

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
698	126BR	WOODFORD	56	3
STA. 519+62.00		TO STA. 523+13.00		
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNITS	TOTAL QUANTITY (80% Fed.-20% St.)	ROADWAY 1000-2A Woodford Co.	S.N. 102-0082 X020-2A WOODFORD
20101100	TREE TRUNK PROTECTION	EACH	10	10	
20200100	EARTH EXCAVATION	CU YD	94	94	
20300100	CHANNEL EXCAVATION	CU YD	741	741	
20400800	FURNISHED EXCAVATION	CU YD	372	372	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	111		111
21101615	TOPSOIL FURNISH <sup>AND</sup> PLACE, 4"	SQ YD	852	852	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	44	44	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	44	44	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	44	44	
25001700	SEEDING, CLASS 3 (MODIFIED)	ACRE	0.5	0.5	
25100115	MULCH, METHOD 2	ACRE	0.5	0.5	
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1048	1048	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	48	48	
28000400	PERIMETER EROSION BARRIER	FOOT	726	726	
28000500	INLET AND PIPE PROTECTION	EACH	5	5	
28100109	STONE RIPRAP, CLASS A5	SQ. YD.	800		800
28200200	FILTER FABRIC	SQ. YD.	970		970
35101400	AGGREGATE BASE COURSE, TYPE B	TON	18	18	
40600215	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	TON	0.41	0.41	
40600300	AGGREGATE (PRIME COAT)	TON	2	2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	416	416	
40600990	TEMPORARY RAMP	SQ YD	58	58	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	80	80	
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	7	7	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNITS	TOTAL QUANTITY (80% Fed.-20% St.)	ROADWAY 1000-2A Woodford Co.	S.N. 102-0082 X020-2A WOODFORD
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	270	270	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	54	54	
44000100	PAVEMENT REMOVAL	SQ YD	268	268	
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	438	438	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	51	51	
44000500	<sup>COMBINATION AND</sup> CURB CUTTER REMOVAL	FOOT	629	629	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	51	51	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	362		362
50300225	CONCRETE STRUCTURES	CU YD	132.6		132.6
50300255	CONCRETE SUPERSTRUCTURES	CU YD	206.3		206.3
50300260	BRIDGE DECK GROOVING	SQ. YD.	250		250
50300280	CONCRETE ENCASEMENT	CU YD	12.2		12.2
50300300	PROTECTIVE COAT	SQ. YD.	470		470
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	46400		46400
50800515	BAR SPLICERS	EACH	213		213
51201610	FURNISHING STEEL PILES HP12X63	FOOT	1625		1625
51202305	DRIVING PILES	FOOT	1625		1625
51203610	TEST PILE STEEL HP 12X63	EACH	2		2
51205200	TEMPORARY SHEET PILING	SQ. FT.	726		726
51500100	NAME PLATES	EACH	1		1
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1	
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	1	1	

△ REVISED 10/14/08

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SUMMARY OF QUANTITIES**  
 F.A.P. 698  
 SECTION 126BR  
 WOODFORD COUNTY  
 SCALE: VERT.      DRAWN BY : GSJ  
 HORIZ.              CHECKED BY : KRG  
 DATE : 10/31/07

PLT DATE = #DATE#  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 2 19 SHEETS
F.A.P. 698	126BR	WOODFORD	56	17	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract # 68576		

**GENERAL NOTES**

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

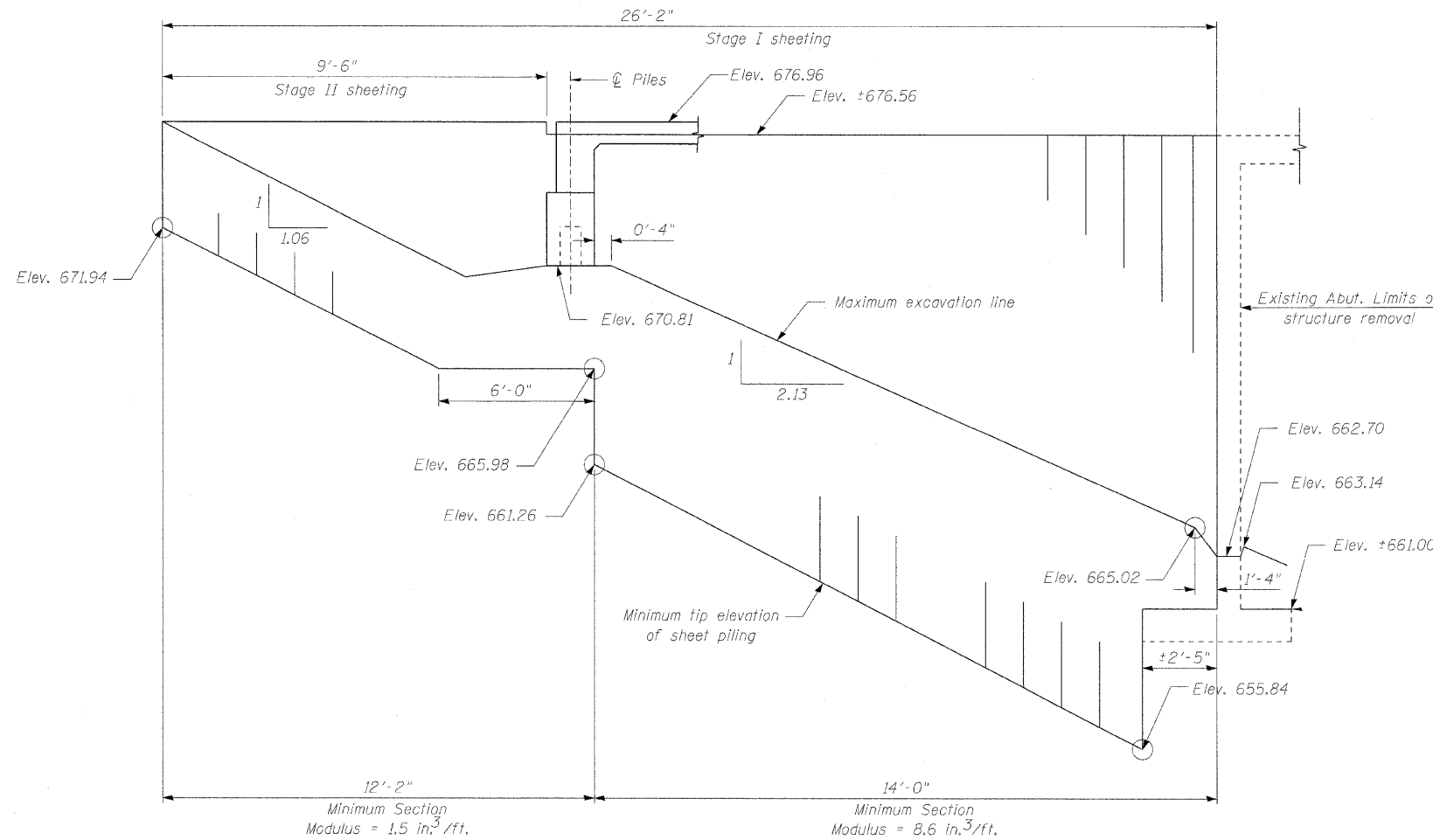
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

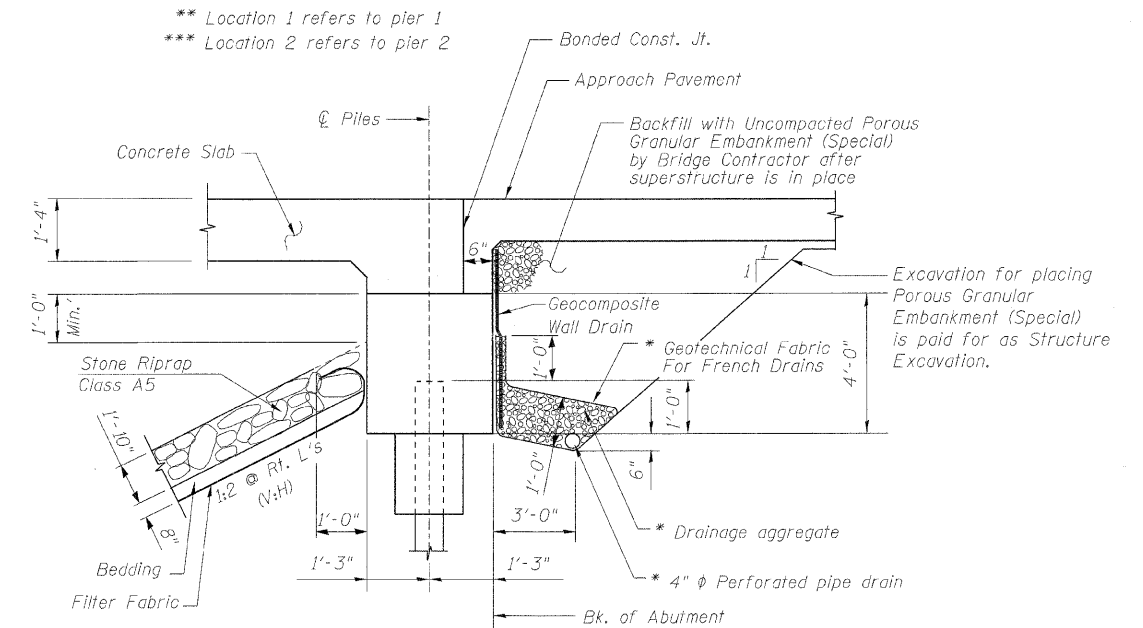
Hard driving may be encountered during the sheet piling installation. The contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring logs.

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Porous Granular Embankment (Special)	Cu. Yd.		111	111
Stone Riprap, class A5	Sq. Yd.		800	800
Filter fabric	Sq. Yd.		970	970
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		362	362
Driving Piles	Foot		1625	1625
Geocomposite Wall Drain	Sq. Yd.		250	250
Pipe Underdrains for Structures 4"	Foot		147	147
Concrete Structures	Cu. Yd.		132.6	132.6
Concrete Superstructure	Cu. Yd.	206.3		206.3
Bridge Deck Grooving	Sq. Yd.	250		250
Protective Coat	Sq. Yd.	470		470
Reinforcement Bars, Epoxy Coated	Pound	33900	12500	46400
Furnishing Steel Piles HP12x63	Foot		1625	1625
Test Pile steel HP 12x63	Each		2	2
Name Plates	Each	1		1
** Underwater Structure Excavation Protection-Location 1	Each		1	1
*** Underwater Structure Excavation Protection-Location 2	Each		1	1
Concrete Bridge Railing, Sidewalk mounted	Foot	161		161
Bar Splicers	Each	127	86	213
Temporary Sheet Piling	Sq. Ft.		726	726
Concrete Encasement	Cu. Yd.		12.2	12.2
Temporary Support System	L. Sum.		1	1



**TEMPORARY SHEET PILING**  
(Typical)



\* Include in the cost of Pipe Underdrains for Structures.

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersection with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

**SECTION THRU ABUTMENT**

DESIGNED	KRG
CHECKED	MJK
DRAWN	GSJ
CHECKED	MJK

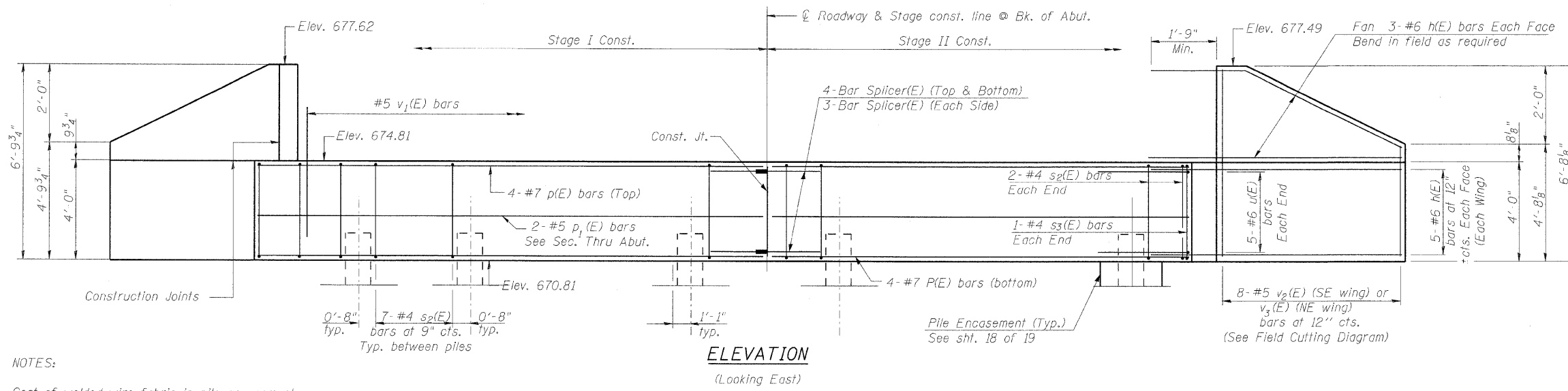
**GENERAL NOTES**  
TOTAL BILL OF MATERIAL & TEMPORARY SHEET PILING  
IL. ROUTE 89 OVER SNAG CREEK  
F.A.P. ROUTE 698 SEC. 126BR  
WOODFORD COUNTY STATION 521+52.42  
STRUCTURE NO. 102-0082

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

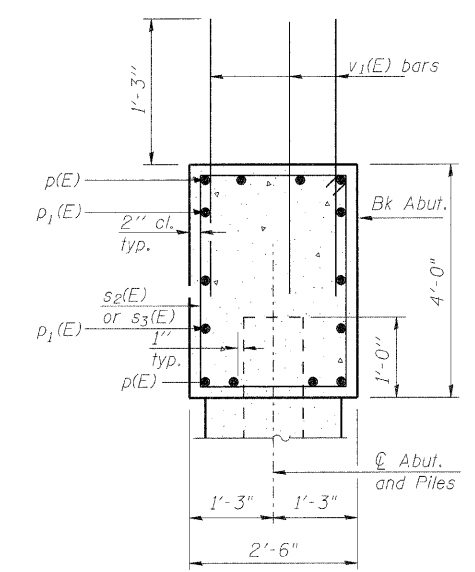
ROUTE NO.	SECTION	COUNTY	STA. SHEETS	SHEET NO.
F.A.P. 698	126BR	WOODFORD	56	29
FED. ROAD DIST. NO. 7		ILL. NOTE	FED. AID PROJECT	

SHEET NO. 14  
19 SHEETS

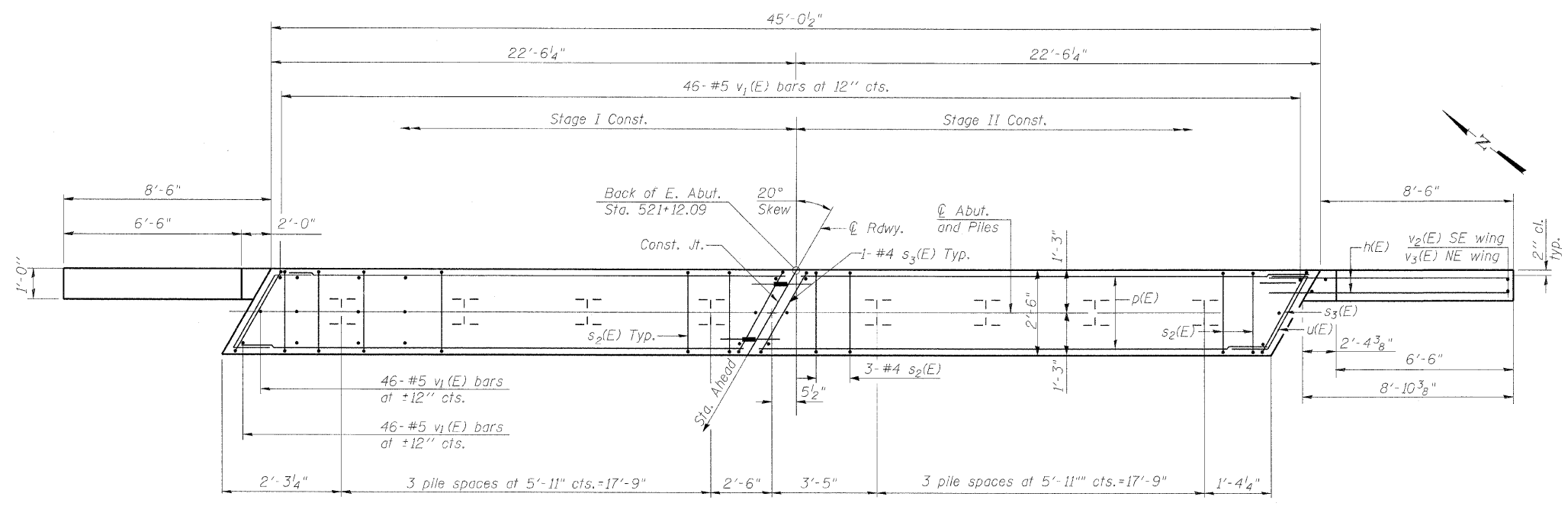
Contract # 68576



NOTES:  
Cost of welded wire fabric in pile encasement is included in the item "concrete encasement"



SEC. THRU ABUT.



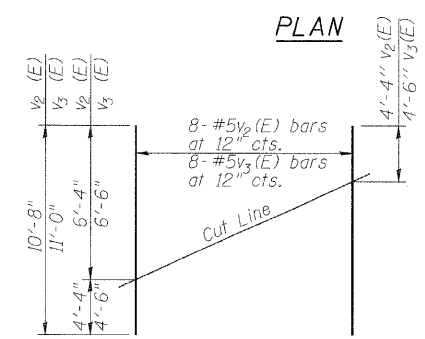
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#6	10'-6"	—
p(E)	16	#7	22'-2"	—
p1(E)	12	#5	22'-2"	—
s2(E)	50	#4	12'-5"	□
s3(E)	4	#4	12'-9"	□
u(E)	10	#6	7'-9"	┌
v1(E)	138	#5	3'-3"	—
v2(E)	8	#5	10'-8"	—
v3(E)	8	#5	11'-0"	—
Structure Excavation		Cu. Yd.	55.0	
Concrete Structures		Cu. Yd.	20.5	
Reinforcement Bars, Epoxy Coated		Pound	2730	
Furnishing Steel Piles HPI2x63		Foot	360	
Driving Piles		Foot	360	
Concrete Encasement		Cu. Yd.	2.7	

PILE DATA

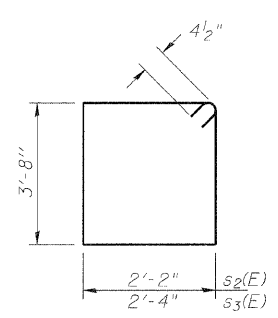
Type & Size: Steel-HP 12x63  
Nominal Required Bearing: 210 Kips  
Allowable Resistance Available = 70 Kips  
Estimated Pile length = 45'  
No. of production piles = 8

DESIGNED	KRG
CHECKED	MJK
DRAWN	GSJ
CHECKED	MJK
AI-R	

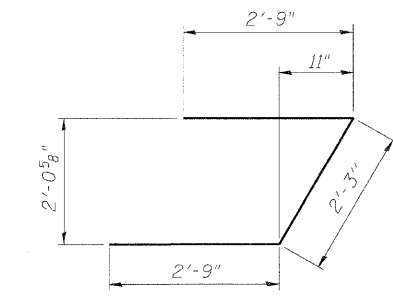


FIELD CUTTING DIAGRAM

Order v2(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s2(E) & s3(E)



BAR u(E)

MID-AMERICA ENGINEERING SERVICES

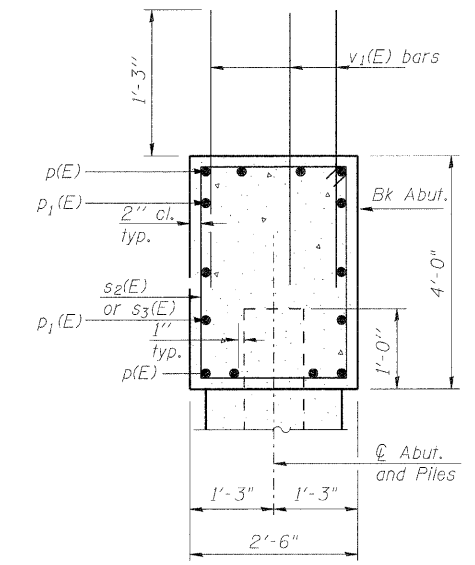
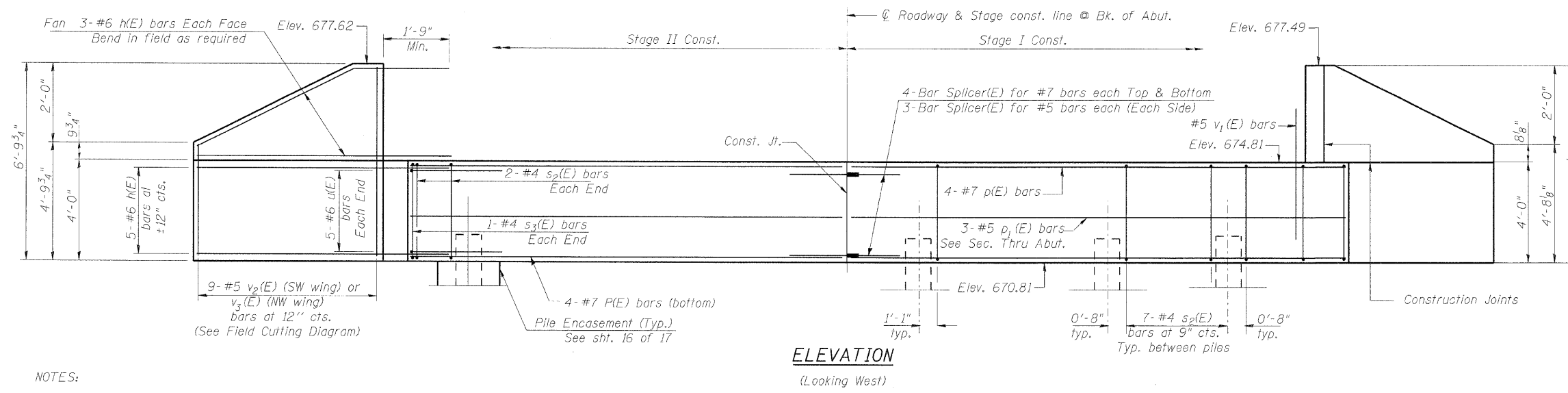
EAST ABUTMENT  
IL. ROUTE 89 OVER SNAG CREEK  
F.A.P. ROUTE 698 SEC. 126BR  
WOODFORD COUNTY  
STATION 521+52.42  
STRUCTURE NO. 102-0082  
REVISD 10/14/08

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 698	126BR	WOODFORD	56	30
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 15  
19 SHEETS

Contract # 68576



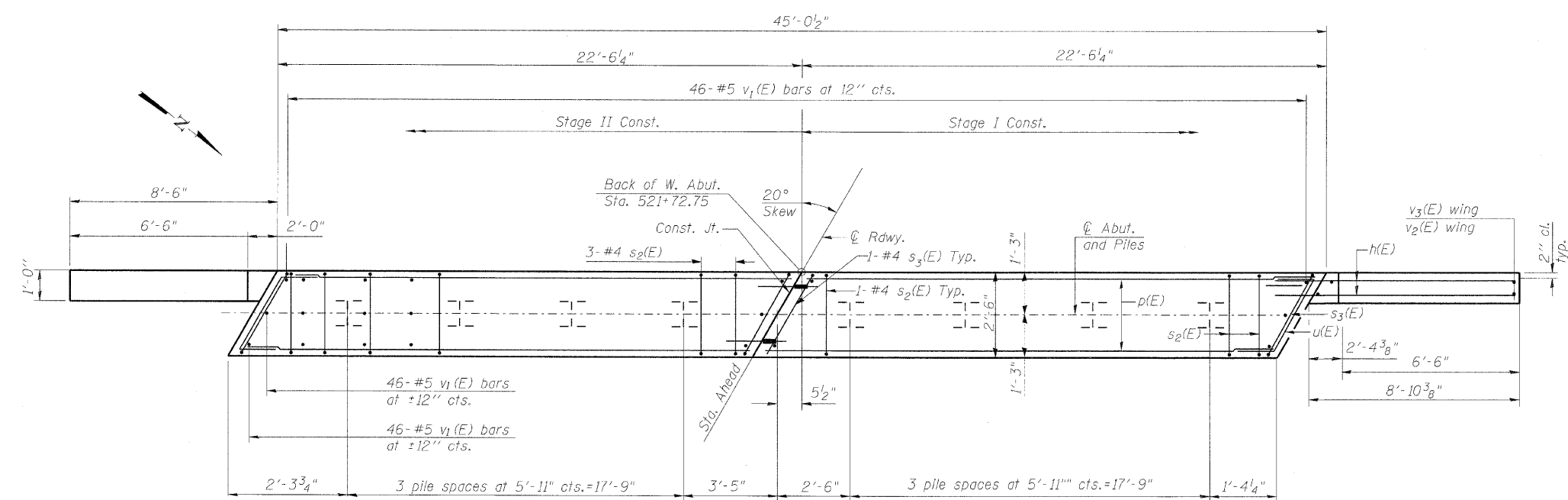
SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#6	10'-6"	—
p(E)	16	#7	22'-2"	—
p1(E)	12	#5	22'-2"	—
s2(E)	50	#4	12'-5"	□
s3(E)	4	#4	12'-9"	□
u(E)	10	#6	7'-9"	┘
v1(E)	138	#5	3'-3"	—
v2(E)	8	#5	10'-8"	—
v3(E)	8	#5	11'-0"	—
Structure Excavation	Cu. Yd.	55.0		
Concrete Structures	Cu. Yd.	20.5		
Reinforcement Bars, Epoxy Coated	Pound	2730		
Furnishing Steel Piles HP12x63	Foot	315		
Driving Piles	Foot	315		
Test Pile, HP12x63	Each	1		
Concrete Encasement	Cu. Yd.	2.7		

NOTES:

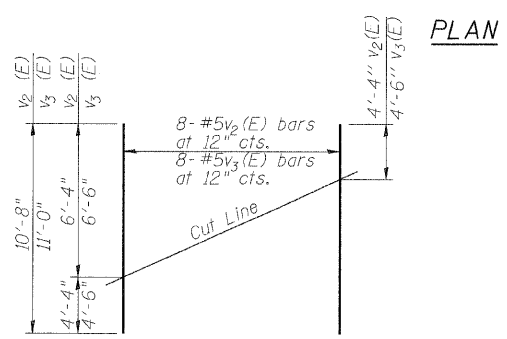
Cost of welded wire fabric in pile encasement is included in the item "concrete encasement"



PILE DATA

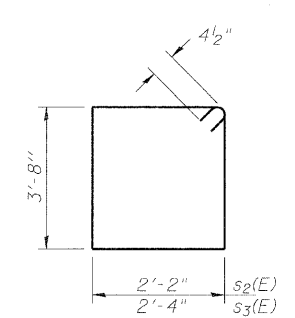
Type & Size: Steel-HP 12x63  
Nominal Required Bearing: 210 Kips  
Allowable Resistance Available = 70 Kips  
Estimated Pile length = 45'  
No. of production piles = 7  
No. of Test Piles = 1

DESIGNED	KRG
CHECKED	MJK
DRAWN	GSI
CHECKED	MJK

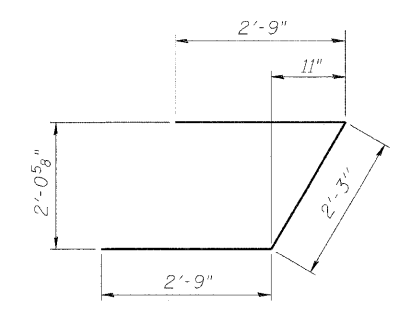


FIELD CUTTING DIAGRAM

Order v2(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s2(E) & s3(E)



BAR u(E)

MID-AMERICA ENGINEERING SERVICES

WEST ABUTMENT  
IL. ROUTE 89 OVER  
SNAG CREEK  
F.A.P. ROUTE 698 SEC. 126BR  
WOODFORD COUNTY  
STATION 521+52.42  
STRUCTURE NO. 102-0082

REVIS 10/14/08

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16 19 SHEETS
F.A.P. 698	126BR	WOODFORD	56	31	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT:		

Contract # 68576

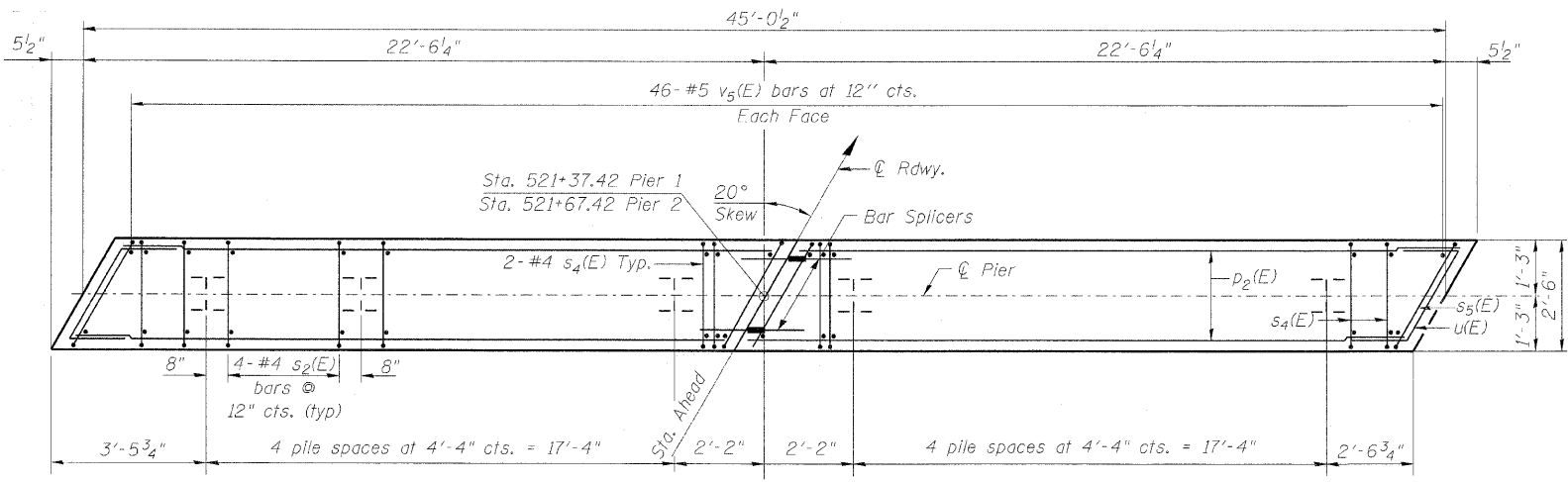
Notes:  
For details of piles, see sheet 18 of 19.  
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms.  
Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

**PILE DATA**

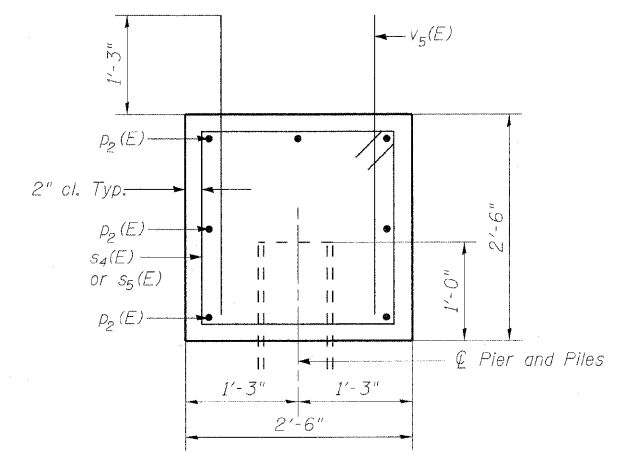
Type & Size: Steel-HP 12x63  
Nominal Required Bearing: 276 Kips  
Allowable resistance available = 92 Kips  
Estimated Pile length = 50'  
No. of production piles = 19 @ pier 1 & 2  
No. of Test Piles = 1 @ pier 1

**MIN BAR LAP**

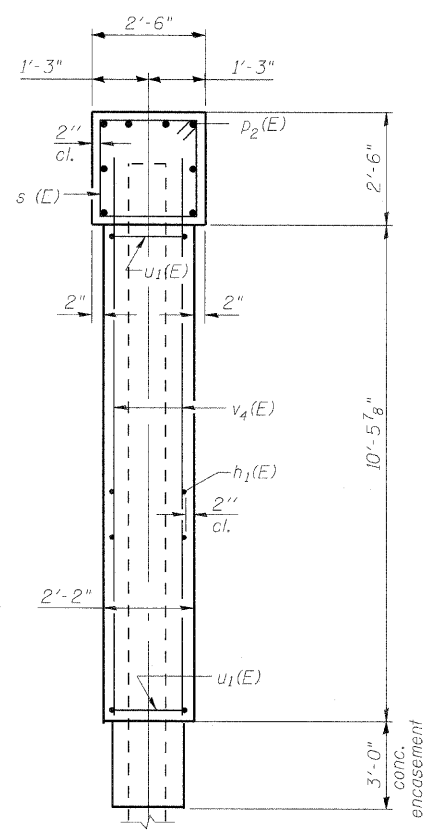
# 5 Bar = 1'-8"  
# 7 Bar = 3'-1"



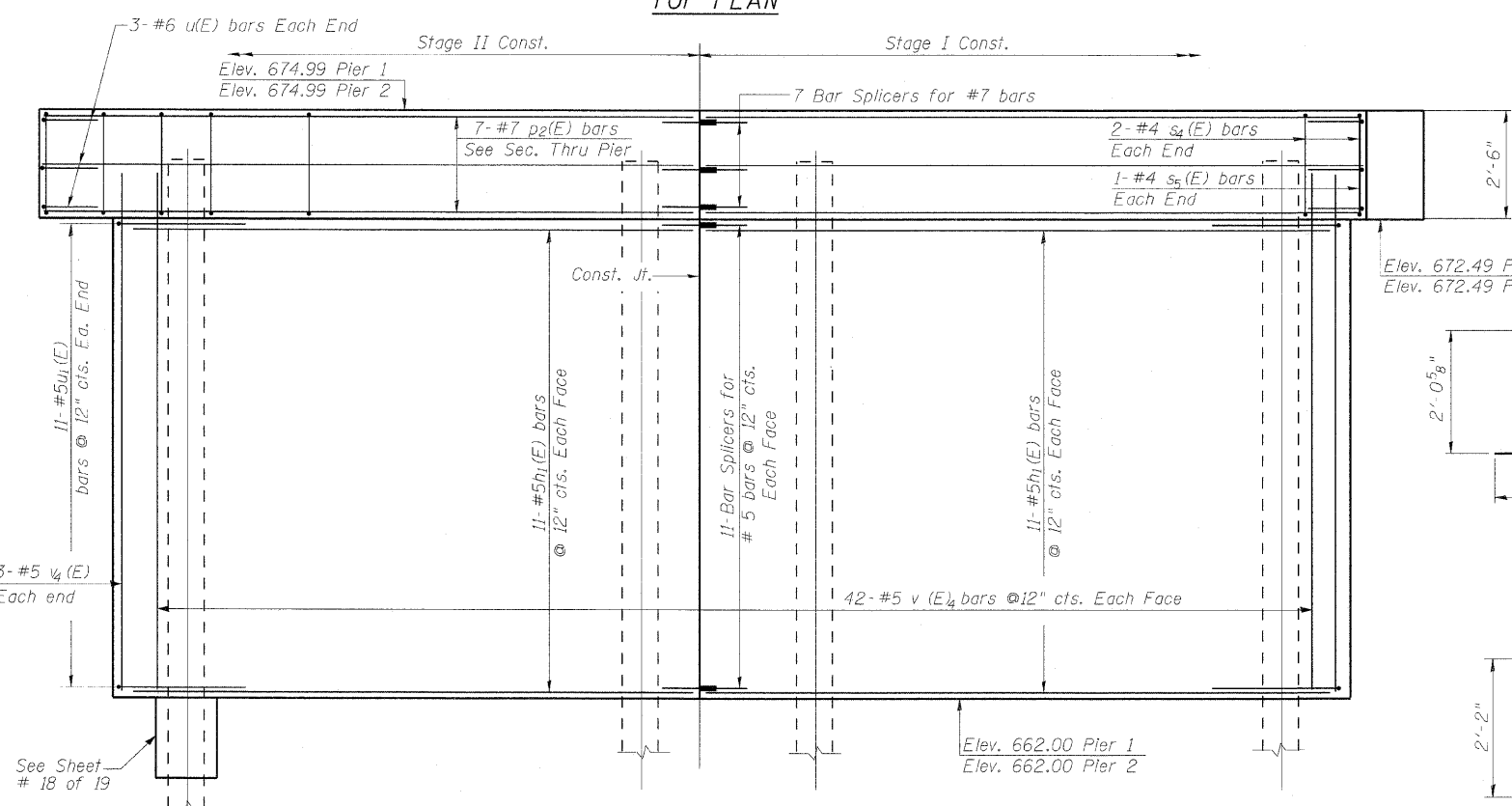
TOP PLAN



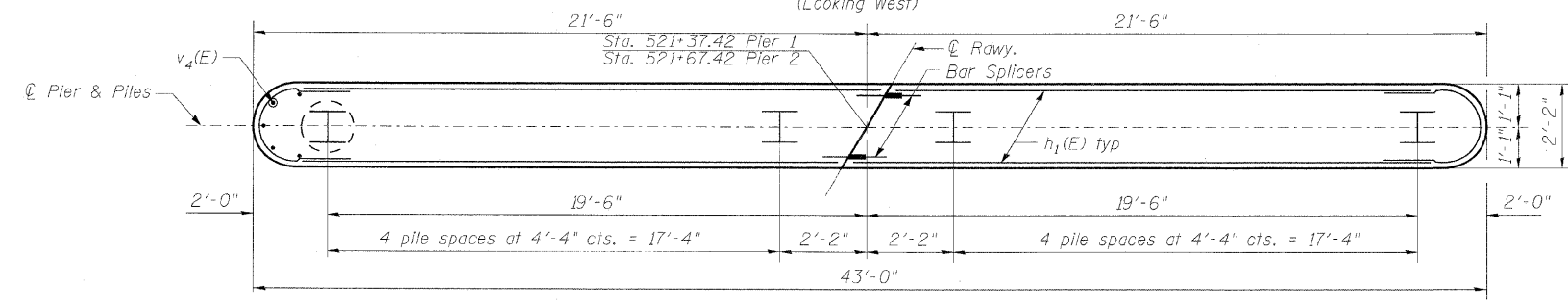
SECTION THRU PIER CAP



END VIEW



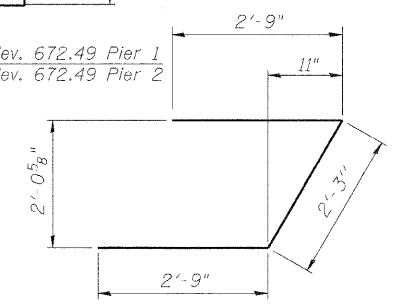
ELEVATION  
(Looking West)



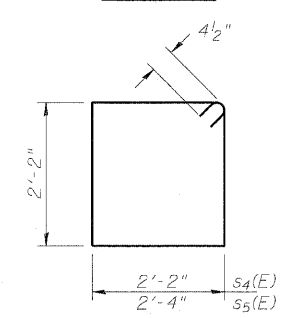
PILE LOCATION PLAN

**TWO PIERS  
BILL OF MATERIAL**

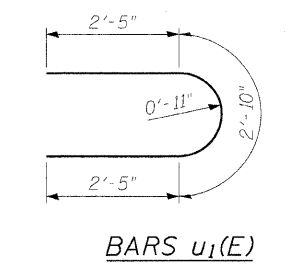
Bar	No.	Size	Length	Shape
h <sub>1</sub> (E)	88	#5	20'-0"	—
p <sub>2</sub> (E)	28	#7	22'-2"	—
s <sub>4</sub> (E)	80	#4	9'-5"	□
s <sub>5</sub> (E)	8	#4	9'-9"	□
u(E)	12	#6	7'-9"	—
u <sub>1</sub> (E)	44	#5	7'-8"	—
v <sub>4</sub> (E)	180	#5	11'-9"	—
v <sub>5</sub> (E)	184	#5	3'-6"	—
Structure Excavation			Cu. Yd.	30.0
Concrete Structures			Cu. Yd.	91.6
Reinforcement Bars, Epoxy Coated			Pound	7030
Furnishing Steel Piles HP12x63			Foot	950
Driving Piles			Foot	950
Test Pile, HP12x63			Each	1
Concrete encasement			Cu. Yd.	6.8



BAR u(E)



BARS s<sub>4</sub>(E) & s<sub>5</sub>(E)



BARS u<sub>1</sub>(E)

PIERS  
IL. ROUTE 89 OVER SNAG CREEK  
F.A.P. ROUTE 698 SEC. 126BR  
WOODFORD COUNTY  
STATION 521+52.42  
STRUCTURE NO. 102-0082

DESIGNED	KRG
CHECKED	MJK
DRAWN	GSI
CHECKED	MJK