

## f'c = 3,500 psi fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi f'ci = 4,000 psi

f's = 270,000 psi (½'ý low lax. strands) f'si = 201,960 psi (½'ý low lax. strands) fy = 60,000 psi (Reinf.)

Loading HS 20-44 Design Specifications: 2002 AASHTO & all applicable interims. 25#/Sq. Ft. included in dead load for future wearing surface.

Seismic Performance Category (SPC) = B Bedrock Acceleration Coefficient (A) = 0.10g Site Coefficient (S) = 1.5

## WATERWAY INFORMATION

Drainage A	rea = 2	1.2 Sq.	Mi.	Low Gra	de Elev.	636.0	© Sta.	10+00	
Flood	Freq.	Q		Sq. Ft.	Natural	Head	- Ft.	Headwa	nter El.
11000	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	- 15	1530	365	450	633.0	0.4	0.2	633.4	633.2
Base	100	2330	405	520	633.8	0.9	0.5	634.7	634,3
Overtopping			1.1						
Max. Calc.	500	2950	415	530	634.4	0.8	0.3	635.2	634.7

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 Bridgeş".

Stim W. Megginson ILLINOIS STRUCTURAL NO. 6064 LING 10.20-06





ILEN W. MEGG

6064 LICENSED STRUCTURAL ENGINEER OF

ROUTE NO.	SECTION		UNITY	SHEETS	SHEN
T.R. 101	03-03127 -00-BR	MÖUL	TRIE	15	9
FED. ROAD DIS	TLUMOIS	FED. AID PRO.			

JONATHAN CREEK BUILT 200\_ BY MOULTRIE COUNTY SEC. 03-03127-00-BR F.A. PROJ. BROS-0139 (51) STR. NO. 070-4333 LOADING HS 20

NAME PLATE

See Std. 515001



Note: See Special Provisions for Stone Riprap, Class A4.

\* Estimated quantity 95 tons Cost included in Stone Riprap, Class A4

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21'' Depth)	Sq. Ft.	2,538	1	2,538
Concrete Structures	Cu. Yd.		25.5	25.5
Reinforcement Bars	Pound		3,630	3,630
Steel Railing, Type S1	Foot	184		184
Steel Piles HP10x42	Foot		360	360
Test Pile Steel HP10x42	Each	· .	. 1	1
Concrete Encasement	Cu. Yd.	1	5.8	5.8
Name Plates	Each		1	1
Stone Riprap, Class A4	Ton	· ·		330

TOTAL BILL OF MATERIAL

IPTON, LENZINI & RENWICK, INC. VIL & STRUCTURAL ENGINEERS	GENERAL PLAN AND ELEVATION			
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	JONATHAN CREEK ROAD DISTRICT			
(217) 546-3400	SECTION 03-03127-00-BR			
ELGIN • SPRINGFIELD	MOULTRIE COUNTY			
BER: 12-72-0015-i DATE: 07/12/06				
P.L. CHECKED: S.W.M. DRAWN: D.T.M.	STR. NO. 070-4333 / STATION 9+95			