spread footing concrete piers and north abutment, and a pile supported south abutment. The structure is 352'-0" fc.-to-fc of abutment backwalls with a 14'-0" o.-o. deck width. The existing structure will be rehabilitated to carry pedestrian traffic.

The Contractor will remove the existing precast concrete units, remove and replace the existing steel in Span 1, remove and replace the existing steel in Spans 5 thru 7 with a prefabricated pedestrian truss bridge spanning from Pier 4 to the North Abutment, remove Pier 5 & 6, modify the existing abutments, add concrete pedestals at Pier 1 & 4, construct a new timber deck and railing, and place riprap at Pier 2.

No Salvage.



LOCATION SKETCH

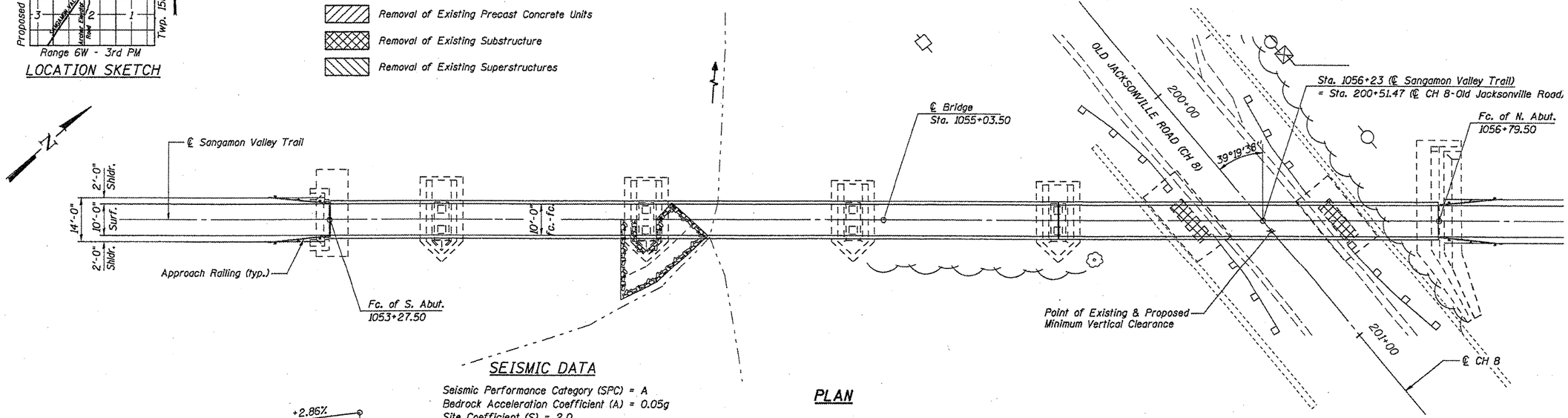


ELEVATION

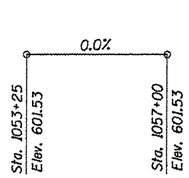
Removal of Existing Precast Concrete Units

Removal of Existing Substructure

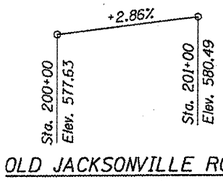
Removal of Existing Superstructures



PLAN



PROFILE GRADE
(along ℄ Sangamon Valley Trail)



OLD JACKSONVILLE ROAD
PROFILE GRADE
(along ℄ County Highway 8)

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)

"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 6/9/09
ILLINOIS STRUCTURAL NO. 4822 (Expires 11/30/10)

LICENSED STRUCTURAL ENGINEER
MICHAEL D. CUMMINS
4822
SPRINGFIELD
STATE OF ILLINOIS

Revised 4-13-10

GENERAL PLAN & ELEVATION
SANGAMON VALLEY TRAIL
OVER OLD JACKSONVILLE ROAD
SECTION 05-00173-00-BT
SANGAMON COUNTY
STATION 1055+03.5
SVT BRIDGE NO. 12
STRUCTURE NO. 084-9912

CEC	Cummins Engineering Corporation
	Civil and Structural Engineering

JOB = 2192	DESIGNED M.D.C.
FILE = 2192oldjack_gpe.dgn	CHECKED A.A.N.
DATE = 6/9/2009	DRAWN T.S.H.
	CHECKED M.D.C.

Sheet 1 of 12

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SVT	05-00173-00-BT	SANGAMON	173	76
SANGAMON VALLEY TRAIL		CONTRACT NO.		93522
FED. ROAD DIST. NO. 6	ILLINOIS	FED. AID PROJECT		