

ROUTE NO.	SECTION	COUNTY	DATE	SHEET
**	*	MORGAN	19	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRM-5032(22)	
** CHAMBERS STREET		* 03-00118-00-BR		

SHEET NO. 1
5 SHEETS

B.M.:
Chiseled "L" on Wingwall @ N.E. Corner of Fayette St. Bridge Elev. 584.85
Chiseled "X" on East Flange Bolt of FH @ S.W. quad of S. Church St. & Chambers Elev. 583.69

EXISTING STRUCTURE:
Single span steel modified Warren Pony Truss superstructure with reinforced concrete deck and monolithic concrete curb on concrete caisson supports with timber backing. The structure is 50'-0" back to back of abutments, 23'-7" out to out of deck, and on a 45° skew.
Salvage: Superstructure (See Special Provisions)
Road to be closed to traffic during construction.

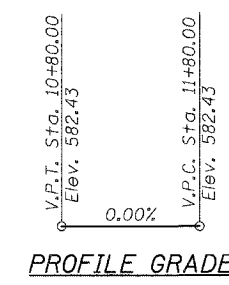
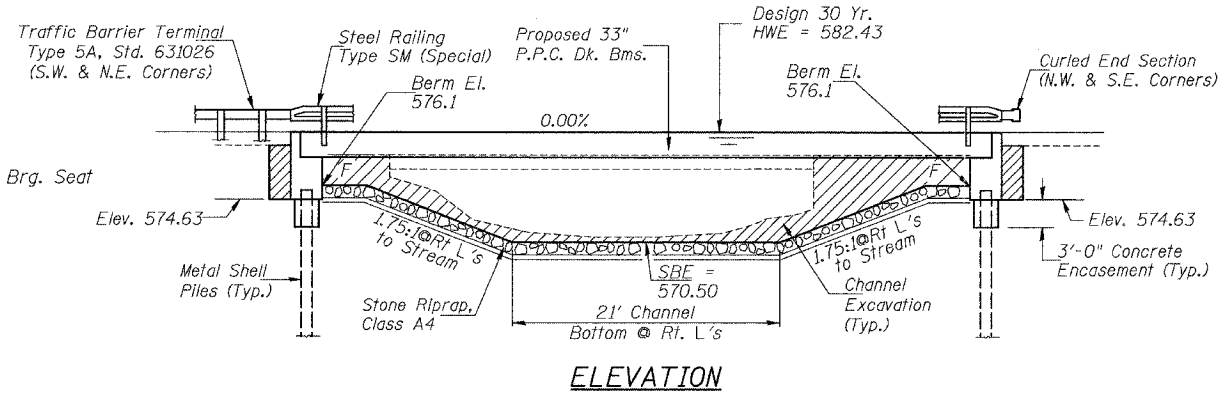
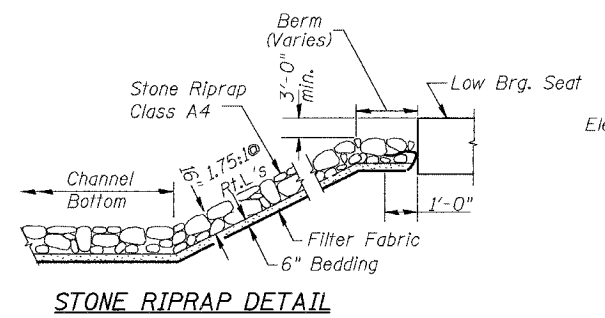
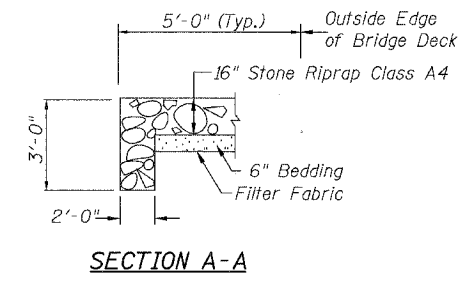
**TOWN BROOK
BUILT 200_ BY
CITY OF JACKSONVILLE
SEC. 03-00118-00-BR
CHAMBERS STREET STATION 11+29.82
F.A. PROJ. BRM-5032(22)
STR. NO. 069-6033 LOADING HS20-44**

NAME PLATE

Locate Name Plate at S.W. Wingwall Corner of Bridge (See Std. 515001)

GENERAL NOTES

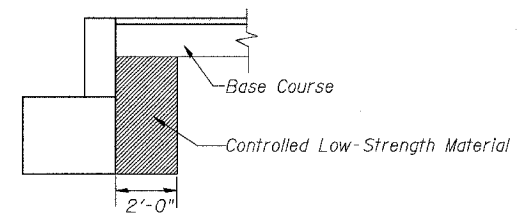
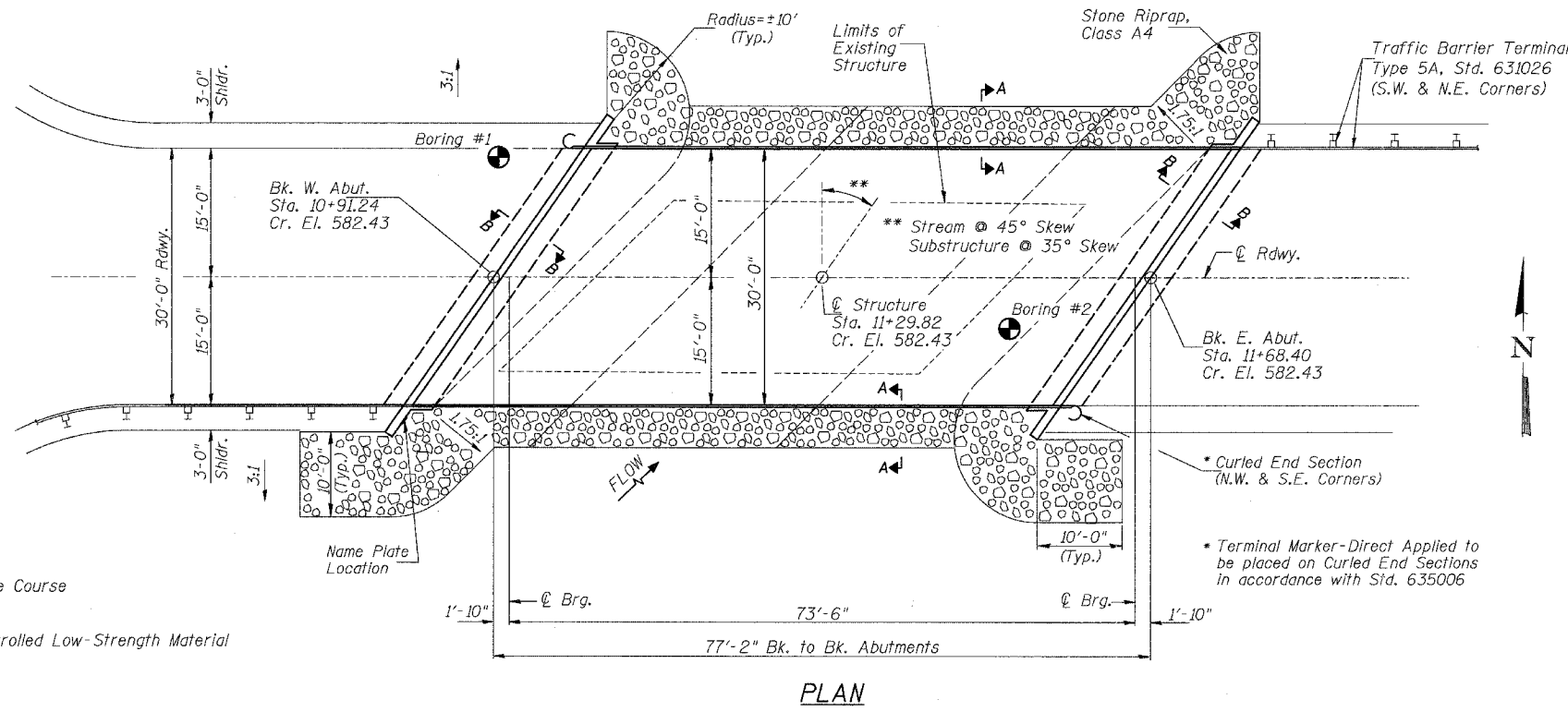
The Contractor shall drive 2 test piles, in permanent locations, one at each abutment, as directed by the Engineer before ordering the remaining piles.
For Soil Boring Logs, see Special Provisions.
A Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for Precast Prestressed Concrete Deck Beams.
Reinforcement Bars shall conform to AASHTO M-31 or M-322, Grade 60.
Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
The existing structural steel coating may contain lead. The contractor should take appropriate precautions to deal with the presence of lead on this project.



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	---	335	335
Stone Riprap, Class A4	TON	---	265	265
Filter Fabric	SQ YD	---	385	385
① Removal of Existing Structures	EACH	---	---	1
Structure Excavation	CU YD	---	135	135
① Concrete Structures	CU YD	---	51.0	51.0
① Precast Prestressed Concrete Deck Beams (33" Depth)	SQ FT	2,248	---	2,248
Reinforcement Bars	POUND	---	4,720	4,720
Steel Bridge Rail, Type SM (Special)	FOOT	154	---	154
Furnishing Metal Pile Shells 12"	FOOT	---	738	738
Driving and Filling Shells	FOOT	---	738	738
Test Pile Metal Shells	EACH	---	2	2
① Concrete Encasement	CU YD	---	3.7	3.7
Name Plates	EACH	---	1	1
Waterproofing Membrane System	SQ YD	250	---	250
Portland Cement Mortar Fairing Course	FOOT	170	---	170
① Bituminous Concrete Surface Course, Superpave Mix "C", N50	TON	28	---	28
① Controlled Low-Strength Material	CU YD	---	36.2	36.2

① See Special Provisions



WATERWAY INFORMATION

Drainage Area = 5.28 Sq. Mi. Low Grade Elev. = 579.93 @ Sta. 12+59.19

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. ft.		Nat. H.W.E. ft.	Head - ft.		Headwater Elev. - ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	1,444	188	320	582.43	0.48	0.48	582.91	582.91
Base	100	1,899	188	320	584.12	0.04	0.04	584.16	584.16

OVER-THE-ROAD AREA

Freq. Yr.	Existing	Proposed
30	394	139
100	739	472

IDNR/OWR has issued permit DS2004171 for the construction of this project.

DESIGN SPECIFICATIONS

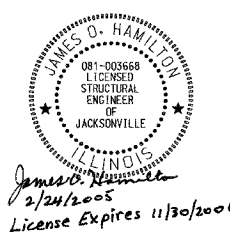
2002 AASHTO & Interims

DESIGN STRESSES

(FIELD UNITS) $f'_c = 3,500$ p.s.i. $f_y = 60,000$ p.s.i. (Rein.)
(PRECAST PRESTRESSED UNITS) $f'_c = 5,000$ p.s.i. $f'_{cl} = 4,000$ p.s.i. $f'_s = 270,000$ p.s.i. (1/2" Strands) $f'_{sl} = 201,960$ p.s.i. (1/2" Strands)

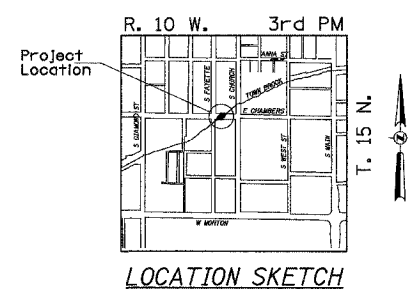
LOADING HS20-44

Allow 50#/sq. ft. future wearing surface.



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 Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

James O. Hamilton
Illinois Structural No. 3668
Expires 11/30/2006



**GENERAL PLAN & ELEVATION
CHAMBERS STREET OVER TOWN BROOK
SECTION 03-00118-00-BR
CITY OF JACKSONVILLE
STATION 11+29.82
STR. NO. 069-6033**

DESIGNED	J.E.H.
CHECKED	J.O.H.
DRAWN	T.A.C./T.R.D.
CHECKED	J.E.H.