

Benchmarks: 1.) Chiseled "□" at S.E. corner of structure on top of safety barrier @ Sta. 465+71.92/13.81' LT Elevation = 563.63.
 2.) Top of guardrail post on the West side of IL Rte. 71 @ back center of the 10th post North from the South end of the rail @ Station 467+60.33/14.84' RT., Elevation = 572.99.

Existing Structure: Structure No. 050-2002, built 1922, Section I-1 of Station 465+27.36 and carries F.A.P. 627 (IL 71) over tributary to Illinois River. Consists of a double barrel 8'x8' reinforced concrete box culvert with wingwalls parallel to the roadway and the out to out of headwall length = 52'-6". The downstream headwall (retaining wall) is approximately 24'-6" high and 87'-9" long. An adjoining +400' retaining wall was constructed between the roadway and the public trail in the state park. Traffic will be maintained during construction via detour routes.

No Salvage.

PROPOSED S.E. TRANSITION DATA

Tan Runoff:	Sta. 462+69.45 to Sta. 462+83.45
S.E. Runoff:	Sta. 462+83.45 to Sta. 464+83.45
Full S.E.:	Sta. 464+83.45 to Sta. 465+71.96
S.E. Runoff:	Sta. 465+71.96 to Sta. 466+71.96
Tan Runoff:	Sta. 466+71.96 to Sta. 466+85.96

HORIZONTAL CURVE DATA

P.I. STA. = 464+75.79
 $\Delta = 45^\circ 36'$
 $D = 16^\circ 55' 20''$
 $R = 338.61'$
 $L = 142.34'$
 $T = 269.49'$
 $E = 28.7'$
 $S.E. = 0.04'/ft.$
 P.C. STA. = 463+33.45
 P.T. STA. = 466+02.94

DESIGN SPECIFICATIONS

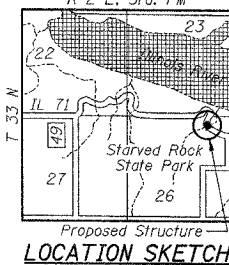
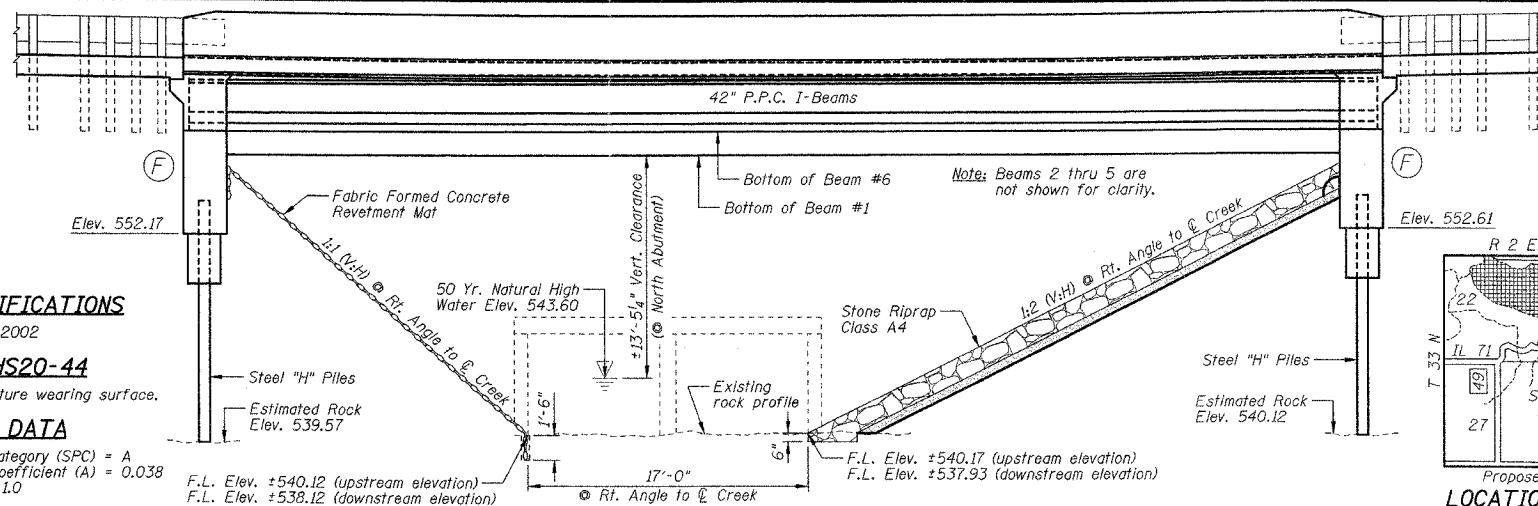
AASHTO 2002

LOADING HS20-44

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.038
 Site Coefficient (S) = 1.0

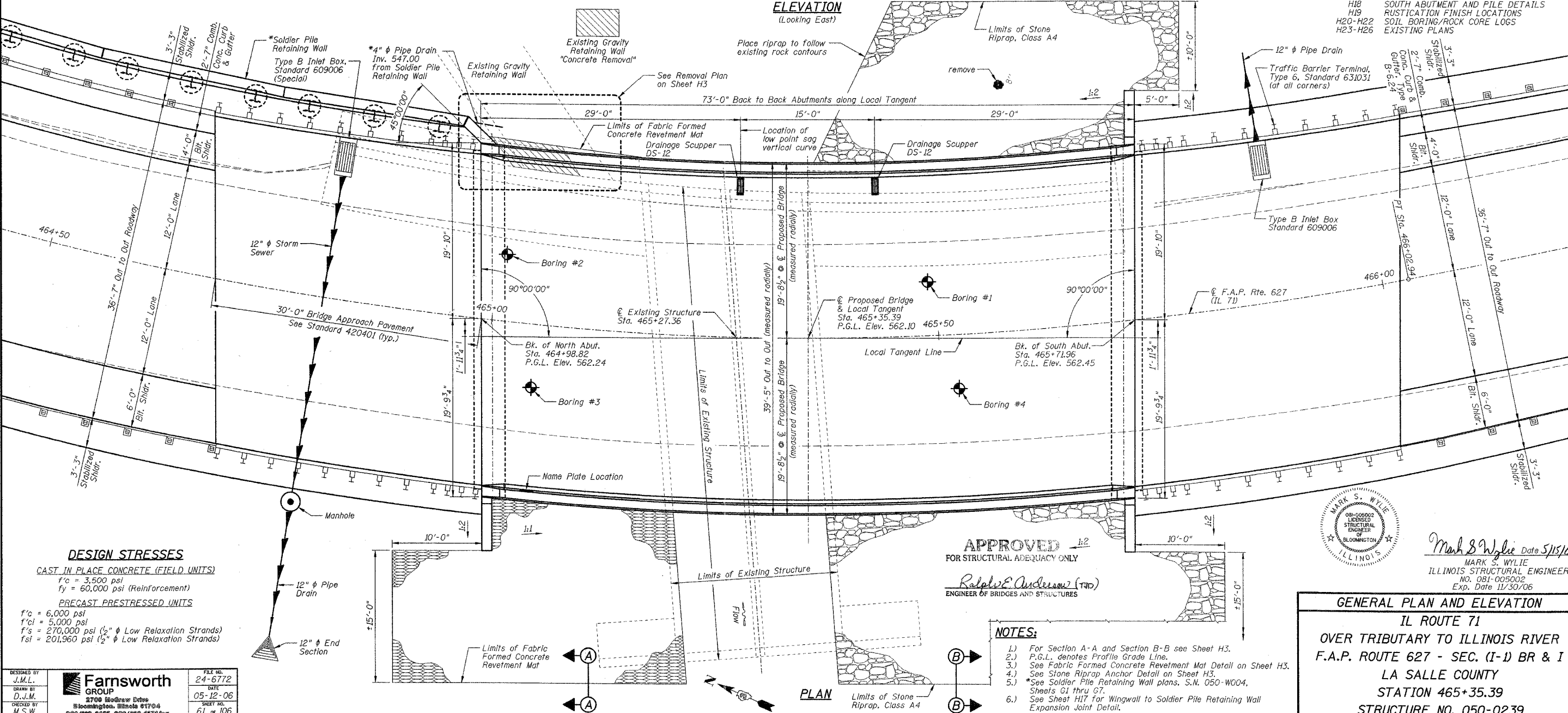


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
627	(I-1) BR & I	LA SALLE	106	61

INDEX TO SHEETS

SHEET NO.	TITLE
H1	GENERAL PLAN AND ELEVATION
H2	GENERAL NOTES, BILL OF MATERIALS AND SUBSTRUCTURE LAYOUT PLAN
H3	MISCELLANEOUS PLAN, SECTIONS AND DETAILS
H4	BAR SPLICER ASSEMBLY DETAILS
H5	ELEVATION LOCATIONS AND DEAD LOAD DEFLECTION DIAGRAM
H6	TOP OF SLAB ELEVATIONS
H7-H8	SUPERSTRUCTURE DECK
H9	SUPERSTRUCTURE CROSS SECTION
H10	SUPERSTRUCTURE DETAILS, PARAPET DETAILS AND BILL OF MATERIALS
H11	DRAINAGE SCUPPER, DS-12
H12	DIAPHRAGM DETAILS - NORTH ABUTMENT
H13	DIAPHRAGM DETAILS - SOUTH ABUTMENT
H14	FRAMING PLAN
H15	42\"/>

ELEVATION (Looking East)



DESIGN STRESSES

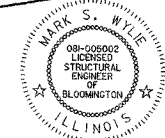
CAST IN PLACE CONCRETE (FIELD UNITS)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_ci = 5,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ Low Relaxation Strands)
 $f_{sl} = 201,960$ psi ($\frac{1}{2}$ " ϕ Low Relaxation Strands)

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

NOTES:

- 1.) For Section A-A and Section B-B see Sheet H3.
- 2.) P.G.L. denotes Profile Grade Line.
- 3.) See Fabric Formed Concrete Revetment Mat Detail on Sheet H3.
- 4.) See Stone Riprap Anchor Detail on Sheet H3.
- 5.) See Soldier Pile Retaining Wall plans, S.N. 050-W004, Sheets G1 thru G7.
- 6.) See Sheet H17 for Wingwall to Soldier Pile Retaining Wall Expansion Joint Detail.



Mark S. Wylie Date 5/15/06
 MARK S. WYLIE
 ILLINOIS STRUCTURAL ENGINEER
 No. 081-005002
 Exp. Date 11/30/06

GENERAL PLAN AND ELEVATION

**IL ROUTE 71
 OVER TRIBUTARY TO ILLINOIS RIVER
 F.A.P. ROUTE 627 - SEC. (I-1) BR & I
 LA SALLE COUNTY
 STATION 465+35.39
 STRUCTURE NO. 050-0239**

DESIGNED BY: J.M.L.
 DRAWN BY: D.J.M.
 CHECKED BY: M.S.W.

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FILE NO. 24-6772
 DATE 05-12-06
 SHEET NO. 61 OF 106