F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
627	(1-1)I-1	LA SALLE	60	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJE	

CONTRACT NO. 66550

SHEET B1 OF 9 SHEETS

Benchmarks: 1.) Top of guardrail post on the South side of IL Rte. 71 @ the back center of the 10th post East from the West end of the rail @ Station 400+80.31/14.62' RT., Elevation = 581.01.

2.) Top of guardrail post on the South side of IL Rte. 71 @ the back center of the 10th post West from the East end of the rail @ Station 396+93.99/15.57' RT., Elevation = 579.55.

Existing Structure: Existing Retaining Wall, built 1922, under Section I-1 from Station ±400+01.00/±32.0' LT. to Station ±400+76.00/±29.0' LT. of F.A.P. 627 (IL 71). Consists of sheet piling and 16 steel piles @ approximately 4'-0" centers. The structure is approximately 63'-0" long.

No Salvage.

DESIGN SPECIFICATIONS

AASHTO 2002

DESIGN STRESSES

FIELD UNITS

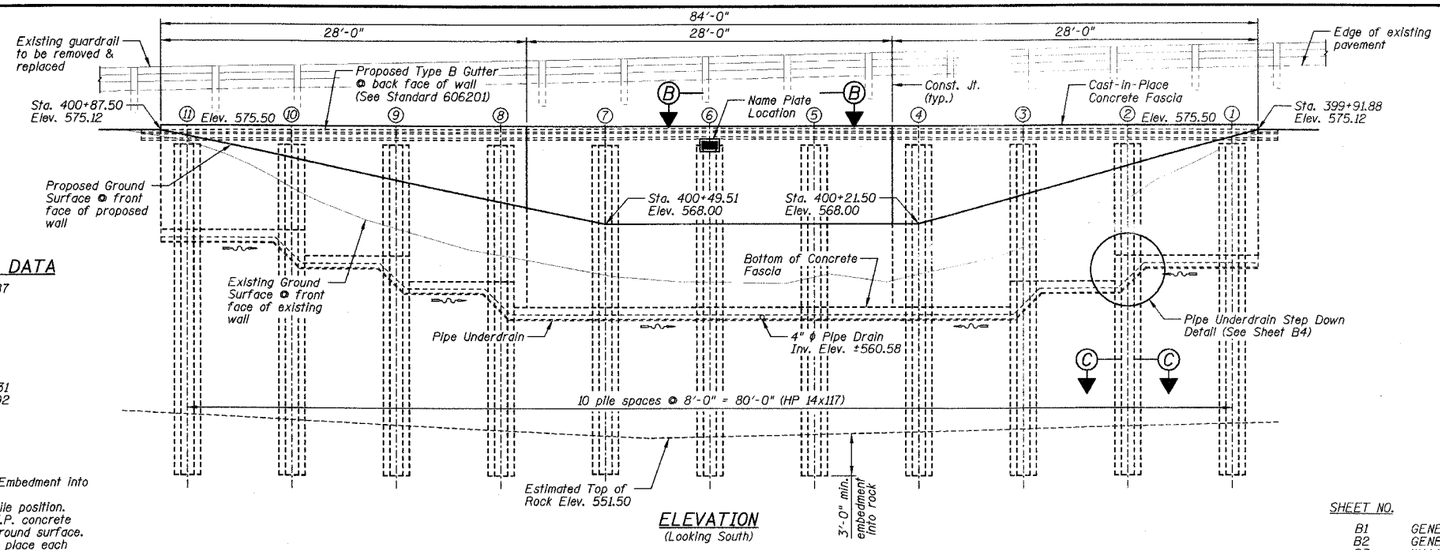
f'c = 3,500 psi (Cast-In-Place Concrete)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (Soldier Pile Steel)

HORIZONTAL CURVE DATA

P.I. STA. = 400+70.87
Δ = 56°11'
D = 28°25'55"
R = 201.52'
T = 107.56'
L = 197.60'
E = 26.91'
S.E. = 0.04'/ft.
P.C. STA. = 399+63.31
P.T. STA. = 401+60.92

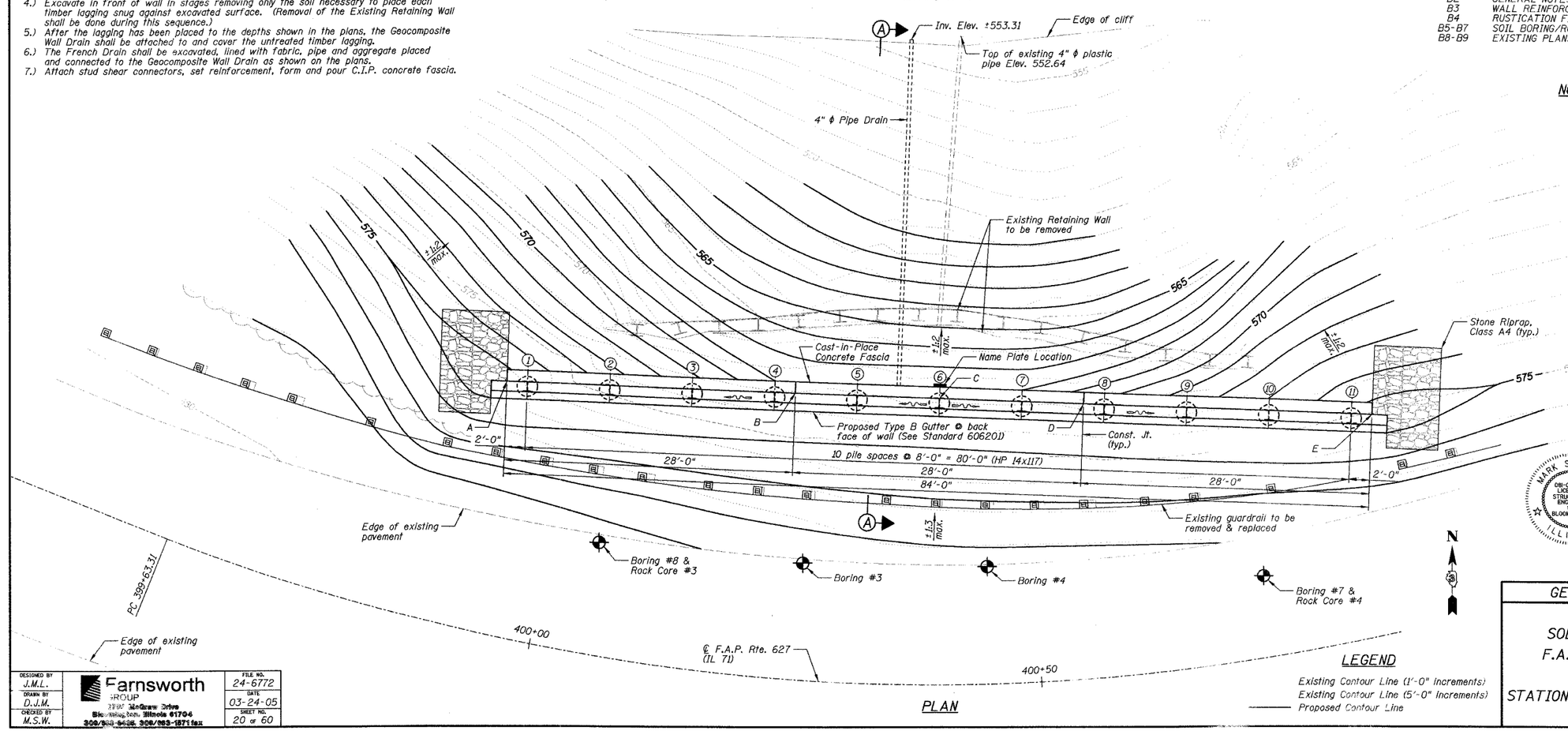
CONSTRUCTION SEQUENCE:

1.) Excavate working platform and drill shaft excavation for soldier pile. Embedment into rock shall be as shown on the plans.
2.) Set soldier pile in the shaft excavation and brace to maintain proper pile position.
3.) Place encasement concrete around soldier pile to the bottom of the C.I.P. concrete fascia, and Controlled Low Strength Material (CLSM) to the excavated ground surface.
4.) Excavate in front of wall in stages removing only the soil necessary to place each timber lagging snug against excavated surface. (Removal of the Existing Retaining Wall shall be done during this sequence.)
5.) After the lagging has been placed to the depths shown in the plans, the Geocomposite Wall Drain shall be attached to and cover the untreated timber lagging.
6.) The French Drain shall be excavated, lined with fabric, pipe and aggregate placed and connected to the Geocomposite Wall Drain as shown on the plans.
7.) Attach stud shear connectors, set reinforcement, form and pour C.I.P. concrete fascia.

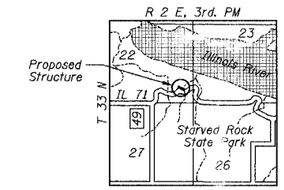


ELEVATION

(Looking South)



PLAN



LOCATION SKETCH

INDEX TO SHEETS

SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	GENERAL NOTES, BILL OF MATERIALS, SECTIONS AND DETAILS
B3	WALL REINFORCEMENT AND SOLDIER PILE INFORMATION
B4	RUSTICATION FINISH DETAILS AND PIPE UNDERDRAIN DETAILS
B5-B7	SOIL BORING/ROCK CORE LOGS
B8-B9	EXISTING PLANS

NOTES:

1.) Work this sheet with Sheets B2 thru B4.
2.) For Sections A-A, B-B & C-C see Sheet B2.
3.) The existing retaining wall to be removed is not shown in the Elevation for clarity.
4.) For Stone Riprap, Class A4 and Type B Gutter see Roadway Plans.

WALL INFORMATION CHART

Reference Points	Station to Back Face of Wall	Offset to Back Face of Wall
A	399+91.88	24.59' LT.
B	400+23.88	27.94' LT.
C	400+40.14	27.94' LT.
D	400+56.29	26.81' LT.
E	400+87.50	21.28' LT.

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

MARK S. WYLIE 081-005002 LICENSED STRUCTURAL ENGINEER OF BLOOMINGTON ILLINOIS

Mark S. Wylie Date 3/24/05
MARK S. WYLIE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-005002
Exp. Date 11/30/06

LEGEND

Existing Contour Line (1'-0" Increments)
Existing Contour Line (5'-0" Increments)
Proposed Contour Line

GENERAL PLAN AND ELEVATION
IL ROUTE 71
SOLDIER PILE RETAINING WALL
F.A.P. ROUTE 627 - SEC. (1-1)I-1
LA SALLE COUNTY
STATION 399+91.88 TO STATION 400+87.50
STRUCTURE NO. 050-W001

DESIGNED BY	FILE NO.
J.M.L.	24-6772
DRAWN BY D.J.M.	DATE 03-24-05
CHECKED BY M.S.W.	SHEET NO. 20 OF 60

Farnsworth GROUP
2709 McGraw Drive
Bloomington, Illinois 61704
309/663-8435 309/663-1871 fax