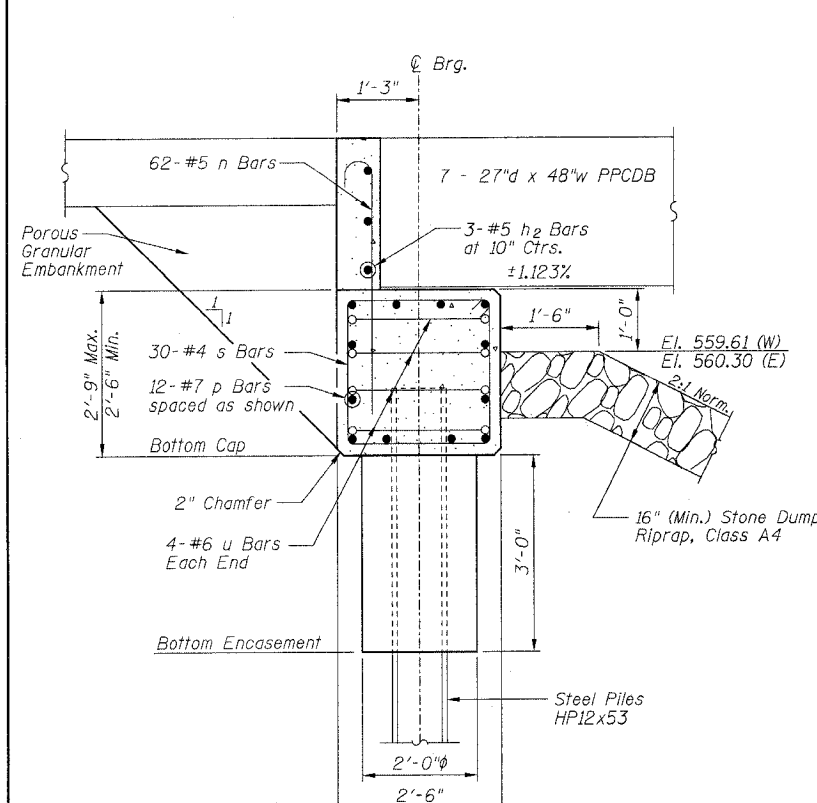
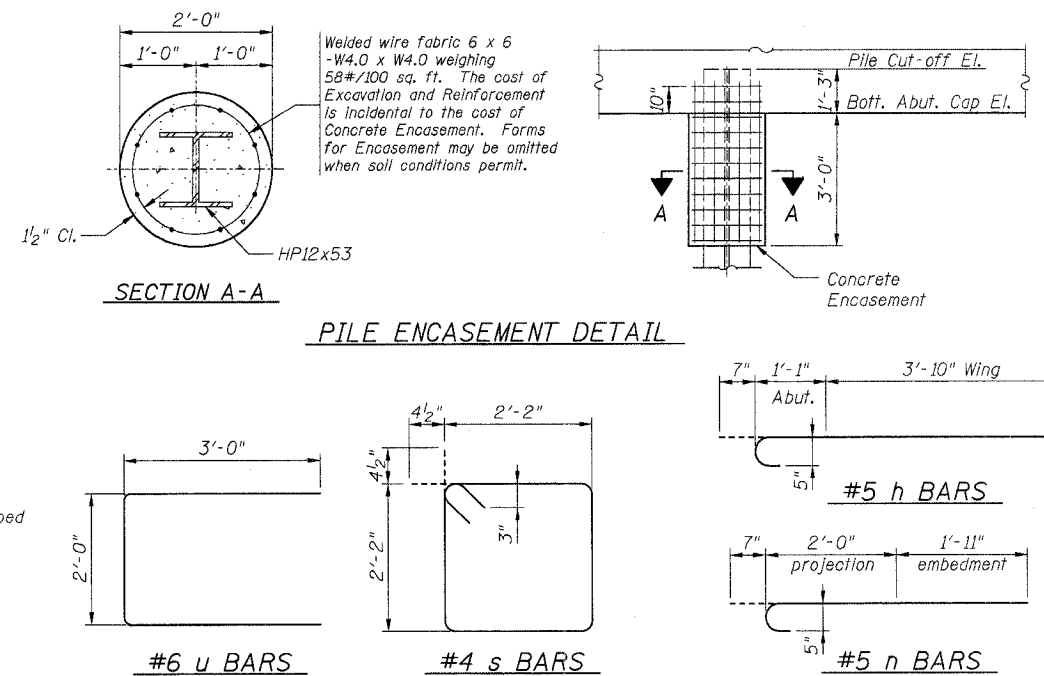


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 16	00-00115-00-BR	MARION	14	14
		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 97287				



SECTION THRU ABUTMENT



PILE ENCASEMENT DETAIL

PILE DATA

Type and Size: Steel HP12x53

Nominal Required Bearing: 420 kips

Allowable Resistance Available: 140 kips

Estimated Length:
West Abutment: 55 Foot
East Abutment: 30 Foot

Number of Production Piles:
West Abutment: 3 Each
East Abutment: 3 Each

Number of Test Piles:
West Abutment: 1 Each
East Abutment: 1 Each

BILL OF MATERIALS
ONE ABUTMENT w/ WINGWALLS

Bar	No.	Size	Length	Shape
h	20	#5	5'-6"	
h ₁	12	#5	4'-3"	
h ₂	3	#5	29'-3"	
n	62	#5	4'-6"	
p	12	#7	30'-8"	
s	30	#4	9'-5"	
u	8	#6	8'-0"	
v	24	#5	4'-9"	
				CUT IN FIELD
Concrete Structures			Cu Yd	10.6
Reinforcement Bars			Pound	1710
Concrete Encasement			Cu Yd	1.4
Pile Shoes			Each	4

GENERAL NOTES

All exposed edges shall have standard $\frac{3}{4}$ " chamfer, unless otherwise noted.

All clearances between rebar and form surface shall be 2", unless otherwise noted.

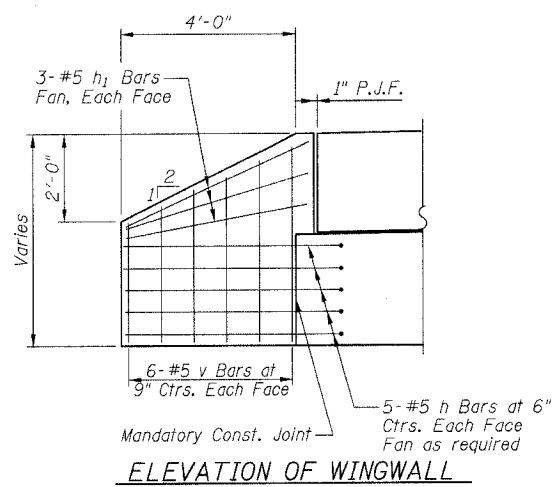
Space reinforcement in cap to miss PPCDB dowel rods.

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a production pile location at each Abutment as shown on the Plans and as directed by the Engineer before ordering the remainder of the piles.

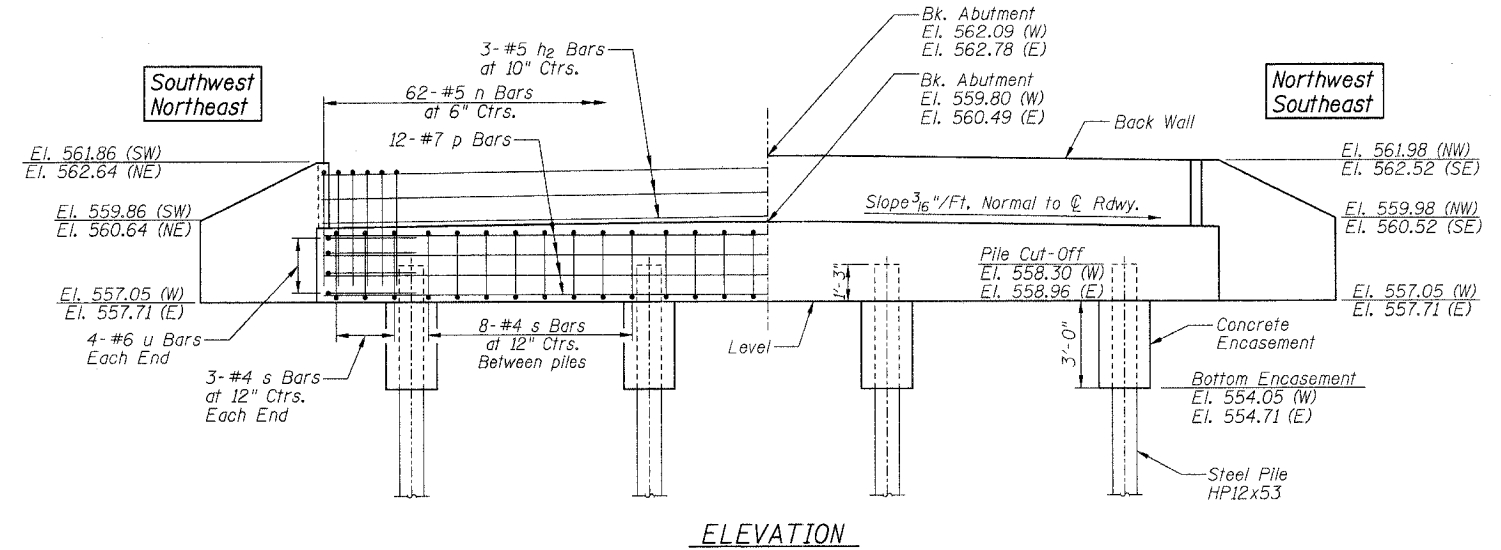
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

The Steel H-piles shall be according to AASHTO M270 Grade 50.

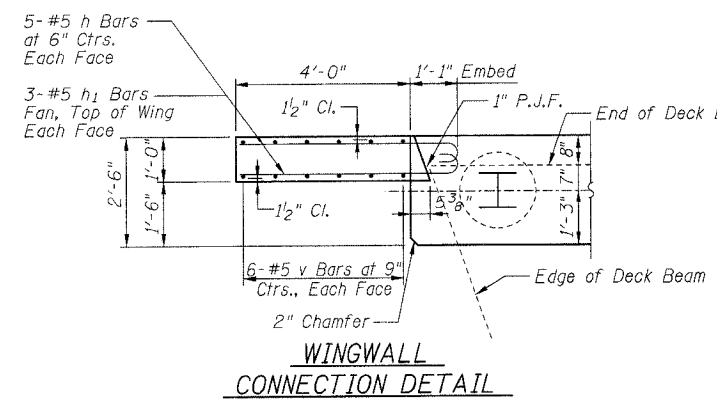
In addition to all other requirements of Section 512 of the Standard Specifications, splices for Steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.



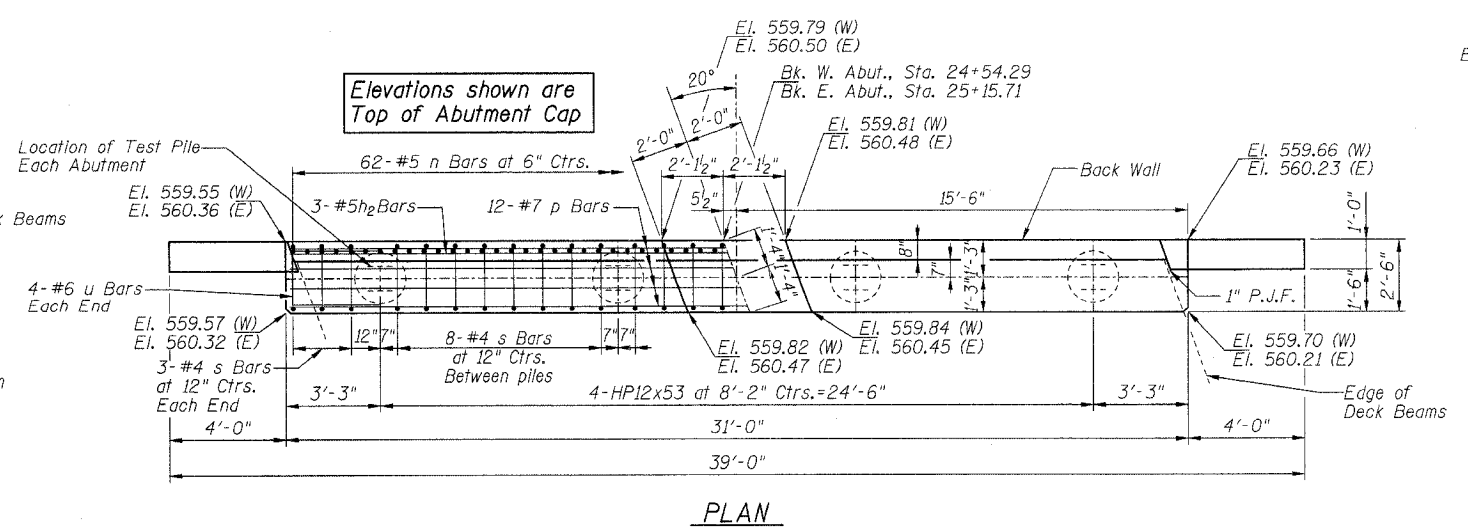
ELEVATION OF WINGWALL



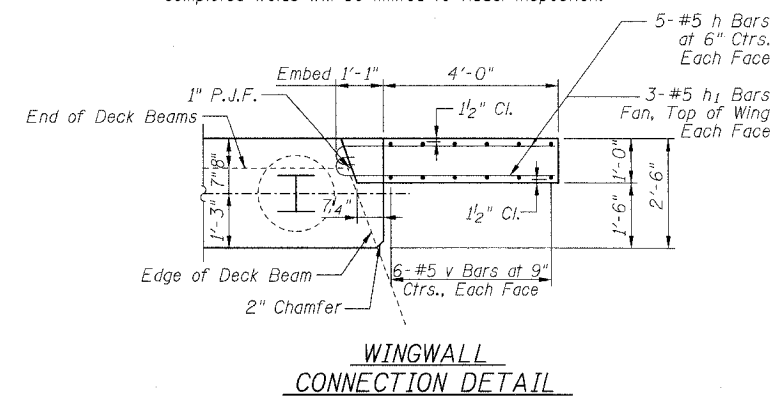
ELEVATION



WINGWALL CONNECTION DETAIL



PLAN



WINGWALL CONNECTION DETAIL

ABUTMENT DETAILS
PROPOSED BRIDGE CARRYING CH 16
OVER CROOKED CREEK
SECTION 00-00115-00-BR
MARION COUNTY, ILLINOIS

10/13/2006