

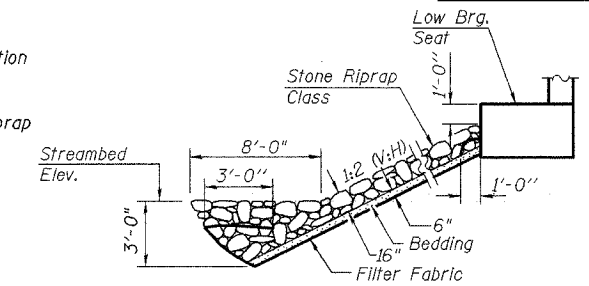
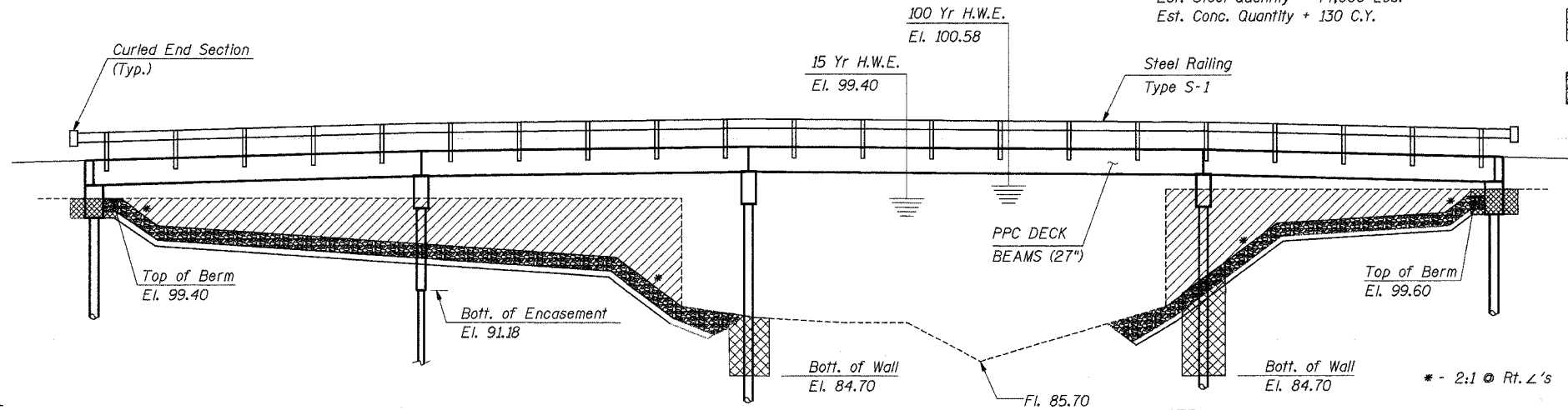
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
235	93-02109-00-BR	CHRISTIAN	18	9
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	
SHEET 1 OF 10				

B.M. #14 - "□" chiseled in Northwest Wingwall
 EL. = 100.00 (ASSUMED)

Existing Structure No. 011-3186 to be removed.
 Single span steel pony truss with concrete deck.
 Closed concrete abutment with wingwalls. 16'-0" width, 74'-0" length.
 Est. Steel Quantity = 44,000 Lbs.
 Est. Conc. Quantity = 130 C.Y.

LEGEND

- Channel Excavation
- Structure Excavation
- Stone Dumped Riprap Class A4



GENERAL NOTES

See Proposal for Boring Data.

The Contractor shall drive one steel test pile at each abutment and at Pier 2 as directed by the Engineer before ordering the remainder of the piles.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

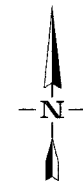
STONE RIPRAP ANCHOR DETAIL

BEAR CREEK
 BUILT 200 BY
 CHRISTIAN COUNTY
 SEC. 93-02109-00-BR
 TR 235 STA. 6+24.42
 STR. NO. 011-3400 LOADING HS 20

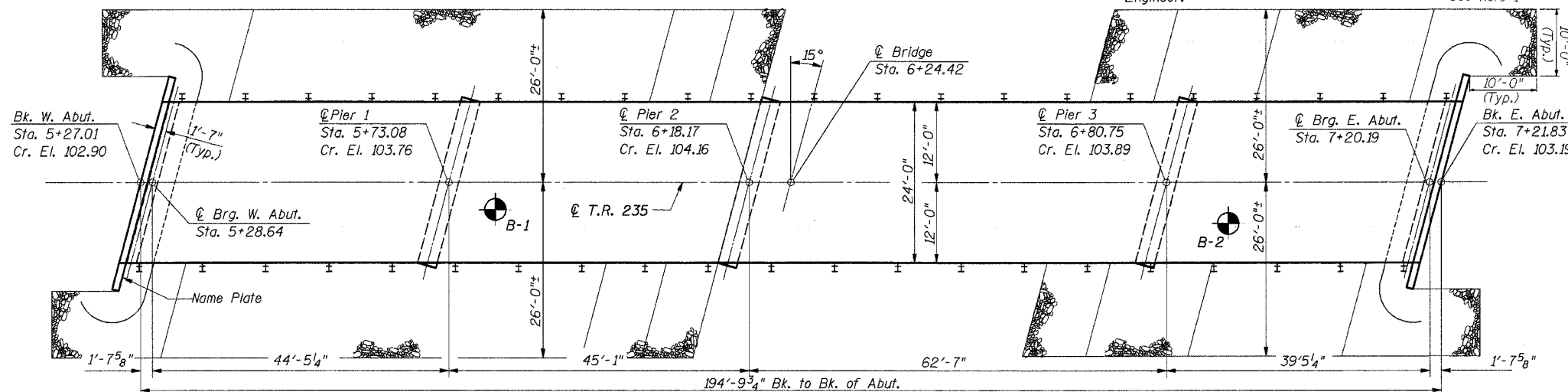
NAME PLATE
 (See Std. 515001)

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.		104	104
Concrete Structures	Cu. Yd.		91.0	91.0
Reinforcement Bars	Pound		7960	7960
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	4620		4620
Steel Railing, Type S-1	Foot	388		388
Furnishing Steel Piles HP 10 x 42	Foot		599	599
Driving Steel Piles	Foot		599	599
Test Pile Steel HP 10 x 42	Each		3	3
Concrete Encasement	Cu. Yd.		8.1	8.1
Name Plates	Each	1		1
Removal of Existing Structures	Each		1	1
Channel Excavation	Cu. Yd.		810	810
Stone Dumped Riprap	Ton		640	640
Filter Fabric for Riprap	Sq. Yd.		950	950
Underwater Structure Excavation Protection, Location 1 (PIER 2)	Each		1	1
Underwater Structure Excavation Protection, Location 2 (PIER 3)	Each		1	1

NOTE:
 Riprap layout is subject to final terrain details and conditions and shall be placed as directed by the Engineer.

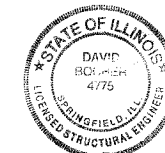


ELEVATION



PLAN

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.



David Booher
 David Booher, Illinois S.E. 081-004775 Date 8-19-04
 Expires 11-30-2004

WATERWAY INFORMATION

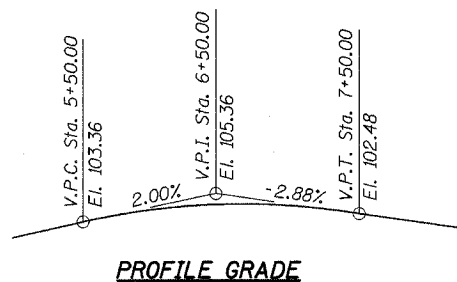
Drainage Area	59.7	Sq. Mi.
Required Opening (15yr.)	680	Sq. Ft.
Provided Opening	680	Sq. Ft.
Present Opening	678	Sq. Ft.
15yr. Discharge	3418	cfs
100yr. Discharge	5458	cfs
Created Head (15yr.)	<0.5	Ft.
Created Head (100yr.)	<1.0	Ft.

IDNR/OWR HAS ISSUED PERMIT DS2004069 FOR CONSTRUCTION OF THIS PROJECT

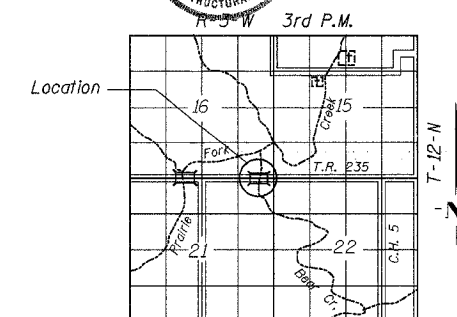
DESIGN STRESSES

Cast-In-Place Unit	f'c = 5,000 psi	f'ci = 4,000 psi	f's = 270,000 psi	f'si = 189,000 psi
Precast Unit	f'c = 3,500 psi	f's = 60,000 psi	n = 9	

LOADING HS 20
 DESIGN SPECIFICATION:
 AASHTO 2002 Standard Specifications for Highway Bridges & Interims.
 FUTURE WEARING SURFACE: 50 lb/Sq. Ft.



PROFILE GRADE



LOCATION MAP

GENERAL PLAN AND ELEVATION
T.R. 235 OVER BEAR CREEK
SEC. 93-02109-00-BR
CHRISTIAN COUNTY
STR. NO. 011-3400
STA. 6+24.42

INTERNATIONAL ENGINEERING CONSULTANTS, INC. 6420 SOUTH SIXTH STREET SPRINGFIELD, ILLINOIS 62707 TEL. (217) 529-8027 FAX (217) 529-4543 IESPRINGFIELD@IE-CONSULTANTS.COM WWW.IE-CONSULTANTS.COM			
DESIGNED BY: G.B.M.	CHECKED BY: D.R.B.	DRAWN BY: T.H.W.	DATE: 5-03-04