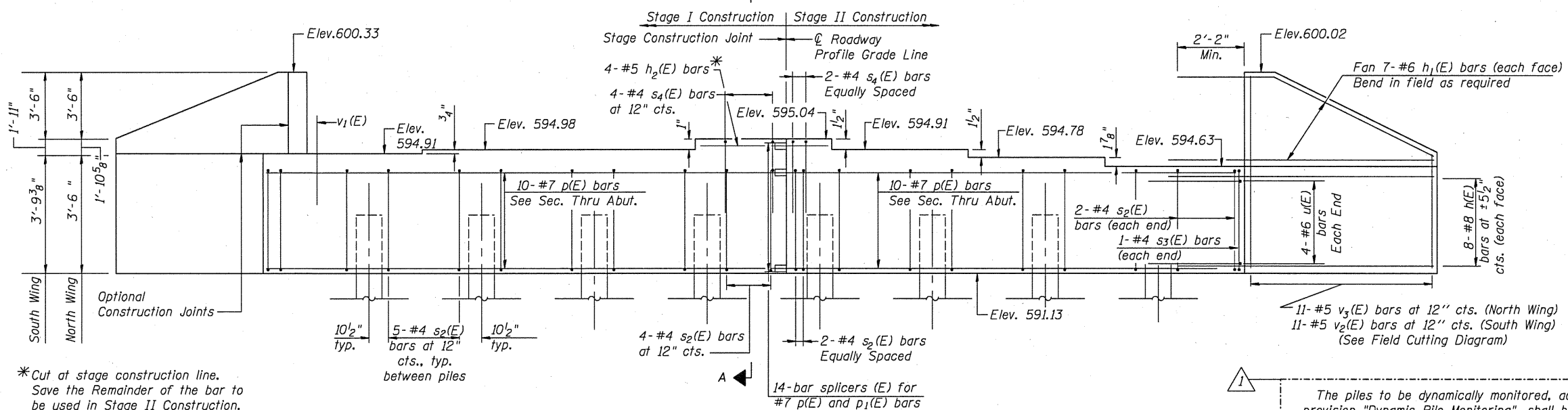
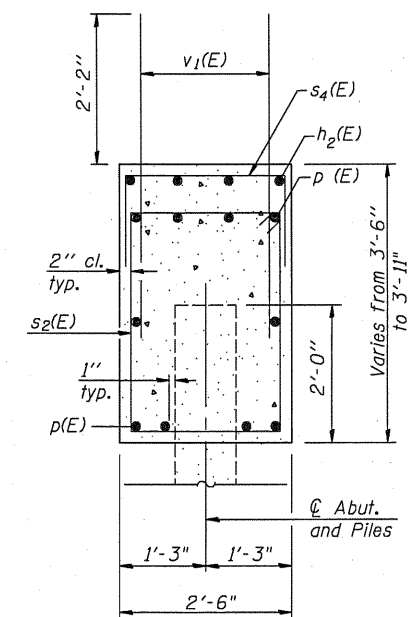


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Four steps monolithically with cap.



*Cut at stage construction line.
Save the Remainder of the bar to be used in Stage II Construction.



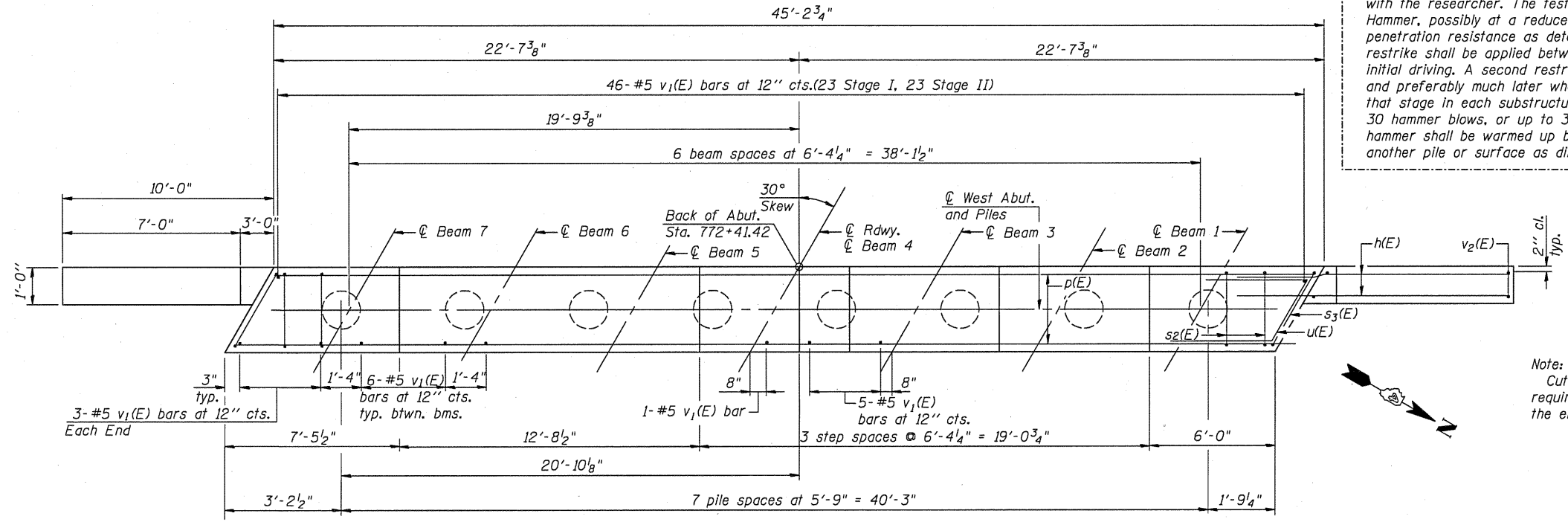
ELEVATION

The piles to be dynamically monitored, according to the special provision "Dynamic Pile Monitoring", shall be the test piles specified at each of the substructure units. The scheduling of the test pile driving (initial and restrikes) shall be coordinated with the researcher. The test pile shall be driven with a Diesel Hammer, possibly at a reduced fuel setting, to a minimal penetration resistance as determined by the researcher. A restrike shall be applied between 1 and 24 hours after end of initial driving. A second restrike shall occur at least 7 days later and preferably much later when production piling is completed for that stage in each substructure. Restrikes will consist of up to 30 hammer blows, or up to 3 inches of pile penetration. The hammer shall be warmed up before restriking the test pile on another pile or surface as directed by the researcher.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#8	16'-0"	—
h1(E)	28	#6	13'-11"	—
h2(E)	4	#5	6'-0"	—
p(E)	20	#7	23'-8"	—
s2(E)	42	#4	11'-5"	□
s3(E)	2	#4	12'-1"	□
s4(E)	6	#4	6'-6"	□
u(E)	8	#6	8'-5"	┘
v1(E)	88	#5	4'-4"	—
v2(E)	11	#5	14'-2"	—
v3(E)	11	#5	13'-6"	—
Structure Excavation		Cu. Yd.	158	
Concrete Structures		Cu. Yd.	20	
Reinforcement Bars, Epoxy Coated		Pound	4,130	
Furnishing Metal Shell Piles 14x0.250		Foot	196	
Driving Piles		Foot	196	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	8	

For details of Bar Splicers, see sheet 19 of 22.
For details of piles see sheet 17 of 22.

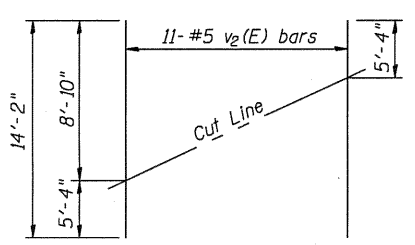
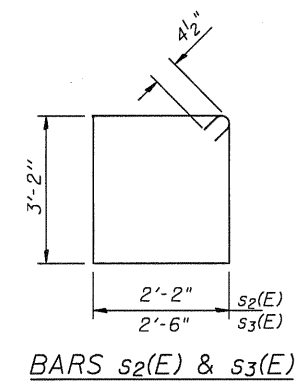
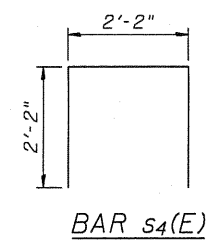


PLAN

Note:
Cut p(E) bars in field as required and as directed by the engineer.

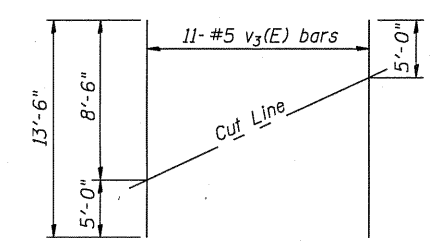
PILE DATA

Type & Size: Metal Shell - 14" dia. x 0.25" walls with Pile Shoes
Nominal Required Bearing: 416 kips
Factored Resistance Available: 208 kips
Est. Length: 28
No. Production Piles: 7
No. Test Piles: 1



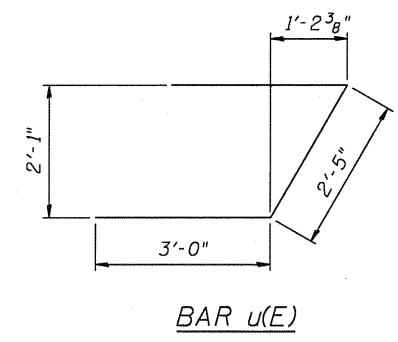
FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



FIELD CUTTING DIAGRAM

Order v3(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR u(E)

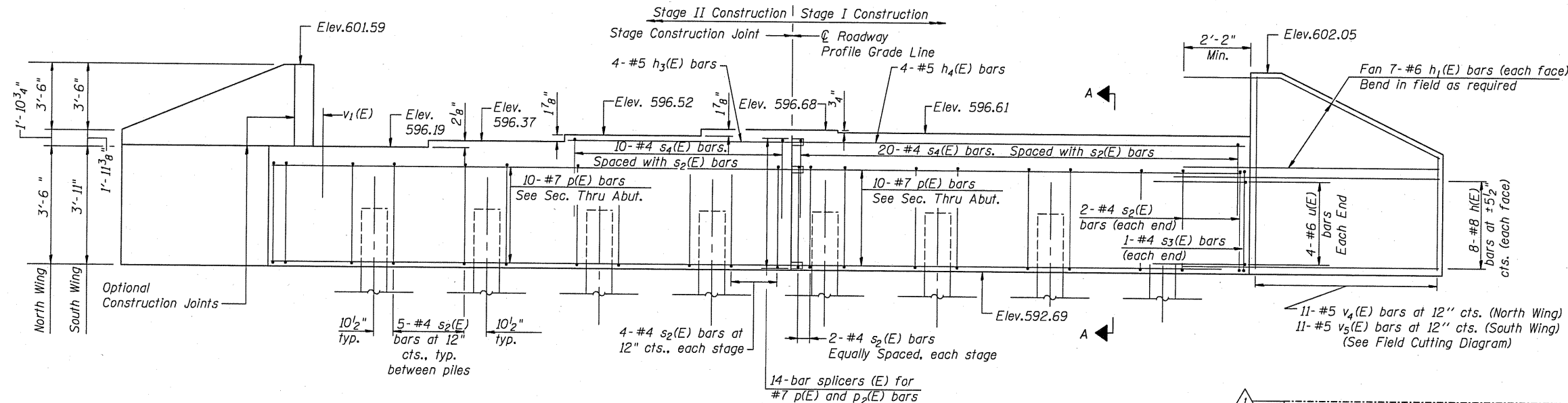
WEST ABUTMENT DETAILS
S.N. 090-0177
STRAND ASSOCIATES, INC.

DESIGNED	RRD
CHECKED	AJS
DRAWN	KAS
CHECKED	AJS

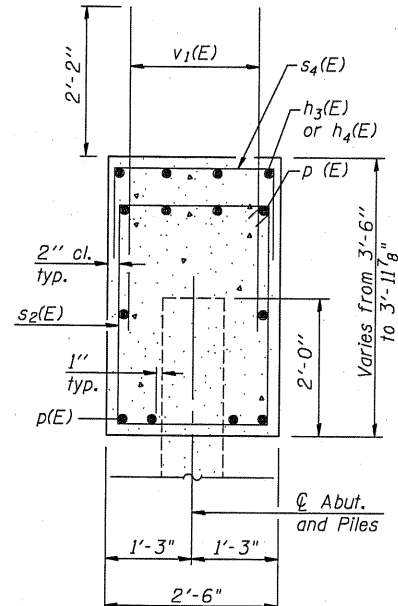
SHEET NO. 15	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	693	(119 BR-2)BR	TAZEWELL	65	32
22 SHEETS	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
	CONTRACT NO. 68660				

Notes:
Four steps monolithically with cap.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION



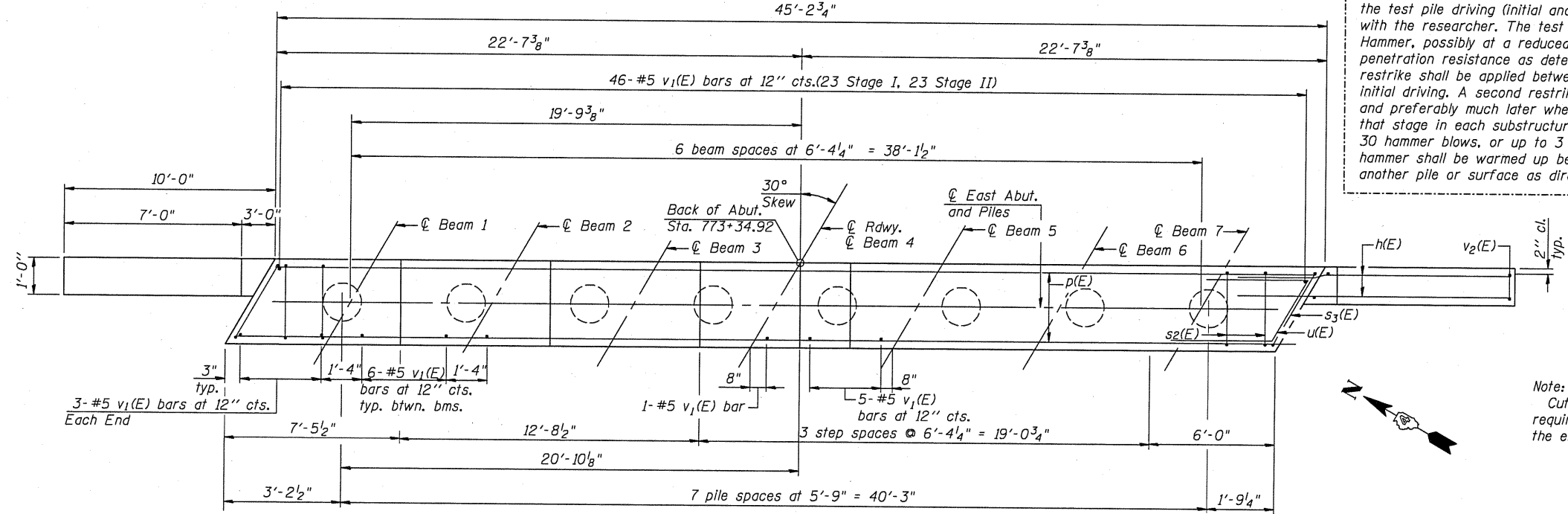
SEC. A-A THRU ABUT.

The piles to be dynamically monitored, according to the special provision "Dynamic Pile Monitoring", shall be the test piles specified at each of the substructure units. The scheduling of the test pile driving (initial and restrikes) shall be coordinated with the researcher. The test pile shall be driven with a Diesel Hammer, possibly at a reduced fuel setting, to a minimal penetration resistance as determined by the researcher. A restrike shall be applied between 1 and 24 hours after end of initial driving. A second restrike shall occur at least 7 days later and preferably much later when production piling is completed for that stage in each substructure. Restrikes will consist of up to 30 hammer blows, or up to 3 inches of pile penetration. The hammer shall be warmed up before restriking the test pile on another pile or surface as directed by the researcher.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h(E)$	32	#8	16'-0"	—
$h_1(E)$	28	#6	13'-11"	—
$h_3(E)$	4	#5	9'-10"	—
$h_4(E)$	4	#5	23'-8"	—
$p(E)$	20	#7	23'-8"	—
$s_2(E)$	42	#4	11'-5"	□
$s_3(E)$	2	#4	12'-1"	□
$s_4(E)$	30	#4	6'-6"	□
$u(E)$	8	#6	8'-5"	J
$v_1(E)$	88	#5	4'-4"	—
$v_4(E)$	11	#5	13'-6"	—
$v_5(E)$	11	#5	14'-6"	—
Structure Excavation		Cu. Yd.	159	
Concrete Structures		Cu. Yd.	21	
Reinforcement Bars, Epoxy Coated		Pound	4,350	
Furnishing Metal Shell Piles 14x0.250		Foot	189	
Driving Piles		Foot	189	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	8	

For details of Bar Splicers, see sheet 19 of 22.
For details of piles see sheet 17 of 22.

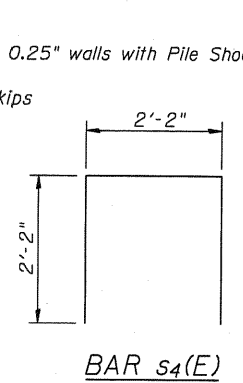


PLAN

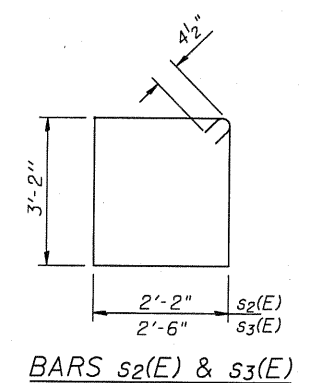
Note:
Cut $p(E)$ bars in field as required and as directed by the engineer.

PILE DATA

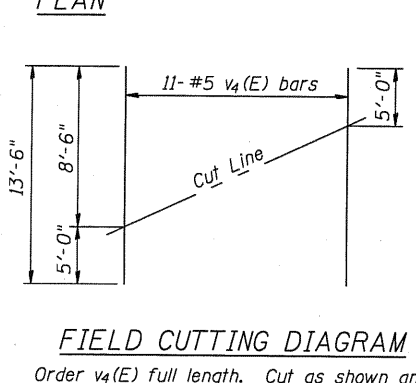
Type & Size: Metal Shell - 14" dia. x 0.25" walls with Pile Shoes
Nominal Required Bearing: 416 kips
Factored Resistance Available: 208 kips
Est. Length: 27
No. Production Piles: 7
No. Test Piles: 1



BAR $s_4(E)$

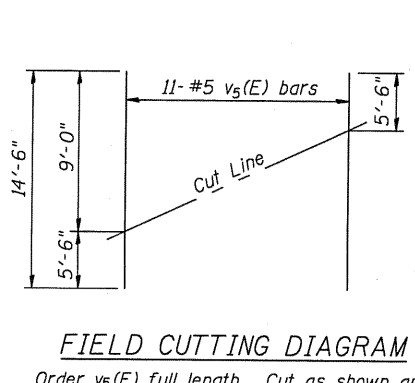


BARS $s_2(E)$ & $s_3(E)$



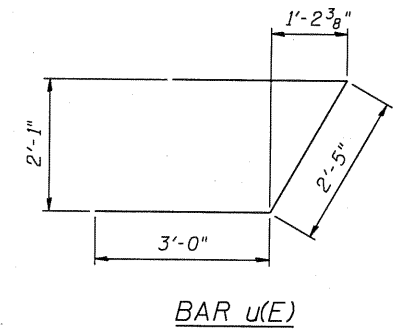
FIELD CUTTING DIAGRAM

Order $v_4(E)$ full length. Cut as shown and use remainder of bars in opposite face.



FIELD CUTTING DIAGRAM

Order $v_5(E)$ full length. Cut as shown and use remainder of bars in opposite face.



BAR $u(E)$

DESIGNED RRD
CHECKED AJS
DRAWN KAS
CHECKED AJS

EAST ABUTMENT DETAILS
S.N. 090-0177

STRAND ASSOCIATES, INC.

SHEET NO. 16	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22 SHEETS	693	(119 BR-2)BR	TAZEWELL	65	33
EAST ABUTMENT DETAILS			CONTRACT NO. 68660		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			