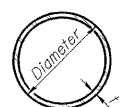


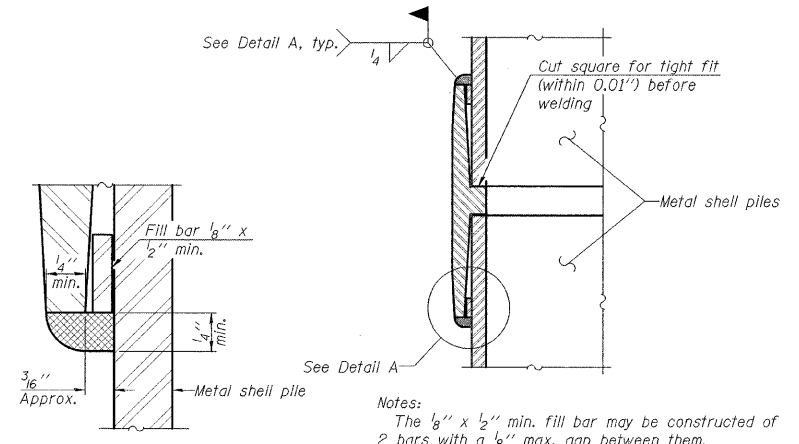
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	03-26140-00-BR 03-21117-00-BR	LIVINGSTON	28	22
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 87360		SHEET NO. B15		

OF 17 SHEETS



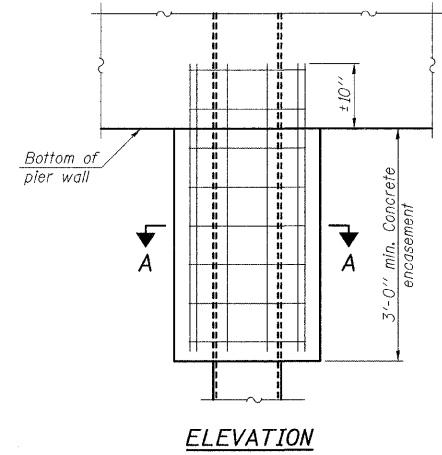
METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /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

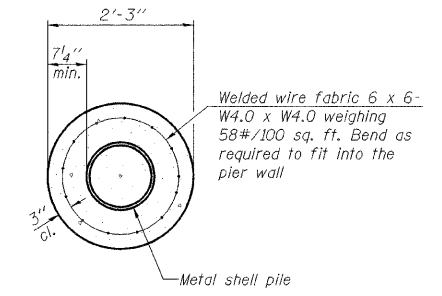


Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



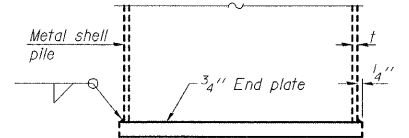
ELEVATION



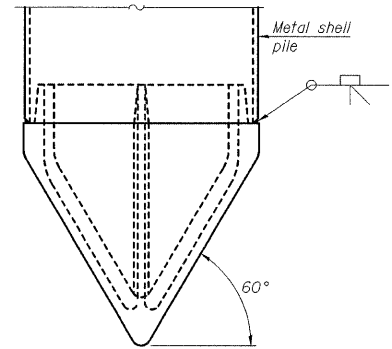
SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.

CONCRETE ENCASEMENT AT PIERS



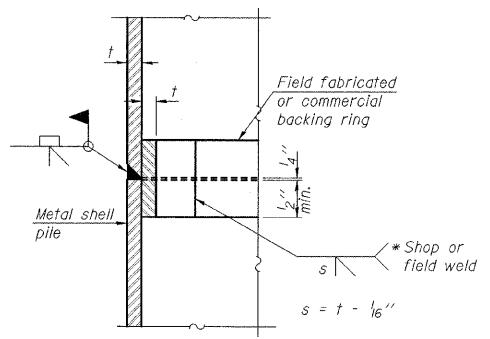
END PLATE ATTACHMENT



METAL SHELL PILE SHOE ATTACHMENT

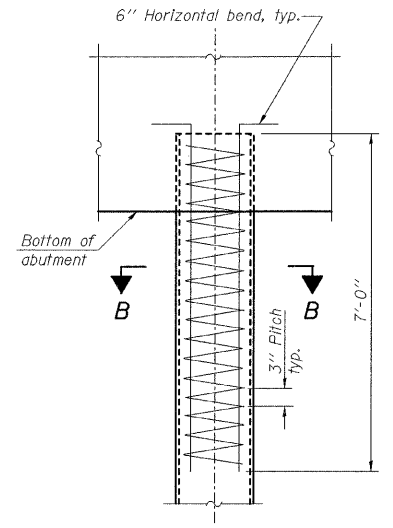
(See Note A)

Note A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



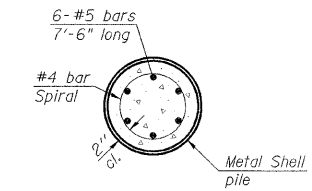
COMPLETE PENETRATION WELD SPLICE

* 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.



ELEVATION

METAL SHELL REINFORCEMENT AT ABUTMENTS



SECTION B-B

NOTES:

- 1.) The metal shell piles shall be according to ASTM A 252 Grade 3.
- 2.) The cost of Excavation and Reinforcement is included with furnishing piles.
- 3.) The cost of Concrete Encasement is included with Concrete Structures.

SECTION 03-26140-00-BR
SECTION 03-21117-00-BR
LIVINGSTON COUNTY

METAL SHELL PILE DETAILS

DESIGNED BY S.D.H.	<p>2706 Midway Drive Bloomington, Illinois 61704 309/888-9636, 309/888-1671 fax</p>	FILE NO. 24-7191
DRAWN BY D.J.M.		DATE 03/17/09
CHECKED BY M.S.W.		SHEET NO. 22 of 28