

TOTAL SHEETS SHEET NO. SECTION COUNTY 10-00091-00-BT EFFINGHAM CONTRACT NO. 95646

#### GENERAL NOTES

- The Contractor shall drive 2 test piles (1 each abutment) in a permanent location, to 110% of the nominal required bearings as specified for production piles as approved by the Engineer before ordering the remainder of the piles.
- 2. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- 3. The Metal Pile Shells shall be according to ASTM A252 Grades 2 or 3.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

#### DESIGN SPECIFICATIONS

"LRFD Guide Specifications for the Design of Pedestrian Bridges"

# DESIGN STRESSES

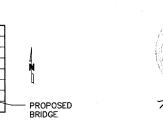
FIFLD UNITS f'c = 4,000 psiFy = 60,000 psi (reinforcement)

#### SEISMIC DATA

Seismic Performance Zone (SPZ) = 2 Design Spectral Acceleration at 1.0 sec.  $(S_{D1})$  = 0.211g Design Spectral Acceleration at 0.2 sec.  $(S_{DS})$  = 0.471g Soil Site Class = D

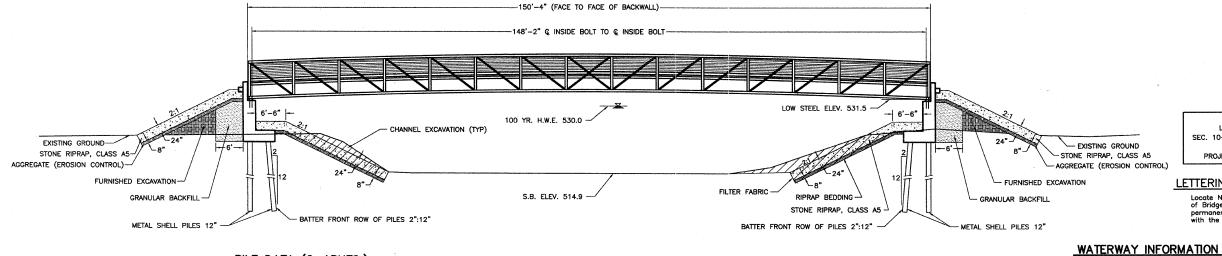
#### TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	Total
Pedestrian Truss Superstructure	Sq. Ft.	1,500			1,500
Concrete Structures	Cu.Yds.			68.0	68.0
Reinforcement Bars	Pound			9,680	9,680
Furnishing Metal Pile Shells 12" X 0.179"	Foot			880	880
Driving Piles	Foot			880	880
Test Pile Metal Shells	Each			2	2_
Name Plates	Each			1	1
Granular Backfill	Cu Yd			60	60
Stone Riprap, Class A5	Tons			775	775
Aggregate (Erosion Control)	Tons			320	320
Filter Fabric	Sq. Yd.			775	775
Channel Excavation	Cu.Yds.			130	130
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R. 5 E LOCATION SKETCH

A SEPARATE STRUCTURAL SEAL WILL BE PROVIDED BY THE PEDESTRIAN TRUSS SUPERSTRUCTURE MANUFACTURER.



EFFINGHAM COUNTY PROJECT NO. TCSP-IL09(029)

STATION 35B+82.66

LITTLE WABASH RIVER

SEC. 10-00091-00-BT BUILT 20

#### LETTERING FOR NAME PLATE

Locate Name Plate at N.W. corner of Bridge. Contractor to coordinate permanent mounting on the bridge with the bridge manufacturer.

Freq. Q. Opening Sq. Ft. Nat. Head - Ft. Heodwater El. Yr. C.F.S. Exist. Prop. H.W.E. Exist. Prop. Exist. Prop. 20 17,200 N/A 1477 527.9 N/A 0.10 N/A 528.0 100 28,785 N/A 1800 530.0 N/A 0.07 N/A 530.1 31,500 N/A 1860 530.4 N/A 0.05 N/A 530.4 500 38,200 N/A 2005 531.4 N/A 0.05 N/A 531.4

Drainage Area = 224.0 SQ MI

Design

## CHARLESTON ENGINEERING, INC.

CONSULTING ENGINEERS
105 NORTH KITCHELL
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OLNEY, ILLINOIS 62450
(618) 392-0736

GENERAL PLAN & ELEVATION

PEDESTRIAN BRIDGE OVER LITTLE WABASH RIVER

> SEC. 10-00091-00-BT **EFFINGHAM COUNTY** STATION 35B+82.66

### PILE DATA (2-ABUTS.)

B.M. RT. STA. 35B+07 STEEL PIN ELEV. 526.10

Type
Nominal Required Bearing
Factored Resistance Available 122 kips
Estimated Pile Length
Number of Production Piles
Number of Test Piles

Metal Shell Piles 12"
22 kips
40 Feet
22
Number of Test Piles
22 (1 Each Abutment)

### PROFILE VIEW