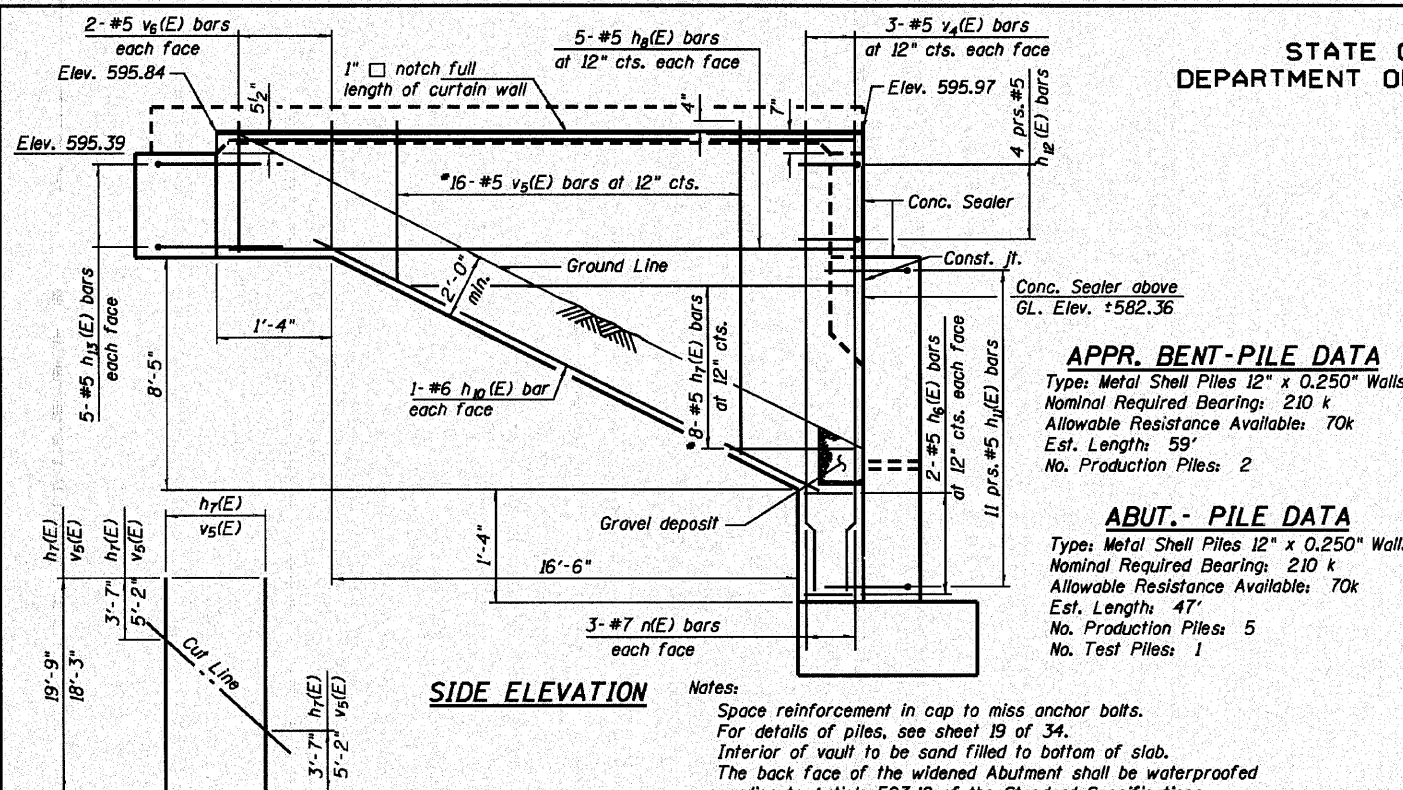


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



APPR. BENT-PILE DATA

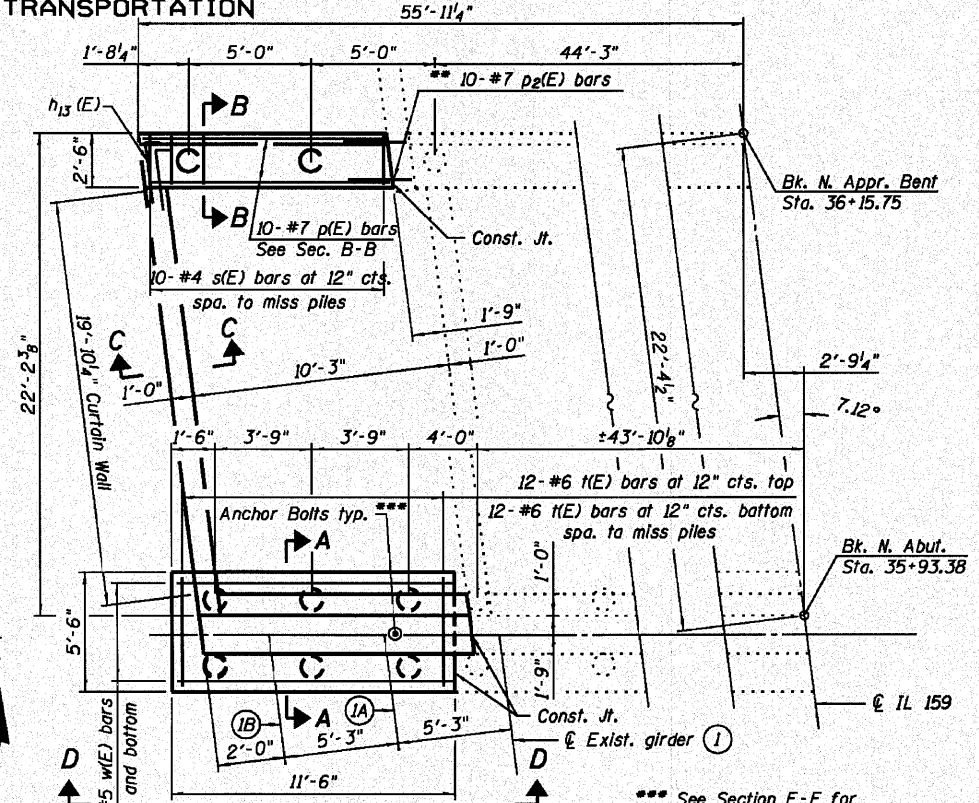
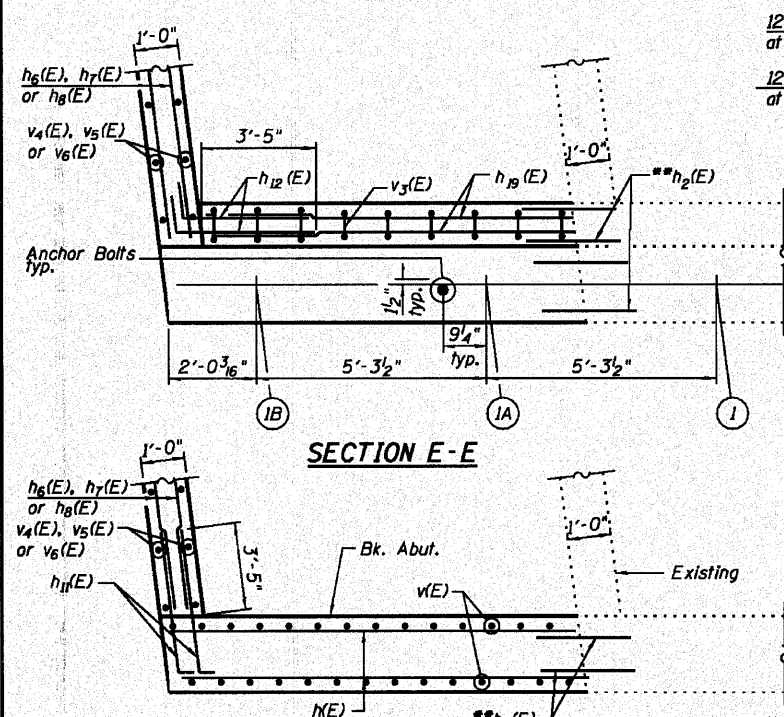
Type: Metal Shell Piles 12" x 0.250" Walls
Nominal Required Bearing: 210 k
Allowable Resistance Available: 70k
Est. Length: 59'
No. Production Piles: 2

ABUT. - PILE DATA

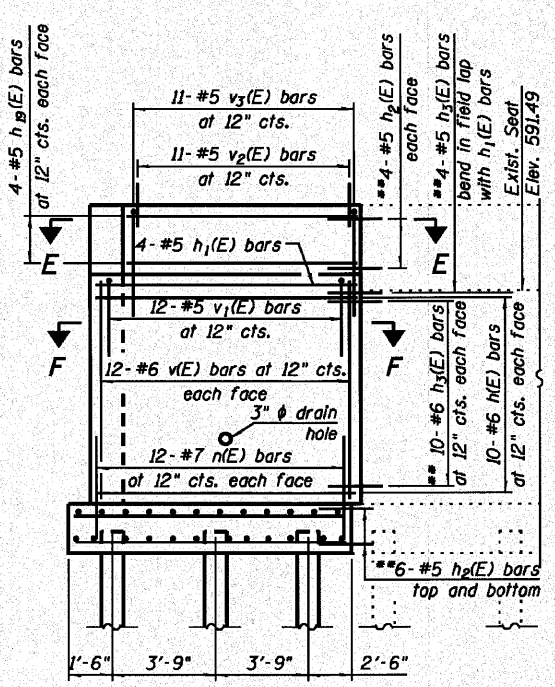
Type: Metal Shell Piles 12" x 0.250" Walls
Nominal Required Bearing: 210 k
Allowable Resistance Available: 70k
Est. Length: 47'
No. Production Piles: 5
No. Test Piles: 1

FIELD CUTTING DIAGRAM

Order $h_7(E)$ and $v_5(E)$ bars full length.
Cut to fit as shown and use remainder of bars in other face.



PLAN

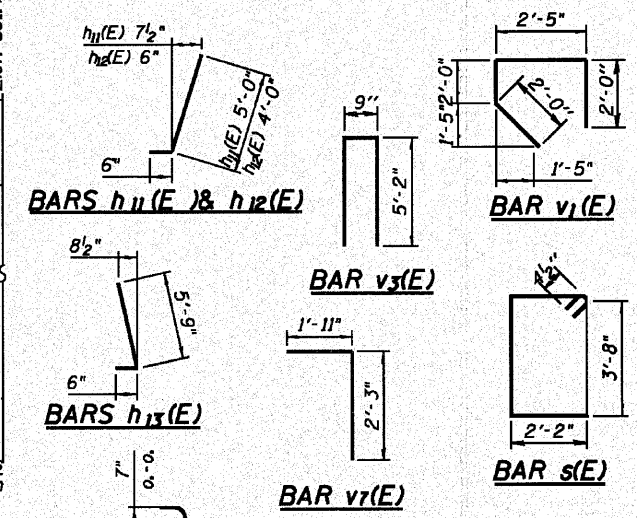


MINIMUM BAR LAP

#5 bar = 2'-7"
#6 bar = 3'-1"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	20	#6	11'-1"	—
$h_2(E)$	4	#5	11'-1"	—
$h_3(E)$	24	#5	4'-2"	—
$h_4(E)$	20	#6	4'-9"	—
$h_5(E)$	4	#5	1'-8"	—
$h_7(E)$	8	#5	19'-9"	—
$h_8(E)$	10	#5	19'-6"	—
$h_9(E)$	2	#6	19'-8"	—
$h_{11}(E)$	22	#5	5'-6"	✓
$h_{12}(E)$	8	#5	4'-6"	✓
$h_{13}(E)$	10	#5	6'-3"	✓
$h_{14}(E)$	8	#5	10'-1"	—
$n(E)$	30	#7	5'-11"	—
$p(E)$	10	#7	9'-3"	—
$p_2(E)$	10	#7	6'-1"	—
$s(E)$	10	#4	12'-5"	—
$t(E)$	24	#6	5'-2"	—
$v(E)$	24	#6	10'-5"	—
$v_1(E)$	12	#5	8'-5"	—
$v_2(E)$	23	#5	2'-3"	—
$v_3(E)$	11	#5	11'-1"	—
$v_4(E)$	6	#5	14'-3"	—
$v_5(E)$	16	#5	18'-3"	—
$v_6(E)$	4	#5	4'-8"	—
$v_7(E)$	12	#5	4'-2"	—
$w(E)$	12	#5	11'-2"	—
Structure Excavation			Cu. Yd.	23
Concrete Structures			Cu. Yd.	25.7
Reinforcement Bars, Epoxy Coated			Pound	3,590
Furnishing Metal Shell Piles 12" x 0.250"			Foot	353
Driving Piles			Foot	353
Test Pile Metal Shells			Each	1
Sand Backfill			Cu. Yd.	47
Concrete Sealer			Sq. Ft.	169



DESIGNED - T.J.Z
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 17	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	100
CONTRACT NO. 76D59					
ILLINOIS FED. AID PROJECT					