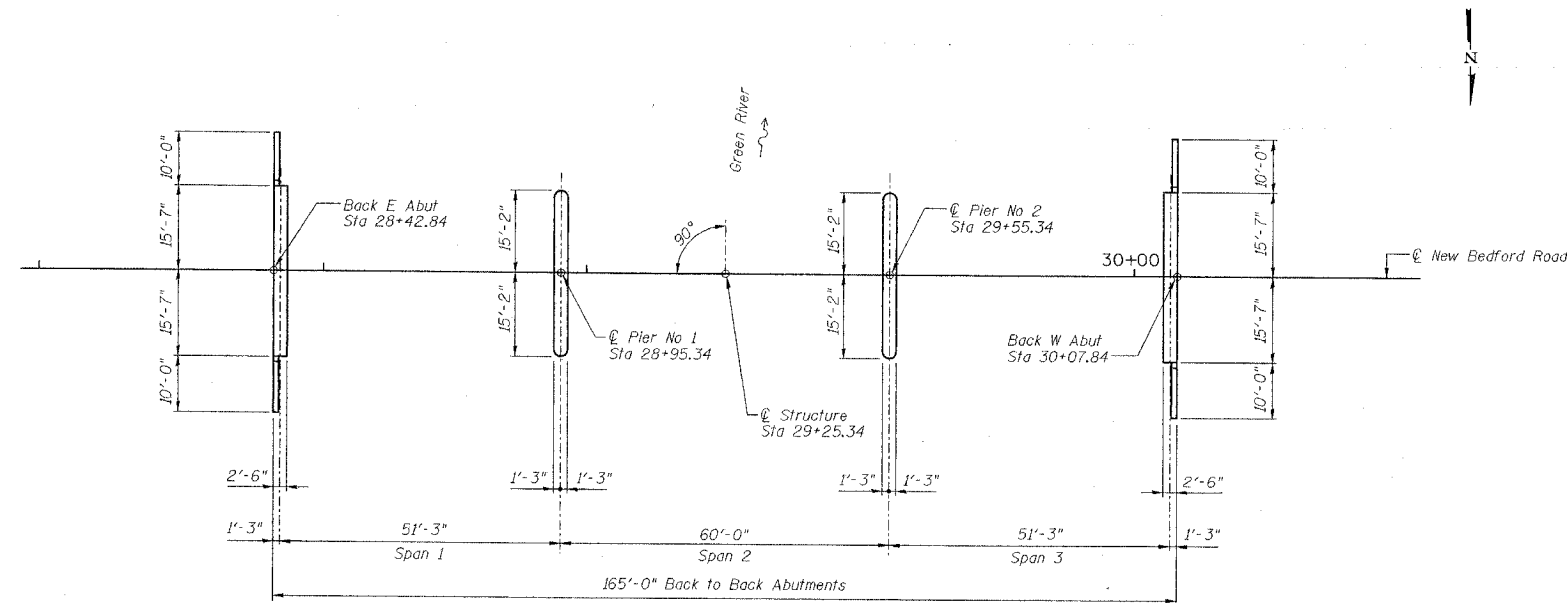


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Sheet No. 2  
of 16 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 88	103C-BR	BUREAU	51	13
FEDERAL DISTRICT	ILLINOIS	PROJECT	CONTRACT #64423	



FOUNDATION PLAN

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All Construction joints shall be bonded.

The Contractor shall drive one test pile each in a permanent location at each abutment and each pier as directed by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu Yd		152	152
Stone Riprap, Class A5	Sq Yd		695	695
Filter Fabric for Use with Riprap	Sq Yd		695	695
Removal of Existing Structures	L Sum	1		1
Structure Excavation	Cu Yd		192	192
Floor Drains	Each	18		18
Concrete Structures	Cu Yd		131.6	131.6
Concrete Superstructure	Cu Yd	196.2		196.2
Bridge Deck Grooving	Sq Yd	477		477
Protective Coat	Sq Yd	652		652
Furnishing and Erecting Precast Prestressed Concrete I-Beams (36" Depth)	Foot	815.0		815.0
Reinforcement Bars, Epoxy Coated	Pound	40,180	10,440	50,620
Furnishing Steel Piles HP12x74	Foot		1998	1998
Driving Steel Piles	Foot		1998	1998
Test Pile Steel HP12x74	Each		4	4
Name Plates	Each	1		1
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Bar Splicers	Each	56		56

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. #1	Pier 1 or 2	0.5 Sp. #2
Strand Pattern				
I	(in <sup>4</sup> )	48,648		48,648
I'	(in <sup>4</sup> )	167,248		167,248
S <sub>b</sub>	(in <sup>3</sup> )	3165		3165
S <sub>b</sub> '	(in <sup>3</sup> )	5815		5815
S <sub>t</sub>	(in <sup>3</sup> )	2358		2358
S <sub>t</sub> '	(in <sup>3</sup> )	23,107		23,107
I <sub>c</sub>	(k/')	0.988		0.988
M <sub>c</sub>	(k)	312		411
s <sub>c</sub>	(k/')	0.440	0.440	0.440
M <sub>s</sub>	(k)	82	141	67
M <sub>t</sub>	(k)	293	228	287
M (Imp)	(k)	84	66	77

INTERIOR BEAM REACTION TABLE				
		Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R <sub>v</sub>	(k)	25.3	25.3	29.1
R <sub>s</sub>	(k)	9	14.2	14.2
R <sub>t</sub>	(k)	35.2	21.6	21.6
Imp.	(k)	10.0	5	5
R (Total)	(k)	79.5	66.1	69.9

I and I' are the moment of inertia and composite moment of inertia of the beam section.  
S<sub>b</sub> and S<sub>b</sub>' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.  
S<sub>t</sub> and S<sub>t</sub>' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

FOUNDATION PLAN, GENERAL NOTES AND BILL OF MATERIAL

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE R King 4/04
1	DATE INITIALS	SBI 88 SPUR SECTION 103C-BR		CHECKED BY DATE CMV 4/04
2		SN 006-0163		DATE/NO. BY DATE CWC 4/04
3		STA 29+25.34 BUREAU COUNTY		BOOK NUMBER
4		HOMER L. CHASTAIN & ASSOCIATES, LLP CONSULTING ENGINEERS 184-001397		PROJECT No. 4858-1
5				SHEET No.