

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.	SHEET NO. 15 25 SHEETS
F.A.P. 324	23B-1	McHENRY	97	55	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-			

Contract # 62892

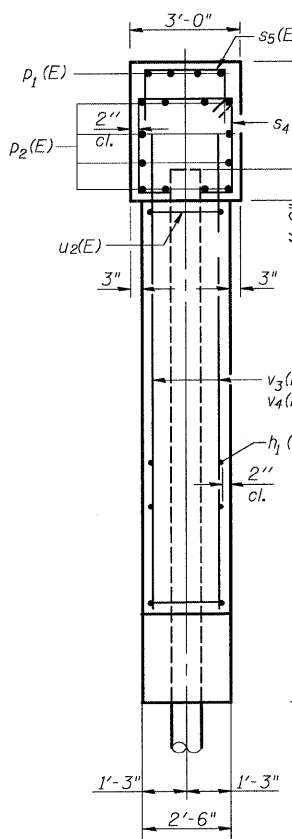
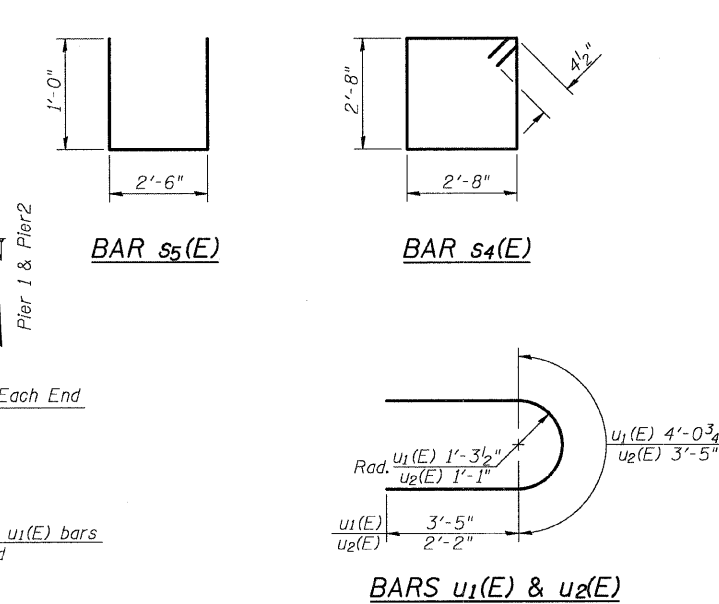
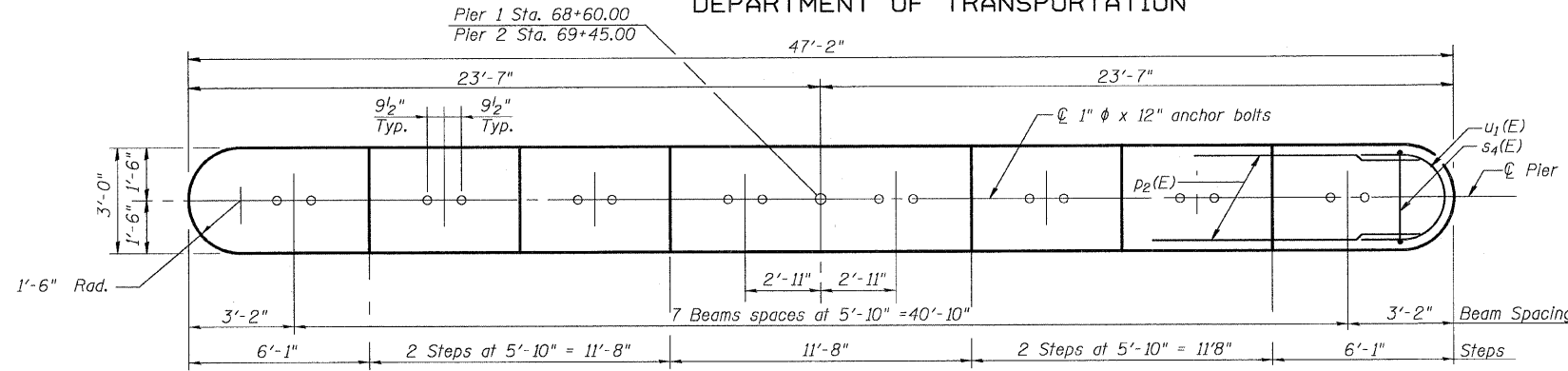
Notes:
Space reinforcement in cap to miss anchor bolts.
Four steps monolithically with cap.
For details of piles, see sheet 16 of 25.

P1 = Pier 1, P2 = Pier 2

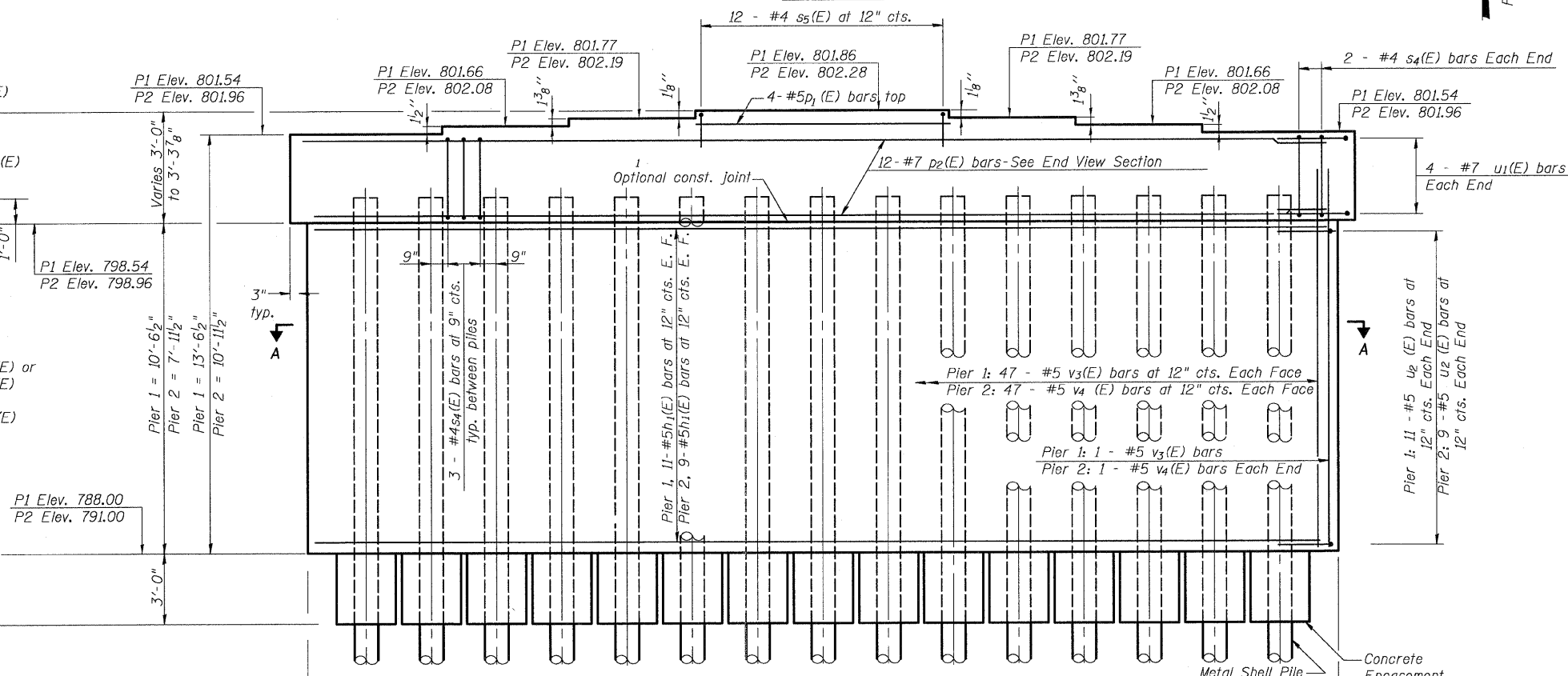
PILE DATA

Pier 1
Type: Metal Shell- 12" dia.x0.25 in. walls with pile shoes
Nominal Required Bearing: 355 kips
Factored Resistance Available: 178 kips
Est. Length: 49'
No. Production Piles: 14
No. Test Piles: 1

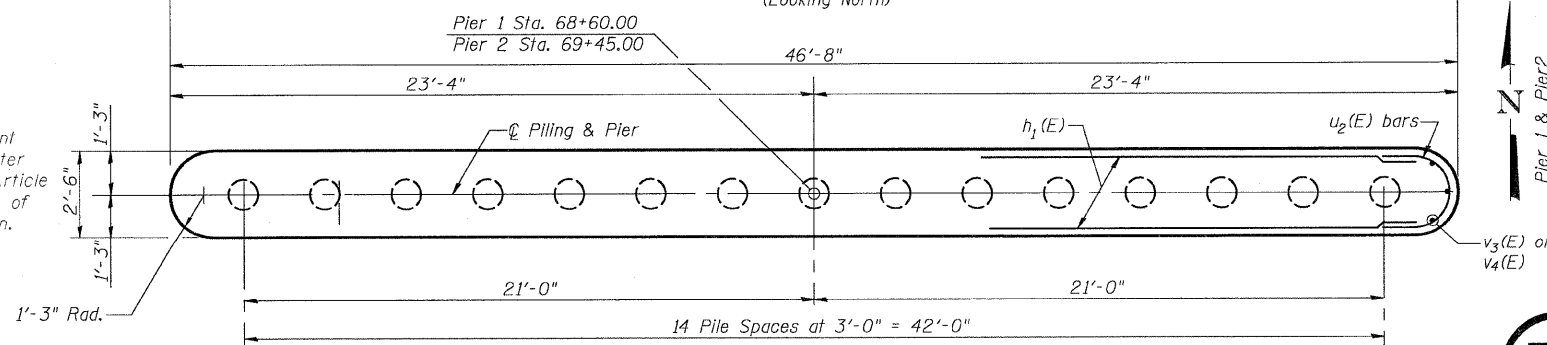
Pier 2
Type: Metal Shell- 12" dia.x0.25 in. walls with pile shoes
Nominal Required Bearing: 355 kips
Factored Resistance Available: 178 kips
Est. Length: 50'
No. Production Piles: 14
No. Test Piles: 1



END VIEW



ELEVATION
(Looking North)



SECTION A-A

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

DESIGNED	CJB
CHECKED	PWO
DRAWN	DRP
CHECKED	PJM

F-MS

9-3-07

BILL OF MATERIAL
(Pier 1 & Pier 2)

Bar	No.	Size	Length	Shape
h1(E)	40	#5	44'-2"	—
p1(E)	8	#5	11'-4"	—
p2(E)	24	#7	43'-10"	—
s4(E)	92	#4	11'-5"	□
s5(E)	24	#4	4'-6"	□
u1(E)	16	#7	10'-11"	U
u2(E)	40	#5	7'-9"	U
v3(E)	96	#5	11'-8"	—
v4(E)	96	#5	9'-0"	—
Structure Excavation		Cu. Yd.	194.0	
Concrete Structures		Cu. Yd.	111.3	
Reinforcement Bars, Epoxy Coated		Pound	7,610	
Furnishing Metal Shell Piles, 12"x0.250"		Foot	1386	
Driving Piles		Foot	1386	
Test Pile Metal Shells		Each	2	
Concrete Encasement		Cu. Yd.	16.4	
Pile shoes		Each	30	

PIERS
ILL. ROUTE 23 OVER
KISHWAUKEE RIVER
F.A.P. RT. 324
McHENRY COUNTY
STATION 69+02.50
STRUCTURE NO. 056-0001



V3 Companies of Illinois Ltd.
7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com