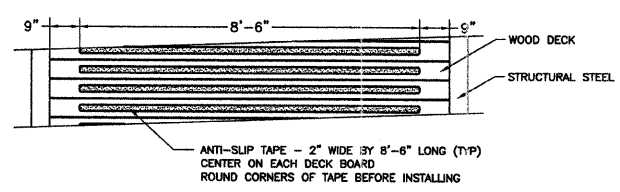
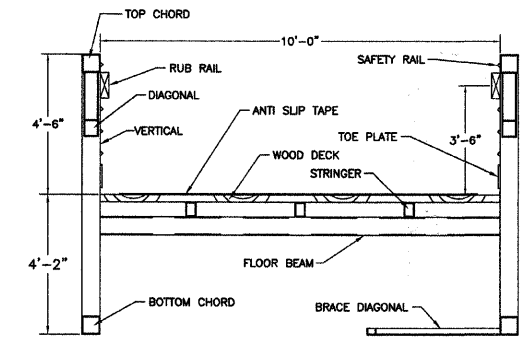


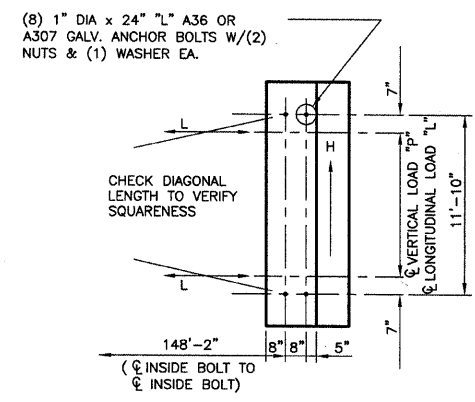
**ANCHOR BOLT ELEVATION**  
NOT TO SCALE



**ANTI SLIP TAPE DETAIL**



**BRIDGE CROSS-SECTION**



**ANCHOR BOLT PLAN**

NOTE: ALL DIMENSIONS AND VALUES ARE SUBJECT TO CHANGE AFTER FINAL DESIGN  
BRIDGE LIFTING WEIGHT: 85,000 LBS

**DESIGN LOADINGS**

BRIDGE LENGTH = 150.00'  
BRIDGE WIDTH = 10.00'  
LIVE LOAD = 90 psf  
VEHICLE LOAD = 10,000 lb  
WIND LOAD = 35 psf

**REACTIONS**

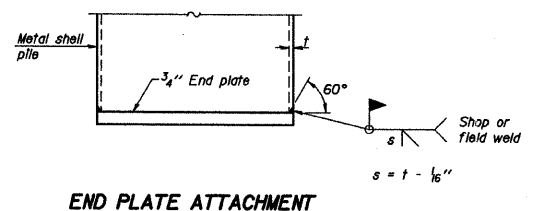
COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS	+ DOWNWARD LOAD - UPWARD LOAD		
	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD	21,250		
UNIFORM LIVE LOAD	24,375		
VEHICLE LOAD	5,000		
WIND UPLIFT 20 PSF	-12,750		
WIND	± 12,460	23,625	
THERMAL			3,190

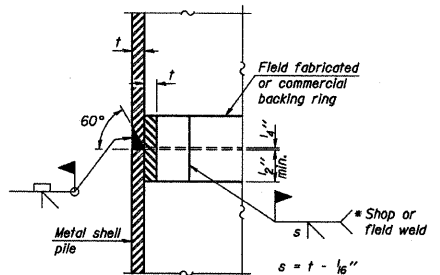
"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)  
"H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)  
"L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

**METAL SHELL PILE TABLE**

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd <sup>3</sup> /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



**END PLATE ATTACHMENT**

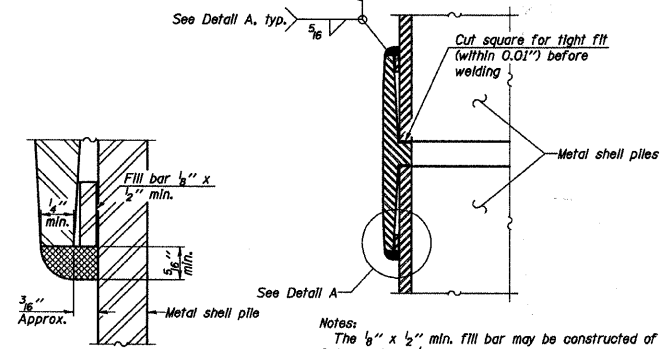


**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

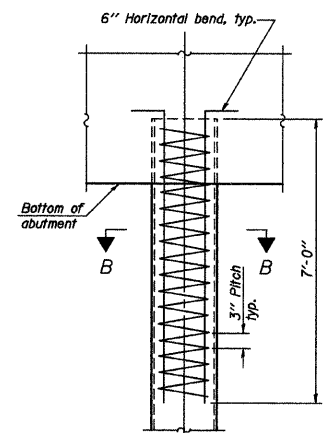
**METAL SHELL PILE DETAILS**

Note:  
The metal shell piles shall be according to ASTM A 252 Grade 3.



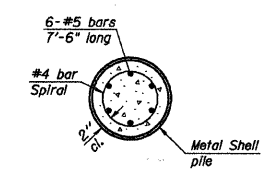
**DETAIL A**

**WELDED COMMERCIAL SPLICE**

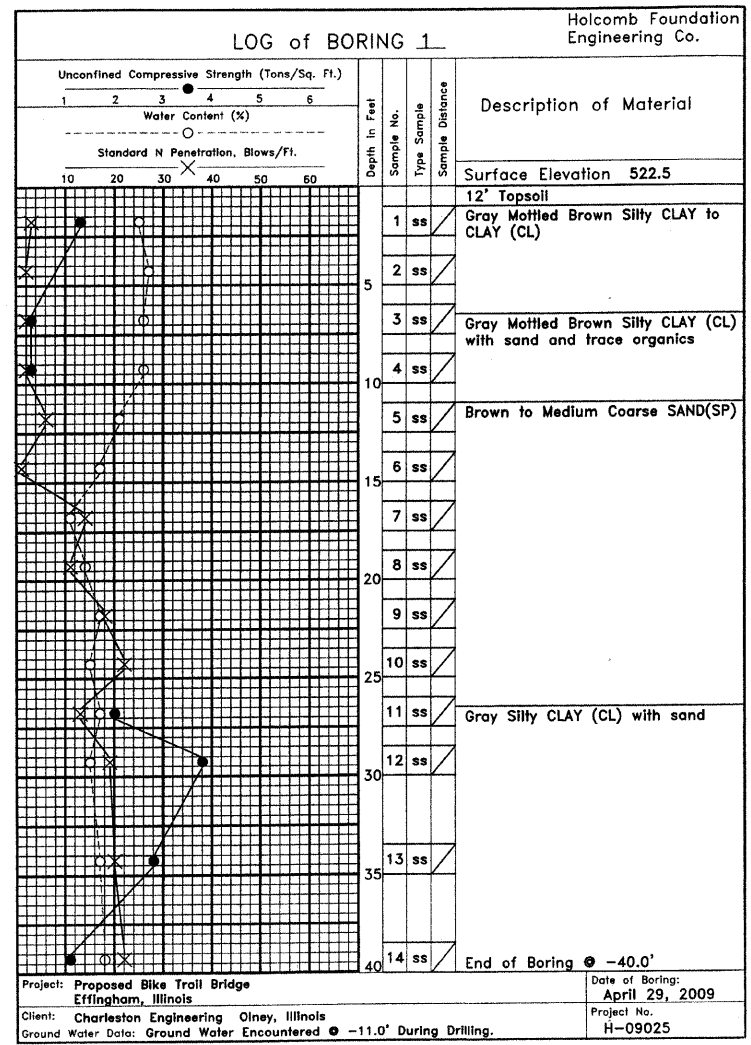


**ELEVATION**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**



**SECTION B-B**



Project: Proposed Bike Trail Bridge Effingham, Illinois  
Date of Boring: April 29, 2009  
Client: Charleston Engineering Olney, Illinois  
Project No. H-09025  
Ground Water Data: Ground Water Encountered @ -11.0' During Drilling.

**CHARLESTON ENGINEERING, INC.**  
CONSULTING ENGINEERS  
105 NORTH KITCHELL  
P.O. BOX 387  
OLNEY, ILLINOIS 62450  
(618) 392-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184.003513

**BRIDGE DETAILS**

**PEDESTRIAN BRIDGE  
OVER LITTLE WABASH RIVER**

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