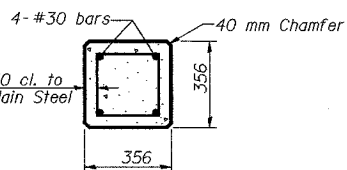
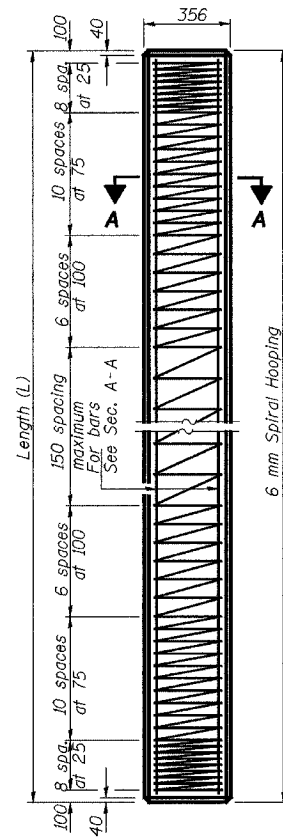


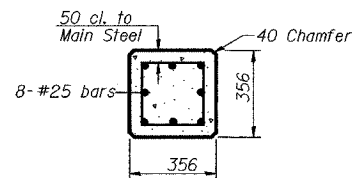
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 337	19R-D	LAKE	800	613
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 31  
37 SHEETS



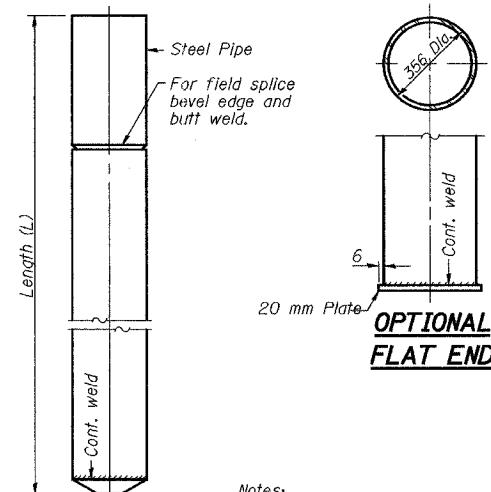
**SECTION A-A  
FOR PILES UNDER  
13.5 m LONG**



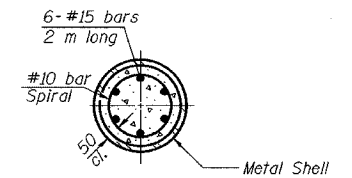
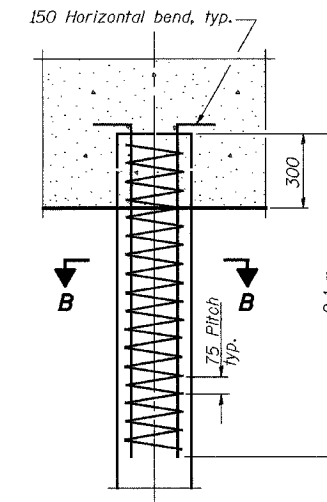
**SECTION A-A  
FOR PILES 13.5 m  
OR MORE**

Handling: For Pile lengths up to 13.5 m use two slings placed at a distance of 0.21L from each end. For Piles longer than 13.5 m, use three slings placed at a distance of 0.12L from each end and at mid point of pile.

**DETAIL OF PRECAST  
CONCRETE PILES**

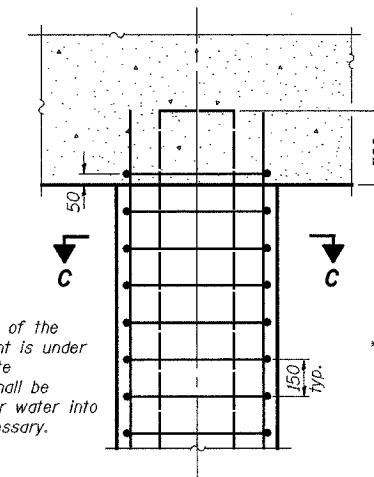


**DETAIL OF CYLINDRICAL  
STEEL SHELL FOR CAST IN  
PLACE CONCRETE PILES**



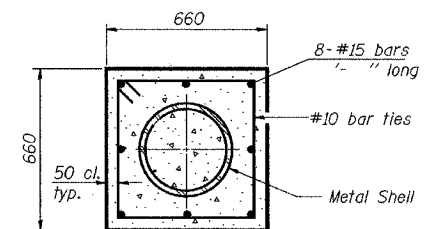
**SECTION B-B**

**DETAIL OF REINFORCEMENT FOR  
METAL SHELLS AT ABUTMENTS**



\* If a portion of the pile encasement is under water, Concrete Encasement shall be tremmied under water into forms as necessary.

**DETAIL OF PROTECTION  
FOR METAL SHELLS AT PIERS**



**SECTION C-C**

The cost of Reinforcement, concrete, and excavation for forms is included with Concrete Encasement.

**CONCRETE PILE DETAILS**

PILE DETAILS				
Date	Designed	EV	ELGIN, JOLIET & EASTERN R.W. CO. BRIDGE OVER ILLINOIS ROUTE 22 F.A.P. ROUTE 337 SECTION (19R-D) LAKE COUNTY STATION 32+611.151 STRUCTURE NO. 049-0188	Sheet No.
Revisions	Drawn	EV		31
	Checked	NPP		
	Approved	NPP		
	Prepared By:	URS		