

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	72
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
CONTRACT #83867				

SHEET NO. ST-1

ST-12 SHEETS

Benchmark:
Cut square on Northwest Wingwall (West Bridge)
Elev. = 639.93

Existing Structure:
12'-0" wide by 8'-0" high by 65'-11" long cast-in-place reinforced concrete tunnel with reinforced concrete wingwalls supported on spread footings. Tunnel built in 1949 under Sec. 14B-CS, S.A.R. 24 Ext. (Kane County Sec. 118-B M.F.T.) and widened in 1976.

Salvage:
Existing tunnel to be lengthened. Wingwalls and footings to remain as shown.
Existing Steel Pipe Railing to be removed and disposed.

Staging:
One lane of traffic in each direction to be maintained during construction utilizing staged construction.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

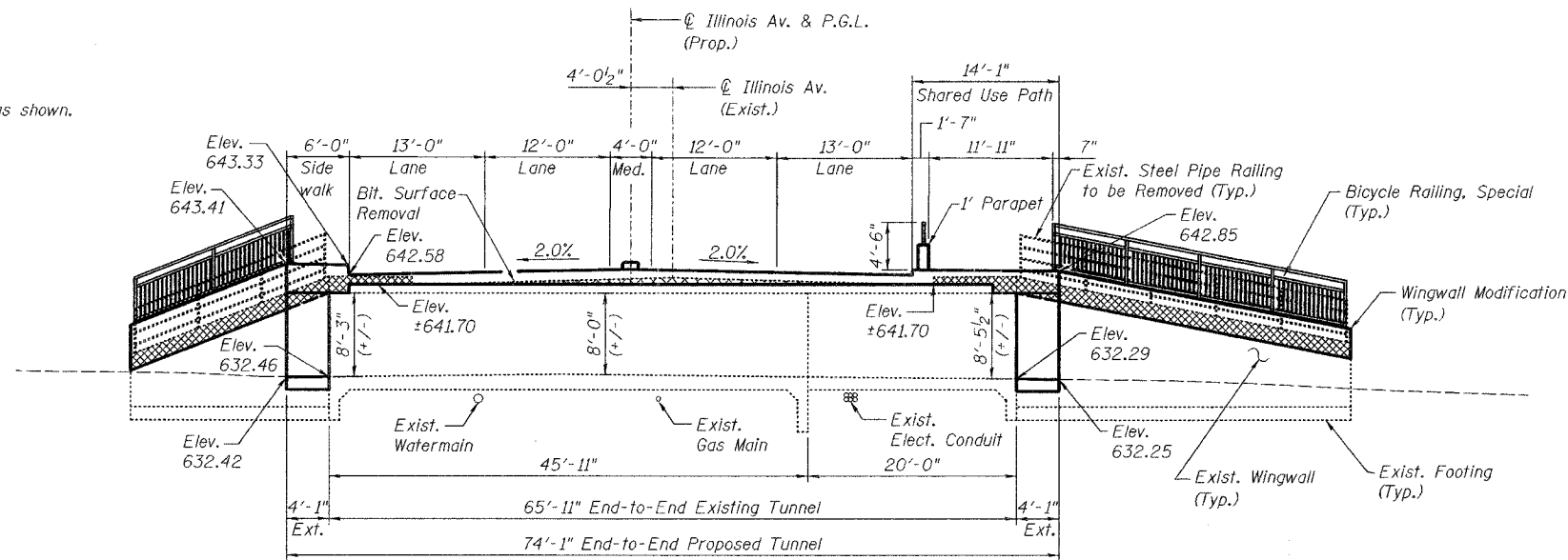
LOADING HS20-44

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

- LEGEND:**
- 12" ϕ Watermain (Abandoned)
 - 8" ϕ Gas Main (Abandoned)
 - (10)-5" ϕ PVC Electrical Conduits (Abandoned)

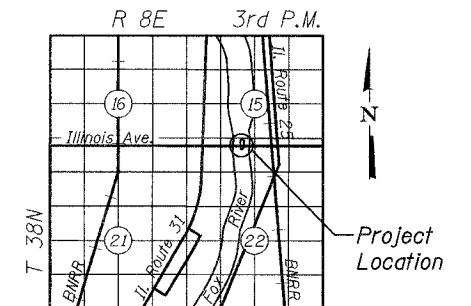
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- ST-11 Bar Splicer Details
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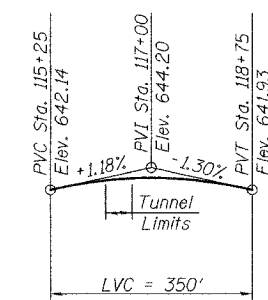


LONGITUDINAL SECTION

(Elevations shown are at the centerline of the Tunnel)

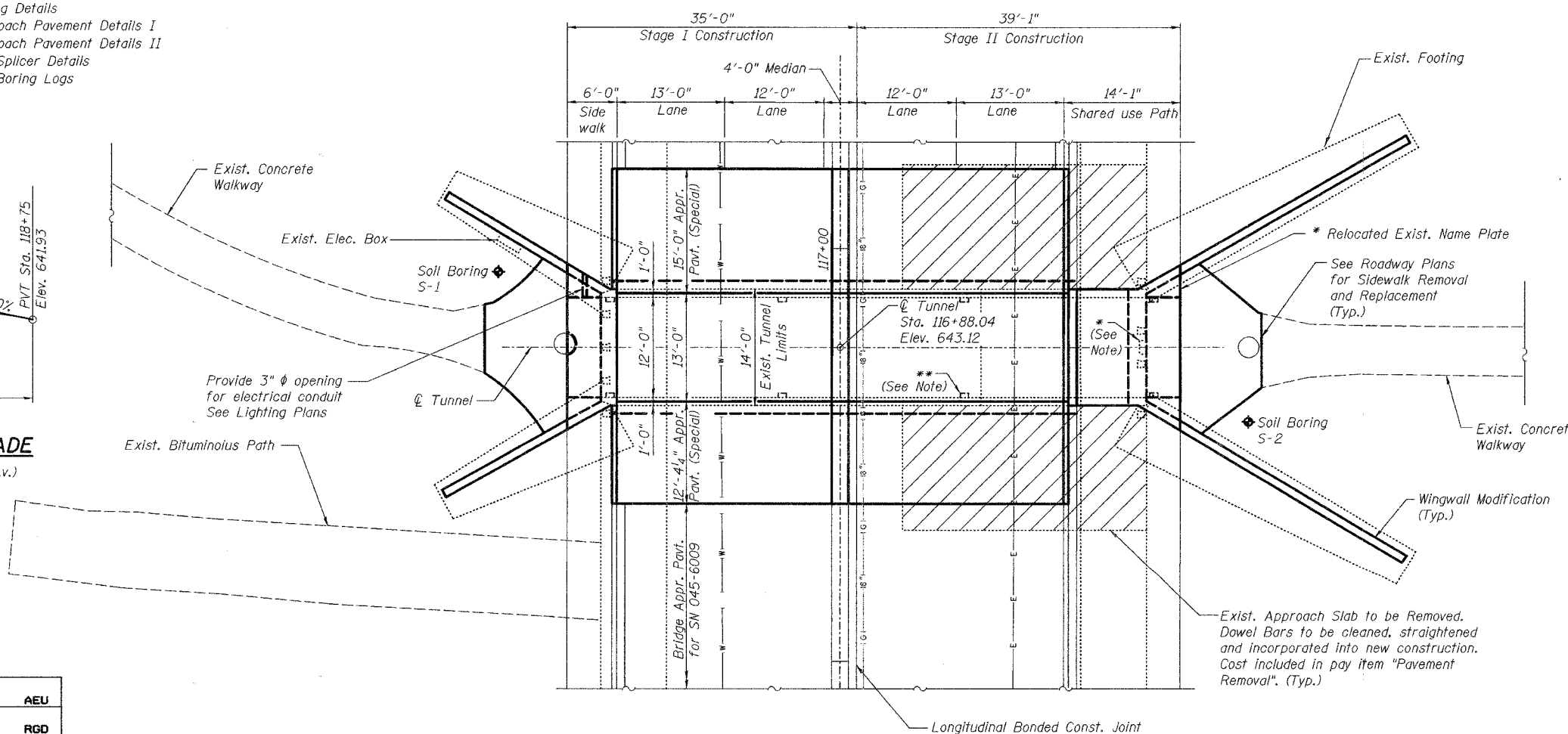


LOCATION SKETCH



PROFILE GRADE

(Along centerline of Illinois Av.)



PLAN

NOTES:

- * Remove, clean, and relocate existing bronze name plate. Cost included in Concrete Structures.
- ** Wall mounted luminaires. See Lighting Plans for locations.



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".

Robert G. Davies 9/13/06
Robert G. Davies Date
Licensed Structural Engineer
License Expires November 30, 2006

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



REVISIONS	
NAME	DATE

CITY OF AURORA

**GENERAL PLAN AND ELEVATION
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY**

DATE 7-28-2006

COMPANY: SMITH ENGINEERING CONSULTANTS, INC.
 PROJECT: CONTRACT #03-00247-00-BR
 SHEET: ST-12 OF 12 SHEETS