

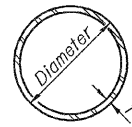
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                       |          |                  |              |           |
|-----------------------|----------|------------------|--------------|-----------|
| ROUTE NO.             | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
| FAS 1536              | 125BR    | Macon            | 45           | 38        |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT |              |           |

SHEET NO. 26

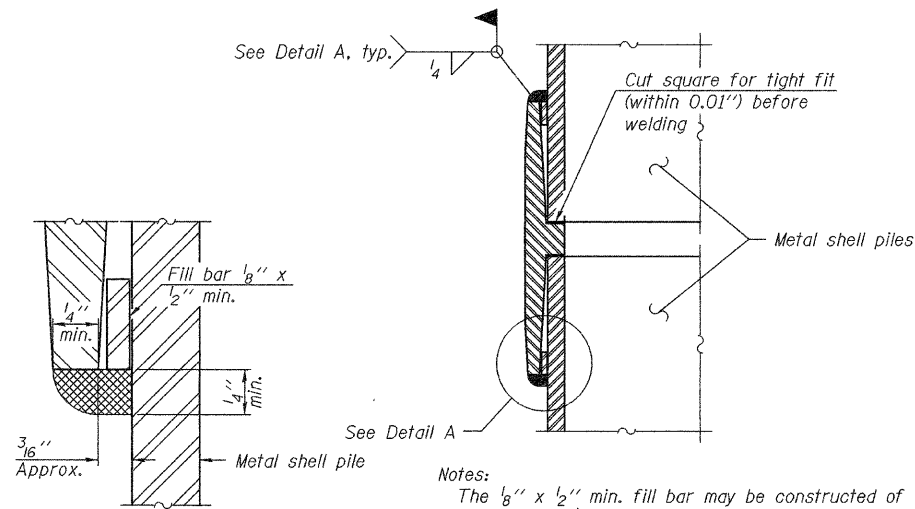
29 SHEETS

Contract #74145



**METAL SHELL PILE TABLE**

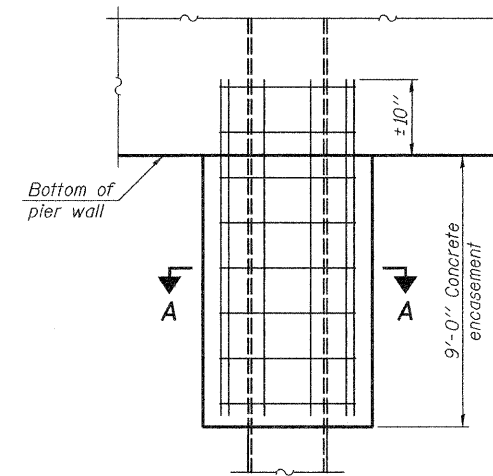
| Designation | Wall thickness t | Weight per foot (Lbs./ft.) | Inside volume (yd. <sup>3</sup> /ft.) | Encasement diameter A |
|-------------|------------------|----------------------------|---------------------------------------|-----------------------|
| PP12        | 0.179"           | 22.60                      | 0.0274                                | 30"                   |
| PP12        | 0.250"           | 31.37                      | 0.0267                                | 30"                   |
| PP14        | 0.250"           | 36.71                      | 0.0368                                | 30"                   |
| PP14        | 0.312"           | 45.61                      | 0.0361                                | 30"                   |



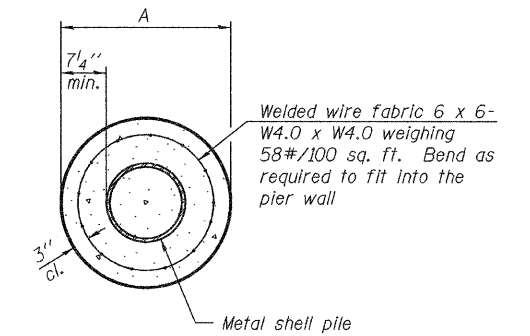
**DETAIL A**

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**



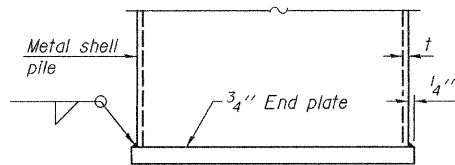
**ELEVATION**



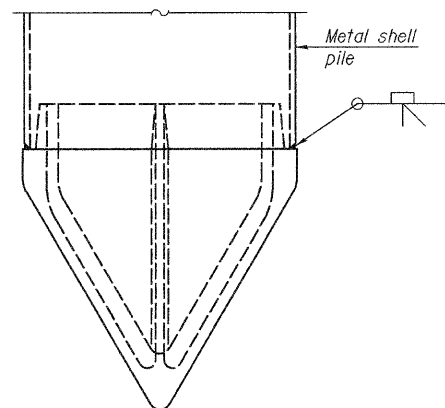
**SECTION A-A**

Notes:  
See Metal Shell Pile Table for dimension "A".  
Forms for encasement may be omitted when soil conditions permit.

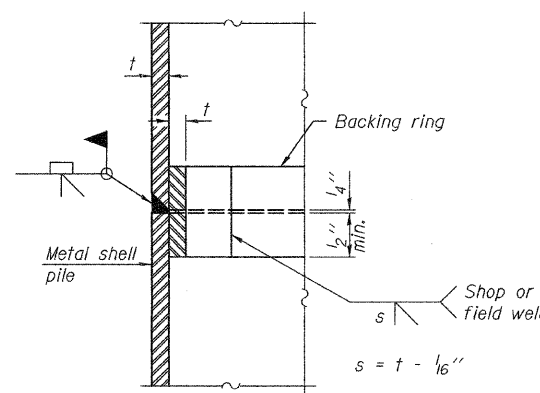
**CONCRETE ENCASEMENT AT PIERS**



**END PLATE ATTACHMENT**

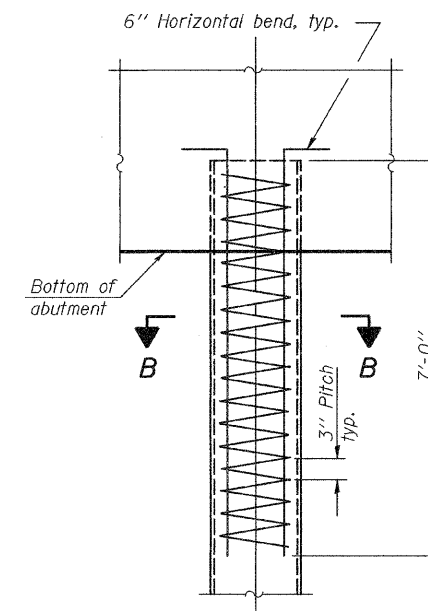


**METAL SHELL PILE SHOE ATTACHMENT**



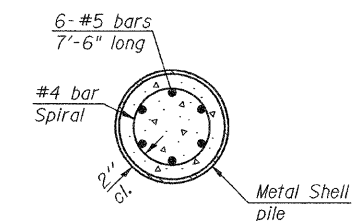
**COMPLETE PENETRATION WELD SPLICE**

Backing ring made from pile shell. Remove segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**



**SECTION B-B**

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

|          |                |
|----------|----------------|
| DESIGNED | Ray Ahanchi    |
| CHECKED  | Nick Barnett   |
| DRAWN    | BECKY M. LEACH |
| CHECKED  | GRA & NRB      |

|          |                    |                   |
|----------|--------------------|-------------------|
| EXAMINED | Thomas J. Donagale | November 14, 2008 |
| PASSED   | Ralph E. Anderson  |                   |

**METAL SHELL PILE DETAILS**  
**F.A.S. ROUTE 1536 - SEC. 125BR**  
**MACON COUNTY**  
**STATION 616+26.50**  
**STRUCTURE NO. 058-0132**