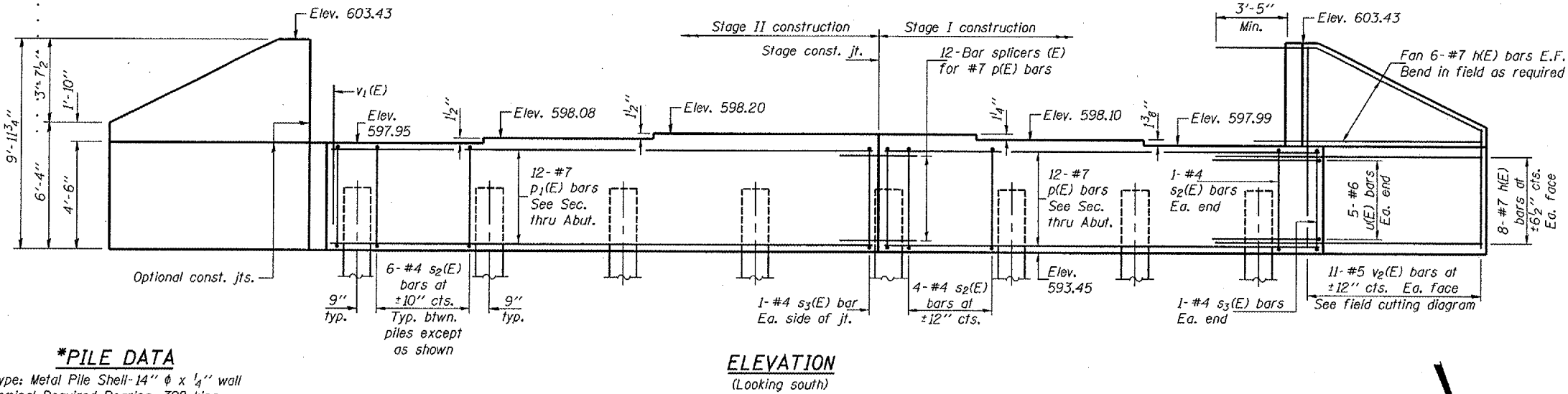


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
FAP 662	(V,T)B-2	MACOUPIN	68	45
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		20 SHEETS

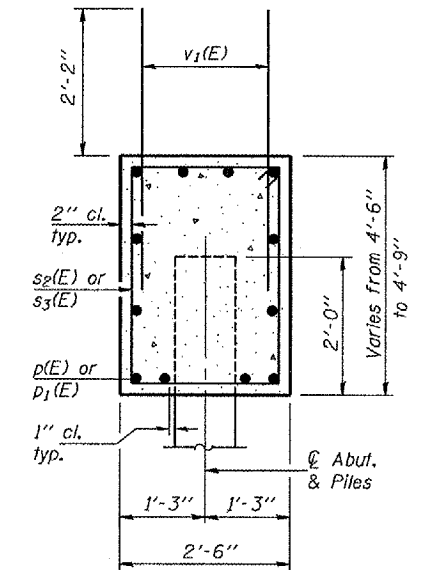
Contract #72993

Notes: . Pour steps monolithically with cap.
. For details of bar splicers, see sheet 17 of 20.
. For details of piles, see sheet 16 of 20.



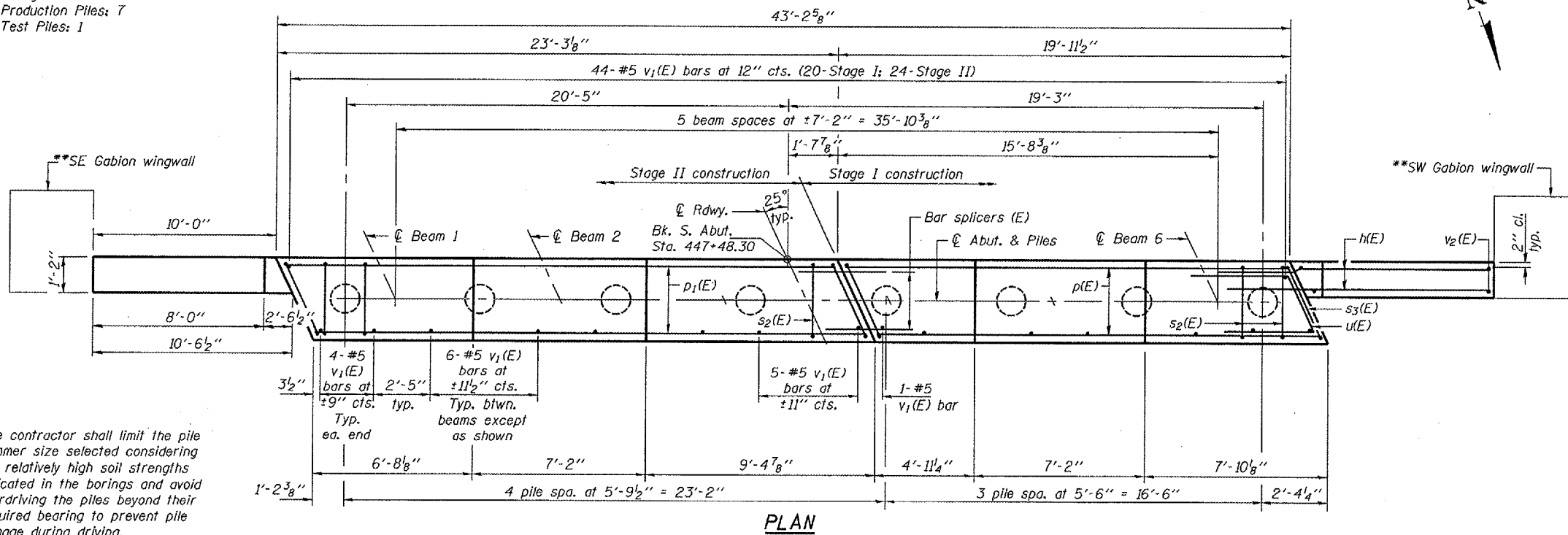
***PILE DATA**

Type: Metal Pile Shell-14" φ x 1/4" wall
Nominal Required Bearing: 398 kips
Factored Resistance Available: 199 kips
Est. Length: 71 ft.
No. Production Piles: 7
No. Test Piles: 1



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	28	#7	14'-0"	—
p(E)	12	#7	19'-8"	—
p ₁ (E)	12	#7	22'-11"	—
s ₂ (E)	42	#4	13'-5"	□
s ₃ (E)	4	#4	13'-11"	□
u(E)	10	#6	7'-7"	∩
v ₁ (E)	82	#5	4'-4"	—
v ₂ (E)	22	#5	15'-8"	—
Concrete Structures	Cu. Yd.		26.1	
Reinforcement Bars, Epoxy Coated	Pound		3100	
Structure Excavation	Cu. Yd.		106.5	
Furnishing Metal Shell Piles 14"	Foot		497	
Driving Piles	Foot		497	
Test Pile Metal Shells	Each		1	

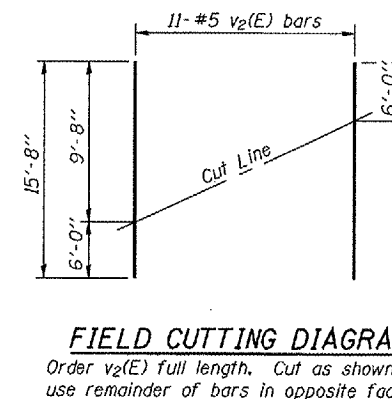
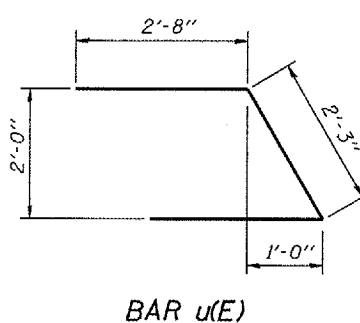
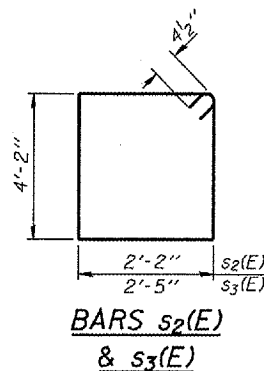


*The contractor shall limit the pile hammer size selected considering the relatively high soil strengths indicated in the borings and avoid overdriving the piles beyond their required bearing to prevent pile damage during driving.

**For gabion wingwall details, see sheet 15 of 20.

DESIGNED	DPN
CHECKED	AJB
DRAWN	h.t. duong
CHECKED	FT/AJB/DPN

Jan 23, 2007
EXAMINED *Thomas J. Romagallo*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES



SOUTH ABUTMENT
F.A.P. RT. 662 SECTION (V,T)B-2
MACOUPIN COUNTY
STATION 447+03.80
STRUCTURE NO. 059-0504