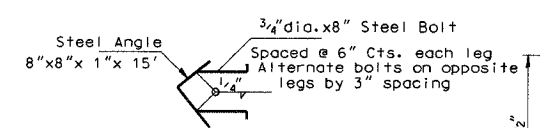
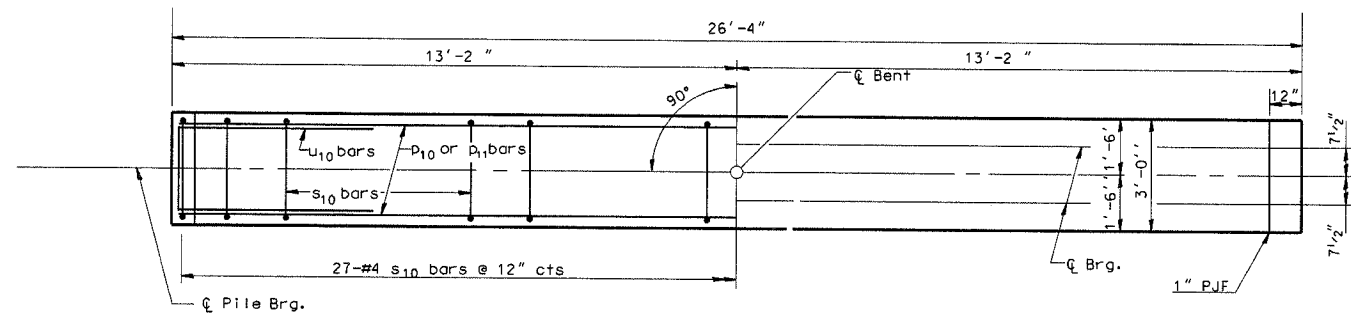


FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 384	04-01119-00-BR 04-04126-00-BR	HENRY	13	10
F.H.W.A. REG.	ILLINOIS	PROJECT	BR-05-073(49)	

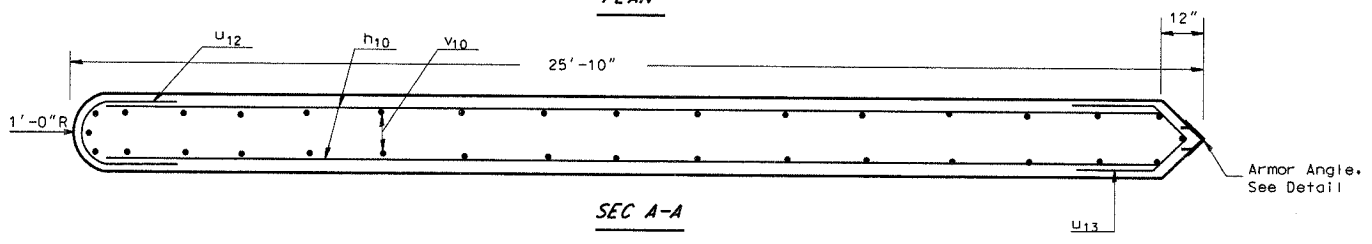
**DETAIL A
DETAIL OF ARMOR ANGLE**



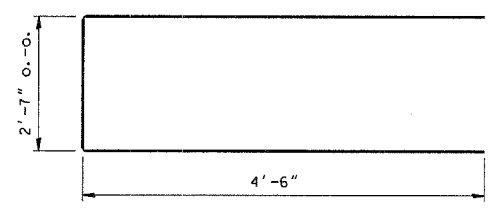
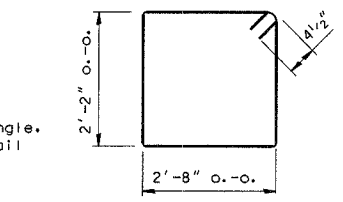
Place Armor Angle on Upstream End of Piers Only. Cast assembly with piers. Maintain a minimum of 2" clearance between armor angle and reinforcement. The Armor Angle shall be galvanized in accordance with AASHTO M-111 and ASTM A-385. Cost of Armor Angle shall be included in concrete structures. Total Furnished Weight is Approx. 1690 lbs. total, both piers.



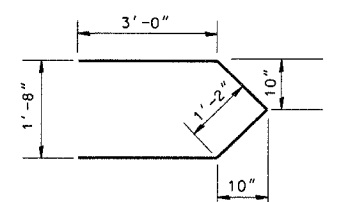
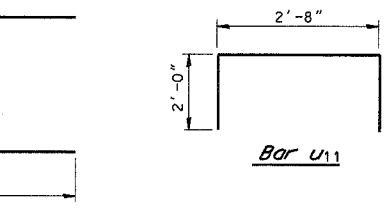
PLAN



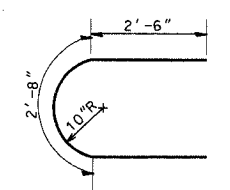
SEC A-A



Bar U₁₀



Bar U₁₃



Bar U₁₂

**BILL OF MATERIAL
FOR ONE PIER**

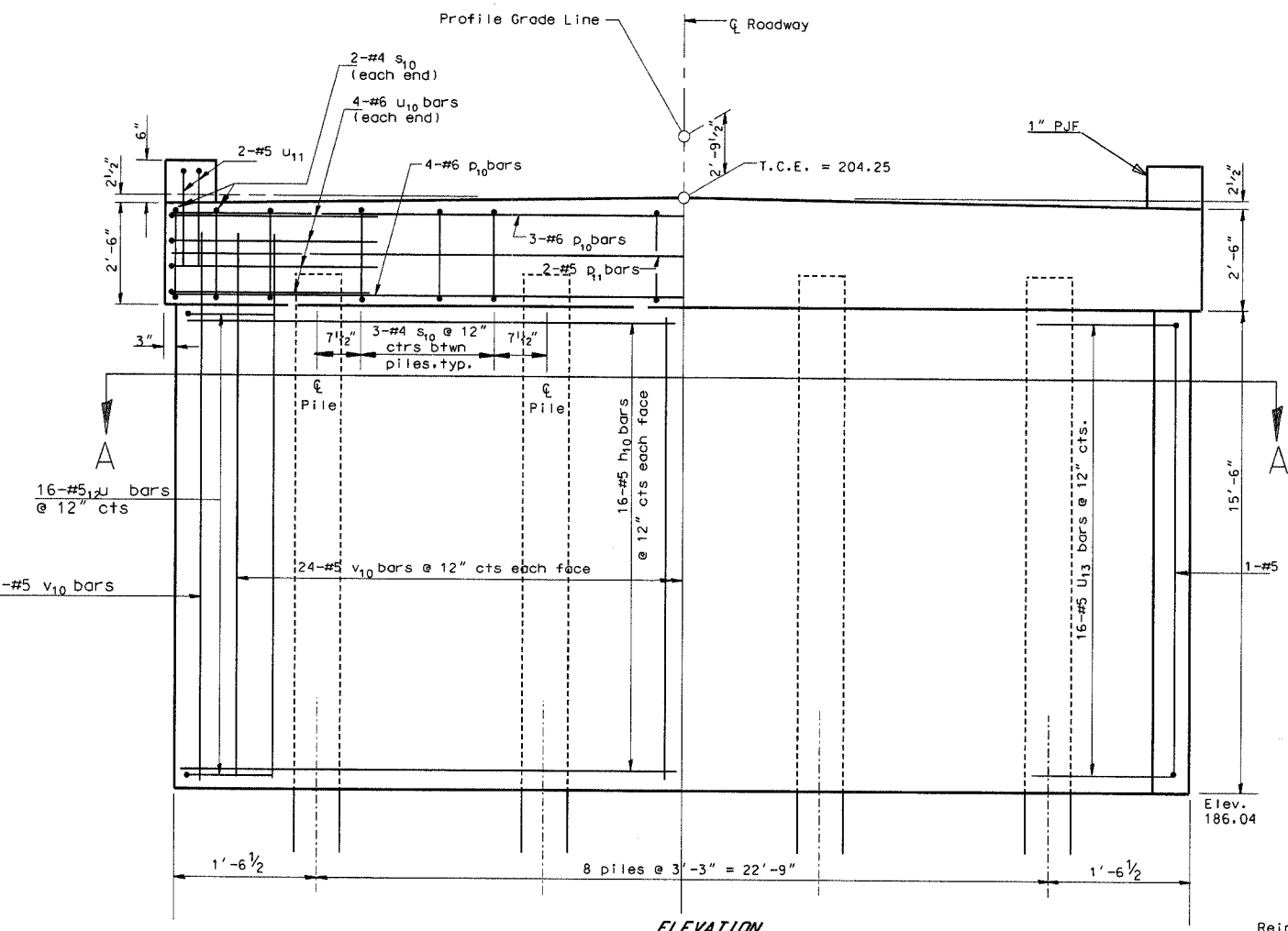
Bar	No.	Size	Length	Shape
h ₁₀	32	#5	23'-10"	—
P ₁₀	7	#5	26'-0"	—
P ₁₁	2	#5	26'-0"	—
s ₁₀	25	#4	10'-5"	□
U ₁₀	8	#6	11'-7"	—
U ₁₁	4	#5	6'-8"	—
U ₁₂	16	#5	7'-8"	—
U ₁₃	16	#5	8'-4"	—
v ₁₀	52	#5	17'-6"	—
Concrete Structures		Cu. Yds.	36.6	
Reinforcement Bars		Pound	2680	
Structure Excavation		Cu. Yds.	26.5	

NOTE

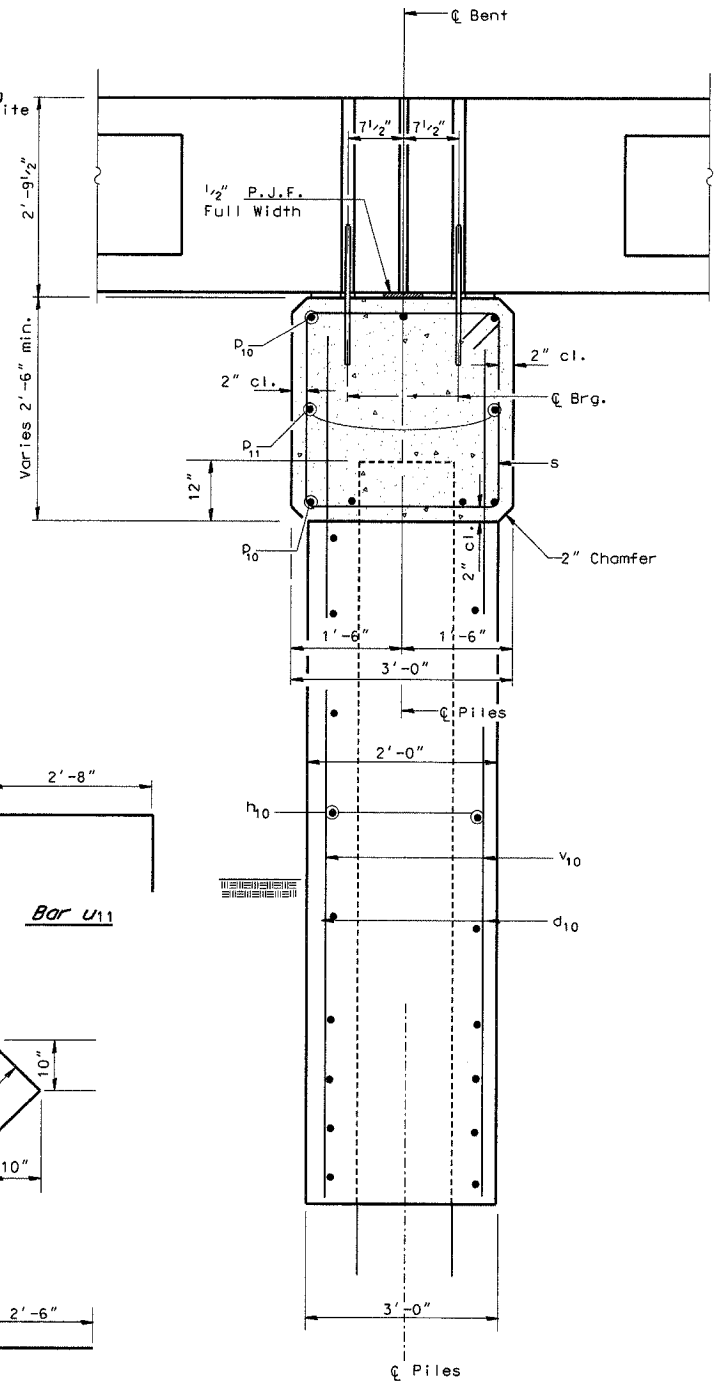
Reinforcement bars shall conform to A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi



ELEVATION



P.P.C. DECK BEAMS PILE BENT PIER		
24' RDWY.	33' BMS.	