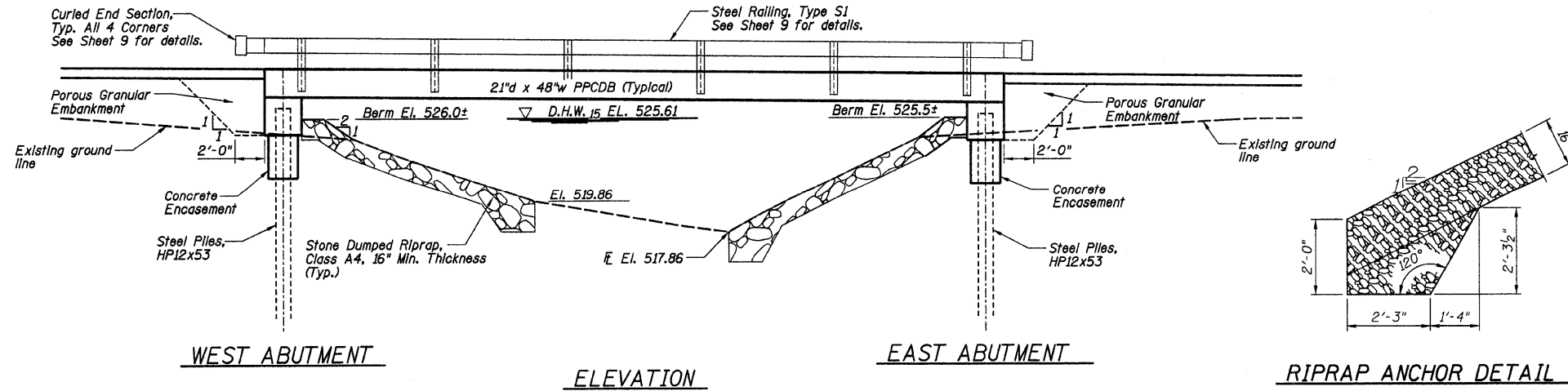


TBM 12/20/05"B" - RR spike in 12" Oak tree
42.4' Rt., Sta. 8+64.1 - Elev. 530.14

TBM 12/20/05"C" - RR spike in 30" Poplar tree
37.0' Rt., Sta. 10+09.5 - Elev. 526.83

Existing Structure: Single span bridge with timber deck on steel stringers supported on closed cast-in-place concrete abutments. 25' Bk. to Bk. abutments, 13' out to out of deck. To be removed. See Special Provisions. Existing Structure Number: 026-3201.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	7
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95550				



ITEM	UNIT	SUB	SUPER	TOTAL
CHANNEL EXCAVATION	CU YD	60	-	60
POROUS GRANULAR EMBANKMENT	TON	58	-	58
STONE DUMPED RIPRAP, CLASS A4	TON	120	-	120
REMOVAL OF EXISTING STRUCTURES	EACH	-	-	1
CONCRETE STRUCTURES	CU YD	17.4	-	17.4
CONCRETE ENCASEMENT	CU YD	2.8	-	2.8
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	-	1170	1170
REINFORCEMENT BARS	POUND	2900	-	2900
STEEL RAILING, TYPE S1	FOOT	-	100	100
FURNISHING STEEL PILES HP 12x53	FOOT	269	-	269
DRIVING PILES	FOOT	269	-	269
TEST PILE STEEL HP12x53	EACH	1	-	1
NAME PLATES	EACH	1	-	1
TERMINAL MARKER - DIRECT APPLIED	EACH	-	4	4

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.

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

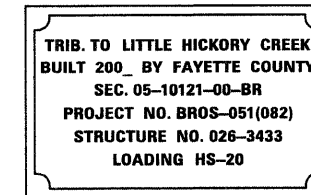
Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Specifications for Soil Borings.

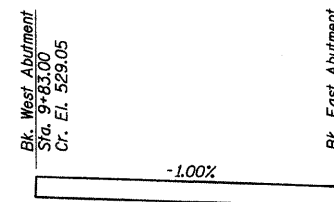
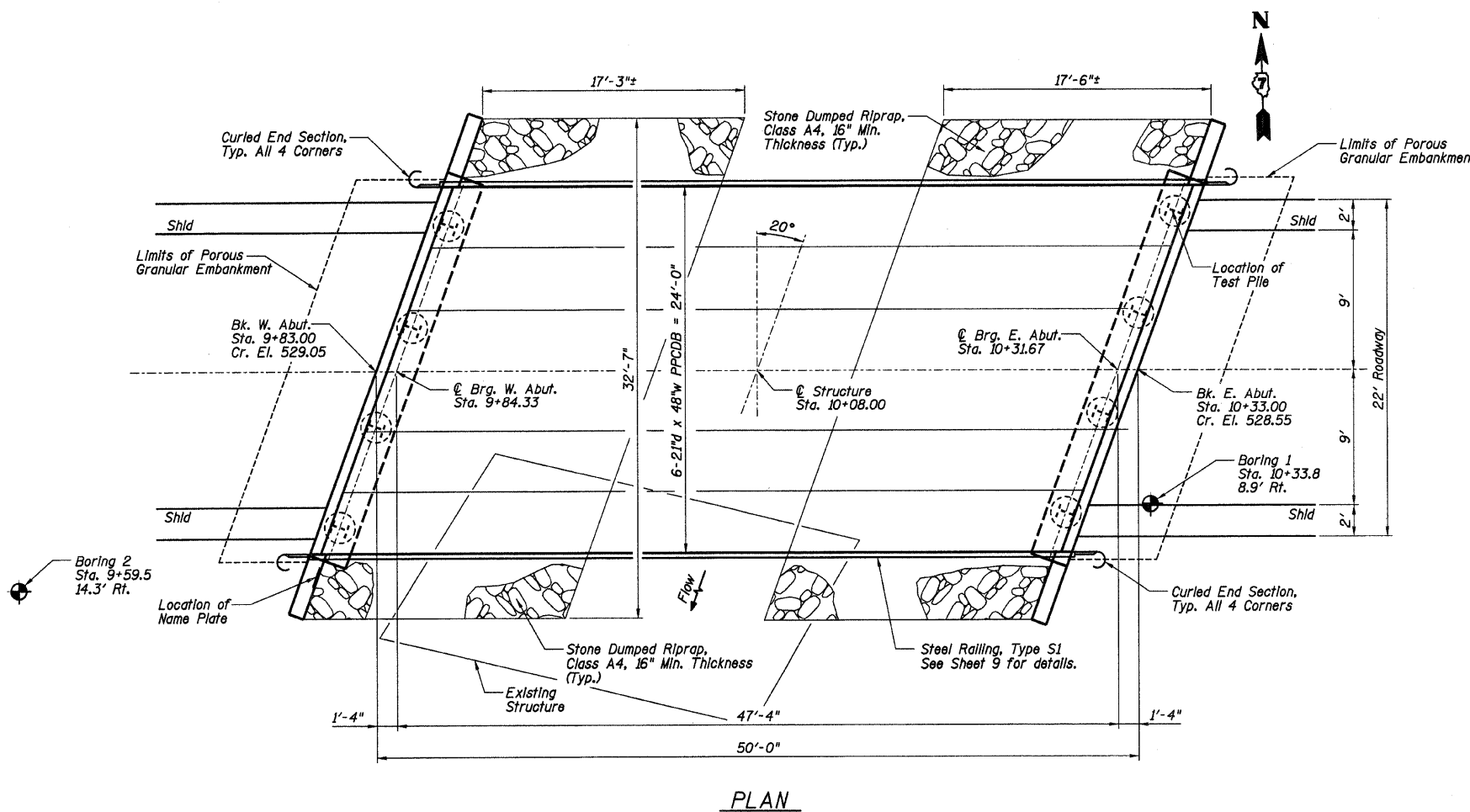
Do not scale these drawings.

The Steel H-piles shall be according to AASHTO M270 Grade 50.

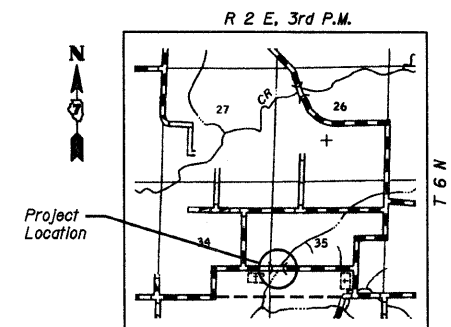
The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.



NAME PLATE
(See State Standard 515001 for details)



GRADE ACROSS STRUCTURE



LOCATION SKETCH

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
CENTRALIA, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 81-4853
EXPIRES NOV. 30, 2008

WATERWAY DATA

Drainage Area = 1.97 Sq. Mi.		Low Grade Elev. 526.77 @ Sta. 12+25								
Flood Yr.	Freq. C.F.S.	Q	Opening Sq. Ft. Exist.	Prop.	Natural H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	15	800	103	181	525.61	0.92	0.11	526.53	525.72	
Base	100	1315	103	216	526.46	0.52	0.43	526.98	526.89	
Max. Calc.	500	1745	103	238	527.01	0.31	0.78	527.32	527.79	

DESIGN SPECIFICATIONS
AASHTO - 2002 17th Edition

LOADING HS 20-44

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

DESIGN STRESSES

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

PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" Low-Lax strands)
 $f'_{sl} = 201,960$ psi (1/2" Low-Lax strands)

**GENERAL PLAN AND ELEVATION
PROPOSED BRIDGE OVER TRIBUTARY
TO LITTLE HICKORY CREEK
TR 437
SECTION 05-10121-00-BR
FAYETTE COUNTY, ILLINOIS**

Sheet
7
of 10
Job No. 51205