

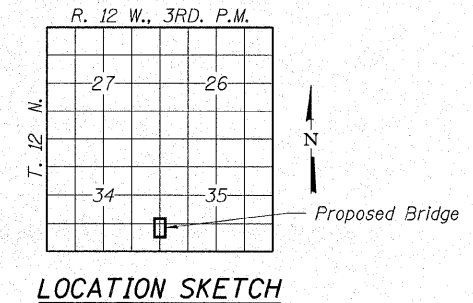
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 242	06-06109-00-BR	CLARK	18	9
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 95529	

GENERAL NOTES

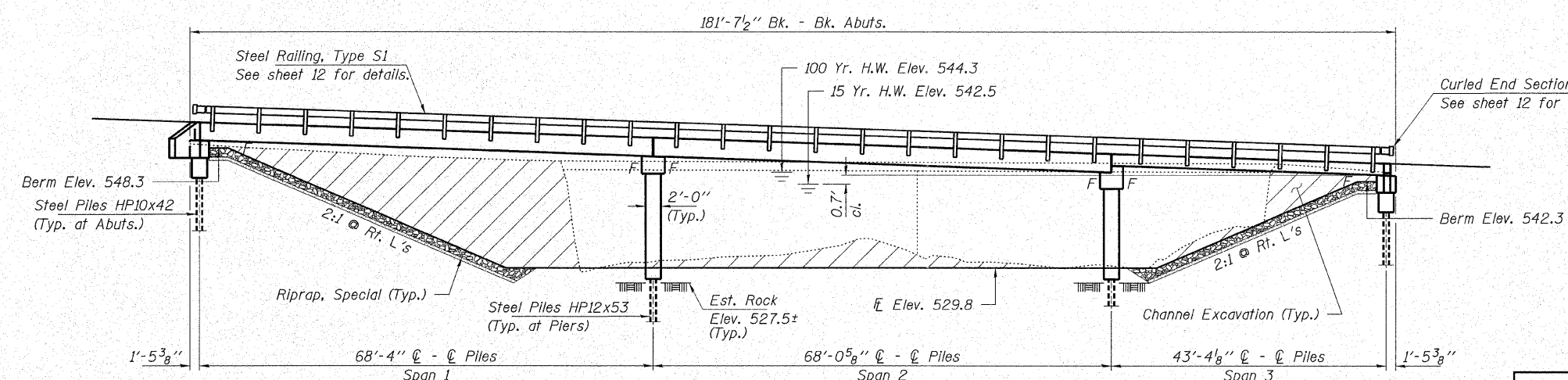
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
 Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.
 All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions. See Sheet 18 for Borings.

WEST FORK BIG CREEK
 BUILT 200_ BY
 CLARK COUNTY
 SEC. 06-06109-00-BR
 DOUGLAS ROAD DISTRICT
 STR. NO. 012-3329
 LOADING HS 20

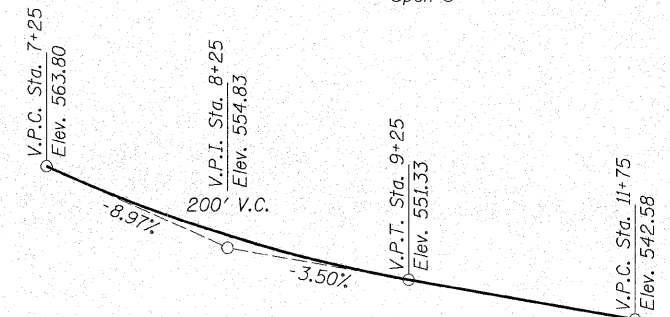
NAME PLATE
 See Std. 515001



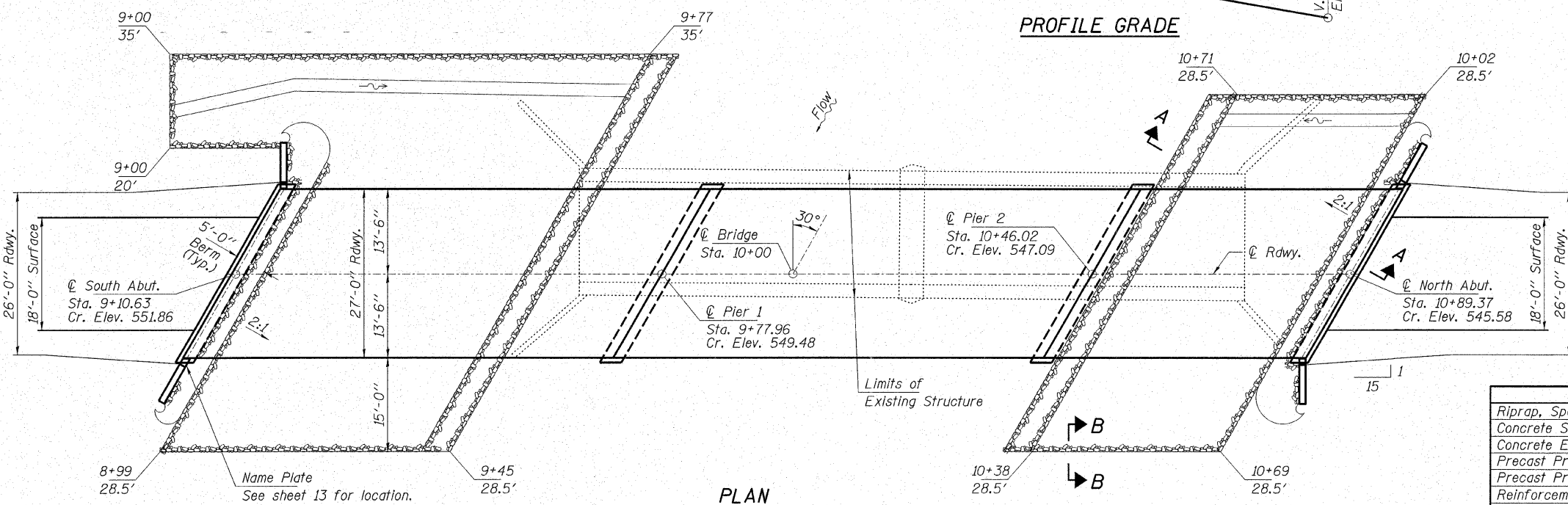
LOCATION SKETCH



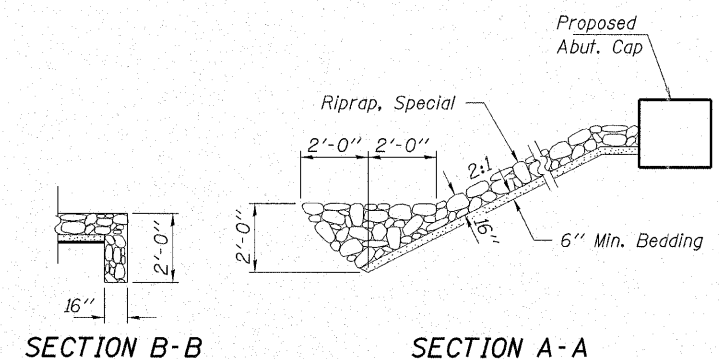
ELEVATION



PROFILE GRADE



PLAN



SECTION B-B

SECTION A-A

Note: See Special Provisions for Riprap, Special.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Riprap, Special	Ton			570
Concrete Structures	Cu. Yd.		108.1	108.1
Concrete Encasement	Cu. Yd.		3.4	3.4
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,188		1,188
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	3,672		3,672
Reinforcement Bars	Pound		11,400	11,400
Steel Railing, Type S1	Foot	359		359
Steel Piles HP10x42	Foot		175	175
Steel Piles HP12x53	Foot		290	290
Driving Piles	Foot		175	175
Name Plates	Each		1	1
Setting Piles in Rock	Each		10	10
Underwater Structure Excavation Protection - Loc. 1	Each		1	1
Underwater Structure Excavation Protection - Loc. 2	Each		1	1

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
 f'ci = 4,000 psi (Span 1 & 2)
 f'ci = 4,200 psi (Span 3)
 f's = 270,000 psi (1/2" low lax. strands)
 f'si = 201,960 psi (1/2" low lax. strands)
 fy = 60,000 psi (Reinf.)

Loading HS 20-44
 Design Specifications: 2002 AASHTO & all applicable interims.
 25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.65g
 Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 38.4 Sq. Mi. Low Grade Elev. 540.9 @ Sta. 13+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	15	4,350	1,080	1,330	542.5	0.2	0.3	542.7	542.8
Base	100	6,890	1,230	1,570	544.3	0.3	0.3	544.6	544.6
Max. Calc.	500	8,940	1,260	1,710	545.3	0.2	0.2	545.5	545.5

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 Standard Specifications for Highway Bridges".

ILLINOIS STRUCTURAL NO. 081-6064 Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
 CIVIL & STRUCTURAL ENGINEERS
 LAND SURVEYORS
 3085 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 (217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-23-0026-1 DATE: 10/30/07
 DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION
SECTION 06-06109-00-BR
DOUGLAS ROAD DISTRICT
CLARK COUNTY
STRUCTURE NO. 012-3329 / STATION 10+00