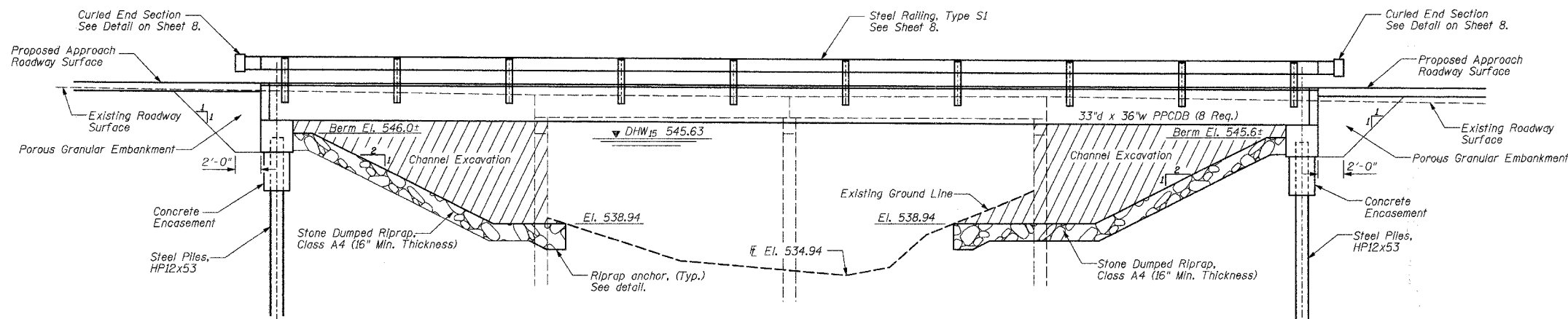


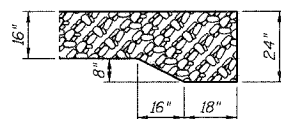
TBM 8-1-06"B" - RR spike in North face of 40" Cottonwood,
30.3' Rt. of Sta. 8+84 - Elev. 547.96
TBM 8-1-06"C" - RR spike in East face of power pole,
29.4' Lt. of Sta. 13+57 - Elev. 545.02

Existing Structure, Str. No. 026-3308; Two span with
precast concrete deck slabs on closed timber abutments
and timber pier. 40'-0" Long x 22'-6" wide. No Skew.
No salvage. See Special Provisions.

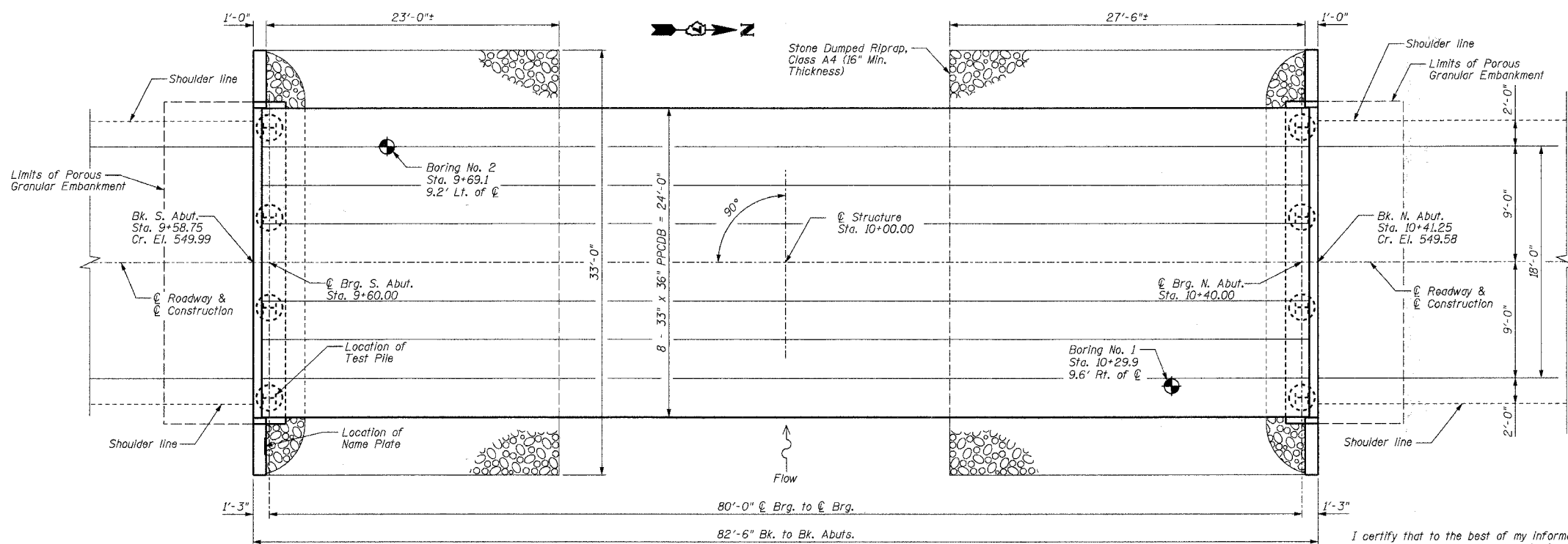
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 454	06-19125-00-BR	FAYETTE	9	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 95532				



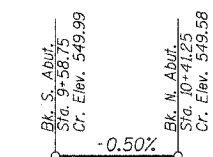
ELEVATION
(No Scale)



RIPRAP ANCHOR DETAIL



PLAN
(No Scale)



PROFILE GRADE
Along @ Roadway

WATERWAY DATA

Drainage Area = 11.77 Sq. Mi. Low Grade Elev. 545.55 @ Sta. 12+64.22

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	15	1913	323	481	545.63	0.16	0.02	545.79	545.65
Base	100	3043	349	534	546.33	0.68	0.10	547.01	546.43
Max. Calc.	500	3961	367	567	546.79	1.36	0.27	548.15	547.06

DESIGN STRESSES

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

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f'_s = 270,000$ psi ($1/2$ " ϕ strands)(Low Relaxation)
 $f'_{si} = 202,500$ psi ($1/2$ " ϕ strands)(Low Relaxation)

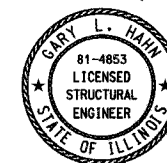
DESIGN SPECIFICATIONS

AASHTO - 2002, 17th Edition

LOADING HS20-44

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

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 10-31-07

Gary L. Hahn
 Centralia, Illinois
 Illinois Licensed Structural
 Engineer No. 81-4853
 Expires Nov. 30, 2008

BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu Yd	-	557	557
Porous Granular Embankment	Ton	-	78	78
Stone Dumped Riprap, Class A4	Ton	-	150	150
Removal of Existing Structures	Each	-	-	1
Concrete Structures	Cu Yd	-	18.2	18.2
Concrete Encasement	Cu Yd	-	2.8	2.8
PPCDB (33" Depth)	Sq Ft	1948	-	1948
Reinforcement Bars	Pound	-	3020	3020
Steel Railing, Type S1	Foot	165	-	165
Furnishing Steel Piles HP12x53	Foot	-	329	329
Driving Piles	Foot	-	329	329
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.

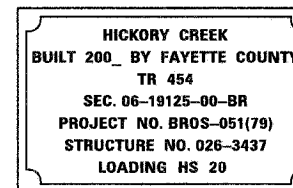
Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Specifications for Soil Borings.

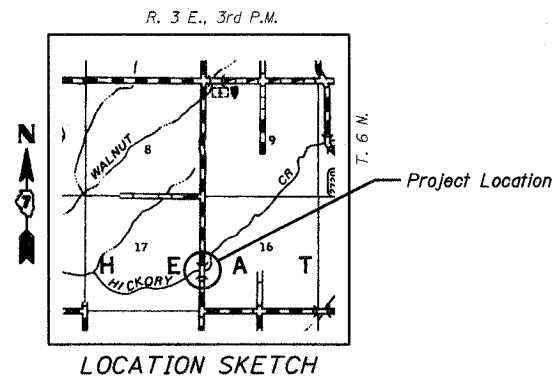
Do not scale these drawings.

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

The 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.



NAME PLATE
(See State Standard 515001 for details)



**GENERAL PLAN AND ELEVATION
 PROPOSED BRIDGE OVER
 HICKORY CREEK
 TR 454
 SECTION 06-19125-00-BR
 FAYETTE COUNTY, ILLINOIS**