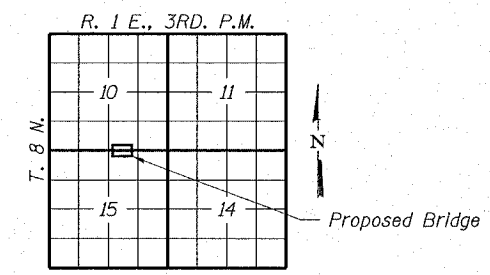


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 712	02-00104-00-BR	FAYETTE	21	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

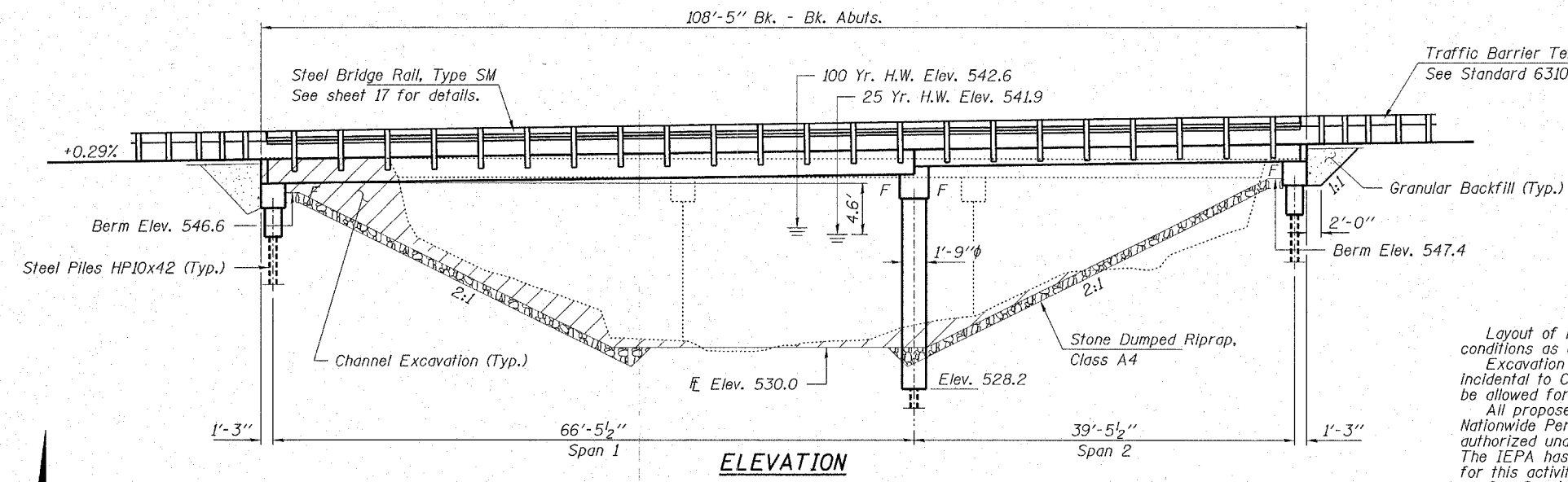
CONTRACT NO. 95469

ASH CREEK
 BUILT 200_ BY
 F.A.S. 712 / C.H. 24
 FAYETTE COUNTY
 SEC. 02-00104-00-BR
 F.A. PROJ. BRS-712(105)
 STR. NO. 026-3431 LOADING HS 20

NAME PLATE
 See Std. 515001

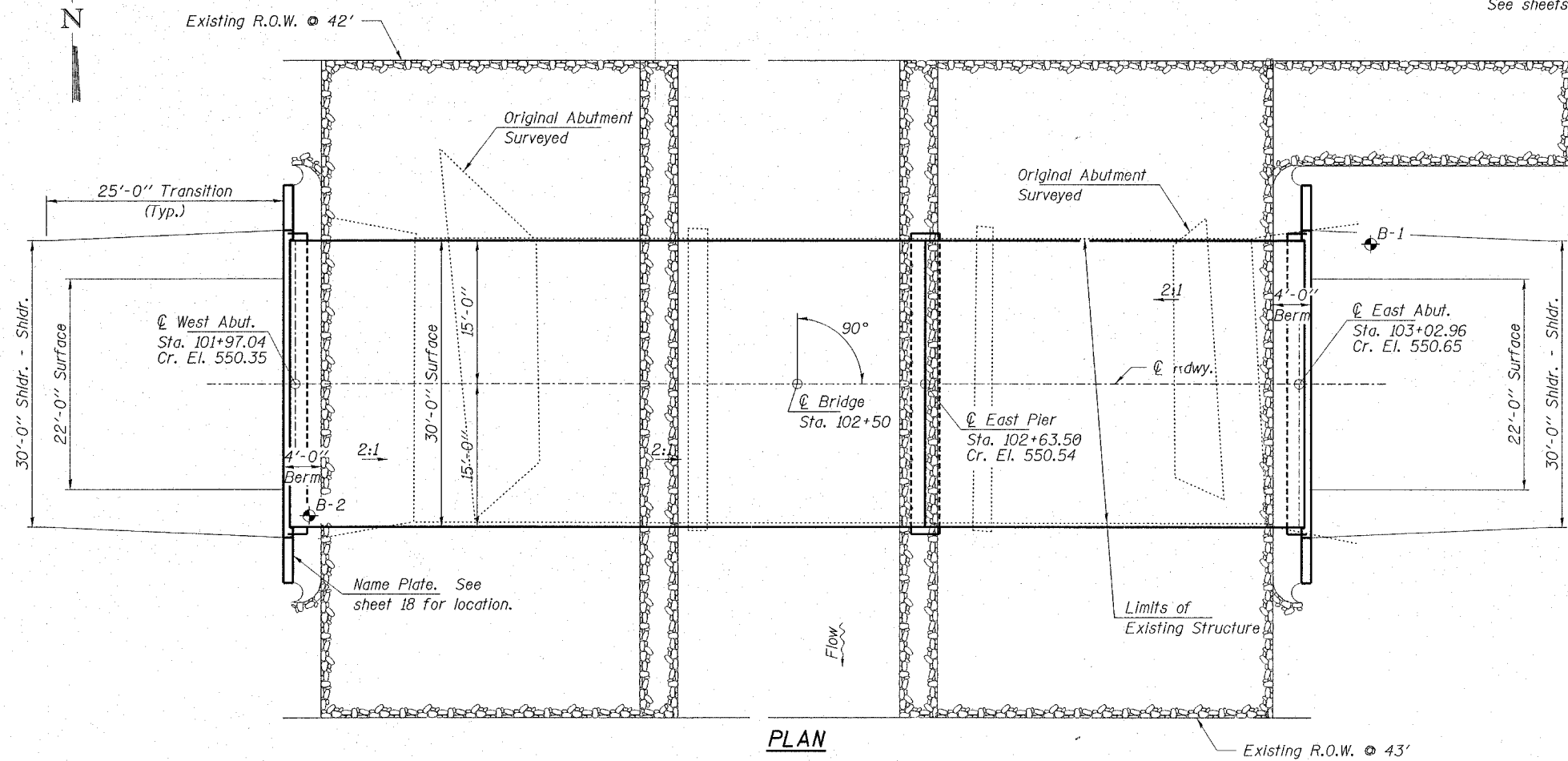


LOCATION SKETCH

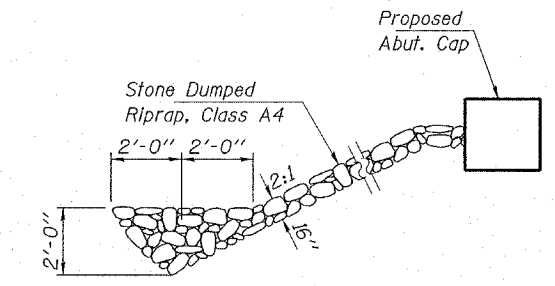


GENERAL NOTES

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 Excavation required to construct the Abutments shall be considered incidental to Concrete Structures. No additional compensation will be allowed for Structure Excavations.
 All proposed construction activity 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 sheets 21 for Borings.



PLAN



SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,200		1,200
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,010		2,010
Concrete Structures	Cu. Yd.		32.4	32.4
Reinforcement Bars, Epoxy Coated	Pound		4,470	4,470
Steel Bridge Rail, Type SM	Foot	220		220
Name Plates	Each		1	1
Stone Dumped Riprap, Class A4	Ton			740
Steel Piles HP10x42	Foot		301	301
Setting Piles in Rock	Each		6	6
Driving Steel Piles	Foot		163	163
Test Pile Steel HP10x42	Each		1	1
Granular Backfill	Cu. Yd.			45
Concrete Encasement	Cu. Yd.		10.8	10.8
Waterproofing Membrane System	Sq. Yd.	366		366
Leveling Binder (MM) Superpave	Ton	8		8
P.C. Mortar Fairing Course	Foot	241		241
Bituminous Concrete Surface Course Superpave	Ton	30		30

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
 f'cl = 4,000 psi
 f's = 270,000 psi (1/2" low lax. strands)
 f'sl = 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) = B
 Bedrock Acceleration Coefficient (A) = 0.075g
 Site Coefficient (S) = 1.5

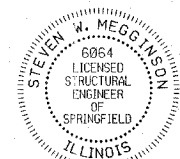
WATERWAY INFORMATION

Drainage Area = 12.8 Sq. Mi. Low Grade Elev. 550.1 @ Sta. 101+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Temporary	5	1,870	NA	310	540.7	NA	NA	NA	NA	NA
Design	25	3,230	580	590	541.9	0.3	0.6	542.2	542.5	
Base	100	4,400	640	650	542.6	0.7	1.0	543.3	543.6	
Overtopping										
Max. Calc.	500	5,791	700	710	543.3	1.3	1.6	544.6	544.9	

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. Mego
 ILLINOIS STRUCTURAL ENGINEER NO. 6064 17-06



Expires 11-30-06

HLR
 Rice, Berry and Associates
 A Division of Hampton, Lenzini and Renwick, Inc.
 Civil & Structural Engineers
 3085 Stevenson Drive
 Suite 201
 Springfield, Illinois 62703
 217-546-3400
 F.O. Box 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Date: 03/13/06
 DESIGNED: S.M.S. CHECKED: S.W.M. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION
 SECTION 02-00104-00-BR
 F.A.S. 712 / C.H. 24
 FAYETTE COUNTY
 STR. NO. 026-3431 / STATION 102+50