

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 16	00-00115-01-BR	MARION	14	8
		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 97287				

PILE DATA

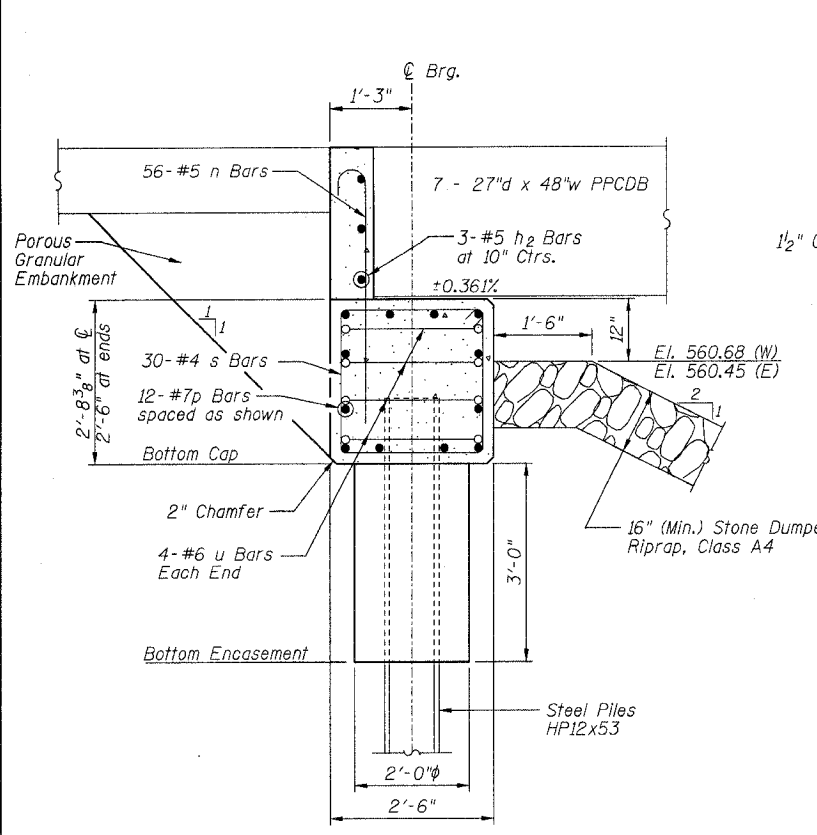
Type and Size: Steel HP12x53
 Nominal Required Bearing: 360 kips
 Allowable Resistance Available: 120 kips
 Estimated Length:
 West Abutment: 60 Foot
 East Abutment: 55 Foot
 Number of Production Piles:
 West Abutment: 3 Each
 East Abutment: 4 Each
 Number of Test Piles:
 West Abutment: 1 Each
 East Abutment: None

**BILL OF MATERIALS
ONE ABUTMENT w/ WINGWALLS**

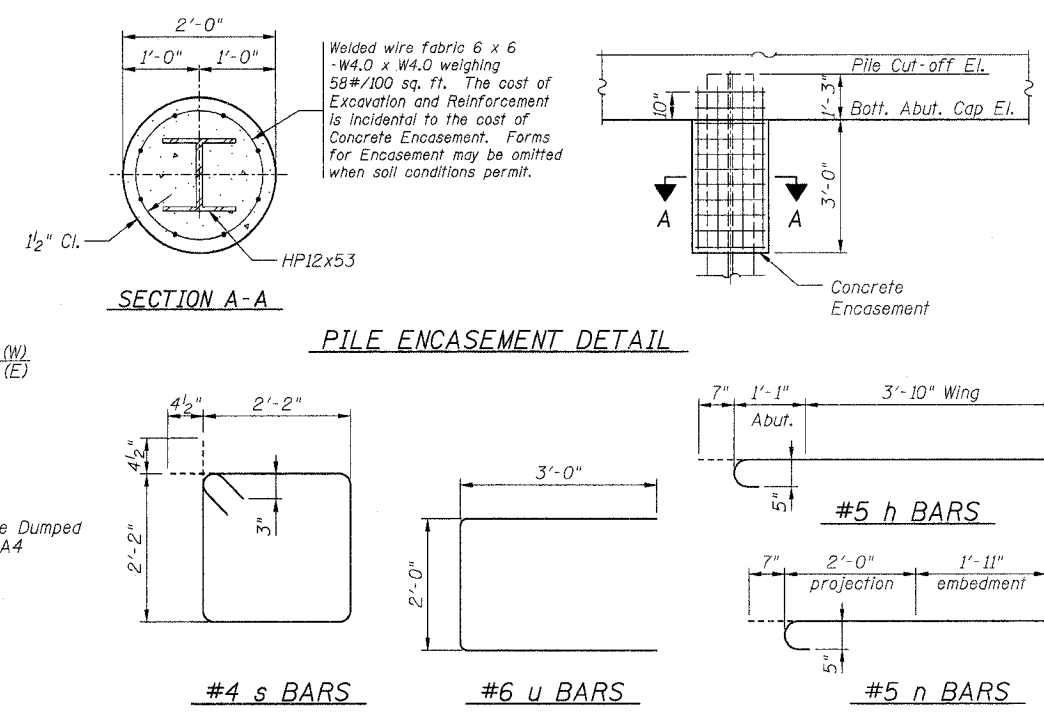
Bar	No.	Size	Length	Shape
h	20	#5	5'-6"	
h ₁	12	#5	4'-3"	
h ₂	3	#5	27'-8"	
n	56	#5	4'-6"	
p	12	#7	28'-8"	
s	30	#4	9'-5"	
u	8	#6	8'-0"	
v	24	#5	4'-9"	CUT IN FIELD
Concrete Structures			Cu Yd	9.8
Reinforcement Bars			Pound	1620
Concrete Encasement			Cu Yd	1.4

GENERAL NOTES

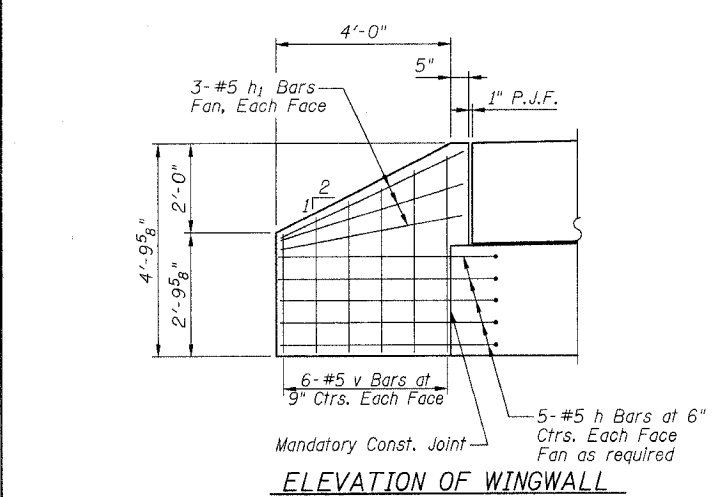
All exposed edges shall have standard 3/4" chamfer, unless otherwise noted.
 All clearances between rebar and form surface shall be 2", unless otherwise noted.
 Space reinforcement in cap to miss PPCDB dowel rods.
 The Contractor shall drive one (1) Steel HP12x53 Test Pile in a production pile location at the West Abutment as directed by the Engineer before ordering the remainder of the piles.
 The test pile 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.
 The Contractor is hereby advised that very stiff soils may be encountered prior to the location of anticipated refusal. See the Soil Borings for further information.
 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.



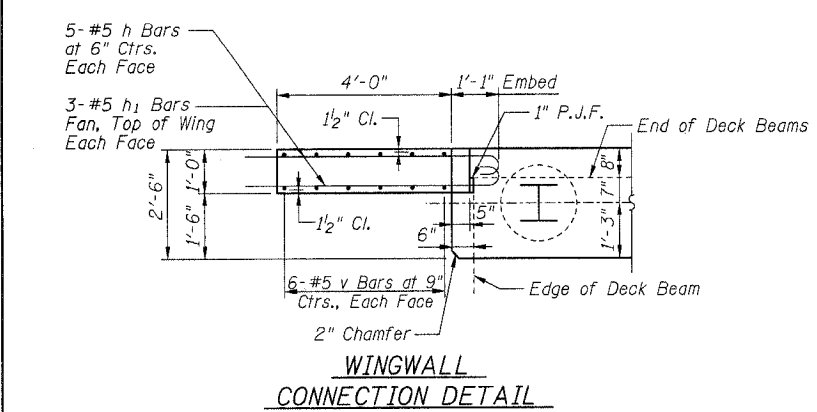
SECTION THRU ABUTMENT



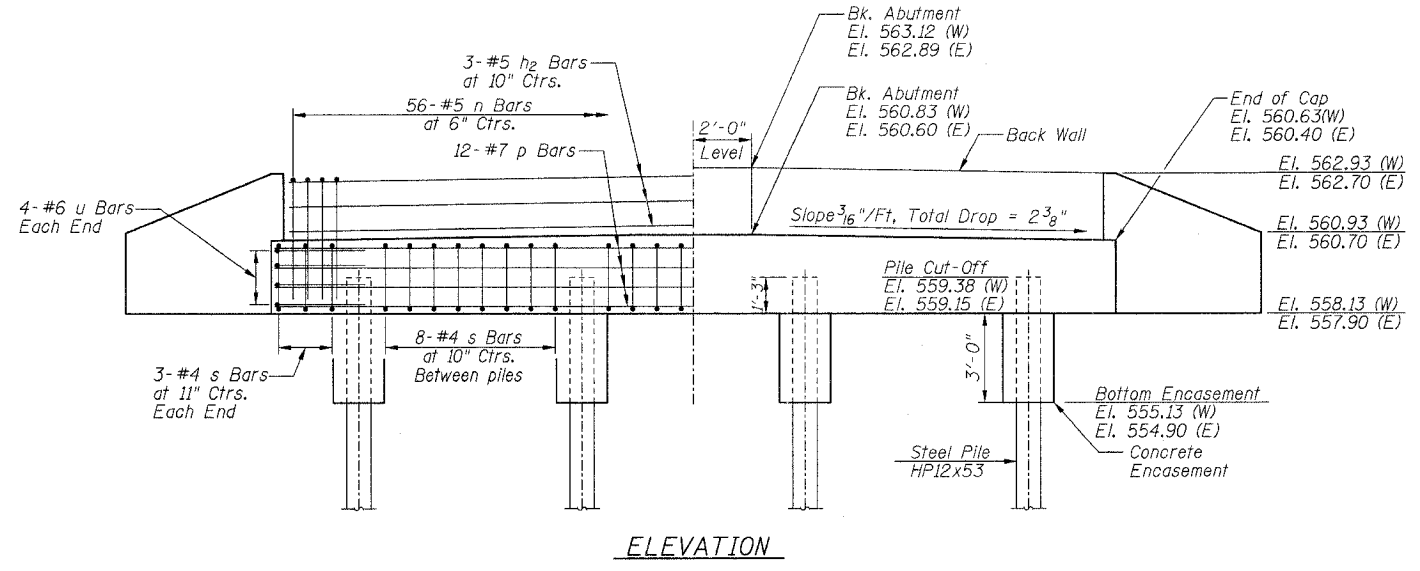
PILE ENCASEMENT DETAIL



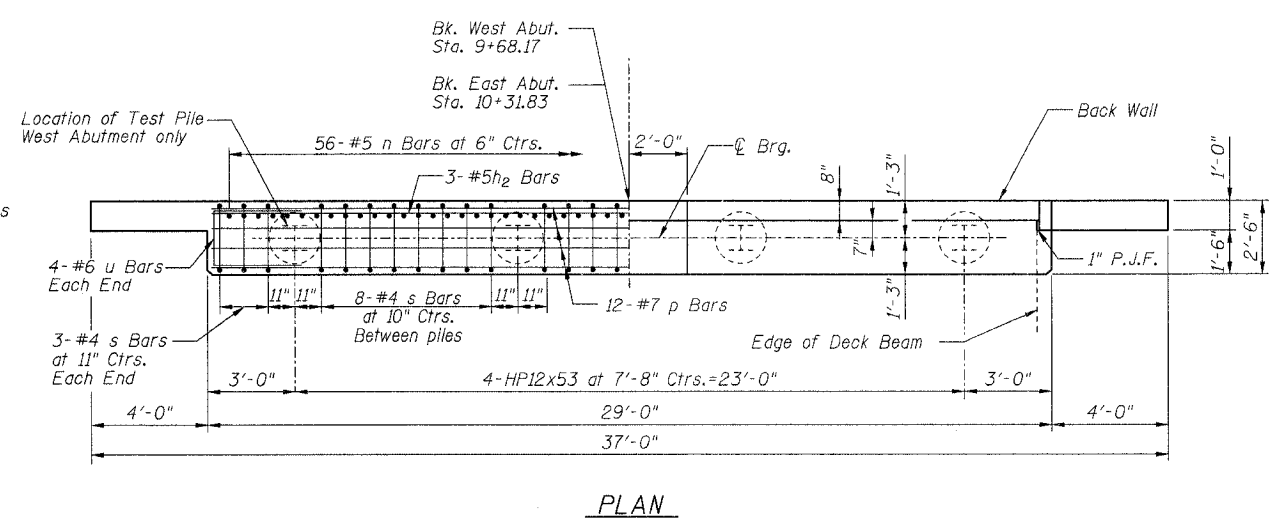
ELEVATION OF WINGWALL



WINGWALL CONNECTION DETAIL



ELEVATION



PLAN

**ABUTMENT DETAILS
PROPOSED BRIDGE CARRYING CH 16
OVER BRANCH TO CROOKED CREEK
SECTION 00-00115-01-BR
MARION COUNTY, ILLINOIS**

Sheet 8 of 14
Job No. 50805

10/13/2006