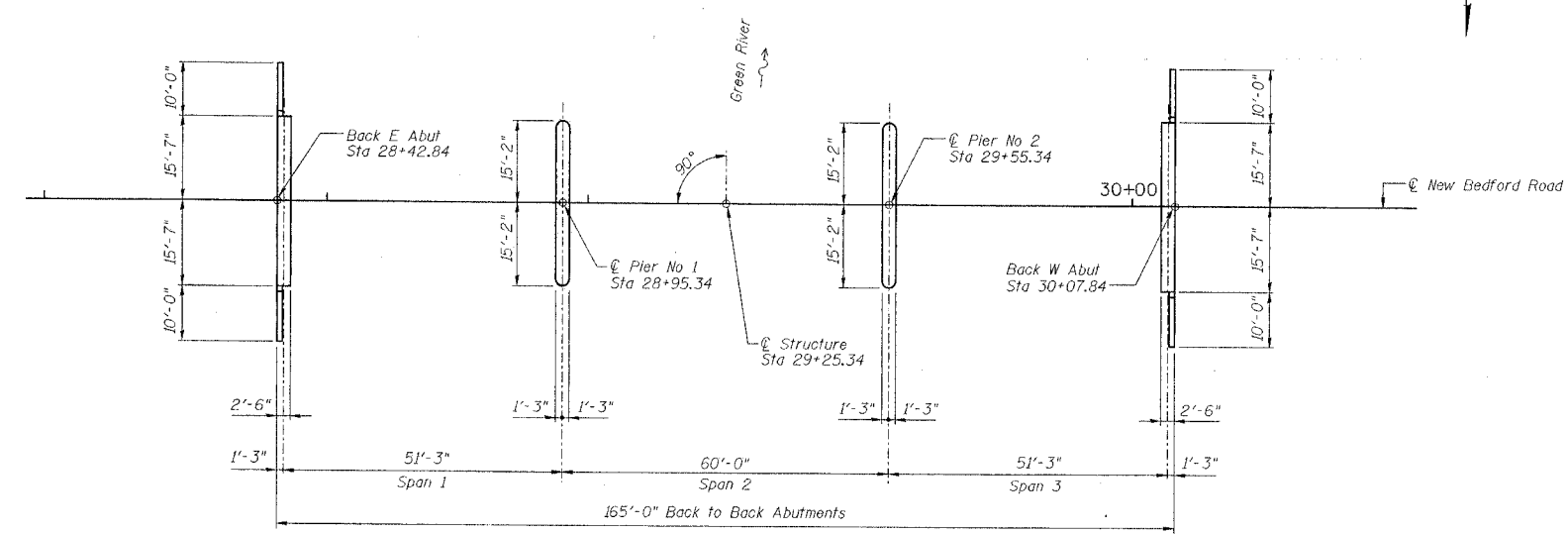


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Sheet No. 2
of 16 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 88	103C-BR	BUREAU	51	13
FEDERAL DIST. NO.		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 HPI2x74	Foot		1998	1998
Driving Steel Piles	Foot		1998	1998
Test Pile Steel HPI2x74	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 ⁴) 48,648			48,648
I'	(in ⁴) 167,248			167,248
S _b	(in ³) 3165			3165
S _b '	(in ³) 5815			5815
S _t	(in ³) 2,358			2,358
S _t '	(in ³) 23,107			23,107
M ₀	(k') 0.988			0.988
M ₀	(k) 312			411
s ₀	(k') 0.440	0.440		0.440
M _{s0}	(k) 82	141		67
M _t	(k) 293	228		287
M (Imp)	(k) 84	66		77

	INTERIOR BEAM REACTION TABLE			
	Abut.	Pier 1 Span 1	Pier 1 Span 2	Pier 2 Span 2
R ₀	(k) 25.3	25.3		29.1
R _{s0}	(k) 9	14.2		14.2
R _t	(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_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.
 S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

NEW BEDFORD ROAD OVER GREEN RIVER

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE R King 4/04
1	DATE	INITIALS		CHECKED BY DATE CMV 4/04
2				QA/QC BY DATE CWC 4/04
3				BOOK NUMBER
4				
5				
6				
7				
8				
9				
10				
11				
12				

SBI 88 SPUR SECTION 103C-BR
 SN 006-0163
 STA 29+25.34 BUREAU COUNTY
 HOMER L. CHASTAIN & ASSOCIATES, LLP
 CONSULTING ENGINEERS
 184-001397

PROJECT No.
4858-1
 SHEET No.