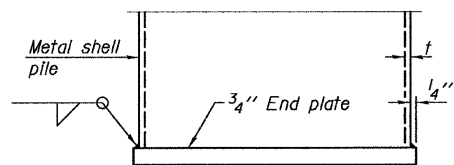
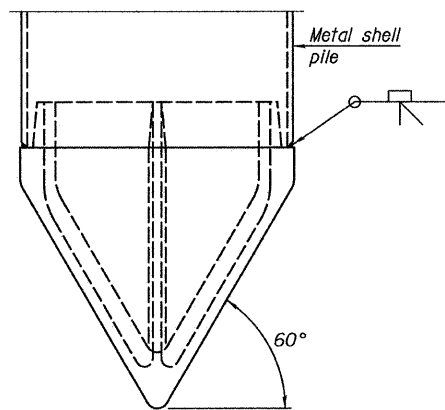


**METAL SHELL PILE TABLE**

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



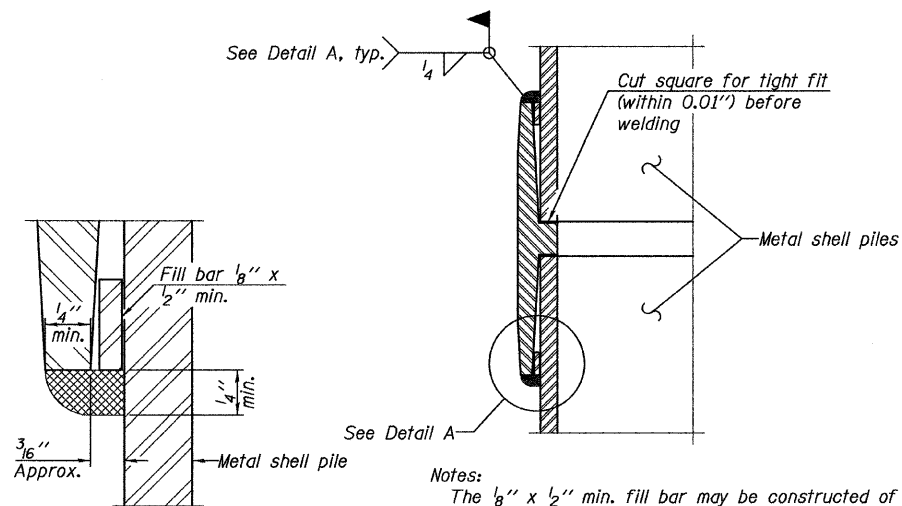
**END PLATE ATTACHMENT**



**METAL SHELL PILE SHOE ATTACHMENT**

(See Note A)

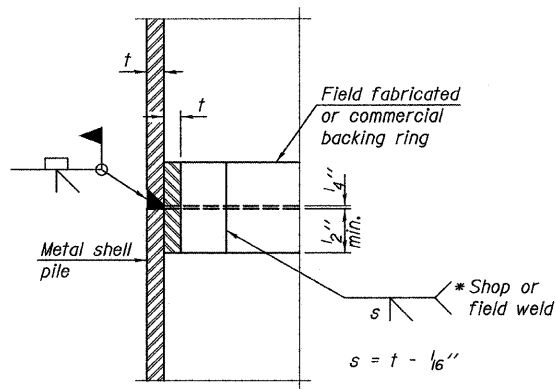
**Note A:**  
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing 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.



**DETAIL A**

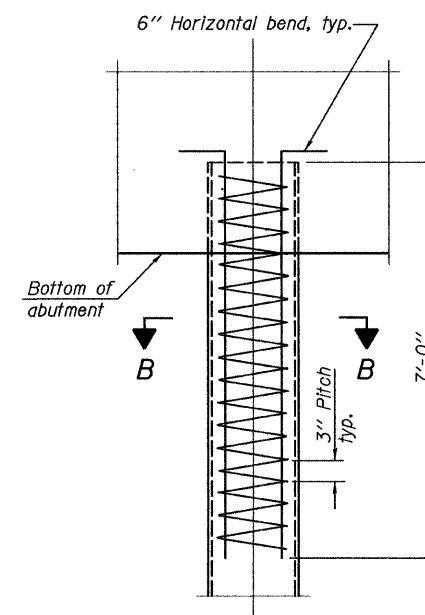
**Notes:**  
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
Pile segments shall be driven to solid contact with splicer before welding.

**WELDED COMMERCIAL SPLICE**

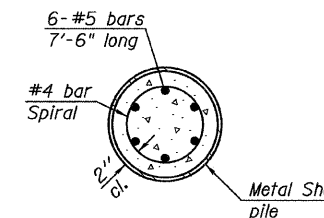


**COMPLETE PENETRATION WELD SPLICE**

\* 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**



**SECTION B-B**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**

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

F-MS

10-1-08

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	<p><b>Allen Henderson &amp; Associates, Inc.</b> Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907</p>	<p><b>METAL SHELL PILE DETAILS</b></p>	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN -	REVISED -			166	08-10110-00-BR	MENARD	17	13
PLOT SCALE = #SCALE#		CHECKED -	REVISED -			CONTRACT NO. 3510				
PLOT DATE = #DATE#		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 13 OF 17 SHEETS					