

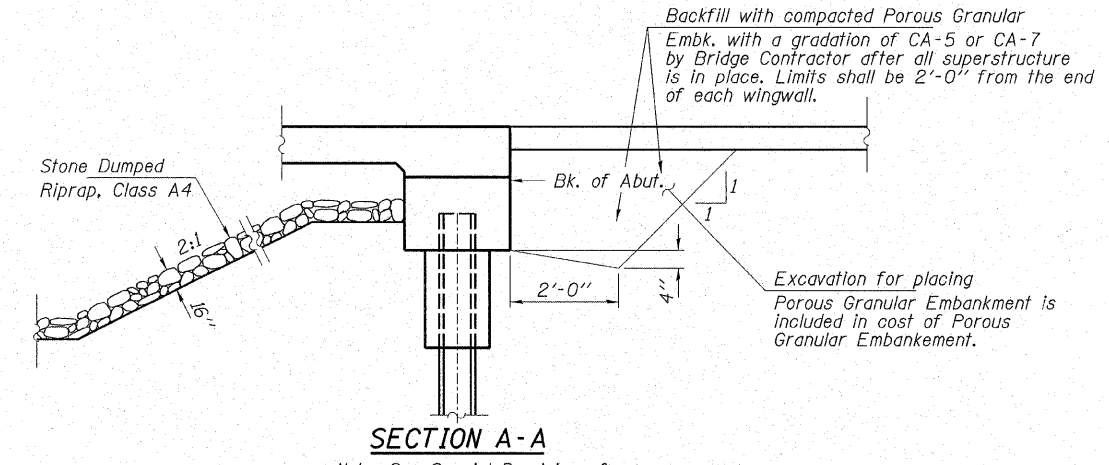
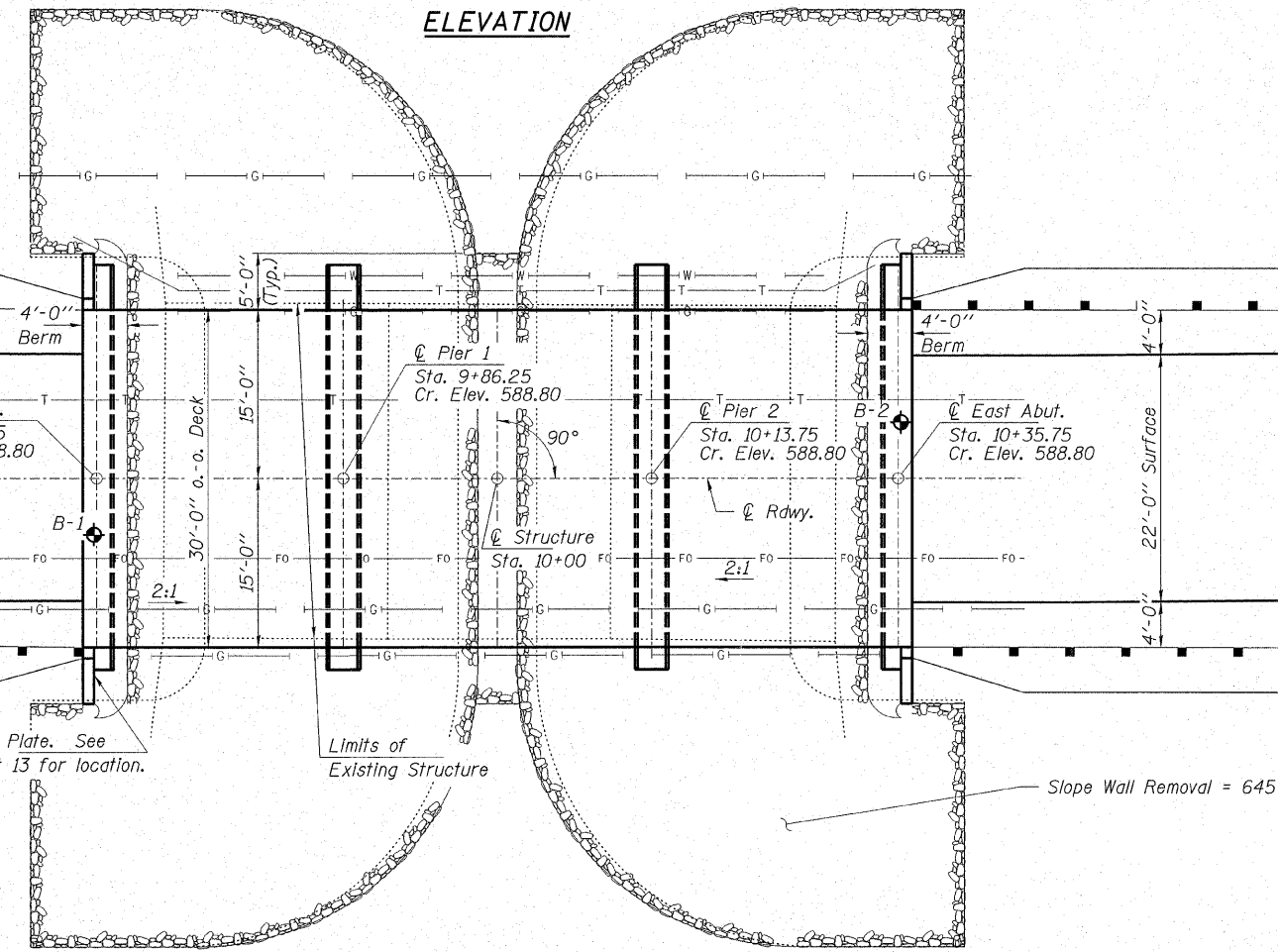
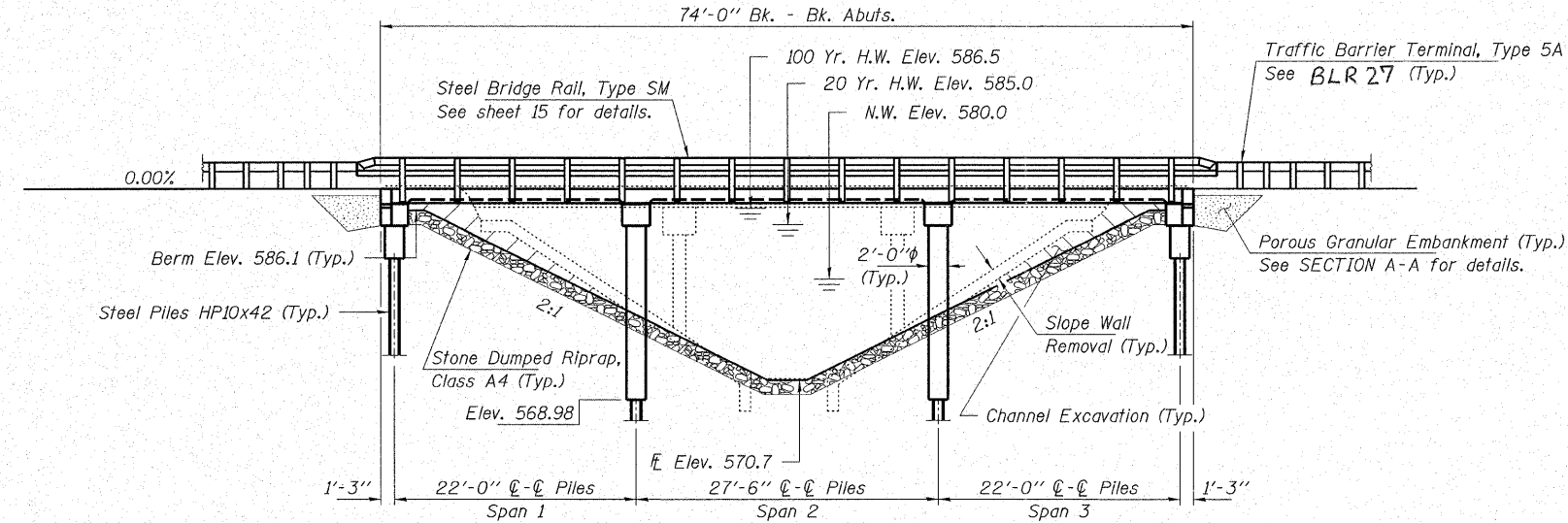
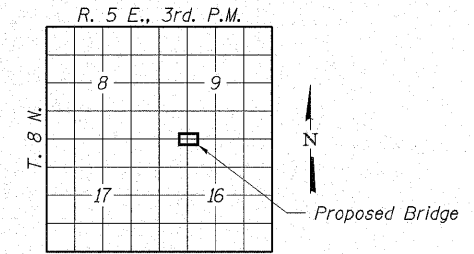
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1706	00-00080-00-BR	EFFINGHAM	17	11
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 95524		

GENERAL NOTES

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment and Pier 1 or approved by the Engineer before ordering the remainder of piles.
 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.
 The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework in addition to allowance for dead load deflection.
 Protective Coat shall be applied to the entire top surface and edges of the bridge deck, extended pier & abutment caps, and front face of wingwalls.
 See Sheet 17 for Borings.

LAKE SARA
 BUILT 200_ BY
 EFFINGHAM COUNTY
 SEC. 00-00080-00-BR
 COUNTY HIGHWAY 6
 F.A. PROJ. BRS-1706(104)
 STR. NO. 025-3222 LOADING HS 20

NAME PLATE
 See Std. 515001



SECTION A-A
 Note: See Special Provisions for Stone Dumped Riprap, Class A4.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Ton		50	50
Stone Dumped Riprap, Class A4	Ton			550
Slope Wall Removal	Sq. Yd.			645
Concrete Structures	Cu. Yd.		29.1	29.1
Concrete Superstructures	Cu. Yd.	93.1		93.1
Bridge Deck Grooving	Sq. Yd.	247		247
Concrete Encasement	Cu. Yd.		25.8	25.8
Protective Coat	Sq. Yd.	290		290
Reinforcement Bars, Epoxy Coated	Pound	23,350	6,170	29,520
Bar Splicers	Each		40	40
Steel Bridge Rail, Type SM	Foot	156		156
Steel Piles HP10x42	Foot		820	820
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1
Underwater Structure Excavation Protection - Loc. 1	Each		1	1
Underwater Structure Excavation Protection - Loc. 2	Each		1	1

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.075g
 Site Coefficient (S) = 1.5

DESIGN STRESSES

$f'_c = 3,500$ psi Load Factor
 $f_y = 60,000$ psi (Reinf.) Design

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

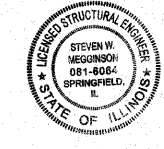
WATERWAY INFORMATION

Flood		Q		Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
Freq. Yr.	C.F.S.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design Base	20	1,100	370	450	585.0 ^φ	0.0	0.0	585.0	585.0		
Overtopping											
Max. Calc.	100	1,640	440	540	586.5 ^φ	0.0	0.0	586.5	586.5		

^φ Water level of the lake is controlled by the dam spillway.

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".

Steven W. Megaw 11/12/07
 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: 12-33-0004-1 DATE: 11/07/07
 DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.A.B.

GENERAL PLAN AND ELEVATION

F.A.S. 1706 / C.H. 6 OVER LAKE SARA
 SECTION 00-00080-00-BR
 EFFINGHAM COUNTY
 STRUCTURE NO. 025-3222 / STATION 10+00