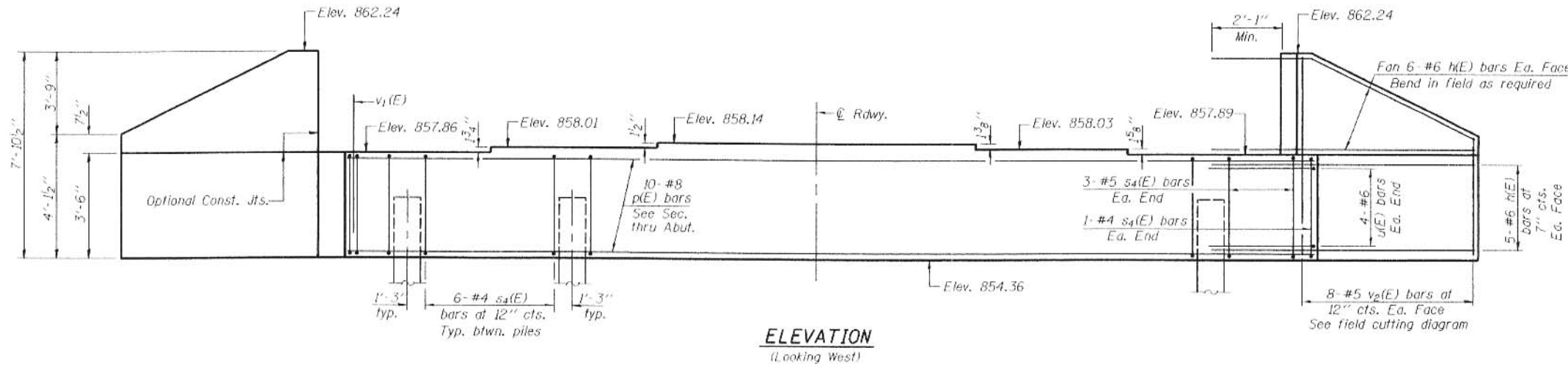


Notes: Four steps monolithically with cap.

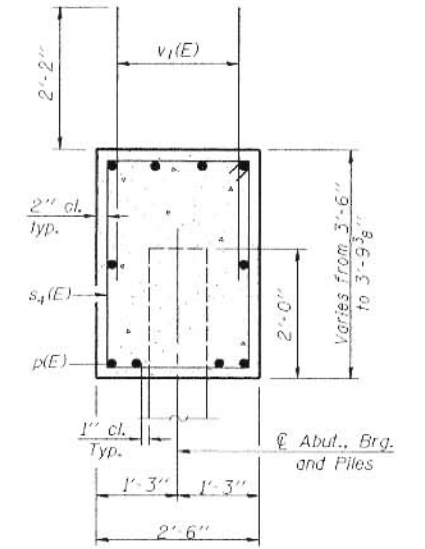
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	NO.	SHEET NO. 11
F.A.P. 303	130 BR-4	BOONE	48		18 SHEETS
FED. ROAD DIST. NO. 7	ALIGNED	FED. AID PROJECT			

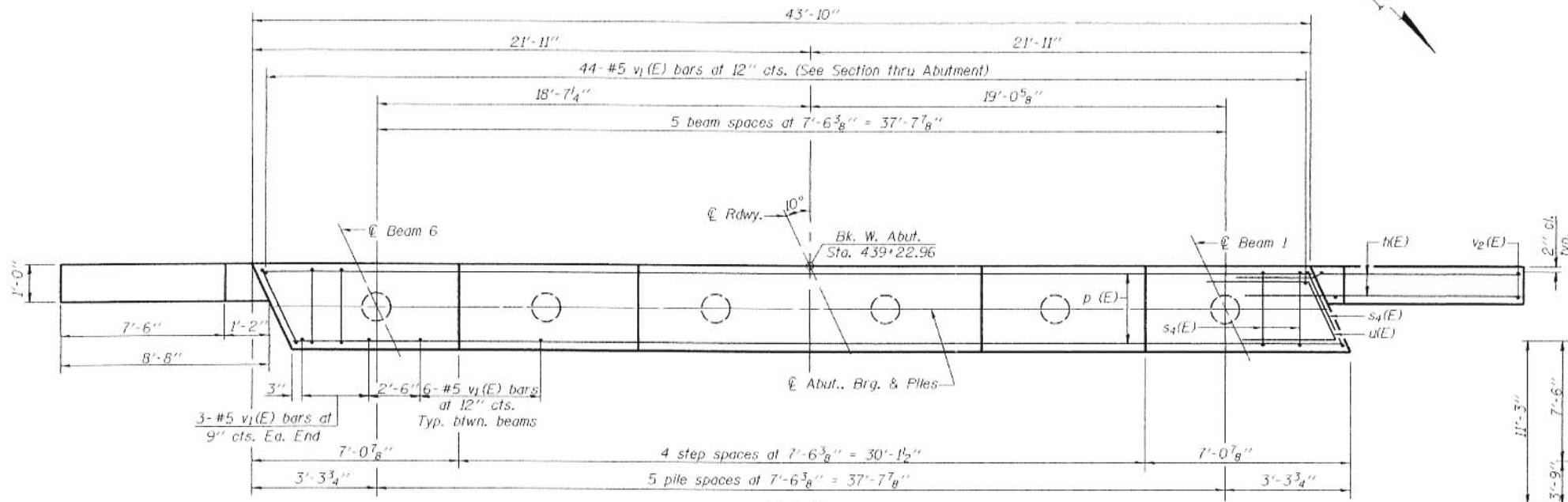
Contract #64800



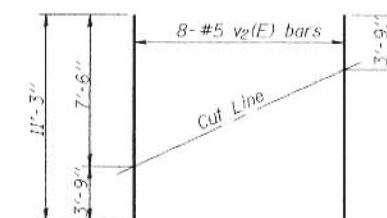
ELEVATION
(Looking West)



SEC. THRU ABUT.



PLAN



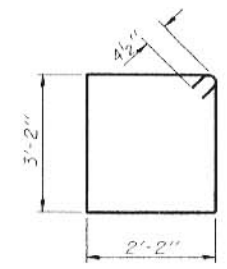
FIELD CUTTING DIAGRAM

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

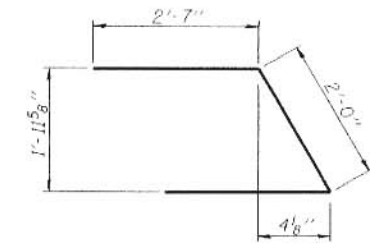
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	11'-5"	—
p(E)	10	#8	43'-6"	—
s4(E)	38	#4	11'-5"	□
u(E)	8	#6	7'-2"	┌
v1(E)	80	#5	4'-4"	—
v2(E)	16	#5	11'-3"	—
Concrete Structures		Cu. Yd.	18.4	
Reinforcement Bars, Epoxy Coated		Pound	2840	
Structure Excavation		Cu. Yd.	193.1	
Driving Piles		Foot	235	▲
Test Pile Metal Shells		Each	1	
Furnishing Metal Shell Piles, 14"		Foot	235	▲

For details of piles and Metal Shell Reinforcement at Abutments see sheet 14 of 18.



BARS s4(E)



BAR u(E)

PILE DATA

Pile type & size: Metal Shell 14" dia. x 5/16" wall
Nominal Required Bearing: 396 kips
Allowable Resistance Available: 132 kips
Estimated Pile Length: 47'
No. of Production Piles: 5
No. of Test Piles: 1

DESIGNED	Fessaha Teklehaimanot
CHECKED	Stephen Ryan
DRAWN	R. Sommer
CHECKED	FT/SMR

March 9 2007
EXAMINED *Thomas J. Domagalaki*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

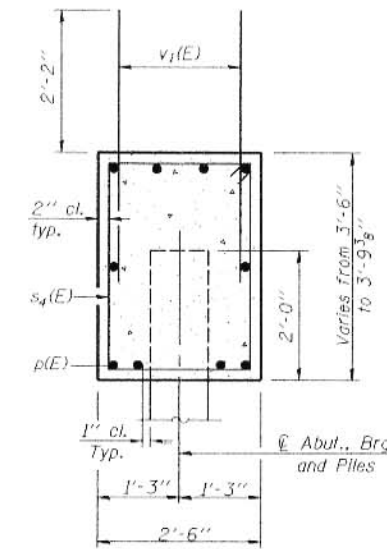
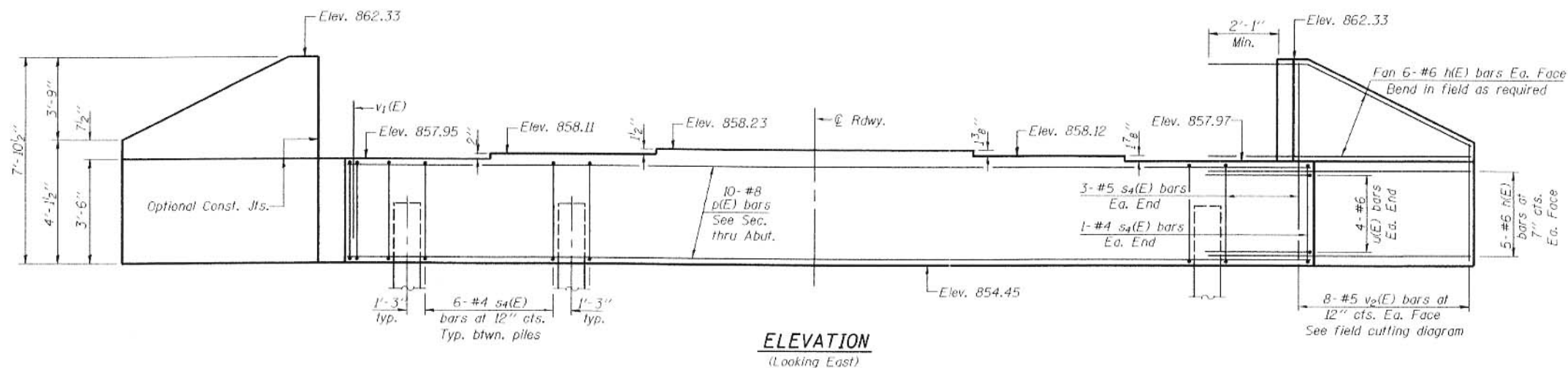
WEST ABUTMENT
F.A.P. ROUTE 303 - SECTION 130BR-4
BOONE COUNTY
STATION 439+88.00
STRUCTURE NO. 004-0020

Notes: Pour steps monolithically with cap.

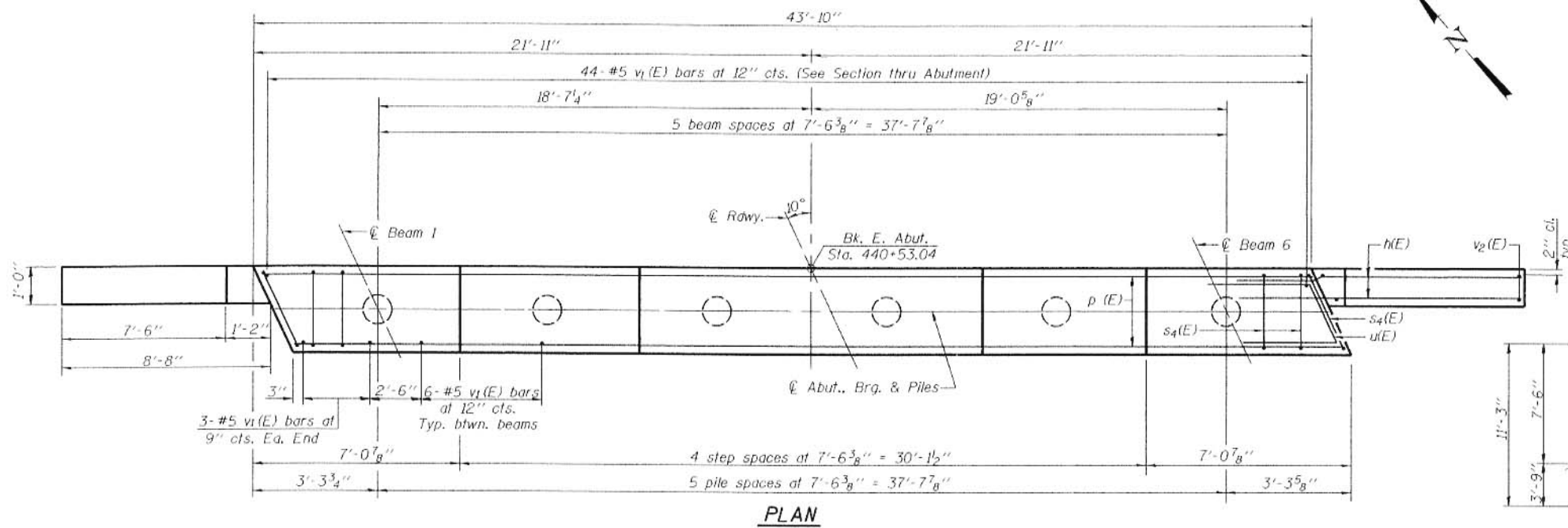
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 303	130 BR-4	BOONE	49	18
FILING AND DRAWING NO.		ILLINOIS	FED. AID PROJECT NO.	

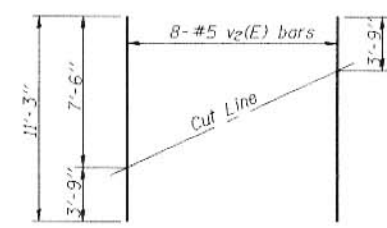
Contract #64800



SEC. THRU ABUT.



PLAN



FIELD CUTTING DIAGRAM

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

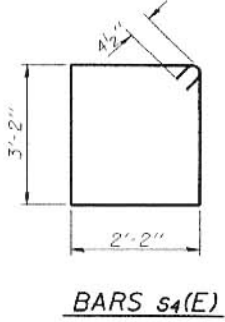
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	11'-5"	—
p(E)	10	#8	43'-6"	—
s4(E)	38	#4	11'-5"	□
u(E)	8	#6	7'-2"	∩
v1(E)	80	#5	4'-4"	—
v2(E)	16	#5	11'-3"	—
Concrete Structures			Cu. Yd.	18.4
Reinforcement Bars, Epoxy Coated			Pound	2840
Structure Excavation			Cu. Yd.	193.1
Driving Piles			Foot	280
Test Pile Metal Shells			Each	1
Furnishing Metal Shell Piles, 14"			Foot	280

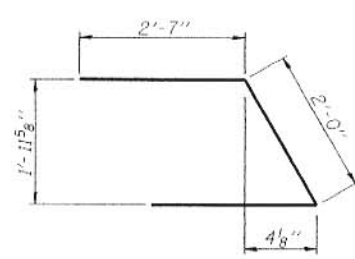
For details of piles and Metal Shell Reinforcement at Abutments see sheet 14 of 18.

PILE DATA

Pile type & size: Metal Shell 14" dia. x 5/16" wall
 Nominal Required Bearing: 395 kips
 Allowable Resistance Available: 132 kips
 Estimated Pile Length: 56'
 No. of Production Piles: 5
 No. of Test Piles: 1



BARS s4(E)



BAR u(E)

DESIGNED	Fesseha Teklehaimanot
CHECKED	Stephen Ryan
DRAWN	R. Sommer
CHECKED	FT/SMR

March 9 2007

EXAMINED *Thomas J. Domagala*
 ENGINEER OF BRIDGE DESIGN

PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

EAST ABUTMENT
 F.A.P. ROUTE 303 - SECTION 130BR-4
 BOONE COUNTY
 STATION 439+88.00
 STRUCTURE NO. 004-0020

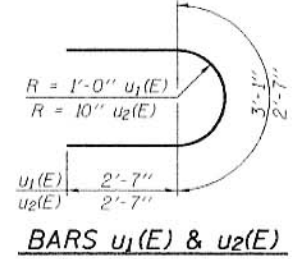
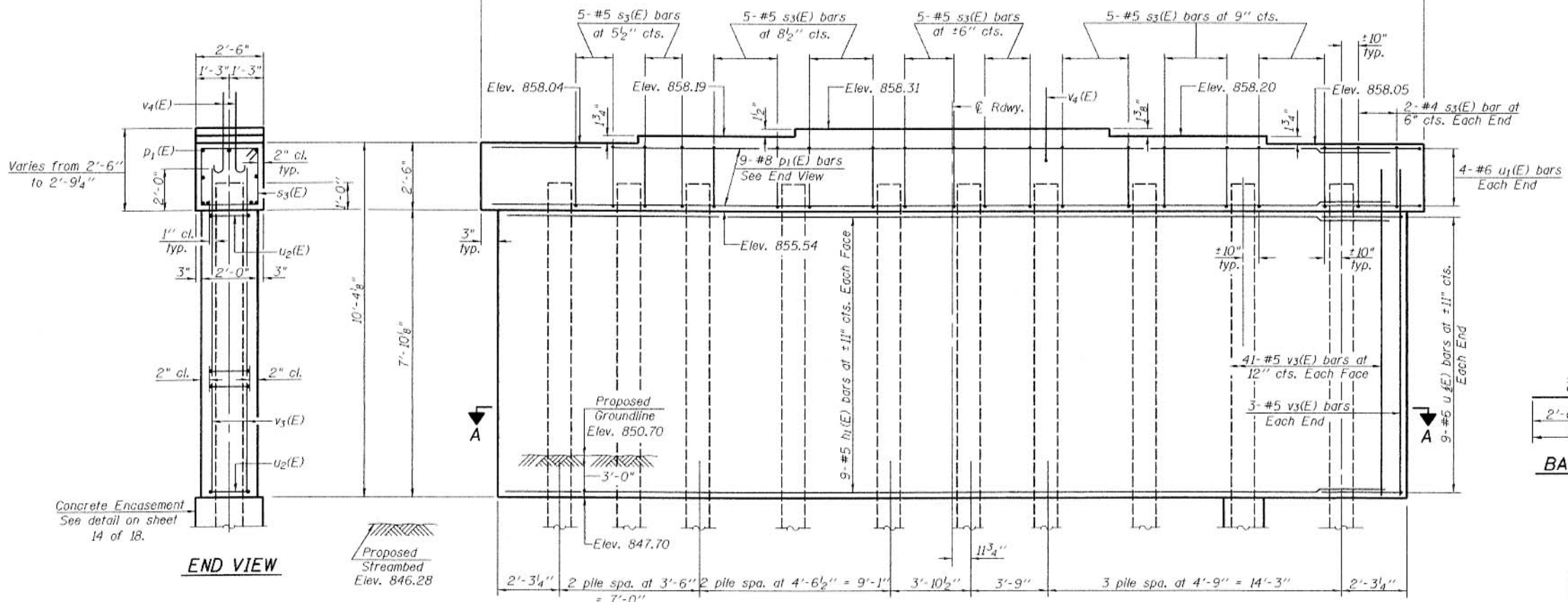
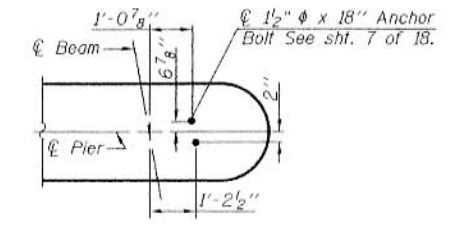
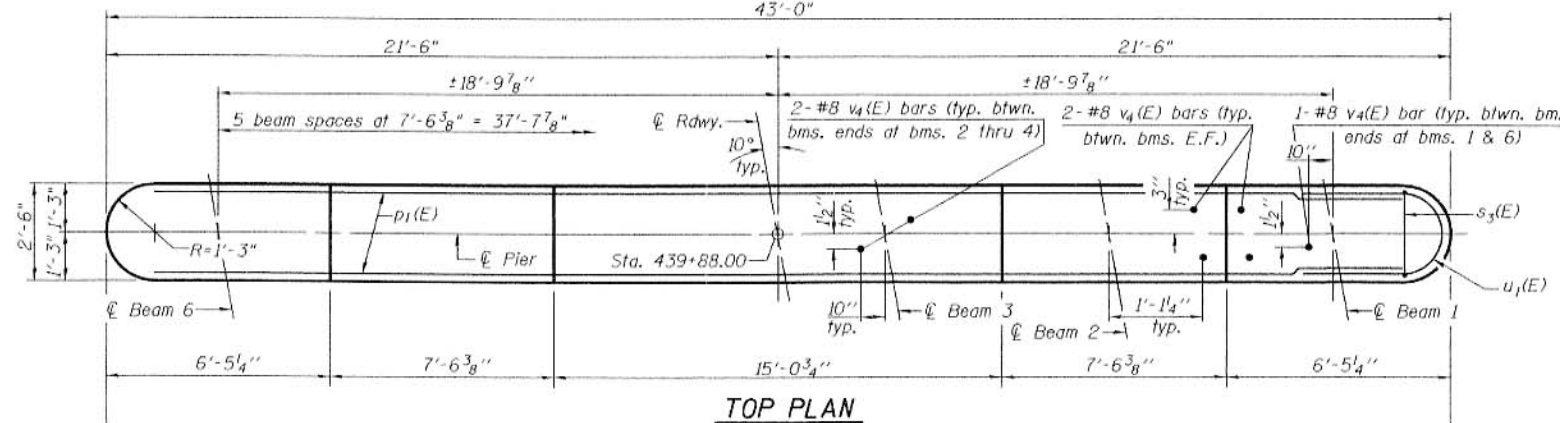
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 303	130 BR-4	BOONE	50	13
FURNISHED BY NO. 7		ENGINEER	PER. JOB PROJECT	

SHEET NO. 13
18 SHEETS

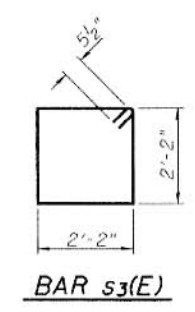
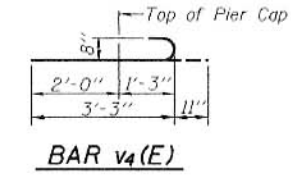
Contract #64800

Notes: Four steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Plan view of existing and proposed piles.
See sheet 2 of 18.



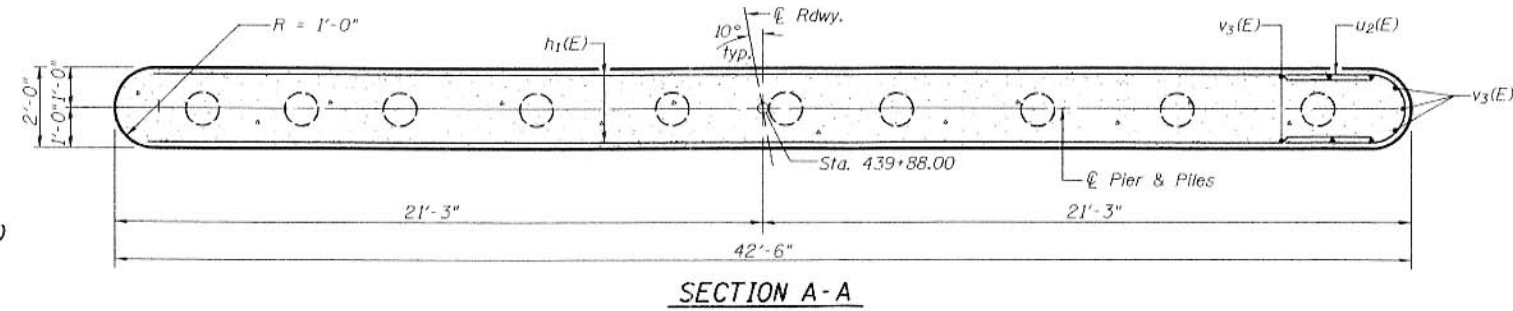
BILL OF MATERIAL

Bar No.	Size	Length	Shape
$h_1(E)$	18 #5	40'-6"	—
$p_1(E)$	9 #8	40'-6"	—
$s_3(E)$	49 #5	9'-7"	□
$u_1(E)$	8 #6	8'-3"	3
$u_2(E)$	18 #6	7'-9"	3
$v_3(E)$	88 #5	9'-8"	—
$v_4(E)$	30 #8	4'-2"	—
Concrete Structures	Cu. Yd.	36.9	
Reinforcement Bars, Epoxy Coated	Pound	3750	
Furnishing Metal Shell Piles, 14"	Foot	477	
Structure Excavation	Cu. Yd.	31	
Test Pile Metal Shells	Each	1	
Driving Piles	Foot	477	
Underwater Structure Excavation Protection - Location 1	Each	1	
Concrete Encasement	Cu. Yd.	10.0	



PILE DATA

Pile Type & Size: Metal Shell 14" ϕ x 5/16" Wall
Nominal Required Bearing: = 395 kips
Allowable Resistance Available: = 125 kips
Est. Length: 53'
No. of Production Piles: 9
No. of Test Piles: 1



PIER
F.A.P. ROUTE 303 - SECTION 130BR-4
BOONE COUNTY
STATION 439+88.00
STRUCTURE NO. 004-0020

DESIGNED	Fesseha Teklehaimanot
CHECKED	Stephen Ryan
DRAWN	R. Sommer
CHECKED	FT/SMR

March 9 2007
EXAMINED *Thomas J. Donagabaki*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES