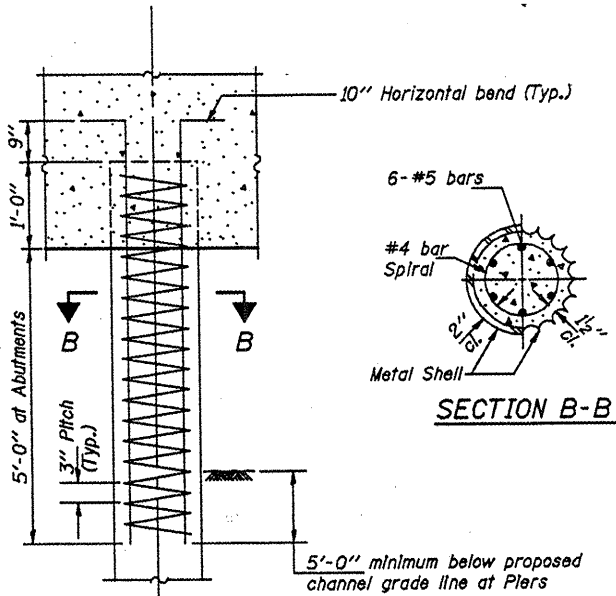


| ROUTE                    | SECTION        | COUNTY | TOTAL SHEETS       | SHEET NO. |
|--------------------------|----------------|--------|--------------------|-----------|
| TR 265                   | 04-01183-00-BR | UNION  | 10                 | 9         |
| PROJECT NO. BROS-181(43) |                |        | CONTRACT NO. 99252 |           |

Reinforcement cage shall be omitted when Concrete Encasement is provided.

The cost of Reinforcement is included with the Cost of Furnishing Piles.



DETAIL OF REINFORCEMENT FOR METAL SHELLS

QUANTITIES/FT. OF ENCASEMENT (STEEL PILES)

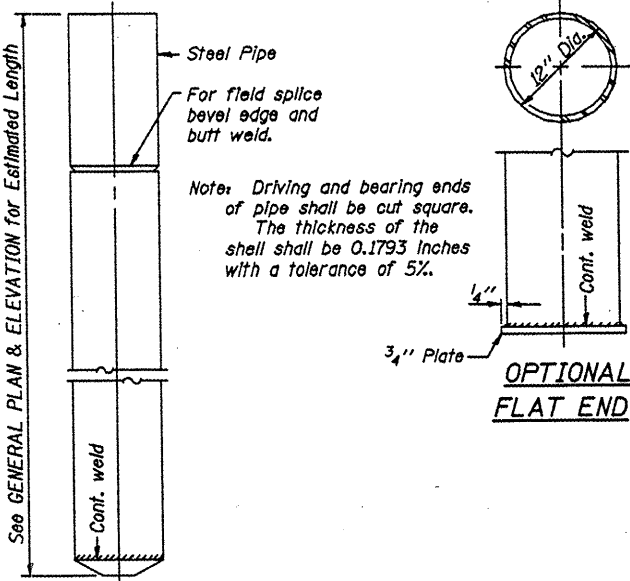
| Pile Size | Item                | Quantity   |
|-----------|---------------------|------------|
| HP8       | Concrete Encasement | 0.063 C.Y. |
| HP10      | Concrete Encasement | 0.086 C.Y. |
| HP12      | Concrete Encasement | 0.112 C.Y. |

(METAL SHELL PILES)

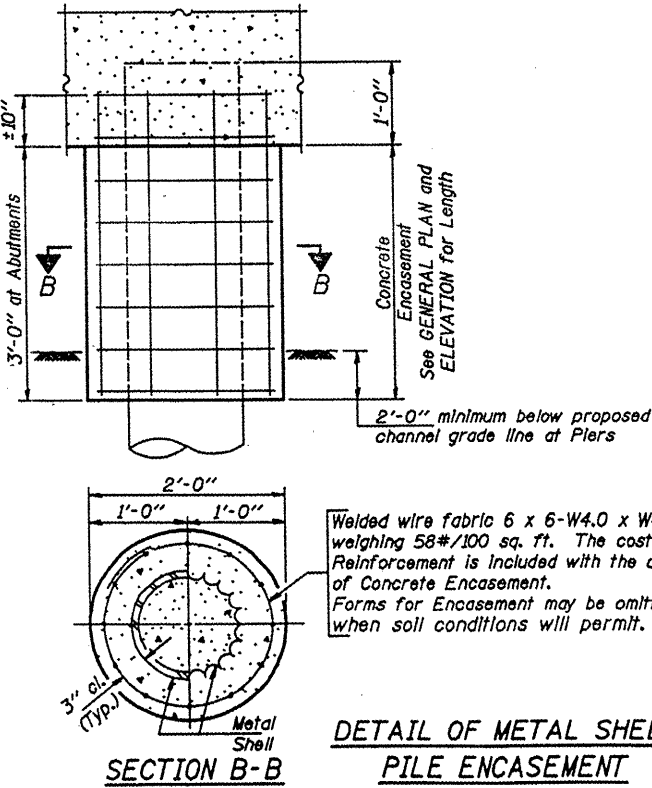
| Pile Size | Item                | Quantity   |
|-----------|---------------------|------------|
| 12" Dia.  | Concrete Encasement | 0.087 C.Y. |

PILE DETAILS

STANDARD CX-1



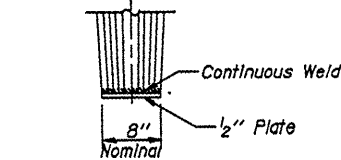
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



DETAIL OF METAL SHELL PILE ENCASEMENT

FIELD CRIMP DETAIL

Note: 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.



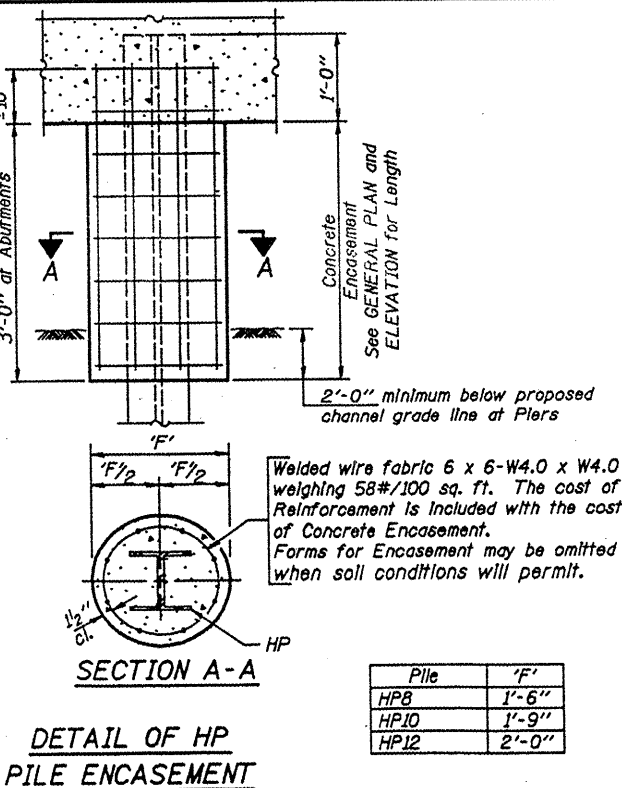
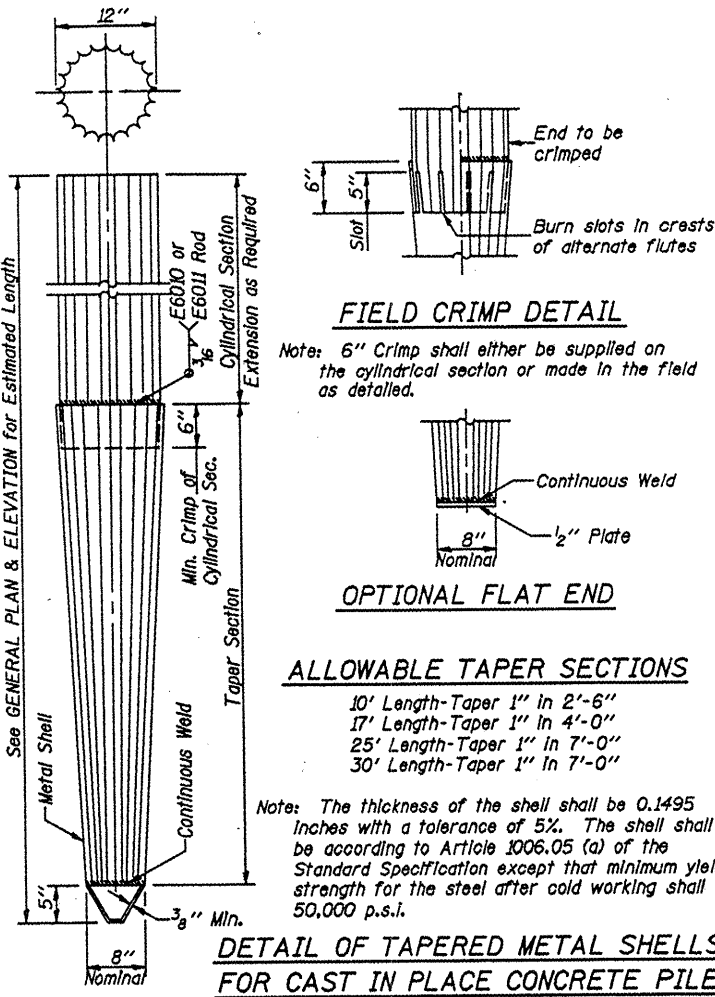
OPTIONAL FLAT END

ALLOWABLE TAPER SECTIONS

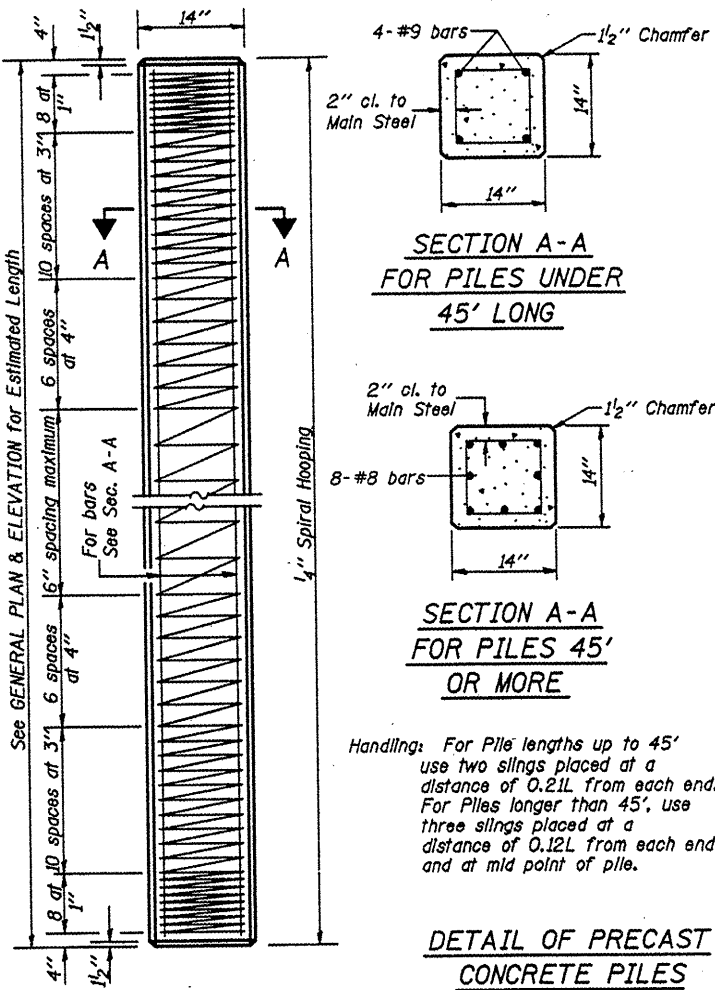
- 10' Length-Taper 1" in 2'-6"
- 17' Length-Taper 1" in 4'-0"
- 25' Length-Taper 1" in 7'-0"
- 30' Length-Taper 1" in 7'-0"

Note: The thickness of the shell shall be 0.1495 inches with a tolerance of 5%. The shell shall be according to Article 1006.05 (a) of the Standard Specification except that minimum yield strength for the steel after cold working shall be 50,000 p.s.i.

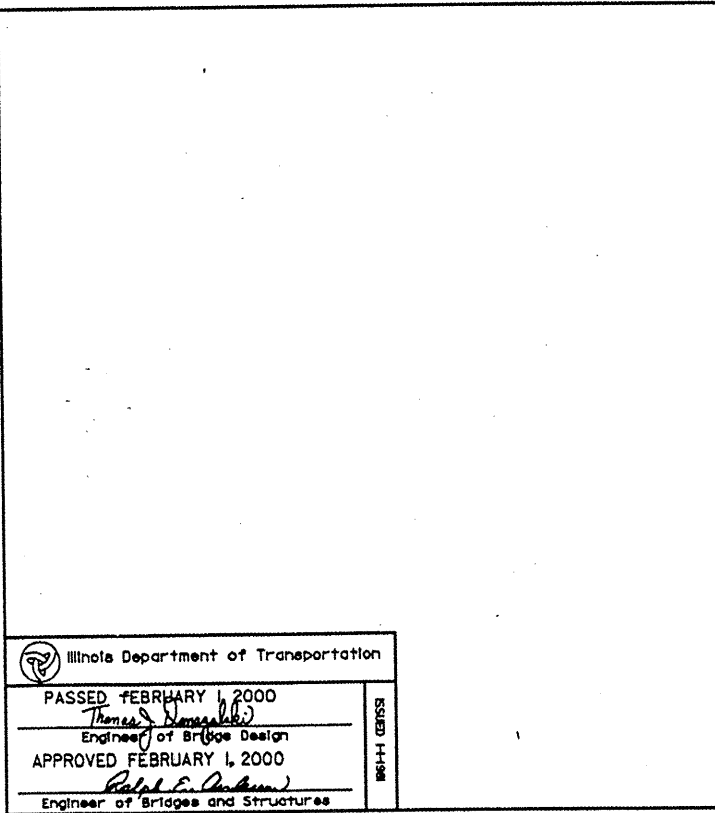
DETAIL OF TAPERED METAL SHELLS FOR CAST IN PLACE CONCRETE PILES



DETAIL OF HP PILE ENCASEMENT



DETAIL OF PRECAST CONCRETE PILES



Handling: For Pile lengths up to 45' use two slings placed at a distance of 0.21L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12L from each end and at mid point of pile.

Illinois Department of Transportation

PASSED FEBRUARY 1, 2000

Approved by: *Thomas J. Hennessey*

Engineer of Bridge Design

APPROVED FEBRUARY 1, 2000

Approved by: *Robert E. Adams*

Engineer of Bridges and Structures