

TBM 7/15/04B - RR Spike in west face of power pole, 21.29' Rt., Sta. 12+86.27 - Elev. 498.21

TBM 7/15/04C - RR Spike in east face of power pole, 21.87' Lt., Sta. 5+91.00 - Elev. 496.56

Existing Structure: Three span bridge with precast concrete deck slabs supported by timber pile bent abutments and timber pile piers with concrete caps. 76'-10'L. x 22'-6"W. No skew. Existing Structure No. 061-3189. Closed to all traffic. No Salvage (See Special Provisions).

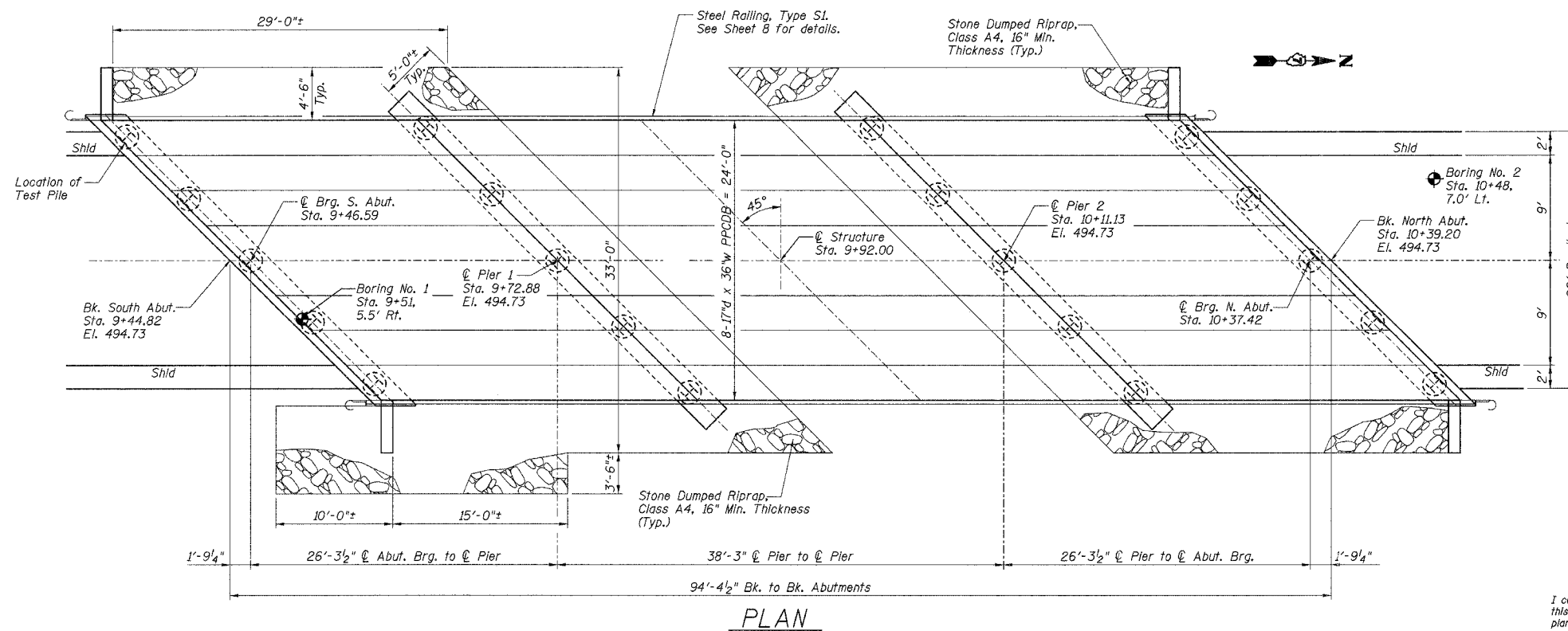
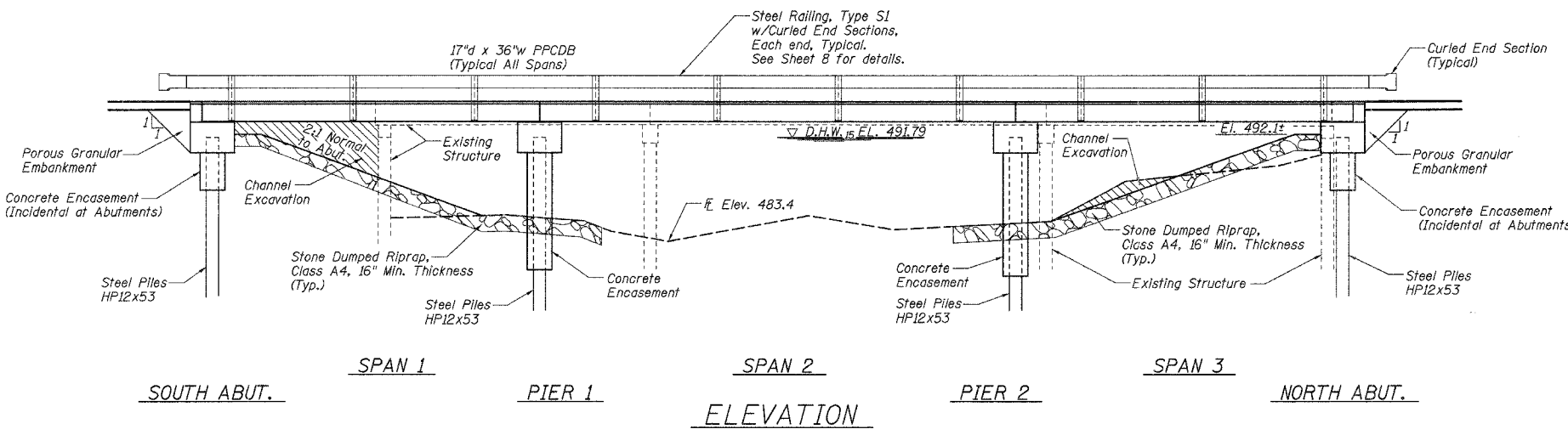
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 22	04-15109-00-BR	MARION	10	5
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95430				

### BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	SUB	SUPER	TOTAL
CHANNEL EXCAVATION	CU YD	45	-	45
POROUS GRANULAR EMBANKMENT	TON	32	-	32
STONE DUMPED RIPRAP, CLASS A4	TON	180	-	180
REMOVAL OF EXISTING STRUCTURES	EACH	-	-	1
CONCRETE STRUCTURES	CU YD	43.6	-	43.6
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	-	2208	2208
REINFORCEMENT BARS	POUND	4960	-	4960
STEEL RAILING, TYPE S1	FOOT	-	190	190
FURNISHING STEEL PILES HP 12x53	FOOT	855	-	855
DRIVING STEEL PILES	FOOT	855	-	855
TEST PILE STEEL HP12x53	EACH	1	-	1
CONCRETE ENCASUREMENT	CU YD	13.0	-	13.0
NAME PLATES	EACH	1	-	1

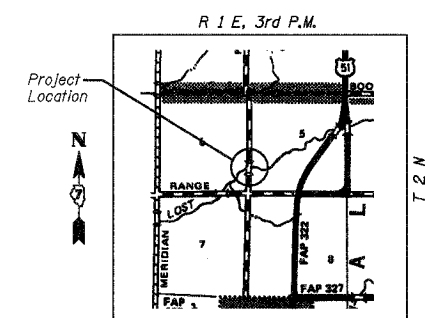
### GENERAL NOTES

- See Section 502 of the Standard Specifications for Structural Excavation.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.
- The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of the piles.
- Reinforcement Bars shall conform to AASHTO M-31, M-42, or M-53, Grade 60 requirements.
- The abutment and pier bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/2" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
- See Specifications for Soil Borings.
- Do not scale these drawings.



**LOST CREEK**  
 BUILT 200 BY  
 MARION COUNTY  
 PROJECT NO. BROS-121(40)  
 SEC. 04-15109-00-BR  
 LOADING HS-20  
 STRUCTURE NO. 061-3299

**NAME PLATE**  
 (See State Standard 515001 for details)



I certify that to the best of my information, knowledge, and belief, this bridge is structurally adequate for the design loading shown on plans. The design is an economical one for the structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



GARY L. HAHN  
 81-4853  
 LICENSED  
 STRUCTURAL  
 ENGINEER  
 ILLINOIS LICENSED STRUCTURAL  
 ENGINEER NO. 81-4853  
 EXPIRES NOV. 30, 2006

### GENERAL PLAN AND ELEVATION PROPOSED BRIDGE CARRYING TR 22 OVER LOST CREEK SECTION 04-15109-00-BR MARION COUNTY, ILLINOIS

Sheet  
 5  
 of 10  
 Job No. 50804

### WATERWAY DATA

Drainage Area = 5.74 Sq. Mi. Low Grade Elev. 494.40 @ Sta. 9+00

Flood Yr.	Q	Opening C.F.S.	Sq. Ft. Exist.	Natural Prop.	Head H.W.E.	Head Prop.	Headwater Exist.	Headwater Prop.
Design	15	1212	311	409	491.79	0.17	0.17	491.96
Base	100	1939	360	490	492.79	0.43	0.39	493.22
Max. Calc.	500	2532	360	519	493.42	0.79	0.81	494.21

### DESIGN STRESSES

FIELD UNITS  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi

### DESIGN SPECIFICATIONS

AASHTO - 2002 17th Edition

### LOADING HS 20-44

Allow 25#/sq. ft. for future wearing surface.

### PRECAST PRESTRESSED UNITS

$f'_c = 5,000$  psi  
 $f'_{ci} = 4,000$  psi  
 $f'_s = 270,000$  psi (1/2" strands)  
 $f'_{si} = 189,000$  psi (1/2" strands)

### GRADE ON STRUCTURE

Span	Span 1	Span 2	Span 3
Grade	0.00%	0.00%	0.00%

03/15/2005