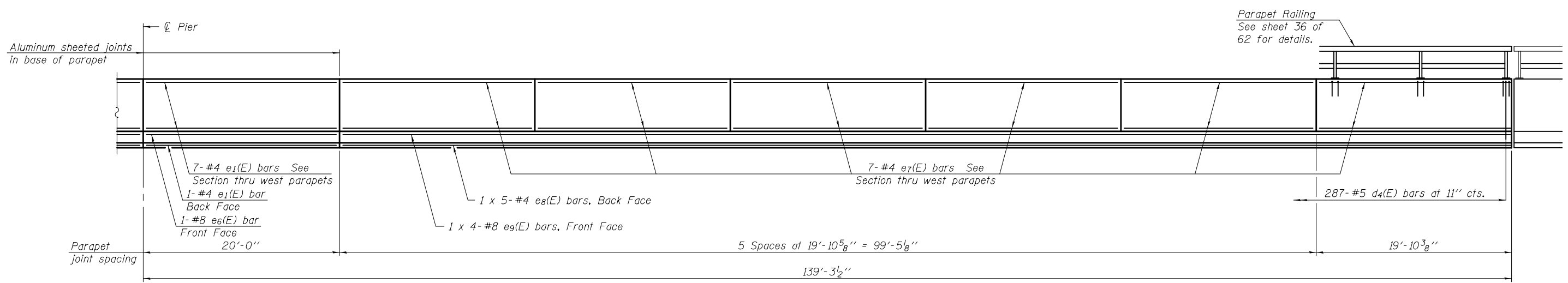
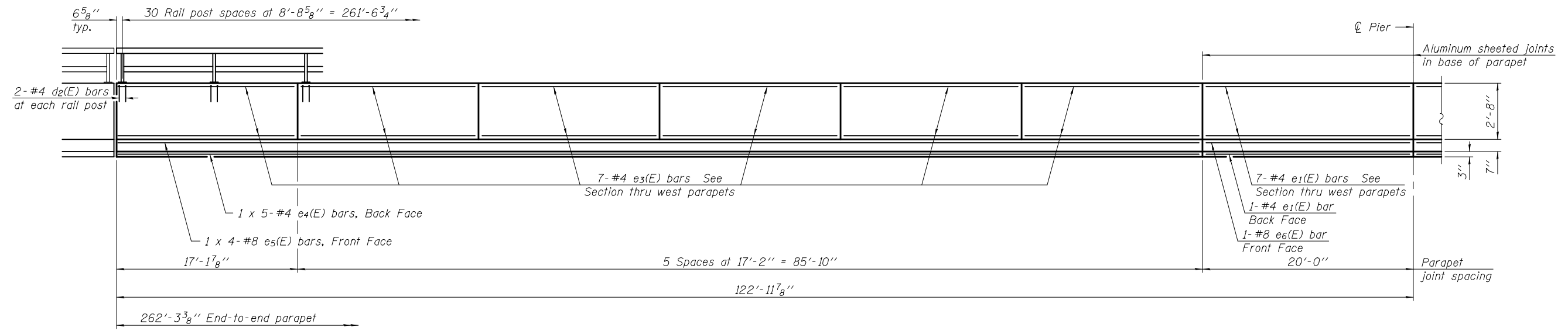


**INSIDE ELEVATION OF WEST SIDEWALK PARAPET WALL**  
(Looking west)

Note:  
See sheet 19 of 62 for section thru west parapets.  
Horizontal dimensions are taken along front face of parapet wall unless otherwise noted.

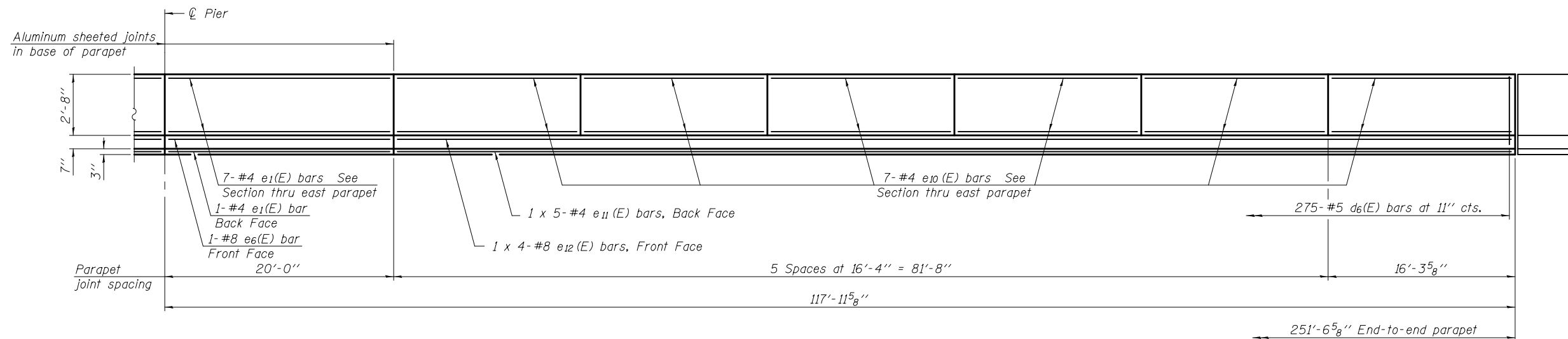
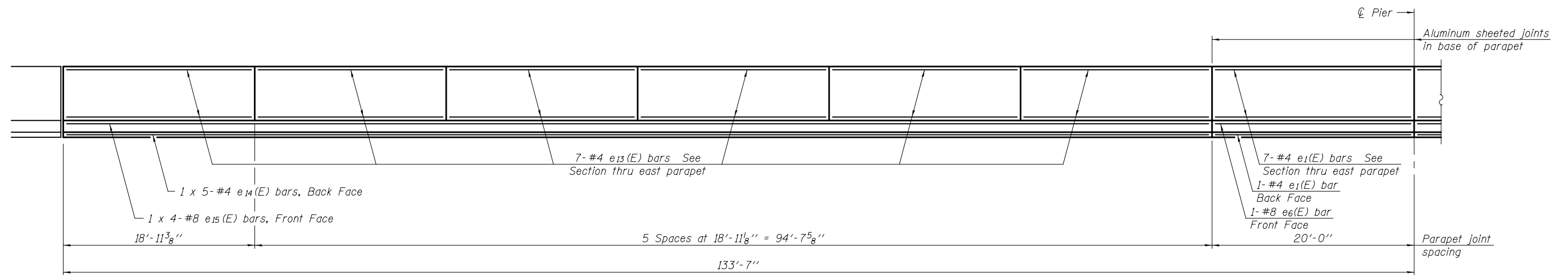
DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Joanne F. DeLuff</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	101	
DRAWN - MICHAEL B. MOSSMAN		REVISED			CONTRACT NO. 70700					
CHECKED - D.H.C. / N.R.B.					ILLINOIS FED. AID PROJECT					
				SHEET NO. 16 OF 62 SHEETS						



**INSIDE ELEVATION OF WEST ROADWAY PARAPET**  
(Looking west)

Notes:  
See sheet 19 of 62 for section thru west parapets.  
Horizontal dimensions are taken along front face of west parapet unless otherwise noted.

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Jaime F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	102	
DRAWN - MICHAEL B. MOSSMAN		REVISED			CONTRACT NO. 70700					
CHECKED - D.H.C. / N.R.B.					ILLINOIS FED. AID PROJECT					
				SHEET NO. 17 OF 62 SHEETS						



**INSIDE ELEVATION OF EAST ROADWAY PARAPET**  
(Looking east)

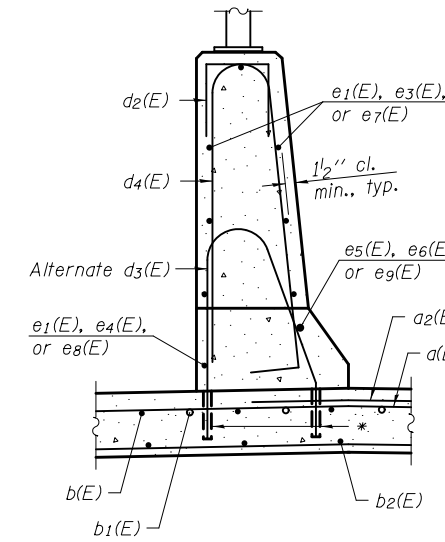
Notes:  
See sheet 19 of 62 for section thru east parapet.  
Horizontal dimensions are taken along front face of east parapet.

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	103
DRAWN - MICHAEL B. MOSSMAN	REVISED	CONTRACT NO. 70700							
CHECKED - D.H.C. / N.R.B.	REVISED	SHEET NO. 18 OF 62 SHEETS							
					ILLINOIS FED. AID PROJECT				

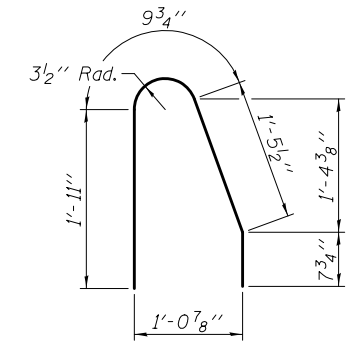
\* Drill and set Alternate #5 d3(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

The Contractor shall take all necessary precautions to prevent drilled hole interference with deck reinforcement bars. Locate longitudinal bars to miss drilled locations. Locate drilled holes to miss transverse bars in deck.

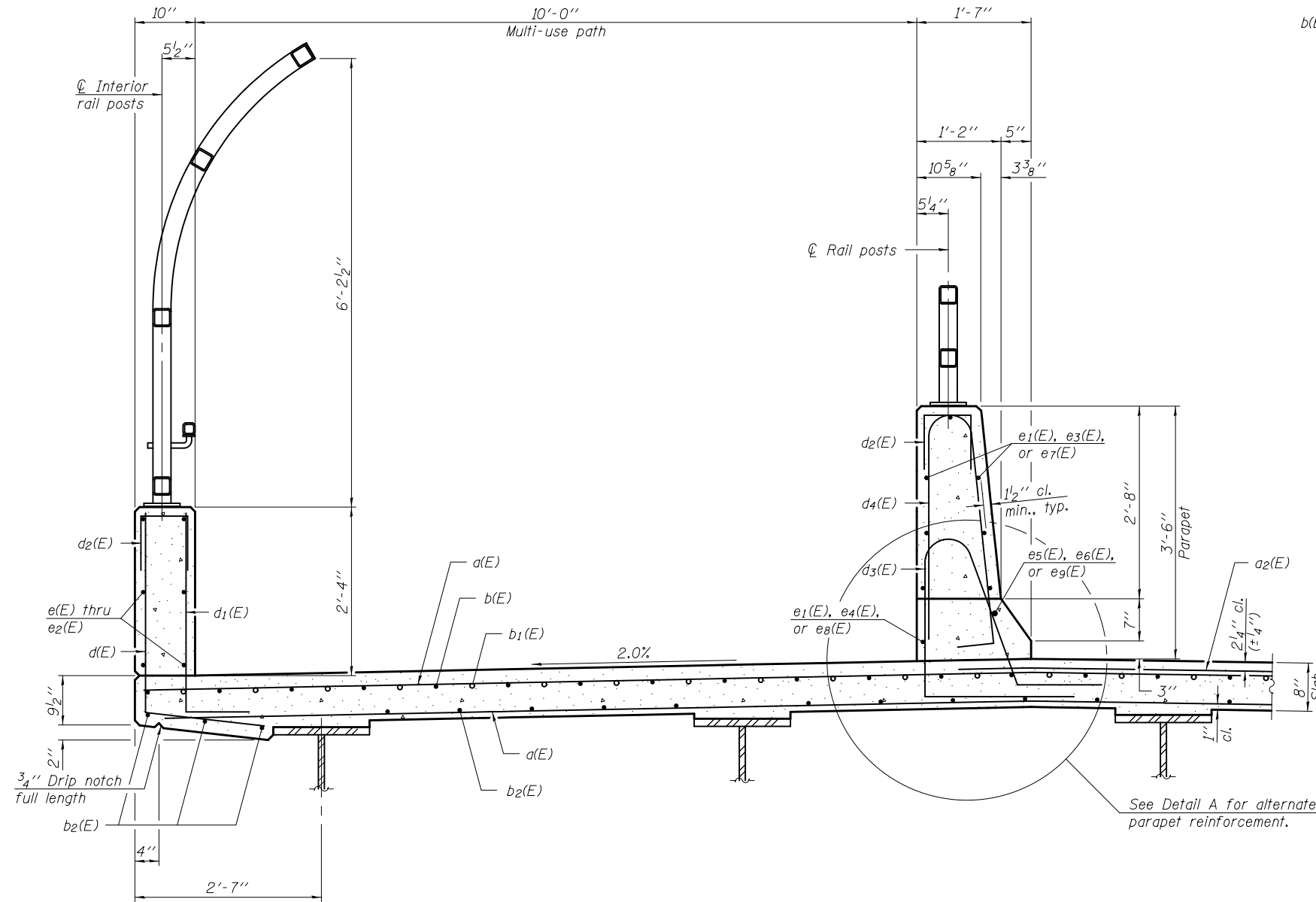
If alternate parapet reinforcement is chosen, cost of alternate d3(E) bars, drilling, and setting is included with the cost of Reinforcement Bars, Epoxy Coated.



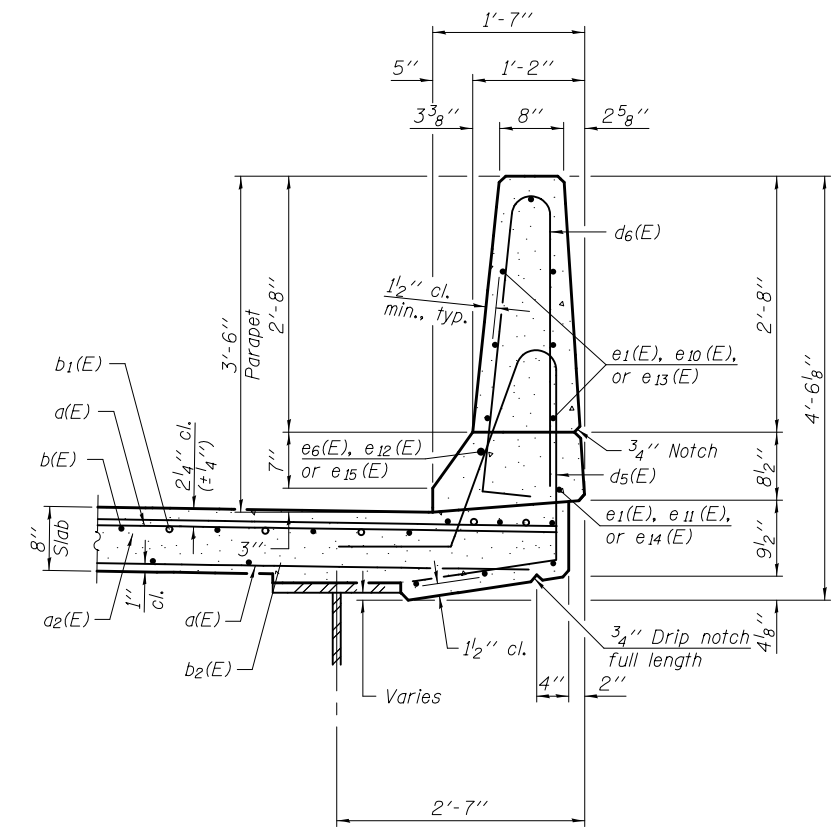
DETAIL A



ALTERNATE BAR d3(E)



SECTION THRU MULTI-USE PATH



SECTION THRU EAST PARAPET

DESIGNED - DEWEY H. COULTAS  
 CHECKED - NICHOLAS R. BARNETT  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED - *Jaime F. DeLuca*  
 ACTING ENGINEER OF BRIDGE DESIGN  
 PASSED - *Carl Perry*  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

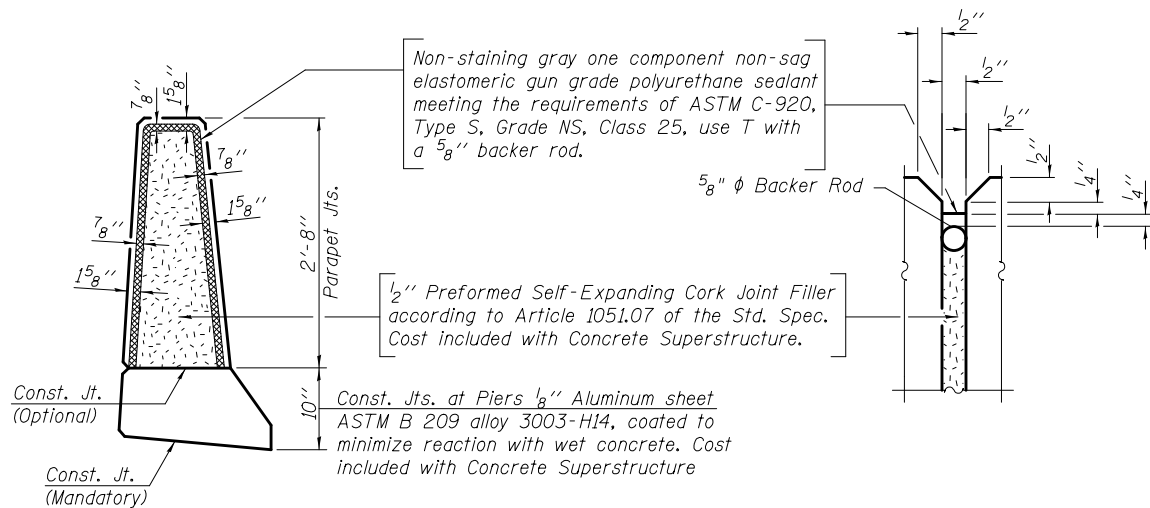
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS  
 STRUCTURE NO. 010 - 0289

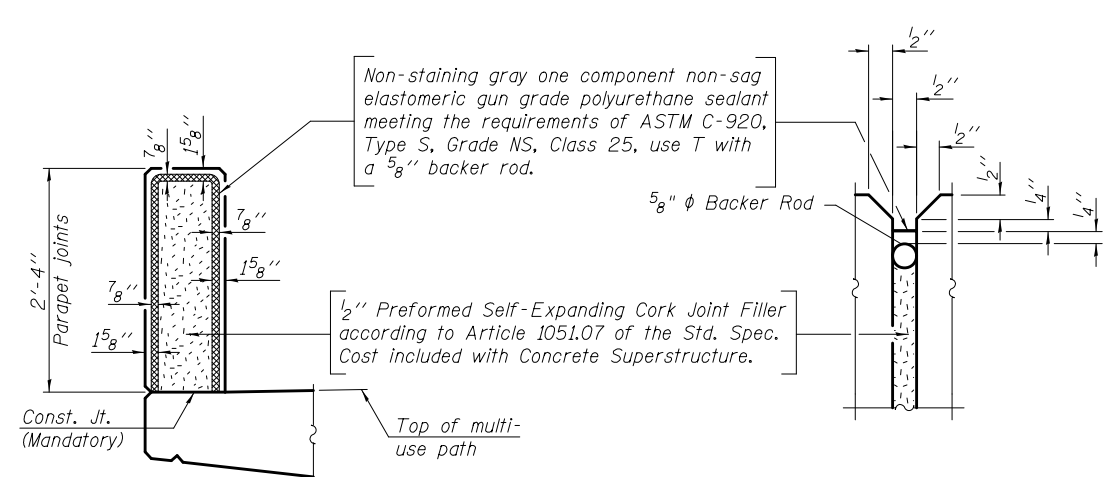
SHEET NO. 19 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	104
CONTRACT NO. 70700				

ILLINOIS FED. AID PROJECT



**ROADWAY PARAPET JOINT DETAILS**

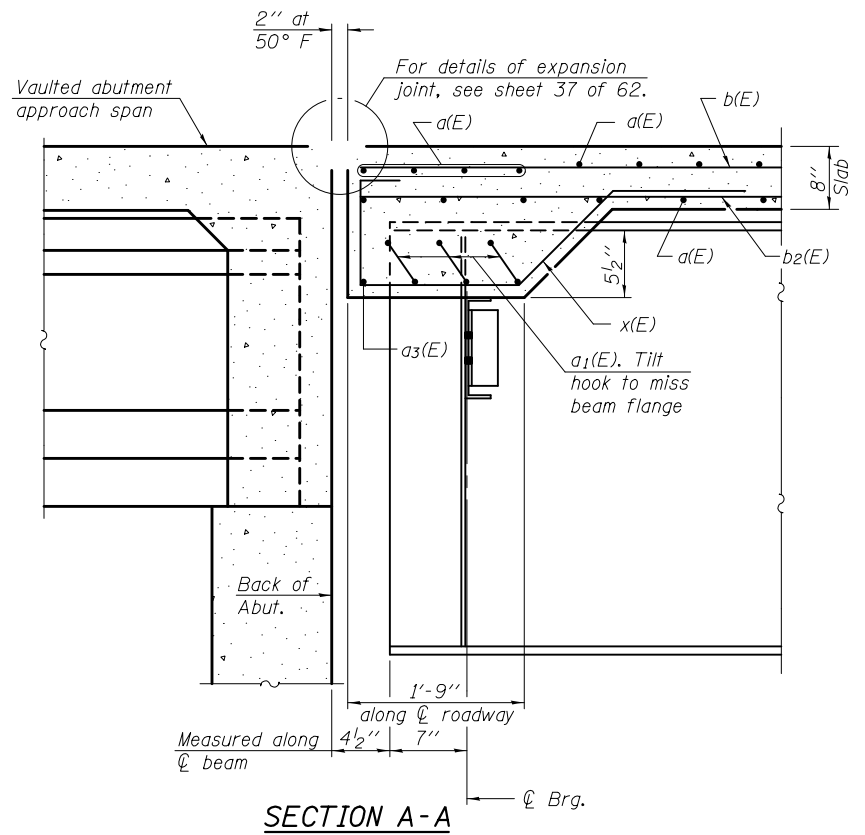
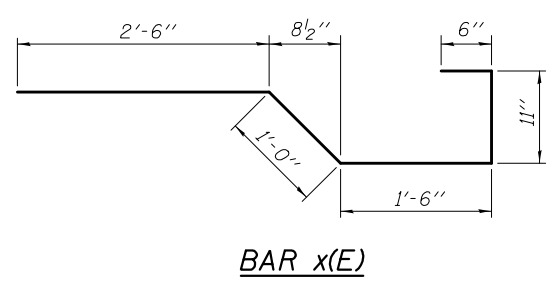
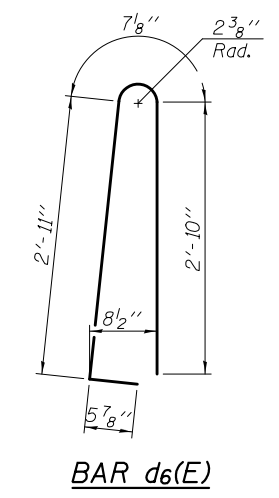
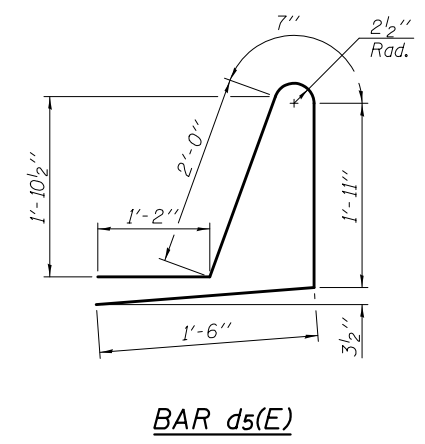
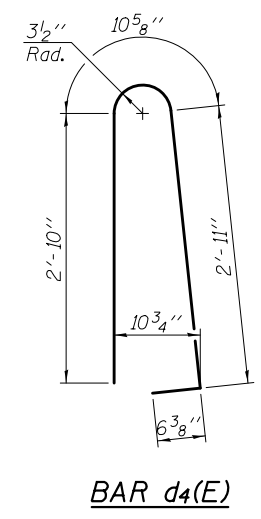
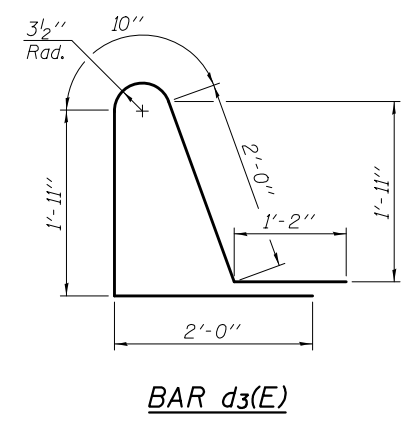
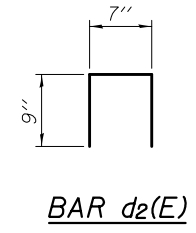
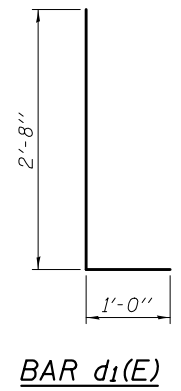
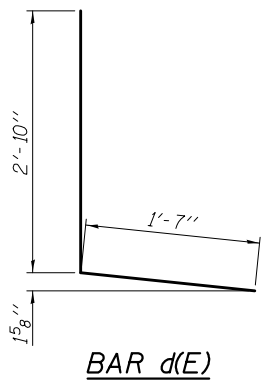
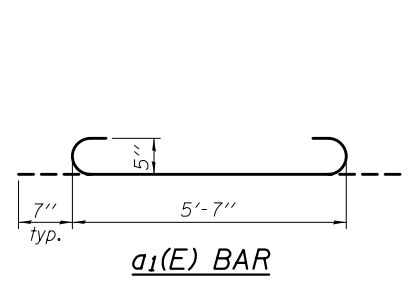


**WEST MULTI-USE PATH PARAPET JOINT DETAILS**

**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	736	#5	45'-7"	—
a <sub>1</sub> (E)	42	#5	6'-9"	⌋
a <sub>2</sub> (E)	842	#6	6'-6"	—
a <sub>3</sub> (E)	2	#5	40'-6"	—
b(E)	480	#5	29'-0"	—
b <sub>1</sub> (E)	92	#6	45'-4"	—
b <sub>2</sub> (E)	369	#5	32'-0"	—
d(E)	267	#4	4'-5"	L
d <sub>1</sub> (E)	267	#6	3'-8"	L
d <sub>2</sub> (E)	122	#4	2'-1"	n
d <sub>3</sub> (E)	287	#5	7'-11"	⌋
d <sub>4</sub> (E)	287	#5	7'-2"	⌋
d <sub>5</sub> (E)	275	#5	7'-2"	⌋
d <sub>6</sub> (E)	275	#5	6'-10"	⌋
e(E)	36	#4	17'-2"	—
e <sub>1</sub> (E)	44	#4	19'-9"	—
e <sub>2</sub> (E)	42	#4	17'-1"	—
e <sub>3</sub> (E)	42	#4	16'-11"	—
e <sub>4</sub> (E)	5	#4	22'-8"	—
e <sub>5</sub> (E)	4	#8	30'-9"	—
e <sub>6</sub> (E)	4	#8	19'-9"	—
e <sub>7</sub> (E)	42	#4	19'-7"	—
e <sub>8</sub> (E)	5	#4	25'-11"	—
e <sub>9</sub> (E)	4	#8	34'-10"	—
e <sub>10</sub> (E)	42	#4	16'-1"	—
e <sub>11</sub> (E)	5	#4	21'-8"	—
e <sub>12</sub> (E)	4	#8	29'-6"	—
e <sub>13</sub> (E)	42	#4	18'-8"	—
e <sub>14</sub> (E)	5	#4	24'-9"	—
e <sub>15</sub> (E)	4	#8	33'-5"	—
x(E)	70	#5	6'-5"	⌋
Reinforcement Bars, Epoxy Coated	Pound		93,490	
Concrete Superstructure	Cu. Yds.		404.6	

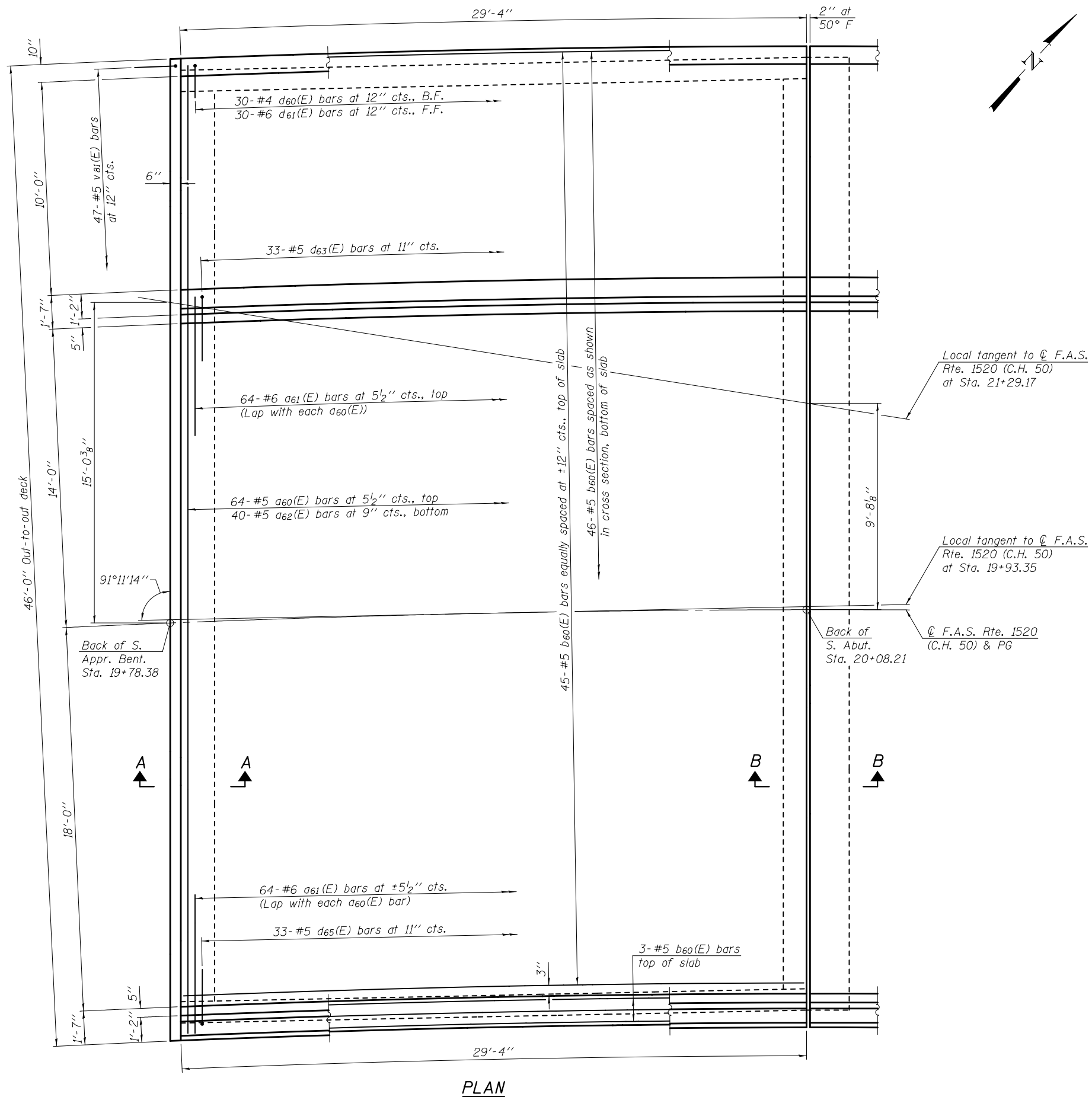
Bars indicated thus 1 x 4-#8 etc. indicates 1 line of bars with 4 lengths per line.



**SECTION A-A**

**MINIMUM BAR LAP**

(Parapet)  
 #4 bar = 2'-7"  
 #8 bar = 6'-9"



Notes:  
 Place transverse reinforcement bars radially.  
 Spacings given are along beam 2a.  
 For Sections A-A and B-B, see sheet 24  
 of 62.

PLAN

DESIGNED - NICHOLAS R. BARNETT	EXAMINED	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	<i>James F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED
CHECKED - D.H.C. / N.R.B.	<i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

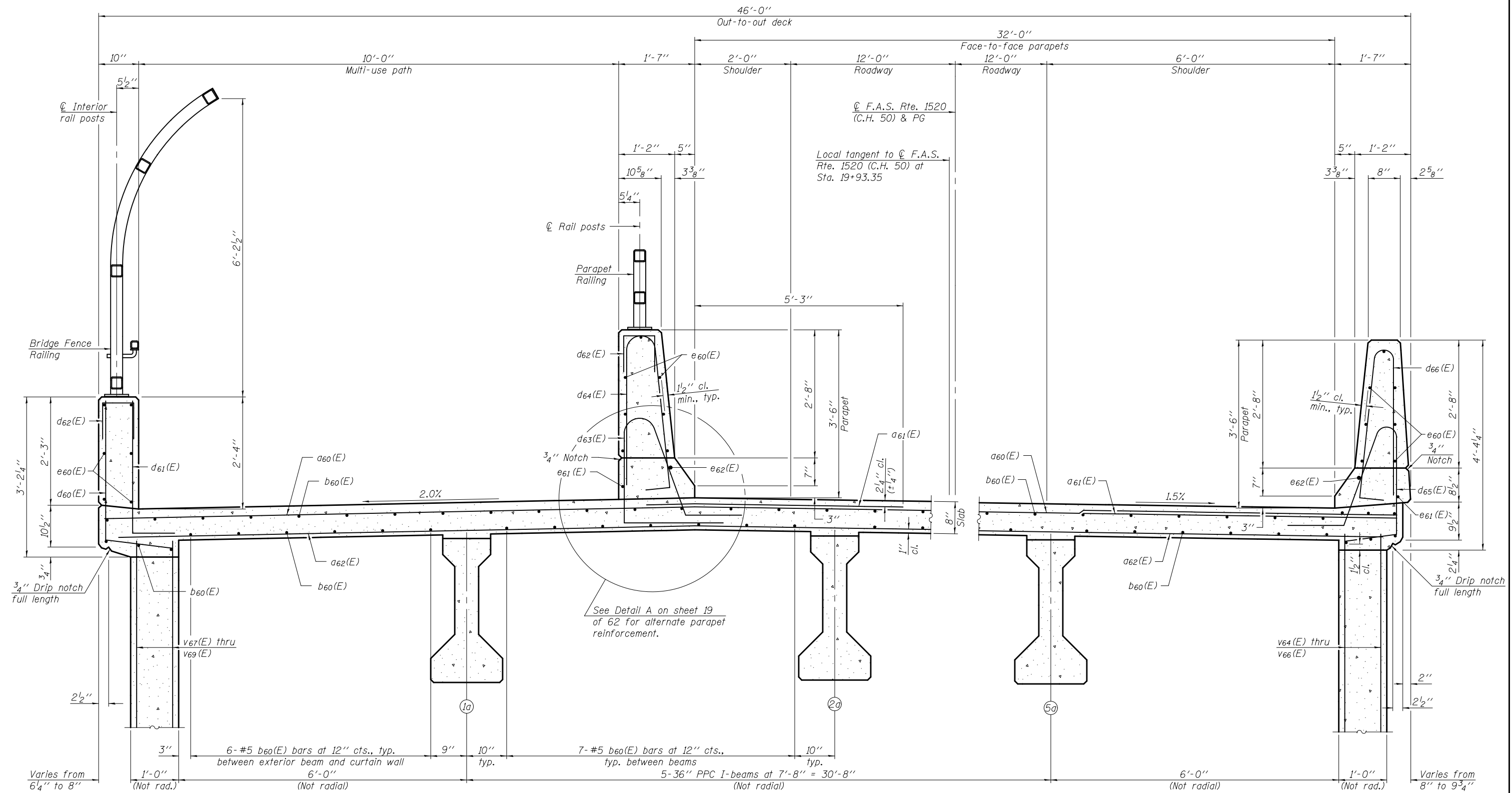
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOUTH VAULTED ABUTMENT APPROACH SPAN  
 STRUCTURE NO. 010 - 0289

SHEET NO. 21 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	106
CONTRACT NO. 70700				

ILLINOIS FED. AID PROJECT



**CROSS SECTION**  
(Looking North)

Notes  
 All horizontal dimensions are radial to  $\text{\textcircled{C}}$  F.A.S. Rte. 1520 (C.H. 50) except as noted.  
 Beams and curtain walls are parallel to the local tangent to  $\text{\textcircled{C}}$  F.A.S. Rte. 1520 (C.H. 50) at Sta. 19+93.35.

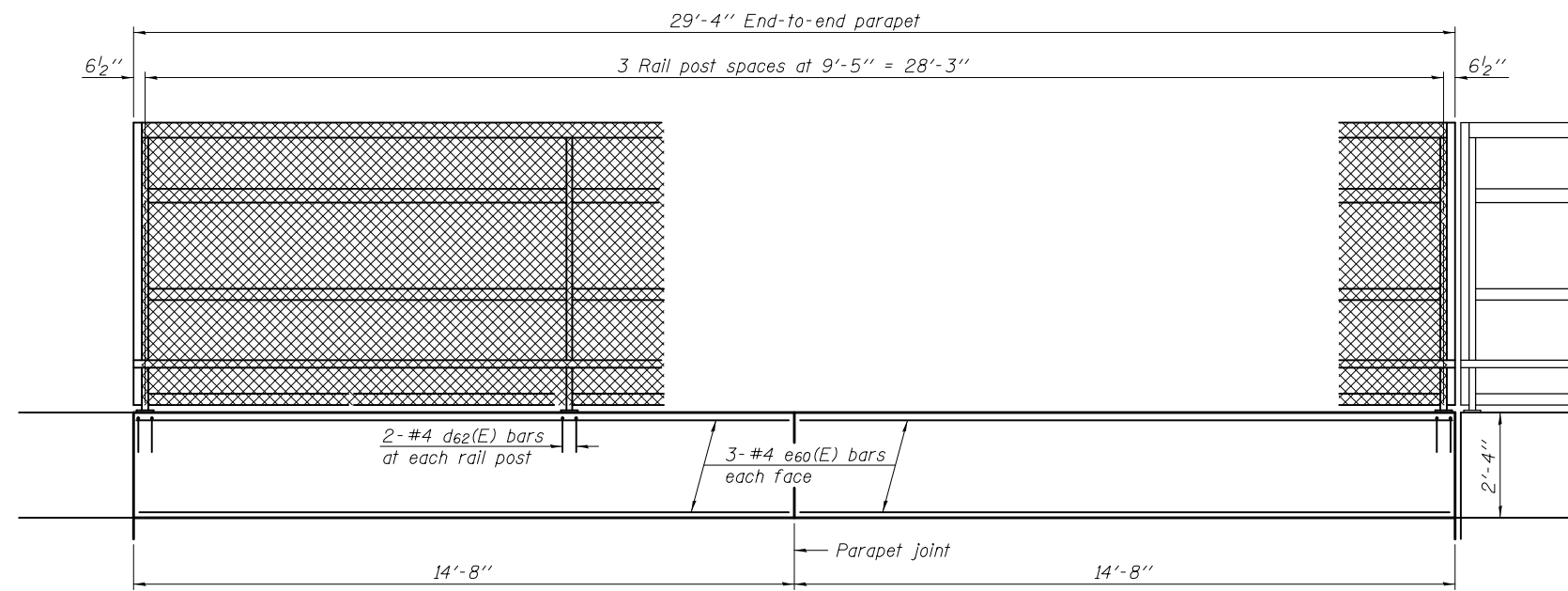
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

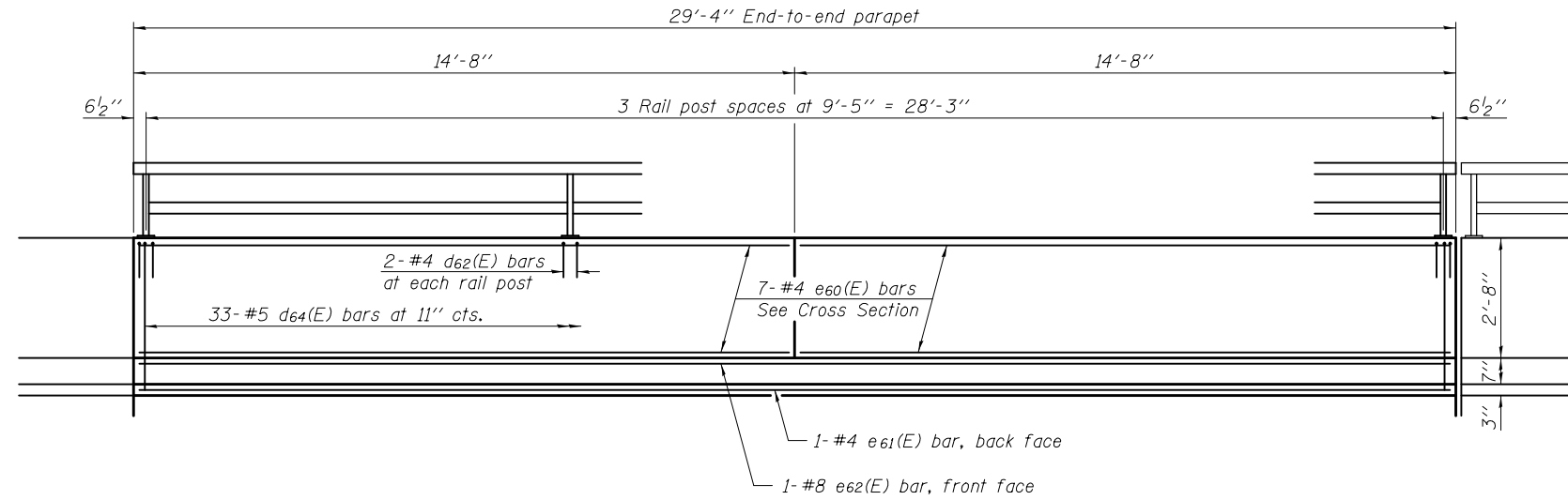
**SOUTH VAULTED ABUTMENT APPROACH SPAN DETAILS**  
**STRUCTURE NO. 010 - 0289**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	107
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

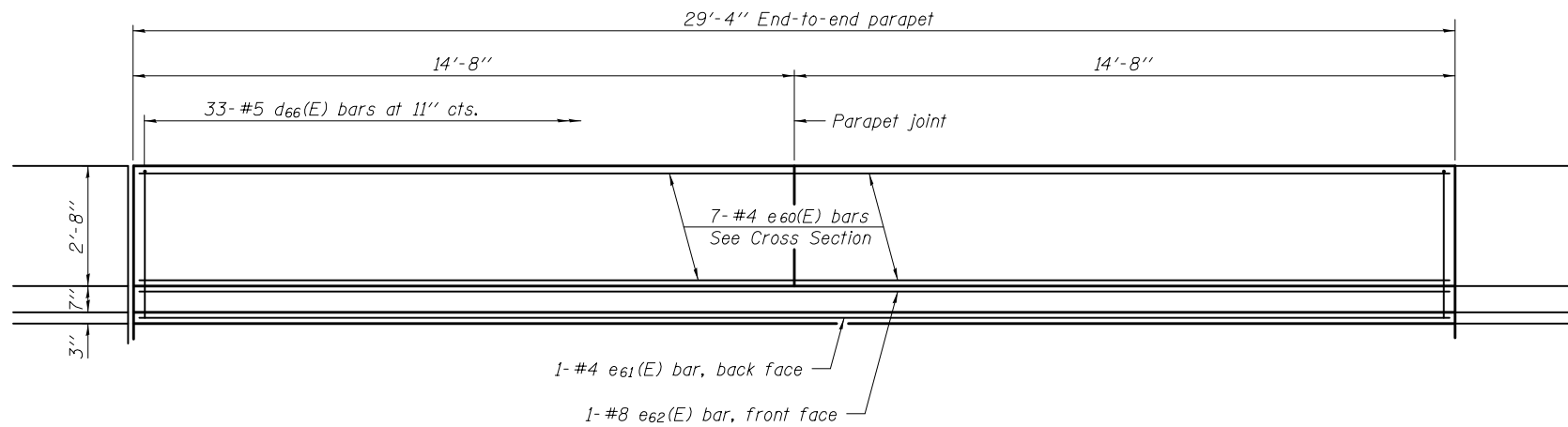
SHEET NO. 22 OF 62 SHEETS



**INSIDE ELEVATION OF WEST SIDEWALK PARAPET WALL**  
(Looking west)

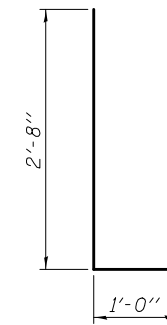
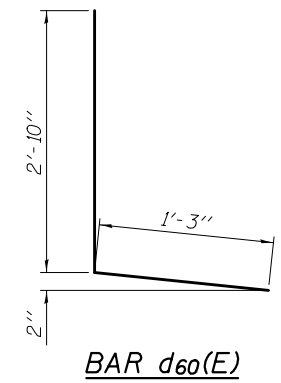


**INSIDE ELEVATION OF WEST ROADWAY PARAPET**  
(Looking west)

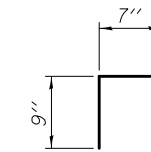


**INSIDE ELEVATION OF EAST ROADWAY PARAPET**  
(Looking east)

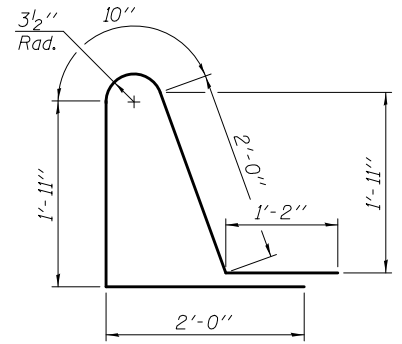
Notes  
Horizontal dimensions are taken along front face of parapet wall unless otherwise noted.  
See sheet 20 of 62 for parapet joint details.  
See sheets 35 and 36 of 62 for Bridge Fence Railing and Parapet Railing details.



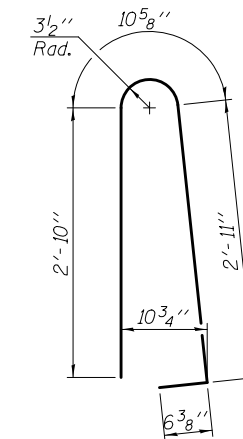
**BAR d61(E)**



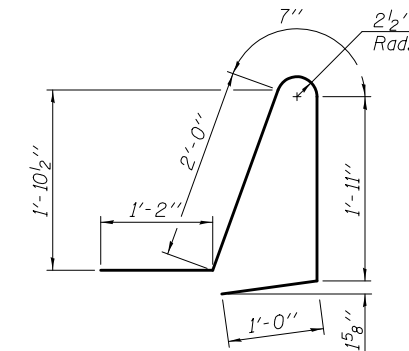
**BAR d62(E)**



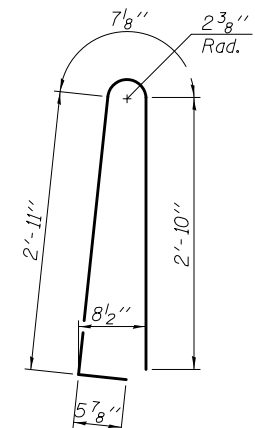
**BAR d63(E)**



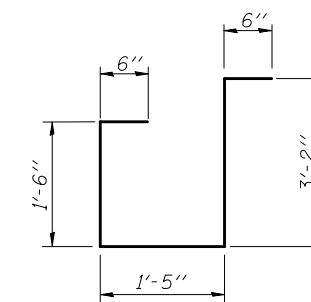
**BAR d64(E)**



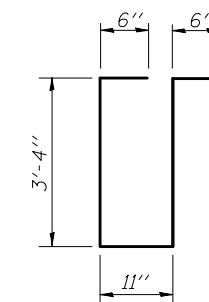
**BAR d65(E)**



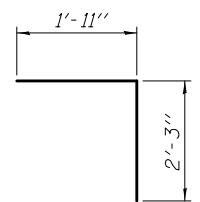
**BAR d66(E)**



**BAR s62(E)**



**BAR s63(E)**



**BAR v81(E)**

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jaime F. Joffe</i>	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl Perry</i>	REVISED
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

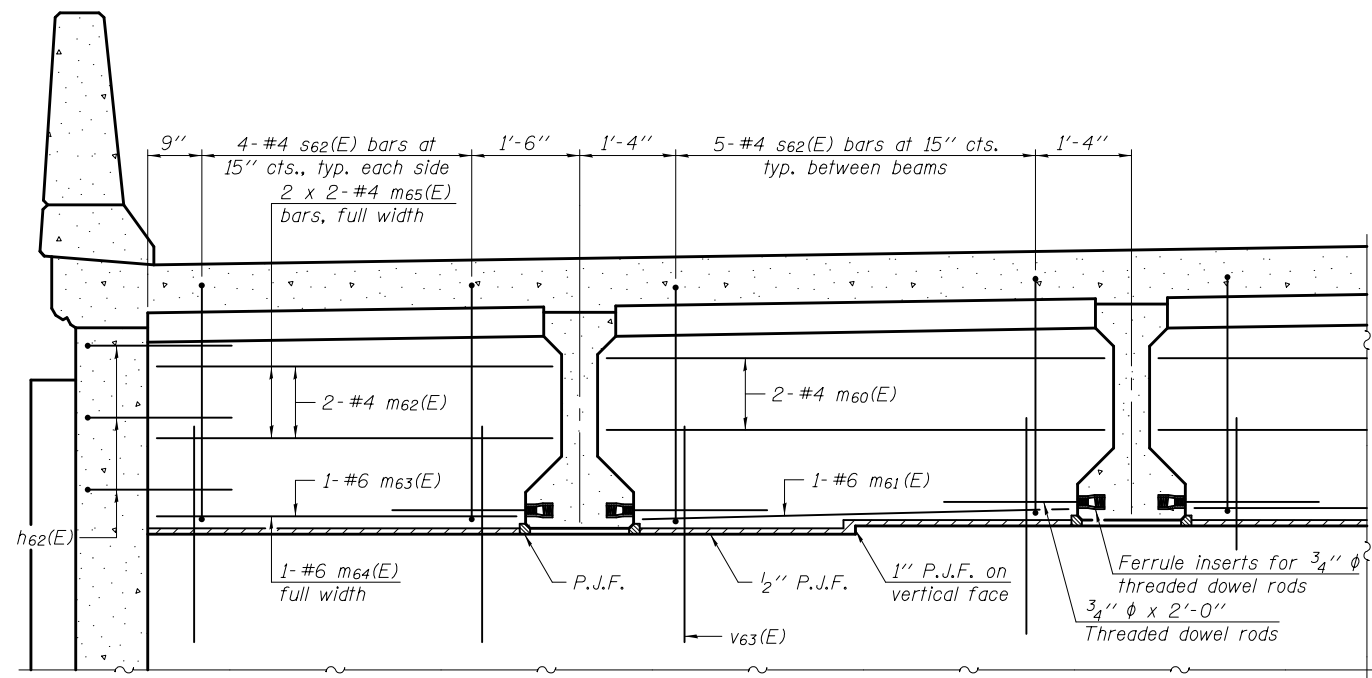
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOUTH VAULTED ABUTMENT APPROACH SPAN DETAILS  
STRUCTURE NO. 010 - 0289

SHEET NO. 23 OF 62 SHEETS

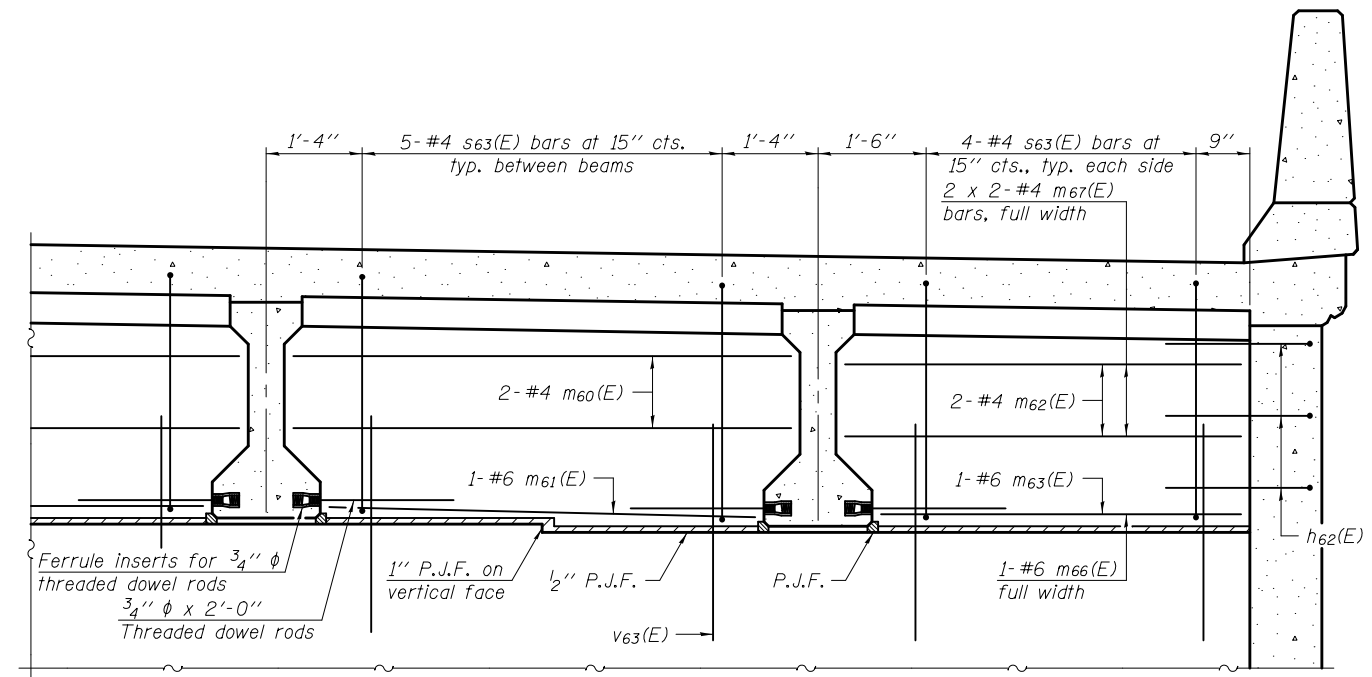
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	108
CONTRACT NO. 70700				
ILLINOIS FED. AID PROJECT				





**DIAPHRAGM AT APPROACH BENT**

For location of m60(E) thru m65(E) bars see Section B-B.

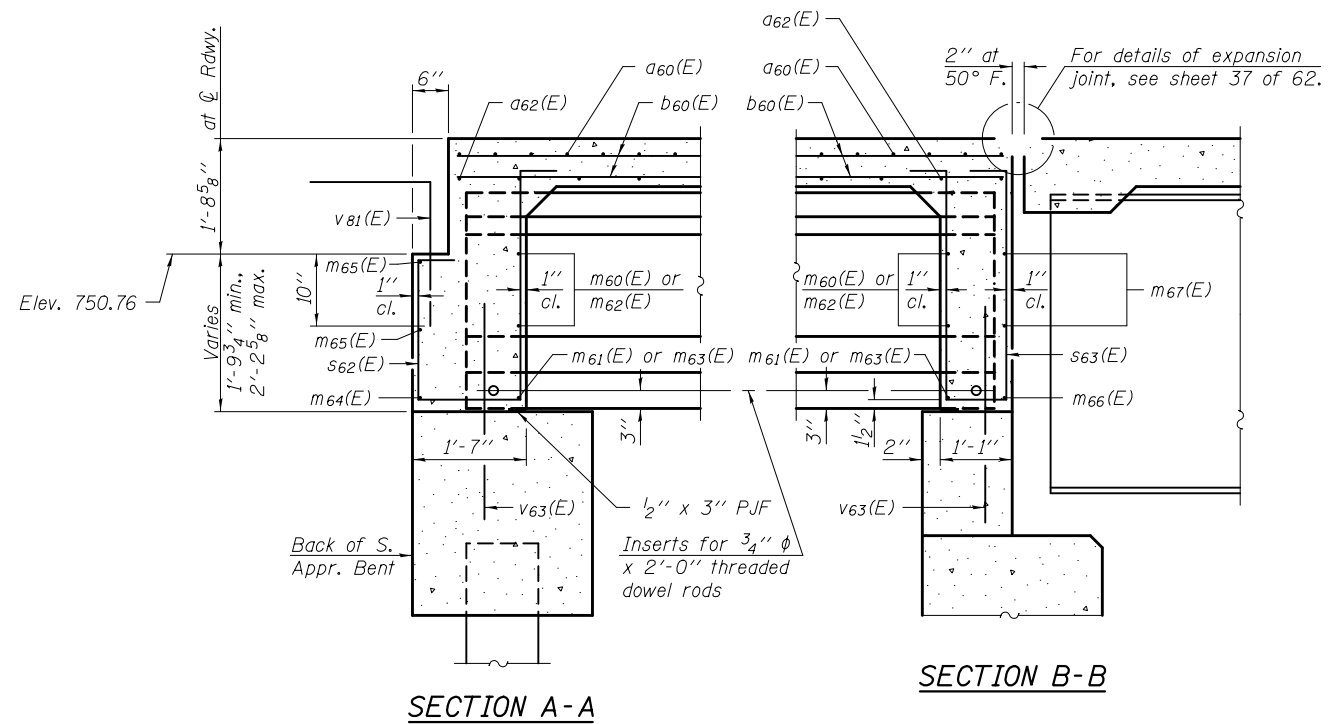


**DIAPHRAGM AT ABUTMENT**

For location of m60(E) thru m63(E), m66(E), and m67(E) bars, see Section A-A.

**MINIMUM BAR LAP**

#4 bar = 2'-7"

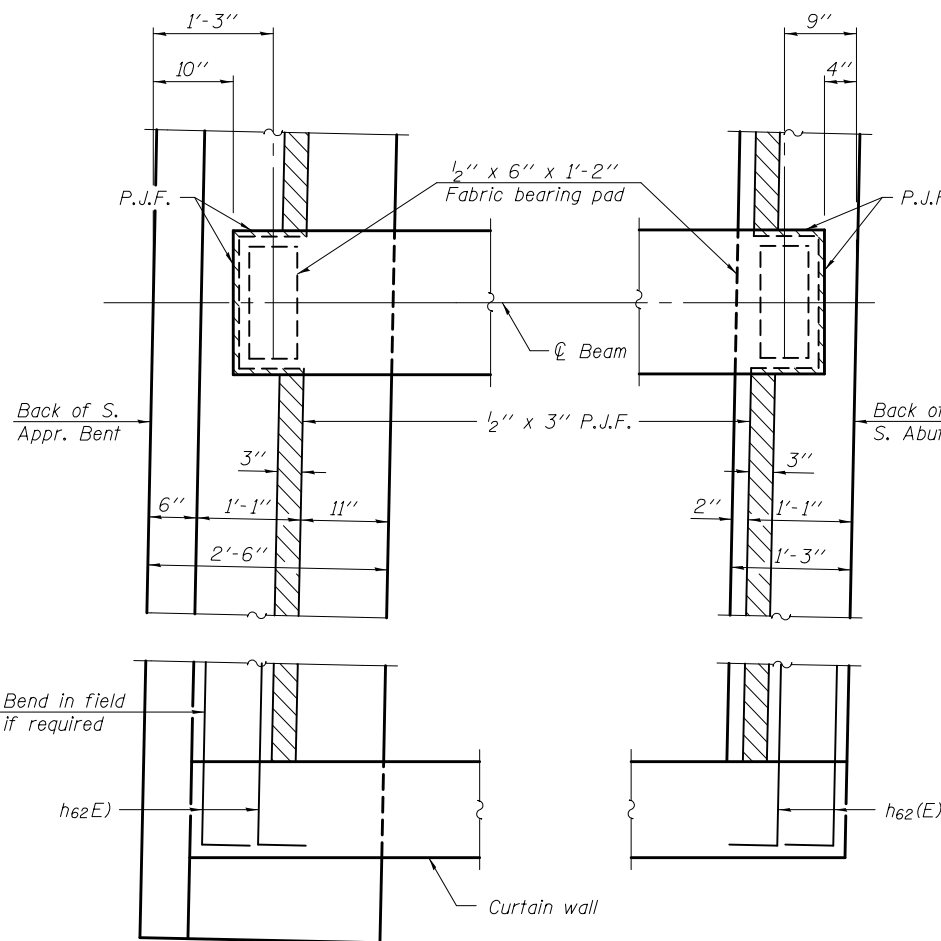


**SECTION A-A**

**SECTION B-B**

**SOUTH APPROACH SPAN  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a60(E)	64	#5	45'-7"	—
a61(E)	128	#6	6'-6"	—
a62(E)	40	#5	45'-5"	—
b60(E)	94	#5	29'-1"	—
d60(E)	30	#4	4'-1"	L
d61(E)	30	#6	3'-8"	L
d62(E)	16	#4	2'-1"	n
d63(E)	33	#5	7'-11"	Δ
d64(E)	33	#5	7'-2"	Δ
d65(E)	33	#5	6'-8"	Δ
d66(E)	33	#5	6'-10"	Δ
e60(E)	40	#4	14'-4"	—
e61(E)	2	#4	29'-0"	—
e62(E)	2	#8	29'-0"	—
m60(E)	16	#4	6'-10"	—
m61(E)	8	#6	5'-10"	—
m62(E)	8	#4	5'-5"	—
m63(E)	4	#6	4'-11"	—
m64(E)	1	#6	45'-11"	—
m65(E)	4	#4	24'-3"	—
m66(E)	1	#6	42'-4"	—
m67(E)	4	#4	22'-6"	—
s62(E)	28	#4	7'-1"	U
s63(E)	28	#4	8'-7"	U
v81(E)	47	#5	4'-2"	└
Reinforcement Bars, Epoxy Coated			Pound	11,820
Concrete Superstructure			Cu. Yd.	56.0



**PARTIAL PLAN**

Note:  
See sheets 47 thru 51 of 62 for h62(E) and v63(E) bars.  
Bars indicated thus 2 x 2-#4 etc. indicates 2 lines of bars with 2 lengths per line.

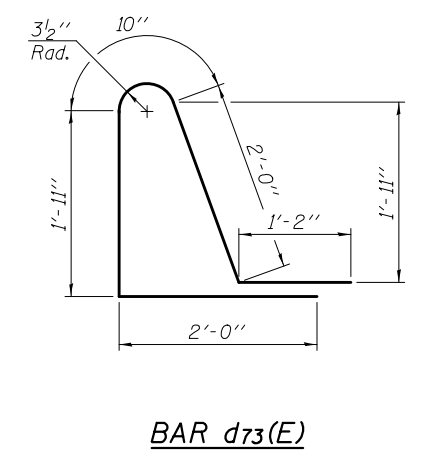
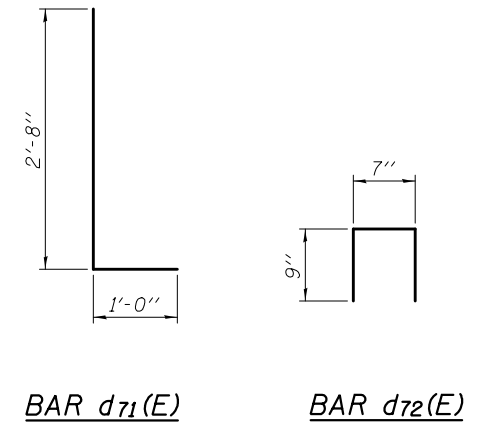
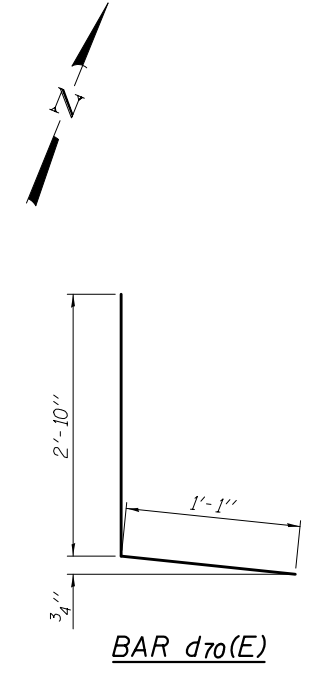
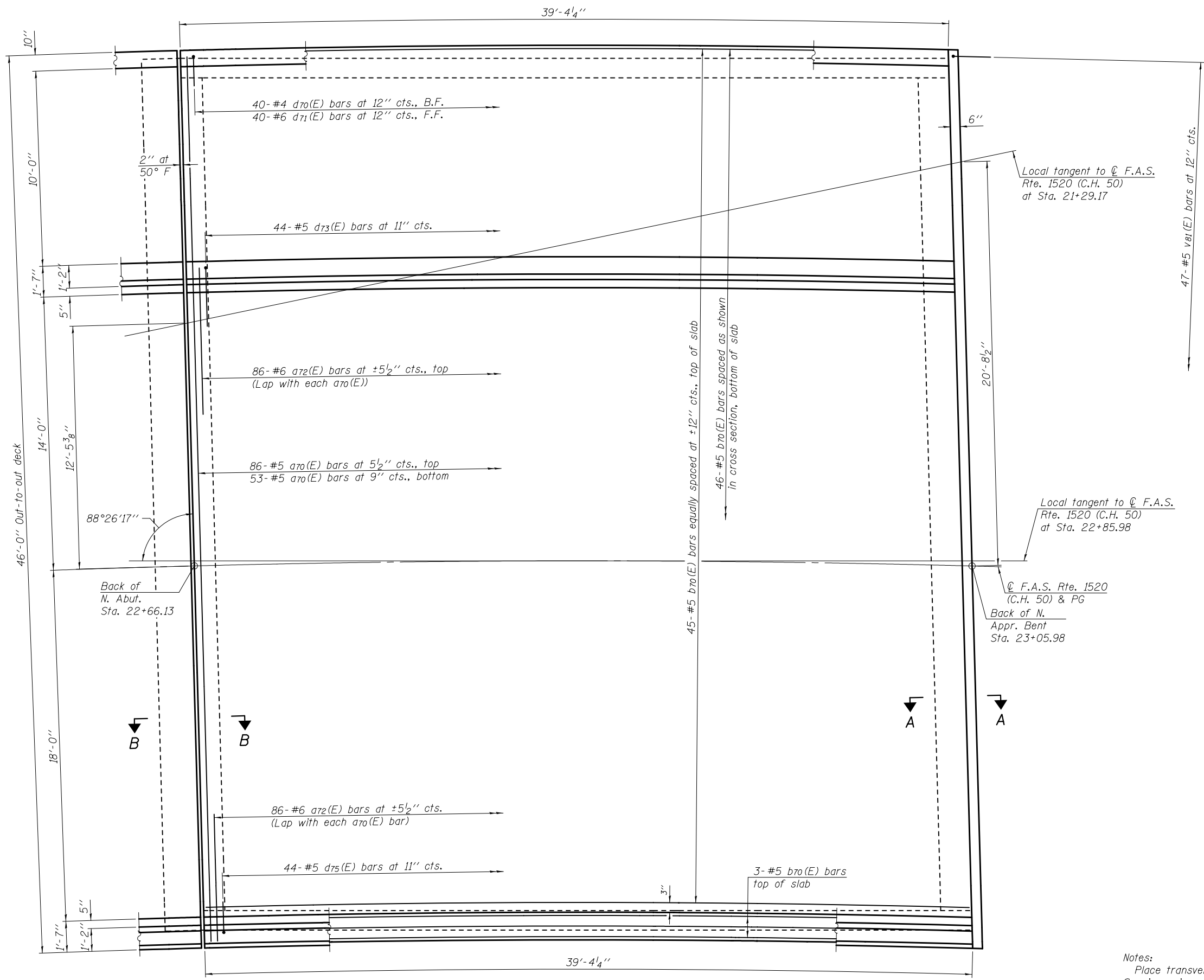
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. J...</i>	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl...</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOUTH VAULTED ABUTMENT APPROACH SPAN DETAILS  
STRUCTURE NO. 010 - 0289**

SHEET NO. 24 OF 62 SHEETS

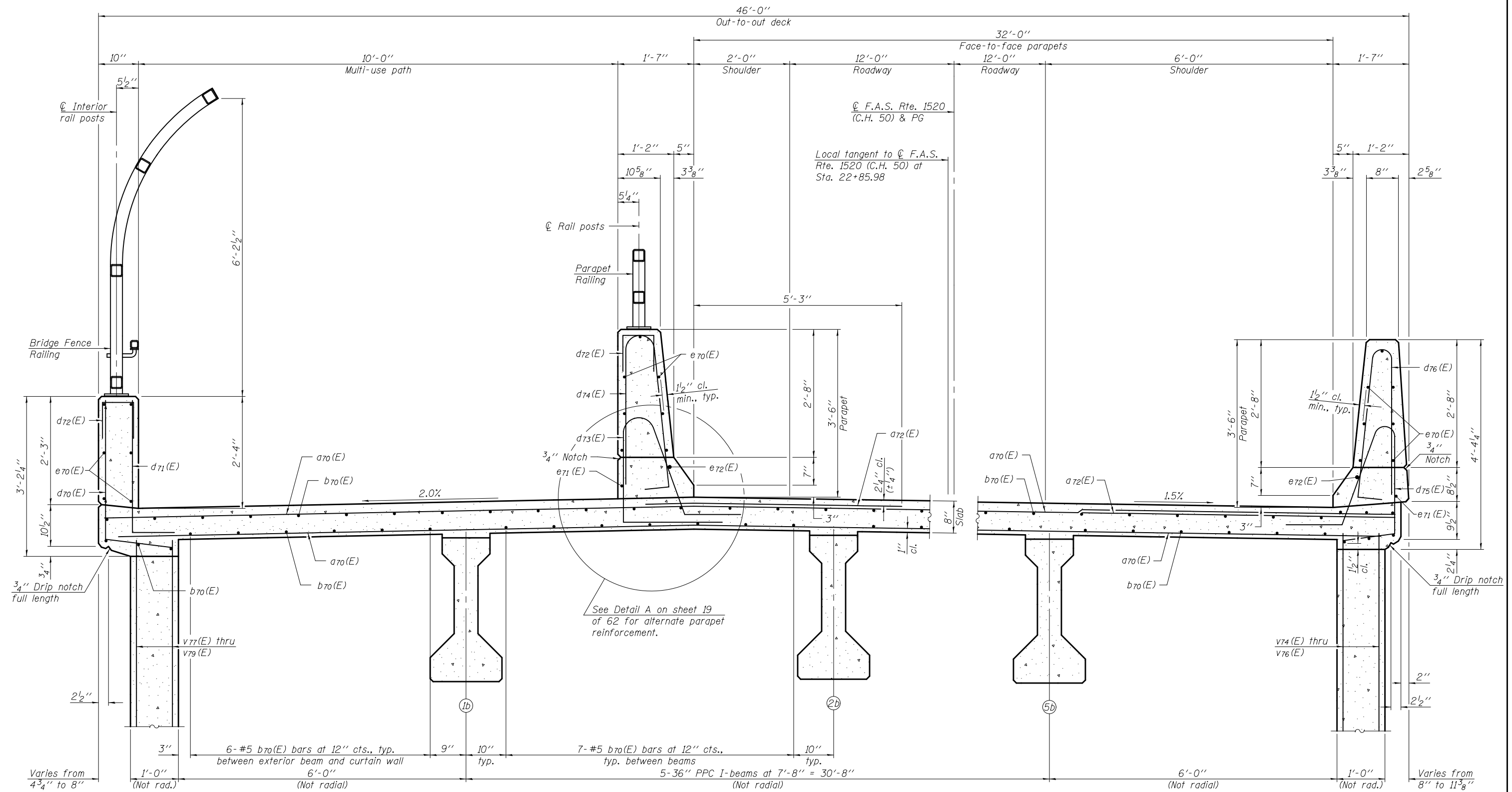
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	109
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				



Notes:  
 Place transverse reinforcement bars radially.  
 Spacings given are along beam 2b.  
 For Sections A-A and B-B, see sheet 28  
 of 62.

PLAN

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. Schaff</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>NORTH VAULTED ABUTMENT APPROACH SPAN STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 110	
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			CONTRACT NO. 70700					
DRAWN - MICHAEL B. MOSSMAN		REVISED			SHEET NO. 25 OF 62 SHEETS					
CHECKED - D.H.C. / N.R.B.					ILLINOIS FED. AID PROJECT					



**CROSS SECTION**  
(Looking North)

Notes  
 All horizontal dimensions are radial to  $\text{C.L. F.A.S. Rte. 1520 (C.H. 50)}$  except as noted.  
 Beams and curtain walls are parallel to the local tangent to  $\text{C.L. F.A.S. Rte. 1520 (C.H. 50)}$  at Sta. 22+85.98.

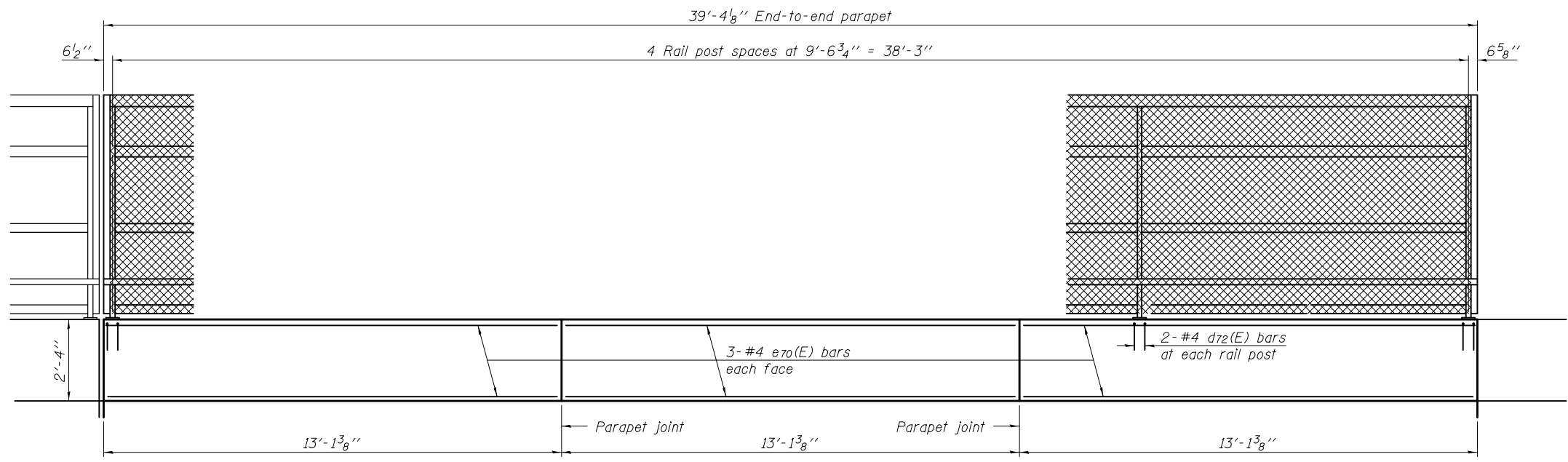
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

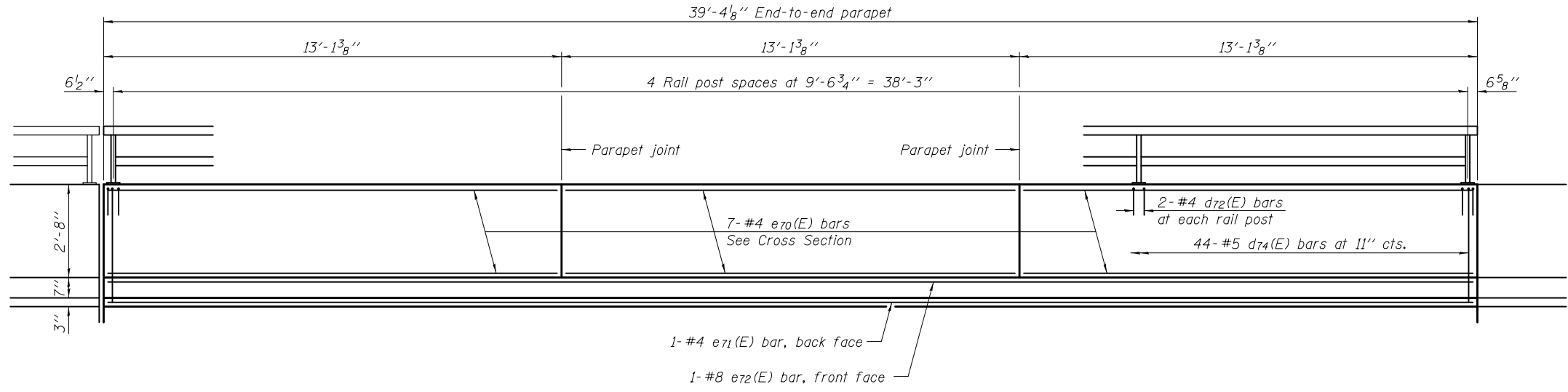
**NORTH VAULTED ABUTMENT APPROACH SPAN DETAILS**  
**STRUCTURE NO. 010 - 0289**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	111
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

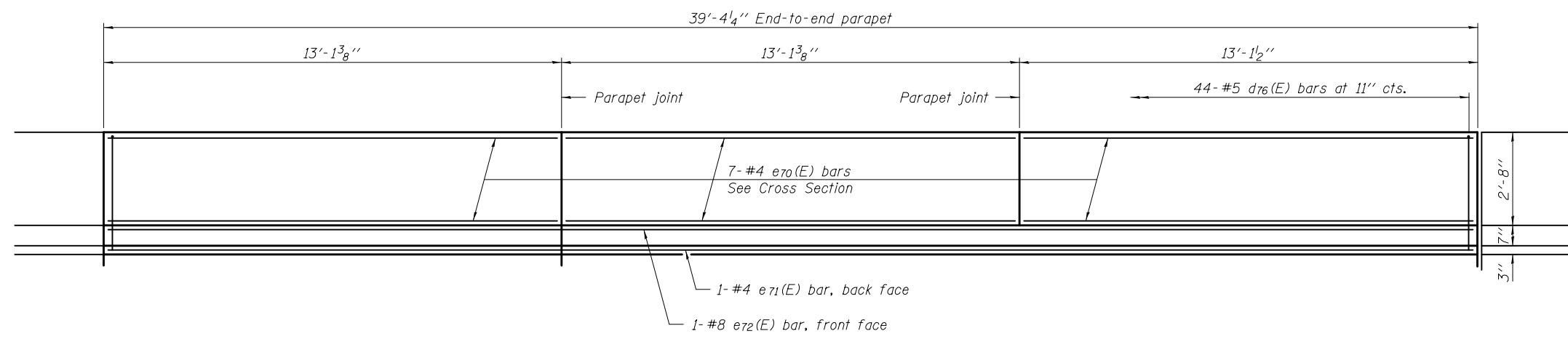
SHEET NO. 26 OF 62 SHEETS



**INSIDE ELEVATION OF WEST SIDEWALK PARAPET WALL**  
(Looking west)

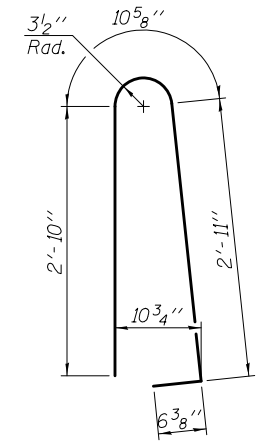


**INSIDE ELEVATION OF WEST ROADWAY PARAPET**  
(Looking west)

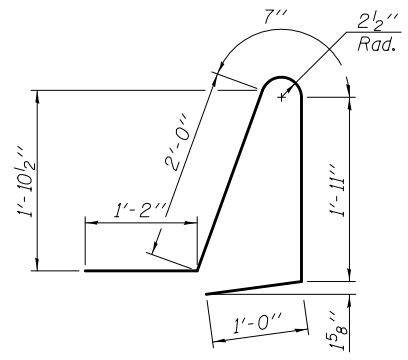


**INSIDE ELEVATION OF EAST ROADWAY PARAPET**  
(Looking east)

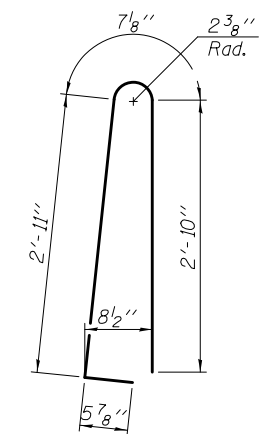
Notes  
Horizontal dimensions are taken along front face of parapet wall unless otherwise noted.  
See sheet 20 of 62 for parapet joint details.  
See sheets 35 and 36 of 62 for Bridge Fence Railing and Parapet Railing details.



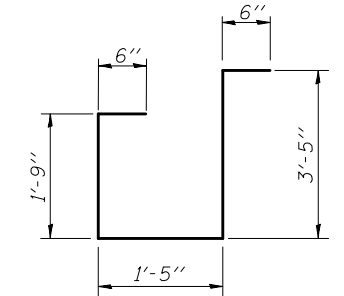
**BAR d74(E)**



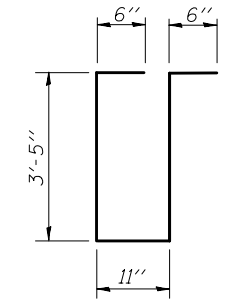
**BAR d75(E)**



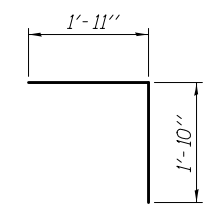
**BAR d76(E)**



**BAR s72(E)**

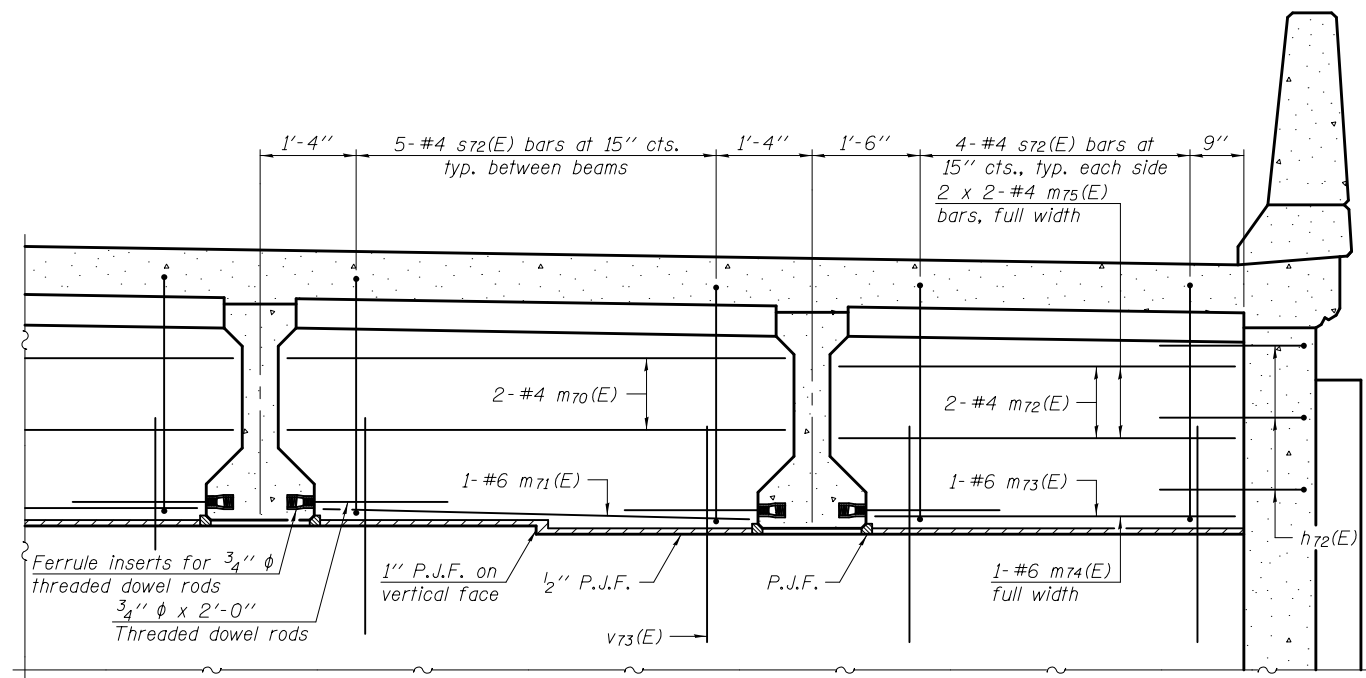


**BAR s73(E)**



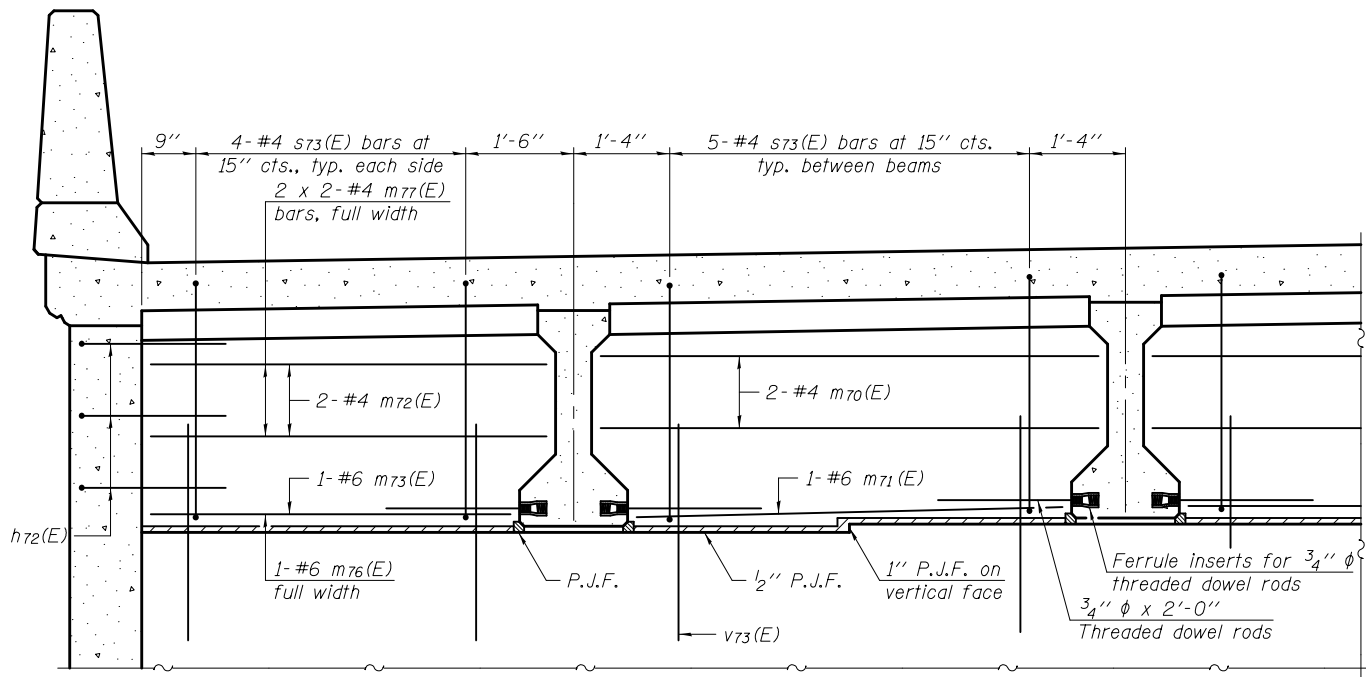
**BAR v81(E)**

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. J. [Signature]</i>	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>NORTH VAULTED ABUTMENT APPROACH SPAN DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 112	
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl [Signature]</i>	REVISED			CONTRACT NO. 70700					
DRAWN - MICHAEL B. MOSSMAN	REVISED	REVISED			ILLINOIS FED. AID PROJECT					
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES				SHEET NO. 27 OF 62 SHEETS					



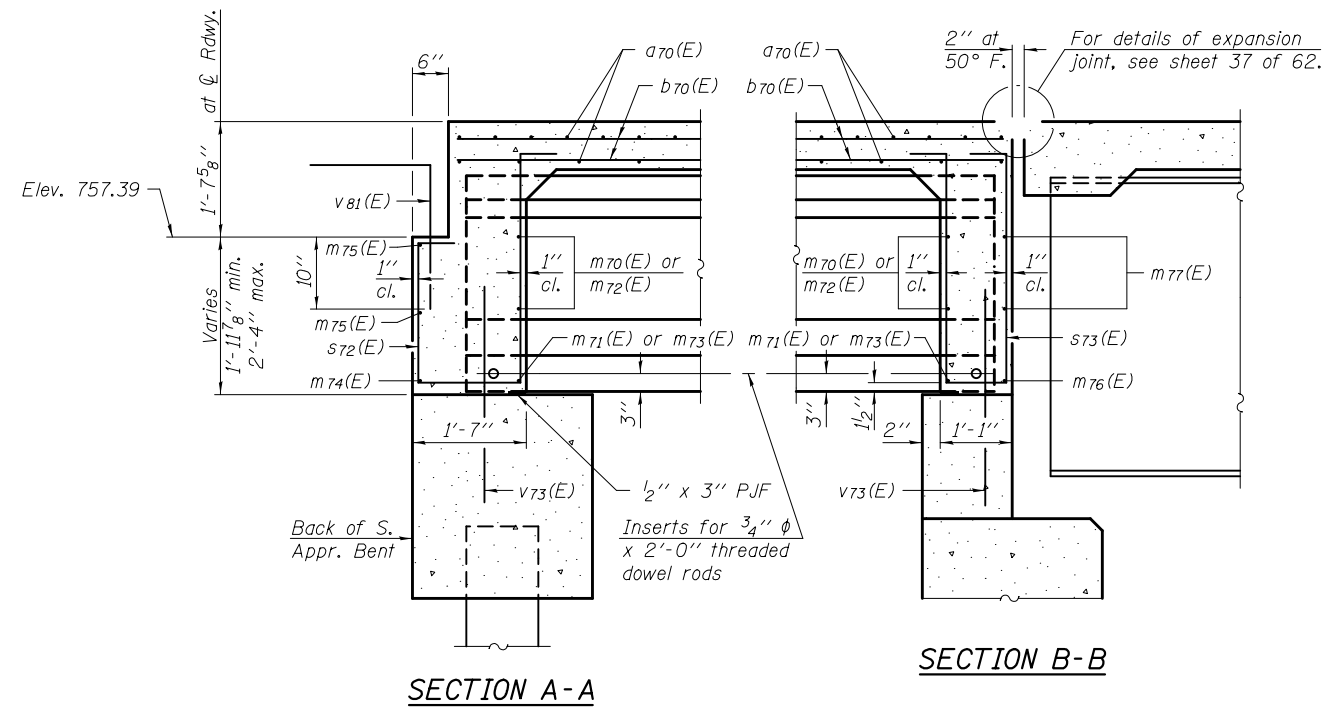
**DIAPHRAGM AT APPROACH BENT**

For location of m70(E) thru m75(E) bars see Section A-A.



**DIAPHRAGM AT ABUTMENT**

For location of m70(E) thru m73(E), m76(E), and m77(E) bars, see Section B-B.



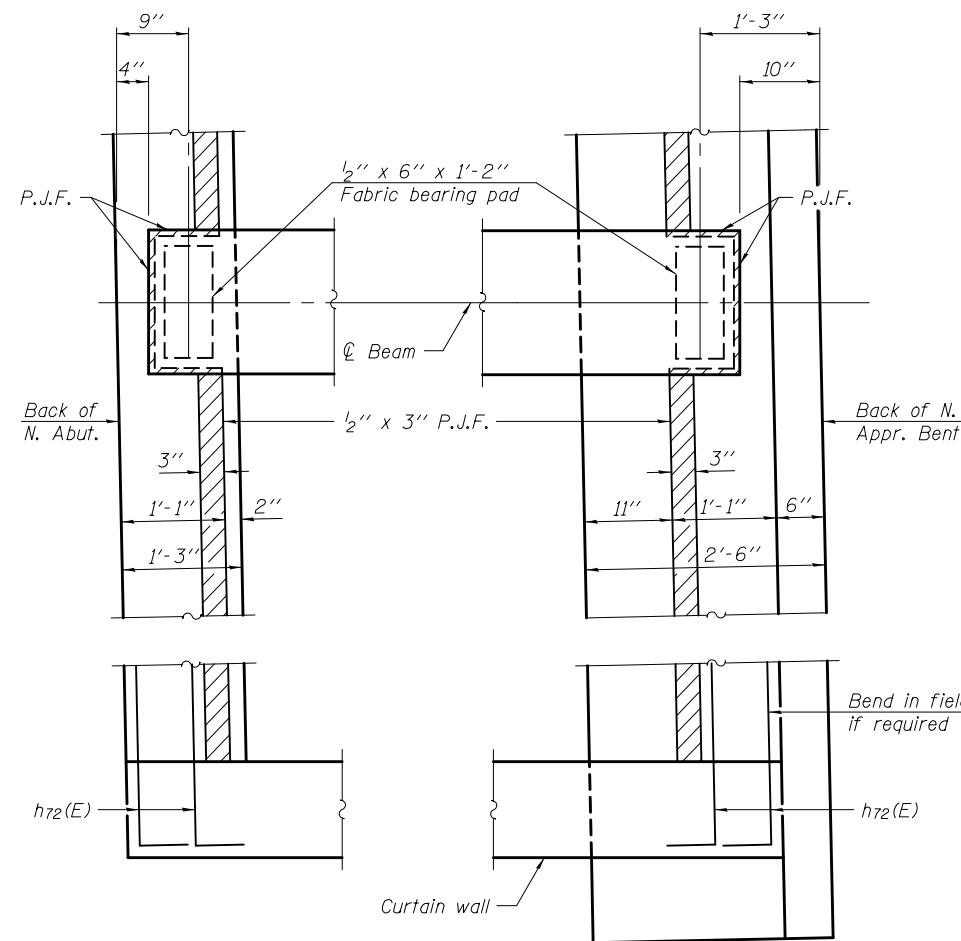
**SECTION A-A**

**SECTION B-B**

**NORTH APPROACH SPAN  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a70(E)	139	#5	45'-6"	—
a72(E)	172	#6	6'-6"	—
b70(E)	94	#5	39'-0"	—
d70(E)	40	#4	3'-11"	L
d71(E)	40	#6	3'-8"	L
d72(E)	20	#4	2'-1"	n
d73(E)	44	#5	7'-11"	Δ
d74(E)	44	#5	7'-2"	Δ
d75(E)	44	#5	6'-8"	Δ
d76(E)	44	#5	6'-10"	Δ
e70(E)	60	#4	12'-9"	—
e71(E)	2	#4	39'-0"	—
e72(E)	2	#8	39'-0"	—
m70(E)	16	#4	6'-10"	—
m71(E)	8	#6	5'-10"	—
m72(E)	8	#4	5'-5"	—
m73(E)	4	#6	4'-11"	—
m74(E)	1	#6	45'-11"	—
m75(E)	4	#4	24'-3"	—
m76(E)	1	#6	42'-4"	—
m77(E)	4	#4	22'-6"	—
s72(E)	28	#4	7'-7"	┌┐
s73(E)	28	#4	8'-9"	┌┐
v81(E)	47	#5	3'-9"	┌┐
Reinforcement Bars, Epoxy Coated Concrete Superstructure		Pound	15,480	
		Cu. Yd.	73.3	

Note:  
See sheets 52 thru 56 of 62 for h72(E) and v73(E) bars.  
Bars indicated thus 2 x 2-#4 etc. indicates 2 lines of bars with 2 lengths per line.



**PARTIAL PLAN**

**MINIMUM BAR LAP**

#4 bar = 2'-7"

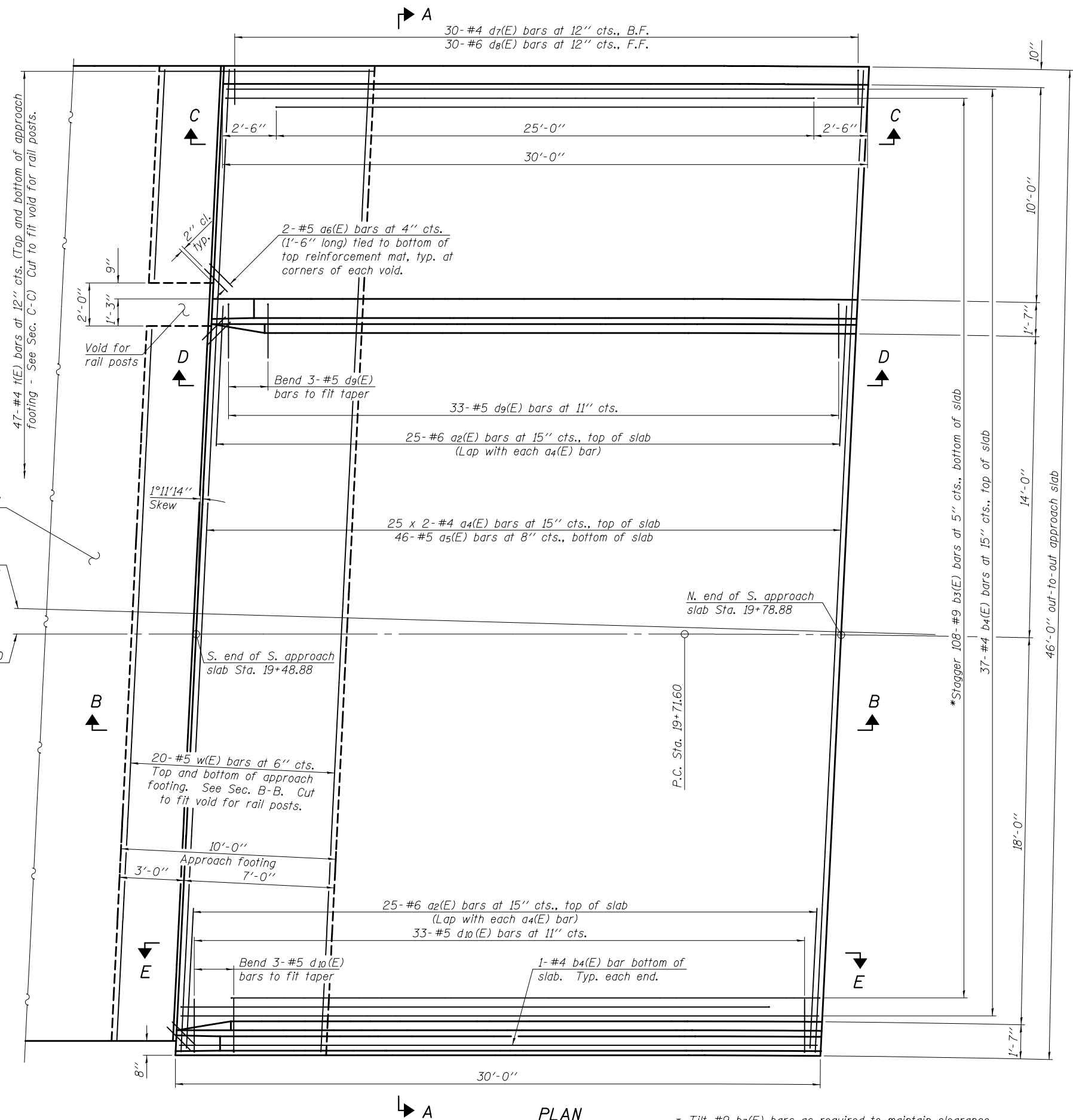
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. Schmitt</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**NORTH VAULTED ABUTMENT APPROACH SPAN DETAILS  
STRUCTURE NO. 010 - 0289**

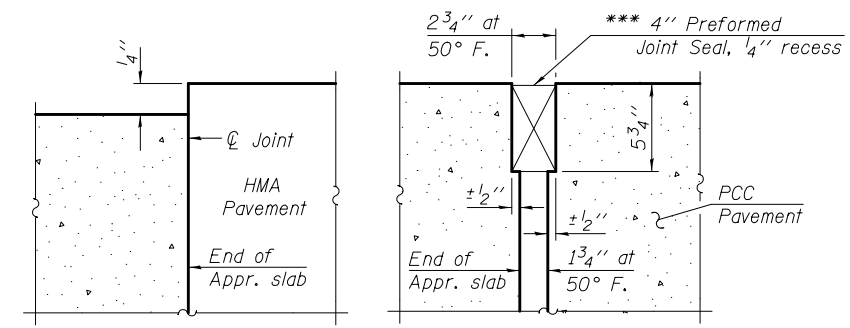
SHEET NO. 28 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	113
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				



Notes:  
 See sheet 30 of 62 for Sections A-A and B-B.  
 a4(E) and a5(E) bar spacings measured along  $\phi$  Rdwy.  
 See sheet 31 of 62 for Views C-C thru E-E.

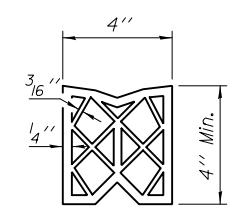
\*\*\* Cost included with Concrete Superstructure.



FLEXIBLE PAVEMENT

RIGID PAVEMENT

DETAIL A



PREFORMED JOINT SEAL

MINIMUM BAR LAP  
 #4 bar = 2'-1"

See Highway Standard 420401 for pavement connector

Local tangent to  $\phi$  F.A.S. Rte 1520 (C.H. 50) at Sta. 19+93.35

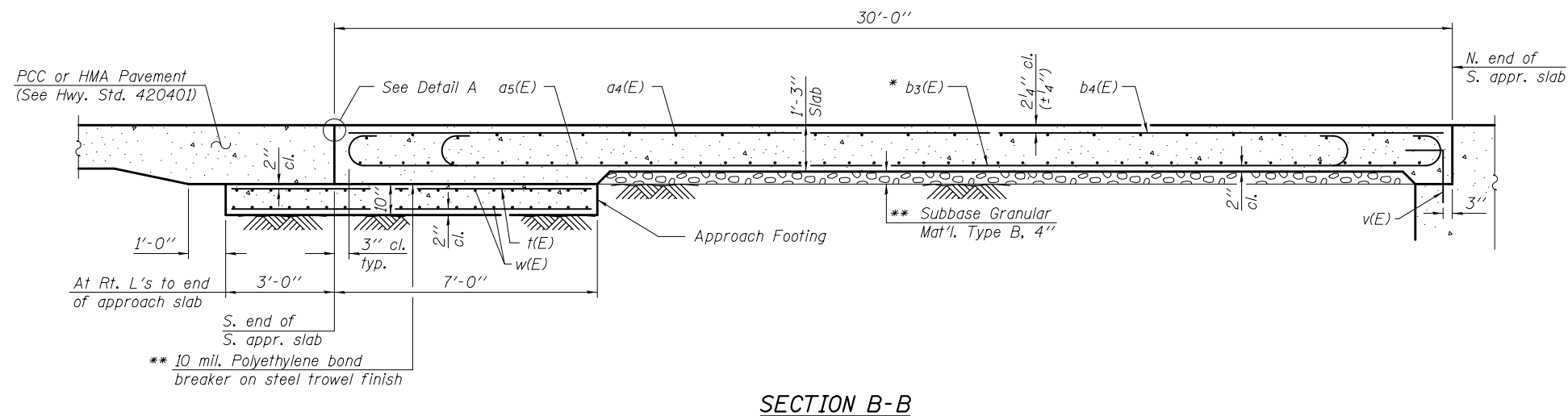
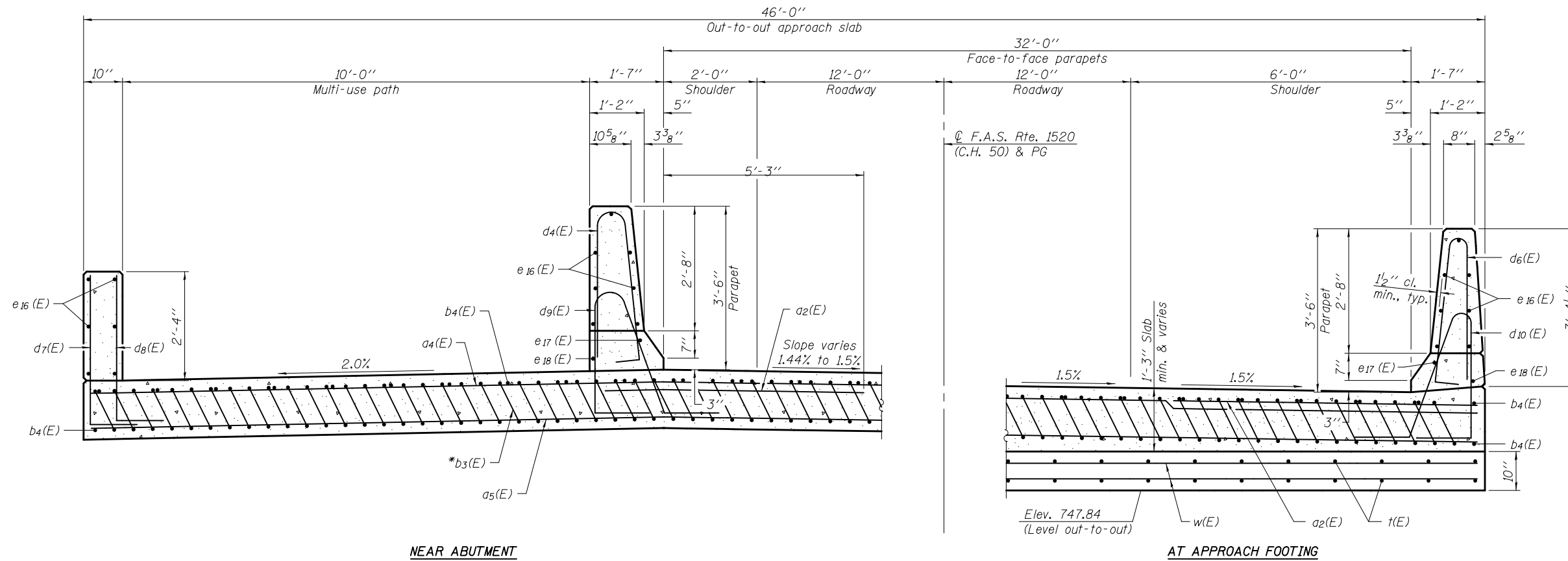
$\phi$  F.A.S. Rte. 1520 (C.H. 50) & PG

PLAN

\* Tilt #9 b3(E) bars as required to maintain clearance.

(Sheet 1 of 3)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. [Signature]</i>	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOUTH BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>[Signature]</i>	REVISED			74	10-4BR	CHAMPAIGN	290	114	
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			CONTRACT NO. 70700					
CHECKED - D.H.C. / N.R.B.					SHEET NO. 29 OF 62 SHEETS					



- \* Tilt #9 b<sub>3</sub>(E) bars as required to maintain clearance.
- \*\* Cost included with Concrete Superstructure.

Note:  
See sheet 29 of 62 for Detail A.

(Sheet 2 of 3)

DESIGNED - DEWEY H. COULTAS  
 CHECKED - NICHOLAS R. BARNETT  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

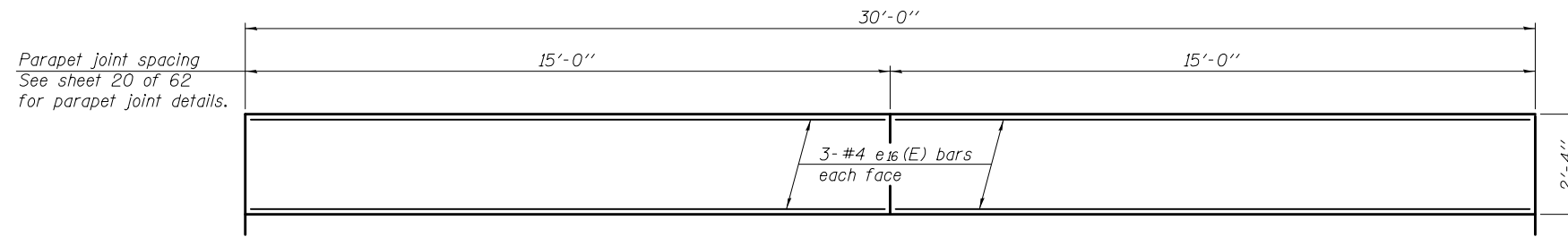
**SOUTH BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 010 - 0289**

SHEET NO. 30 OF 62 SHEETS

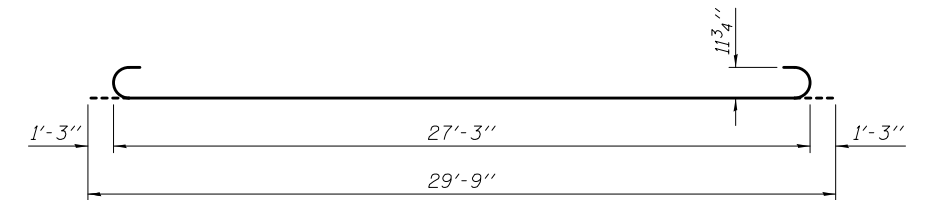
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	115
CONTRACT NO. 70700				

ILLINOIS FED. AID PROJECT

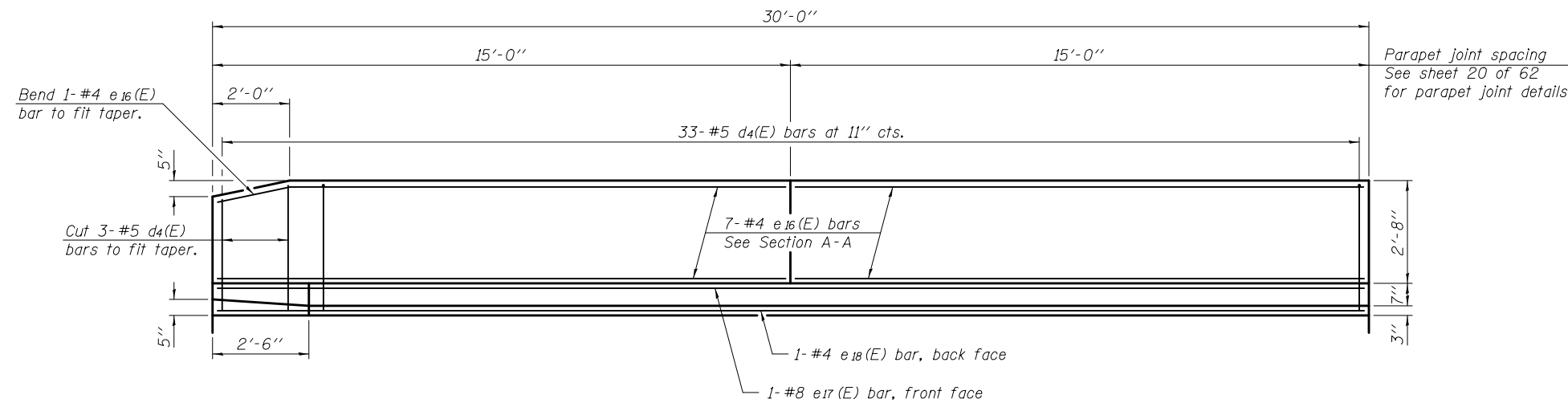
Notes:  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For  $v_{B1}(E)$  bar details, see sheet 23 of 62.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 See sheet 20 of 62 for  $d_4(E)$  and  $d_6(E)$  bar bending diagrams.  
 For additional parapet details, see sheet 30 of 62.  
 Bars indicated thus 25 x 2-#4 etc. indicates 25 lines of bars with 2 lengths per line.



**VIEW C-C**  
 (Inside elevation of west sidewalk parapet wall)

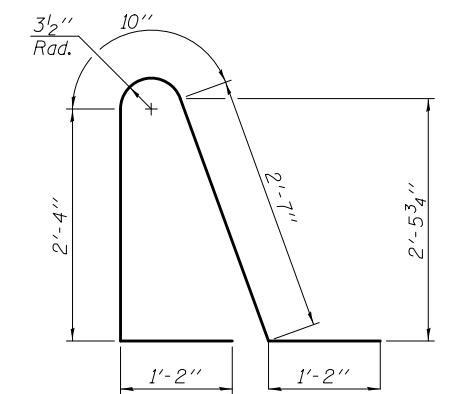


**BAR  $b_3(E)$**

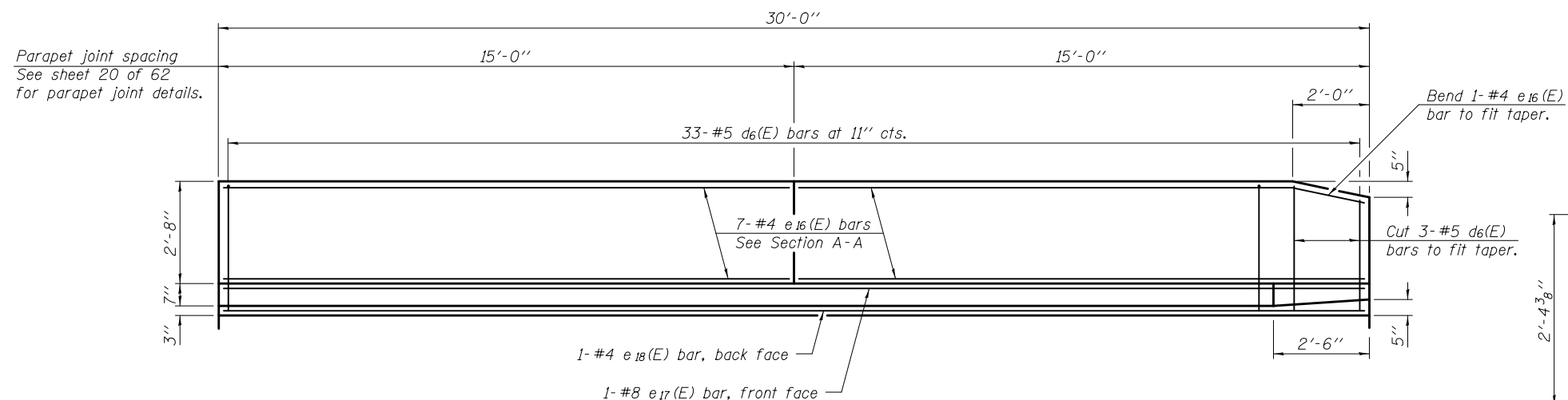


**VIEW D-D**  
 (Inside elevation of west roadway parapet)

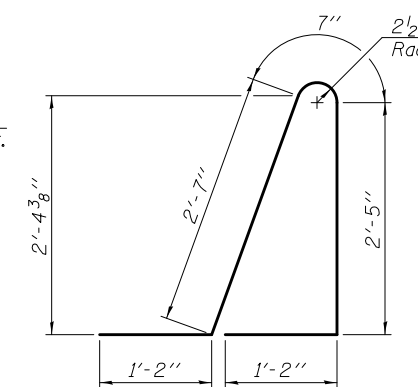
**BARS  $d_7(E)$  &  $d_8(E)$**



**BAR  $d_9(E)$**



**VIEW E-E**  
 Inside elevation of east roadway parapet



**BAR  $d_{10}(E)$**

**SOUTH APPROACH SLAB  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$a_2(E)$	50	#6	6'-6"	—
$a_4(E)$	50	#4	24'-0"	—
$a_5(E)$	46	#5	45'-8"	—
$a_6(E)$	6	#5	1'-6"	—
$b_3(E)$	108	#9	29'-9"	U
$b_4(E)$	39	#4	29'-8"	—
$d_4(E)$	33	#5	7'-2"	U
$d_6(E)$	33	#5	6'-10"	U
$d_7(E)$	30	#4	4'-2"	—
$d_8(E)$	30	#6	4'-2"	—
$d_9(E)$	33	#5	8'-1"	U
$d_{10}(E)$	33	#5	7'-11"	U
$e_{16}(E)$	40	#4	14'-8"	—
$e_{17}(E)$	2	#8	29'-8"	—
$e_{18}(E)$	2	#4	29'-8"	—
$t(E)$	94	#4	9'-8"	—
$w(E)$	40	#5	45'-8"	—
Concrete Superstructure		Cu. Yd.	80.2	
Concrete Structures		Cu. Yd.	14.2	
Reinforcement Bars, Epoxy Coated		Pound	19,600	

(Sheet 3 of 3)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Jaime F. J. [Signature]</i>	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

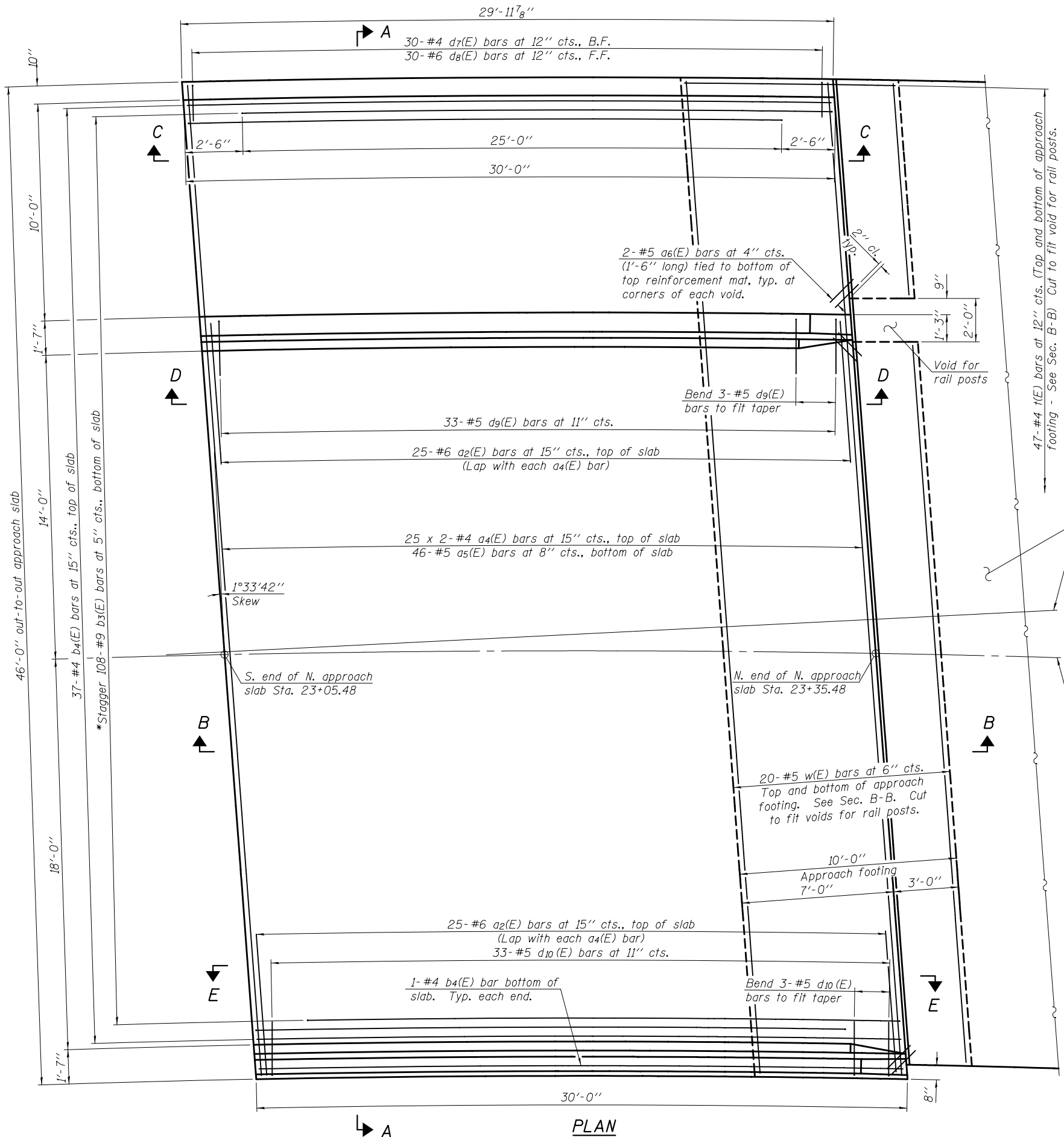
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SOUTH BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 010 - 0289**

SHEET NO. 31 OF 62 SHEETS

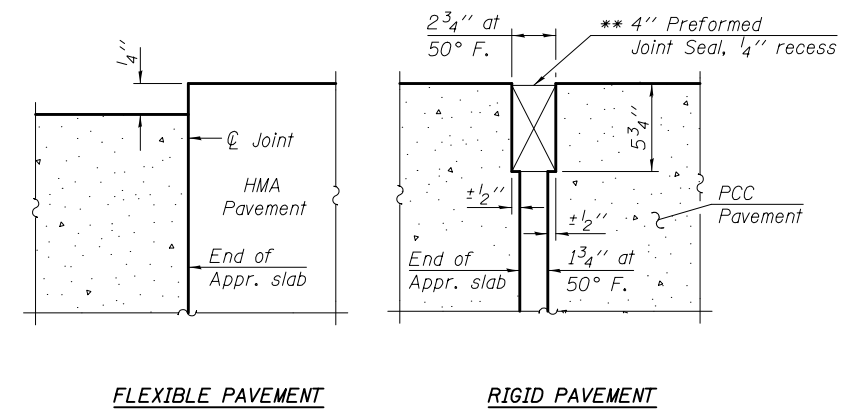
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	116
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	



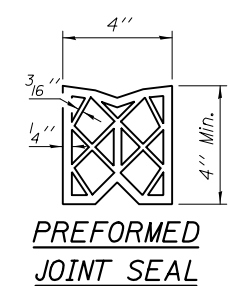


Notes:  
 See sheet 33 of 62 for Sections A-A and B-B.  
 a4(E) and a5(E) bar spacings measured along  $\varnothing$  Rdwy.  
 See sheet 34 of 62 for Views C-C thru E-E.

\*\* Cost included with Concrete Superstructure.



DETAIL A



MINIMUM BAR LAP  
 #4 bar = 2'-1\"/>

\* Tilt #9 b3(E) bars as required to maintain clearance.

See Highway Standard 420401 for pavement connector

Local tangent to  $\varnothing$  F.A.S. Rte 1520 (C.H. 50) at Sta. 22+85.98

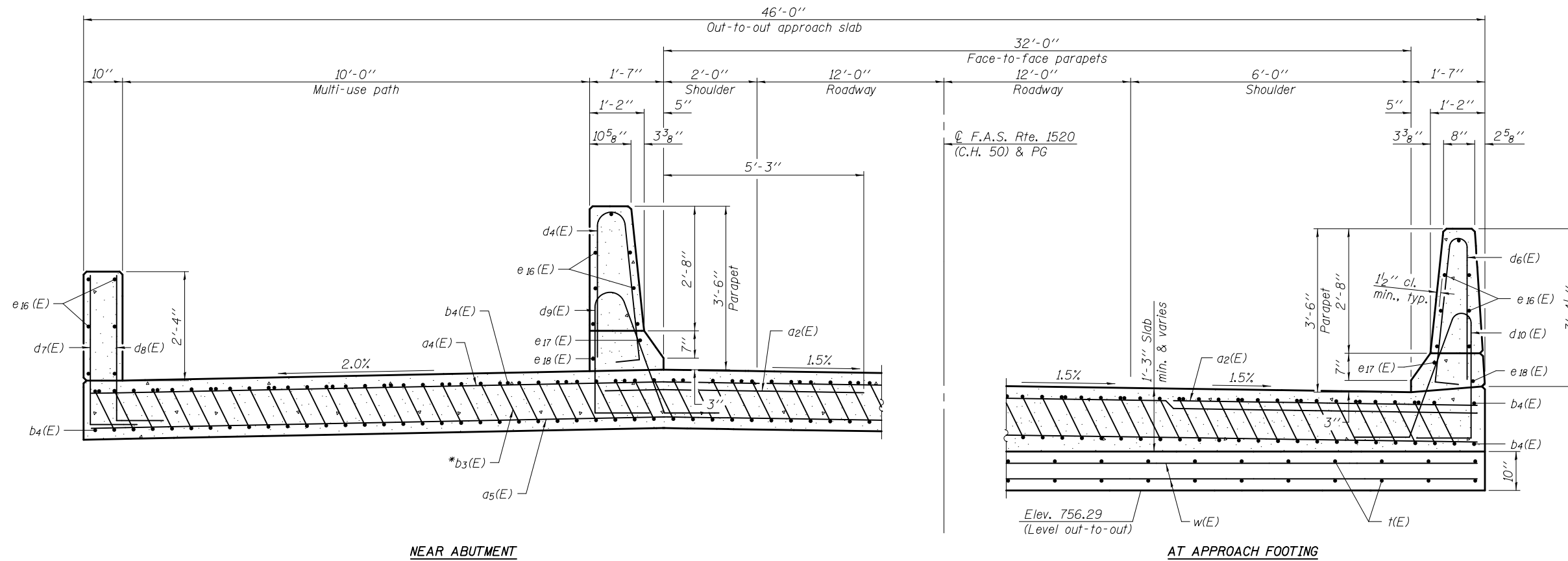
$\varnothing$  F.A.S. Rte. 1520 (C.H. 50) & PG



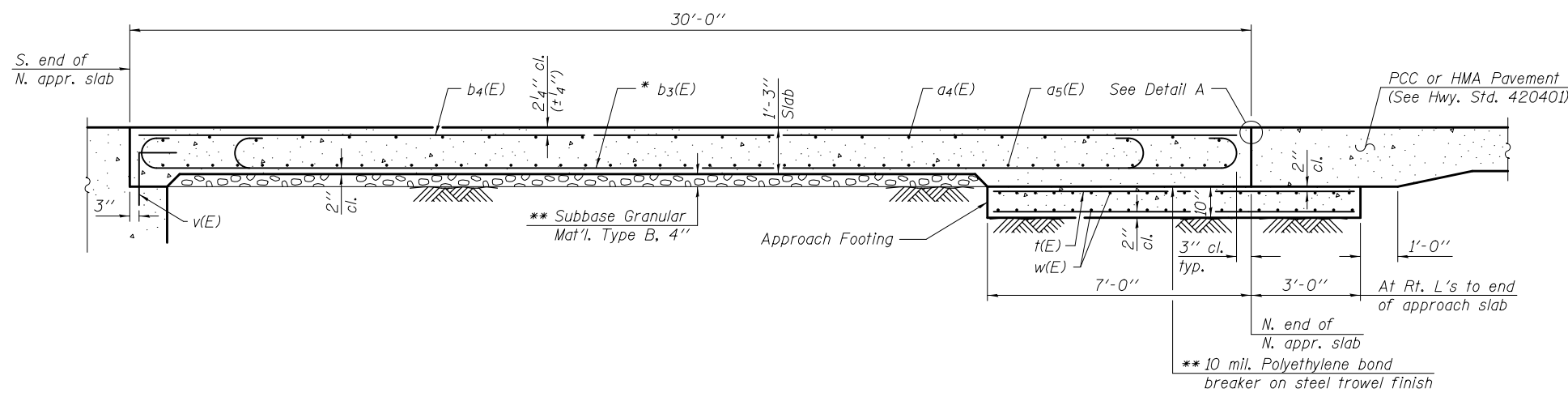
PLAN

(Sheet 1 of 3)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Jaime F. Joffe</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>NORTH BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 117
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			CONTRACT NO. 70700				
DRAWN - MICHAEL B. MOSSMAN	REVISED	SHEET NO. 32 OF 62 SHEETS							
CHECKED - D.H.C. / N.R.B.	REVISED	ILLINOIS FED. AID PROJECT							



SECTION A-A



SECTION B-B

- \* Tilt #9 b3(E) bars as required to maintain clearance.
- \*\* Cost included with Concrete Superstructure.

Note:  
See sheet 32 of 62 for Detail A.

(Sheet 2 of 3)

DESIGNED - DEWEY H. COULTAS  
 CHECKED - NICHOLAS R. BARNETT  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

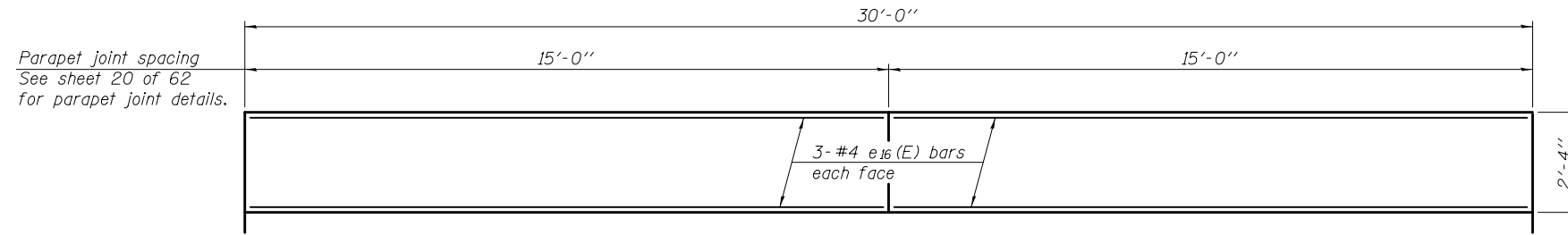
NORTH BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 010 - 0289

SHEET NO. 33 OF 62 SHEETS

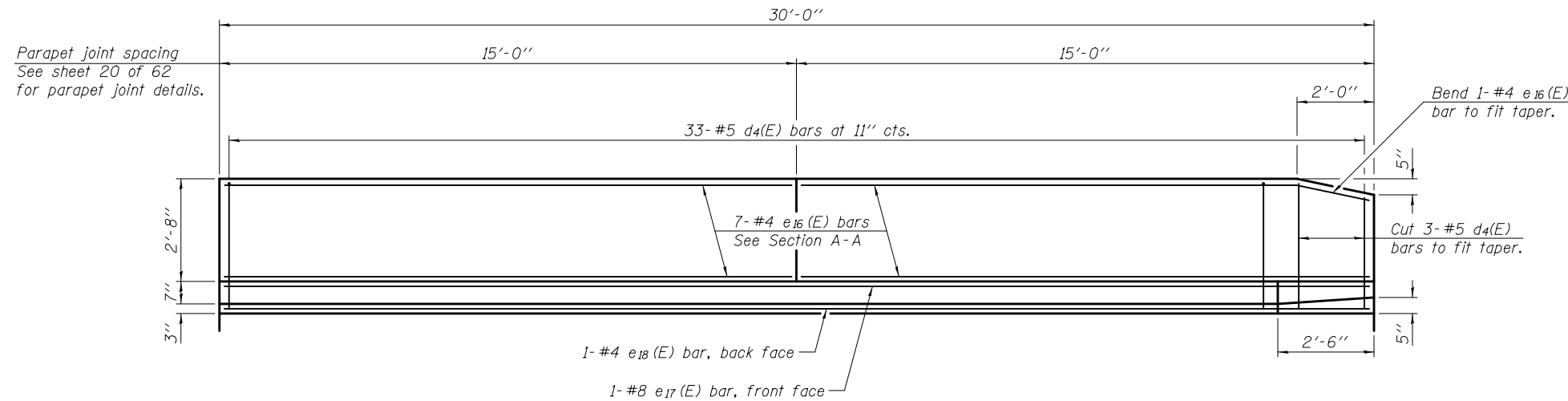
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	118
				CONTRACT NO. 70700

ILLINOIS FED. AID PROJECT

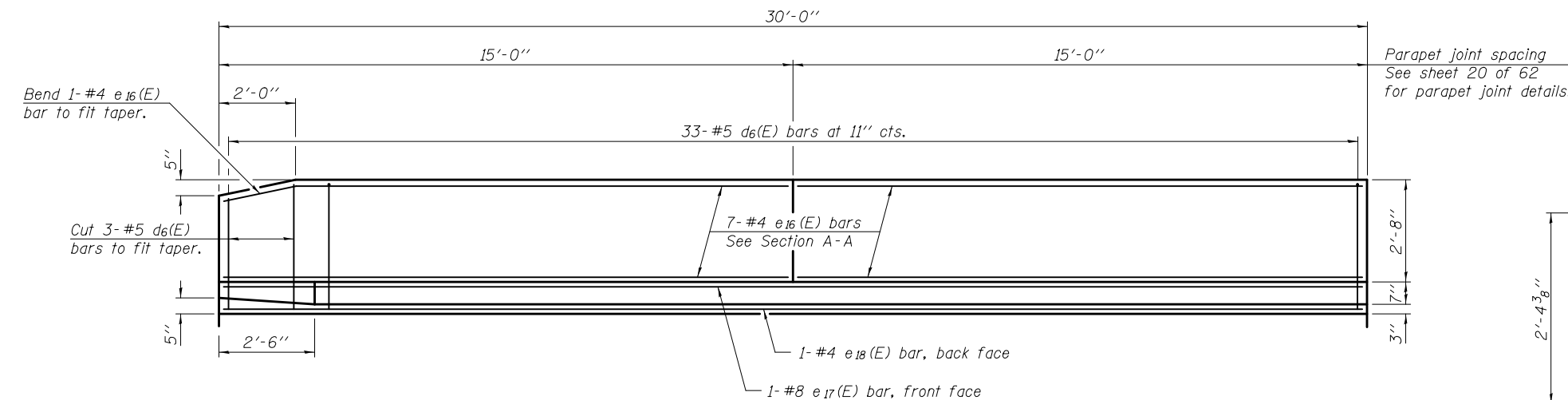
Notes:  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For  $v_{B1}(E)$  bar details, see sheet 27 of 62.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 See sheet 20 of 62 for  $d_4(E)$  and  $d_6(E)$  bar bending diagrams.  
 For additional parapet details, see sheet 33 of 62.  
 Bars indicated thus 25 x 2-#4 etc. indicates 25 lines of bars with 2 lengths per line.



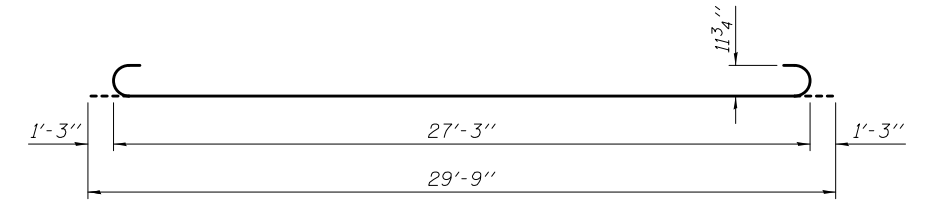
**VIEW C-C**  
 (Inside elevation of west sidewalk parapet wall)



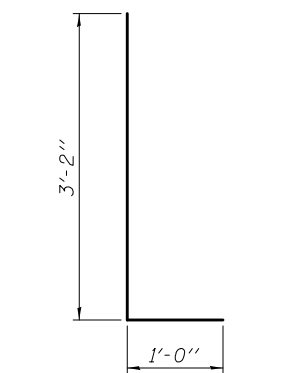
**VIEW D-D**  
 (Inside elevation of west roadway parapet)



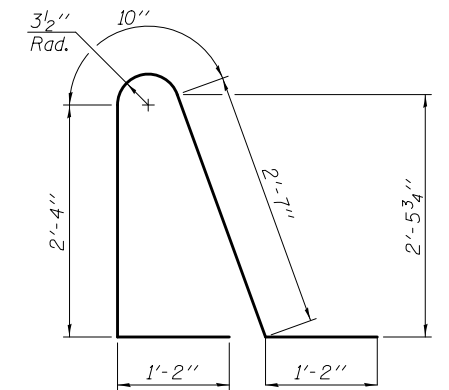
**VIEW E-E**  
 (Inside elevation of east roadway parapet)



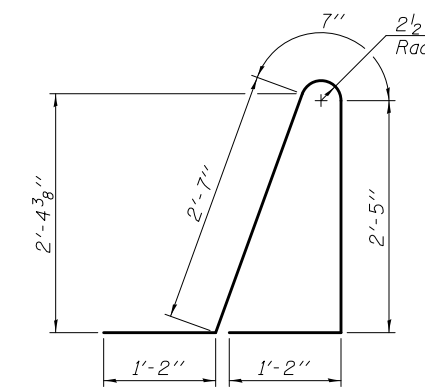
**BAR  $b_3(E)$**



**BARS  $d_7(E)$  &  $d_8(E)$**



**BAR  $d_9(E)$**



**BAR  $d_{10}(E)$**

**NORTH APPROACH SLAB  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$a_2(E)$	50	#6	6'-6"	—
$a_4(E)$	50	#4	24'-0"	—
$a_5(E)$	46	#5	45'-8"	—
$a_6(E)$	6	#5	1'-6"	—
$b_3(E)$	108	#9	29'-9"	U
$b_4(E)$	39	#4	29'-8"	—
$d_4(E)$	33	#5	7'-2"	U
$d_6(E)$	33	#5	6'-10"	U
$d_7(E)$	30	#4	4'-2"	—
$d_8(E)$	30	#6	4'-2"	—
$d_9(E)$	33	#5	8'-1"	U
$d_{10}(E)$	33	#5	7'-11"	U
$e_{16}(E)$	40	#4	14'-8"	—
$e_{17}(E)$	2	#8	29'-8"	—
$e_{18}(E)$	2	#4	29'-8"	—
$t(E)$	94	#4	9'-8"	—
$w(E)$	40	#5	45'-8"	—
Concrete Superstructure		Cu. Yd.	79.3	
Concrete Structures		Cu. Yd.	14.2	
Reinforcement Bars, Epoxy Coated		Pound	19,600	

(Sheet 3 of 3)

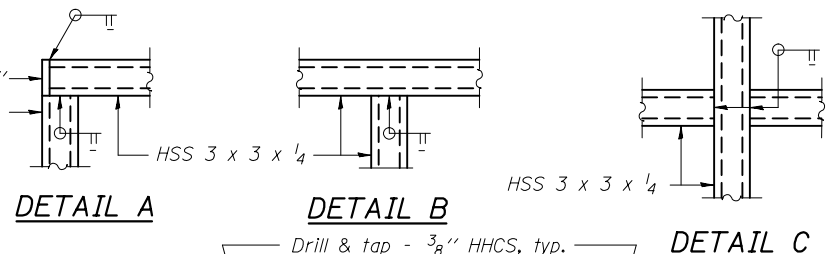
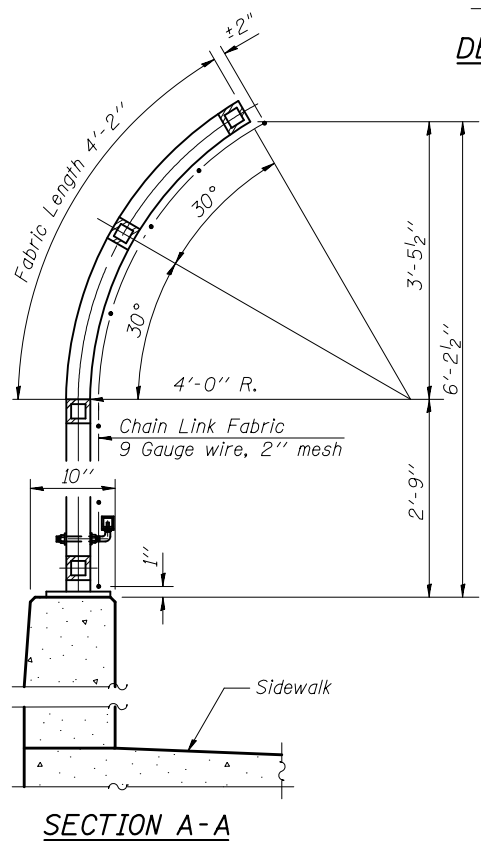
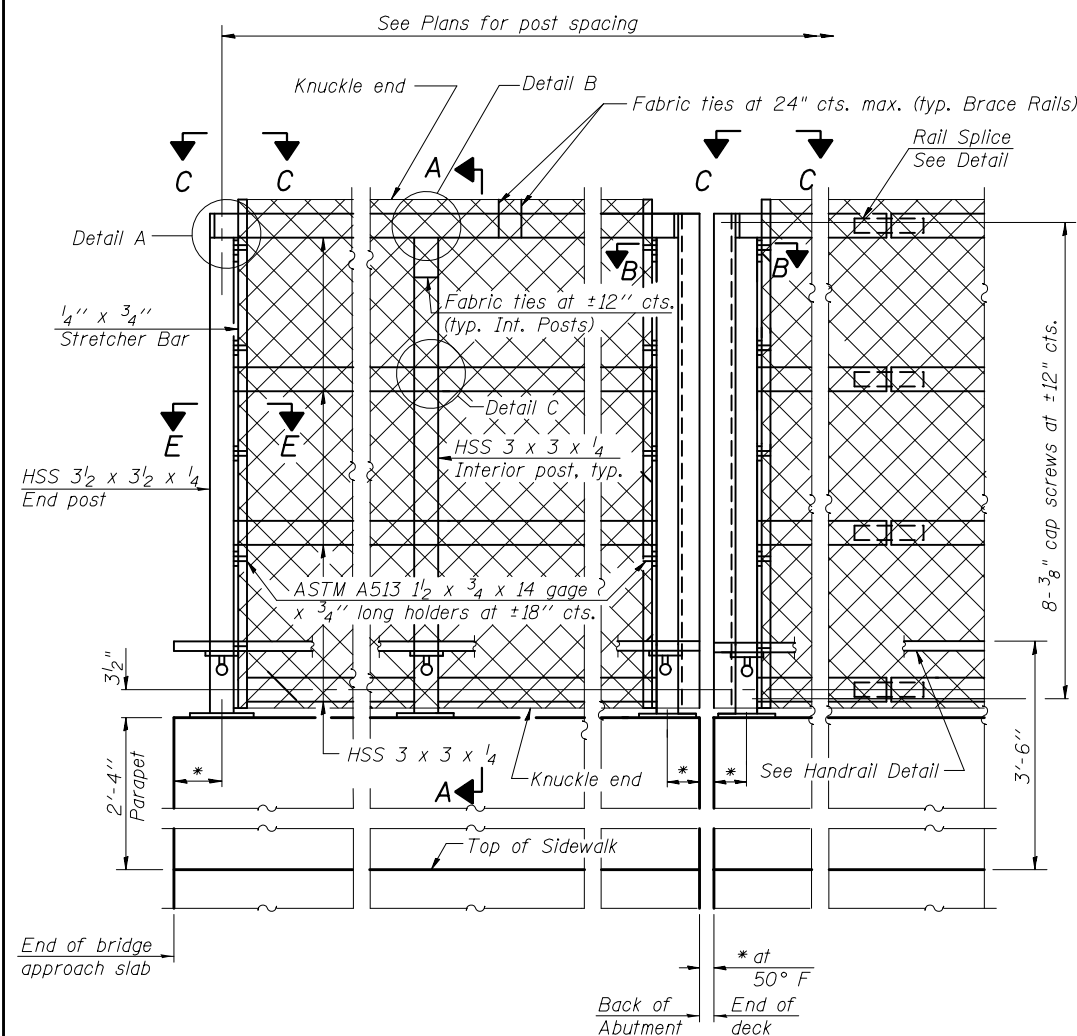
DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. J...</i>	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl...</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

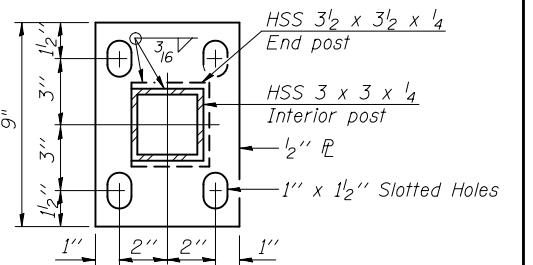
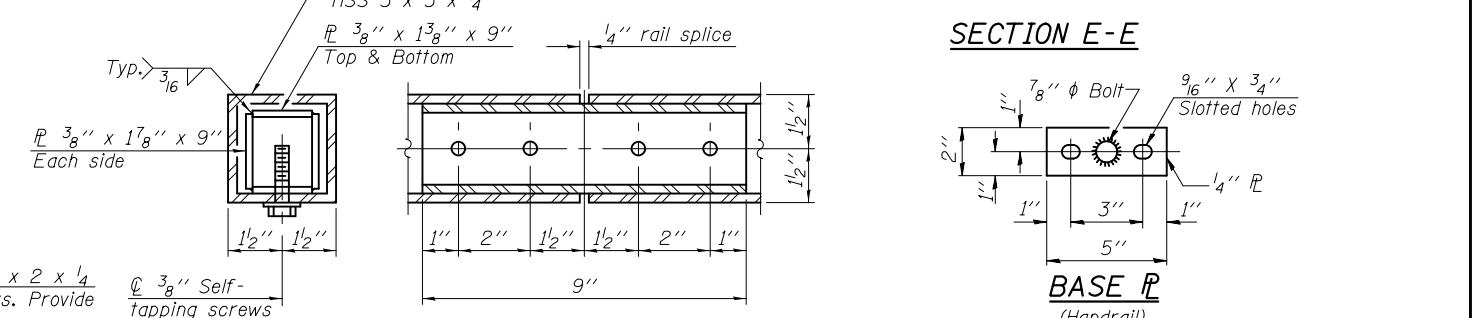
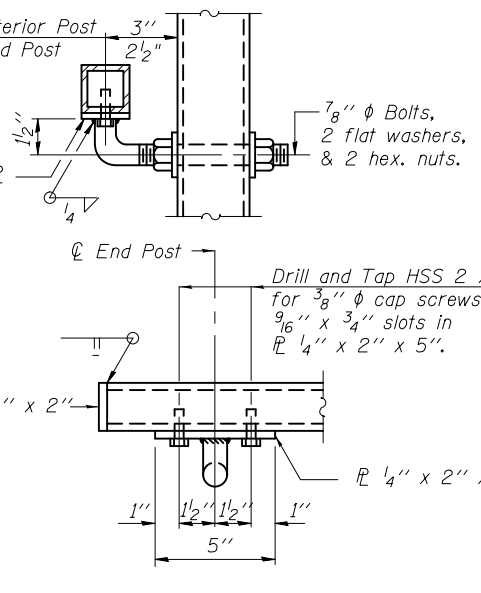
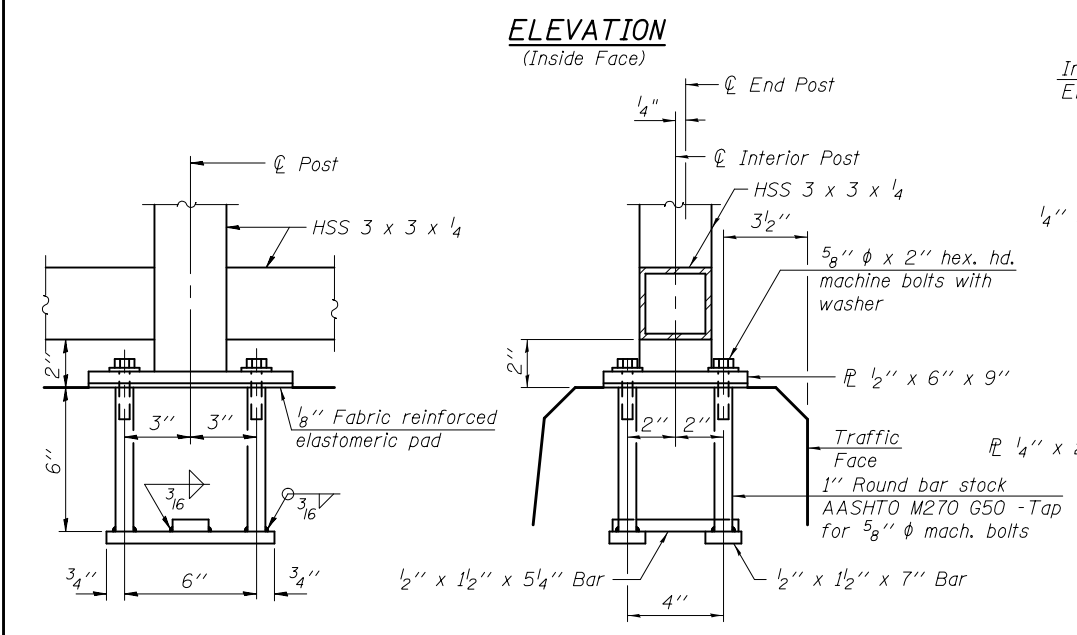
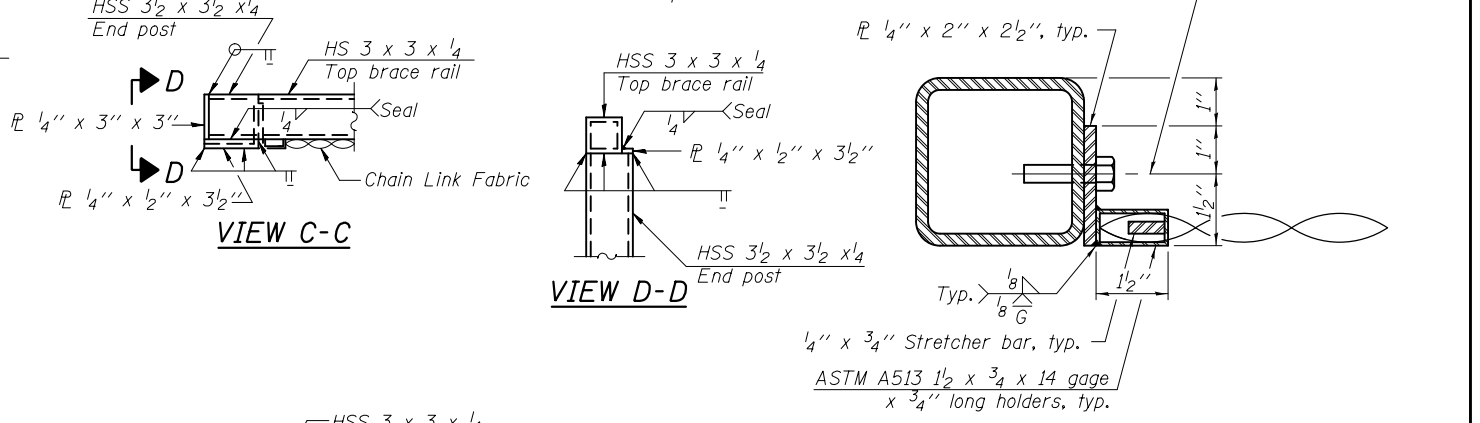
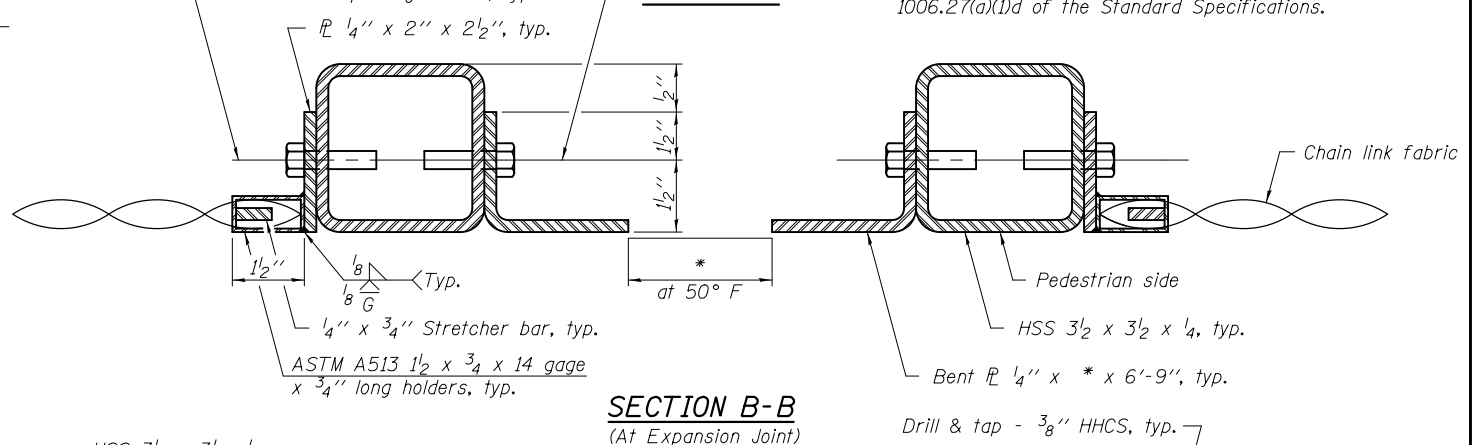
**NORTH BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 010 - 0289**

SHEET NO. 34 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	119
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700	



Notes:  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications. All of these elements, except the chain link fabric and ties, shall also be powder coated. At a minimum, the powder coating process shall consist of a zinc phosphate pretreatment/wash, a gray zinc rich primer coat, and a black top coat.  
 The galvanized chain link fabric and ties shall be vinyl coated black according to Section 509 and Article 1006.27(a)(1)d of the Standard Specifications.



**ANCHOR BOLT DETAILS**  
 In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Fence Railing	Foot	335

R-32  
 7-1-10

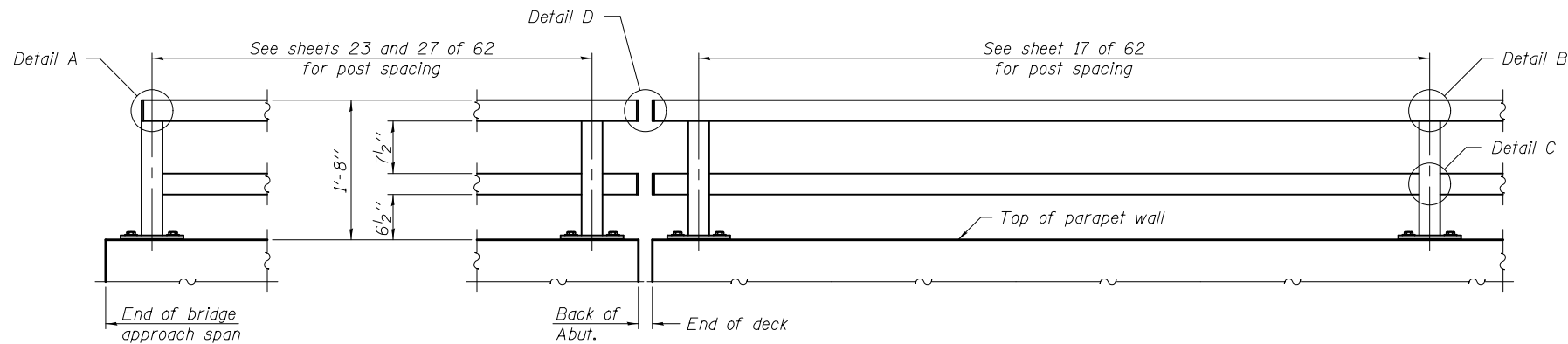
\*Variable - See Plans  
 (10'-0" Maximum Post Spacing)

DESIGNED - DEWEY H. COULTAS	EXAMINED - [Signature]	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	PASSED - [Signature]	
DRAWN - MICHAEL B. MOSSMAN		
CHECKED - D.H.C. / N.R.B.		

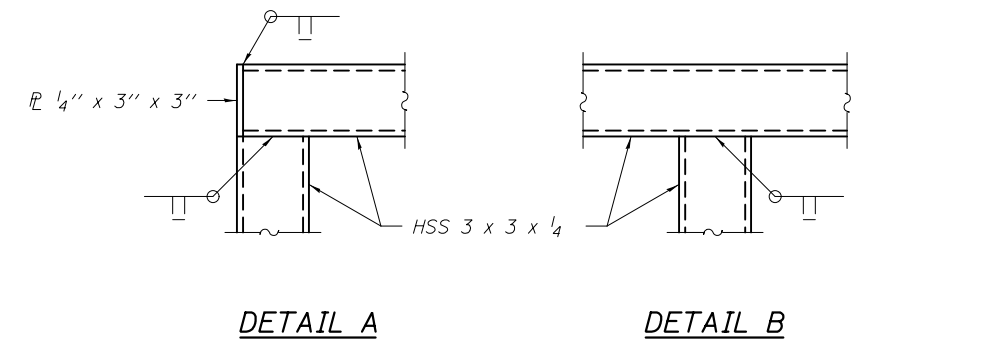
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE FENCE RAILING, PARAPET MOUNTED  
 STRUCTURE NO. 010 - 0289**

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	120
CONTRACT NO. 70700				

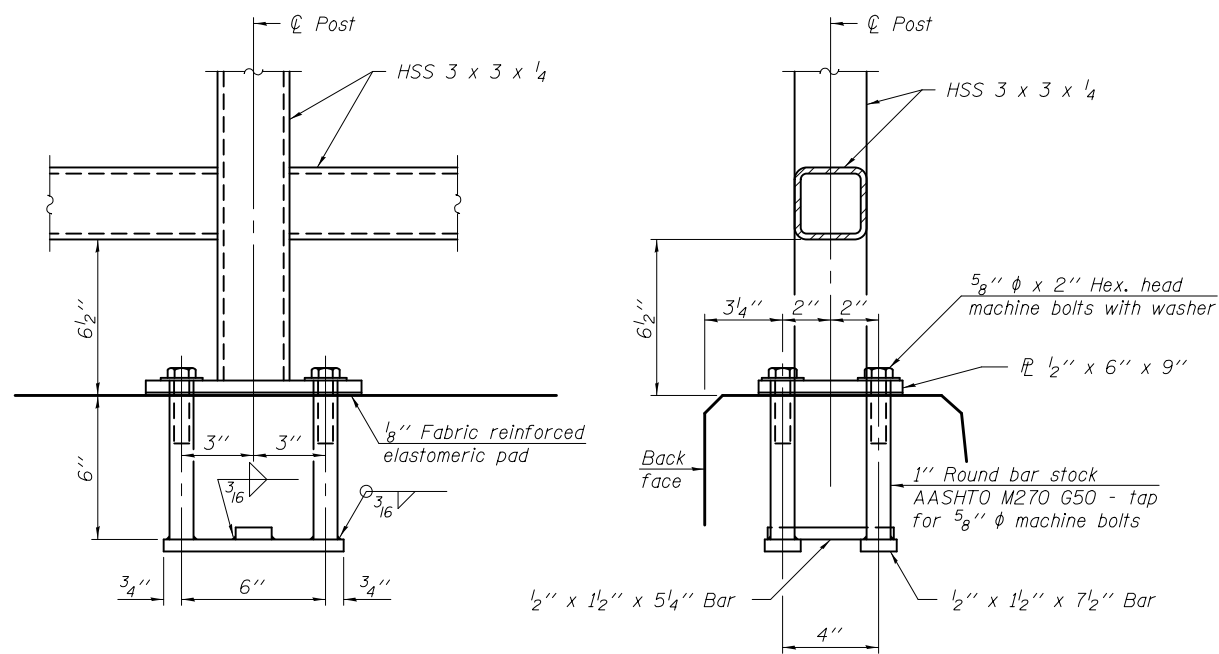


**PARAPET RAILING ELEVATION**



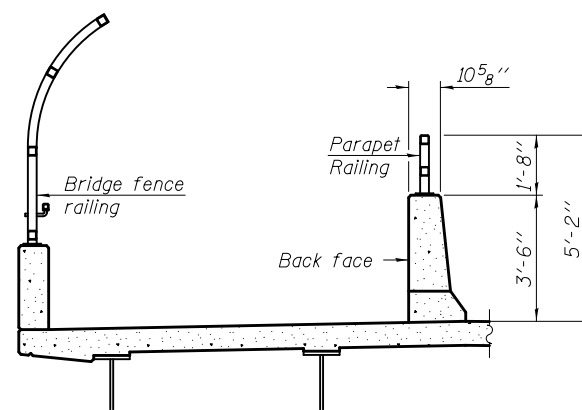
**DETAIL A**

**DETAIL B**

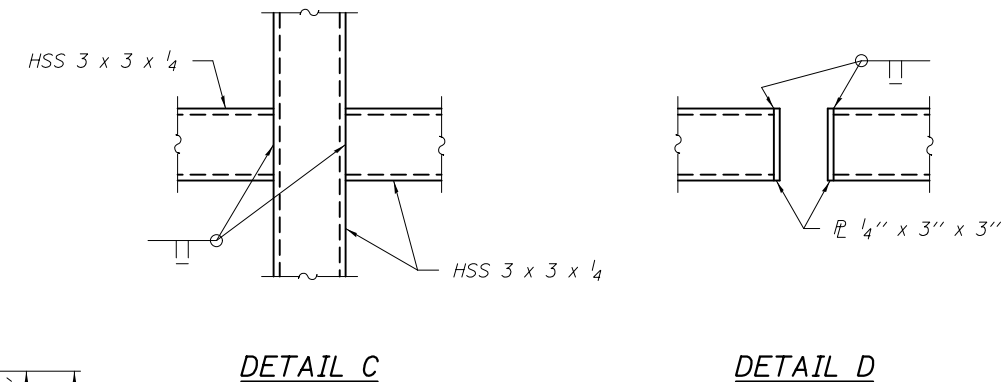


**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8"  $\phi$  anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



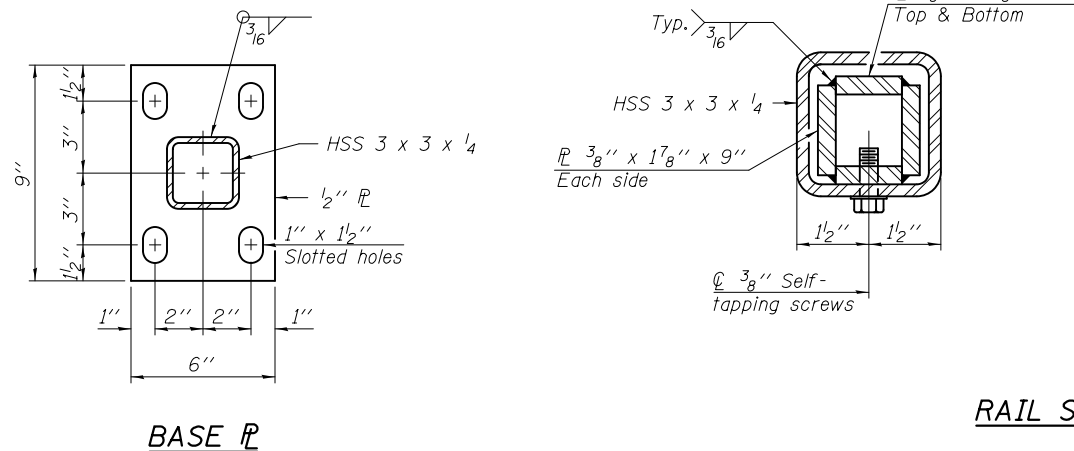
**SECTION THRU DECK**



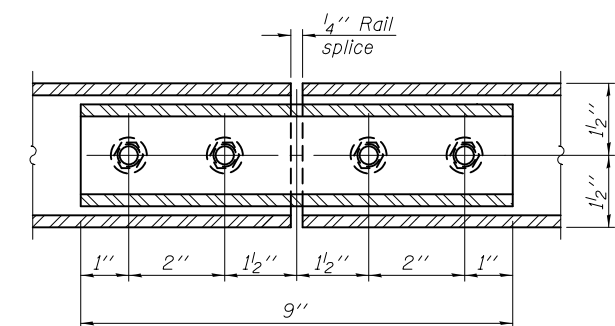
**DETAIL C**

**DETAIL D**

Note:  
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications. All of these elements shall also be powder coated. At a minimum, the powder coating process shall consist of a zinc phosphate pretreatment/wash, a gray zinc rich primer coat, and a black top coat.



**BASE PL**



**RAIL SPLICE**

**BILL OF MATERIAL**

Item	Unit	Quantity
Parapet Railing	Foot	332

DESIGNED - DEWEY H. COULTAS  
CHECKED - NICHOLAS R. BARNETT  
DRAWN - MICHAEL B. MOSSMAN  
CHECKED - D.H.C. / N.R.B.

EXAMINED  
PASSED  
ACTING ENGINEER OF BRIDGE DESIGN  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
REVISED  
REVISED

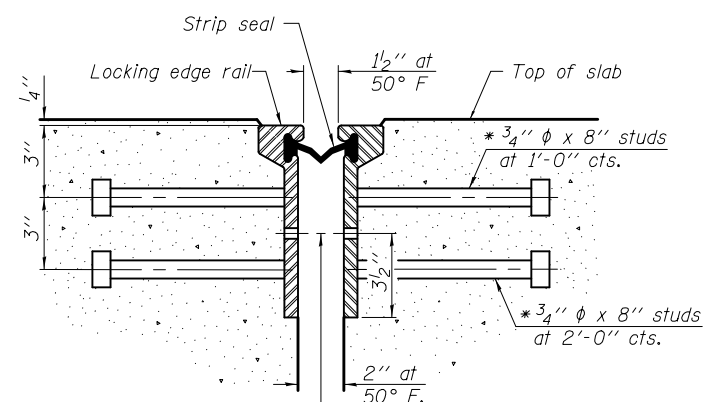
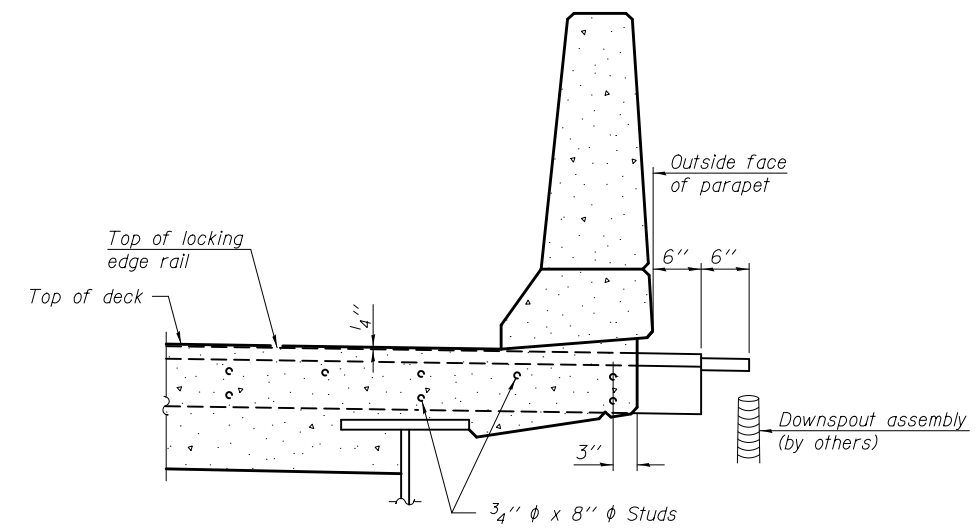
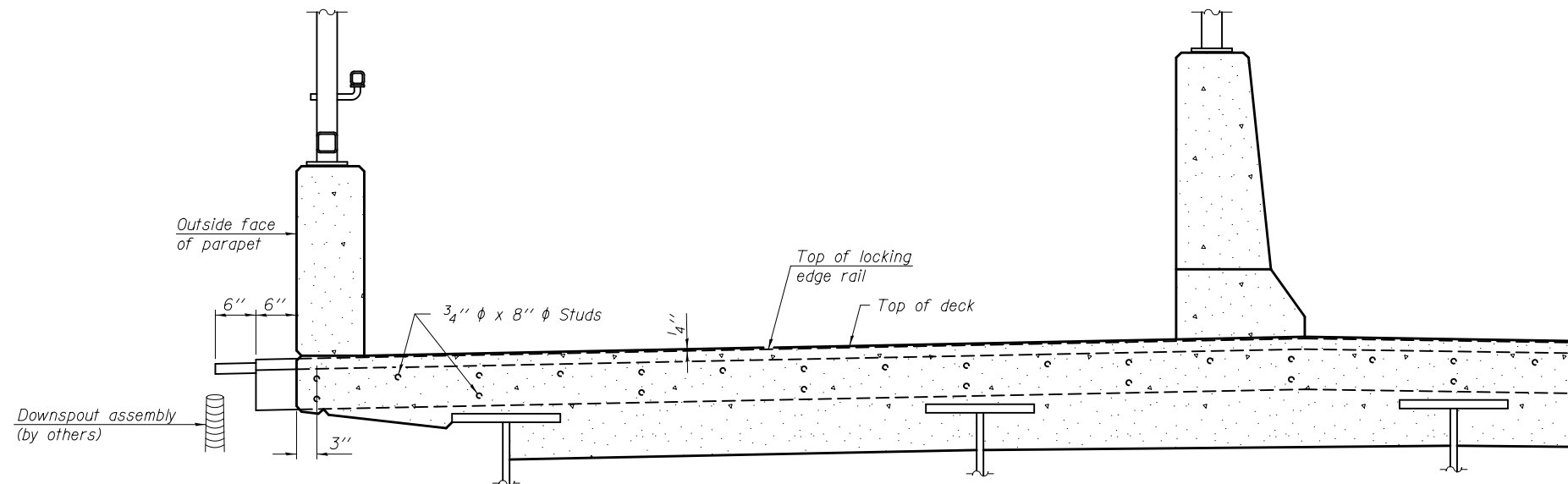
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PARAPET RAILING  
STRUCTURE NO. 010 - 0289

SHEET NO. 36 OF 62 SHEETS

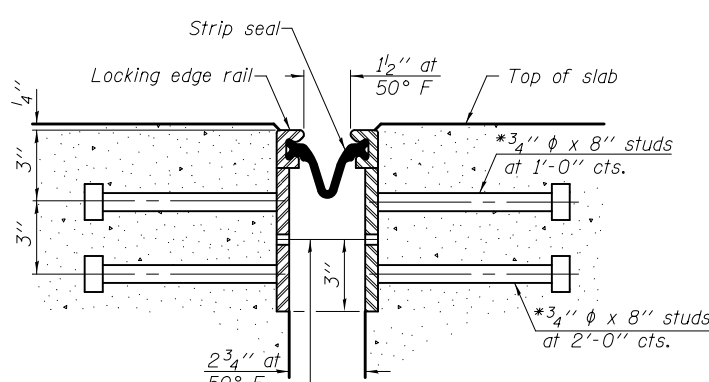
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	121

CONTRACT NO. 70700  
ILLINOIS FED. AID PROJECT



7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU ROLLED RAIL JOINT**



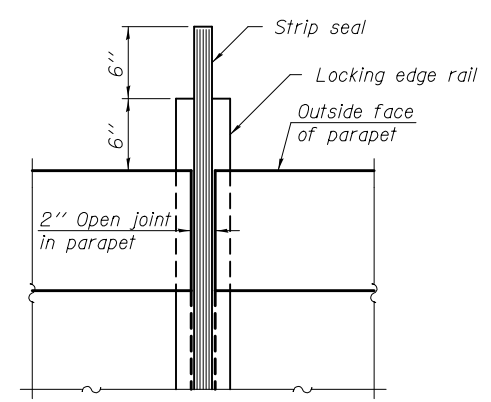
7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU WELDED RAIL JOINT**

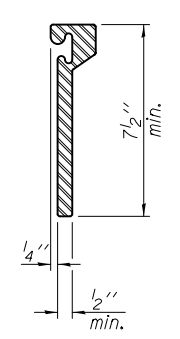
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

**SECTION THRU MULTI-USE PATH**

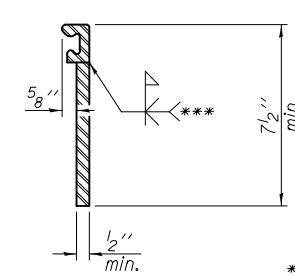
**SECTION THRU EAST PARAPET**



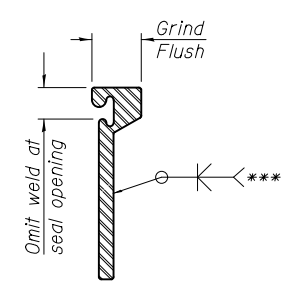
**PLAN**



**ROLLED EXTRUDED RAIL**



**WELDED RAIL**



\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

**LOCKING EDGE RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

**LOCKING EDGE RAILS**

**Notes:**

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	96

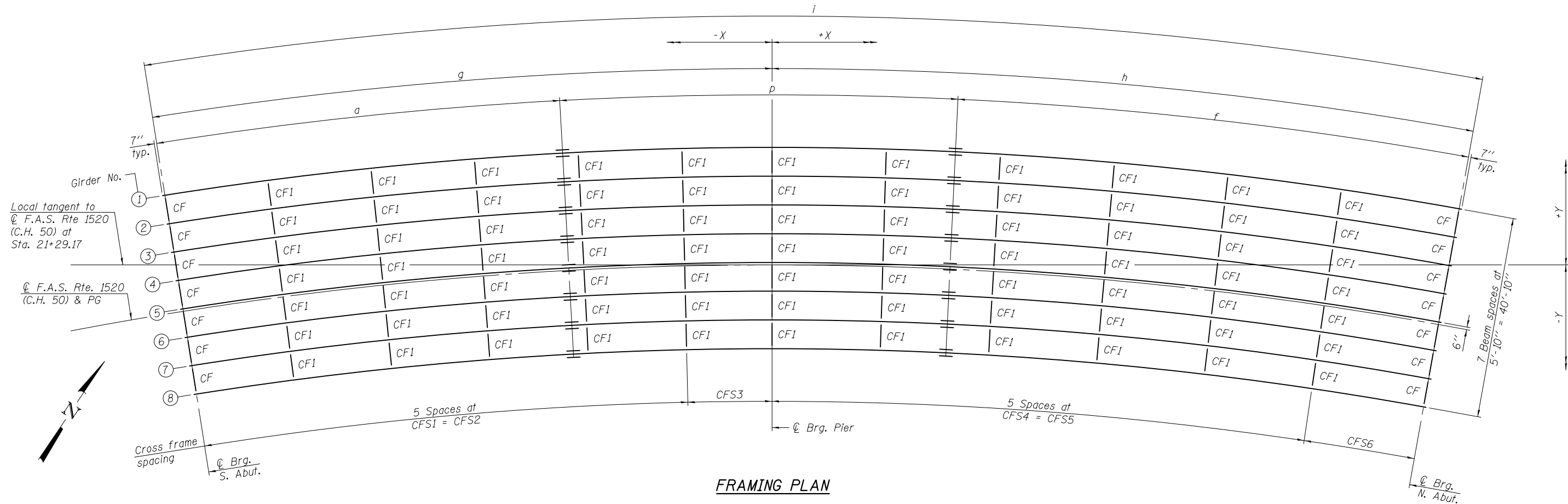
DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. [Signature]</i>	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl [Signature]</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

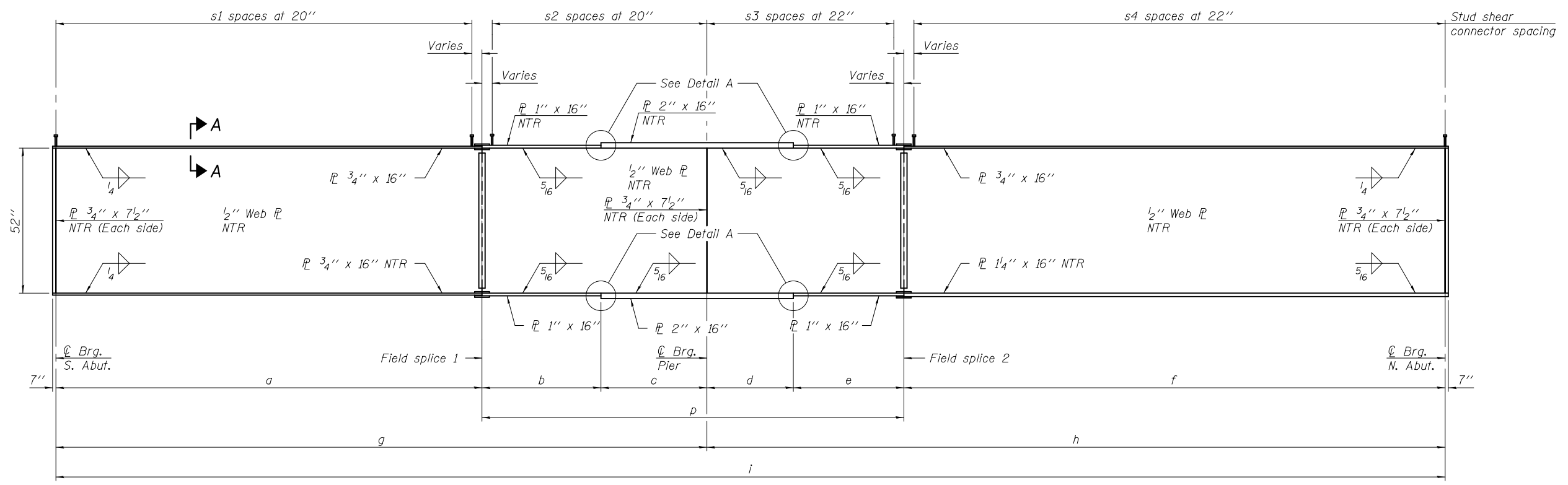
**PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 010 - 0289**

SHEET NO. 37 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	122
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700	



**FRAMING PLAN**

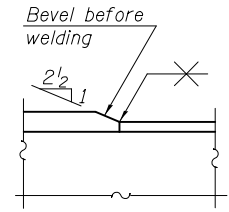


**GIRDER ELEVATION**

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

Note:  
See sheets 39 thru 41 of 62 for structural steel details, notes, and tables.  
All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

**DETAIL A**



DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Joanne F. Joffe</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STRUCTURAL STEEL STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	123	
DRAWN - MICHAEL B. MOSSMAN		REVISED			CONTRACT NO. 70700					
CHECKED - D.H.C. / N.R.B.					SHEET NO. 38 OF 62 SHEETS					

**GIRDER DIMENSIONS**

(Measured along C girders)

Girder	Radius	a	b	c	d	e	f	g	h	i	p
1	787.27'	81'-2 1/2"	23'-6 3/8"	19'-0"	15'-6"	21'-9"	103'-0"	123'-8 7/8"	140'-3"	263'-11 7/8"	79'-9 1/2"
2	781.44'	80'-7 3/8"	23'-2 5/8"	19'-0"	15'-6"	21'-5 3/4"	102'-2 3/4"	122'-10"	139'-2 1/2"	262'-0 3/8"	79'-2 3/8"
3	775.61'	80'-0 9/8"	22'-10 7/8"	19'-0"	15'-6"	21'-2 3/8"	101'-5 5/8"	121'-11"	138'-2"	260'-1"	78'-7 1/4"
4	769.77'	79'-4 7/8"	22'-7 1/8"	19'-0"	15'-6"	20'-11 1/8"	100'-8 3/8"	121'-0"	137'-1 1/2"	258'-1 1/2"	78'-0 1/4"
5	763.94'	78'-9 5/8"	22'-3 3/8"	19'-0"	15'-6"	20'-7 3/4"	99'-11 3/8"	120'-1"	136'-1 1/8"	256'-2"	77'-5 1/8"
6	758.11'	78'-2 1/2"	21'-11 1/2"	19'-0"	15'-6"	20'-4 1/2"	99'-2 1/8"	119'-2"	135'-0 5/8"	254'-2 1/2"	76'-10"
7	752.27'	77'-7 1/4"	21'-7 5/8"	19'-0"	15'-6"	20'-1 1/8"	98'-5"	118'-2 7/8"	134'-0 1/8"	252'-3 1/8"	76'-2 7/8"
8	746.44'	77'-0"	21'-3 1/8"	19'-0"	15'-6"	19'-9 7/8"	97'-7 3/4"	117'-3 7/8"	132'-11 5/8"	250'-3 5/8"	75'-7 7/8"

**LAYOUT DIMENSIONS**

Girder	C Brg. S. Abut.		C Splice 1		C Pier		C Splice 2		C Brg. N. Abut.	
	X	Y	X	Y	X	Y	X	Y	X	Y
1	-123'-2 7/8"	14'-1 1/2"	-42'-6 1/4"	22'-8 1/4"	0'-0"	23'-10"	37'-2 7/8"	22'-11 3/8"	139'-6"	11'-4 1/2"
2	-122'-3 7/8"	8'-4 3/8"	-42'-2 3/8"	16'-10 3/8"	0'-0"	18'-0"	36'-11 5/8"	17'-1 1/2"	138'-5 5/8"	5'-7 5/8"
3	-121'-4 7/8"	2'-7 1/4"	-41'-10 5/8"	11'-0 3/8"	0'-0"	12'-2"	36'-8 1/4"	11'-3 5/8"	137'-5 1/4"	0'-1 1/4"
4	-120'-6"	-3'-1 7/8"	-41'-6 7/8"	5'-2 1/2"	0'-0"	6'-4"	36'-5"	5'-5 5/8"	136'-4 7/8"	-5'-10 1/8"
5	-119'-7"	-8'-11"	-41'-3 1/8"	-0'-7 3/8"	0'-0"	0'-6"	36'-1 5/8"	-0'-4 1/4"	135'-4 1/2"	-11'-7 1/8"
6	-118'-8"	-14'-8 1/8"	-40'-11 1/4"	-6'-5 1/4"	0'-0"	-5'-4"	35'-10 3/8"	-6'-2 1/8"	134'-4"	-17'-4"
7	-117'-9 1/8"	-20'-5 1/4"	-40'-7 1/2"	-12'-3 1/8"	0'-0"	-11'-2"	35'-7"	-12'-0 1/8"	133'-3 5/8"	-23'-0 7/8"
8	-116'-10 1/8"	-26'-2 3/8"	-40'-3 5/8"	-18'-1 1/8"	0'-0"	-17'-0"	35'-3 3/4"	-17'-10"	132'-3 1/4"	-28'-9 3/4"

**CROSS FRAME SPACING**

Girder	CFS1	CFS2	CFS3	CFS4	CFS5	CFS6
1	21'-1 1/8"	105'-5 5/8"	18'-3 1/4"	23'-2 1/2"	116'-0 1/2"	24'-2 1/2"
2	20'-11 1/4"	104'-8 1/4"	18'-1 3/4"	23'-0 3/8"	115'-1 1/8"	24'-0 5/8"
3	20'-9 3/8"	103'-10 7/8"	18'-0 9/8"	22'-10 3/8"	114'-3 7/8"	23'-10 9/8"
4	20'-7 1/2"	103'-1 1/2"	17'-10 1/2"	22'-8 1/4"	113'-5 1/4"	23'-8 1/4"
5	20'-5 5/8"	102'-4 1/8"	17'-8 1/8"	22'-6 1/4"	112'-7 1/4"	23'-5 7/8"
6	20'-3 3/4"	101'-6 3/4"	17'-7 1/4"	22'-4 1/8"	111'-8 5/8"	23'-4"
7	20'-1 7/8"	100'-9 3/8"	17'-5 1/2"	22'-2 1/8"	110'-10 5/8"	23'-1 1/2"
8	20'-0"	100'-0"	17'-3 1/8"	22'-0"	110'-0"	22'-11 5/8"

**TOP OF WEB ELEVATIONS\***

Girder	C Brg. S. Abut.	C Field splice 1	C Brg. Pier	C Field splice 2	C Brg. N. Abut.
1	753.67	757.33	758.32	759.18	758.66
2	753.78	757.44	758.42	759.28	758.78
3	753.81	757.47	758.43	759.29	758.79
4	753.72	757.39	758.35	759.19	758.71
5	753.63	757.30	758.26	759.09	758.62
6	753.55	757.21	758.16	758.99	758.54
7	753.45	757.13	758.07	758.89	758.44
8	753.37	757.04	757.98	758.79	758.36

\* For fabrication only.

**DEAD LOAD DEFLECTION  
STEEL SELF-WEIGHT ONLY**

Girder	Span 1			Span 2		
	0.25	0.5	0.75	0.25	0.5	0.75
1	3/8"	3/8"	0	3/4"	1 1/2"	1 1/4"
2	3/8"	3/8"	0	3/4"	1 3/8"	1 1/8"
3	3/8"	3/8"	0	5/8"	1 3/8"	1 1/8"
4	3/8"	3/8"	0	5/8"	1 1/4"	1"
5	3/8"	3/8"	0	1/2"	1 1/8"	1"
6	3/8"	3/8"	0	1/2"	1"	7/8"
7	3/8"	3/8"	0	1/2"	1"	7/8"
8	3/8"	3/8"	0	3/8"	7/8"	3/4"

The calculated deflections of the primary girders under steel self-weight shall be used to detail the cross frame connections, and to erect the structural steel such that the girders will be plumb within a tolerance of ± 1/8" per vertical ft. throughout when supporting their own weight.

The Contractor shall either:

1. Ream cross frame connection holes during shop assembly, or
2. Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(1) of the Standard Specifications.

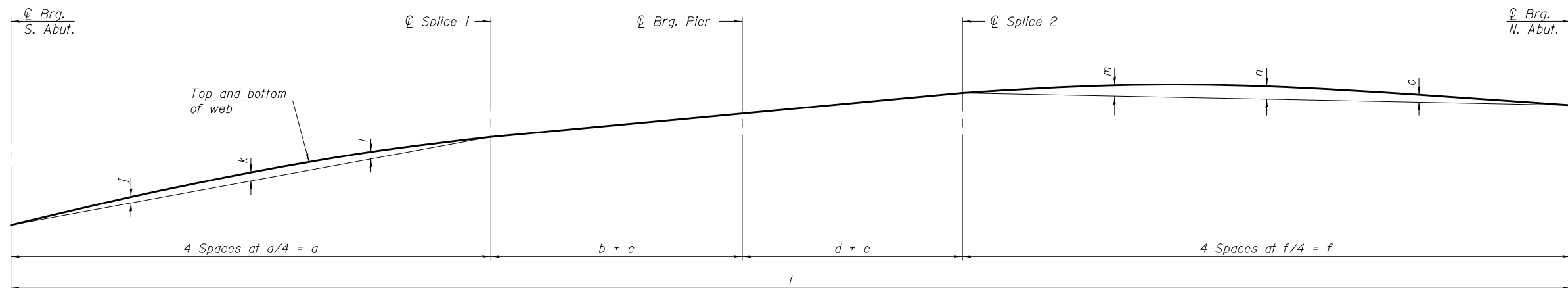
**CAMBER DIMENSIONS**

Girder	j	k	l	m	n	o
1	3"	4 1/4"	3 1/2"	5 1/2"	6 1/2"	3 3/4"
2	3"	4 1/4"	3 1/2"	5 1/2"	6 1/2"	3 3/4"
3	3"	4 1/4"	3 1/2"	5 1/2"	6 1/2"	3 3/4"
4	3"	4 1/4"	3 1/2"	5 1/2"	6 1/2"	3 3/4"
5	3"	4 1/4"	3 1/2"	4 3/4"	5 3/4"	3 3/4"
6	3"	4 1/4"	3 1/2"	4 3/4"	5 3/4"	3 1/4"
7	3"	4 1/4"	3 1/2"	4 3/4"	5 3/4"	3 1/4"
8	3"	4 1/4"	3 1/2"	4 3/4"	5 3/4"	3 1/4"

**STUD SHEAR CONNECTOR SPACING**

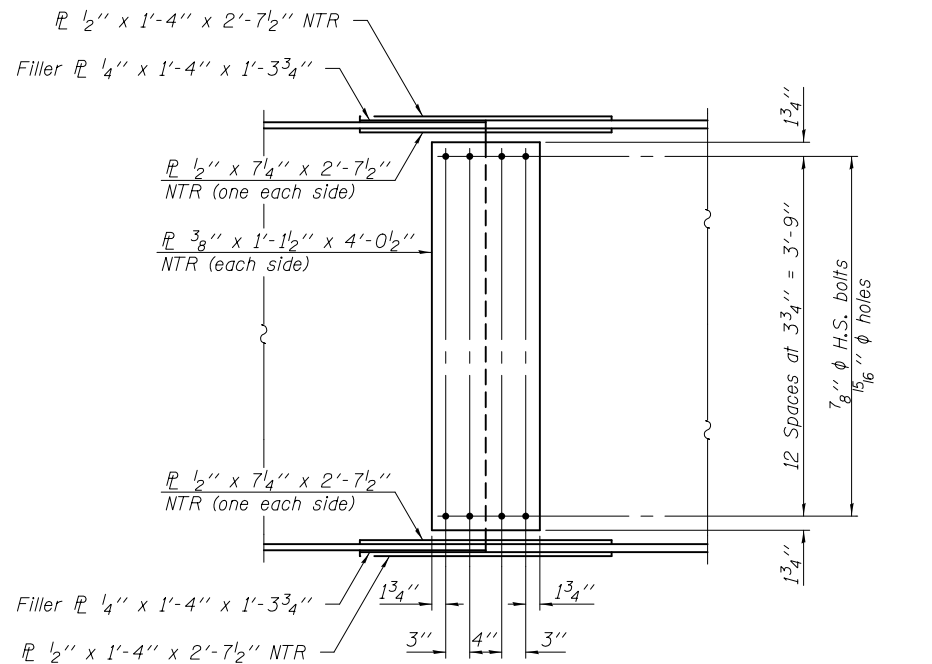
Girder	s1	s2	s3	s4
1	47	24	19	55
2	47	24	19	55
3	47	24	19	55
4	47	24	19	54
5	46	24	19	54
6	46	24	19	53
7	46	24	19	53
8	45	23	19	53

Do not place stud shear connectors on splice plates. Move stud shear connectors that fall on a splice plate at the spacing shown to provide 6" minimum to the edge of the splice plate.

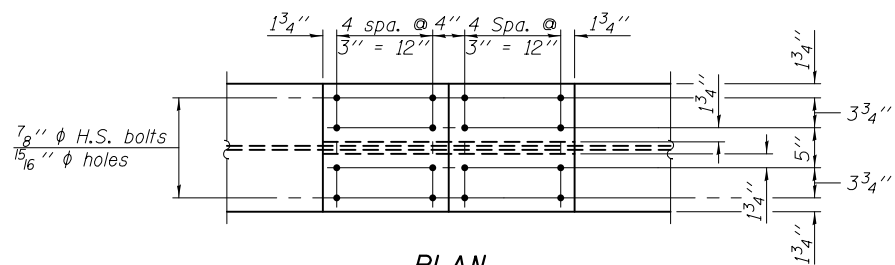


**CAMBER DIAGRAM**

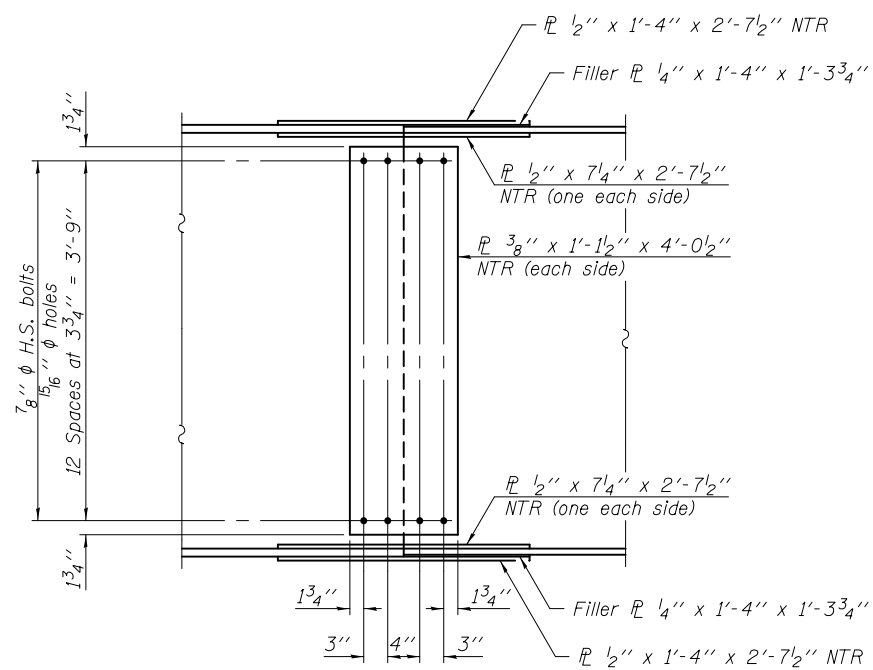




**ELEVATION**  
(Splice 1)



**PLAN**  
(Top and bottom flange splice 1 and splice 2)

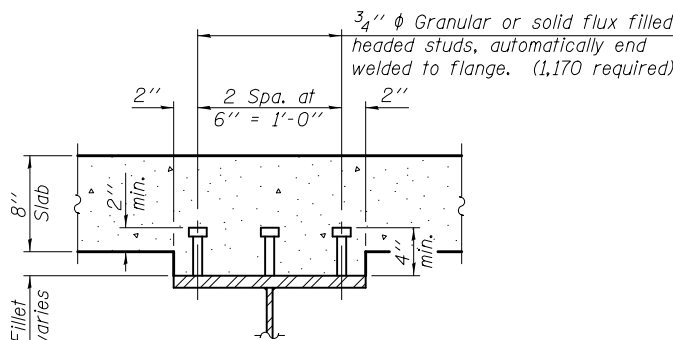


**ELEVATION**  
(Splice 2)

INTERIOR GIRDER MOMENT TABLE - GIRDER 3				
		0.4 Sp. 1	Pier	0.6 Sp. 2
$I_s$	(in <sup>4</sup> )	22555	52536	27538
$I_c(n)$	(in <sup>4</sup> )	50518	92623	65370
$I_c(3n)$	(in <sup>4</sup> )	37353	70945	46855
$I_c(cr)$	(in <sup>4</sup> )	-	58552	-
$S_s$	(in <sup>3</sup> )	843	1876	1172
$S_c(n)$	(in <sup>3</sup> )	1140	-	1560
$S_c(3n)$	(in <sup>3</sup> )	1035	-	1423
$S_c(cr)$	(in <sup>3</sup> )	-	1950	-
$S_{xc}$	(in <sup>3</sup> )	1084	1928	1460
DC1	(k/')	0.815	0.952	0.843
MDC1	('k)	589	2319	1127
DC2	(k/')	0.295	0.295	0.295
MDC2	('k)	122	455	218
DW	(k/')	0.267	0.267	0.267
MDW	('k)	146	412	238
$M_L + IM$	('k)	990	1292	1202
$f_i$ (Strength I)	(ksi)	11.0	9.0	12.0
$M_u + \frac{1}{3} f_i S_{xc}$	('k)	3171	6829	4628
$\phi_r M_n$	('k)	-	-	-
$f_s$ DC1	(ksi)	8.4	14.8	11.5
$f_s$ DC2	(ksi)	1.4	2.8	1.8
$f_s$ DW	(ksi)	1.7	2.5	2.0
$f_s$ ( $L + IM$ )	(ksi)	10.4	8.0	9.2
$f_i$ (Service II)	(ksi)	8.5	7.1	8.9
$f_s + \frac{1}{2} f_i$ (Service II)	(ksi)	29.3	34.0	31.9
$0.95 R_h F_y f$	(ksi)	47.5	47.5	47.5
$f_s + \frac{1}{3}$ (Total)(Strength I)	(ksi)	36.7	42.8	39.9
$\phi_r F_n$	(ksi)	50.0	50.0	50.0
$V_f$	(k)	24.9	-	23.2

INTERIOR GIRDER REACTION TABLE - GIRDER 3				
		S. Abut.	Pier	N. Abut.
$R_{DC1}$	(k)	33.4	152.6	45.1
$R_{DC2}$	(k)	7.7	34.3	10.0
$R_{DW}$	(k)	8.1	30.8	10.2
$R_L + IM$	(k)	67.5	128.8	71.0
$R_{Total}$	(k)	116.7	346.4	136.3

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



**SECTION A-A**

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $S_{xc}$ : Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in<sup>3</sup>).  
 DC1: Un-factored non-composite dead load (kips/ft.).  
 MDC1: Un-factored moment due to non-composite dead load (kip-ft.).  
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).  
 MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).  
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).  
 MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).  
 $M_L + IM$ : Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).  
 $M_u$  (Strength I): Factored design moment (kip-ft.).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM$   
 $f_i$ : Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).  
 $\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).  
 $f_s$  DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
 $M_{DC1} / S_{nc}$   
 $f_s$  DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
 $M_{DC2} / S_c(3n)$  or  $M_{DC2} / S_c(cr)$  as applicable.  
 $f_s$  DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
 $M_{DW} / S_c(3n)$  or  $M_{DW} / S_c(cr)$  as applicable.  
 $f_s$  ( $L + IM$ ): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).  
 $M_L + IM / S_c(n)$  or  $M_{DW} / S_c(cr)$  as applicable.  
 $f_s + \frac{1}{2}$  (Service II): Sum of stresses as computed below (ksi).  
 $f_s DC1 + f_s DC2 + f_s DW + 1.3 f_s (L + IM) + \frac{1}{2} 0.95 R_h F_y f$ : Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).  
 $f_s + \frac{1}{3}$  (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).  
 $1.25 (f_s DC1 + f_s DC2) + 1.5 f_s DW + 1.75 f_s (L + IM) + \frac{1}{3} \phi_r F_n$ : Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).  
 $V_f$ : Maximum factored shear range in span computed according to Article 6.10.10.  
 Note:  
 $M_L$  and  $R_L$  include the effects of centrifugal force and superelevation.

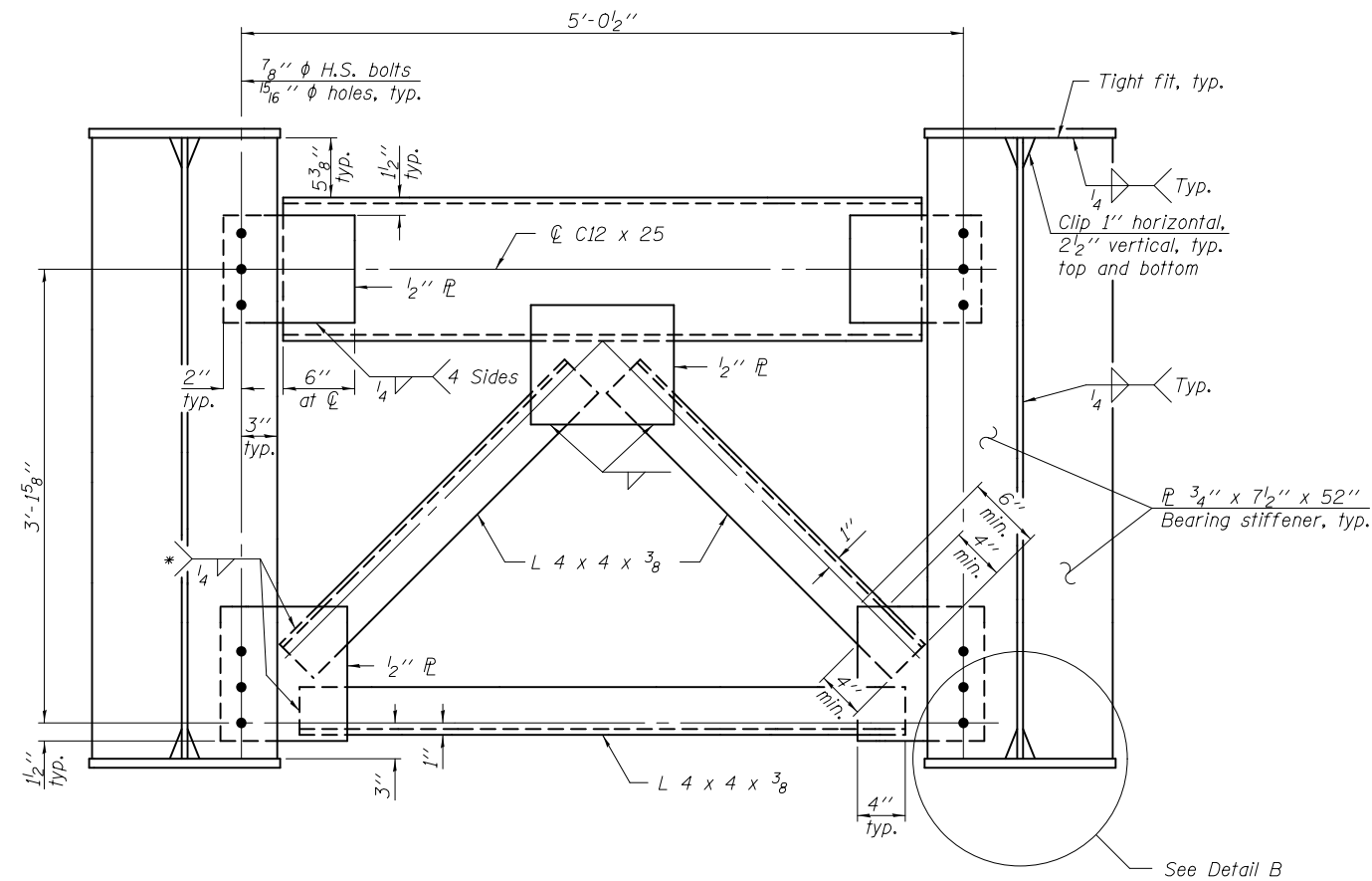
DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Jaime F. Schmitt</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - D.H.C. / N.R.B.		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

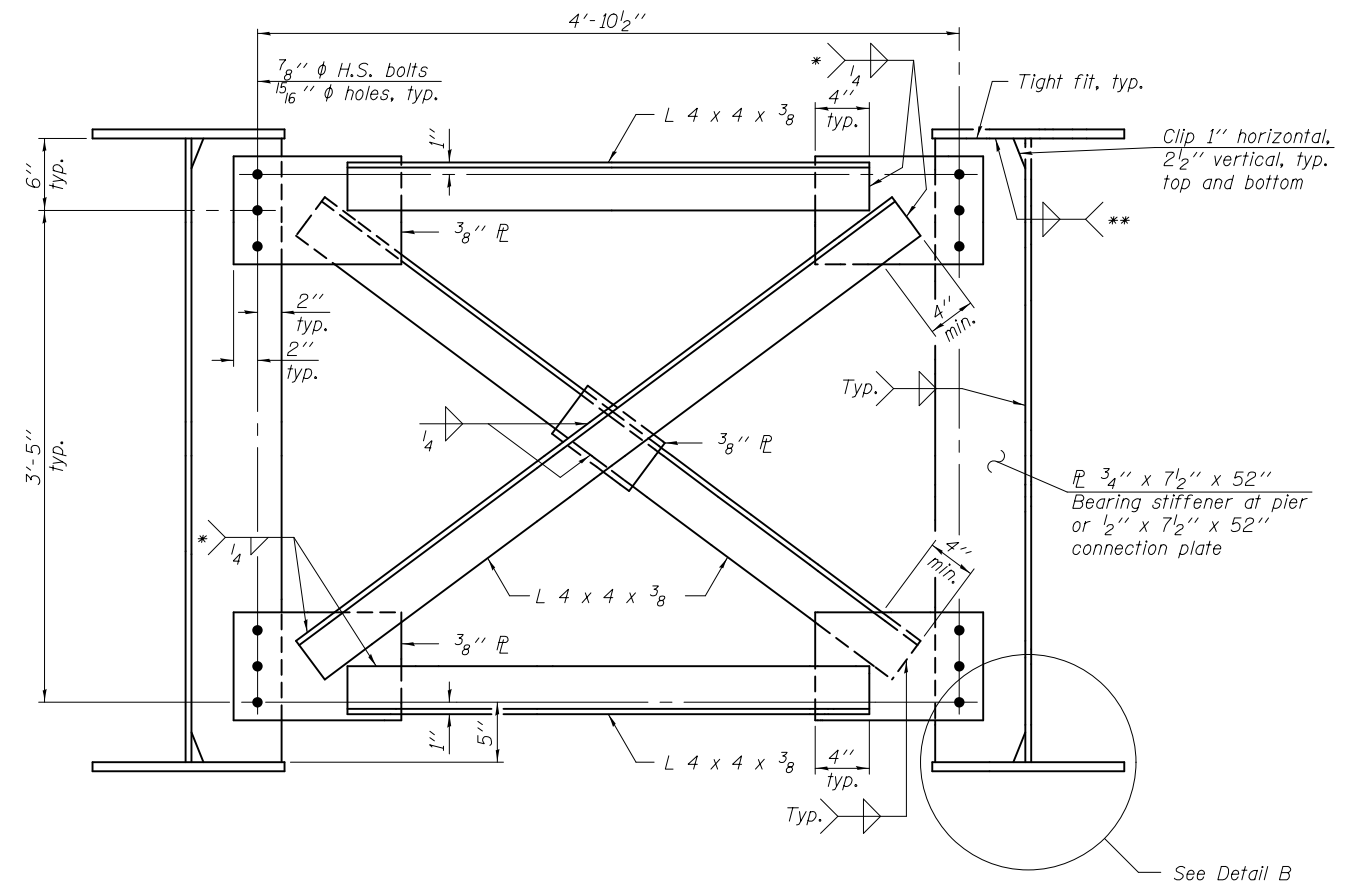
STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 010 - 0289

SHEET NO. 40 OF 62 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	125
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700	



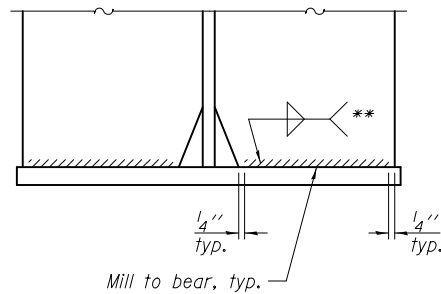
**END CROSS FRAME (CF)**



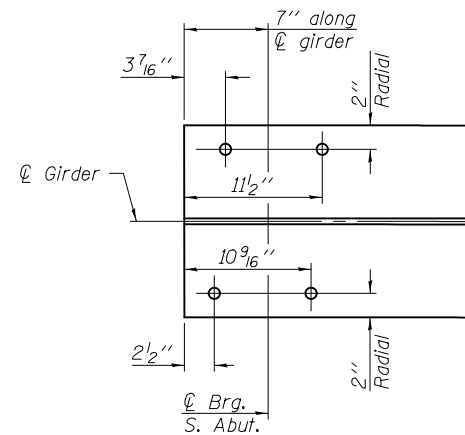
**INTERIOR CROSS FRAME (CF1)**

Notes:  
 All frame members and connection plates shall be NTR.  
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
 Omit connection plate on exterior face of fascia girders.  
 All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

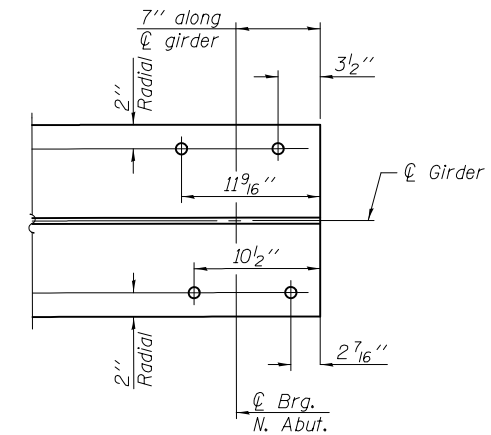
\* Fillet weld angles to gusset plate along 3 sides.  
 \*\* 1/4" weld for flange thickness = 3/4"  
 5/16" weld for flange thickness > 3/4"



**DETAIL B**



**SOUTH END OF GIRDER PLAN**  
 (Showing bottom flange)



**NORTH END OF GIRDER PLAN**  
 (Showing bottom flange)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. J. [Signature]</i>	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl [Signature]</i>	REVISED
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

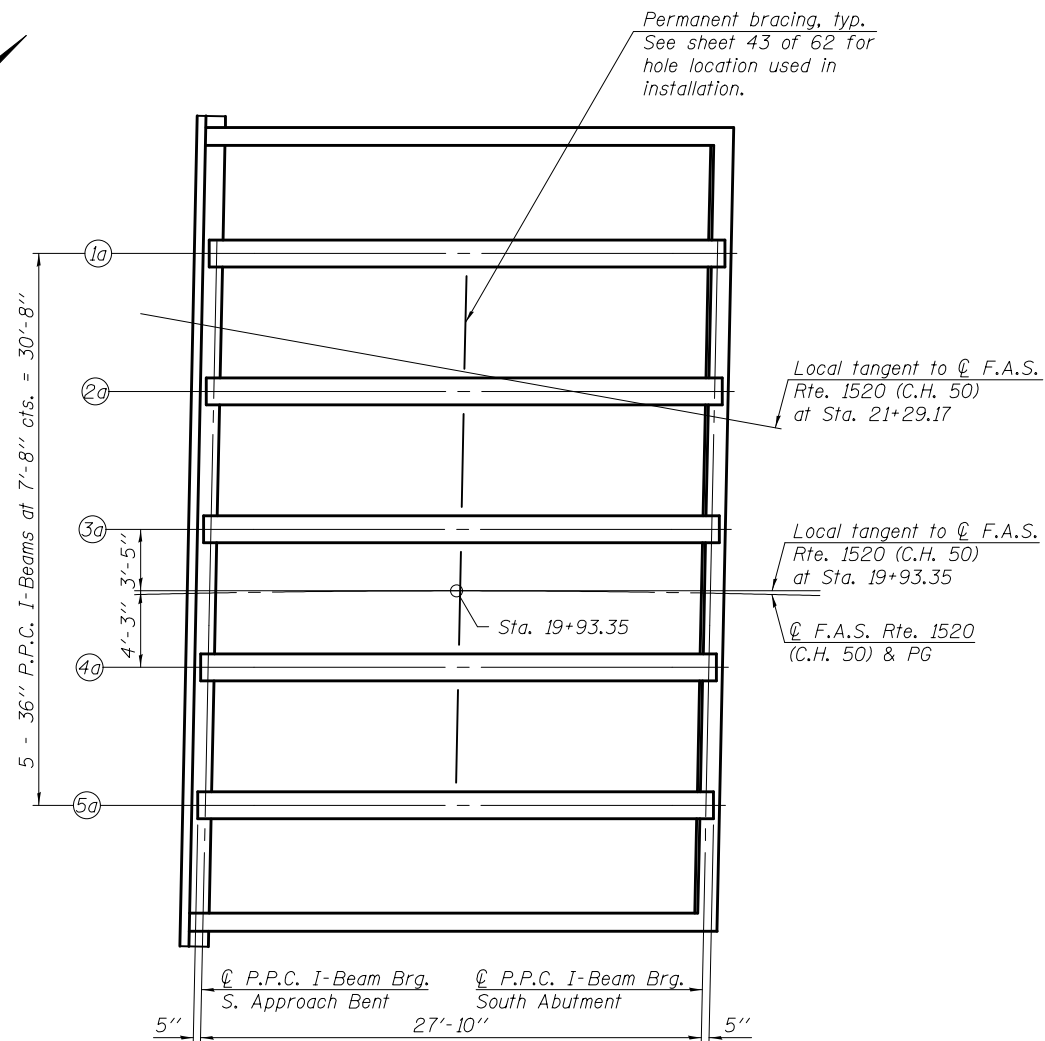
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS  
 STRUCTURE NO. 010 - 0289**

SHEET NO. 41 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	126
			CONTRACT NO. 70700	

ILLINOIS FED. AID PROJECT



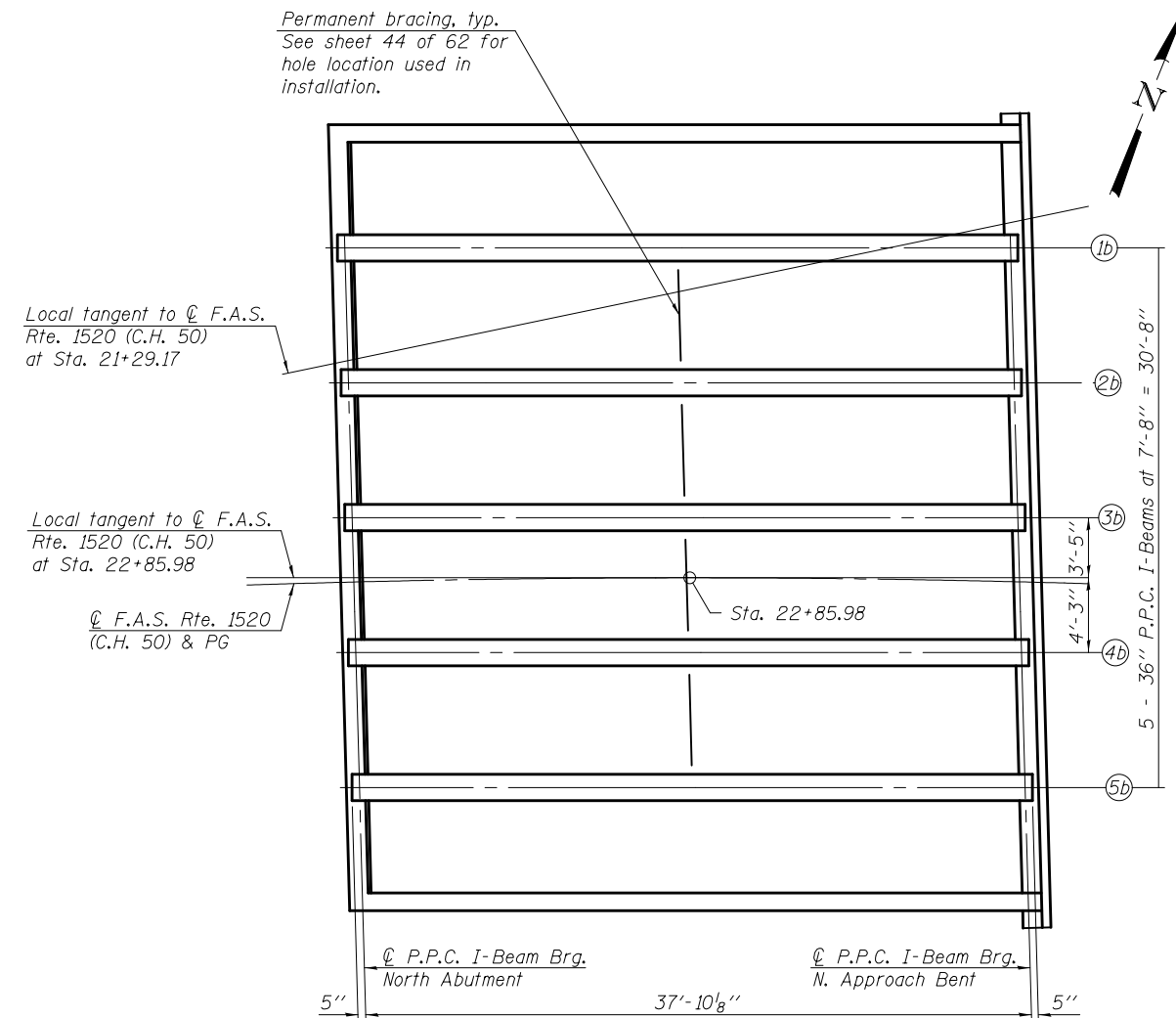
**SOUTH VAULTED ABUTMENT  
FRAMING PLAN**

**SHIM PLATE THICKNESS**

Beam	S. Appr. Bent	S. Abut.
1a	-	-
2a	1/8"	1/4"
3a	-	-
4a	-	-
5a	-	-

INTERIOR BEAM MOMENT TABLE			
		South vaulted abutment span	North vaulted abutment span
I	(in <sup>4</sup> )	48648	48648
I'	(in <sup>4</sup> )	189538	189538
S <sub>b</sub>	(in <sup>3</sup> )	3165	3165
S <sub>b</sub> '	(in <sup>3</sup> )	6166	6166
S <sub>t</sub>	(in <sup>3</sup> )	2358	2358
S <sub>t</sub> '	(in <sup>3</sup> )	36034	36034
DC1	(k/ft)	1.144	1.144
M <sub>DC1</sub>	(k)	110.8	204.8
DC2	(k/ft)	0.200	0.200
M <sub>DC2</sub>	(k)	19.4	35.8
DW	(k/ft)	0.383	0.383
M <sub>DW</sub>	(k)	37.1	68.6
M <sub>L + IM</sub>	(k)	376.6	526.9

INTERIOR BEAM REACTION TABLE			
		South vaulted abutment	North vaulted abutment
R <sub>DC1</sub>	(k)	15.9	21.6
R <sub>DC2</sub>	(k)	2.8	3.8
R <sub>DW</sub>	(k)	5.3	7.2
R <sub>L + IM</sub>	(k)	57.4	67.0
R <sub>Total</sub>	(k)	81.4	99.6



**NORTH VAULTED ABUTMENT  
FRAMING PLAN**

**SHIM PLATE THICKNESS**

Beam	N. Appr. Bent	N. Abut.
1b	-	-
2b	3/8"	3/8"
3b	-	-
4b	-	-
5b	-	-

- I: Non-composite moment of inertia of beam section (in<sup>4</sup>).
- I': Composite moment of inertia of beam section (in<sup>4</sup>).
- S<sub>b</sub>: Non-composite section modulus for the bottom fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>b</sub>': Composite section modulus for the bottom fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>t</sub>: Non-composite section modulus for the top fiber of the prestressed beam (in<sup>3</sup>).
- S<sub>t</sub>': Composite section modulus for the top fiber of the prestressed beam (in<sup>3</sup>).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M<sub>L + IM</sub>: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

DESIGNED - NICHOLAS R. BARNETT  
 CHECKED - DEWEY H. COULTAS  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

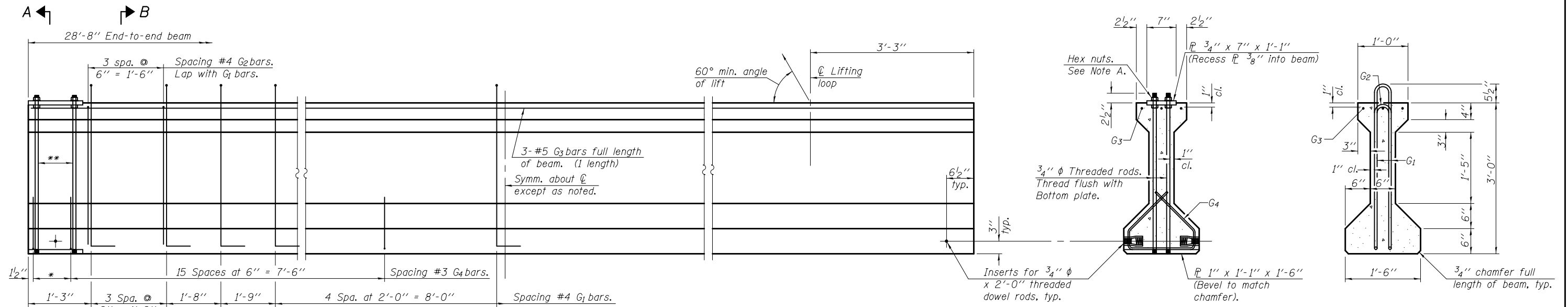
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

VAULTED ABUTMENT FRAMING PLAN  
 STRUCTURE NO. 010 - 0289

SHEET NO. 42 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	127
CONTRACT NO. 70700				

ILLINOIS FED. AID PROJECT



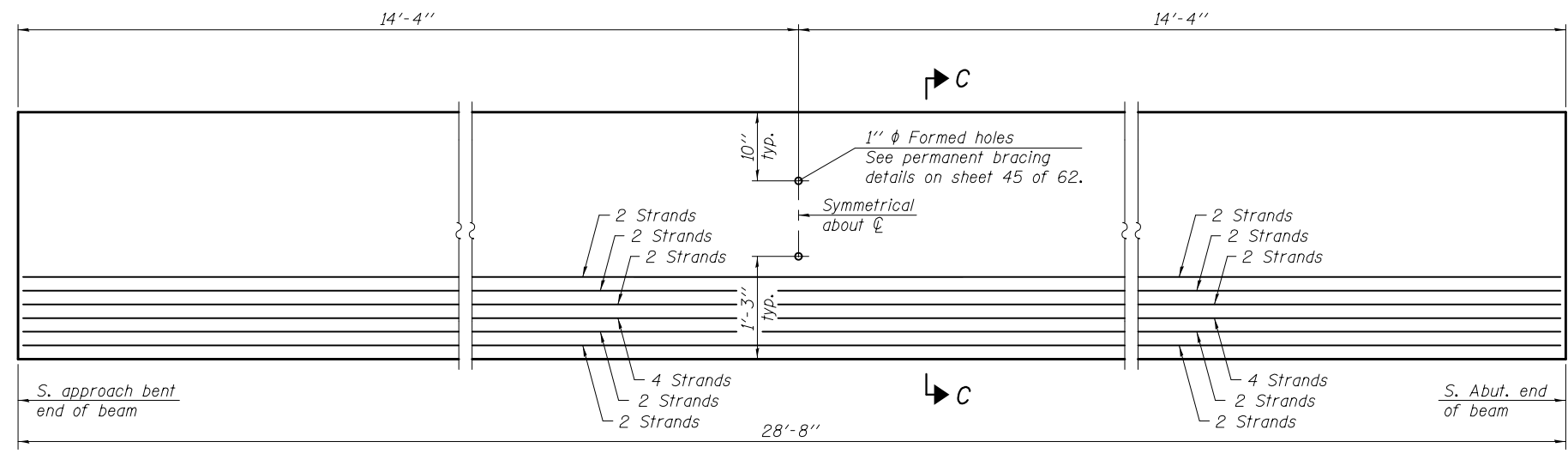
**ELEVATION OF BEAM**  
(Showing reinforcement & dimensions)

**SECTION A-A**

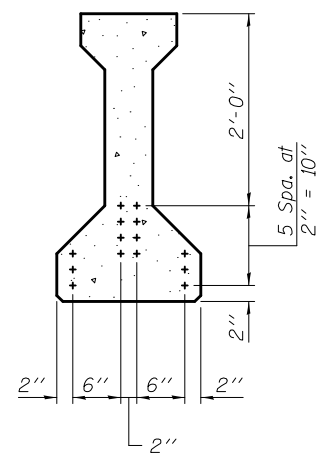
**SECTION B-B**

\* 3 spaces at 3" = 9".  
\*\* 4-3/4"  $\phi$  threaded dowel rods at 3" cts., Each Face

Note A:  
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



**ELEVATION OF BEAM**  
(Showing prestressing steel)



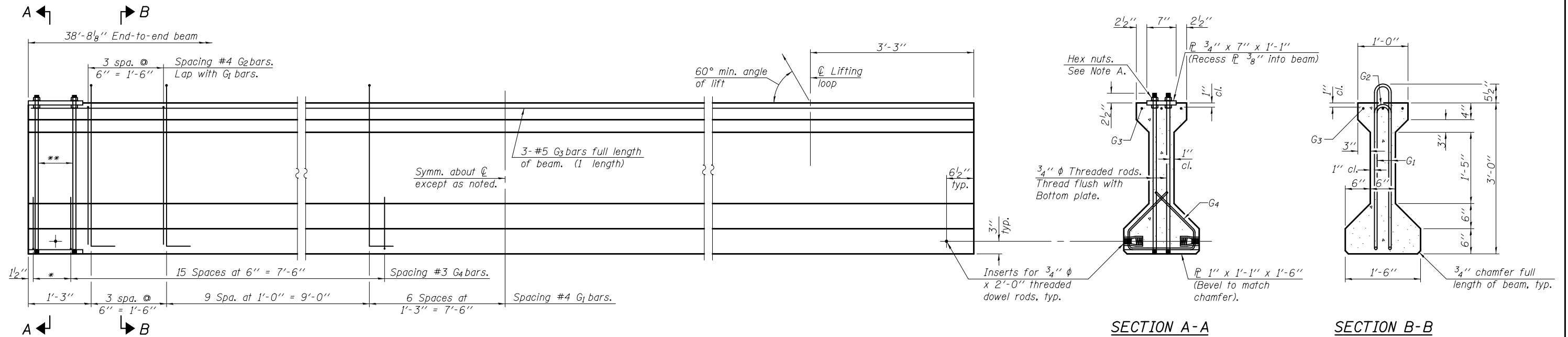
**SECTION C-C**

**\*\*\*BAR LIST  
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G <sub>1</sub>	20	#4	7'-7"	∩ L
G <sub>2</sub>	8	#4	5'-8"	∩
G <sub>3</sub>	3	#5	28'-6"	—
G <sub>4</sub>	38	#3	4'-1"	⊔

\*\*\*For information only

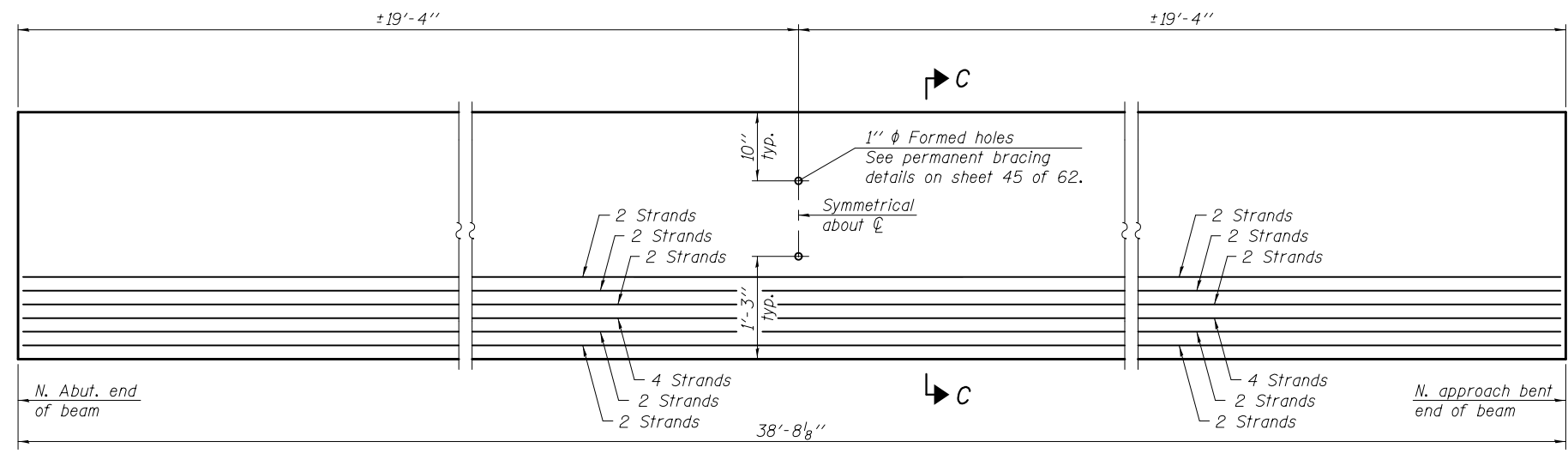
Notes:  
See sheet 45 of 62 for additional details and Bill of Material.  
Required release strength,  $f'_{ci}$ , shall be 5,000 psi.



\* 3 spaces at 3" = 9".  
 \*\* 4-3/4"  $\phi$  threaded dowel rods at 3" cts., Each Face

**ELEVATION OF BEAM**  
(Showing reinforcement & dimensions)

Note A:  
 Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



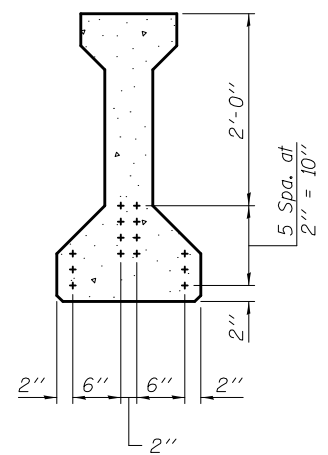
**ELEVATION OF BEAM**  
(Showing prestressing steel)

**\*\*\*BAR LIST  
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G <sub>1</sub>	38	#4	7'-7"	⌊
G <sub>2</sub>	8	#4	5'-8"	⌋
G <sub>3</sub>	3	#5	38'-6"	—
G <sub>4</sub>	38	#3	4'-1"	⌋

\*\*\*For information only

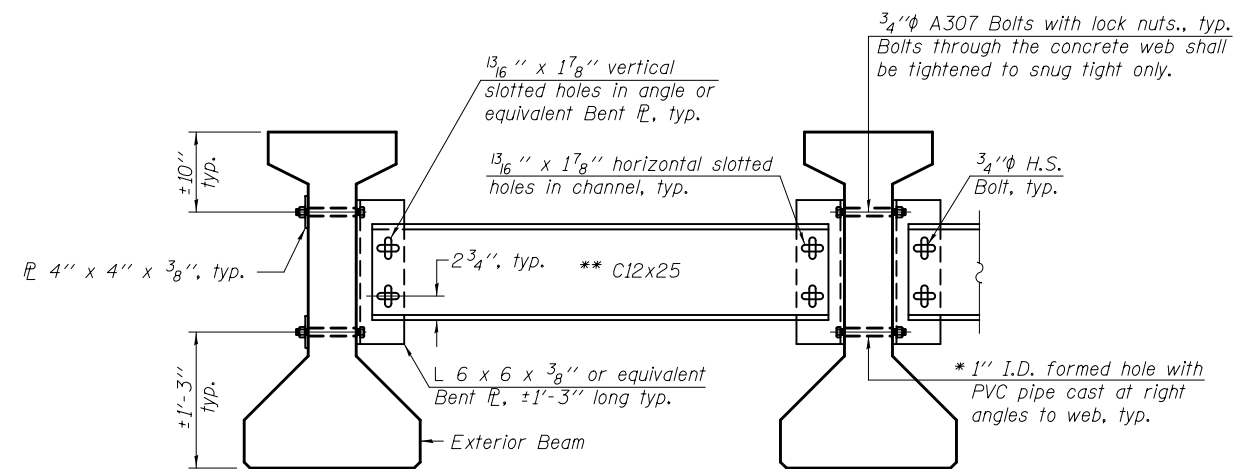
Notes:  
 See sheet 45 of 62 for additional details and Bill of Material.  
 Required release strength,  $f'_{ci}$ , shall be 5,000 psi.



**SECTION C-C**

**NOTES**

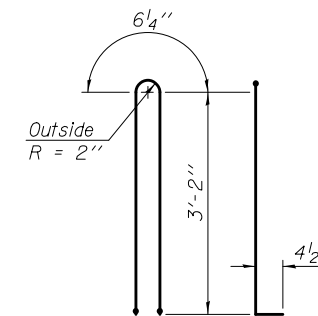
Inserts for 3/4" φ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. A minimum 2 1/2" φ lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized. Threaded rods shall be ASTM F 1554 Grade 55.



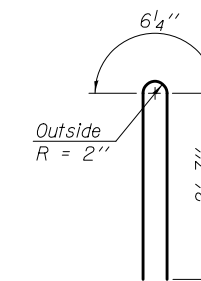
**Notes:**

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes. All holes shall be 15/16" φ unless otherwise noted. 5/16" x 3" x 3" plate washers are required over all slotted holes. All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection. Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

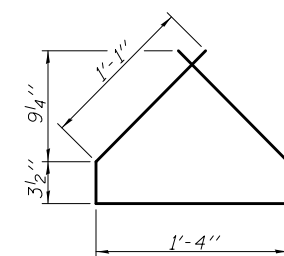
\* Fabricator shall locate to miss strands within permissible tolerances.  
 \*\* Alternate C12x30 channels are permitted to facilitate material acquisition.



**BAR G1**

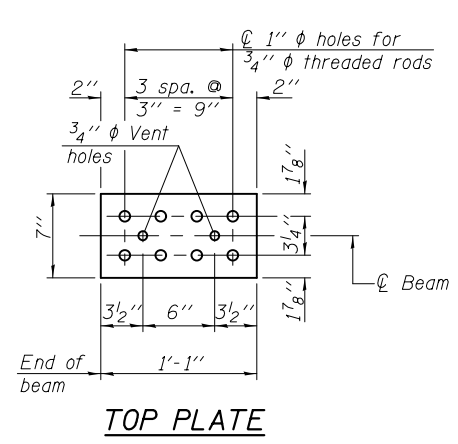


**BAR G2**

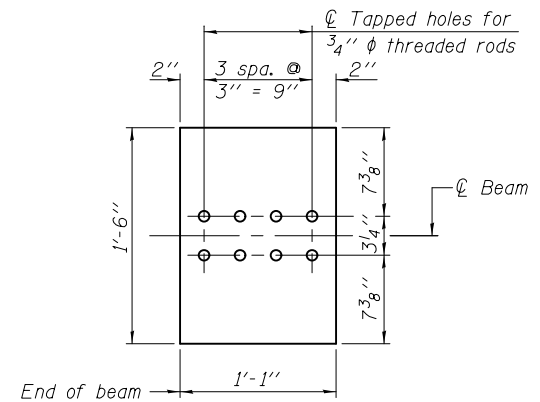


**BAR G4**

**PERMANENT BRACING DETAILS FOR 36" AND 42" PPC I-BEAMS**

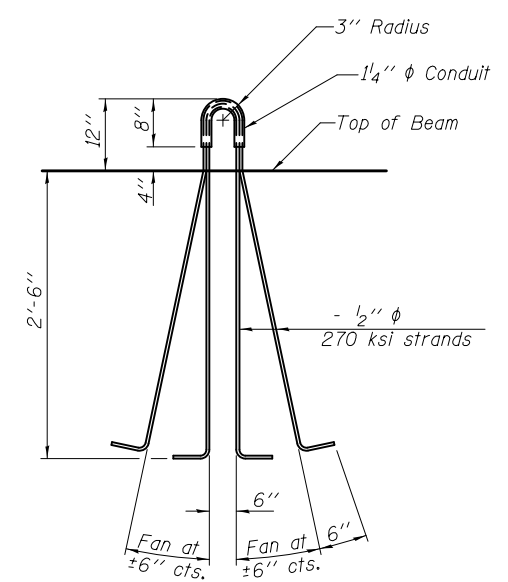


**TOP PLATE**



**BOTTOM PLATE**

See bearing details for pintle hole locations when required.



**LIFTING LOOP DETAIL**

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	Ft.	337

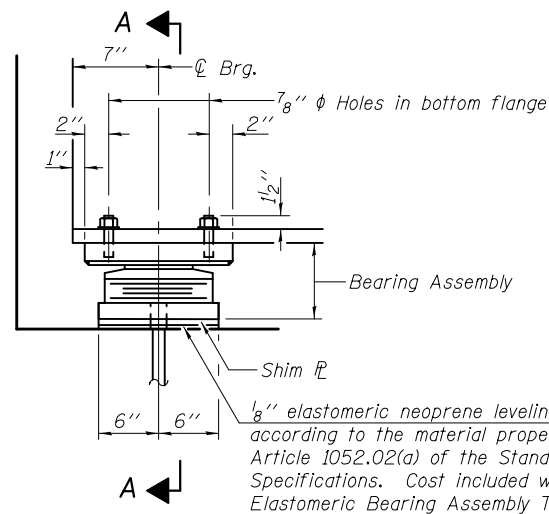
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jaime F. Schuff</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl Kasper</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN - MICHAEL B. MOSSMAN		REVISED
CHECKED - D.H.C. / N.R.B.		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

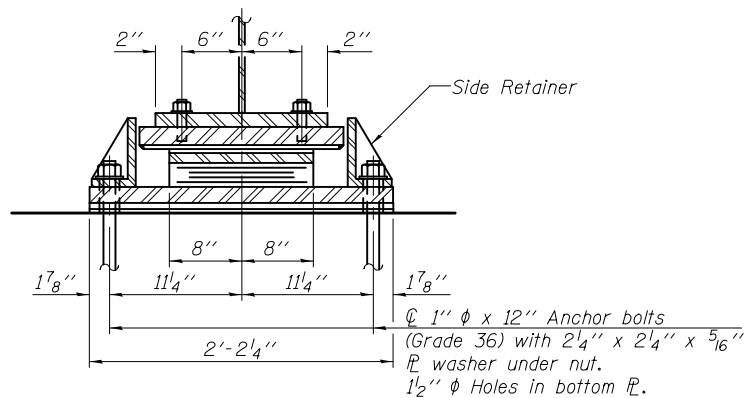
**36" PPC I-BEAM DETAILS  
STRUCTURE NO. 010 - 0289**

SHEET NO. 45 OF 62 SHEETS

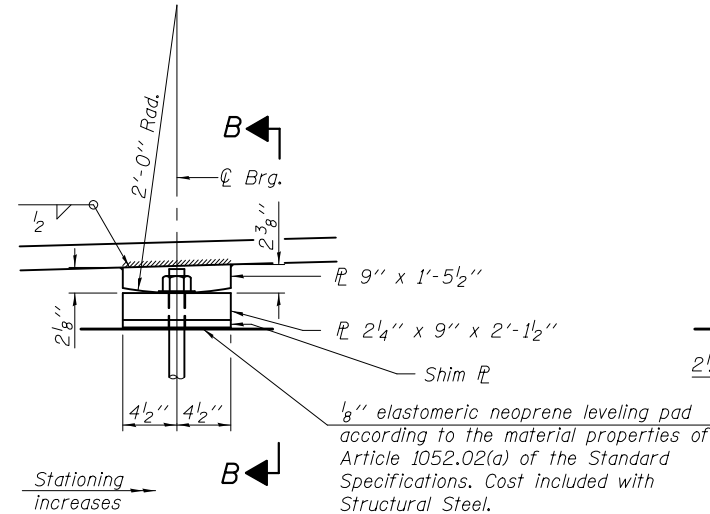
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	130
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	



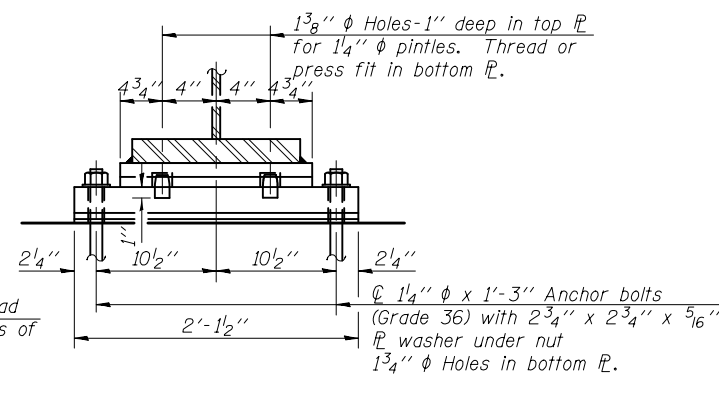
**ELEVATION AT ABUT.**



**SECTION A-A**



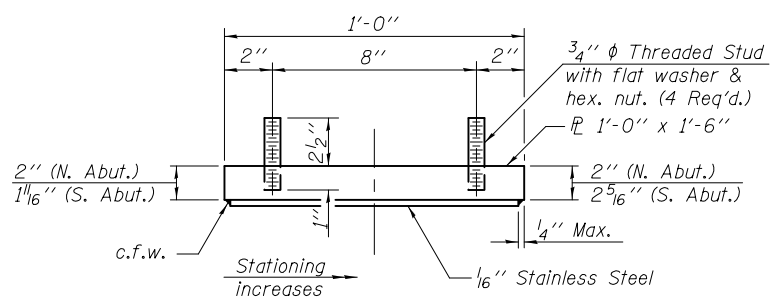
**ELEVATION AT PIER**



**SECTION B-B**

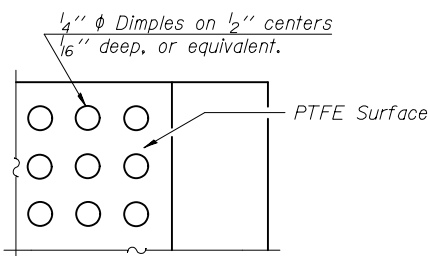
**TYPE II ELASTOMERIC EXP. BRG.**

**FIXED BEARING**

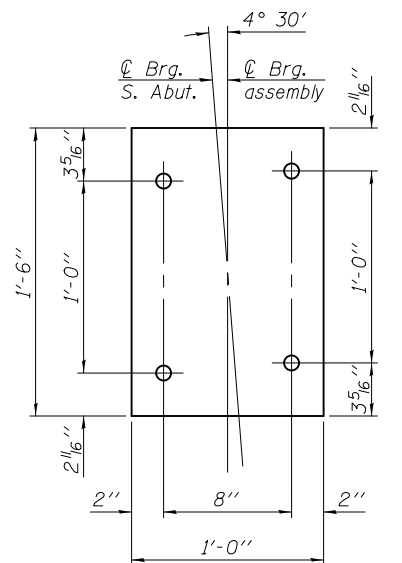


**TOP BEARING ASSEMBLY**

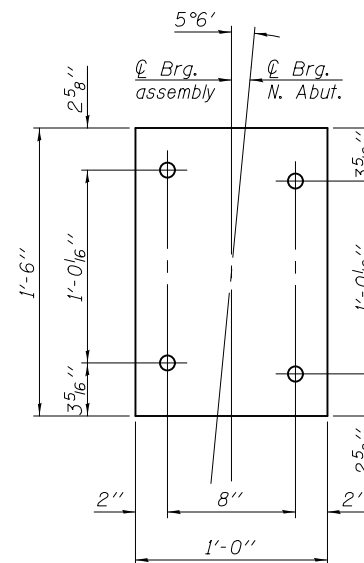
See Bearing Plate Plan views for additional information.



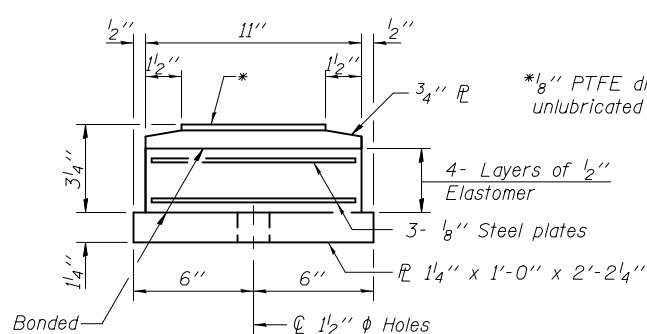
**PLAN-PTFE SURFACE**



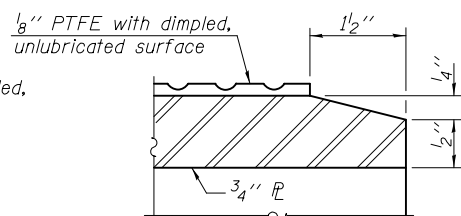
**SOUTH ABUTMENT TOP BEARING PLATE PLAN**



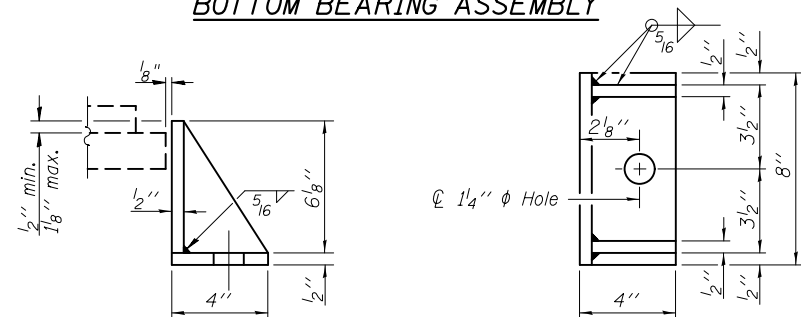
**NORTH ABUTMENT TOP BEARING PLATE PLAN**



**BOTTOM BEARING ASSEMBLY**

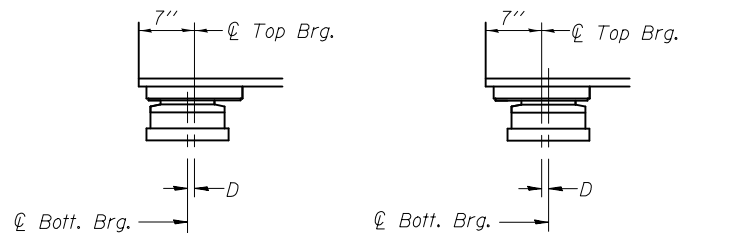


**SECTION THRU PTFE**



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



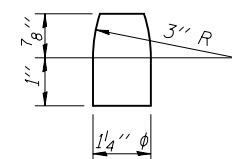
**BELOW 50°F.**

**ABOVE 50°F.**

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

**SETTING ANCHOR BOLTS AT EXP. BRG.**

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



**PINTLE**

**Notes:**

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 3/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

**SHIM PLATE THICKNESS**

	S. Abut.	Pier	N. Abut.
Girder 1	-	1/8"	-
Girder 2	1/2"	5/8"	5/8"

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	16
Anchor Bolts, 1"	Each	32
Anchor Bolts, 1 1/4"	Each	16

DESIGNED - DEWEY H. COULTAS  
 CHECKED - NICHOLAS R. BARNETT  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

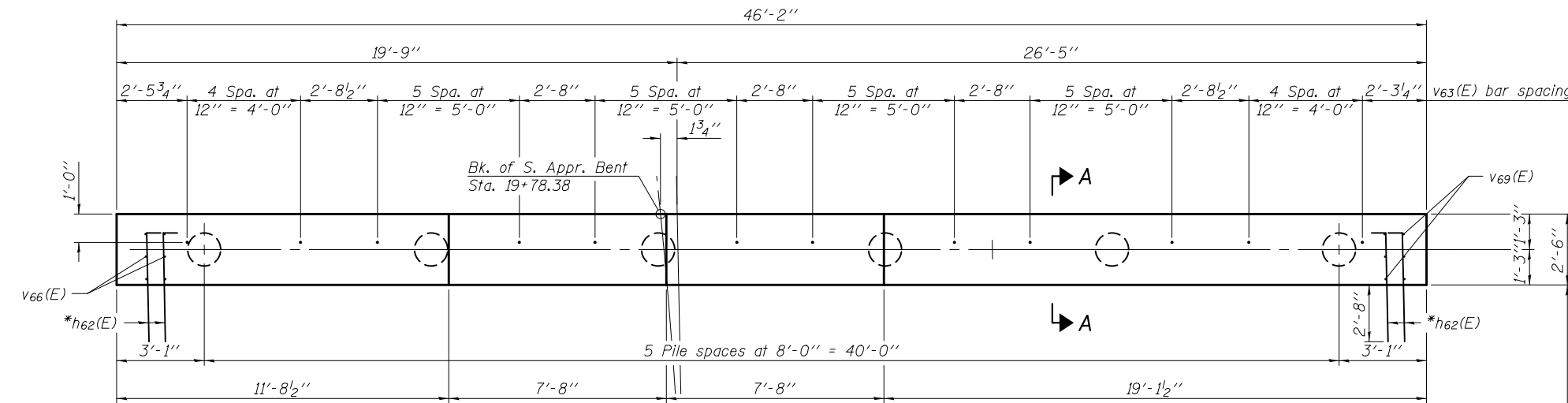
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS  
 STRUCTURE NO. 010 - 0289

SHEET NO. 46 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	131

CONTRACT NO. 70700  
 ILLINOIS FED. AID PROJECT



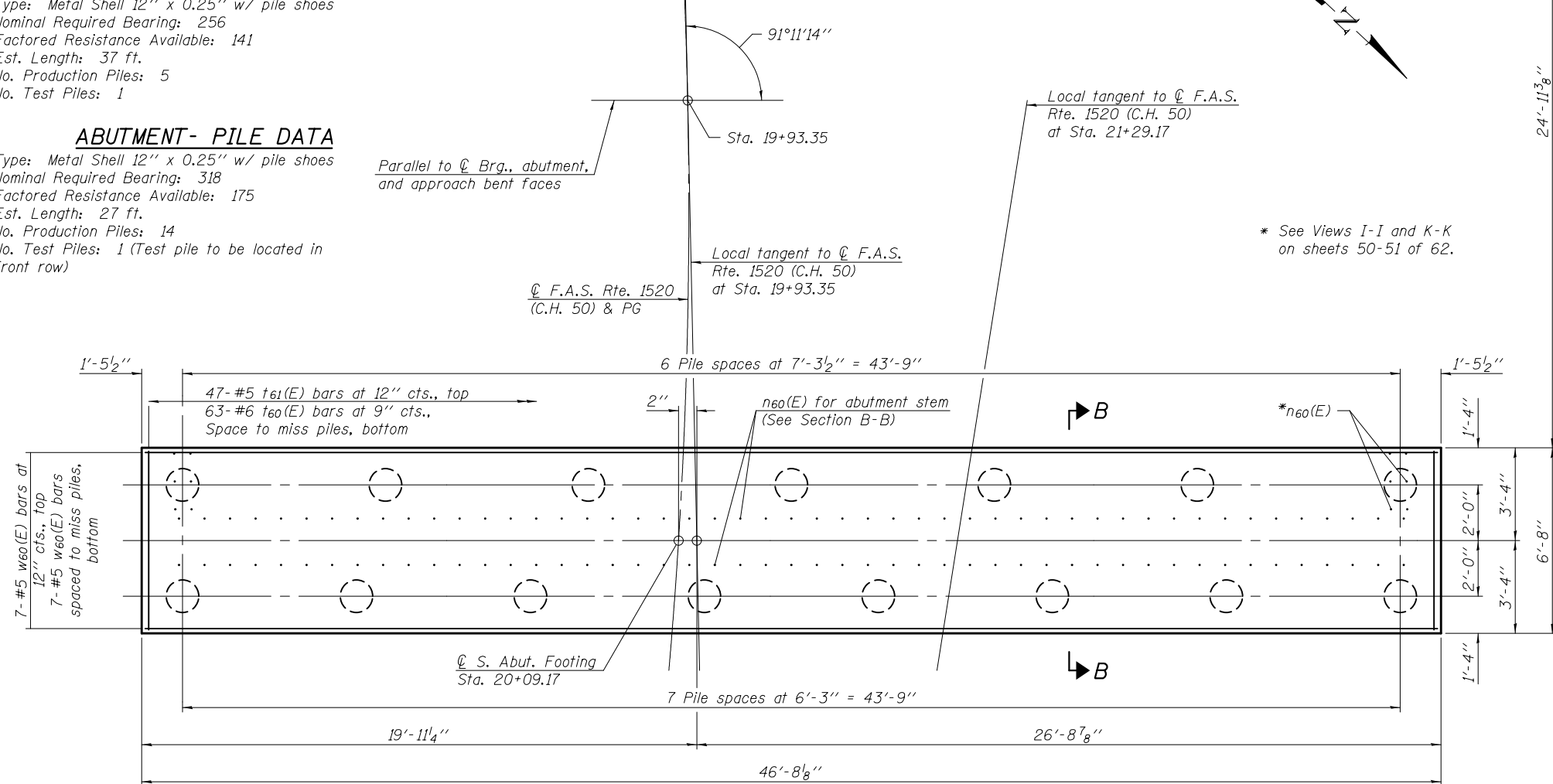
**APPROACH BENT-PILE DATA**

Type: Metal Shell 12" x 0.25" w/ pile shoes  
 Nominal Required Bearing: 256  
 Factored Resistance Available: 141  
 Est. Length: 37 ft.  
 No. Production Piles: 5  
 No. Test Piles: 1

**ABUTMENT- PILE DATA**

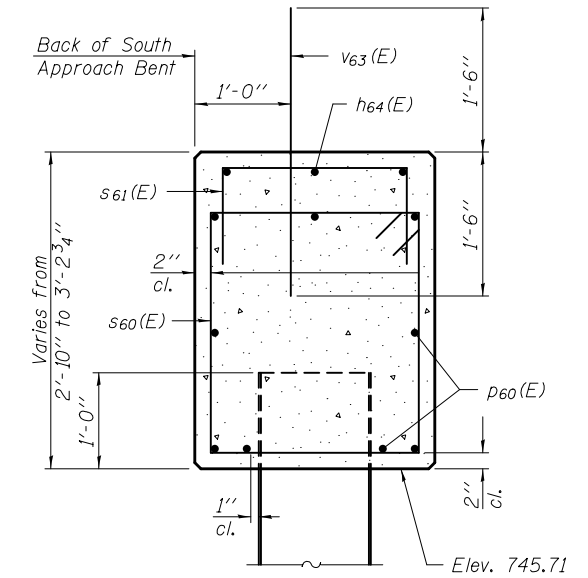
Type: Metal Shell 12" x 0.25" w/ pile shoes  
 Nominal Required Bearing: 318  
 Factored Resistance Available: 175  
 Est. Length: 27 ft.  
 No. Production Piles: 14  
 No. Test Piles: 1 (Test pile to be located in front row)

Parallel to C. Brg., abutment, and approach bent faces

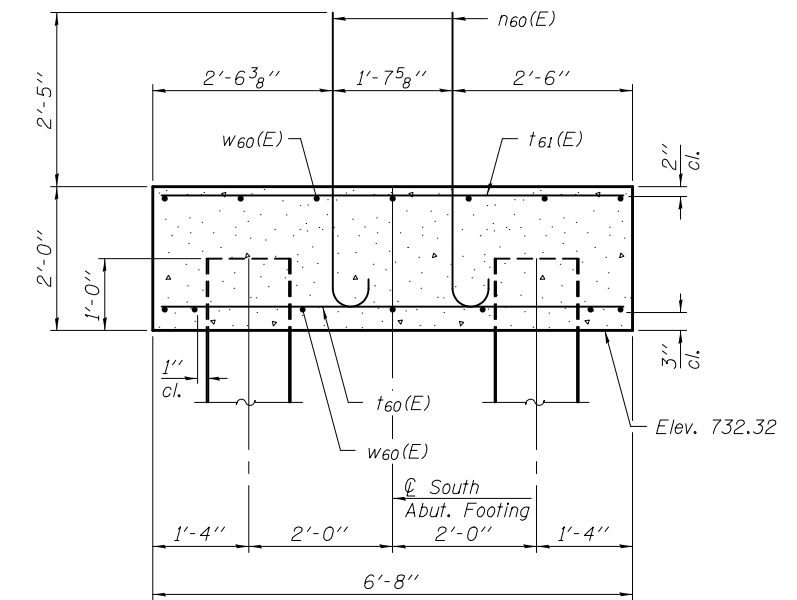


**FOOTING PLAN**

Notes:  
 Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.  
 For details of piles, see sheet 58 of 62.  
 For details of reinforcement and Bill of Material, see sheet 51 of 62.  
 The abutments shall have all exposed surfaces of backwalls, bridge seats, front and side faces, and curtain walls treated with Concrete Sealer.  
 See sheet 3 of 62 for offsets to local tangent at Sta. 21+29.27.



**SECTION A-A**



**SECTION B-B**

Note:  
 Space proposed piles at south abutment to miss existing piles by as much distance as practical, but not less than 9" clear distance.

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jaime F. Joffe</i>	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl Perry</i>	REVISED
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

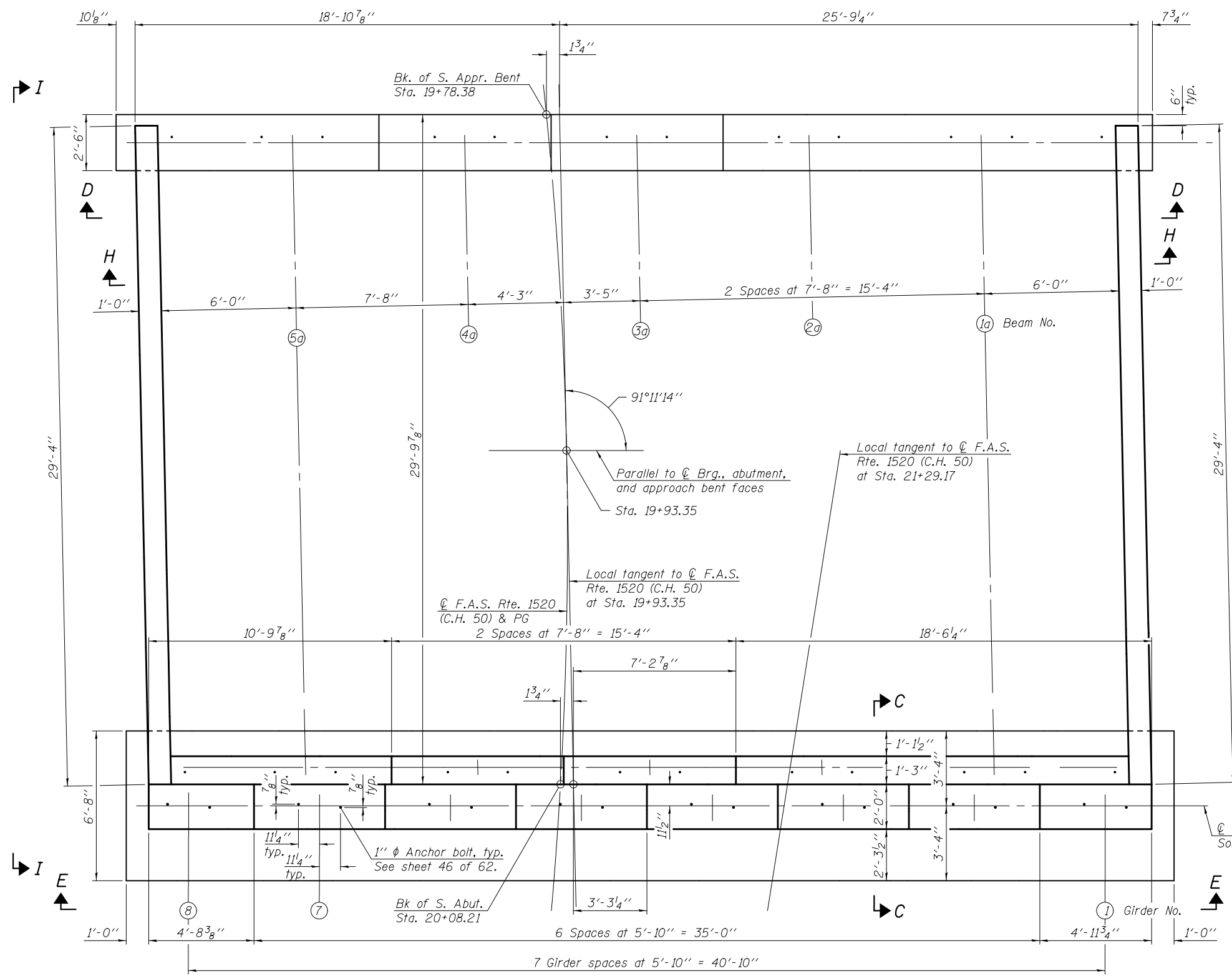
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT  
 STRUCTURE NO. 010 - 0289**

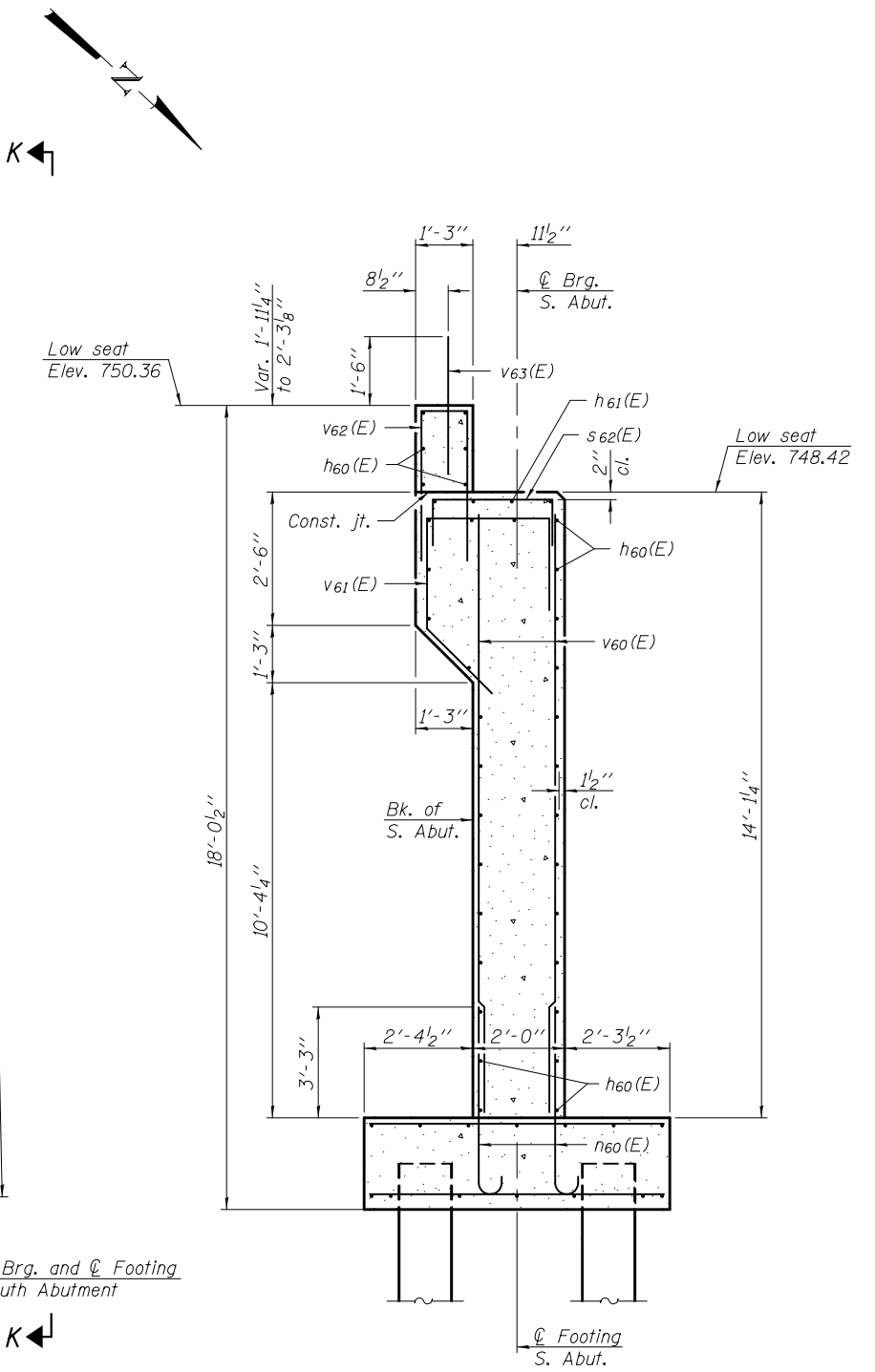
SHEET NO. 47 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	132
CONTRACT NO. 70700				
ILLINOIS FED. AID PROJECT				





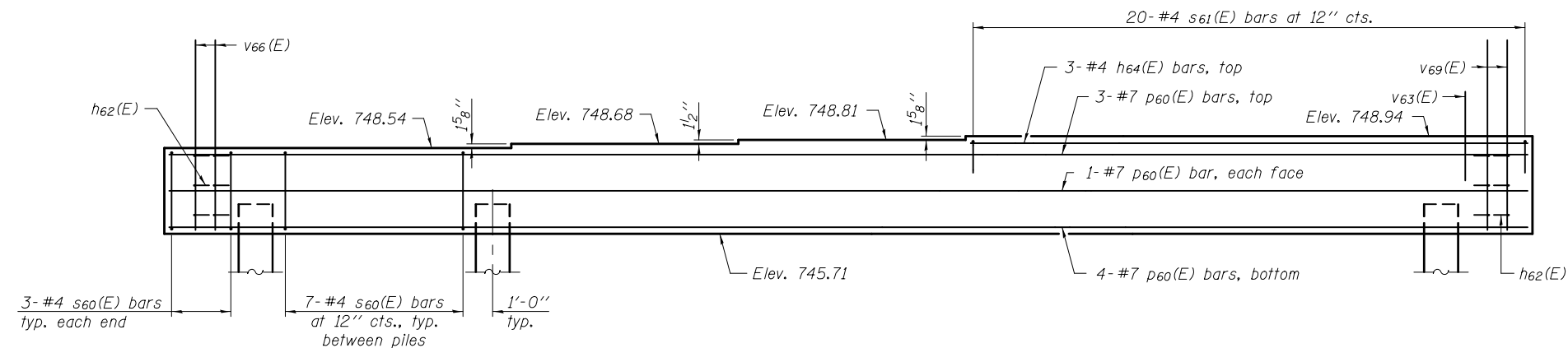
PLAN



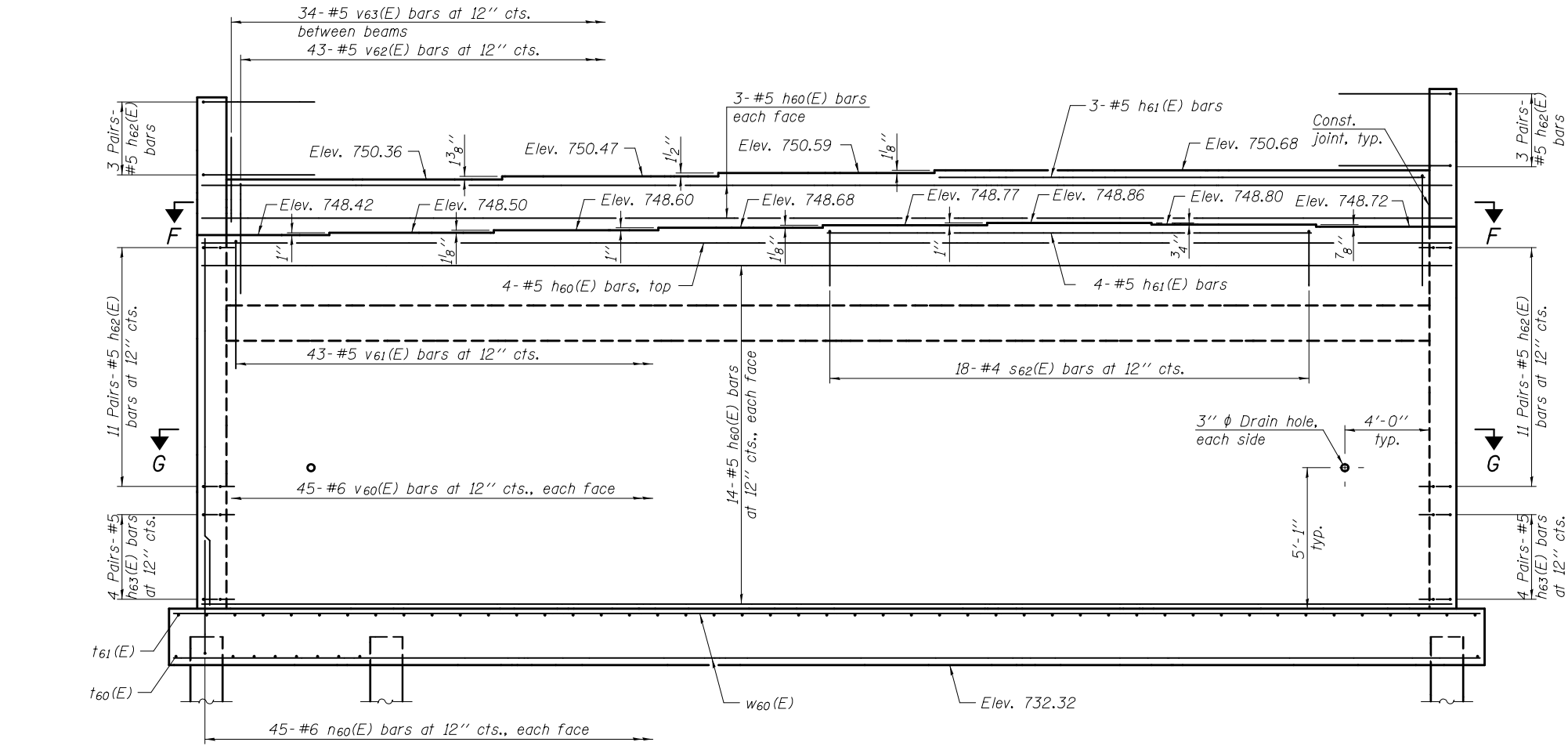
SECTION C-C

Note:  
See sheet 21 of 62 for offsets to local tangent at Sta. 21+29.17.

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Joanne F. Schaff</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOUTH ABUTMENT STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 133
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl Kasper</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 48 OF 62 SHEETS	CONTRACT NO. 70700			
DRAWN - MICHAEL B. MOSSMAN		REVISED							
CHECKED - D.H.C. / N.R.B.						ILLINOIS FED. AID PROJECT			

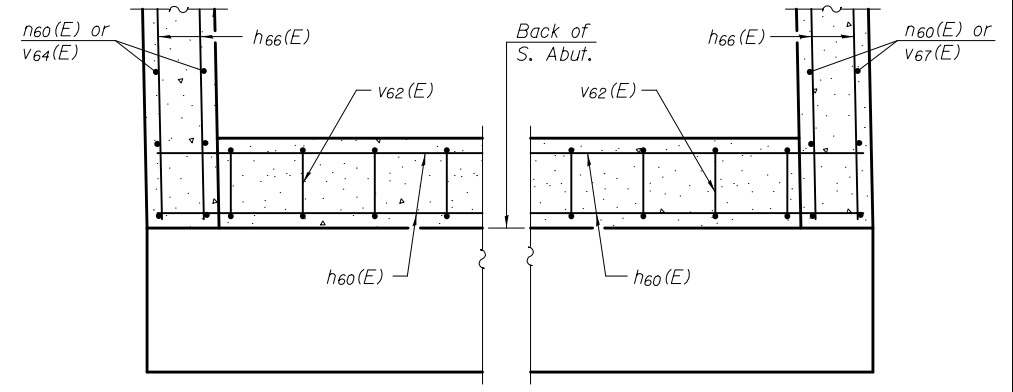


VIEW D-D

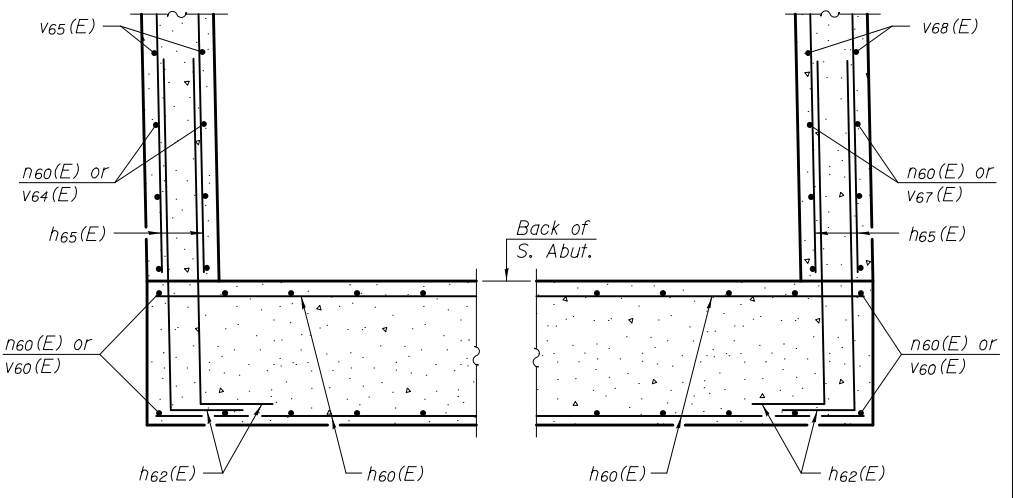


VIEW E-E

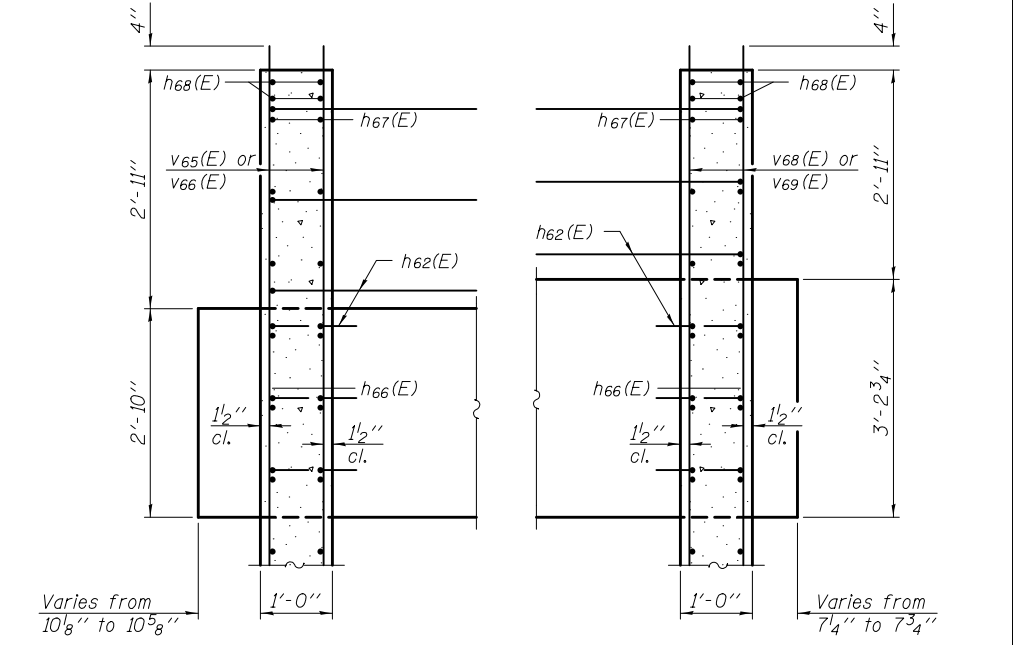
Note:  
Pour steps monolithically with cap.  
Space reinforcement to miss anchor bolts.



SECTION F-F

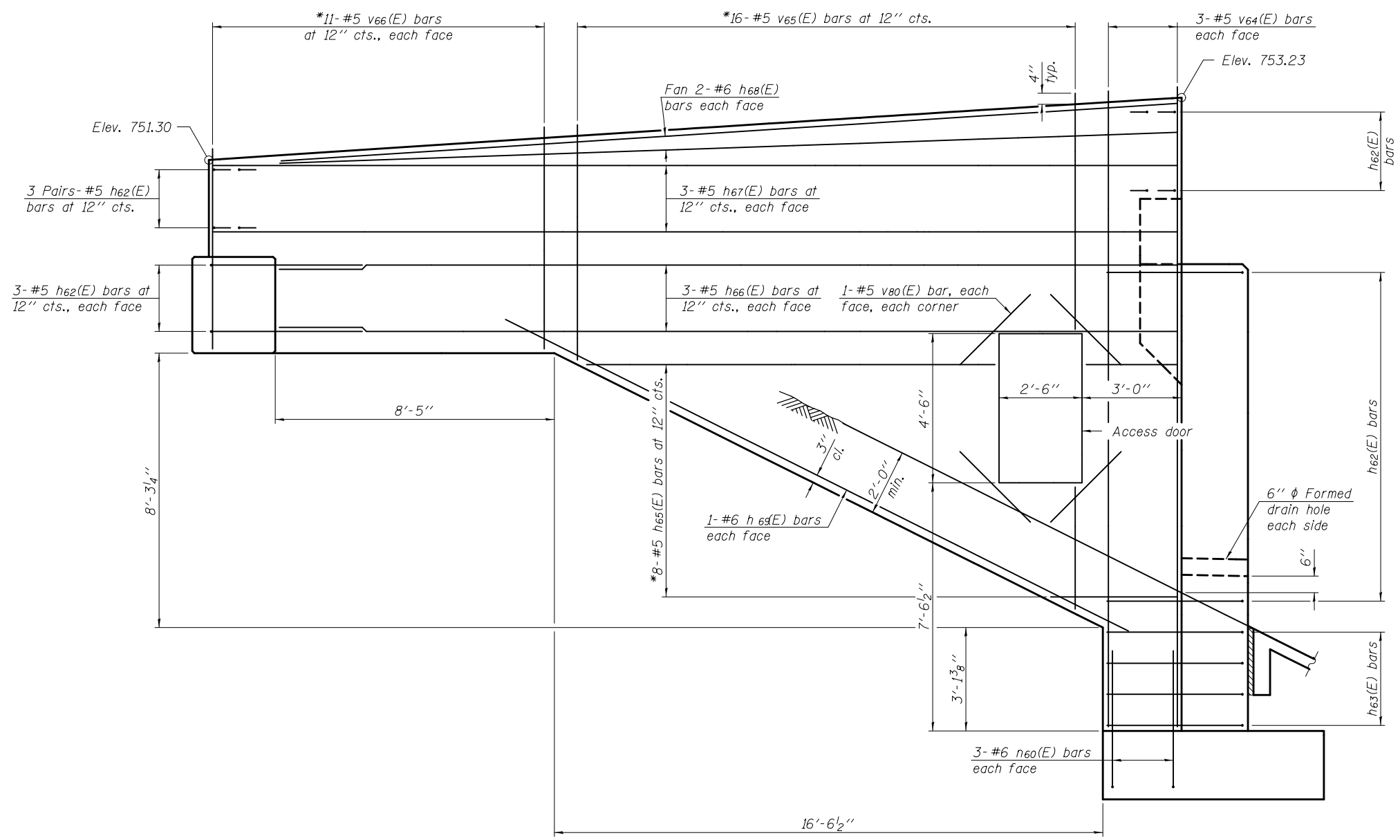


SECTION G-G

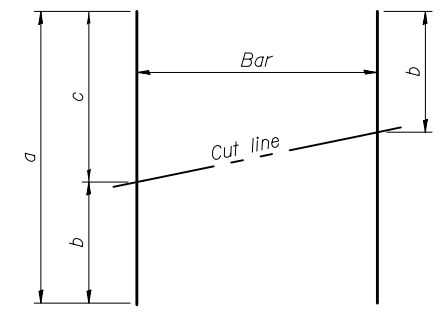


SECTION H-H

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jaime F. Joffe</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOUTH ABUTMENT STRUCTURE NO. 010 - 0289</b>	F.A.I. RT. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 134	
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 49 OF 62 SHEETS		CONTRACT NO. 70700			
DRAWN - MICHAEL B. MOSSMAN		REVISED			ILLINOIS FED. AID PROJECT					
CHECKED - D.H.C. / N.R.B.		REVISED								



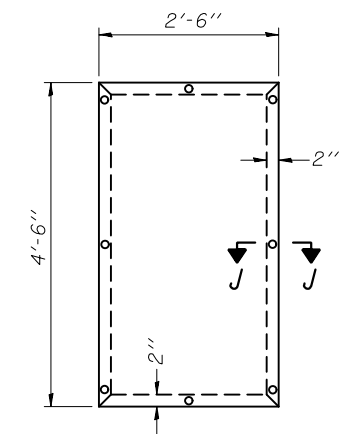
**VIEW I-I**  
(East curtain wall)



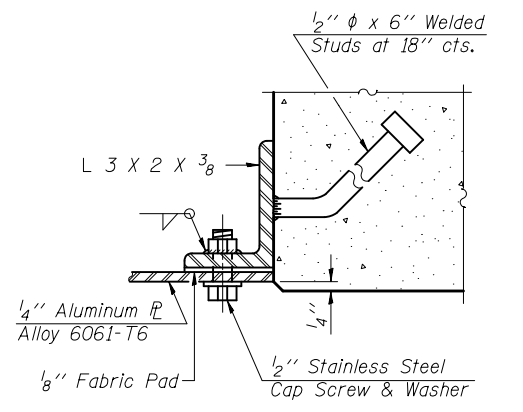
**FIELD CUTTING DIAGRAM**

\* Order h65(E) and v65(E) thru v66(E) bars full length. Cut to fit and use the remainder of bars in opposite face. Cut reinforcement to miss access door.

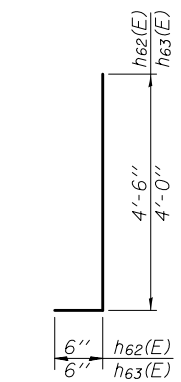
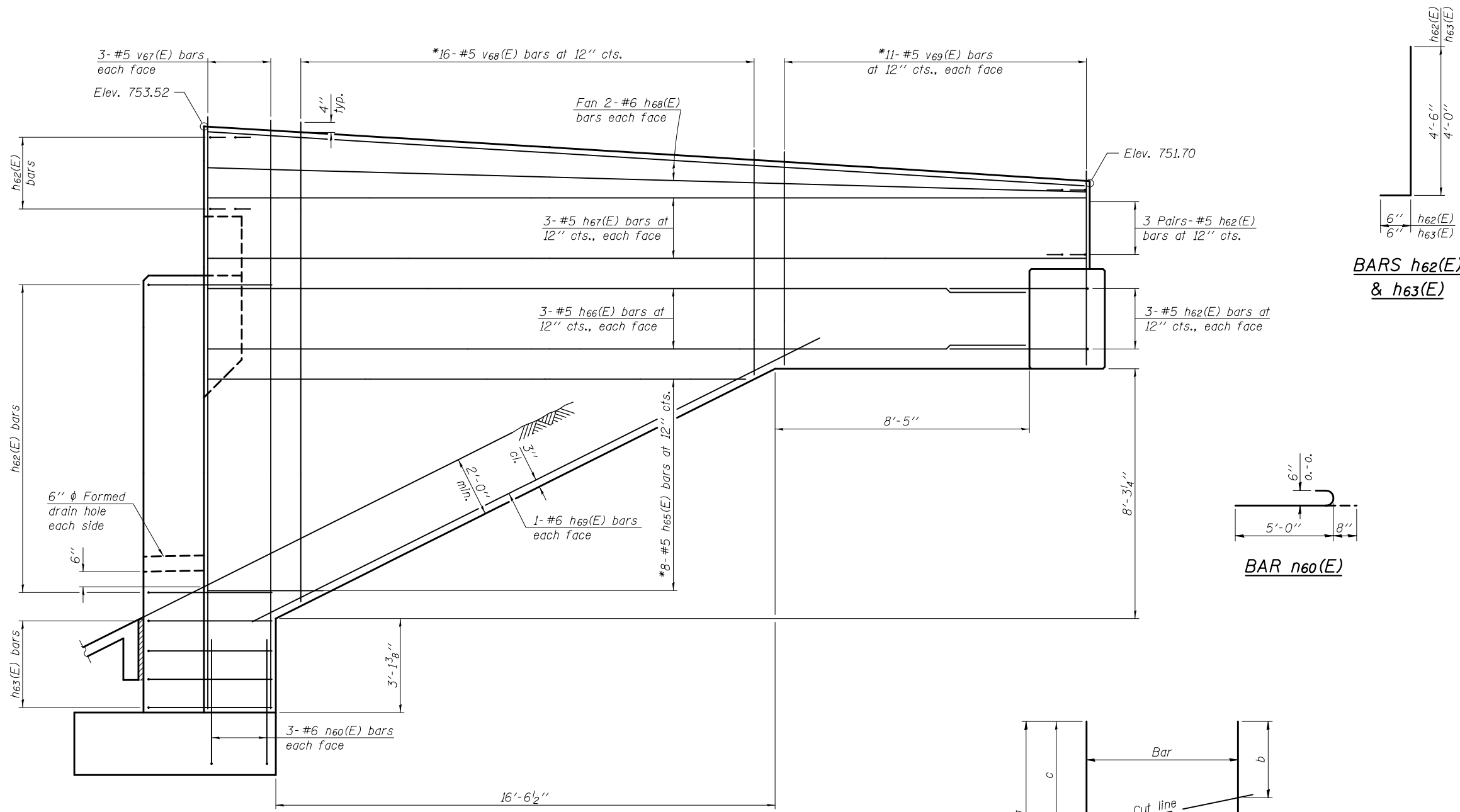
Bar	a	b	c
h65(E)	22'-0"	4'-0"	18'-0"
v65(E)	22'-0"	6'-9"	15'-3"
v66(E)	12'-0"	5'-8"	6'-4"



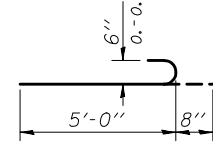
**DOOR ELEVATION**  
Cost of door and frame are included with Concrete Structures.



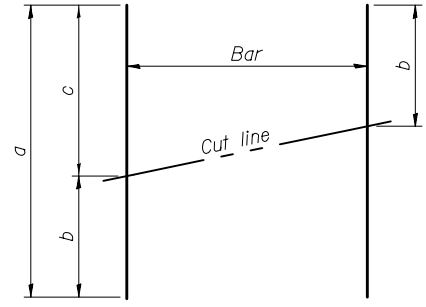
**SECTION J-J**



**BARS h62(E) & h63(E)**



**BAR n60(E)**



**FIELD CUTTING DIAGRAM**

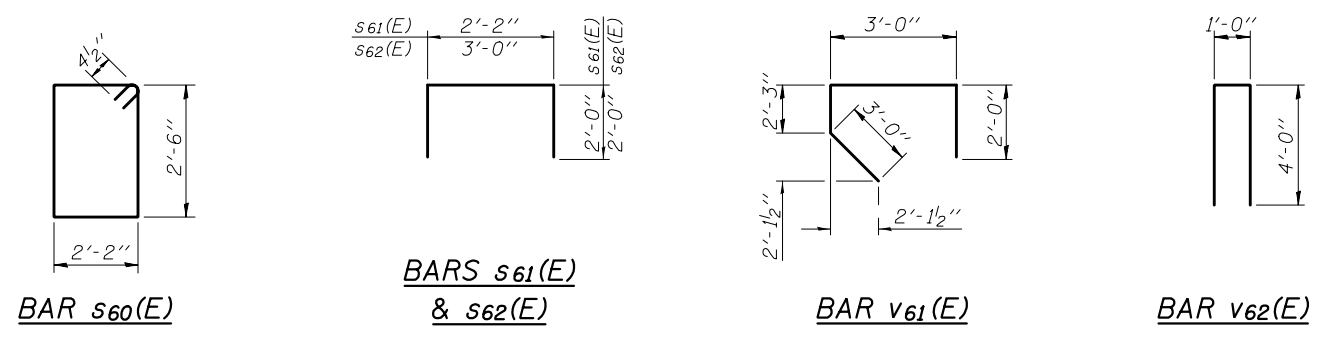
\* Order h65(E) and v68(E) thru v69(E) bars full length. Cut to fit and use the remainder of bars in opposite face.

Bar	a	b	c
h65(E)	22'-6"	4'-3"	18'-3"
v68(E)	23'-0"	7'-3"	15'-9"
v69(E)	13'-0"	6'-2"	6'-10"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h60(E)	38	#5	44'-4"	—
h61(E)	7	#5	17'-2"	—
h62(E)	80	#5	5'-0"	┌
h63(E)	16	#5	4'-6"	┌
h64(E)	3	#4	18'-9"	—
h65(E)	16	#5	22'-6"	—
h66(E)	12	#5	27'-0"	—
h67(E)	12	#5	29'-0"	—
h68(E)	8	#6	29'-0"	—
h69(E)	4	#6	23'-0"	—
n60(E)	102	#6	5'-8"	└
p60(E)	9	#7	45'-10"	—
s60(E)	41	#4	10'-1"	┌
s61(E)	20	#4	6'-2"	┌
s62(E)	18	#4	7'-0"	┌
f60(E)	63	#6	6'-4"	—
f61(E)	47	#5	6'-4"	—
v60(E)	90	#6	13'-9"	—
v61(E)	43	#5	10'-3"	┌
v62(E)	43	#5	9'-0"	┌
v63(E)	68	#5	3'-0"	—
v64(E)	6	#5	19'-0"	—
v65(E)	16	#5	22'-0"	—
v66(E)	11	#5	12'-0"	—
v67(E)	6	#5	19'-6"	—
v68(E)	16	#5	23'-0"	—
v69(E)	11	#5	13'-0"	—
v80(E)	8	#5	3'-0"	—
w60(E)	14	#5	46'-4"	—
Structure Excavation	Cu. Yd.		153	
Concrete Structures	Cu. Yd.		115	
Reinforcement Bars, Epoxy Coated	Pound		11,950	
Furnishing Metal Shell Piles, 12" x 0.25"	Foot		563	
Driving Piles	Foot		563	
Test Pile, Metal Shells	Each		2	
Concrete Sealer	Sq. Ft.		1240	
Pile Shoes	Each		21	

**VIEW K-K**  
(West curtain wall)



DESIGNED - NICHOLAS R. BARNETT  
 CHECKED - DEWEY H. COULTAS  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGE DESIGN  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

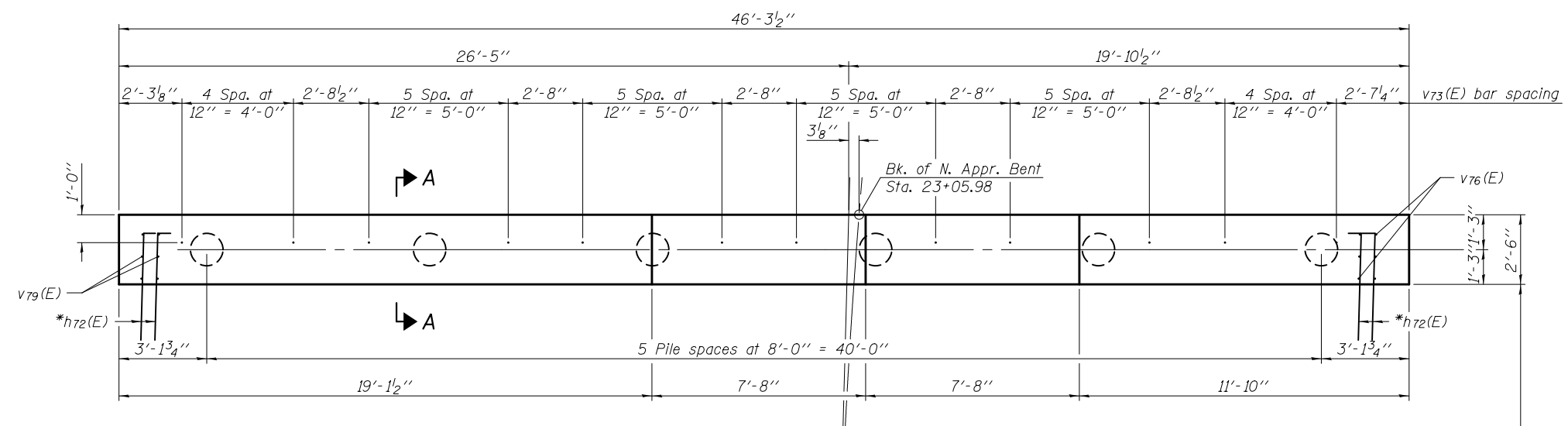
DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT DETAILS**  
**STRUCTURE NO. 010 - 0289**

SHEET NO. 51 OF 62 SHEETS

F.A.I. RT. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 74 10-4BR CHAMPAIGN 290 136  
 CONTRACT NO. 70700  
 ILLINOIS FED. AID PROJECT

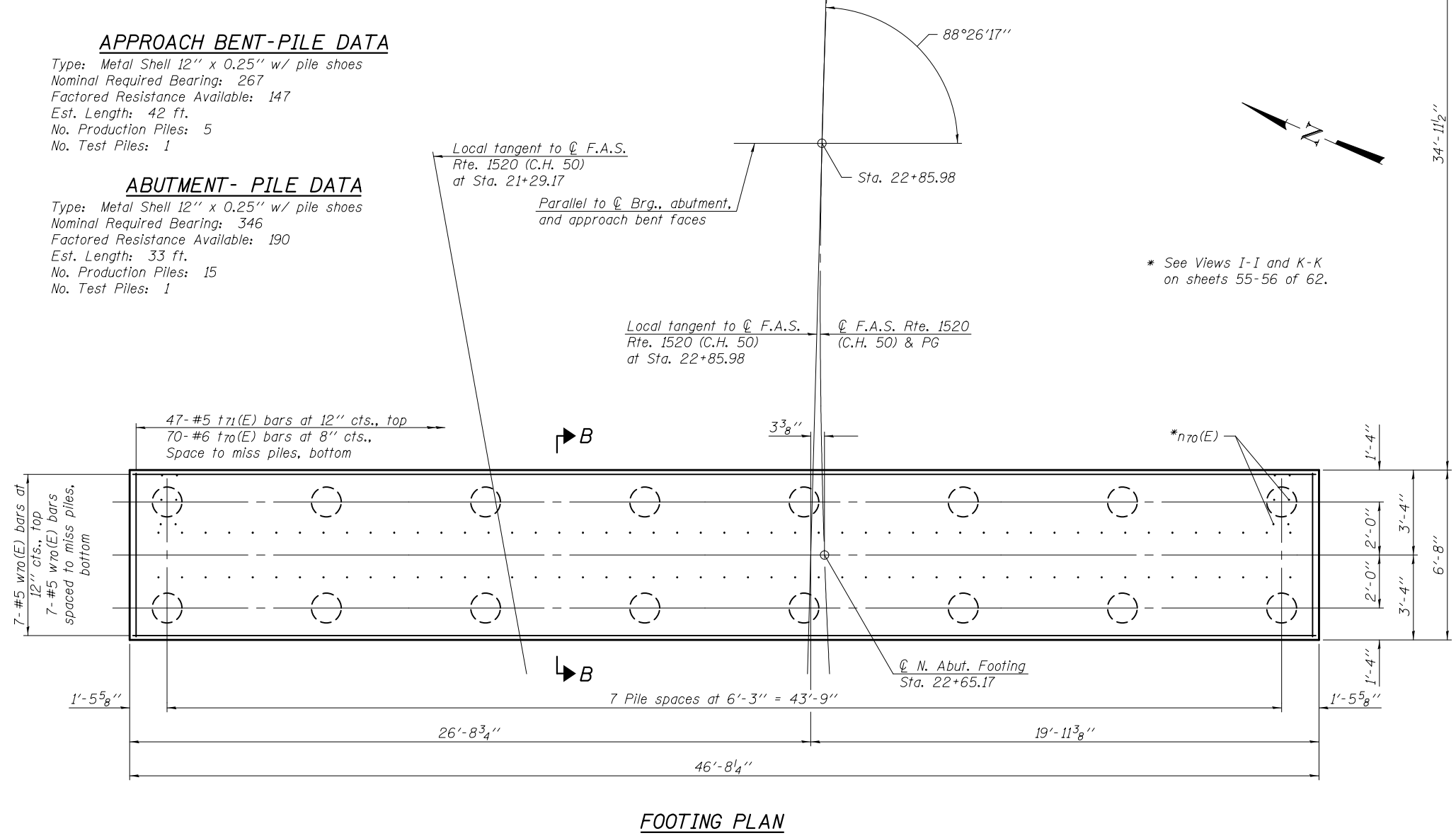


**APPROACH BENT-PILE DATA**

Type: Metal Shell 12" x 0.25" w/ pile shoes  
 Nominal Required Bearing: 267  
 Factored Resistance Available: 147  
 Est. Length: 42 ft.  
 No. Production Piles: 5  
 No. Test Piles: 1

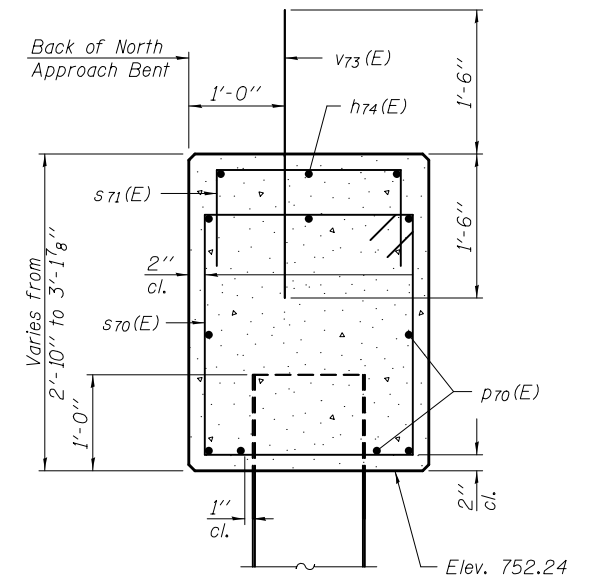
**ABUTMENT- PILE DATA**

Type: Metal Shell 12" x 0.25" w/ pile shoes  
 Nominal Required Bearing: 346  
 Factored Resistance Available: 190  
 Est. Length: 33 ft.  
 No. Production Piles: 15  
 No. Test Piles: 1

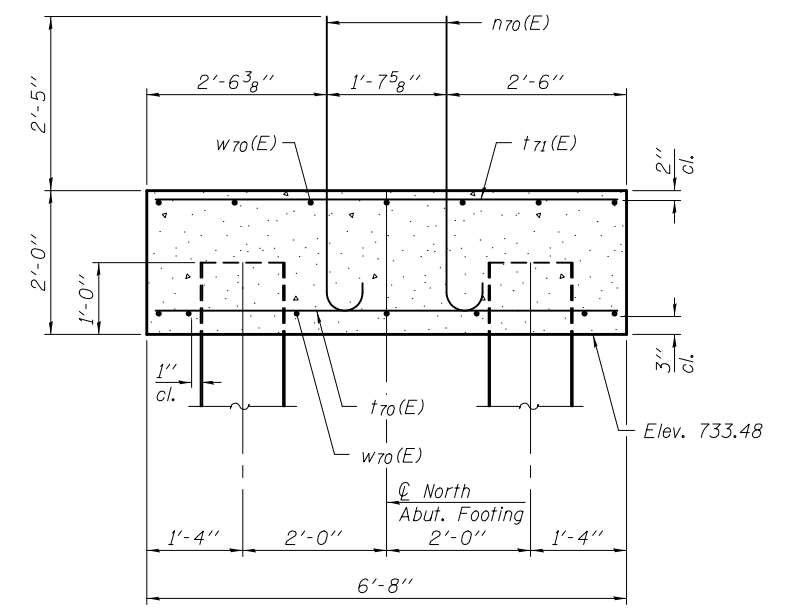


**FOOTING PLAN**

Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 58 of 62.  
 For details of reinforcement and Bill of Material, see sheet 56 of 62.  
 The abutments shall have all exposed surfaces of backwalls, bridge seats, front and side faces, and curtain walls treated with Concrete Sealer.  
 See sheet 3 of 62 for offsets to local tangent at Sta. 21+29.17.



**SECTION A-A**



**SECTION B-B**

\* See Views I-I and K-K on sheets 55-56 of 62.

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. J...</i>	DATE - FEBRUARY 25, 2013
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl...</i>	REVISED
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
CHECKED - D.H.C. / N.R.B.		

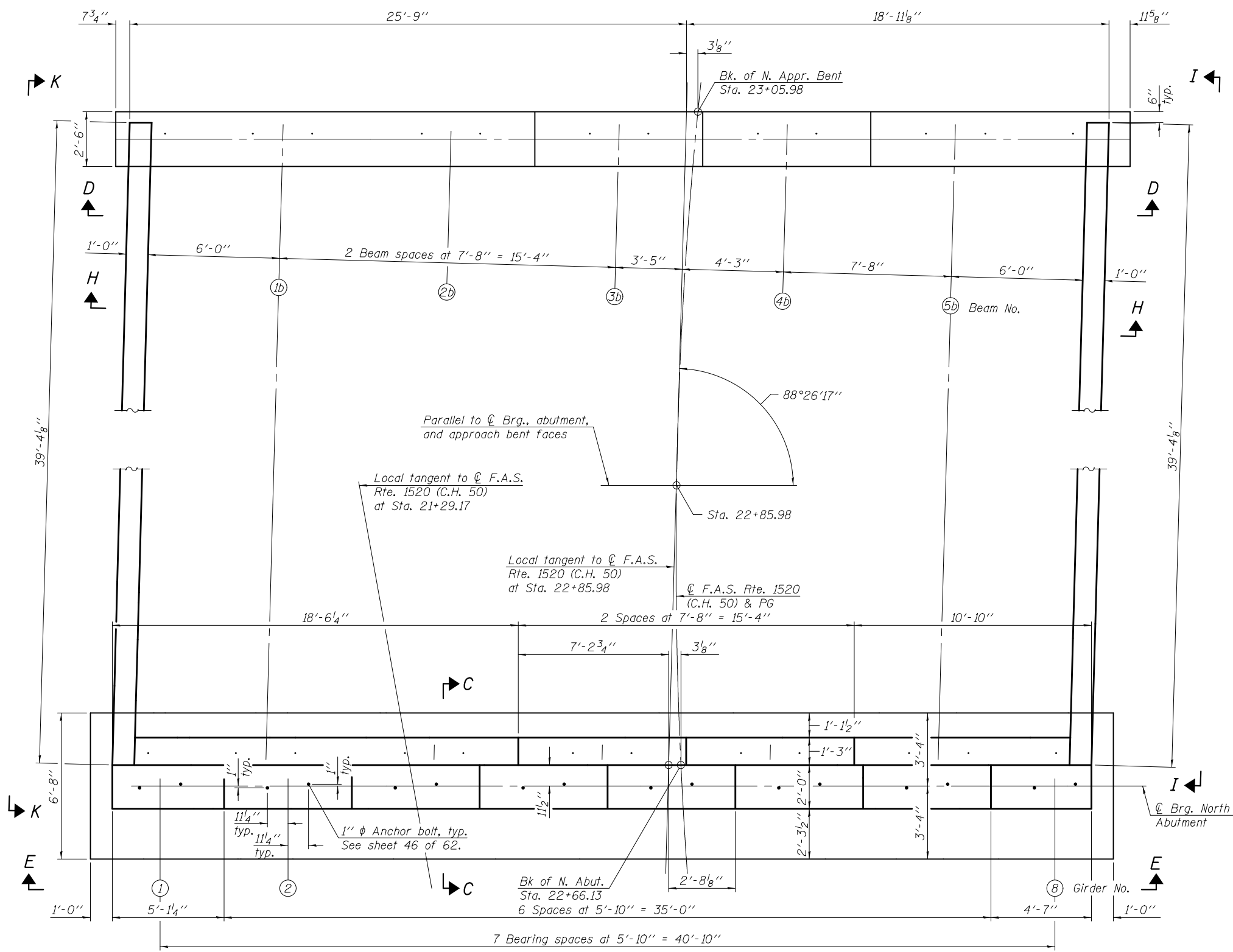
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT  
 STRUCTURE NO. 010 - 0289**

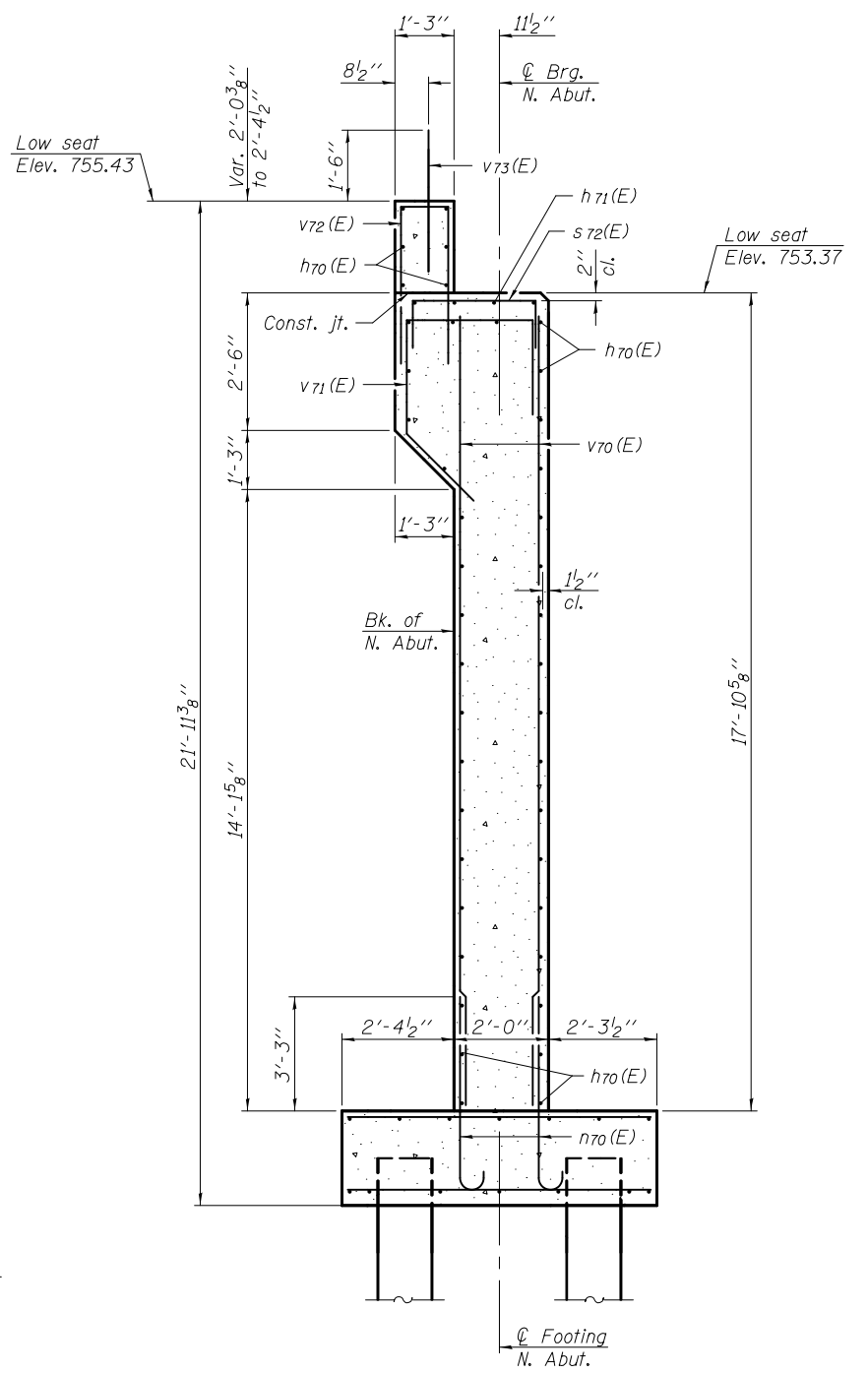
SHEET NO. 52 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	137
				CONTRACT NO. 70700

ILLINOIS FED. AID PROJECT



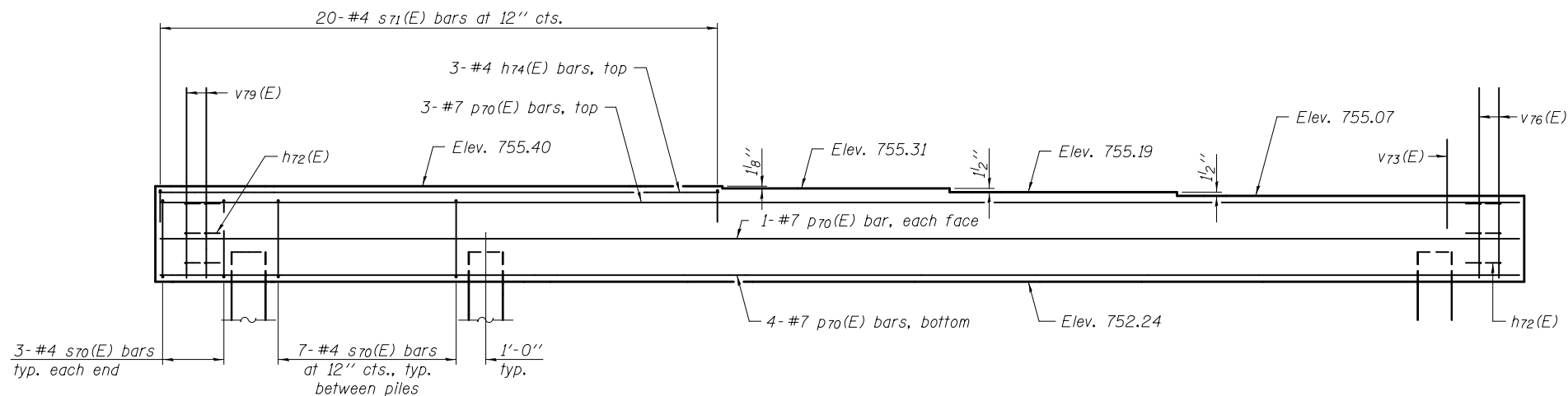
PLAN



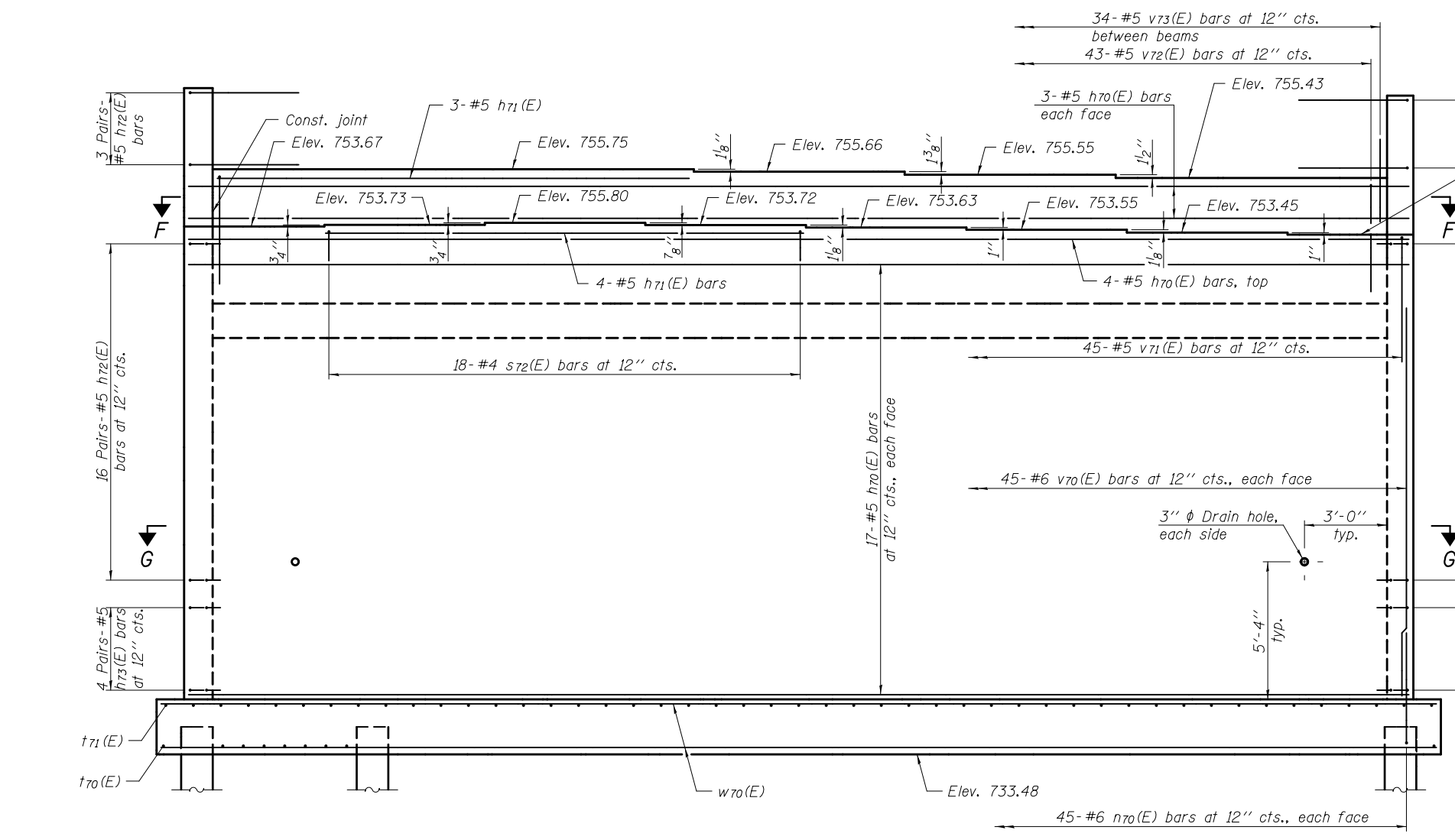
SECTION C-C

Note:  
See sheet 25 of 62 for offsets to local tangent at Sta. 21+29.17.

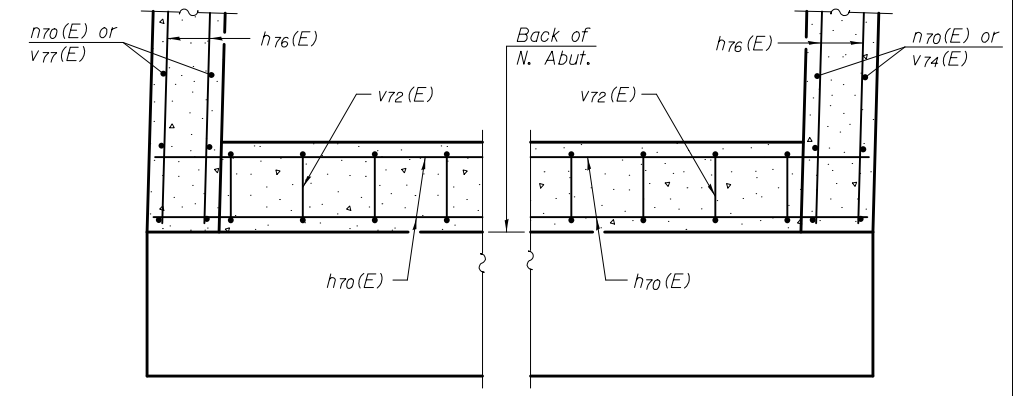
DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>Jaime F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>NORTH ABUTMENT STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED - DEWEY H. COULTAS	PASSED - <i>[Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	138	
DRAWN - MICHAEL B. MOSSMAN		REVISED			CONTRACT NO. 70700					
CHECKED - D.H.C. / N.R.B.					SHEET NO. 53 OF 62 SHEETS					



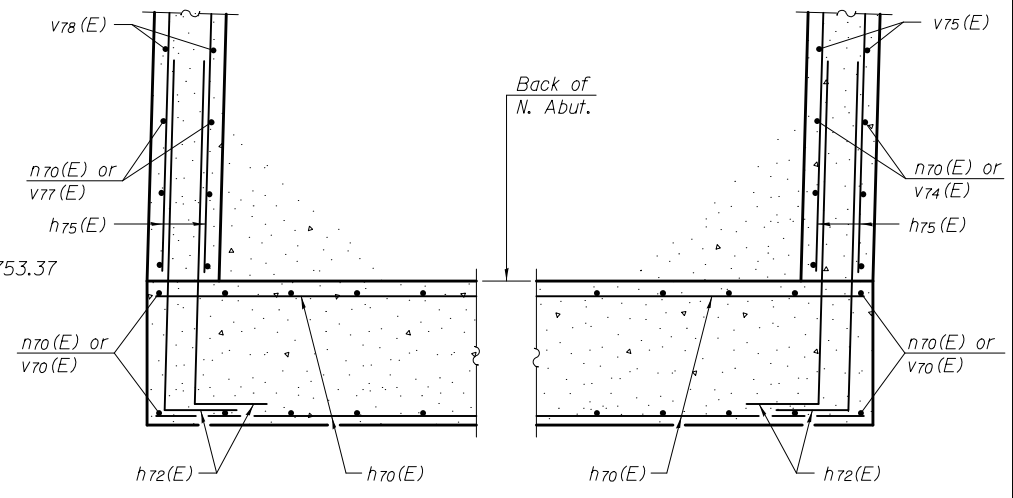
VIEW D-D



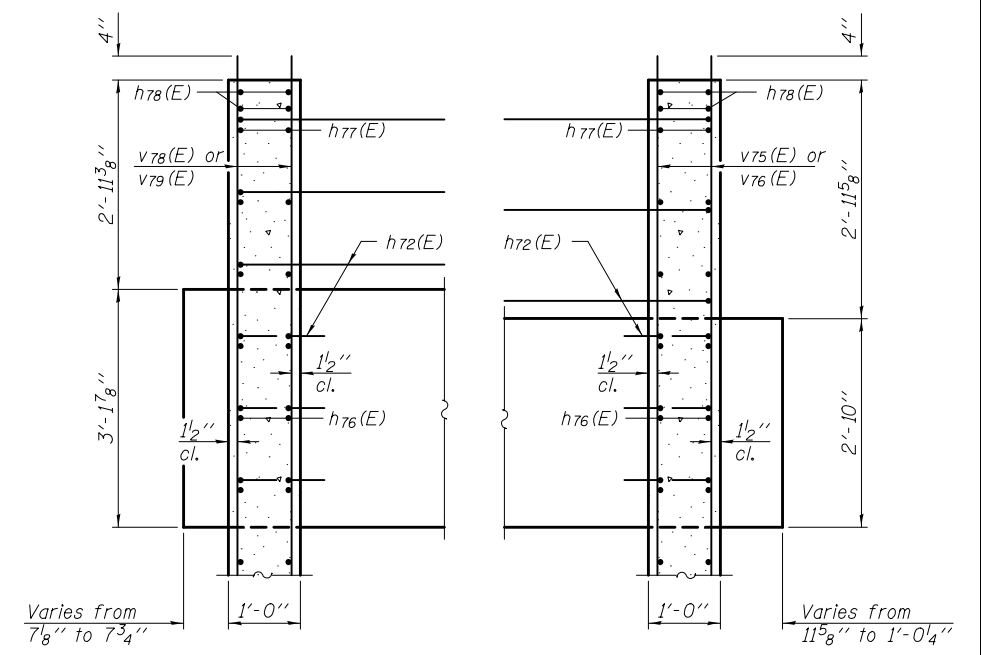
VIEW E-E



SECTION F-F



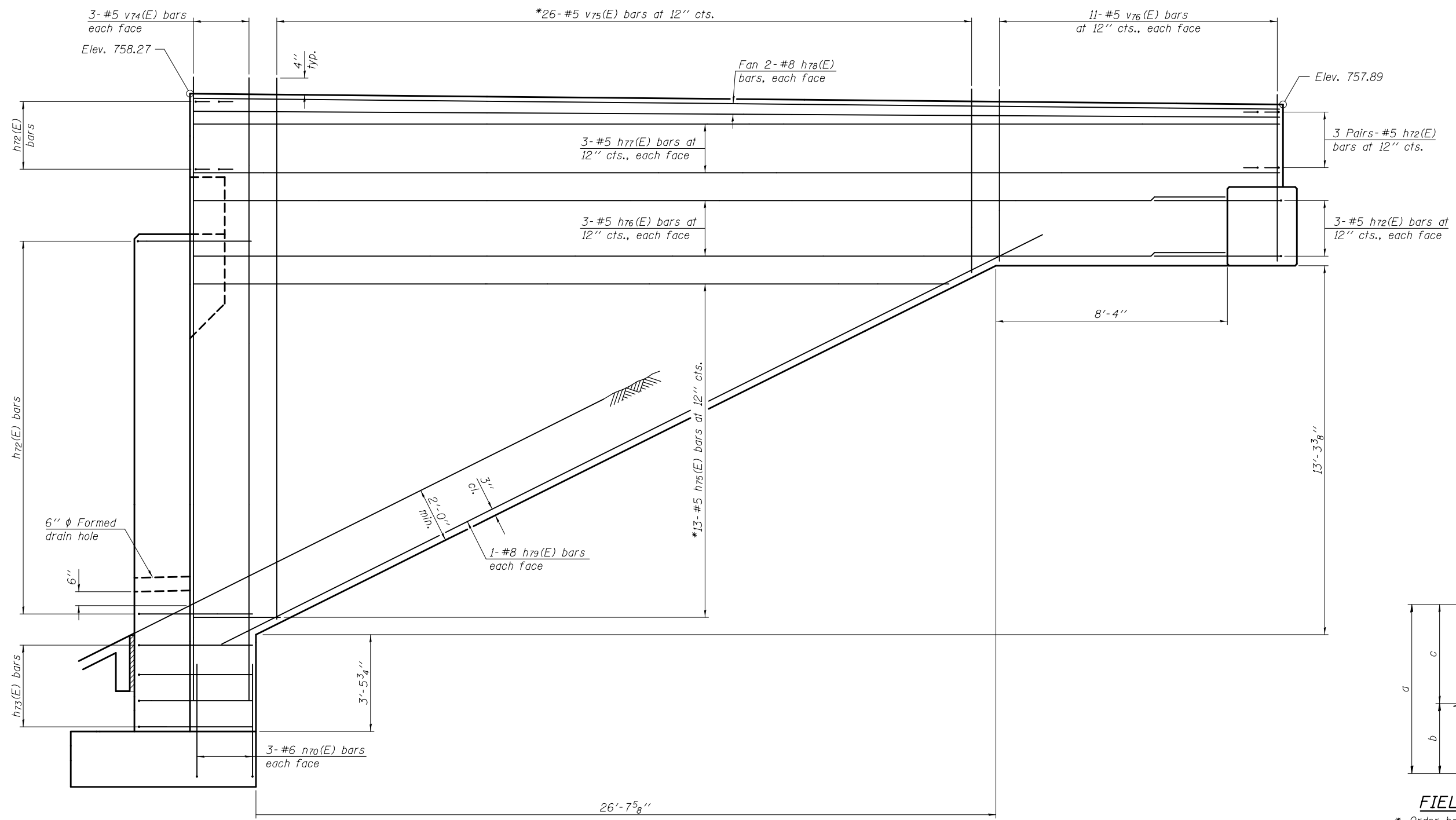
SECTION G-G



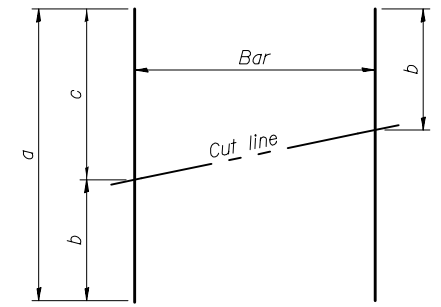
SECTION H-H

Notes:  
 Pour steps monolithically with cap.  
 Space reinforcement to miss anchor bolts.

DESIGNED - NICHOLAS R. BARNETT	EXAMINED - <i>James F. J...</i>	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>NORTH ABUTMENT STRUCTURE NO. 010 - 0289</b>	F.A.I. R.T.E. - 74	SECTION - 10-4BR	COUNTY - CHAMPAIGN	TOTAL SHEETS - 290	SHEET NO. - 139
CHECKED - DEWEY H. COULTAS	PASSED - <i>Carl...</i>	REVISED			CONTRACT NO. 70700				
DRAWN - MICHAEL B. MOSSMAN	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 54 OF 62 SHEETS				
CHECKED - D.H.C. / N.R.B.					ILLINOIS FED. AID PROJECT				



**VIEW I-I**  
(East curtain wall)

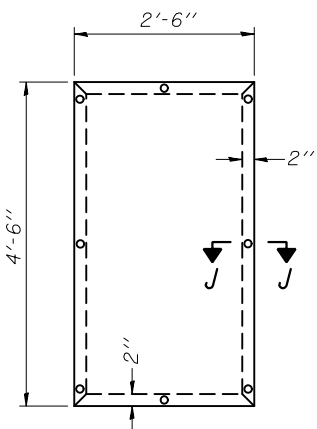


**FIELD CUTTING DIAGRAM**

\* Order h75(E) and v75(E) full length. Cut to fit and use the remainder of bars in opposite face. Cut reinforcement to miss access door.

Bar	a	b	c
h75(E)	30'-0"	3'-0"	27'-0"
v75(E)	25'-3"	6'-3"	19'-0"



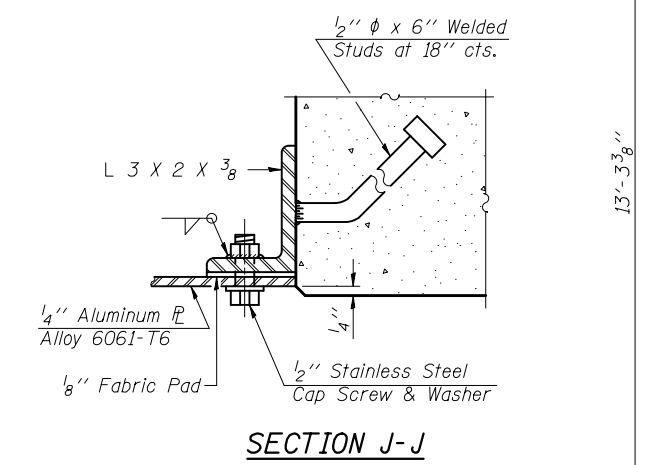


**DOOR ELEVATION**

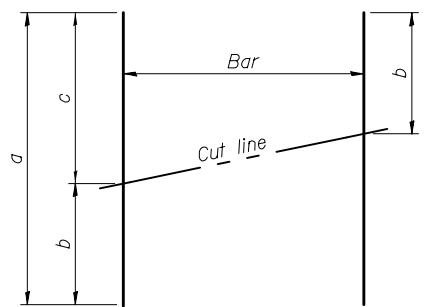
Cost of door and frame are included with Concrete Structures.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h70(E)	44	#5	42'-4"	
h71(E)	7	#5	17'-2"	
h72(E)	100	#5	5'-0"	
h73(E)	16	#5	4'-6"	
h74(E)	3	#4	18'-10"	
h75(E)	26	#5	30'-0"	
h76(E)	12	#5	37'-0"	
h77(E)	12	#5	39'-0"	
h78(E)	8	#8	39'-0"	
h79(E)	4	#8	30'-9"	
n70(E)	102	#6	5'-8"	
p70(E)	9	#7	45'-11"	
s70(E)	41	#4	10'-1"	
s71(E)	20	#4	6'-2"	
s72(E)	18	#4	7'-0"	
t70(E)	70	#6	6'-4"	
t71(E)	47	#5	6'-4"	
v70(E)	90	#6	17'-6"	
v71(E)	45	#5	10'-3"	
v72(E)	43	#5	9'-0"	
v73(E)	68	#5	3'-0"	
v74(E)	6	#5	23'-1"	
v75(E)	26	#5	25'-3"	
v76(E)	22	#5	5'-9"	
v77(E)	6	#5	23'-3"	
v78(E)	26	#5	25'-9"	
v79(E)	22	#5	6'-0"	
v80(E)	8	#5	3'-0"	
w70(E)	14	#5	46'-4"	
Structure Excavation	Cu. Yd.		172	
Concrete Structures	Cu. Yd.		140.2	
Reinforcement Bars, Epoxy Coated	Pound		14,870	
Furnishing Metal Shell Piles, 12" x 0.25"	Foot		705	
Driving Piles	Foot		705	
Test Pile, Metal Shells	Each		2	
Concrete Sealer	Sq. Ft.		1682	
Pile Shoes	Each		22	



**SECTION J-J**



**FIELD CUTTING DIAGRAM**

\* Order h75(E) and v78(E) bars full length. Cut to fit and use the remainder of bars in opposite face. Cut reinforcement to miss access door.

Bar	a	b	c
h75(E)	30'-0"	3'-0"	27'-0"
v78(E)	25'-9"	6'-6"	19'-3"

**BARS h72(E) & h73(E)**

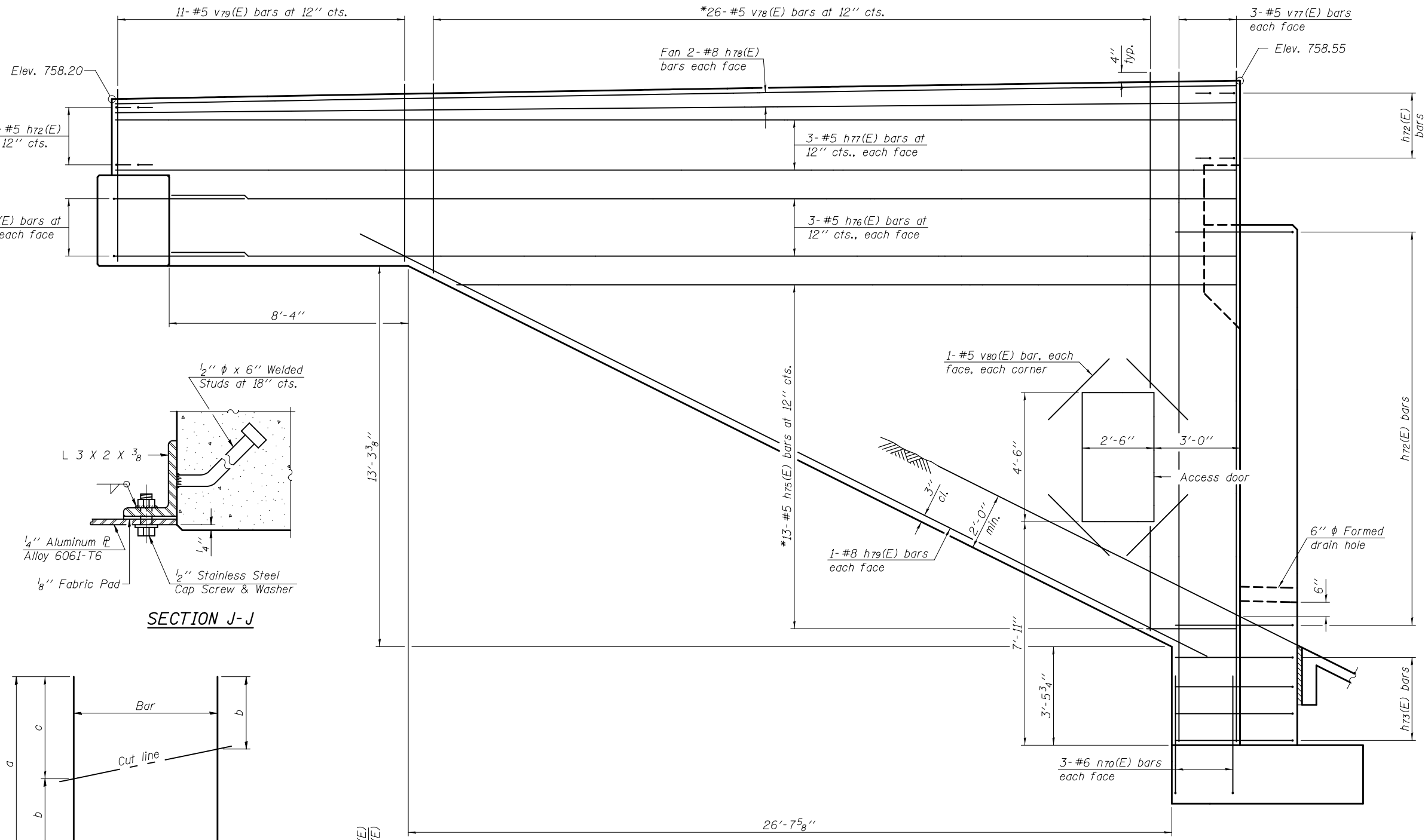
**BAR n70(E)**

**BAR s70(E)**

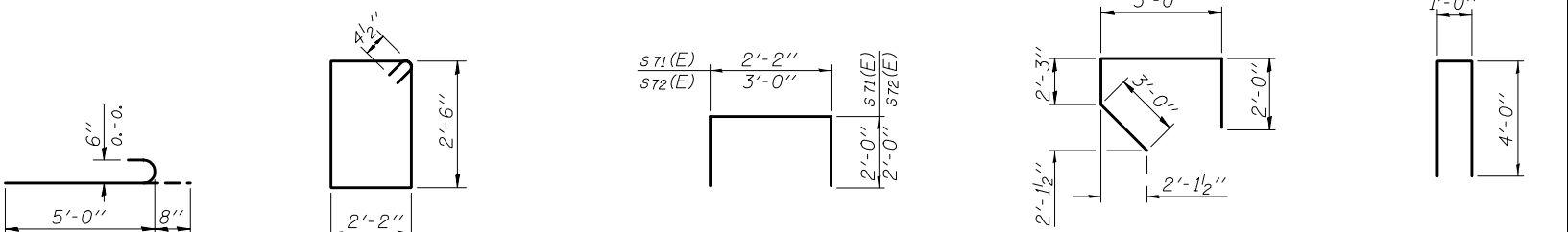
**BARS s71(E) & s72(E)**

**BAR v71(E)**

**BAR v72(E)**

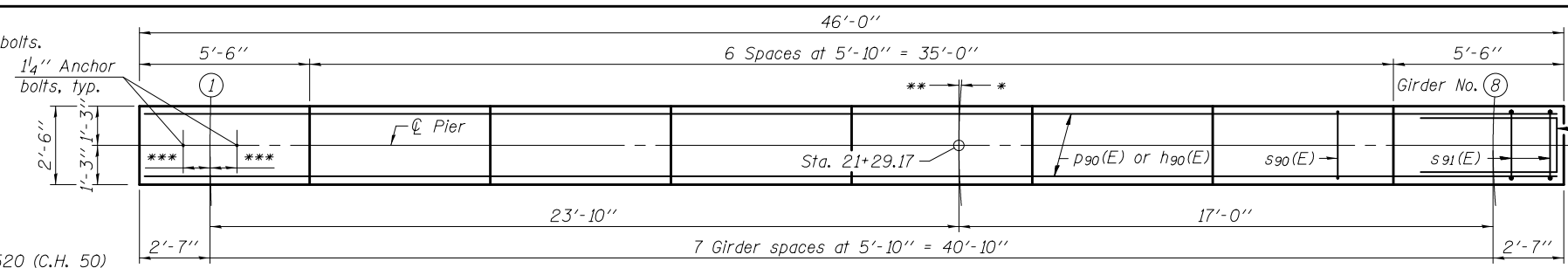


**VIEW K-K (West curtain wall)**

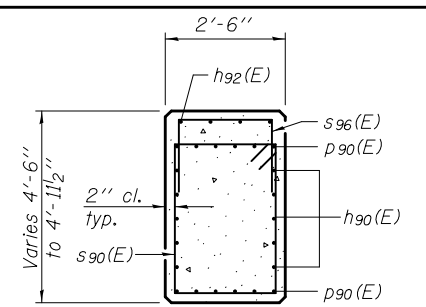


Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 58 of 62.

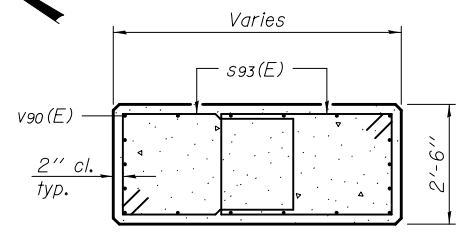
**PILE DATA**  
 Type: Metal shell, 14" x 0.250"  
 with pile shoes  
 Nominal Required Bearing: 367 k  
 Factored Resistance Available: 202 k  
 Est. Length: 29 ft.  
 No. Production Piles: 23  
 No. Test Piles: 1



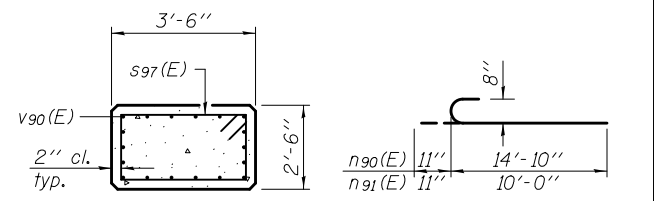
**TOP PLAN**



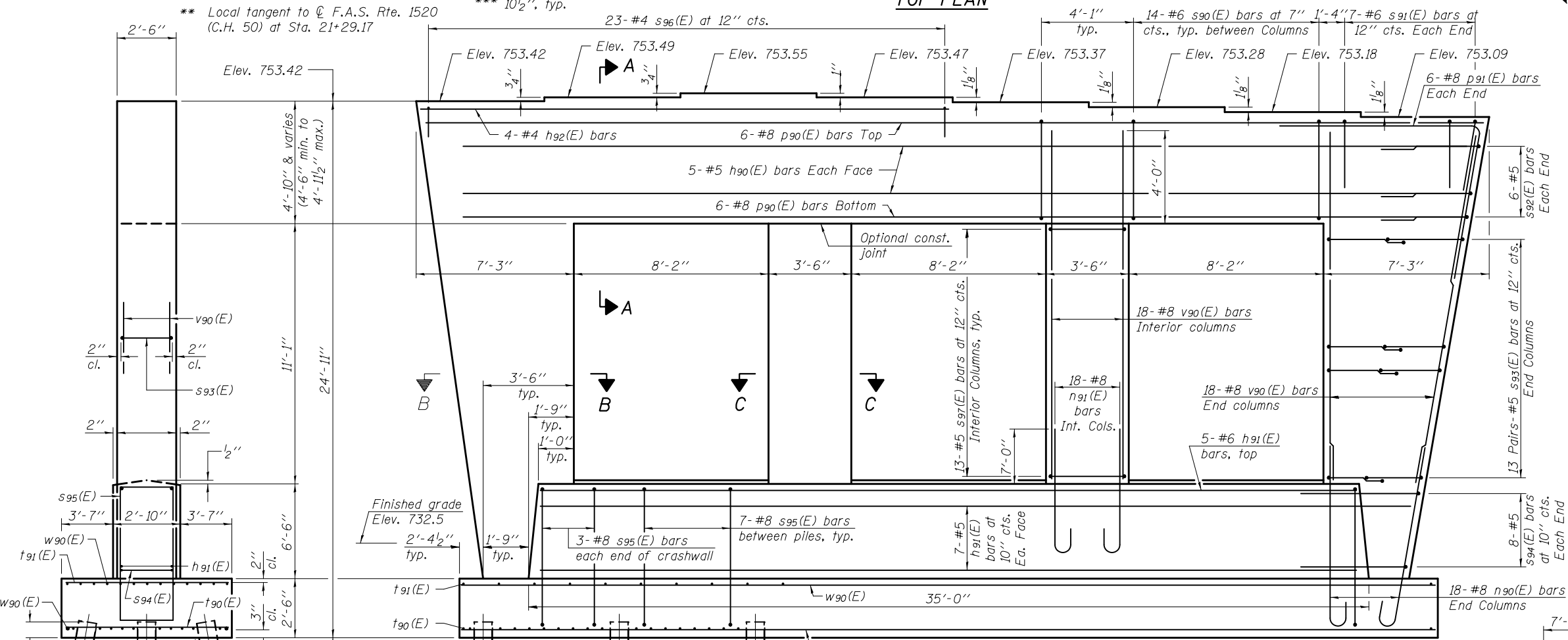
**SECTION A-A**



**SECTION B-B**

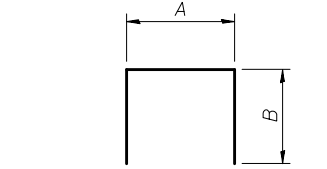


**SECTION C-C BARS n90(E) & n91(E)**



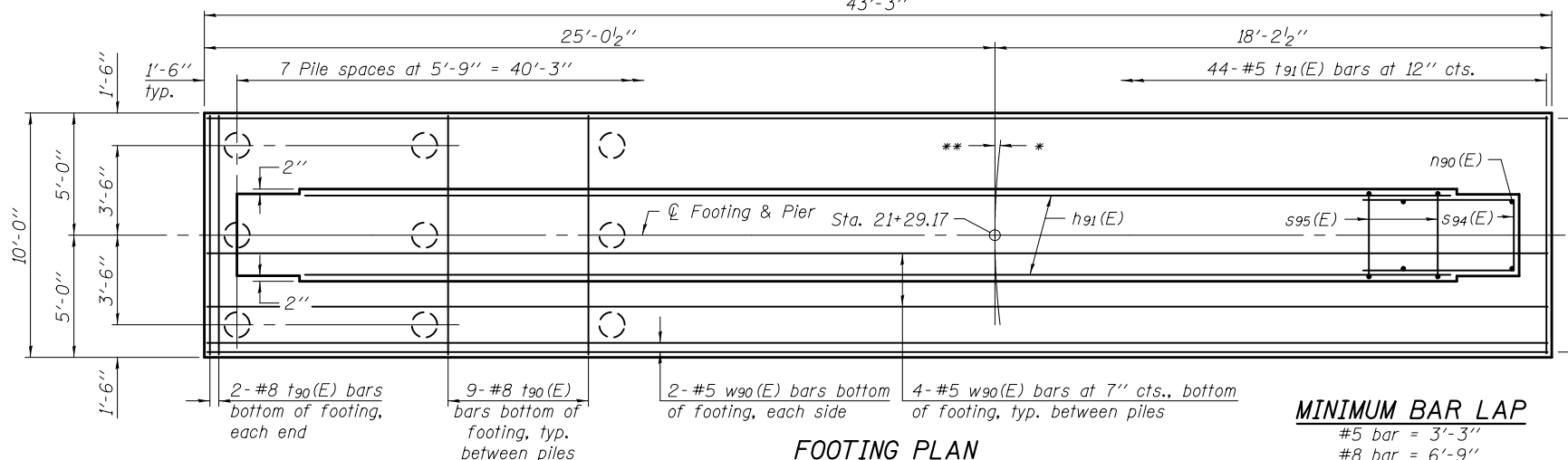
**ELEVATION (Looking North)**

**END VIEW**



**BARS A & B DIMENSIONS**

Bar	A	B
s91(E)	2'-2"	3'-10"
s92(E)	2'-0"	4'-9"
s94(E)	2'-2"	6'-7"
s96(E)	2'-2"	2'-0"



**FOOTING PLAN**

**MINIMUM BAR LAP**  
 #5 bar = 3'-3"  
 #8 bar = 6'-9"

**BAR p91(E)**

**BARS s90(E), s93(E) s95(E) & s97(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h90(E)	10	#5	42'-6"	—
h91(E)	19	#5	33'-3"	—
h92(E)	4	#4	22'-8"	—
n90(E)	36	#8	15'-9"	U
n91(E)	36	#8	10'-11"	U
p90(E)	12	#8	44'-0"	—
p91(E)	12	#8	15'-4"	7
s90(E)	42	#6	14'-0"	□
s91(E)	14	#6	9'-10"	□
s92(E)	12	#5	11'-6"	□
s93(E)	52	#5	12'-9"	□
s94(E)	16	#5	15'-4"	□
s95(E)	41	#8	23'-2"	□
s96(E)	23	#4	6'-2"	□
s97(E)	26	#5	11'-7"	□
t90(E)	67	#8	9'-8"	—
t91(E)	44	#5	9'-8"	—
v90(E)	72	#8	16'-0"	—
w90(E)	23	#5	42'-11"	—

Structure Excavation	Cu. Yd.	110.0
Concrete Structures	Cu. Yd.	105.1
Reinforcement Bars, Epoxy Coated	Pound	17,030
Furnishing Metal Shell Piles, 14" x 0.250"	Foot	667
Driving Piles	Foot	667
Test Pile, Metal Shells	Each	1
Pile Shoes	Each	24

DESIGNED - DEWEY H. COULTAS  
 CHECKED - NICHOLAS R. BARNETT  
 DRAWN - MICHAEL B. MOSSMAN  
 CHECKED - D.H.C. / N.R.B.

EXAMINED  
 PASSED  
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

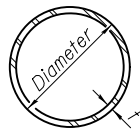
DATE - FEBRUARY 25, 2013  
 REVISED  
 REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PIER  
 STRUCTURE NO. 010 - 0289

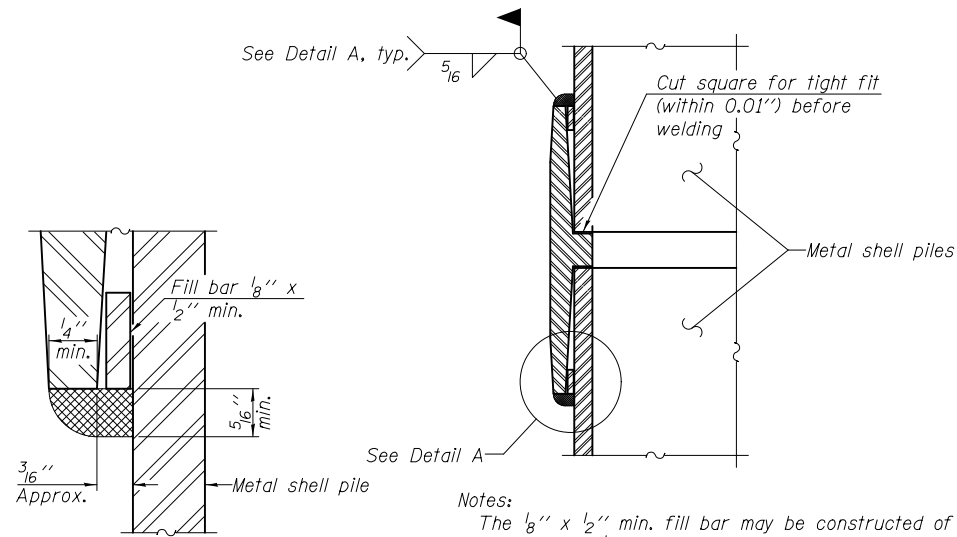
SHEET NO. 57 OF 62 SHEETS

F.A.I. R.T.E. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 74 10-4BR CHAMPAIGN 290 142  
 CONTRACT NO. 70700  
 ILLINOIS FED. AID PROJECT



**METAL SHELL PILE TABLE**

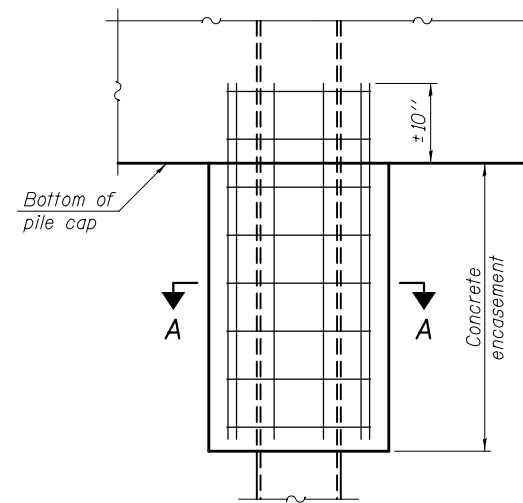
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



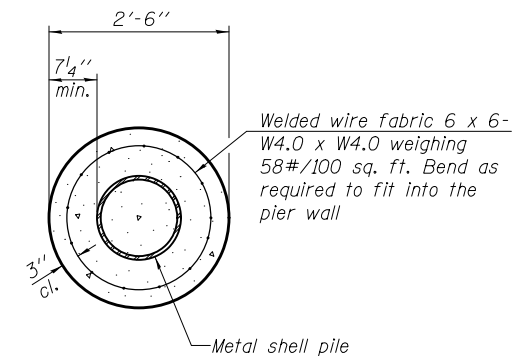
**DETAIL A**

**Notes:**  
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
 Pile segments shall be driven to solid contact with splicer before welding.

**WELDED COMMERCIAL SPLICE**



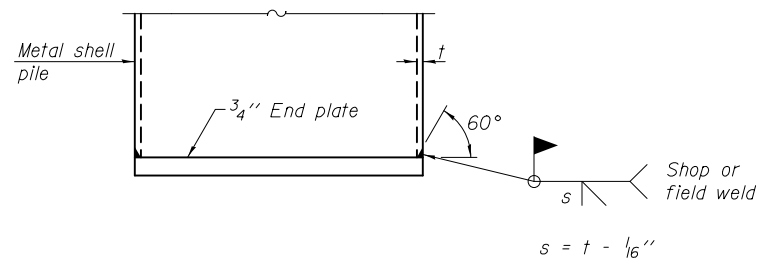
**ELEVATION**



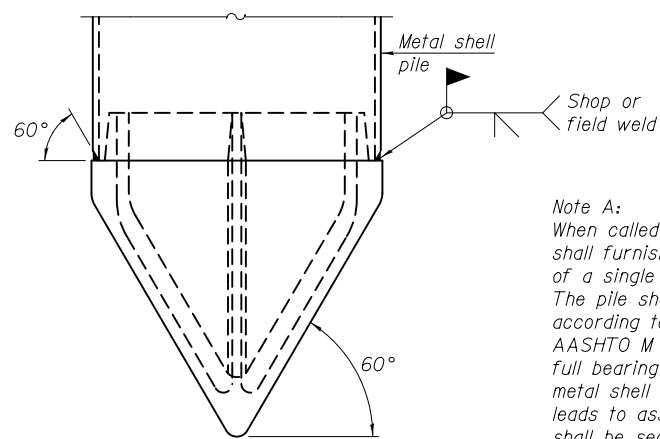
**SECTION A-A**

**Note:**  
 Forms for encasement may be omitted when soil conditions permit.

**CONCRETE ENCASEMENT AT PIERS**



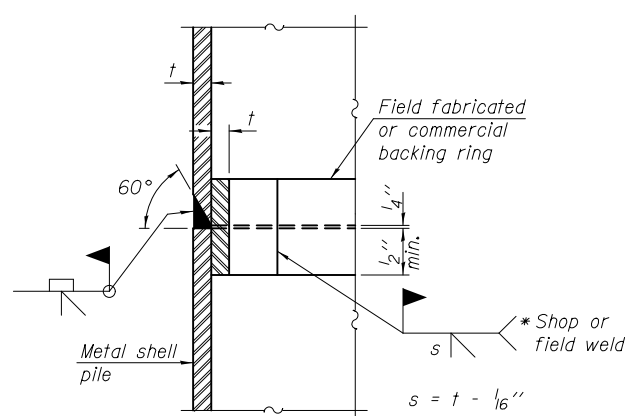
**END PLATE ATTACHMENT**



**METAL SHELL PILE SHOE ATTACHMENT**

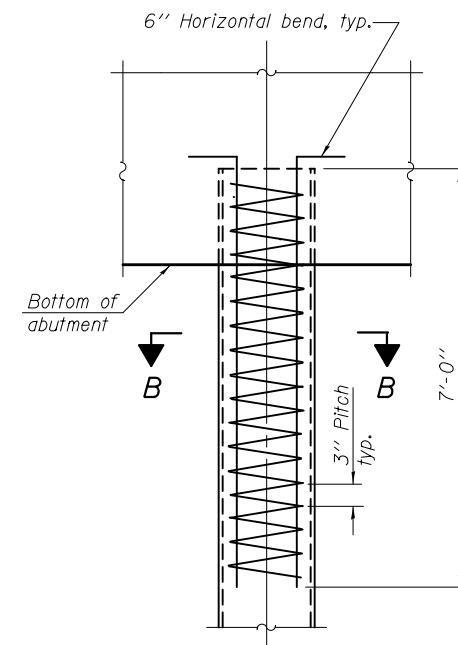
(See Note A)

**Note A:**  
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



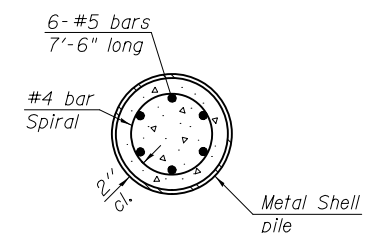
**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**



**SECTION B-B**

**Note:**  
 The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS 1-27-12

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>Jaime F. Joffe</i>	DATE - FEBRUARY 25, 2013
CHECKED - NICHOLAS R. BARNETT	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl Berger</i>	REVISED
CHECKED - D.H.C. / N.R.B.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS  
 STRUCTURE NO. 010 - 0289**

SHEET NO. 58 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	143
CONTRACT NO. 70700				

ILLINOIS FED. AID PROJECT





**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

## SOIL BORING LOG

Page 1 of 2  
Date 6/21/13

ROUTE FAJ 74 DESCRIPTION CH 50 (Lake of the Woods Road) over I-74 East of Mahomet LOGGED BY CNA

SECTION 10-4BR LOCATION NW, SEC. 14, TWP. 20N, RNG. 7E, 3rd PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-0157 Exist.  
Station 21+83

BORING NO. 5 North Pier  
Station 21+83  
Offset 27.0 ft Lt.  
Ground Surface Elev. 734.7 ft

DEPTH (ft)	BLOW COUNT (blows/ft)	UNCONSOLIDATED QUANTITY	MATERIAL	DEPTH (ft)	BLOW COUNT (blows/ft)	UNCONSOLIDATED QUANTITY	MATERIAL
734.7			Black Mottled Sand Loam				Gray Clay Loam Till (continued)
733.7			Gray to Brown Sand Loam	4			
				5	2.7	11	
				8	B		
				711.7			
			Brown Clay Loam Till	4			
				17	6.8	11	
				18	B		
				710.2			
			Gray to Brown Poorly Sorted Coarse Sand with Small Gravel (Dry & Dense)	-25			
729.2			Brown Dirty Coarse Sand				
			(Trace of Brown Clay Loam Till)				
				21			
				21			
				25			
				-30			
725.7			Brown Sandy Clay Loam Till				
				6			
				7	1.4	14	
				10	B		
				-10			
				6			
				9	4.7	14	
				12	B		
				7			
				10	1.6	13	
				8	B		
				-15			
				4			
				4	2.1	12	
				7	B		
				697.7			
			Brown Poorly Sorted Coarse Sand with Free Water				
				4			
				7			
				4	1.2	13	
				7	B		
				-20			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS form 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

## SOIL BORING LOG

Page 2 of 2  
Date 6/21/13

ROUTE FAJ 74 DESCRIPTION CH 50 (Lake of the Woods Road) over I-74 East of Mahomet LOGGED BY CNA

SECTION 10-4BR LOCATION NW, SEC. 14, TWP. 20N, RNG. 7E, 3rd PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-0157 Exist.  
Station 21+83

BORING NO. 5 North Pier  
Station 21+83  
Offset 27.0 ft Lt.  
Ground Surface Elev. 734.7 ft

DEPTH (ft)	BLOW COUNT (blows/ft)	UNCONSOLIDATED QUANTITY	MATERIAL	DEPTH (ft)	BLOW COUNT (blows/ft)	UNCONSOLIDATED QUANTITY	MATERIAL
			Brown Poorly Sorted Coarse Sand with Free Water (continued)				
				691.7			
			Gray to Brown Silt with Trace of Very Hard Brown Sandy Clay Loam Till	9			
				11			
				-45	14		
				688.7			
			Brown Sandy Clay Loam Till				
				12			
				16			
				21			
				684.7	-50		
			End of Boring				
				-55			
				-60			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS form 137 (Rev. 8-99)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. [Signature]</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl [Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			74	10-4BR	CHAMPAIGN	290	146
DRAWN - MICHAEL B. MOSSMAN		REVISED			CONTRACT NO. 70700				
CHECKED - D.H.C. / N.R.B.					SHEET NO. 61 OF 62 SHEETS ILLINOIS FED. AID PROJECT				

Page 1 of 2

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Date 6/21/13

ROUTE FAI 74 DESCRIPTION CH 50 (Lake of the Woods Road) over I-74 East of Mahomet LOGGED BY RRW

SECTION 10-4BR LOCATION NW, SEC. 14, TWP. 20N, RNG. 7E, 3rd PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-0157 Exist.  
Station \_\_\_\_\_

BORING NO. 6 North Abut  
Station 22+67  
Offset 113.0 ft Lt.  
Ground Surface Elev. 731.0 ft

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	SOIL DESCRIPTION			
				DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
731.0				Surface Water Elev. _____ ft			
				Stream Bed Elev. _____ ft			
				Groundwater Elev.: _____ ft			
				First Encounter _____ ft			
				Upon Completion _____ ft			
				After _____ Hrs. _____ ft			
				Grey Sandy Clay Loam Till (continued) _____ ft			
				710.0 _____ ft			
				Grey/Brown Mixed Poorly Sorted Coarse Sand w/Small Gravel _____ ft			
				8 _____ ft			
				11 _____ ft			
				18 _____ ft			
				13 _____ ft			
				11 _____ ft			
				19 _____ ft			
726.0				-25 _____ ft			
				2 _____ ft			
				2 _____ ft			
				4 _____ ft			
				3 _____ ft			
				2 _____ ft			
				2 _____ ft			
				2 _____ ft			
				-10 _____ ft			
720.0				20 _____ ft			
				16 _____ ft			
				14 _____ ft			
				-30 _____ ft			
				5 _____ ft			
				5 _____ ft			
				11 _____ ft			
				1.0 _____ ft			
				E _____ ft			
717.5				40 _____ ft			
				11 _____ ft			
				2.0 _____ ft			
				E _____ ft			
				-15 _____ ft			
				696.0 _____ ft			
				-35 _____ ft			
				5 _____ ft			
				7 _____ ft			
				3.5 _____ ft			
				B _____ ft			
				13 _____ ft			
				7 _____ ft			
				4.5 _____ ft			
				B _____ ft			
				9 _____ ft			
				7 _____ ft			
				7.6 _____ ft			
				8 _____ ft			
				22-4" _____ ft			
				-40 _____ ft			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS form 137 (Rev. 8-99)

Page 2 of 2

**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Date 6/21/13

ROUTE FAI 74 DESCRIPTION CH 50 (Lake of the Woods Road) over I-74 East of Mahomet LOGGED BY RRW

SECTION 10-4BR LOCATION NW, SEC. 14, TWP. 20N, RNG. 7E, 3rd PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-0157 Exist.  
Station \_\_\_\_\_

BORING NO. 6 North Abut  
Station 22+67  
Offset 113.0 ft Lt.  
Ground Surface Elev. 731.0 ft

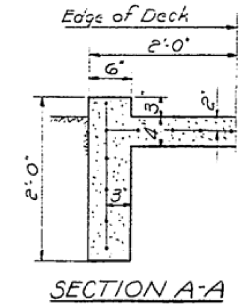
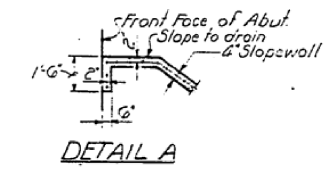
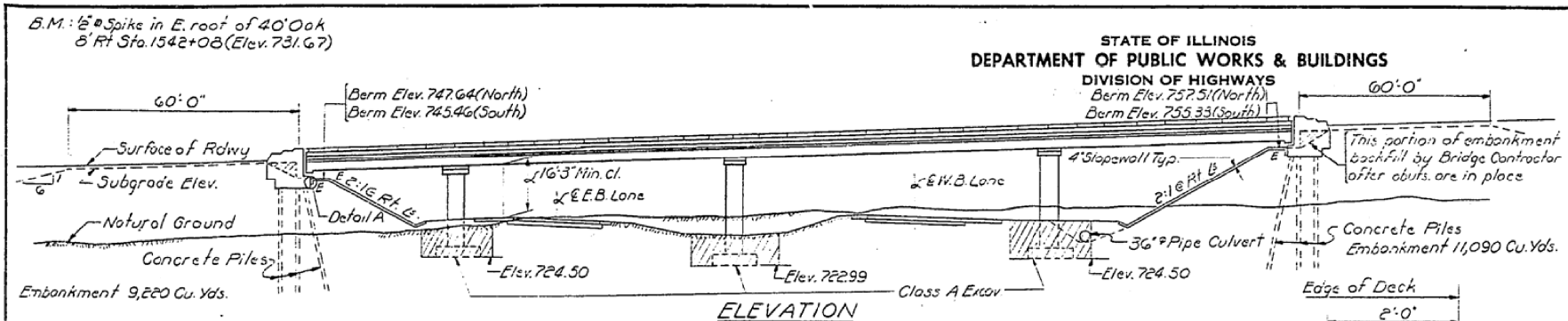
DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	SOIL DESCRIPTION			
				DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
				Surface Water Elev. _____ ft			
				Stream Bed Elev. _____ ft			
				Groundwater Elev.: _____ ft			
				First Encounter _____ ft			
				Upon Completion _____ ft			
				After _____ Hrs. _____ ft			
				Brown Sandy Clay Loam Till (continued) _____ ft			
				688.0 _____ ft			
				Brown Poorly Sorted Coarse Sand with Free Water _____ ft			
				50-14" _____ ft			
				686.0 _____ ft			
				-45 _____ ft			
				-50 _____ ft			
				-55 _____ ft			
				-60 _____ ft			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS form 137 (Rev. 8-99)

DESIGNED - DEWEY H. COULTAS	EXAMINED - <i>James F. Joffe</i> ACTING ENGINEER OF BRIDGE DESIGN	DATE - FEBRUARY 25, 2013	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS STRUCTURE NO. 010 - 0289</b>	F.A.I. RTE. 74	SECTION 10-4BR	COUNTY CHAMPAIGN	TOTAL SHEETS 290	SHEET NO. 147	
CHECKED - NICHOLAS R. BARNETT	PASSED - <i>Carl Kopp</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED _____			CONTRACT NO. 70700					
DRAWN - MICHAEL B. MOSSMAN	REVISED _____	SHEET NO. 62 OF 62 SHEETS								
CHECKED - D.H.C. / N.R.B.	ILLINOIS FED. AID PROJECT									

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS  
Berm Elev. 757.51 (North)  
Berm Elev. 755.33 (South)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	10-4 HB-2	Champaign	34	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



Coarse aggregate to be used in parapet handrail and end post must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 Sq. Ft.

All reinforcement bars shall be lapped 20 diameters unless otherwise noted.

Roadway expansion guards be assembled in the shop in proper position with the ends in place and shall be left assembled for shop inspection.

The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Expansion guards are included in the quantity of Structural Steel, Est. Wt. 7730 lbs.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications.

All structural steel shall conform to ASTM Specifications A-36 Steel.

The sequence of pouring the superstructure shall be as set forth on sheet E of these plans.

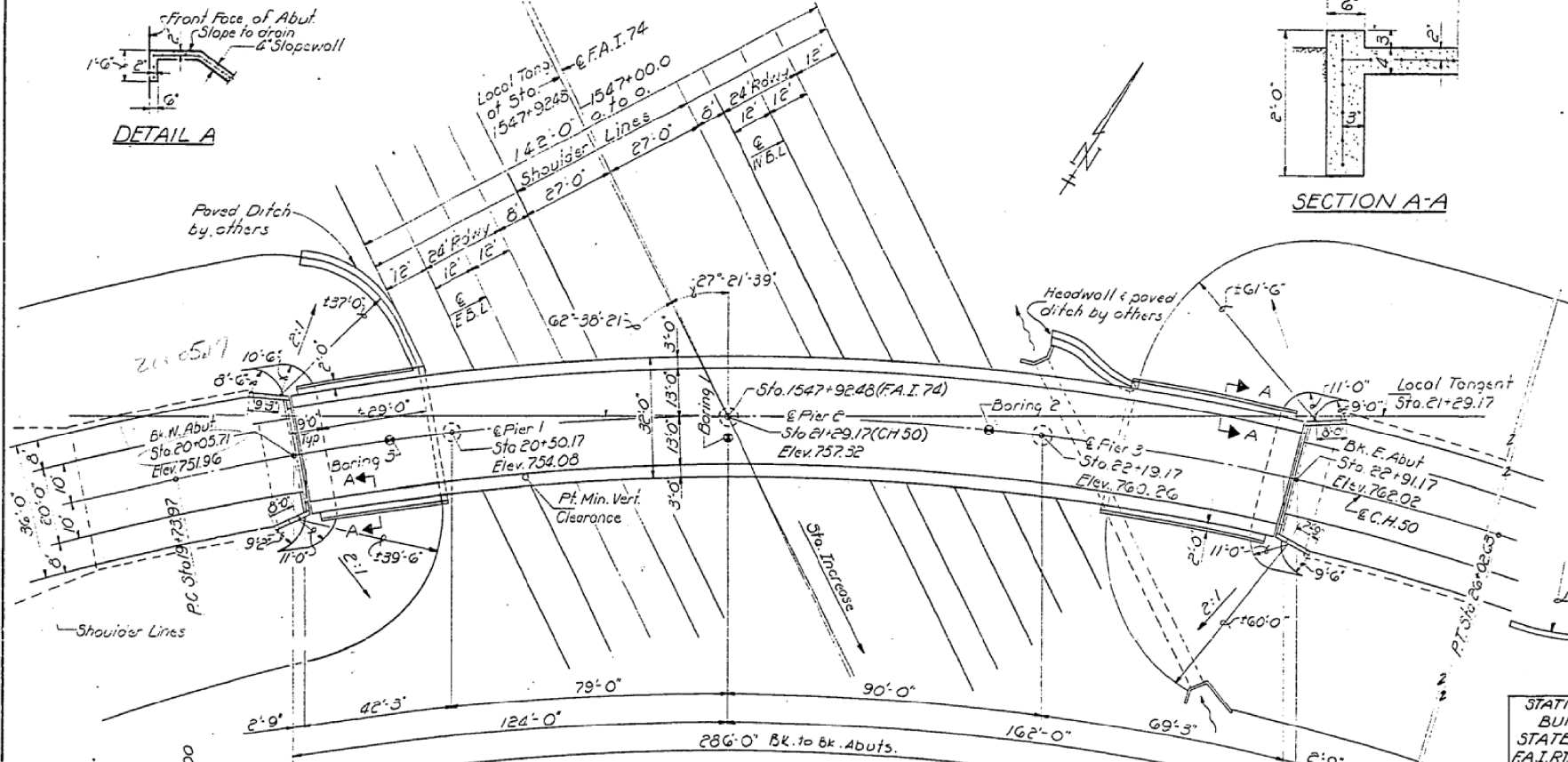
The contractor shall submit to the engineer for approval, detailed plans of the falsework for the entire structure in accordance with Article 52.5 of the Standard Specifications.

The Contractor shall drive one concrete test pile in a permanent location at the East abutment as directed by the Engineer before ordering the remainder of piers.

Concrete piles of abutments shall be driven in to be precored through the embankment in accordance with Article 60.9(c) of the Standard Specifications.

Permanent metal forms will not be permitted in forming the concrete superstructure.

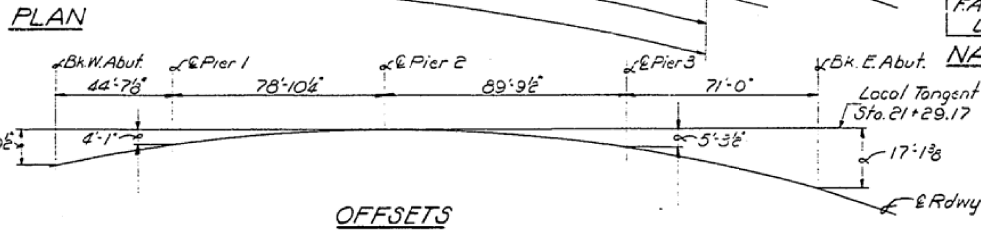
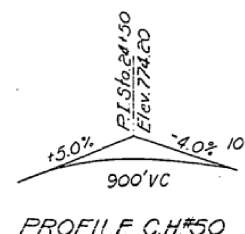
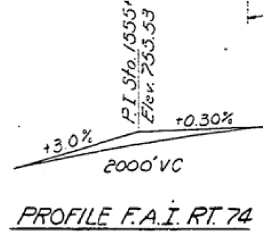
Excavation for portions of structures in the embankments shall not be classified.



STATION 1547+92.48  
BUILT 196 BY  
STATE OF ILLINOIS  
F.A.I. RT. 74 SEC. 10-4 HB-2  
F.A. PROJ. I-74-5 (40)  
LOADING H5EO

Items	Units	Super	Sub	Total
* Class A Excavation for Structures Cu. Yds.		326	323	
Class X Concrete	Cu. Yds.	644.9	239.5	884.4
Structural Steel	Lbs.	11910		11910
Aluminum Handrail	Lin. Ft.	566		566
Pipe Culvert (Type 2A) 36\"/>				
Reinforcement Bars	Lbs.	208,630	43,950	252,580
Concrete Piles	Lin. Ft.		930	930
Test Pile (Concrete)	Each		1	1
Name Plates	Each		2	2
Slope Wall	Sq. Yds.			457
Cast Iron Frames	Each		1	1
Protective Coat	Sq. Yds.	1140		1140

\* Class A Excavation for Structures includes excavation for slope walls Proposed Structure



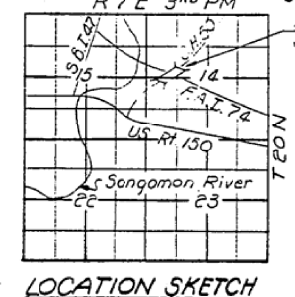
**CURVE DATA @ F.A.I. 74**

Δ = 17°-18'-40"
R = 5053.51'
T = 769.59'
L = 1527.45'
E = 58.24'
D = 1°-08'-00"
PI Sta. 1551+13.42
S.E. = 0.032%

**CURVE DATA @ C.H. 50**

Δ = 47°-09'-00"
R = 763.94'
T = 333.36'
L = 628.66'
E = 69.53'
D = 7°-30"
PI Sta. 23+07.33
S.E. = 0.08% Atain S.E.
Sta 18+13 to Sta. 20+05

**DESIGN STRESSES**  
 Fc = 1400 psi Super. & Sub.  
 Fc = 75 psi Footing  
 Fs = 20,000 psi Reinf.  
 Fs = 20,000 psi Struct.  
 n = 10  
 LOADING H5EO-44



**GENERAL PLAN & ELEVATION**  
 PROJECT I-74-5(40)174  
 F.A.I. RT. 74 SEC. 10-4 HB-2  
 CHAMPAIGN COUNTY  
 STA. 1547+92.48 (F.A.I. 74)  
 STA. 21+29.17 (C.H. 50)

DESIGNED James M. Pines  
 CHECKED [Signature]  
 DRAWN [Signature]  
 CHECKED [Signature] JNP

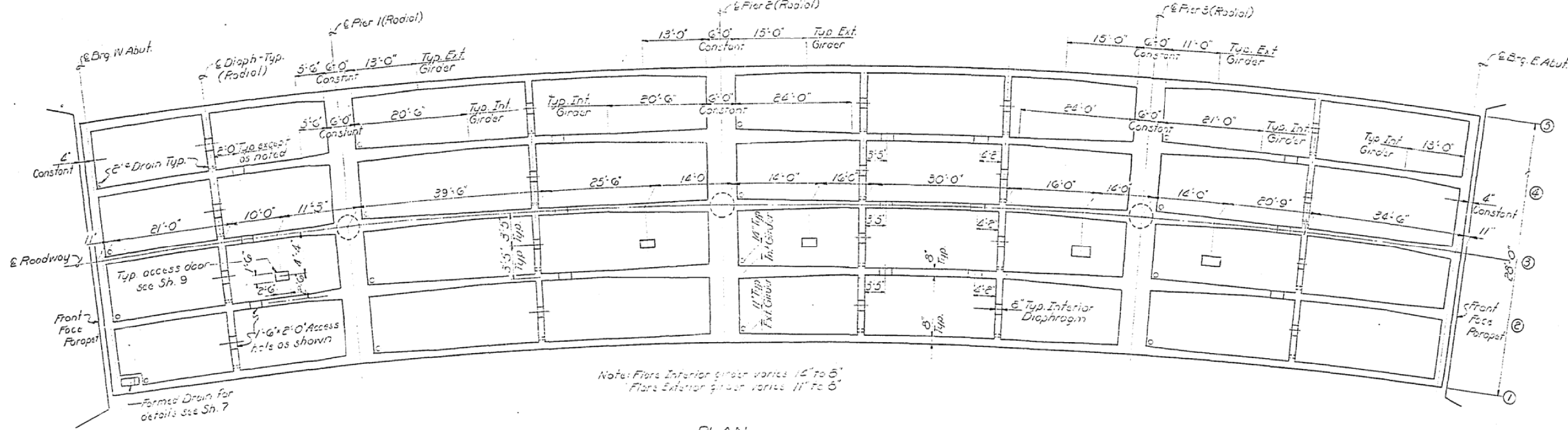
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 PASSED [Signature]  
 APPROVED [Signature]

July 29 19 65

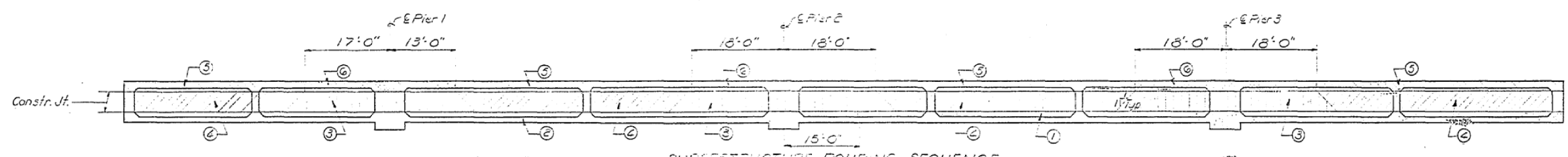


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

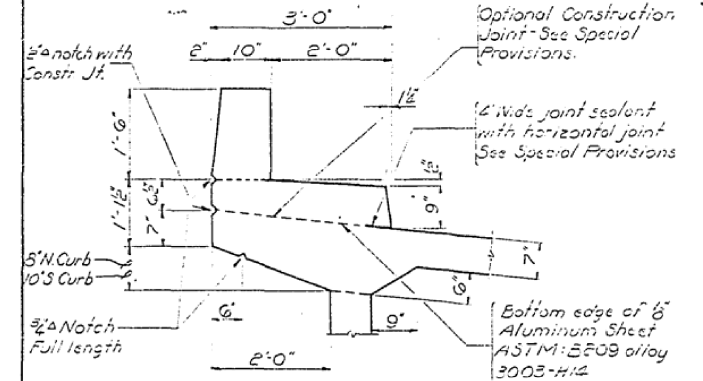
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-4	10-4	Champaign	34	8
F.L. 74	HB-2			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN



SUPERSTRUCTURE POURING SEQUENCE

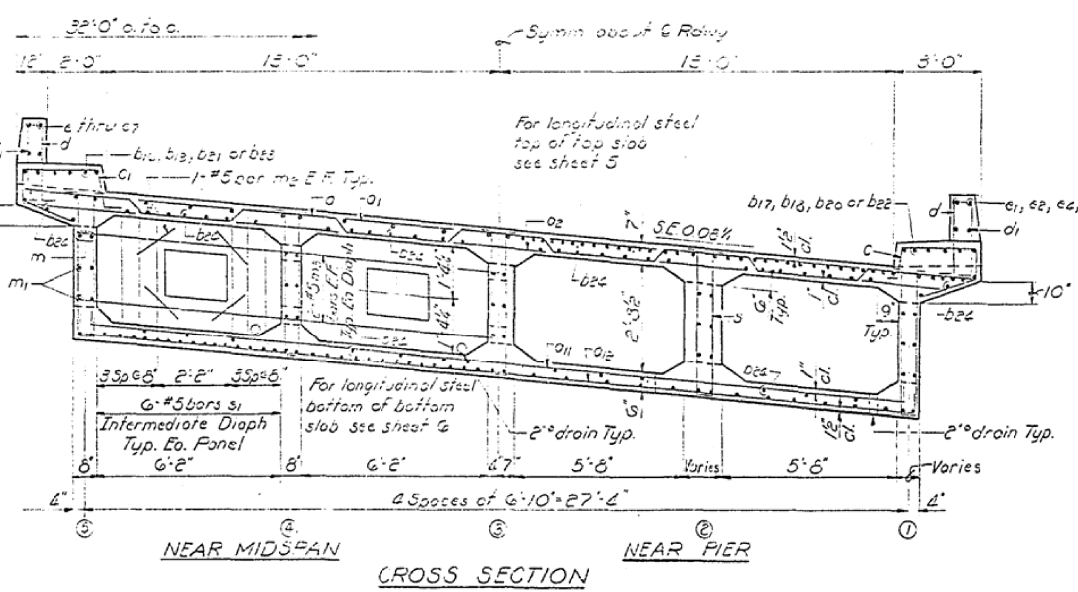


CURB DETAIL  
Cost of Aluminum sheet incidental to C.I. X Conc.

DESIGNED	James M. Pomeroy	EXAMINED	July 29 1965
CHECKED	James S. Hartman	PASSED	
DRAWN	J. C. DuBois	APPROVED	
CHECKED	J. M. J. P.		

SYMBOLS

- Pour 1
- Pour 2
- Pour 3
- Pour 4
- Pour 5
- Pour 6



NEAR MIDSPAN CROSS SECTION NEAR PIER

Pours 5 & 6 may be placed together  
After each of pours 1, 2, 3, & 4 have been completed, the forms must be checked and wedged up or raised to the proper elevations before proceeding with the next pour.  
The entire falsework must be erected of one time before any concrete poured.  
The contractor shall submit falsework plans for the approval of the Engineer.  
No longitudinal construction joints will be permitted.  
All construction joints to be banded construction joints, to secure the best possible bond between the pours.  
For Bill of Material, see sheet 8

F.A.I.R.T. 74 SEC. 10-4HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

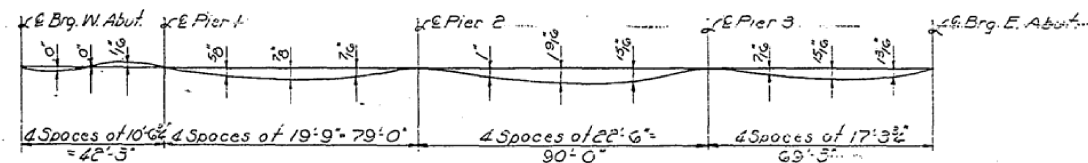
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	
Bk. of W. Abut	1	2005.170	13.666	750.664	750.664
	2	2005.170	6.833	751.410	751.410
	3	2005.170	.000	751.957	751.957
	4	2005.170	6.833	752.504	752.504
	5	2005.170	13.666	753.050	753.050
E Brg. W. Abut	2007.920	13.666	751.000	751.000	
	2007.920	6.833	751.546	751.546	
	2007.920	.000	752.093	752.093	
	2007.920	6.833	752.640	752.640	
A	2017.920	13.666	751.467	751.468	
	2017.920	6.833	752.033	752.036	
	2017.920	.000	752.580	752.583	
	2017.920	6.833	753.127	753.129	
B	2027.920	13.666	753.675	753.676	
	2027.920	6.833	754.241	754.242	
	2027.920	.000	754.807	754.808	
	2027.920	6.833	755.373	755.374	
C	2037.920	13.666	755.939	755.940	
	2037.920	6.833	756.505	756.506	
	2037.920	.000	757.071	757.072	
	2037.920	6.833	757.637	757.638	

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	
E Pier 1	1	2056.170	15.000	752.960	752.960
	2	2056.170	6.833	753.336	753.336
	3	2056.170	.000	753.712	753.712
	4	2056.170	6.833	754.088	754.088
	5	2056.170	13.666	754.464	754.464
D	2056.170	15.666	753.434	753.461	
	2056.170	6.833	753.861	753.932	
	2056.170	.000	754.287	754.358	
	2056.170	6.833	754.714	754.785	
E	2070.170	13.666	755.221	755.292	
	2070.170	6.833	755.648	755.719	
	2070.170	.000	756.074	756.145	
	2070.170	6.833	756.501	756.572	
F	2084.170	13.666	756.968	757.039	
	2084.170	6.833	757.395	757.466	
	2084.170	.000	757.821	757.892	
	2084.170	6.833	758.248	758.319	
G	2098.170	13.666	758.675	758.746	
	2098.170	6.833	759.102	759.173	
	2098.170	.000	759.528	759.599	
	2098.170	6.833	759.955	760.026	
H	2112.170	13.666	760.382	760.453	
	2112.170	6.833	760.809	760.880	
	2112.170	.000	761.235	761.306	
	2112.170	6.833	761.662	761.733	
I	2126.170	13.666	762.089	762.160	
	2126.170	6.833	762.516	762.587	
	2126.170	.000	762.942	763.013	
	2126.170	6.833	763.369	763.440	
J	2140.170	13.666	763.796	763.867	
	2140.170	6.833	764.223	764.294	
	2140.170	.000	764.649	764.720	
	2140.170	6.833	765.076	765.147	

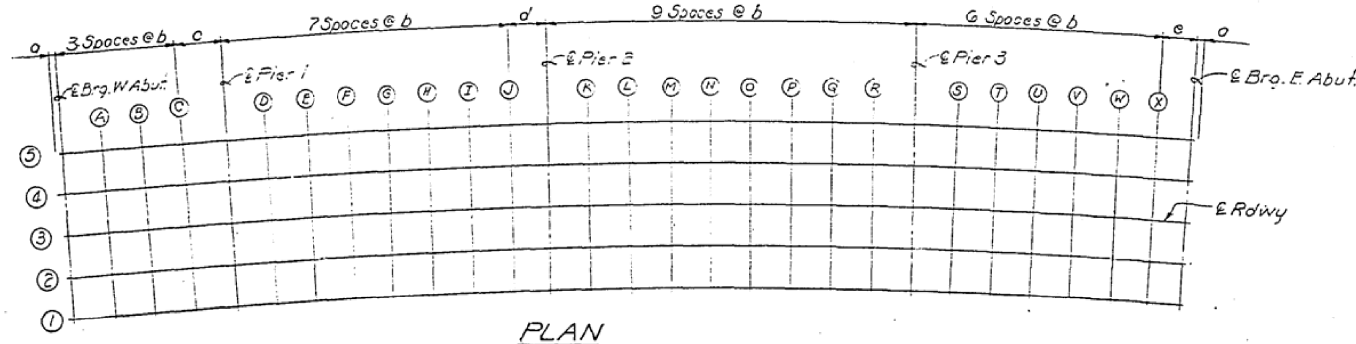
Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	
E Pier 2	1	2189.170	13.666	756.231	756.231
	2	2189.170	6.833	756.607	756.607
	3	2189.170	.000	756.983	756.983
	4	2189.170	6.833	757.359	757.359
	5	2189.170	13.666	757.735	757.735
K	2199.170	13.666	758.202	758.273	
	2199.170	6.833	758.628	758.699	
	2199.170	.000	759.054	759.125	
	2199.170	6.833	759.480	759.551	
L	2213.170	13.666	759.947	760.018	
	2213.170	6.833	760.373	760.444	
	2213.170	.000	760.799	760.870	
	2213.170	6.833	761.225	761.296	
M	2227.170	13.666	761.692	761.763	
	2227.170	6.833	762.118	762.189	
	2227.170	.000	762.544	762.615	
	2227.170	6.833	762.970	763.041	
N	2241.170	13.666	763.437	763.508	
	2241.170	6.833	763.863	763.934	
	2241.170	.000	764.289	764.360	
	2241.170	6.833	764.715	764.786	
O	2255.170	13.666	765.182	765.253	
	2255.170	6.833	765.608	765.679	
	2255.170	.000	766.034	766.105	
	2255.170	6.833	766.460	766.531	
P	2269.170	13.666	766.927	766.998	
	2269.170	6.833	767.353	767.424	
	2269.170	.000	767.779	767.850	
	2269.170	6.833	768.205	768.276	
Q	2283.170	13.666	768.674	768.745	
	2283.170	6.833	769.100	769.171	
	2283.170	.000	769.526	769.597	
	2283.170	6.833	769.952	770.023	
R	2297.170	13.666	770.419	770.490	
	2297.170	6.833	770.845	770.916	
	2297.170	.000	771.271	771.342	
	2297.170	6.833	771.697	771.768	

Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	
E Pier 3	1	2316.170	13.666	760.103	760.103
	2	2316.170	6.833	760.479	760.479
	3	2316.170	.000	760.855	760.855
	4	2316.170	6.833	761.231	761.231
	5	2316.170	13.666	761.607	761.607
S	2326.170	13.666	762.074	762.145	
	2326.170	6.833	762.500	762.571	
	2326.170	.000	762.926	762.997	
	2326.170	6.833	763.352	763.423	
T	2340.170	13.666	763.819	763.890	
	2340.170	6.833	764.245	764.316	
	2340.170	.000	764.671	764.742	
	2340.170	6.833	765.097	765.168	
U	2354.170	13.666	765.564	765.635	
	2354.170	6.833	765.990	766.061	
	2354.170	.000	766.416	766.487	
	2354.170	6.833	766.842	766.913	
V	2368.170	13.666	767.309	767.380	
	2368.170	6.833	767.735	767.806	
	2368.170	.000	768.161	768.232	
	2368.170	6.833	768.587	768.658	
W	2382.170	13.666	769.054	769.125	
	2382.170	6.833	769.480	769.551	
	2382.170	.000	769.906	770.013	
	2382.170	6.833	770.332	770.403	
X	2396.170	13.666	770.781	770.852	
	2396.170	6.833	771.207	771.278	
	2396.170	.000	771.633	771.704	
	2396.170	6.833	772.059	772.130	
E Brg. E. Abut	2288.420	13.666	760.668	760.668	
	2288.420	6.833	761.115	761.115	
	2288.420	.000	761.562	761.562	
	2288.420	6.833	762.009	762.009	
Bk. of E. Abut	2291.170	13.666	760.926	760.926	
	2291.170	6.833	761.473	761.473	
	2291.170	.000	762.019	762.019	
	2291.170	6.833	762.566	762.566	
	2291.170	13.666	763.113	763.113	



DEAD LOAD DEFLECTION DIAGRAM

The above deflections are not to be used in the field if the Engineer is working from Grade Elevations Adjusted for Dead Load Deflections as shown on this sheet.



PLAN

	a	b	c	d	e
Beam 5	2'-9 3/8"	10'-2 3/8"	12'-5 3/8"	9'-2"	9'-5"
Beam 4	2'-9 3/8"	10'-1 3/8"	12'-4 3/8"	9'-1"	9'-2"
Beam 3	2'-9"	10'-0"	12'-3"	9'-0"	9'-3"
Beam 2	2'-8 3/4"	9'-10 3/8"	12'-1 3/8"	8'-11"	9'-2"
Beam 1	2'-8 3/8"	9'-9 3/8"	12'-0 3/8"	8'-10"	9'-1"

DESIGNED: James M. Pence  
EXAMINED: [Signature]  
CHECKED: James M. Pence  
DRAWN: [Signature]  
APPROVED: [Signature]

July 29, 1965

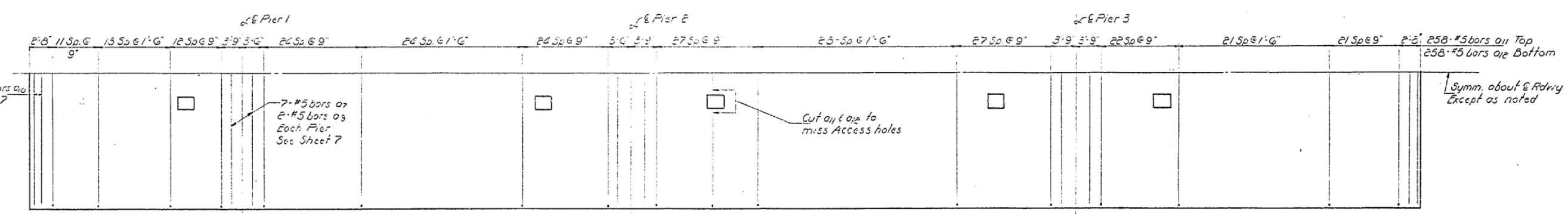
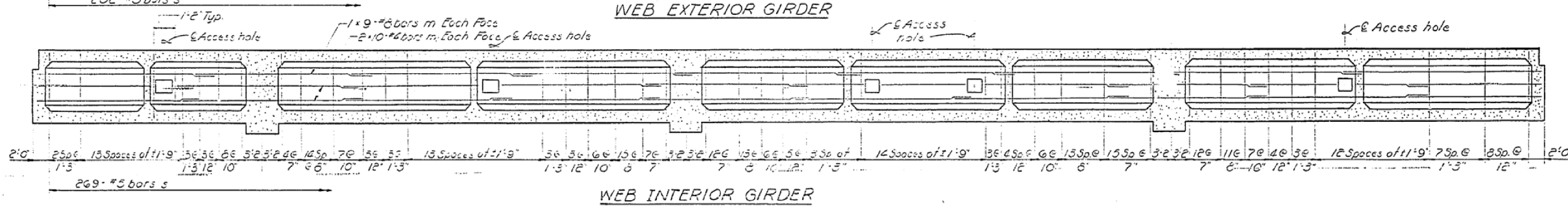
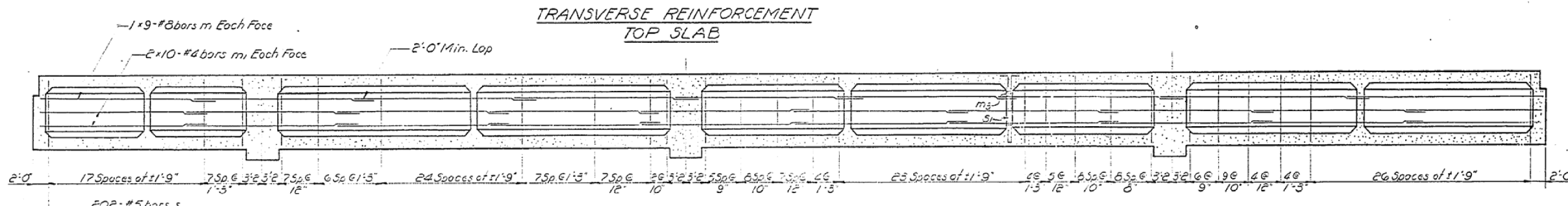
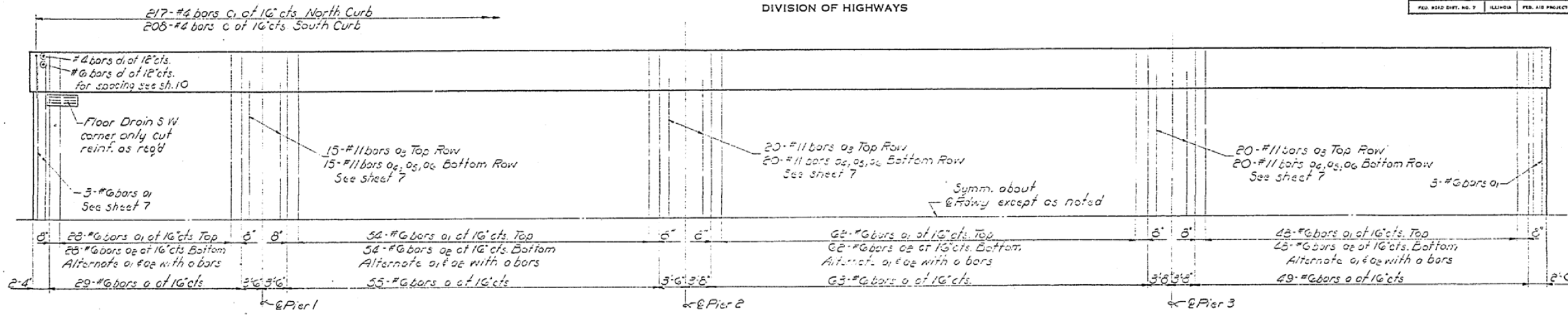
EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

Deflections due to the weight of forms are not included in tables above and must be compensated for by the contractor. The total deflection as shown will be reached about 5 years after roadwork removal. For immediate deflection of time of falsework removal divide those shown by 3.5.

ELEVATIONS  
F.A.I.R.T. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	FRACTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
10-4	HB-2	Champaign	34	10	18 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	



DESIGNED	James P. Ponce	EXAMINED	[Signature]
CHECKED	[Signature]	PASSED	[Signature]
DRAWN	[Signature]	APPROVED	[Signature]
CHECKED	JWP		JNP

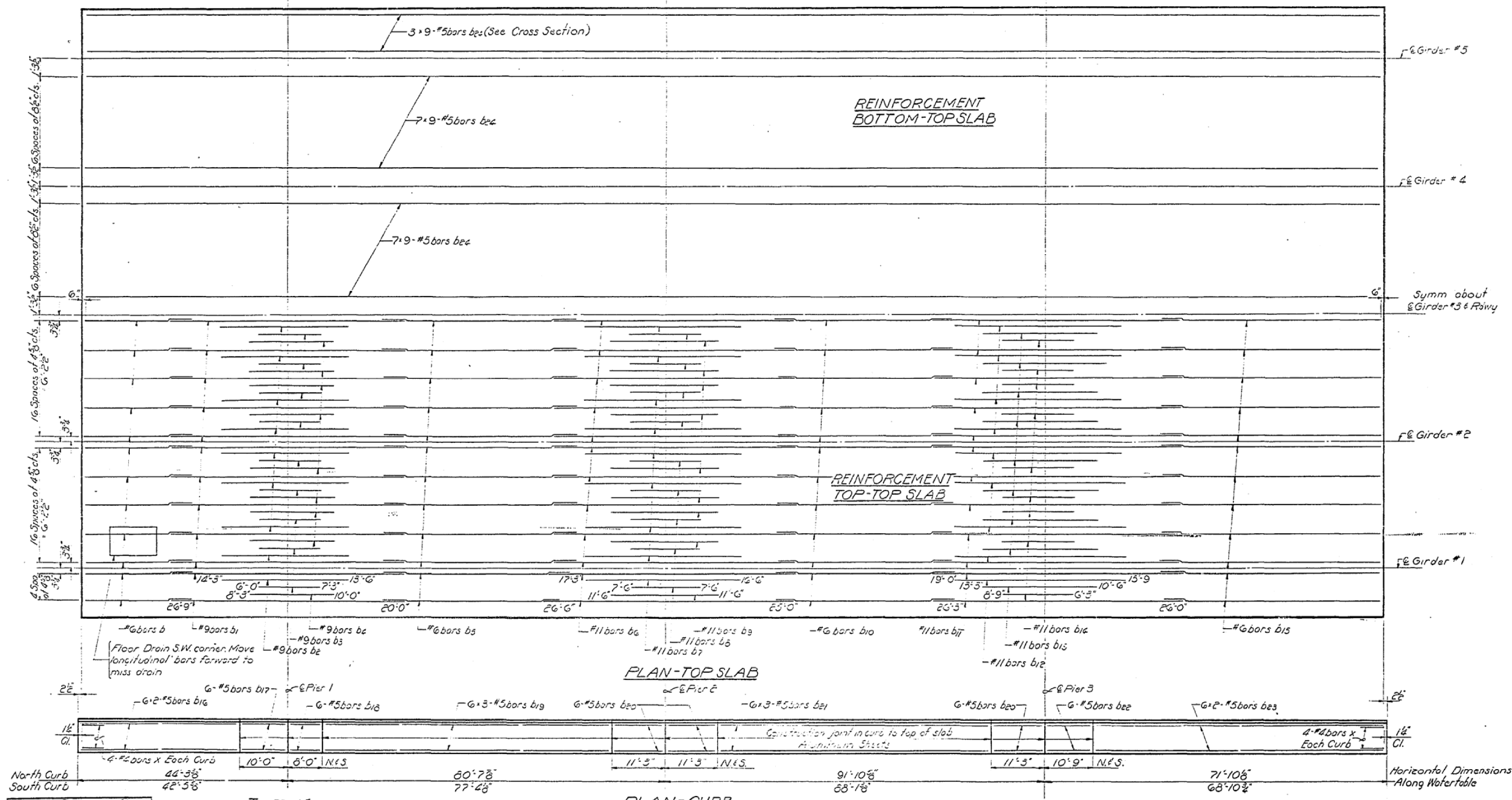
TRANSVERSE REINFORCEMENT  
BOTTOM SLAB

NOTES  
All top and bottom slab transverse bars are to be placed radially, spacing measured along & roadway.  
Spacing for web reinforcement are measured along & girder.  
For Bill of Material see sheet 8

F.A.I.R.T. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.43

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5
F.A.I. RT. 74	10-4BR	CHAMPAIGN	34	11	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



DESIGNED	James D. Pence
CHECKED	James D. Pence
DRAWN	St. G. Dickerson
CHECKED	JW JJP

EXAMINED	Jul 23 1925
PASSED	
APPROVED	

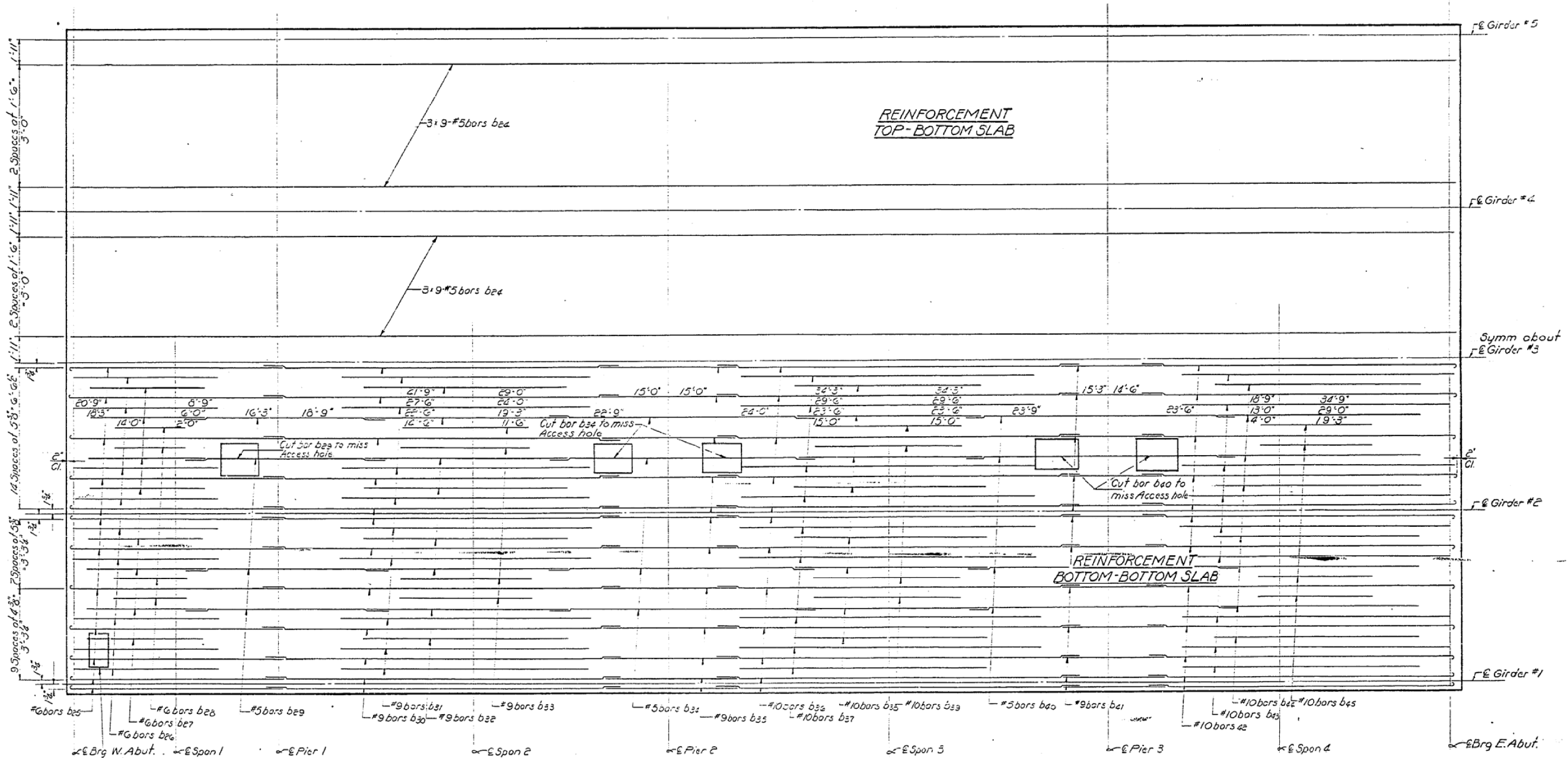
PLAN-CURB  
Showing South Curb

Note:  
Dimensions of end of bars indicates extent of bar on either side of piers. Bars indicated thus 3x6-#5 etc. indicates 3 lines of bars with 6 length per line. Min. bar laps - 30 dia. For Bill of Material see sheet 8

LONGITUDINAL REINFORCEMENT  
TOP SLAB & CURB  
F.A.I. RT. 74 SEC. 10-4BR-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
F.A.I. 74	10-4 HB-2	CHAMPAIGN	34	12	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



PLAN - BOTTOM SLAB

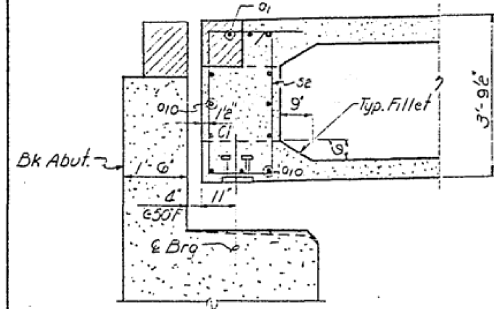
DESIGNED	James M. Pence	EXAMINED	Carl Hummel
CHECKED	James M. Pence	PASSED	W. J. O'Connell
DRAWN	W. J. O'Connell	APPROVED	J. E. Stief
CHECKED	JMP		

NOTE:  
Dimensions on bars indicate extent of bar on either side of span or pier.  
Bars indicated thus 5'-6" #5 etc. indicates 5 lines of bars with 6 lengths per line.  
Min. bar lops 30 dia.  
For Bill of Material See Sheet B

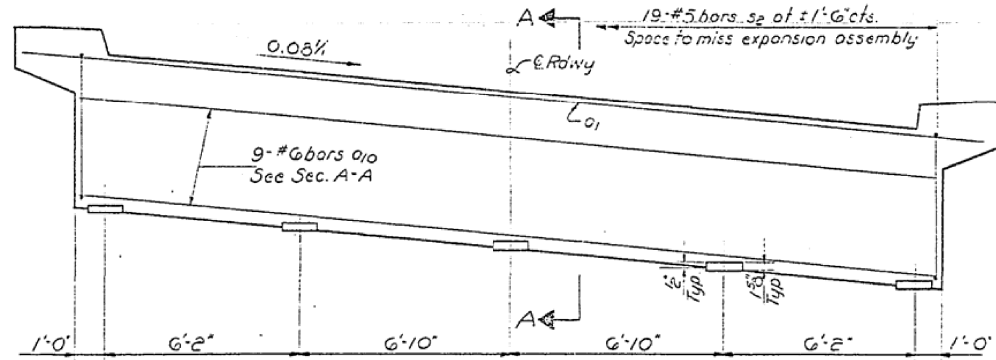
LONGITUDINAL REINFORCEMENT  
BOTTOM SLAB  
F.A.I. RT. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

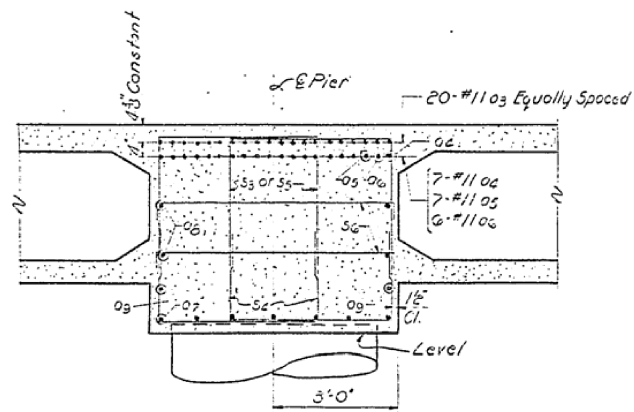
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.R.T. 74	10-4 HB-2	CHAMPAIGN	34	13	18 SHEETS
ILLINOIS FED. AID PROJECT					



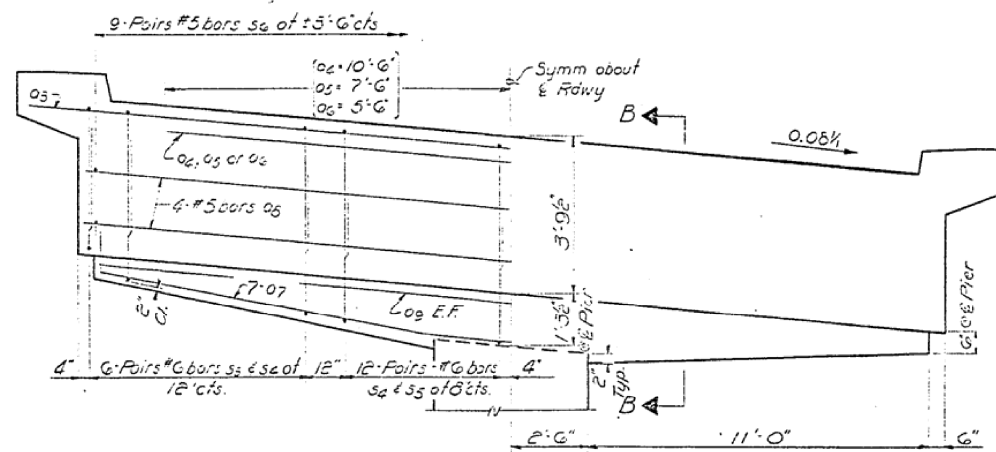
SECTION A-A



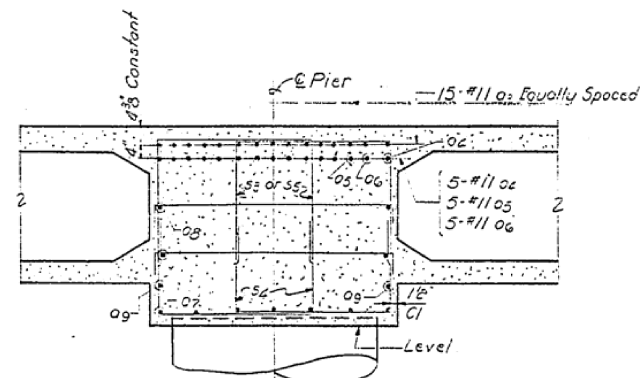
SECTION THRU END DIAPHRAGM AT ABUTMENTS



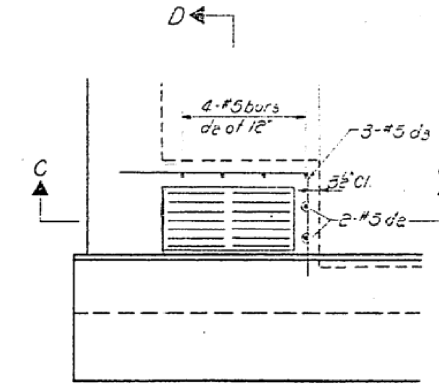
SECTION B-B  
PIERS 2 & 3



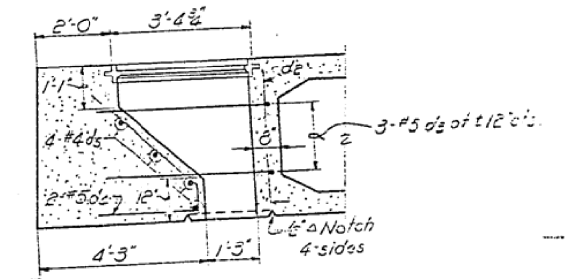
SECTION THRU PIER CAP



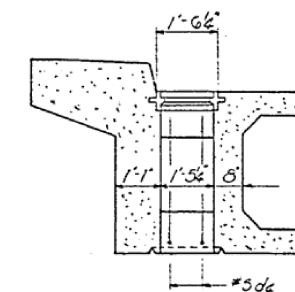
SECTION B-B  
PIER 1



PLAN AT DRAIN



SECTION C-C



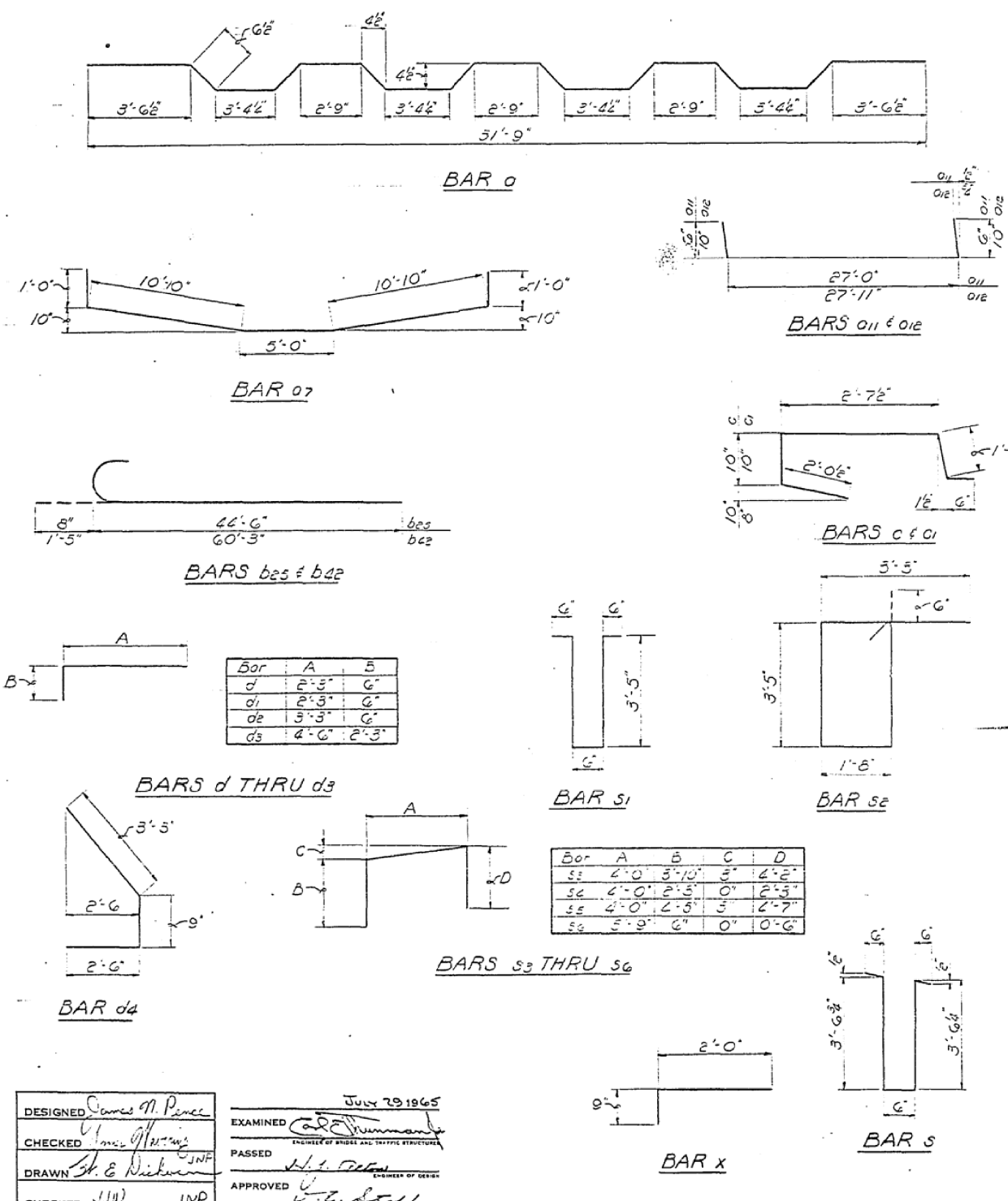
SECTION D-D

DESIGNED	James M. Pence
CHECKED	James M. Pence
DRAWN	H. E. Dickerson
CHECKED	JNP

EXAMINED	July 23 19 66
PASSED	
APPROVED	

END DIAPHRAGMS-PIER CAPS  
DRAIN DETAILS  
F.A.I.R.T. 74 SEC. 10-4HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

FILE NAME =	USER NAME = ceerlockbm	DESIGNED BMC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS BUILT PLANS, SN 010-0157			F.A.I.R.T. 74	SECTION 10-4BR	COUNTY CHAMPAIGN	TOTAL SHEETS 290	SHEET NO. 154
et:\pw\work\p\midot\ceerlockbm\d0208368\0570700-sht-esbuilts.dgn.dgn		DRAWN BMC	REVISED -		SCALE: N/A	SHEET NO. 7 OF 17 SHEETS	STA. -	TO STA. -	CONTRACT NO. 70700		ILLINOIS FED. AID PROJECT	
PLOT SCALE = 48.0000 / in.		CHECKED -	REVISED -									
PLOT DATE = 11/9/2012		DATE 8-8-11	REVISED -									



BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
0	196	#6	33'-1"	~
01	198	#6	31'-9"	~
02	192	#6	30'-9"	~
02	55	#11	31'-0"	~
02	19	#11	21'-0"	~
05	19	#11	15'-0"	~
06	17	#11	11'-0"	~
07	21	#5	26'-8"	~
08	12	#5	27'-9"	~
09	6	#5	26'-9"	~
010	18	#6	27'-9"	~
011	258	#5	28'-0"	~
012	258	#5	29'-7"	~
b	24	#6	18'-6"	~
b1	24	#9	46'-9"	~
b2	18	#9	27'-9"	~
b3	18	#9	15'-3"	~
b4	18	#9	18'-3"	~
b5	24	#6	37'-8"	~
b6	24	#11	51'-6"	~
b7	18	#11	35'-9"	~
b8	18	#11	15'-0"	~
b9	18	#11	25'-0"	~
b10	24	#6	22'-0"	~
b11	24	#11	32'-5"	~
b12	18	#11	34'-9"	~
b13	18	#11	23'-9"	~
b14	18	#11	15'-0"	~
b15	24	#6	26'-9"	~
b16	24	#5	17'-9"	~
b17	12	#5	9'-9"	~
b18	12	#5	7'-9"	~
b19	36	#5	21'-3"	~
b20	36	#5	11'-0"	~
b21	36	#5	24'-0"	~
b22	12	#5	10'-6"	~
b23	24	#5	31'-0"	~
b24	414	#5	32'-0"	~
b25	24	#6	45'-2"	~
b26	18	#6	29'-6"	~
b27	16	#6	24'-3"	~
b28	8	#6	16'-0"	~
b29	8	#5	35'-0"	~
b30	24	#9	70'-9"	~
b31	18	#9	51'-6"	~
b32	16	#9	41'-9"	~
b33	8	#9	23'-0"	~
b34	8	#5	46'-9"	~
b35	24	#9	30'-0"	~
c	208	#4	7'-1"	~
c1	217	#4	7'-1"	~
d	566	#6	2'-9"	~
d1	566	#4	2'-9"	~
d2	6	#5	3'-9"	~
d3	3	#5	6'-9"	~
d4	2	#5	6'-6"	~
d5	4	#4	2'-3"	~
m	90	#8	33'-9"	~
m1	200	#4	29'-6"	~
m2	60	#5	2'-0"	~
m3	20	#5	27'-9"	~
s	1211	#5	8'-7"	~
s1	120	#5	8'-4"	~
s2	38	#5	12'-3"	~
s3	72	#6	12'-0"	~
s4	216	#6	8'-6"	~
s5	124	#6	12'-10"	~
s6	54	#5	6'-9"	~
x	16	#4	2'-9"	~

Bar	No.	Size	Length	Shape
b36	24	#10	68'-6"	~
b37	18	#10	59'-0"	~
b38	16	#10	47'-0"	~
b39	8	#10	30'-0"	~
b40	8	#5	27'-3"	~
b41	24	#9	29'-9"	~
b42	24	#10	61'-8"	~
b43	18	#10	53'-6"	~
b44	16	#10	42'-0"	~
b45	8	#10	23'-3"	~
c	208	#4	7'-1"	~
c1	217	#4	7'-1"	~
d	566	#6	2'-9"	~
d1	566	#4	2'-9"	~
d2	6	#5	3'-9"	~
d3	3	#5	6'-9"	~
d4	2	#5	6'-6"	~
d5	4	#4	2'-3"	~
m	90	#8	33'-9"	~
m1	200	#4	29'-6"	~
m2	60	#5	2'-0"	~
m3	20	#5	27'-9"	~
s	1211	#5	8'-7"	~
s1	120	#5	8'-4"	~
s2	38	#5	12'-3"	~
s3	72	#6	12'-0"	~
s4	216	#6	8'-6"	~
s5	124	#6	12'-10"	~
s6	54	#5	6'-9"	~
x	16	#4	2'-9"	~

BILL OF MATERIAL

Class X Concrete	Cu. Yds.	646.9
Reinforcement Bars	Lbs.	1206,620
Structural Steel	Lbs.	11,910

\*Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel. Est. No. 3380  
\*\*Includes e bars shown on sheet 10.

DESIGNED *James M. Pence*  
CHECKED *James M. Pence*  
DRAWN *St. E. Dickman*  
CHECKED *JWD JNP*

EXAMINED *Carl Hummer*  
PASSED *St. E. Dickman*  
APPROVED *C. E. Dickman*

JULY 29 1965

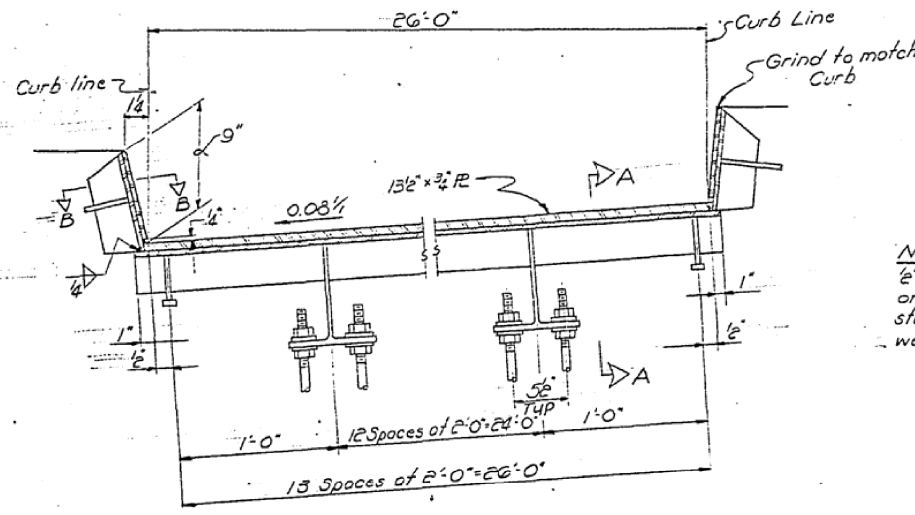
BAR x

BAR s

SUPERSTRUCTURE  
BILL OF MATERIAL  
F.A.I.R.T. 74 SEC. 10-4HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

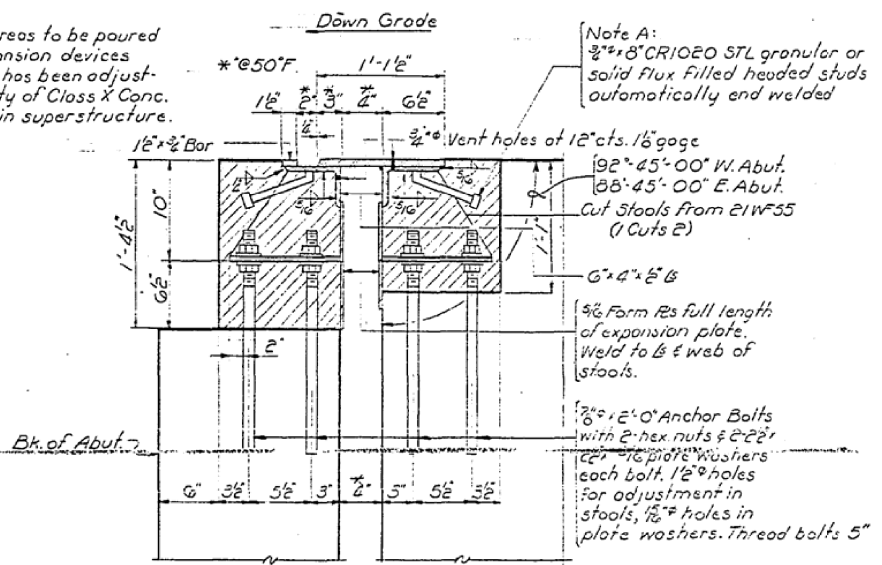
PROJ. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
F.A.I. 74	10-4 HB-2	CHAMPAIGN	34	15	15 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

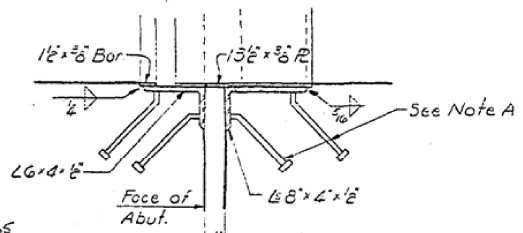


EXPANSION DEVICE AT ABUTTS.

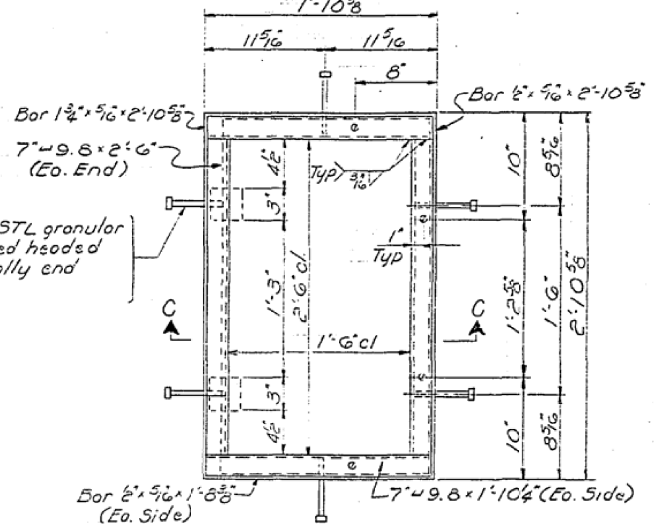
Hatched areas to be poured after expansion devices assembly has been adjusted. Quantity of Class X Conc. included in superstructure.



SECTION A-A

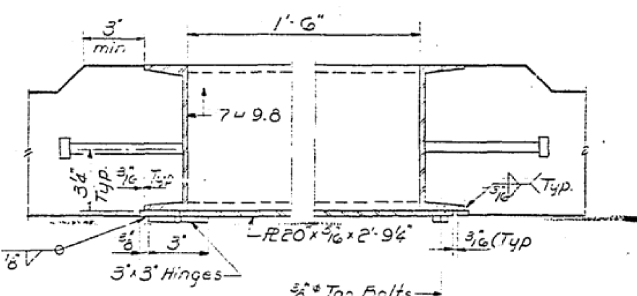


SECTION B-B

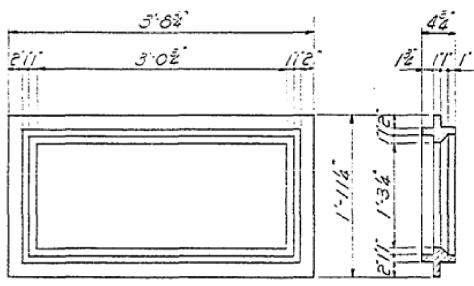


PLAN OF ACCESS DOOR

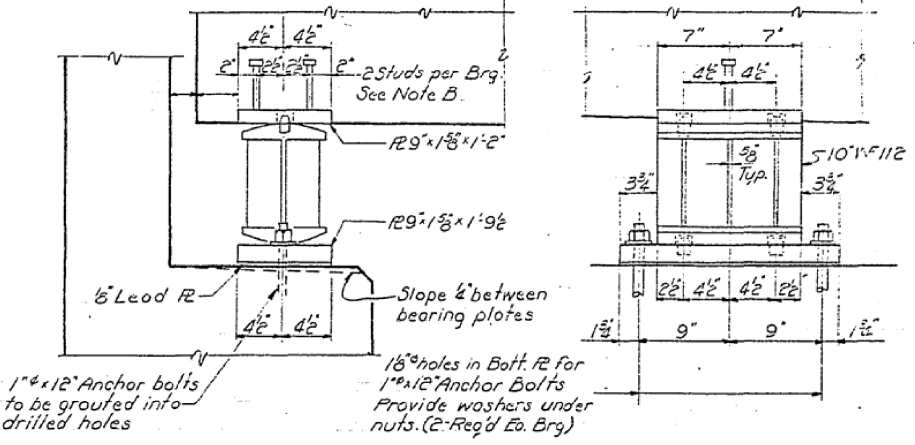
Door frame and hardware to be galvanized. Est. Wt. 160 lbs. each. Included in weight of structural steel. 5-Req'd



SECTION C-C



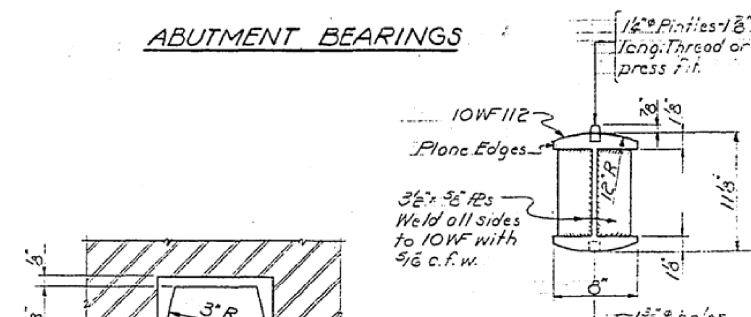
CAST IRON FRAME  
1-Req'd



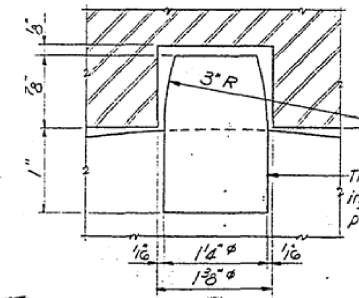
ABUTMENT BEARINGS

1" x 12" Anchor bolts to be grouted into drilled holes

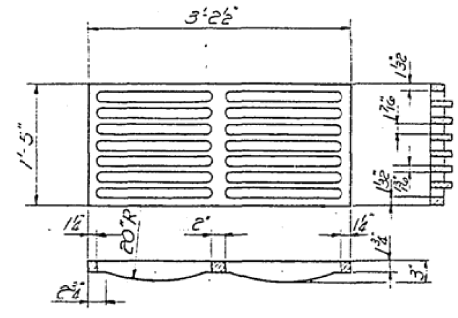
1/8" holes in Bolt. R for 1" x 12" Anchor Bolts Provide washers under nuts. (2-Req'd Ea. Brg.)



ROCKER DETAIL



PINTLE DETAIL



CAST IRON GRATE  
1-Req'd

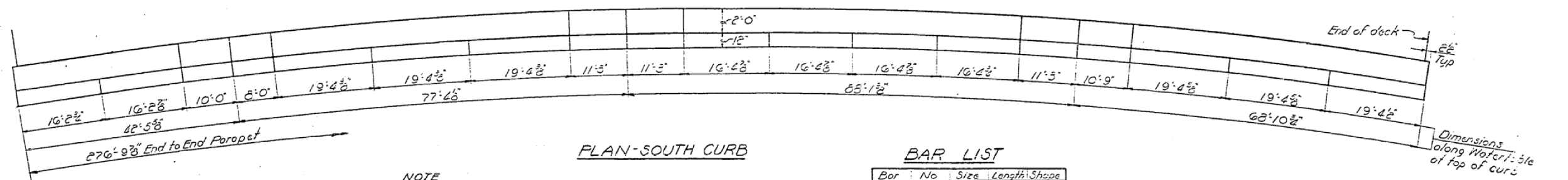
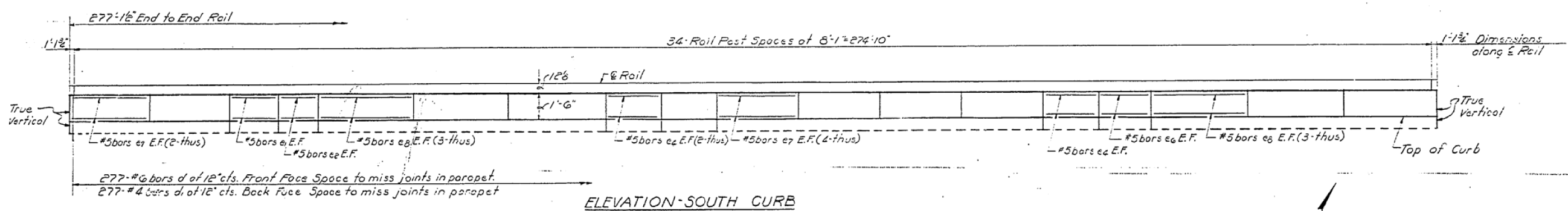
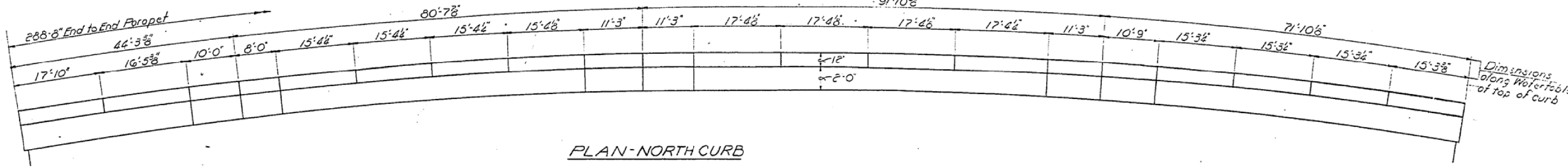
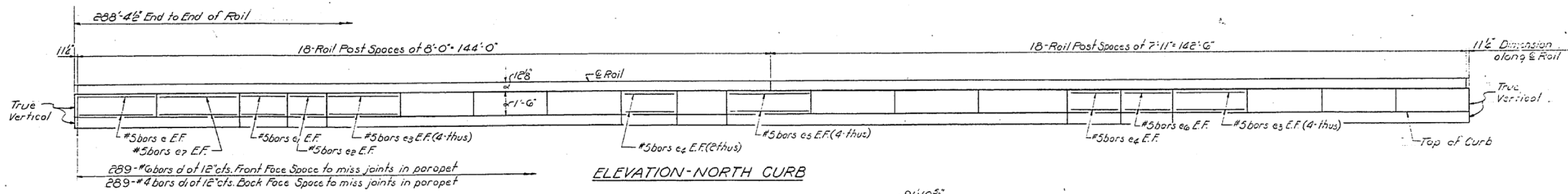
STRUCTURAL STEEL  
F.A.I. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

DESIGNED	James N. Pence	EXAMINED	July 29, 1965
CHECKED	James Haring	PASSED	
DRAWN	E. E. Dickerson	APPROVED	
CHECKED	J.W. JNP		



STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO./10
74	10-4 HB-2	CHAMPAIGN	34	16	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:			



**NOTE**  
Dimensions shown are horizontal dimensions.  
All parapet joint shall be placed normal to grade.  
Any post within 6" of parapet joint shall be moved to provide a min. of 6" from post to joint.  
Aluminum rail shall be fabricated to a radius of 764'-0"

**BAR LIST**

Bar	No	Size	Length	Shape
e	4	#5	17'-7"	---
e1	8	#5	9'-9"	---
e2	8	#5	7'-9"	---
e3	32	#5	15'-0"	---
e4	24	#5	11'-0"	---
e5	16	#5	17'-0"	---
e6	8	#5	10'-6"	---
e7	28	#5	16'-0"	---
e8	24	#5	19'-0"	---

DESIGNED *James H. Penick*  
CHECKED *James H. Penick*  
DRAWN *W.E. Dickerson*  
CHECKED *J.N.P.*

EXAMINED *W.E. Dickerson*  
PASSED *H.J. Tolson*  
APPROVED *W.E. Dickerson*

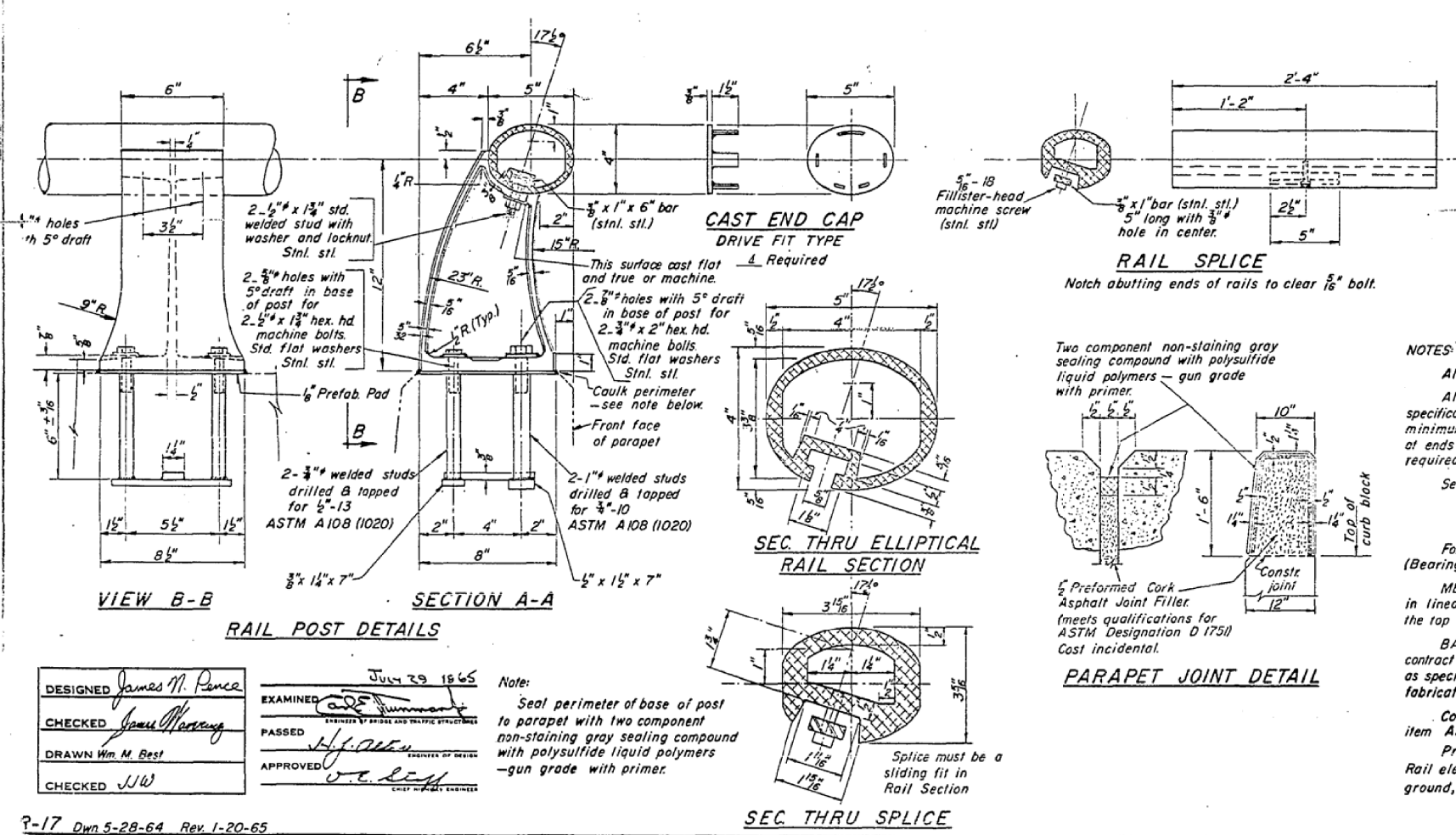
JULY 29 1965

**HANDRAIL & PARAPET**  
F.A.I.R.T. 74 SEC. 10-4HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48

DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-A	HB-2	CHAMPAIGN	34	17
18 SHEETS				

For Rail and Parapet Joint Spacing See Sheet 10



**NOTES:**

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-235 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications:

Cast Aluminum Alloy Bridge Post—Alloy 344-T4.  
Stainless Steel Welded Stud Bolts, Washers, and Locknuts

For material composition of Prefabricated Pad, see Article 54.9(f), (Bearing and Anchorage), of the Standard Specifications.

**METHOD OF MEASUREMENT:** Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

**BASIS OF PAYMENT:** Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-1/2" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade—high spots shall be ground, and low spots shimmed.

**BILL OF MATERIAL**

Item	Unit	Quantity
ALUMINUM HANDRAIL	Lin Ft	536'-0"

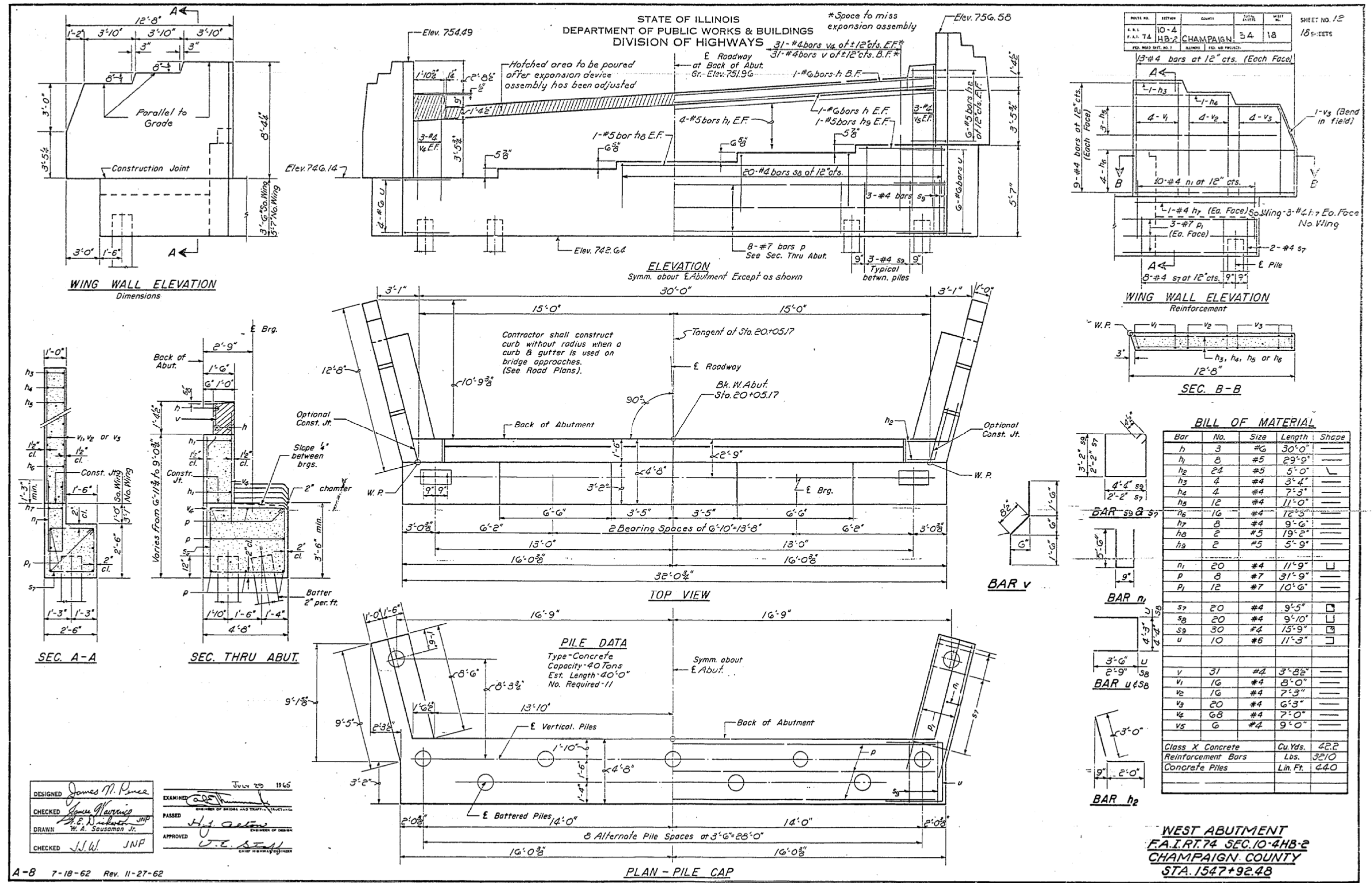
DESIGNED *James M. Pence*  
CHECKED *James M. Pence*  
DRAWN *Wm. M. Best*  
CHECKED *JW*

EXAMINED *Carl J. ...*  
PASSED *H. J. ...*  
APPROVED *J. E. ...*

July 29 1965

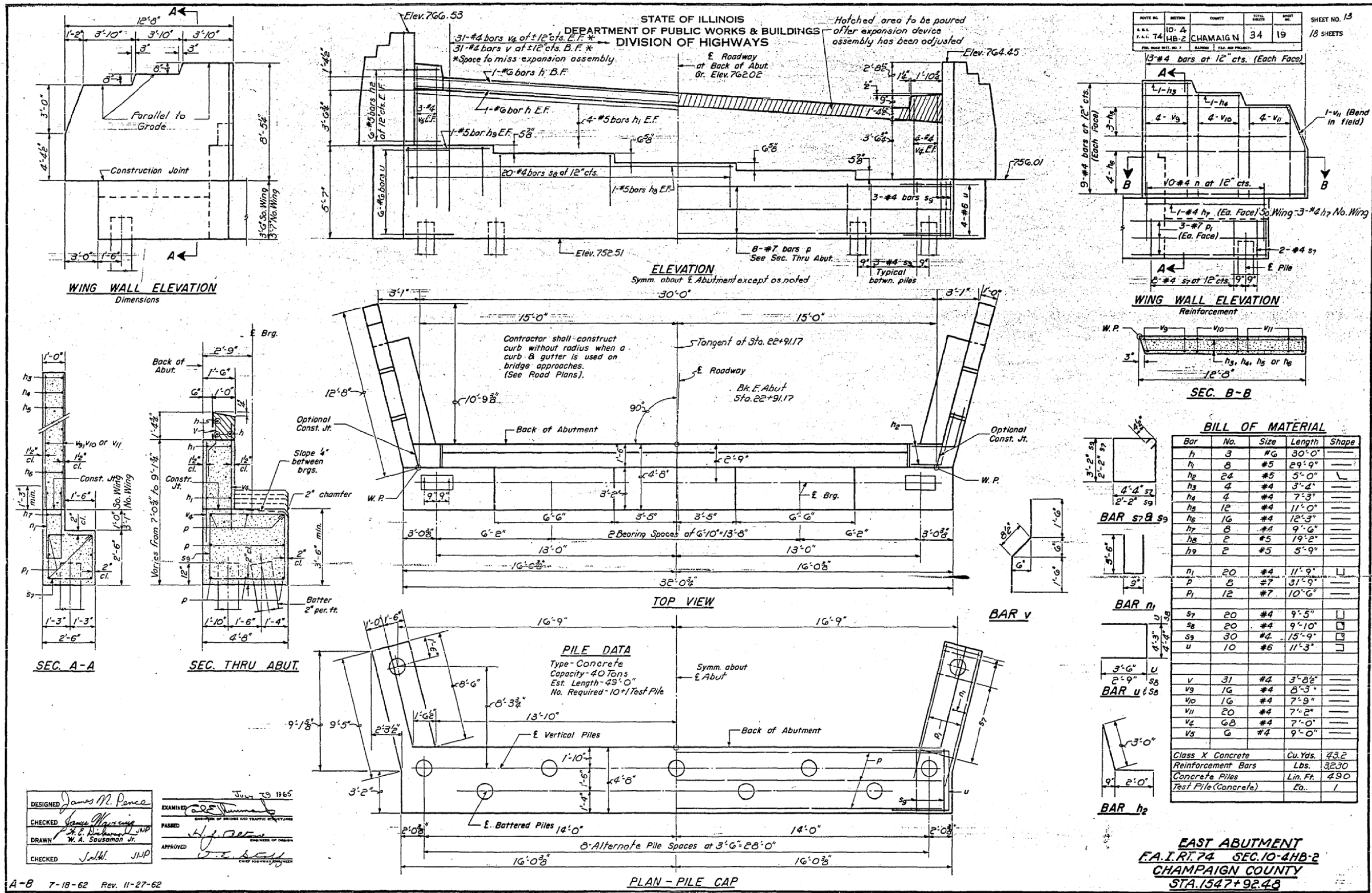
Note:  
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer.

P-17 Dwn 5-28-64 Rev. 1-20-65



DESIGNED *James M. Pence*  
 CHECKED *James Harris*  
 DRAWN *W. A. Sausaman Jr.*  
 JULY 23 1965  
 EXAMINED *...*  
 PASSED *H. J. Grew*  
 APPROVED *J. E. Seal*

A-8 7-18-62 Rev. 11-27-62



DESIGNED *James M. Pence*  
 CHECKED *James M. Pence*  
 DRAWN *W. A. Sausaman Jr.*  
 CHECKED *S. W. JNP*

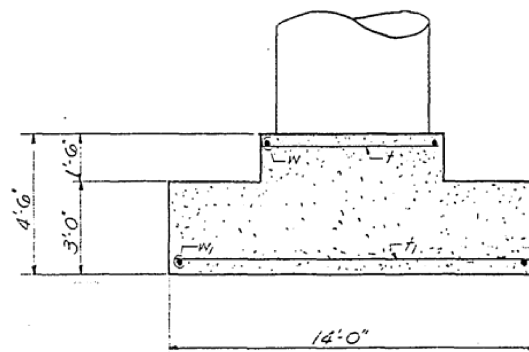
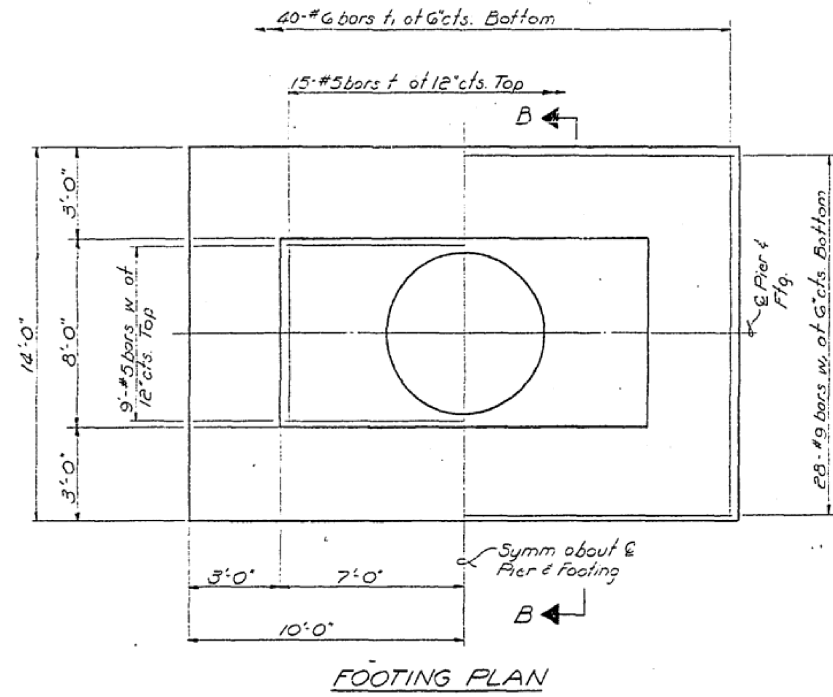
EXAMINED *Carl E. Summers*  
 PASSED *H. J. ...*  
 APPROVED *J. E. ...*

July 29 1965

A-8 7-18-62 Rev. 11-27-62

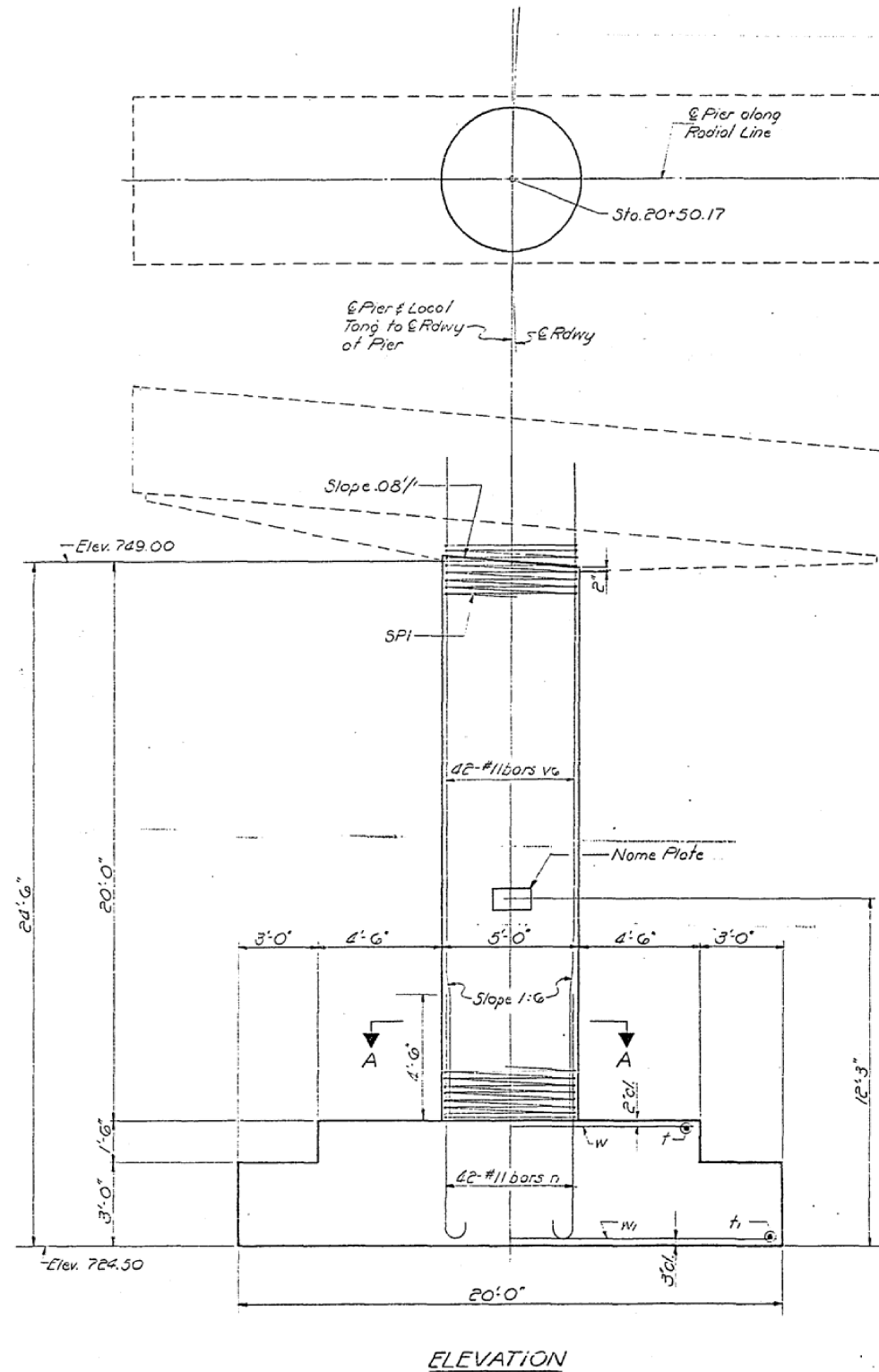
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	SUBJECT	TOTAL SHEETS	SHEET NO.	SHEET NO. 14 18 SHEETS
F.A.I. 74	10-4	HB-2 CHAMPAIGN	34	20	
FED. ROAD DIST. NO. 7	BLANK	FED. AID PROJECT			

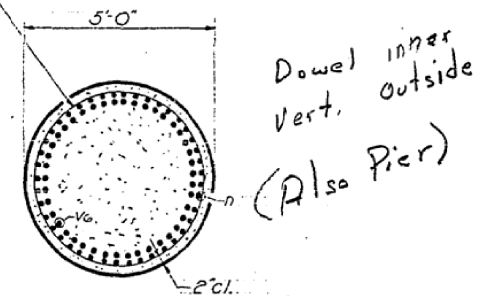


Note:  
Construction joints will  
not be permitted in  
footing.  
Max. Basic Soil Pressure = 3.03  $\frac{76}{100}$

DESIGNED	James M Pence	EXAMINED	July 29 1965
CHECKED	James Flarwig	PASSED	
DRAWN	W.E. Dickerson	APPROVED	
CHECKED	JW JNP		



2" Spiral 3" pitch Two  
extra turns top &  
bottom. Extend spiral  
hooping 4" into pier cap  
Provide 4-#4 spacers  
each spiral



BILL OF MATERIAL

Bar	No	Size	Length	Shape
n	42	#11	10'-2"	C
f	15	#5	7'-9"	
f <sub>1</sub>	40	#6	13'-9"	
v <sub>6</sub>	42	#11	24'-9"	
w	9	#5	13'-9"	
w <sub>1</sub>	28	#9	19'-9"	
SPI	1	#4	20'-4"	W
Class X Concrete Cu. Yds. 51.8				
* Reinforcement Bars Lbs. 11,670				
Name Plate Each 1				

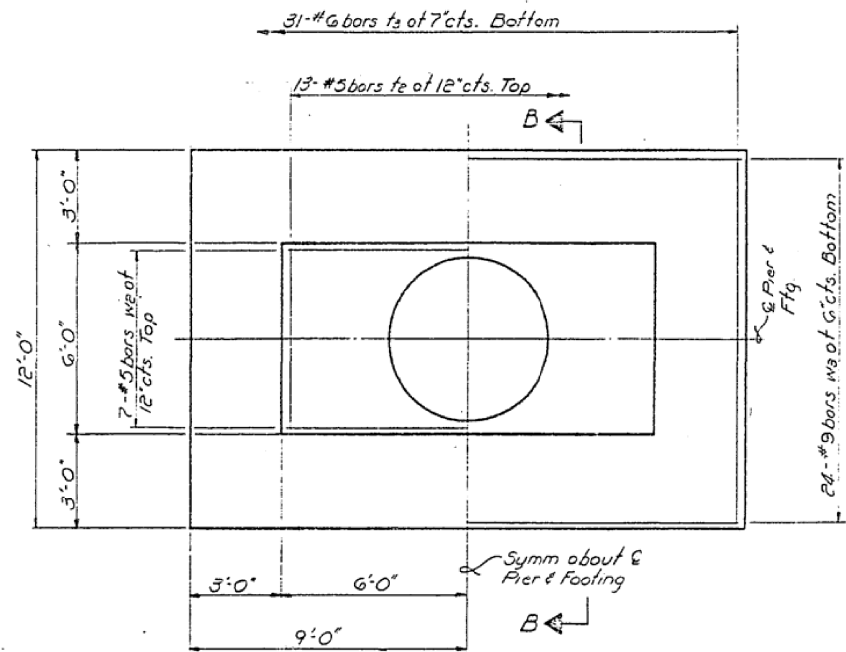
\*Includes weight of Spiral spacers

BAR n

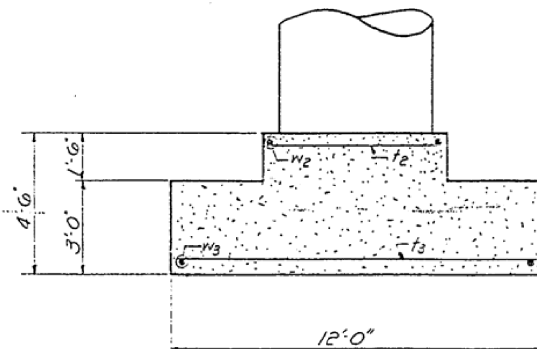
PIER I  
F.A.I. RT. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1347 + 92.48

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15 18 SHEETS
74	10-4	CHAMPAIGN	34	21	
F.A.I. RT. 74 SEC. 10-4 HB-2 CHAMPAIGN COUNTY					



FOOTING PLAN

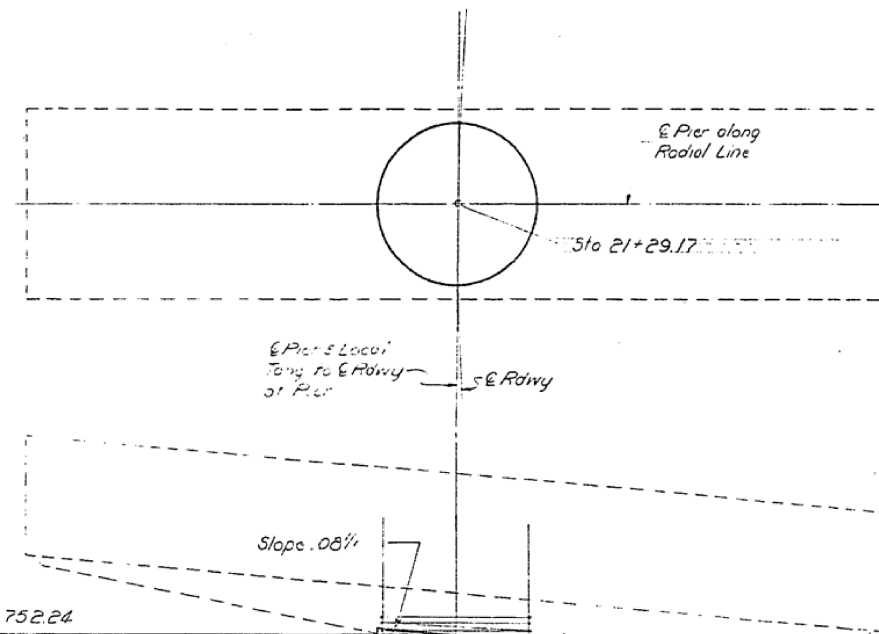


SECTION B-B

Note:  
Construction joints will  
not be permitted in  
footing.

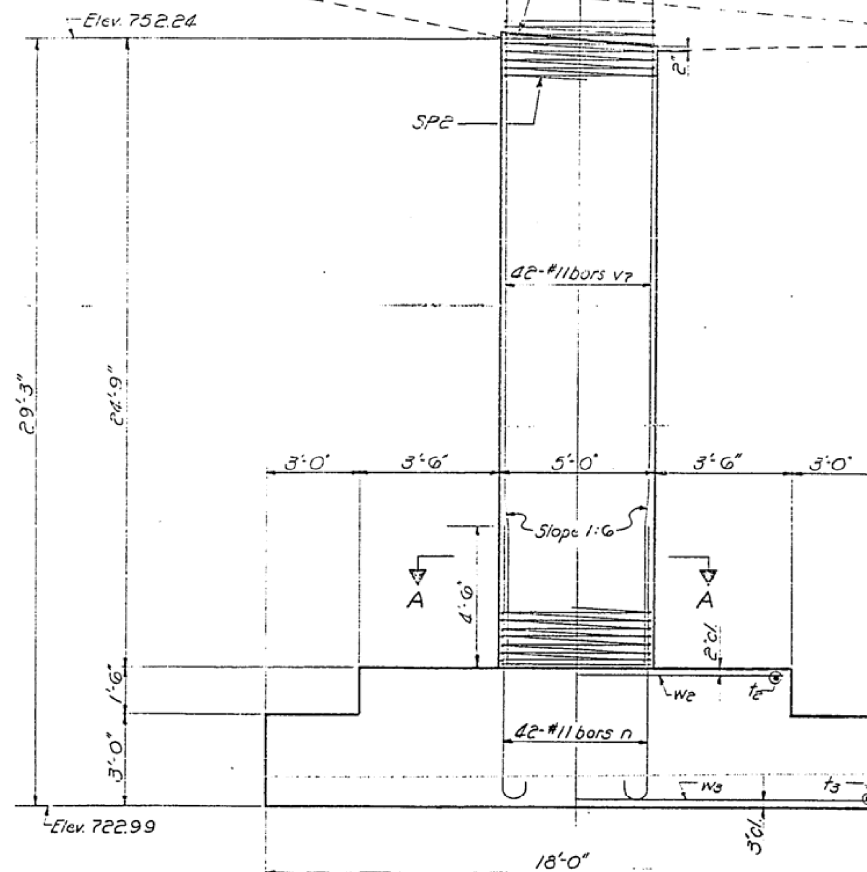
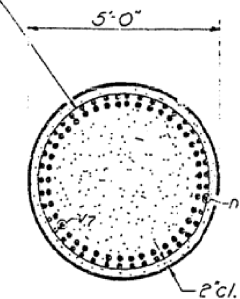
Max. Basic Soil Pressure = 3.87/ft<sup>2</sup>

DESIGNED	James M. Pence	EXAMINED	July 23 1965 C. E. Hummel
CHECKED	James Hoxsey	PASSED	H. J. Green
DRAWN	H. E. Dickson	APPROVED	V. E. Smith
CHECKED	J. W. JNP		

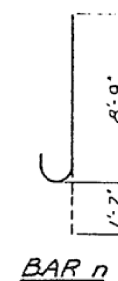


SECTION A-A

1/2" Spiral 3" pitch Two  
extra turns top &  
bottom. Extend spiral  
hooping 4" into pier cap  
Provide 4 #4 spacers  
each spiral



ELEVATION



BAR n

BILL OF MATERIAL

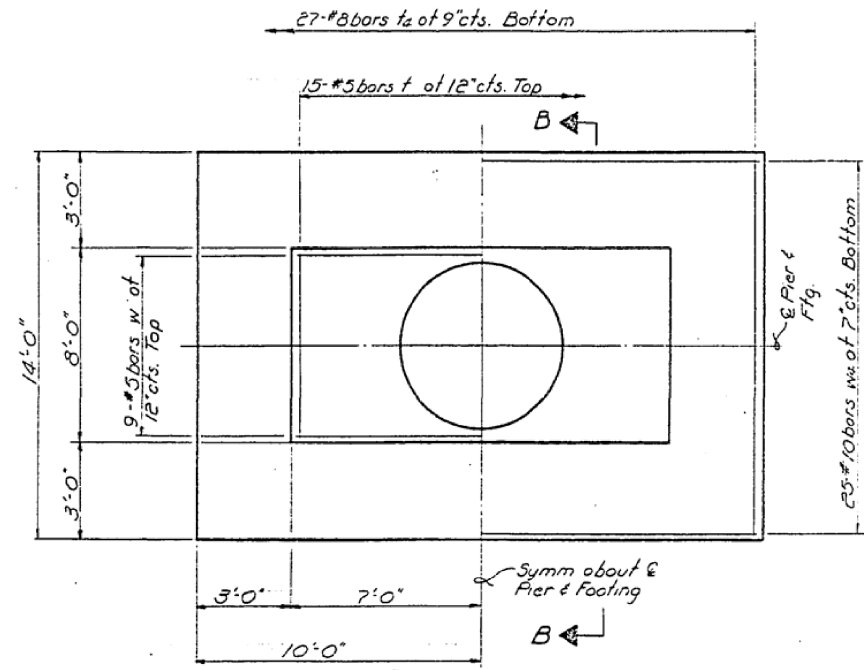
Bar	No	Size	Length	Spacers
n	42	#11	10'-4"	
fe	13	#5	5'-9"	
f3	31	#6	11'-9"	
v7	42	#11	29'-6"	
w2	7	#5	11'-9"	
w3	24	#9	17'-9"	
SP2	1	#4	25'-1"	
Class X Concrete				Cu. Yds. 46.0
* Reinforcement Bars				Lbs. 12,130

\* Includes weight of Spiral spacers

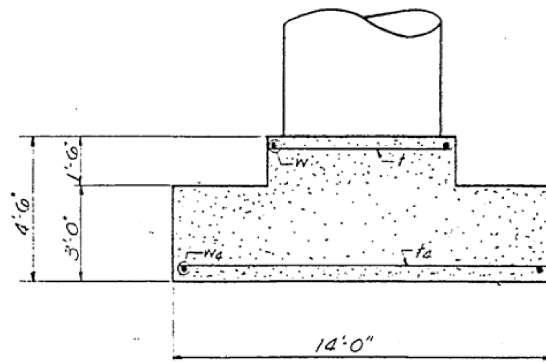
PIER 2  
F.A.I. RT. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547 + 92.48

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16 18 SHEETS
F.A.I. 74	10-4 HB-2	CHAMPAIGN	34	22	
FED. ROAD DIST. NO. 7	ALIGNED	FED. AID PROJECT			



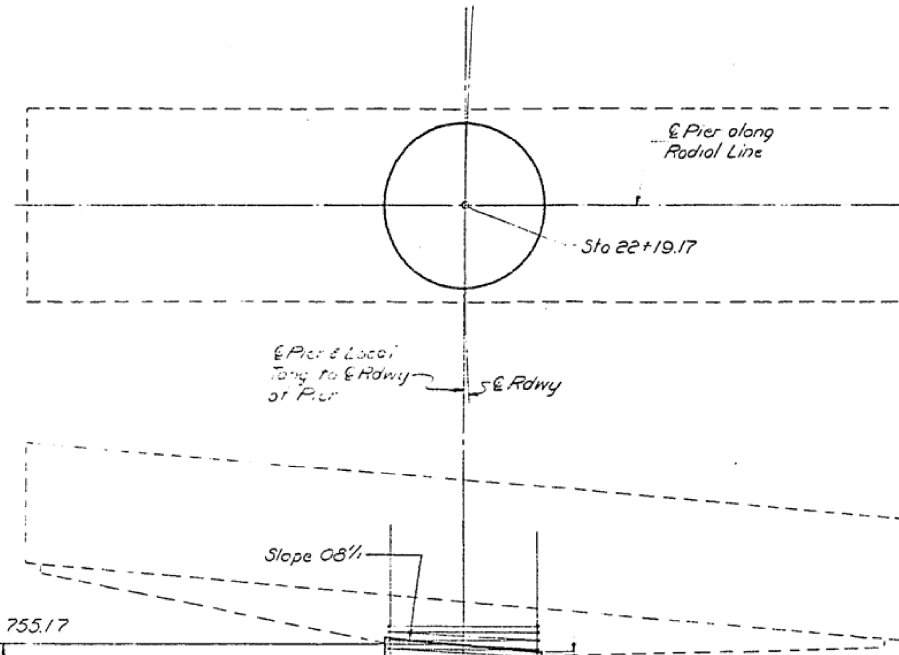
FOOTING PLAN



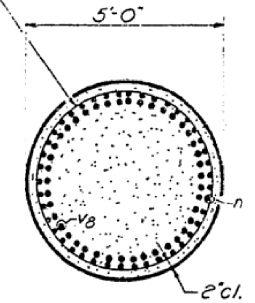
SECTION B-B

Note:  
Construction joints will  
not be permitted in  
footing.  
Max. Basic Soil Pressure = 3.52 T/sq ft

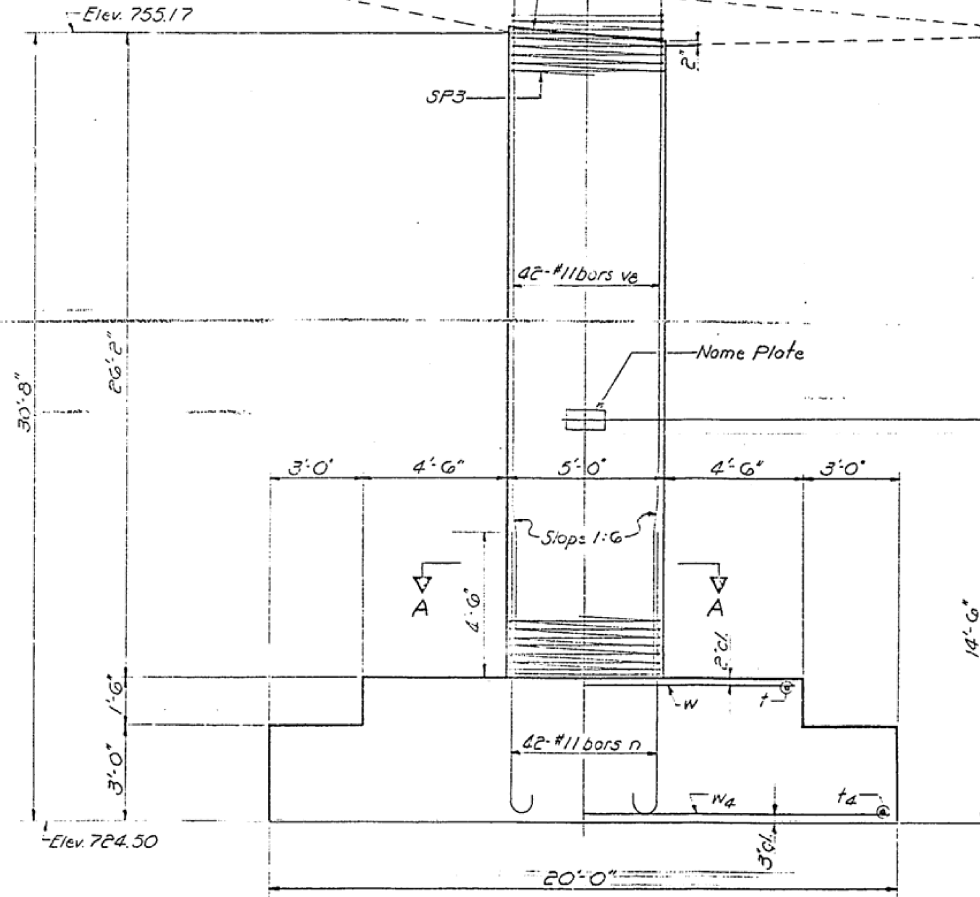
DESIGNED	James M. Pence	EXAMINED	July 23 1965
CHECKED	Lowell Haverig	PASSED	H. J. Austin
DRAWN	F. G. Dickson	APPROVED	J. C. Ryan
CHECKED	J. W. JNP		



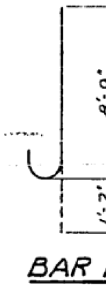
1/2" Spiral 3" pitch Two  
extra turns top &  
bottom. Extend spiral  
hooping 4" into pier cap  
Provide 4" #4 spacers  
each spiral



SECTION A-A



ELEVATION



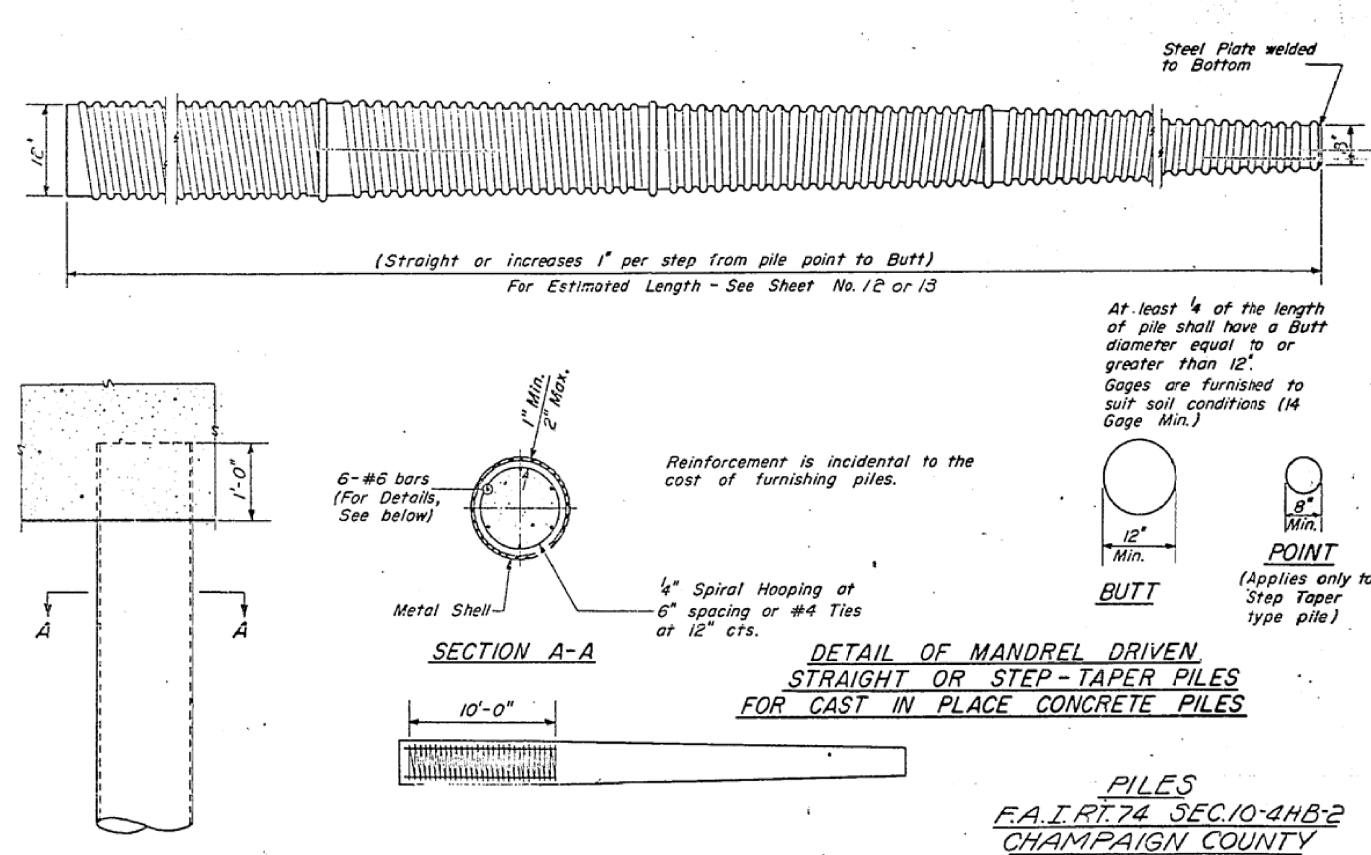
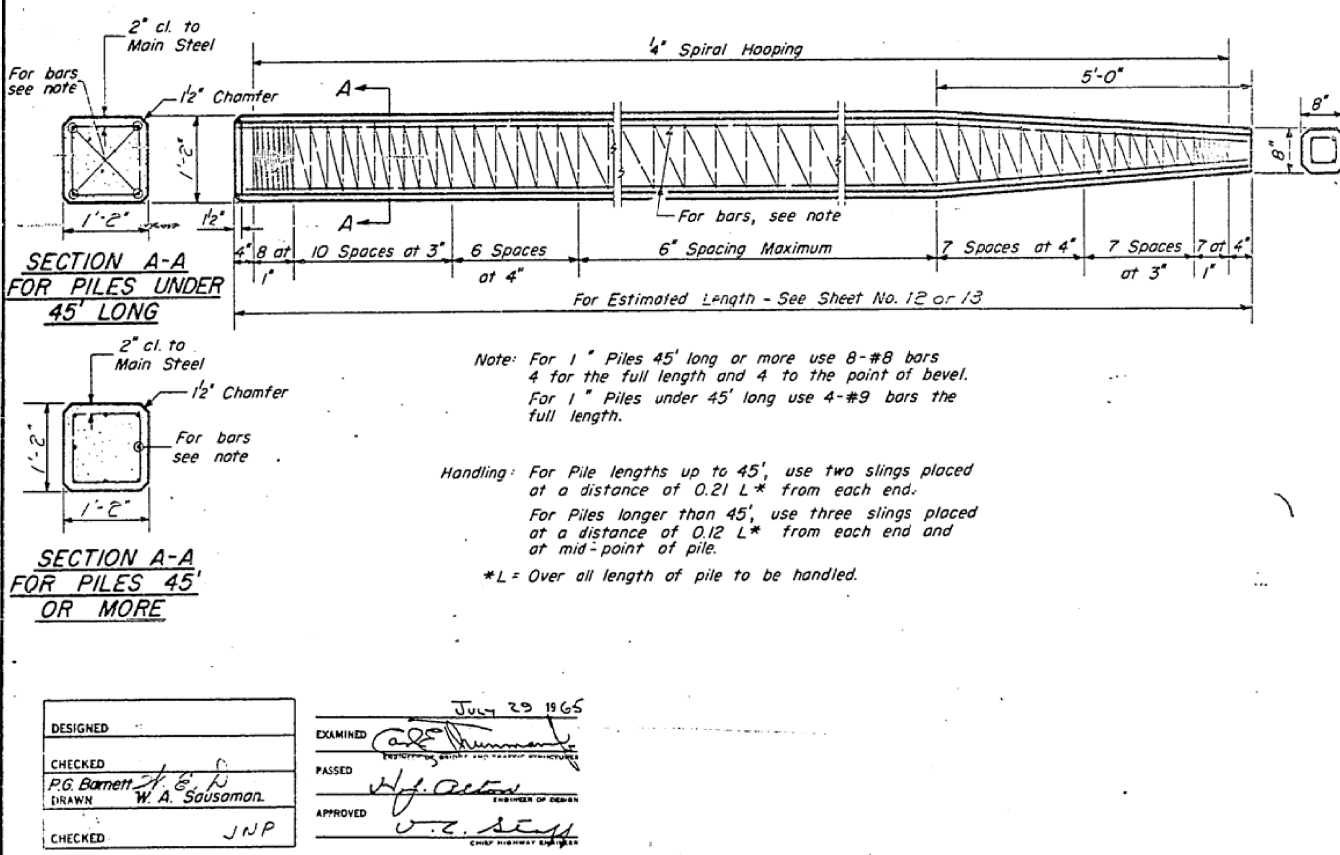
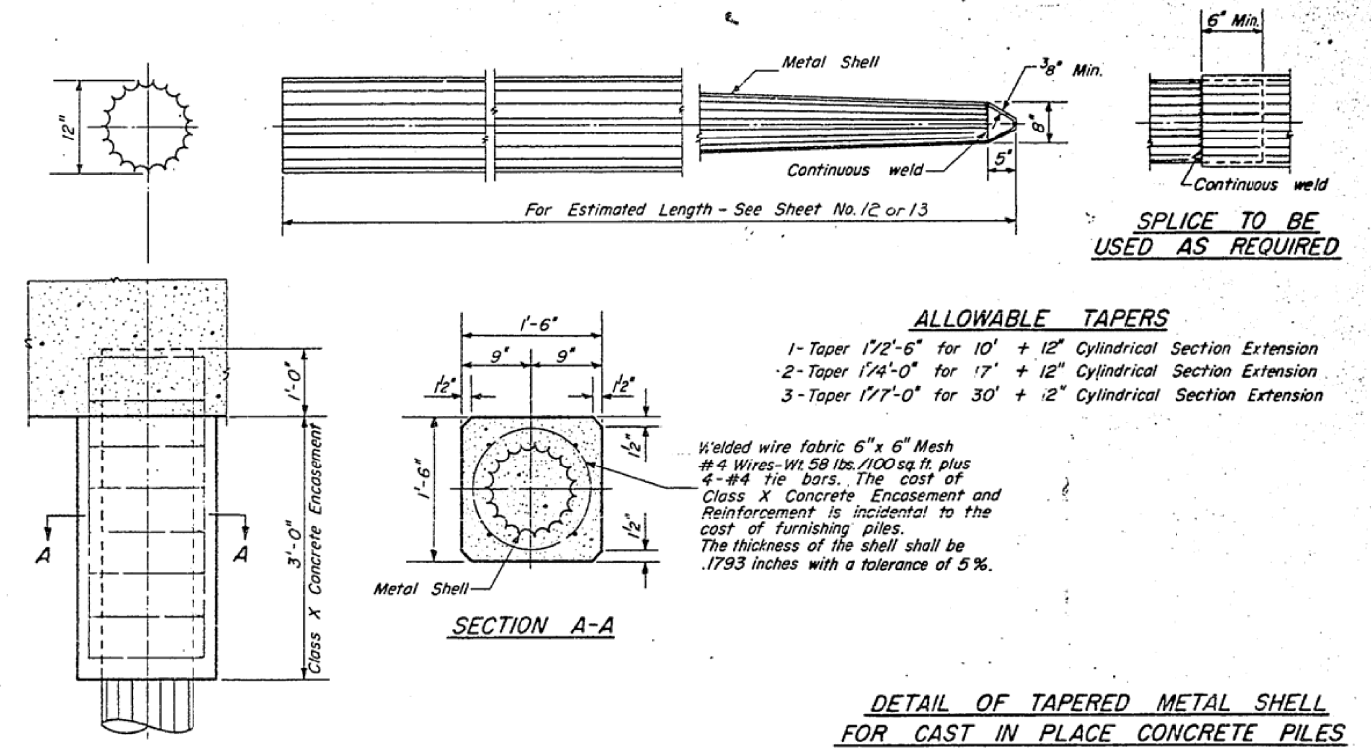
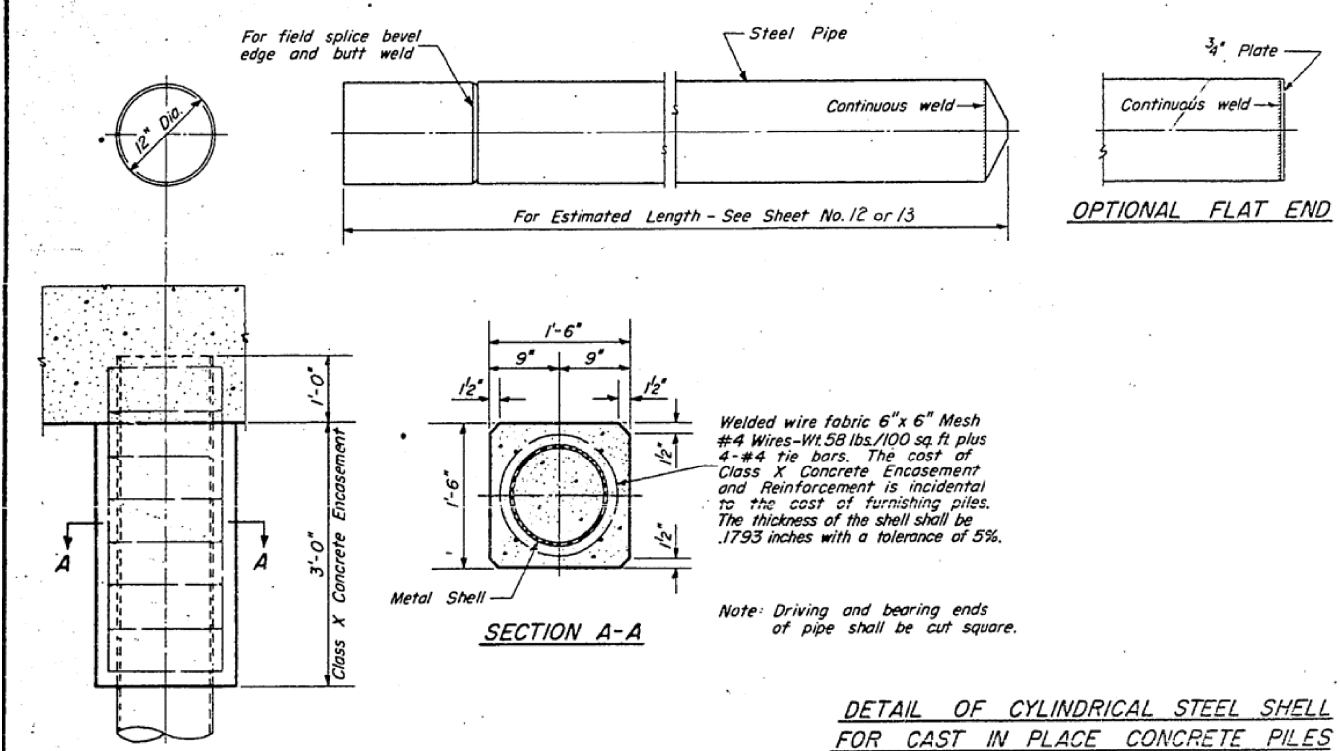
BAR n

BILL OF MATERIAL

Bar	No	Size	Length	Shape
n	42	#11	10'-4"	C
t	15	#5	7'-9"	
t2	27	#8	13'-9"	
va	42	#11	30'-11"	
w	9	#5	13'-9"	
w2	25	#10	19'-9"	
SP3	1	#4	26'-6"	WMM
Class X Concrete		Cu. Yds	56.3	
* Reinforcement Bars		Lbs.	13,170	
Name Plate		Each	1	

\*Includes weight of Spiral spacers

PIER 3  
F.A.I. RT. 74 SEC. 10-4 HB-2  
CHAMPAIGN COUNTY  
STA. 1547 + 92.48



DESIGNED

CHECKED PG Barnett

DRAWN W. A. Sausoman

CHECKED JNP

EXAMINED

PASSED

APPROVED

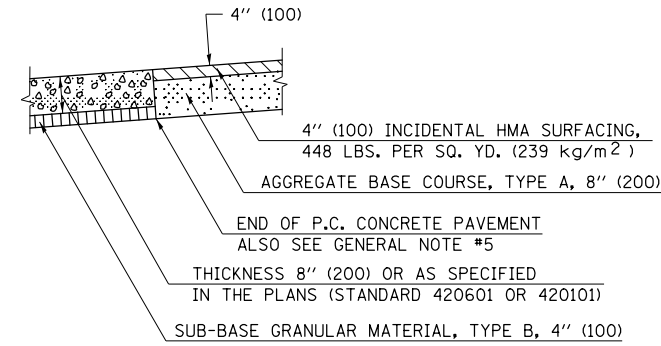
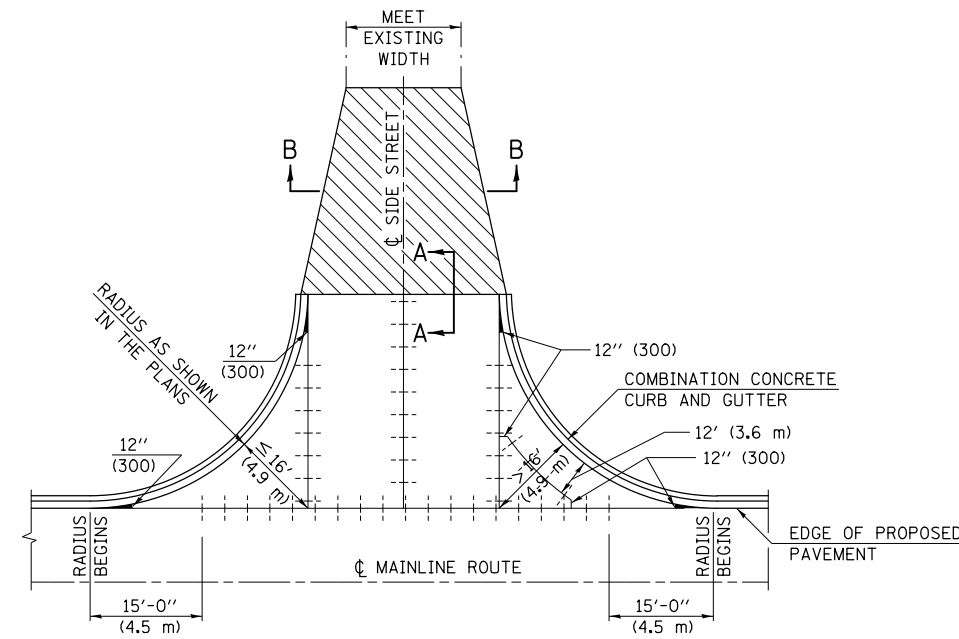
July 29 1965

PILES  
F.A.I. RT. 74 SEC. 10-4HB-2  
CHAMPAIGN COUNTY  
STA. 1547+92.48



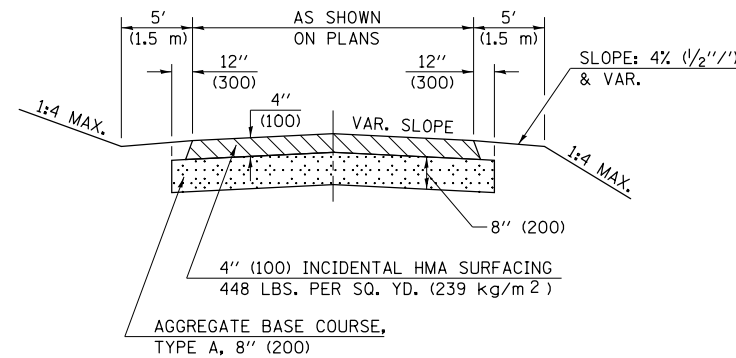
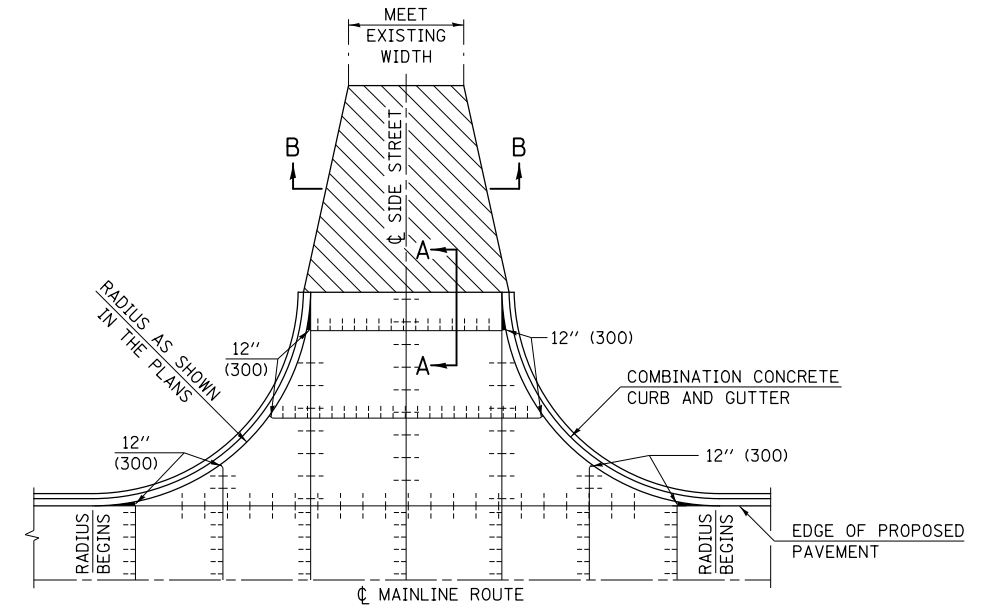
**NEW CONSTRUCTION  
('3 R" IMPROVEMENTS)**

(ADJACENT TO RESURFACING OR WIDENING AND RESURFACING)



**SECTION A-A**

(ADJACENT TO JOINTED P.C.C. PAVEMENT)



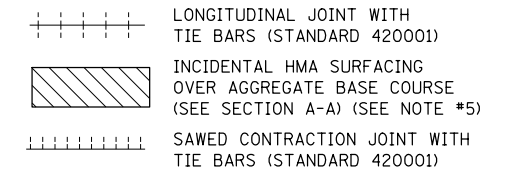
**SECTION B-B**

**GENERAL NOTES**

- ALL INTERSECTING SIDE STREETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS DETAIL EXCEPT THOSE NOTED IN THE PLANS.
- SAWED LONGITUDINAL JOINTS WITH TIE BARS WILL BE ALLOWED ALONG THE CENTERLINE ONLY WHEN THE STREET RETURN IS POURED FULL WIDTH. OTHER LONGITUDINAL JOINTS SHALL BE ACCORDING TO STANDARD 420001.
- THE MATERIAL WITHIN THE WIDTH TRANSITION AREA MAY BE DIFFERENT THAN SHOWN ABOVE. THE WIDTH TRANSITION MAY NOT BE REQUIRED AT ALL LOCATIONS.
- SHADED AREAS SHALL BE POURED MONOLITHIC WITH ADJACENT COMBINATION CONCRETE CURB AND GUTTER. THIS WORK WILL BE MEASURED AND INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD (m<sup>2</sup>) FOR PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) OF THE TYPE AND THICKNESS SPECIFIED IN THE PLANS.
- SAWED CONTRACTION JOINTS, AS SHOWN IN STANDARD 420001, SHALL BE REQUIRED AT 12' (3.6 m) TO 18' (5.5 m) SPACING FOR JOINTED PCC PAVEMENT AND AT 40' (12.2 m) (MIN. SPACING 20' (6.1 m)) WHEN THE LENGTH OF THE RETURN EXCEEDS 40' (12.2 m).
- JOINT SPACING, MONOLITHIC POURS AND OTHER FEATURES MAY BE MODIFIED TO MAINTAIN ALIGNMENT OF JOINTS BETWEEN ADJACENT PANELS. SEE PAVEMENT JOINT PLANS.
- PLACEMENT OF PAVEMENT FABRIC SHALL BE AS SHOWN ON THE STANDARDS INCLUDED WITH THIS IMPROVEMENT.

URBAN SIDEROAD DESIGN STANDARDS (PPM 40-06)									
DESIGN ELEMENT	New Construction OR 3R (Existing Width Less Than 20 ft)			3R (Existing Width 20 ft or Greater) OR 3P			SMART or Contract Maintenance		
	min.	des.	max.	min.	des.	max.	min.	des.	max.
SURFACE WIDTH (FT); (measured at end of radius or row line; greatest distance from edge of traveled way)	30 f-f	30 f-f	Coordinate with Geometrics Engineer	resurface existing configuration to completion of radius return or row line; greatest distance from edge of traveled way; major sideroads (> 400 adt) shall have "butt joints" constructed whether the entrance is hma or pcc; minor sideroads (< 400 adt) shall have "featheredge rundown" as shown in district cadd detail 406AAAAA			resurface existing configuration with the completion of a 10 ft. featheredge rundown for ALL sideroads as shown in district cadd detail 406AAAAA		
RADIUS (FT)	30	30							
ENTRANCE GRADE (%)	1	1 to 4	4						
BREAKOVER (%)	0	5	10						
INTERSECTION ANGLE	60	75 to 90							
<b>SURFACE TYPE</b>									
INCIDENTAL HMA SURFACING (INCH)	4			taper from 2 1/4" to 1 1/2" or featheredge			taper from 1 1/2" to featheredge		
AGGREGATE BASE COURSE, TYPE A (INCH)	8	4		if applicable use item: 35800100 Preparation of Base					
PCC PAVEMENT (INCH)		8							

**LEGEND**



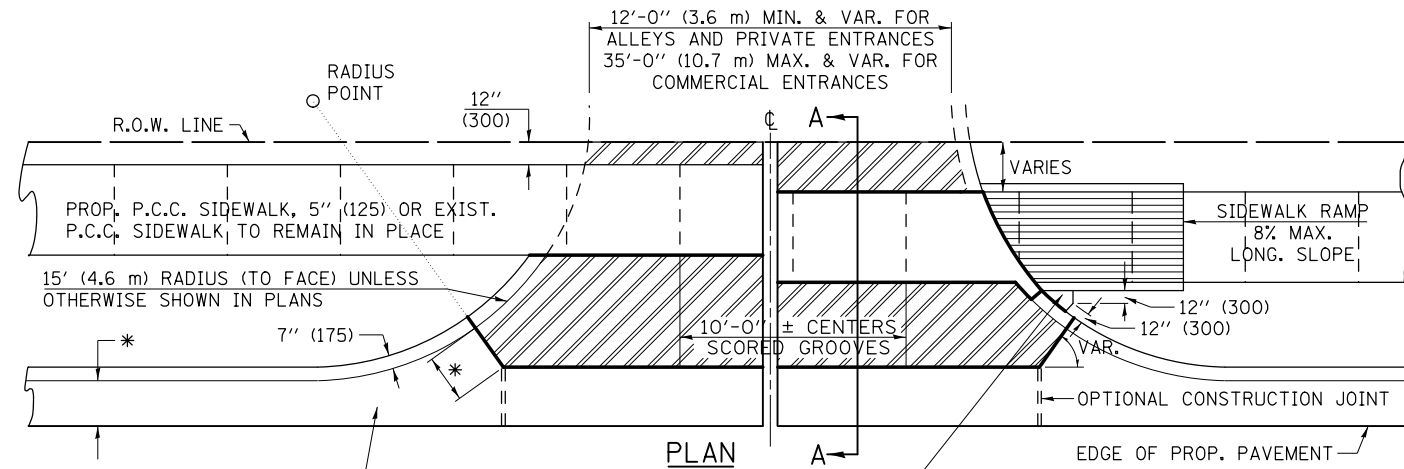
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 420030A**

FILE NAME =	USER NAME = ceorlockbm	DESIGNED -	REVISED - 11/06 TJB	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INTERSECTING SIDE STREETS (URBAN)</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ce:\pw\work\p\d02\ceorlockbm\d0208368\0570700-sht-details.dgn	DRAWN -	REVISED - 09/07 KAG	74			10-4BR	CHAMPAIGN	290	165	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70700			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
PLOT DATE = 11/9/2012	DATE -	REVISED -	SCALE: N/A			SHEET NO. 1 OF 1 SHEETS	STA. ----- TO STA. -----			

GENERAL NOTES

1. THIS LONGITUDINAL CURB EXPANSION JOINT SHALL BE PLACED ONLY WHERE THE PROPOSED P.C. CONCRETE SIDEWALK OR DRIVEWAY PAVEMENT MEETS AN EXISTING CONCRETE ENTRANCE. THE P.C.C. DRIVEWAY PAVEMENT WILL BE POURED MONOLITHIC WITH THE P.C.C. SIDEWALK WHEN THE DISTANCE BETWEEN THE SIDEWALK AND RIGHT-OF-WAY IS LESS THAN OR EQUAL TO 24" (600 mm). THE LONGITUDINAL EXPANSION JOINT BETWEEN THE DRIVEWAY PAVEMENT AND SIDEWALK WILL NOT BE NEEDED UNLESS THE DISTANCE EXCEEDS 24" (600 mm).
2. THE LONGITUDINAL CURB EXPANSION JOINT SHALL CONFORM TO SECTION 1051 OF THE STANDARD SPECS.
3. DRIVEWAYS THAT WILL MEET EXISTING OR PROPOSED CURB NEAR THE R.O.W. LINE SHALL HAVE THE CURB CONSTRUCTED FULL HEIGHT TO THE R.O.W. LINE.
4. DRIVEWAYS THAT WILL BE CONSTRUCTED WITH FULL HEIGHT CURBS AND NOT MEETING EXISTING OR PROPOSED CURBS NEAR THE R.O.W. LINE SHALL HAVE THE CURB SLOPED AS SHOWN ABOVE.
5. DEPRESSED CURB SHALL BE BUILT ONLY AT PRIVATE DRIVES WITH NO SIDEWALK RAMPS.
6. THE ENTRANCE GRADES WILL BE AS SHOWN ON THE STATION CROSS SECTIONS AND AS DIRECTED BY THE ENGINEER.
7. THE P.C. CONCRETE DRIVEWAY PAVEMENT SHALL BE CONSTRUCTED WITH SCORED GROOVES, AS SPECIFIED IN ARTICLE 424.06 OF THE STANDARD SPECIFICATIONS, AT APPROXIMATELY EVERY OTHER JOINT, EITHER IN THE EXISTING SIDEWALK OR THE PROPOSED SIDEWALK. THE PROPOSED P.C. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PRIOR TO CONSTRUCTING THE P.C. CONC. DRIVEWAY PAVEMENT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
8. THE COMBINATION CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED AS SHOWN AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LIN. FT. (METER) FOR COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
9. THE P.C. CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ABOVE AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. FT. (m<sup>2</sup>) FOR P.C. CONCRETE SIDEWALK OF THE THICKNESS SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE EXTRA THICKNESS AS SHOWN ABOVE OR THE SEQUENCE OF CONSTRUCTION AS SPECIFIED.
10. BEFORE A CHANGE IN THE METHOD OF CONSTRUCTION IS ALLOWED, THE REQUEST SHALL BE SUBMITTED IN WRITING AND MUST BE APPROVED BY THE ENGINEER.
11. THE VARIABLE HEIGHT CURB ADJACENT TO THE P.C. CONCRETE DRIVEWAY PAVEMENT SHALL BE CONSTRUCTED MONOLITHIC WITH AND INCLUDED IN THE AREA OF THE P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. YD. (m<sup>2</sup>) FOR P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS, INCLUDING THE MONOLITHIC CURBS AS SPECIFIED, THE SCORED GROOVES, THE LONGITUDINAL CURB EXPANSION JOINTS, AND THE ADDITIONAL THICKNESS REQUIRED ADJACENT TO THE DEPRESSED COMBINATION CONCRETE CURB AND GUTTER, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



**PLAN**

12'-0" (3.6 m) MIN. & VAR. FOR ALLEYS AND PRIVATE ENTRANCES  
35'-0" (10.7 m) MAX. & VAR. FOR COMMERCIAL ENTRANCES

R.O.W. LINE

12" (300)

RADIUS POINT

15' (4.6 m) RADIUS (TO FACE) UNLESS OTHERWISE SHOWN IN PLANS

7" (175)

10'-0" (3.0 m) ± CENTERS SCORED GROOVES

VARIES

SIDEWALK RAMP 8% MAX. LONG. SLOPE

12" (300)

12" (300)

OPTIONAL CONSTRUCTION JOINT

EDGE OF PROP. PAVEMENT

PROP. P.C.C. SIDEWALK, 5" (125) OR EXIST. P.C.C. SIDEWALK TO REMAIN IN PLACE

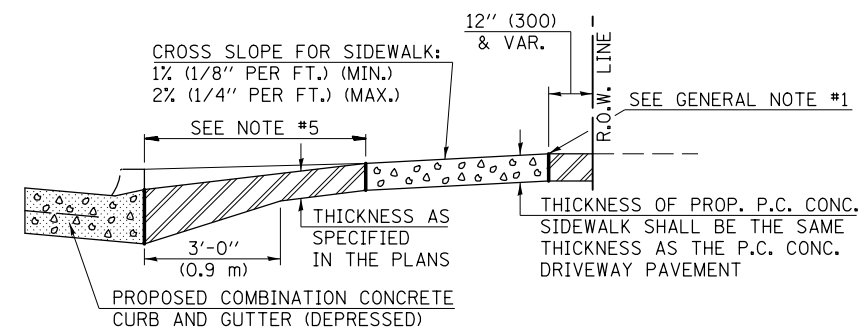
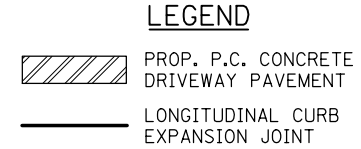
PROP. COMBINATION CONCRETE CURB AND GUTTER

\* WIDTH OF PROPOSED GUTTER FLAG

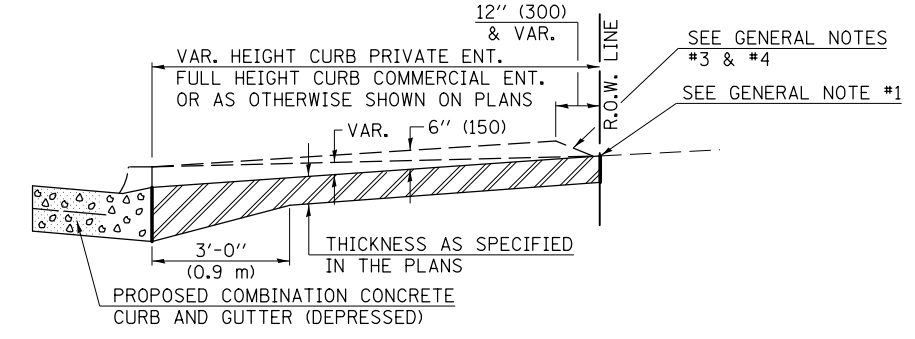
P.C. CONCRETE SIDEWALK, 5" (125) SHALL BE POURED BETWEEN THE CURB OF THE DRIVEWAY AND SIDEWALK RAMP, WHERE IN THE OPINION OF THE ENGINEER, CONSTRUCTION WILL CREATE A MOWING PROBLEM (I.E. POINTED AREAS ADJACENT TO HIGH CURBS).

**NOTE:** SIDEWALK RAMPS SHALL BE CONSTRUCTED AT COMMERCIAL ENTRANCES. AT PRIVATE ENTRANCES RAMPS SHALL USUALLY BE NEEDED WHERE NARROW BOULEVARDS OR RADII GREATER THAN 15' (4.6 m) ARE CONSTRUCTED. THE BACK CURB RAMPS AT PRIVATE ENTRANCES MAY BE ELIMINATED IF GRADING CAN BE ACCOMPLISHED WITHOUT THE CURB.

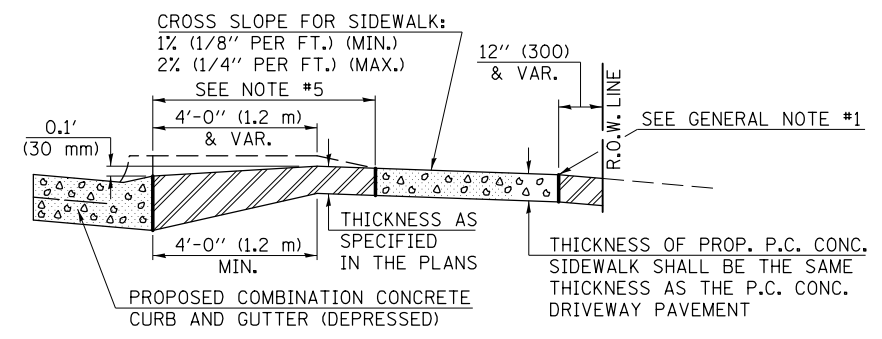
**NOTE:** THE ENTRANCE WIDTHS SHOWN ON THE PLANS SHALL BE INTERPRETED TO BE THE WIDTHS AT THE COMPLETED RADIUS, WHICH MAY BE LOCATED BEHIND THE R.O.W. LINE.



**SECTION A-A WITH POSITIVE GRADE**



**SECTION A-A WITHOUT SIDEWALK**



**SECTION A-A WITH NEGATIVE GRADE**

URBAN ENTRANCE DESIGN STANDARDS (PPM 40-09)												
DESIGN ELEMENT	NEW CONSTRUCTION & 3R with RECONSTRUCTION						3R w/out RECONSTRUCTION, 3P, SMART & CM					
	NONCOMMERCIAL			COMMERCIAL			NONCOMMERCIAL			COMMERCIAL		
SURFACE WIDTH (FT)	min.	des.	max.	min.	des.	max.	min.	des.	max.	min.	des.	max.
	12	12 or 14	24	1 LANE, 1 WAY						1 LANE, 1 WAY		
				2 LANE, 2 WAY						2 LANE, 2 WAY		
		with		24	30	35	resurface existing configuration; existing hma or pcc entrances shall have "butt joints" constructed; existing aggregate or earth entrances shall have the continuation of aggregate shoulders placed behind them					
RADIUS (FT)	12	15 or 12	25	15	30	40						
ENTRANCE GRADE (%)	0	2 to 5	8	0	2 to 4	6						
<b>SURFACE TYPE</b>												
INCIDENTAL HMA SURFACING (INCH)				3 or 4			taper from hma resurfacing thickness (2 1/2", 2 1/4" or 1 1/2") to 1/2" for "butt joints" and to minimize aggregate shoulder					
AGGREGATE SURFACE COURSE, TYPE A (INCH)				8			if applicable use items: Preparation of Base & Aggregate Base Repair; see PPM 30-02					
PCC DRIVEWAY PAVEMENT (INCH)	6	6					6 or 8					

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 42300AAA**

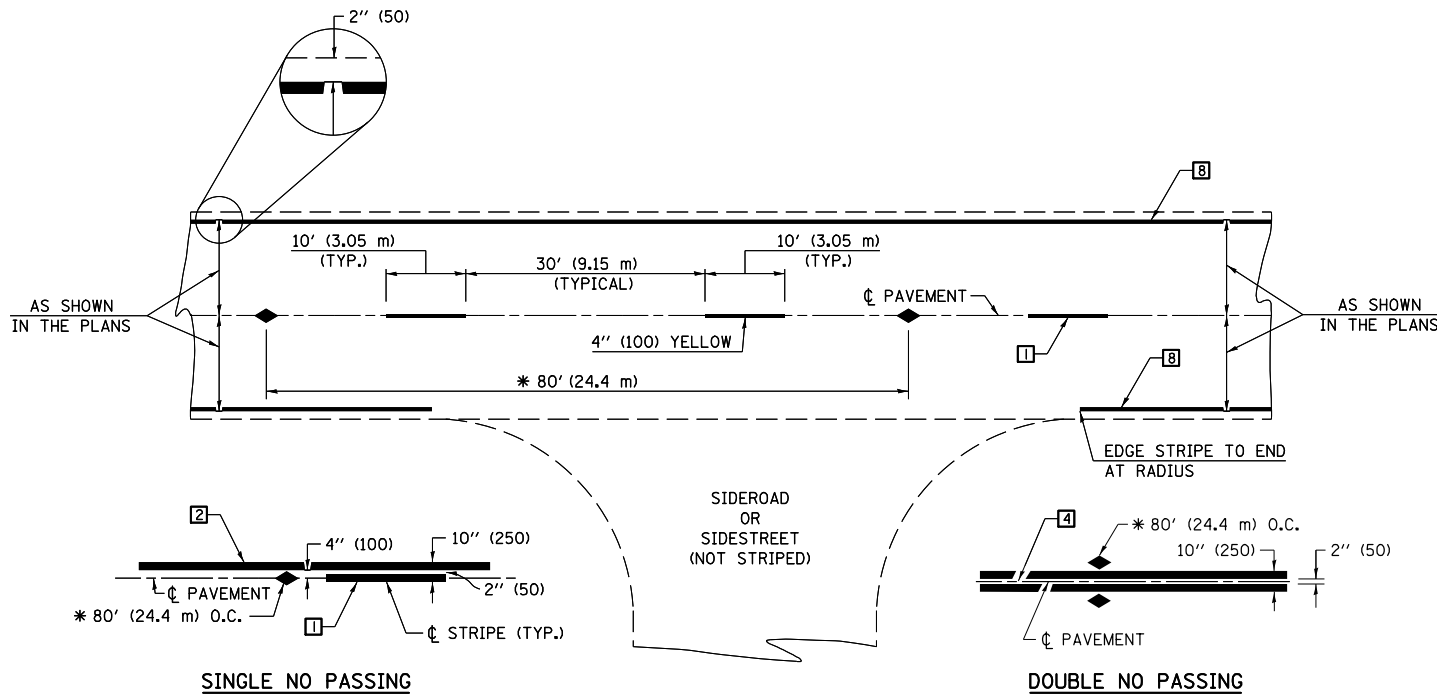
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		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY PAVEMENT (PCC) (NON & COMMERCIAL URBAN)

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. ----- TO STA. -----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	166
CONTRACT NO. 70700			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



\* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

**TWO LANE/TWO WAY**

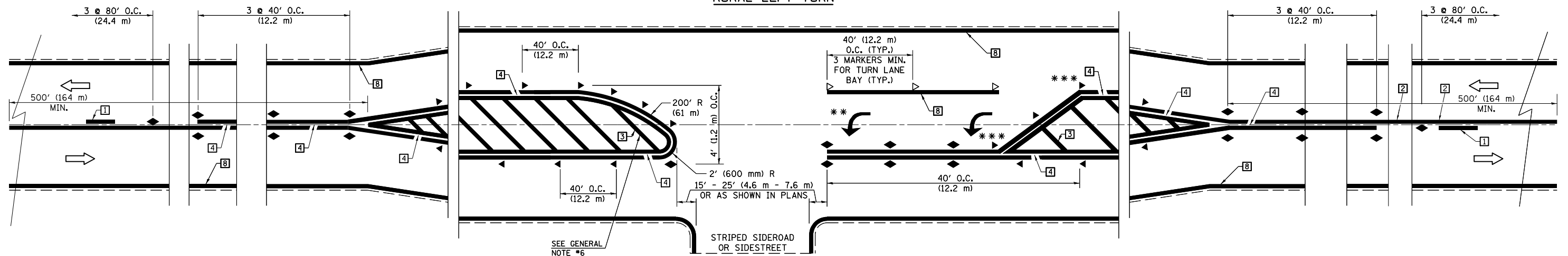
**TYPICAL PAVEMENT MARKING LEGEND**

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

**TYPICAL PAVEMENT MARKERS LEGEND**

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

**RURAL LEFT TURN**



\*\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

\*\* TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 7800AAA**

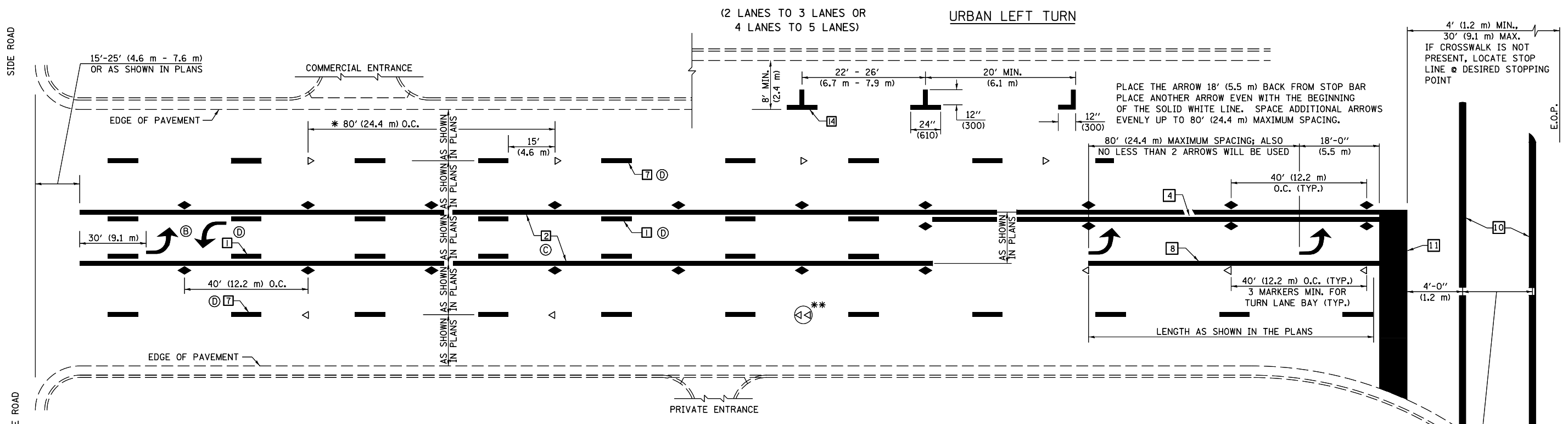
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ei:\pwork\pwork\cealockbm\d0208368\0570700-sht-details.dgn		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 1 OF 4 SHEETS STA. ----- TO STA. -----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	167
CONTRACT NO. 70700				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

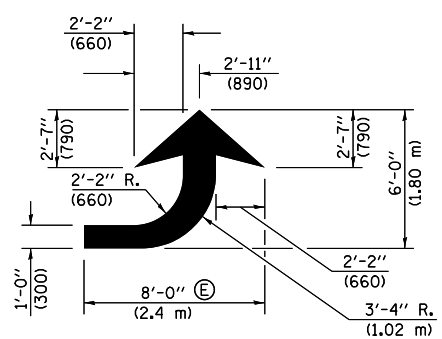


\* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

\*\* DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

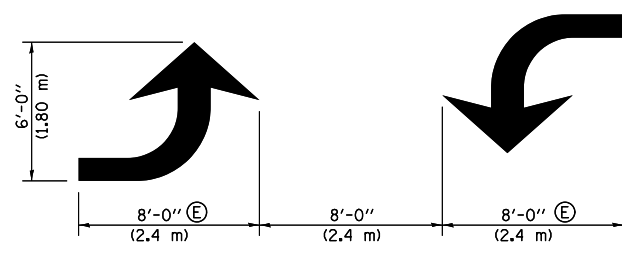
**GENERAL NOTES:**

- ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- ⓔ USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)



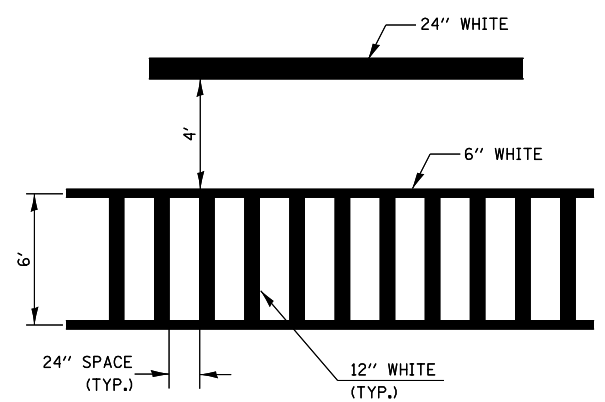
**LEFT ARROW**

REVERSE FOR RIGHT ARROW  
AREA = 15.6 SQ. FT. (1.47 m<sup>2</sup>)  
(WHITE)

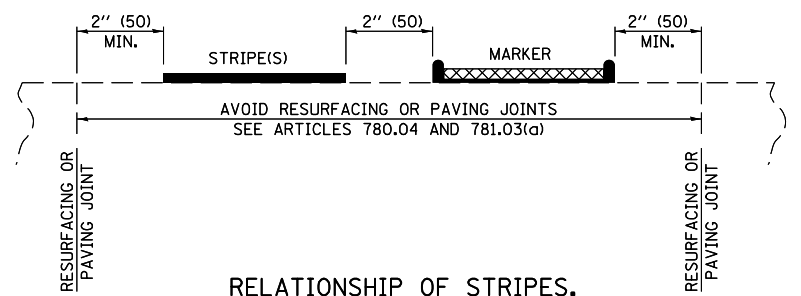


**TYPICAL DOUBLE TURN ARROWS (WHITE)**

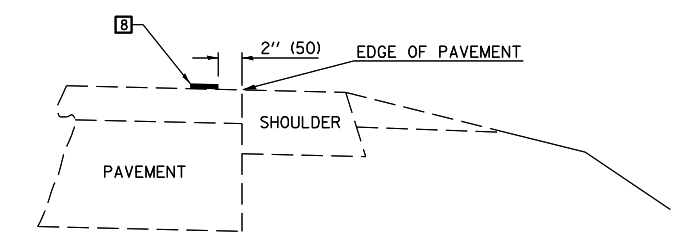
**BLOOMINGTON-NORMAL CITY LIMITS ONLY**



**TYPICAL SPACING FOR CROSSWALKS & STOP BARS**



**RELATIONSHIP OF STRIPES, MARKERS AND JOINTS**

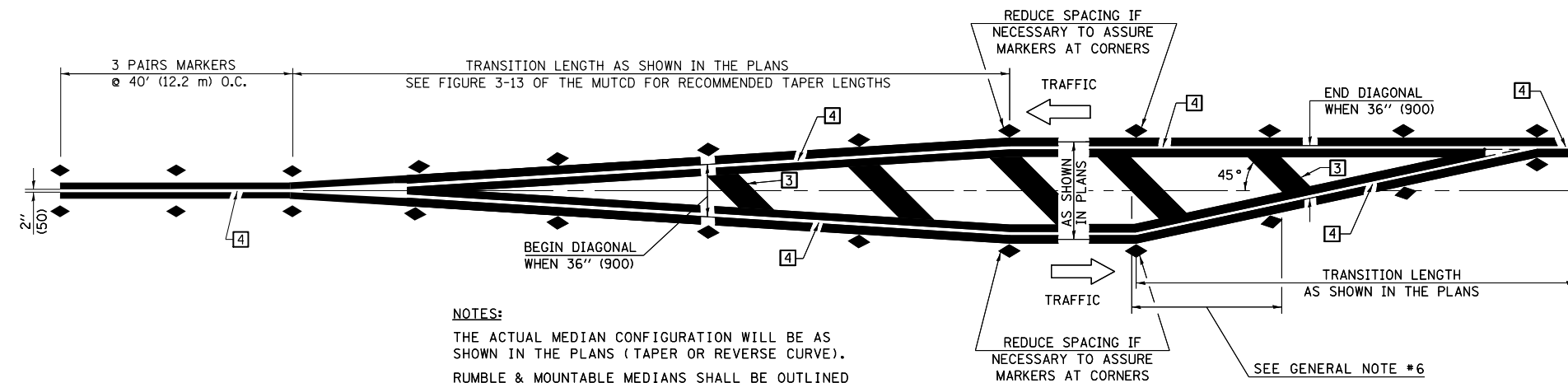


**RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT (SAFETY SHOULDER OR PAVED SURFACE) SEE ARTICLE 780.04**

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 7800AAA**

FILE NAME =	USER NAME = cealockbm	DESIGNED -	REVISED - 11/06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p\idot\cealockbm\d0208368\0570700-sht-details.dgn	DRAWN -	REVISED - 09/2009 - KJT	74			10-4BR	CHAMPAIGN	290	168	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70700							
PLOT DATE = 11/9/2012	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

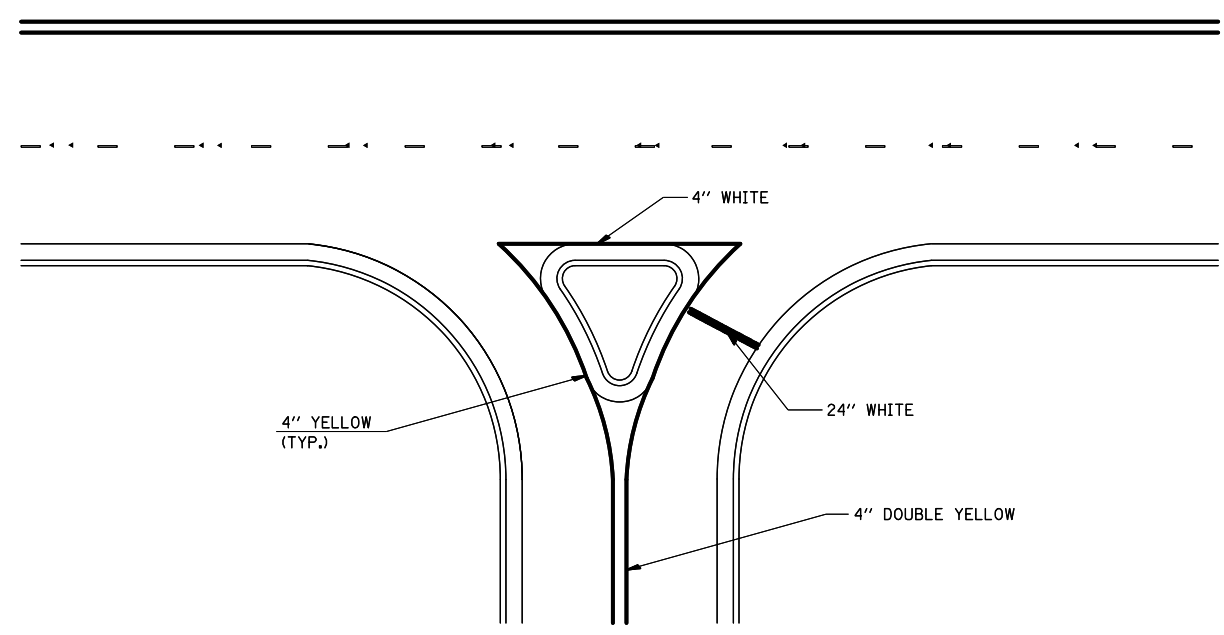


**NOTES:**  
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).  
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

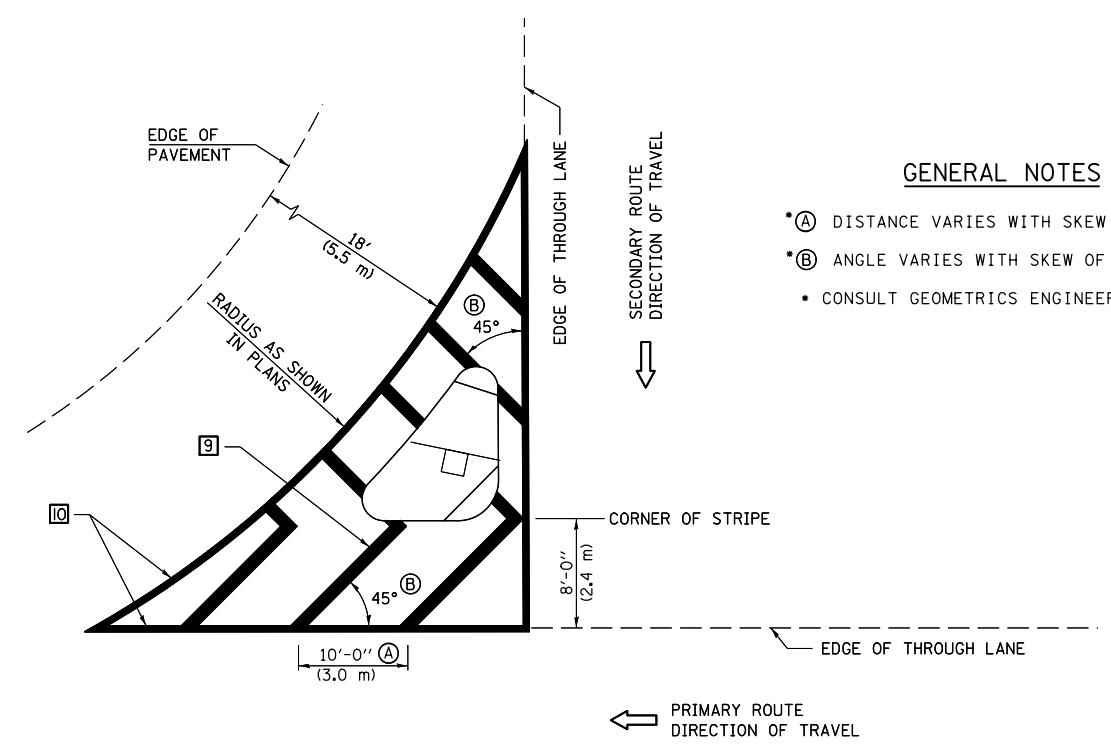
**TYPICAL MEDIAN TRANSITIONS**

**GENERAL NOTES**

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,  
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)  
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)  
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



**RIGHT IN - RIGHT OUT ACCESS**



**GENERAL NOTES**

- (A) DISTANCE VARIES WITH SKEW OF INTERSECTION.
- (B) ANGLE VARIES WITH SKEW OF INTERSECTION.
- CONSULT GEOMETRICS ENGINEER

**ISLAND**

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = cealockbm	DESIGNED -	REVISED - 11/06
ei:\pwork\pwork\cealockbm\d0208368\0570700-sht-details.dgn		DRAWN -	REVISED - 09/2009 - KJT
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	PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS  
 (RURAL & URBAN APPLICATIONS)**

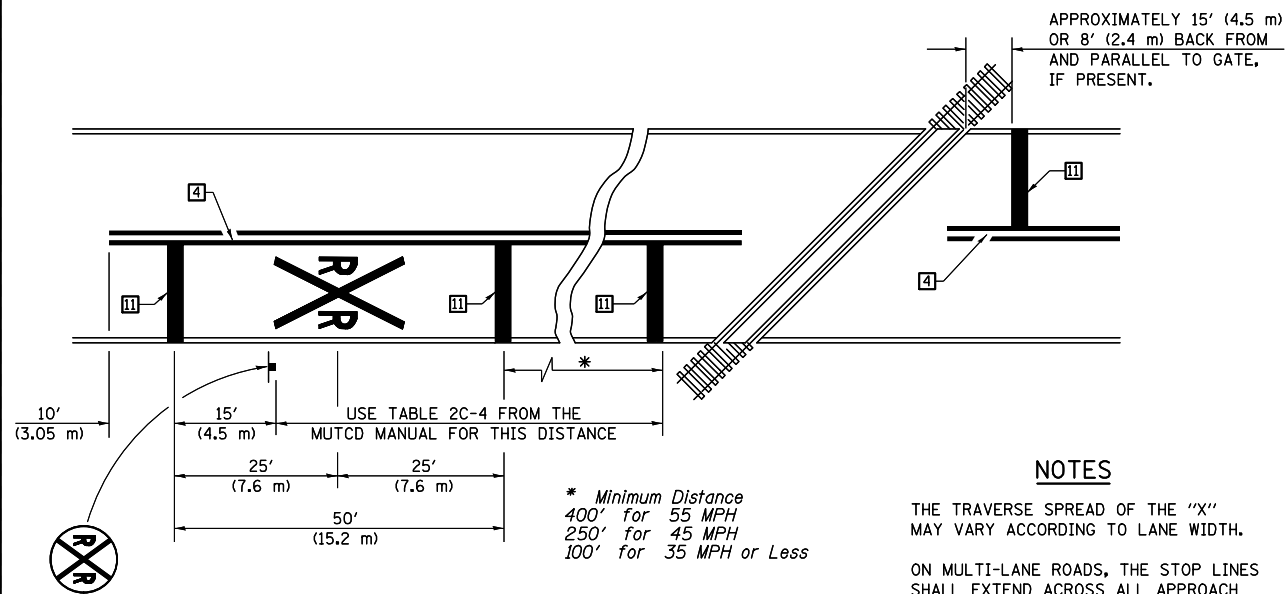
SCALE: SHEET NO. 3 OF 4 SHEETS STA. ----- TO STA. -----

**DISTRICT 5 DETAIL NO. 7800AAA**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	169
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700	

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

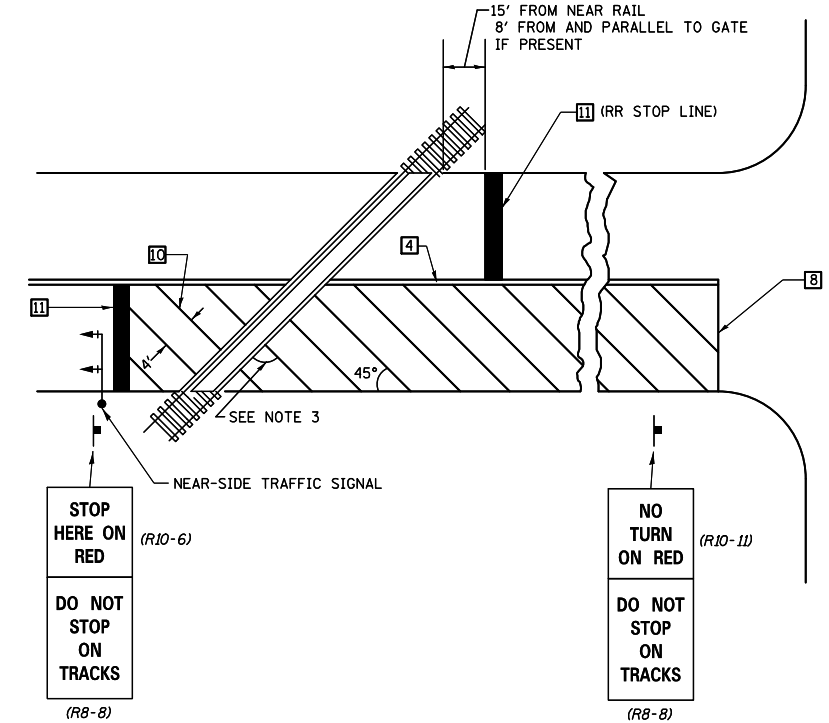
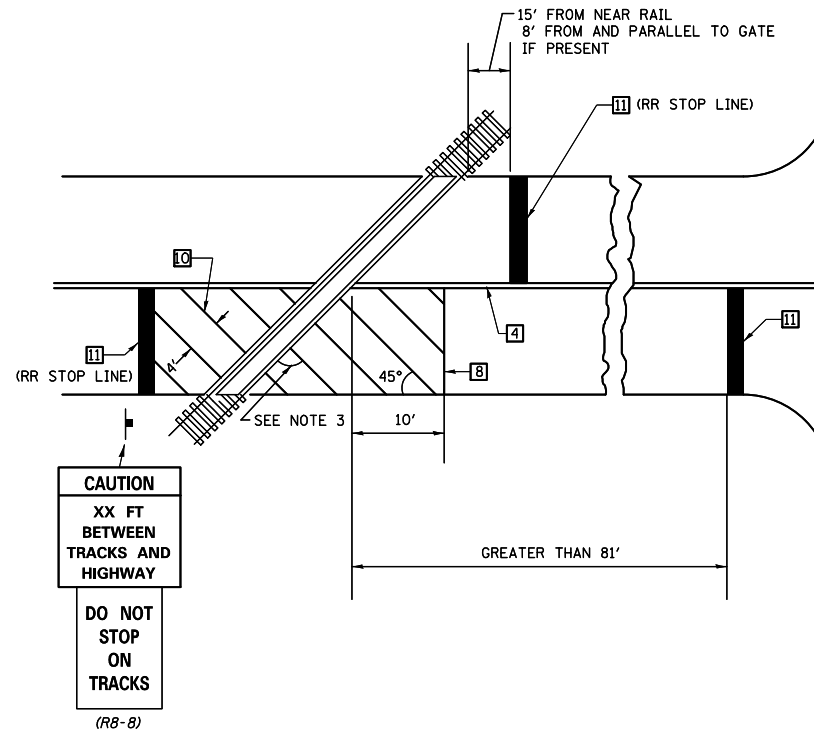
NOTES

APPROXIMATELY 15' (4.5 m) OR 8' (2.4 m) BACK FROM AND PARALLEL TO GATE, IF PRESENT.

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

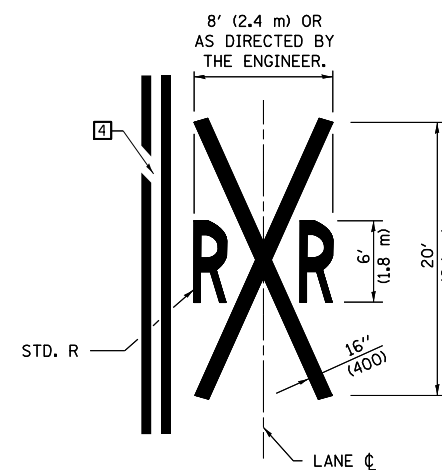
WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.
- WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = ceorlockbm	DESIGNED -	REVISED - 11/06
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	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 11/9/2012	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)

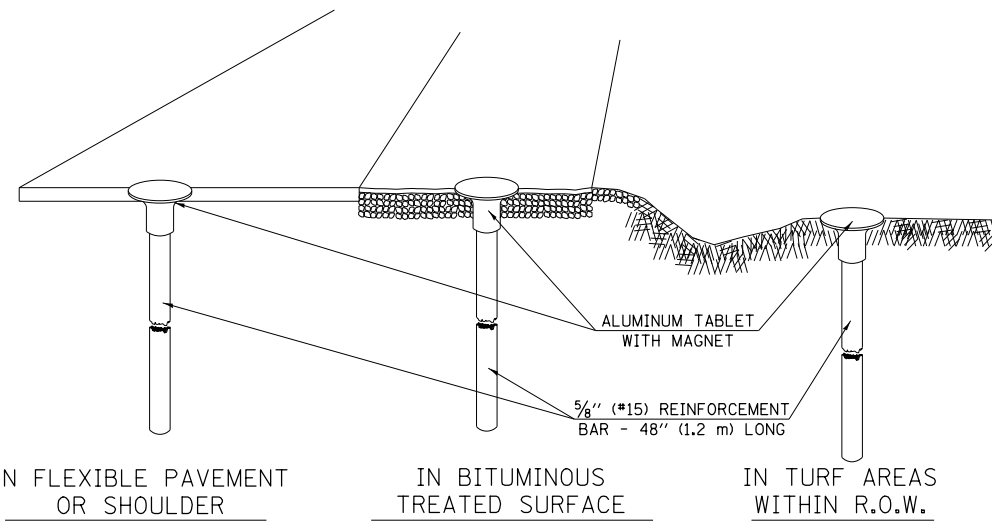
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DISTRICT 5 DETAIL NO. 7800AAA

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	170
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700	

## XZ193300 – SURVEY MARKER, TYPE 1 (SPECIAL)

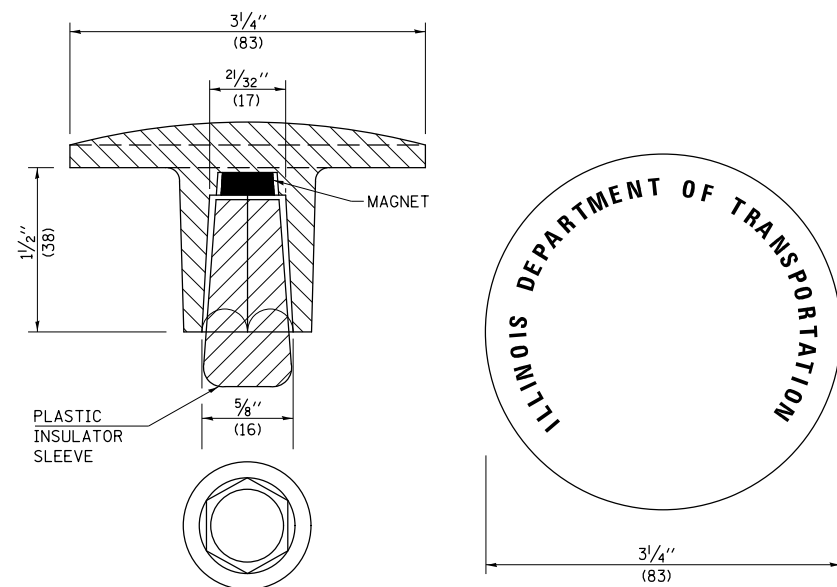
TO BE INSTALLED IN FLEXIBLE PAVEMENT OR SHOULDER, BITUMINOUS TREATED SURFACE AND TURF AREAS WITHIN THE RIGHT-OF-WAY FOR PRESERVING PERMANENT SURVEY MARKERS (PI'S, PT'S, PC'S, POC'S, & POT'S)



IN FLEXIBLE PAVEMENT  
OR SHOULDER

IN BITUMINOUS  
TREATED SURFACE

IN TURF AREAS  
WITHIN R.O.W.



THE DIMENSIONS SHOWN SHALL BE EXACT, OTHERS MAY VARY, BUT SHALL BE SHOWN ON SHOP DRAWINGS.

### GENERAL NOTES

1. THE CONTRACT UNIT PRICE, EACH, FOR SURVEY MARKER, TYPE 1 (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE REINFORCEMENT BAR AND ALUMINUM TABLET AND FOR ALL LABOR AND MATERIAL REQUIRED TO SET THE MARKER IN PLACE.
2. ALL SURVEY MARKERS, TYPE 1 (SPECIAL) SHALL BE PLACED  $\pm 1/4"$  (6 mm) BELOW THE FINAL SURFACE.
3. WHEN THE TABLET AND REBAR ARE PLACED AS PART OF A SURVEY MARKER VAULT, THEY SHALL BE CONSIDERED AS INCLUDED IN THAT PAY ITEM AND THERE WILL BE NO PAYMENT FOR THE SURVEY MARKER, TYPE 1 (SPECIAL).

### SPECIFICATIONS FOR ALUMINUM TABLET

SURVEY CAP FOR REBAR.  $3/4"$  (83 mm) CONVEX SURVEY CAP FOR  $5/8"$  (15 mm) REBAR WITH ILLINOIS DEPARTMENT OF TRANSPORTATION LOGO. THIS LOGO SHALL PROVIDE LETTERS RECESSED INTO THE SURFACE A MINIMUM OF  $1/32"$  (0.8 mm) FOR EASY AND LONG-TERM LEGIBILITY. THE ALUMINUM CAP FOR REBAR SHALL BE PRODUCED BY THE PROCESS OF ORBITAL FORGING TO PRODUCE A HIGH-STRENGTH AND DURABLE MARKER CAP WHICH WILL NOT CHIP OR BREAK AND PROVIDE A SMOOTH FINISH FOR STAMPING OF DATA IN THE FIELD. THE ALUMINUM CAP FOR REBAR SHALL BE TAPERED FOR A PERFECT COMPRESSION FIT. A SPECIAL PLASTIC INSULATOR SHALL BE INSTALLED TO PREVENT DISSIMILAR METAL CONTACT AND CORROSION. THE PLASTIC INSULATOR SHALL FORM READILY TO THE OUTER SHAPE OF THE REBAR AND TO THE INNER SHAPE OF THE ALUMINUM CAP SOCKET. THE PLASTIC INSULATOR SHALL BE LOW DENSITY POLYETHYLENE, A MINIMUM  $1 1/2"$  (38 mm) LONG AND CONFORM TO FEDERAL SPECIFICATION L-P 390.

COMPOSITION: ALUMINUM 98.3-98.7%; OTHER 1.3-1.7%; STRENGTH: YIELD 28 KSI (193 MPa), ULTIMATE 32 KSI (221 MPa). ELONGATION 15% [IN 2" (50 mm)]. SPECIFICATIONS: ALUMINUM ALLOY 6101-0; ASTM B317-83 (EXCEPT TEMPER) AS FORGED. NO EXCEPTIONS.

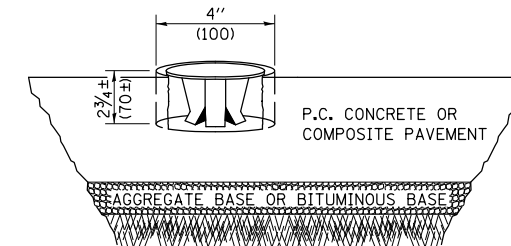
### SPECIFICATIONS FOR REBAR

REBAR FOR ALUMINUM TABLET. REINFORCEMENT BAR SHALL BE  $5/8"$  (#15) X 48" (1.2 m) (DEFORMED).

INSPECTION OF REINFORCEMENT BAR  $5/8"$  (#15) SHALL BE DONE BY DISTRICT PERSONNEL OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS.

## XZ193400 – SURVEY MARKER, TYPE 2 (SPECIAL)

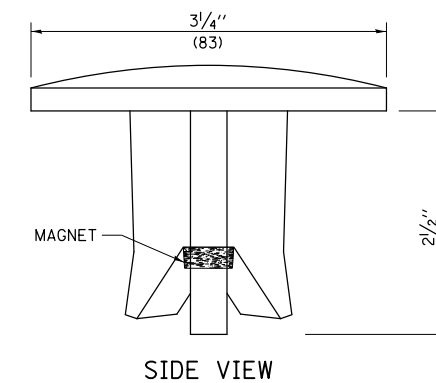
TO BE INSTALLED IN RIGID OR COMPOSITE PAVEMENT FOR PRESERVING PERMANENT SURVEY MARKERS (PI'S, PT'S, PC'S, POC'S, & POT'S)



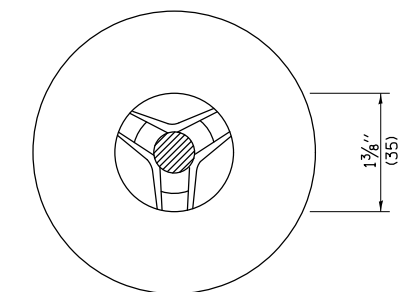
### SPECIFICATIONS FOR ALUMINUM TABLET (FORKED)

ALUMINUM TABLET (FORKED) FOR USE WITH "SURVEY MARKER, TYPE 2, (SPECIAL)" SHALL BE AS SHOWN ON THE DETAIL FOR THE  $3/4"$  (83 mm) CONVEX SURVEY TABLET WITH ILLINOIS DEPARTMENT OF TRANSPORTATION LOGO. THIS LOGO SHALL PROVIDE FOR LETTERS RECESSED INTO THE SURFACE A MINIMUM OF  $1/32"$  (0.8 mm) FOR EASY AND LONG-TERM LEGIBILITY. THE ALUMINUM TABLET SHALL BE PRODUCED BY THE PROCESS OF ORBITAL FORGING TO PRODUCE A HIGH-STRENGTH AND DURABLE MARKER CAP WHICH WILL NOT CHIP OR BREAK AND PROVIDE A SMOOTH FINISH FOR STAMPING OF DATA IN THE FIELD. THE ALUMINUM TABLET SHALL BE DESIGNED NOT TO TURN OR ROTATE. THREE PRONGS ON A  $2 1/2"$  (63 mm) STEM SHALL BE SUCH THAT THE ALUMINUM TABLET CANNOT BE EASILY REMOVED.

COMPOSITION: ALUMINUM 92-93%; MAGNESIUM 6.5-7.5%. STRENGTH: YIELD 19,000-21,000 PSI (131-145 MPa); TENSILE 38,000-44,000 PSI (262-303 MPa); ELONGATION 10-15% [IN 2" (50 mm)]. SPECIFICATIONS: ALLOY 535.0; QQ-A-601ES. NO EXCEPTIONS.



SIDE VIEW



BOTTOM VIEW

THE DIMENSIONS SHOWN SHALL BE EXACT, OTHERS MAY VARY, BUT SHALL BE SHOWN ON SHOP DRAWINGS.

### GENERAL NOTES

1. WORK ON THIS ITEM SHALL NOT START UNTIL THE FINAL SURFACE IS COMPLETED.
2. THE ALUMINUM TABLET (FORKED) SHALL REST UPON THE BOTTOM OF THE 4" (100 mm) CORE HOLE. IF THE HOLE IS TOO DEEP, EPOXY GROUT MUST BE USED TO DECREASE THE DEPTH AND ALLOWED TO HARDEN BEFORE PROCEEDING.
3. THE ALUMINUM TABLET SHALL BE ANCHORED IN THE 4" (100 mm) DIAMETER HOLE IN THE NEW PAVEMENT WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01 OF THE STANDARD SPECIFICATIONS.
4. THE 4" (100 mm) CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
5. THE CONTRACT PRICE, EACH, FOR SURVEY MARKER, TYPE 2 (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE ALUMINUM TABLET AND FOR ALL LABOR AND MATERIAL REQUIRED TO SET THE MARKER IN PLACE, AS SPECIFIED, INCLUDING CORING THE NEW PAVEMENT.
6. ALL SURVEY MARKERS, TYPE 2 (SPECIAL) SHALL BE PLACED  $\pm 1/4"$  (6 mm) BELOW THE FINAL SURFACE.

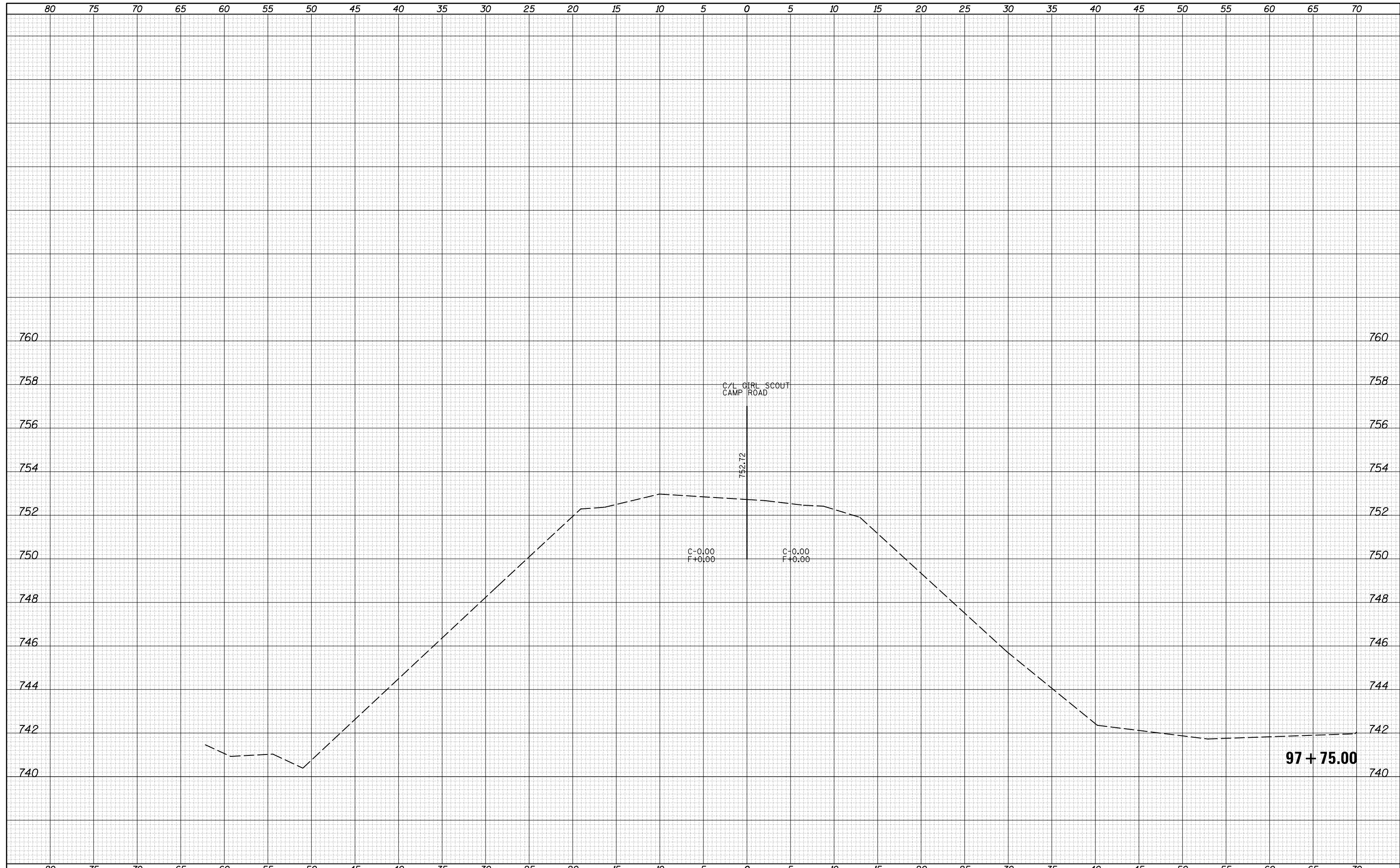
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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**DISTRICT 5 DETAIL NO. XZ193AAA**

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NOTE BOOK	PLOTTED
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

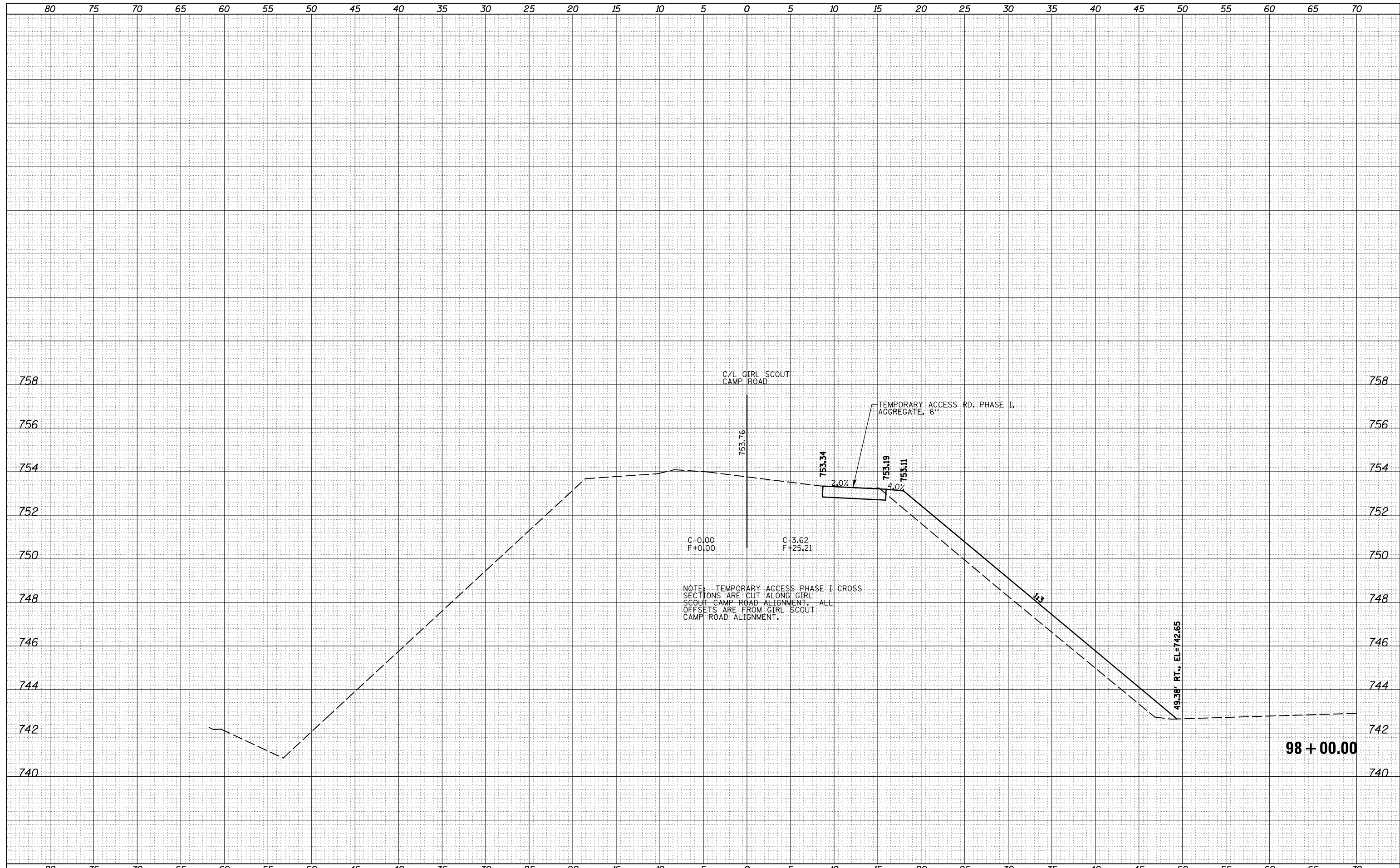
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 PHASE I**  
 SCALE: SHEET 1 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	172
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	



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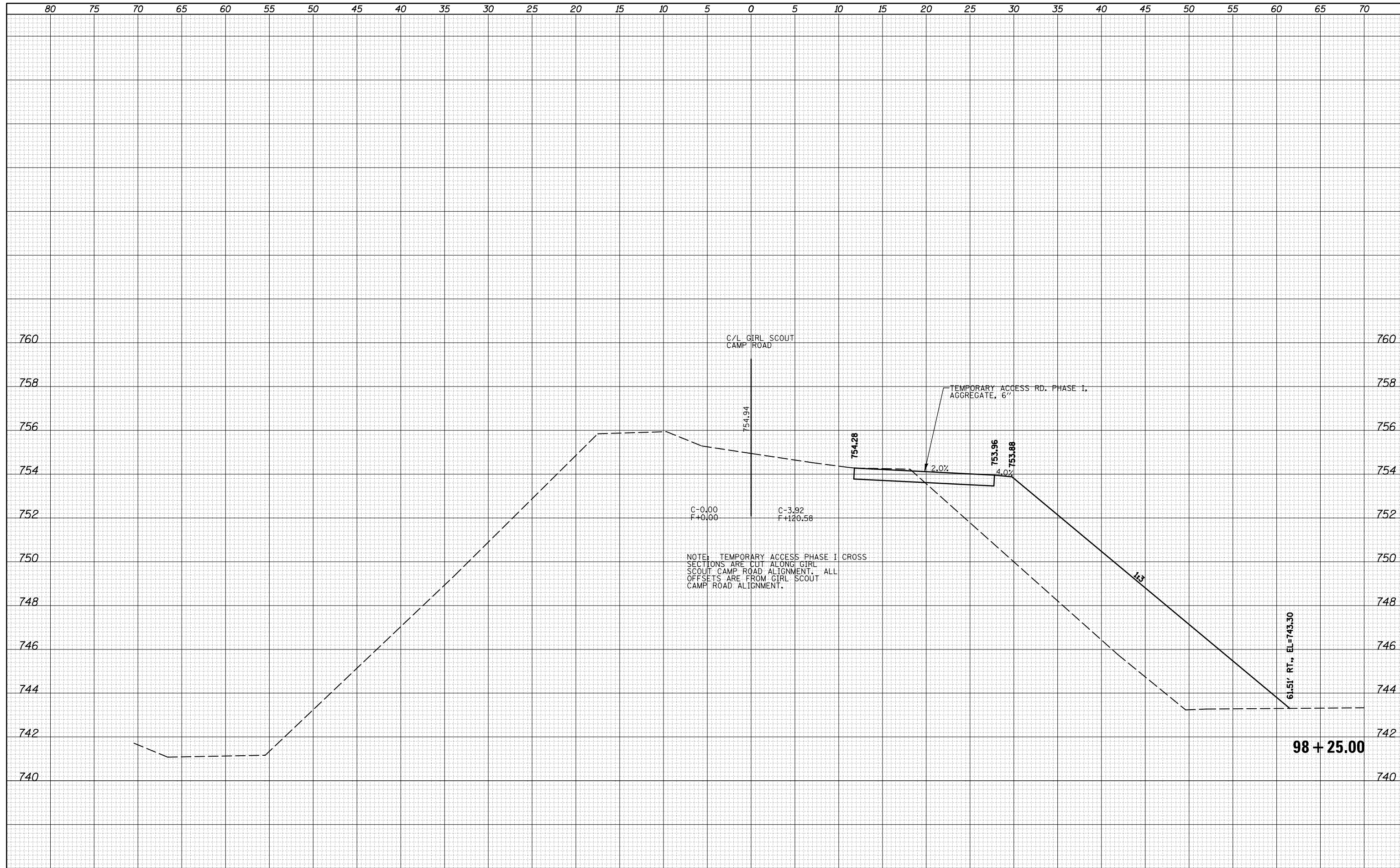
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - TEMPORARY ACCESS ROAD  
 PHASE I  
 SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	173
CONTRACT NO. 70700				
ILLINOIS FED. AID PROJECT				

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NOTE: TEMPORARY ACCESS PHASE I CROSS SECTIONS ARE CUT ALONG GIRL SCOUT CAMP ROAD ALIGNMENT. ALL OFFSETS ARE FROM GIRL SCOUT CAMP ROAD ALIGNMENT.

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

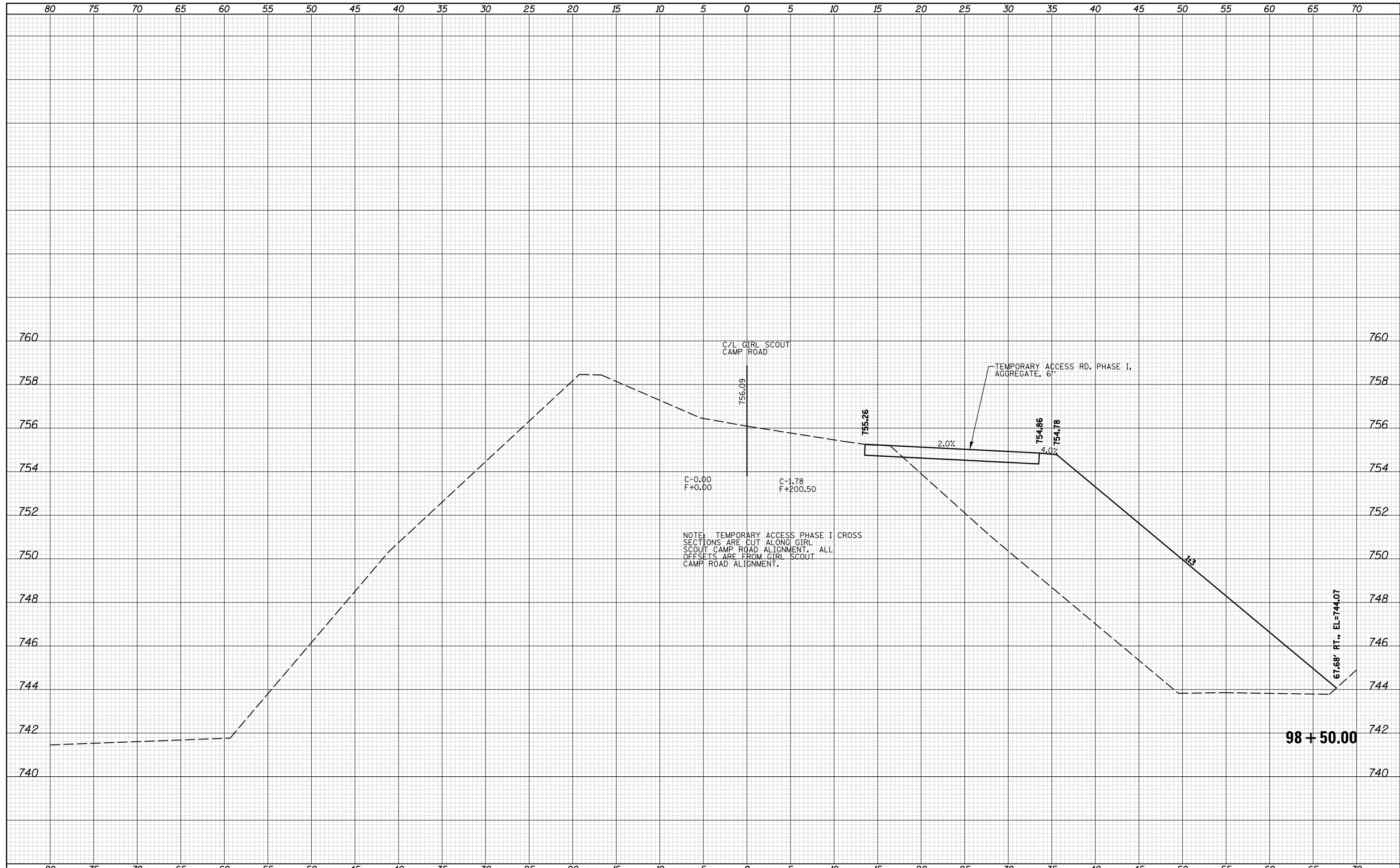
**CROSS SECTIONS - TEMPORARY ACCESS ROAD  
 PHASE I**

SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	174
CONTRACT NO. 70700				

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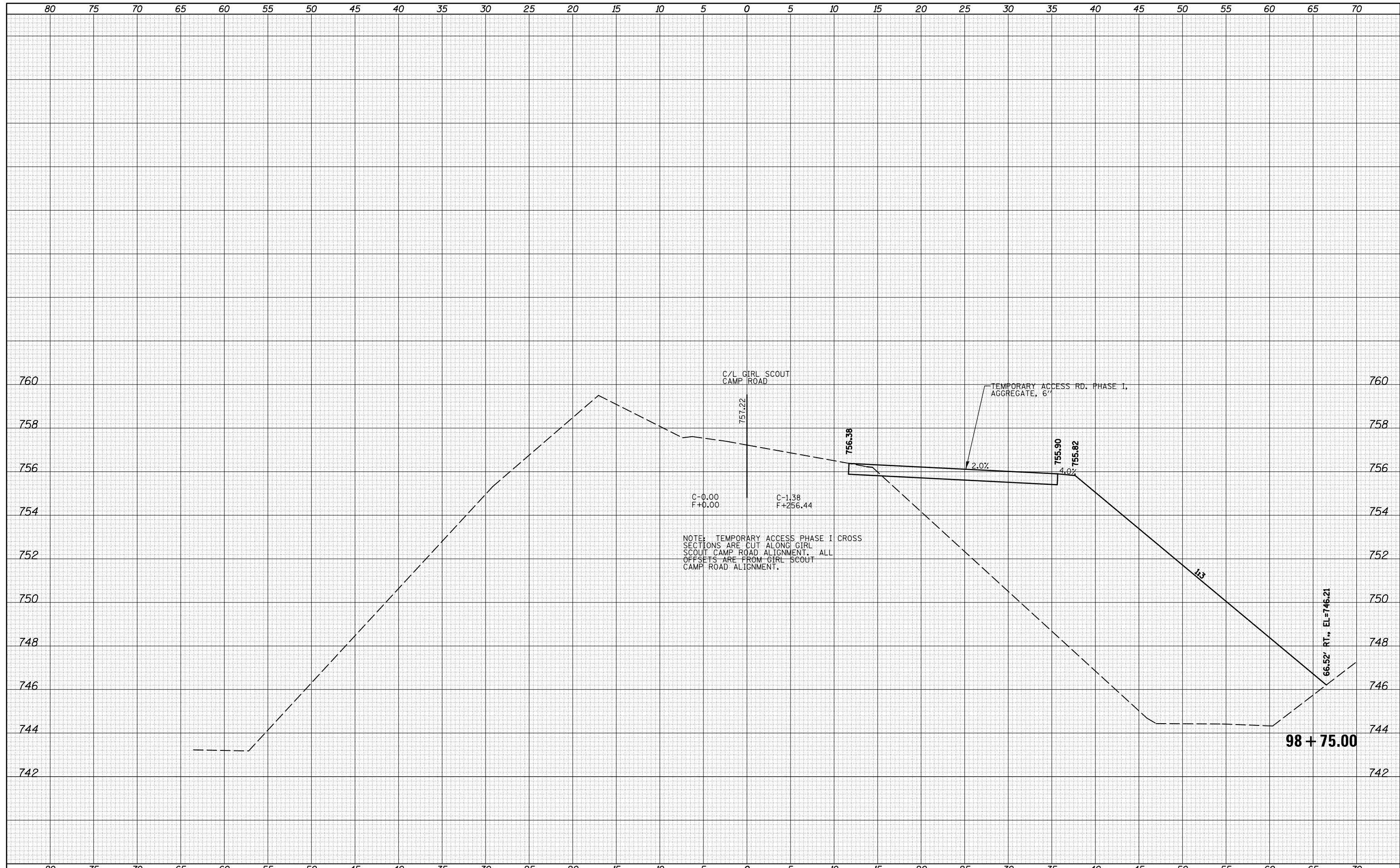
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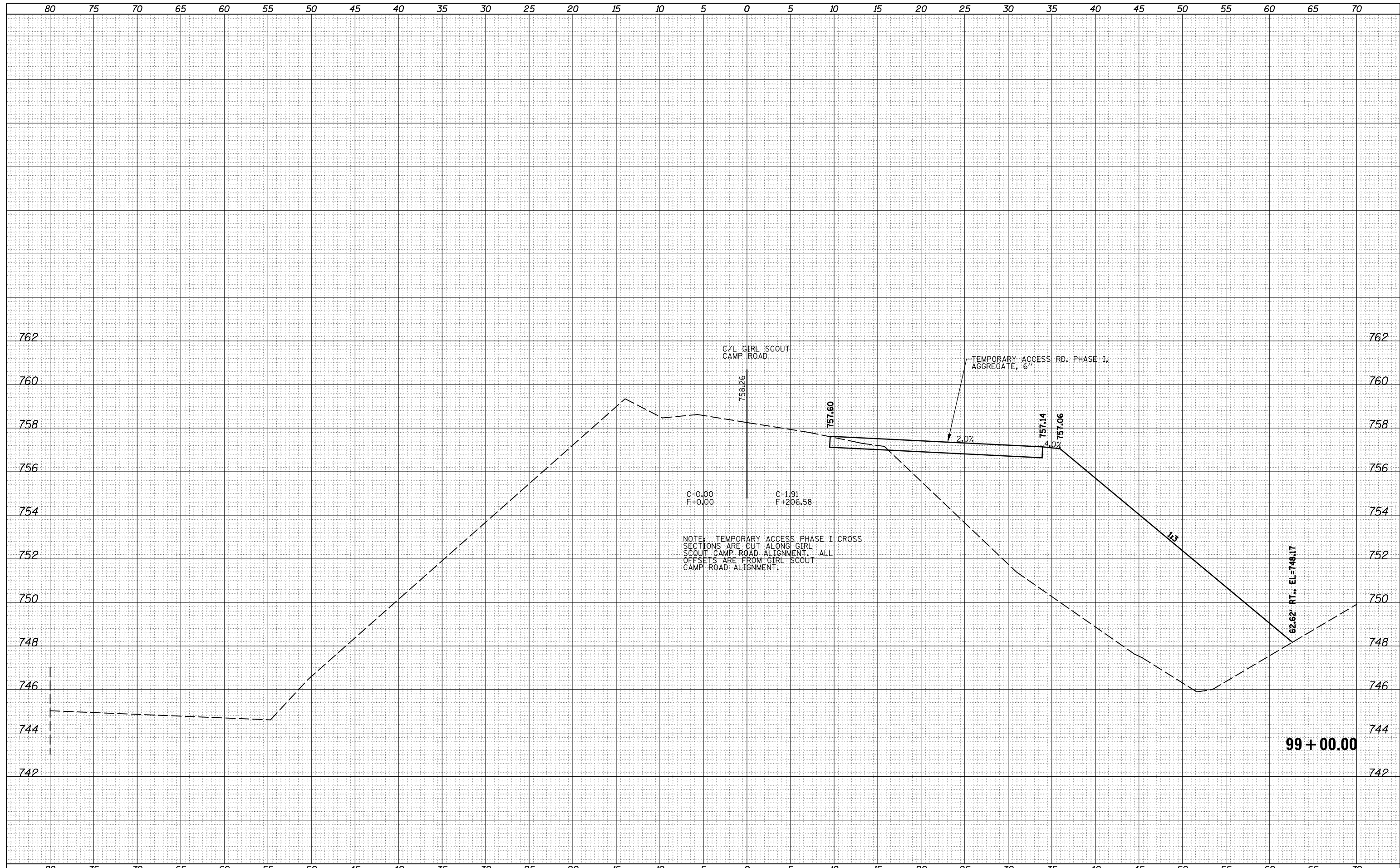
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - TEMPORARY ACCESS ROAD  
 PHASE I  
 SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	176
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

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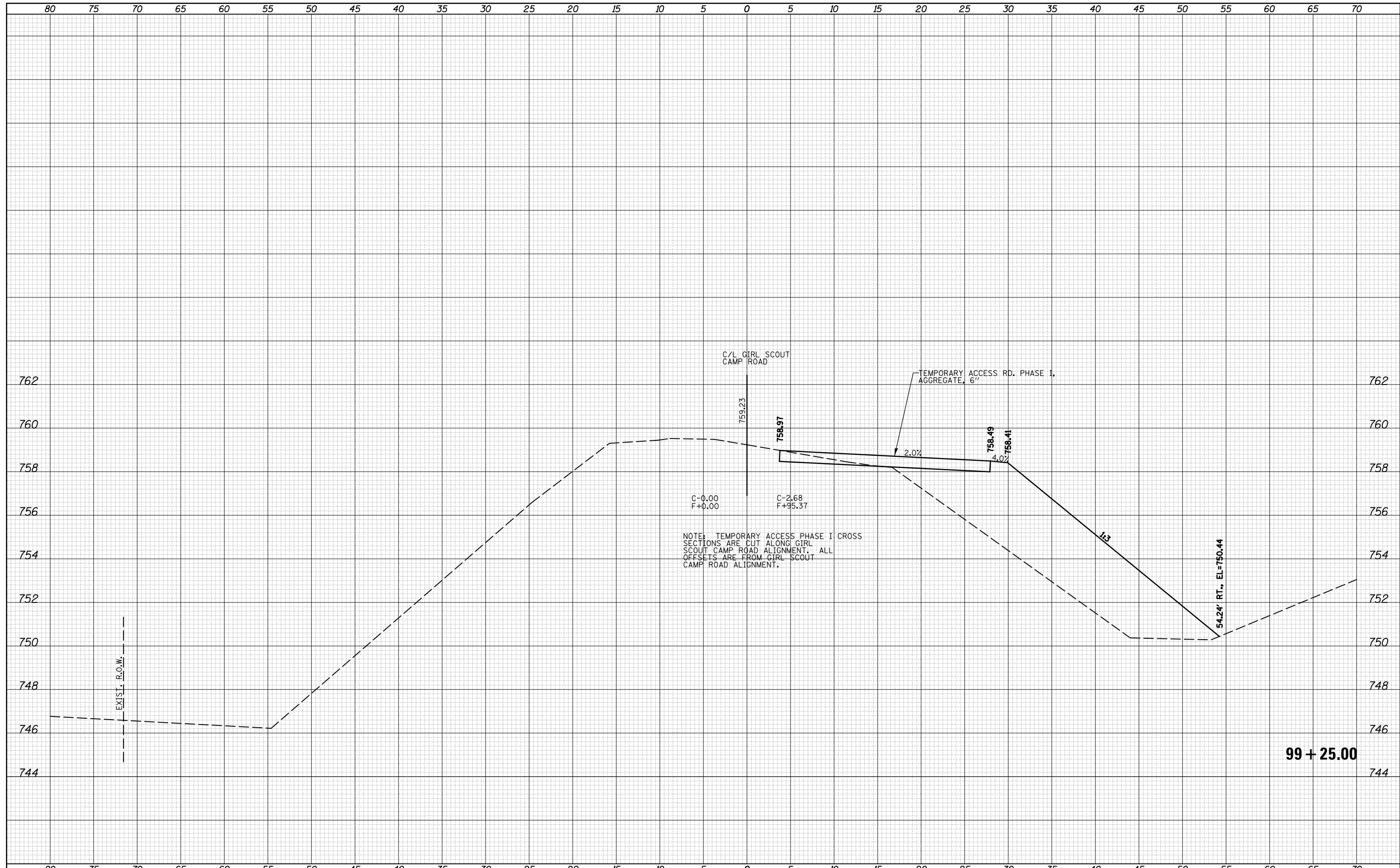
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - TEMPORARY ACCESS ROAD  
 PHASE I  
 SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	177
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

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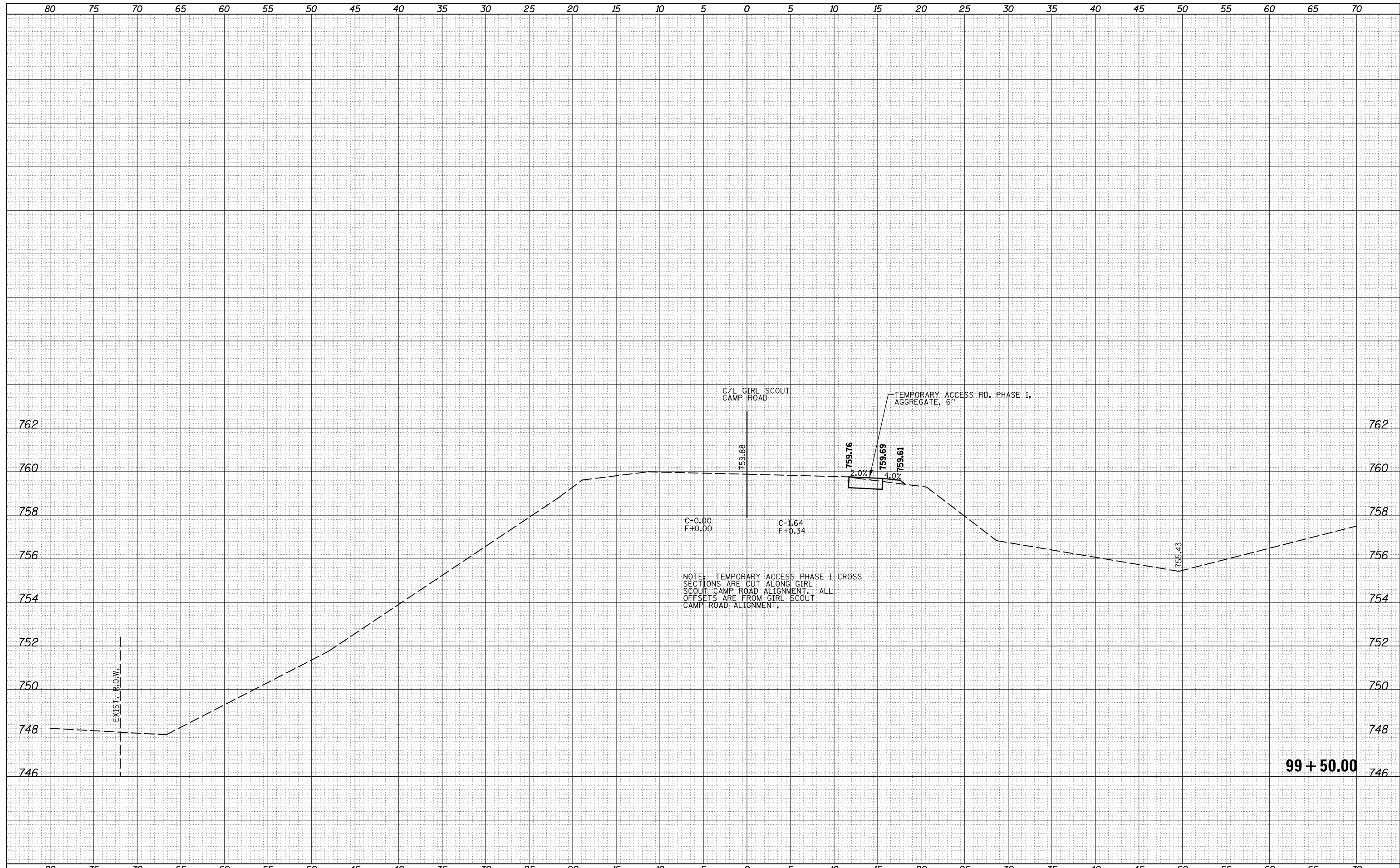


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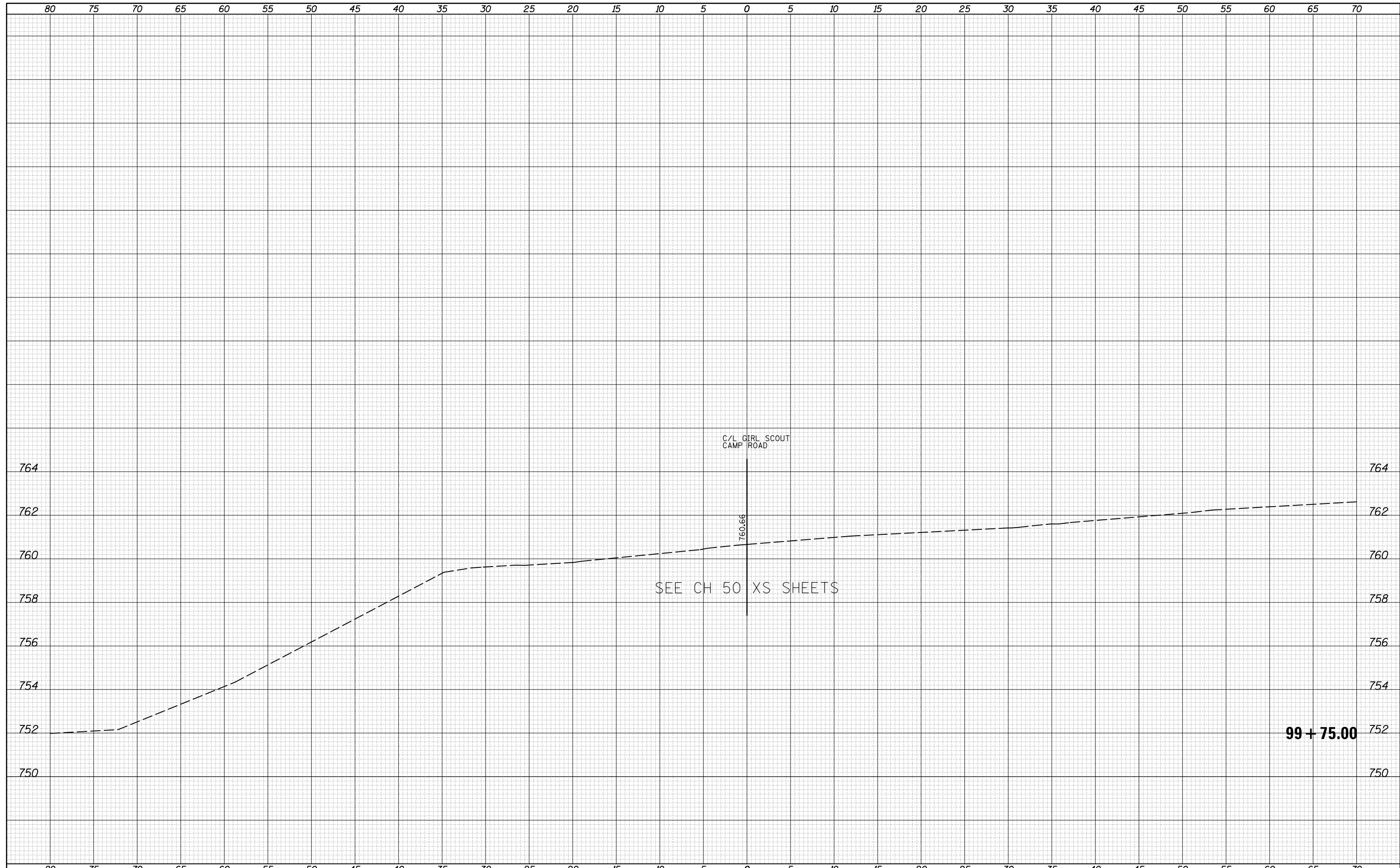


NOTE: TEMPORARY ACCESS PHASE I CROSS SECTIONS ARE CUT ALONG GIRL SCOUT CAMP ROAD ALIGNMENT. ALL OFFSETS ARE FROM GIRL SCOUT CAMP ROAD ALIGNMENT.

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	PLOT DATE = 11/9/2012	DATE 04-26-12	REVISÉ -		ILLINOIS FED. AID PROJECT							

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD  
 PHASE I**  
 SCALE: SHEET 9 OF 9 SHEETS STA. TO STA.

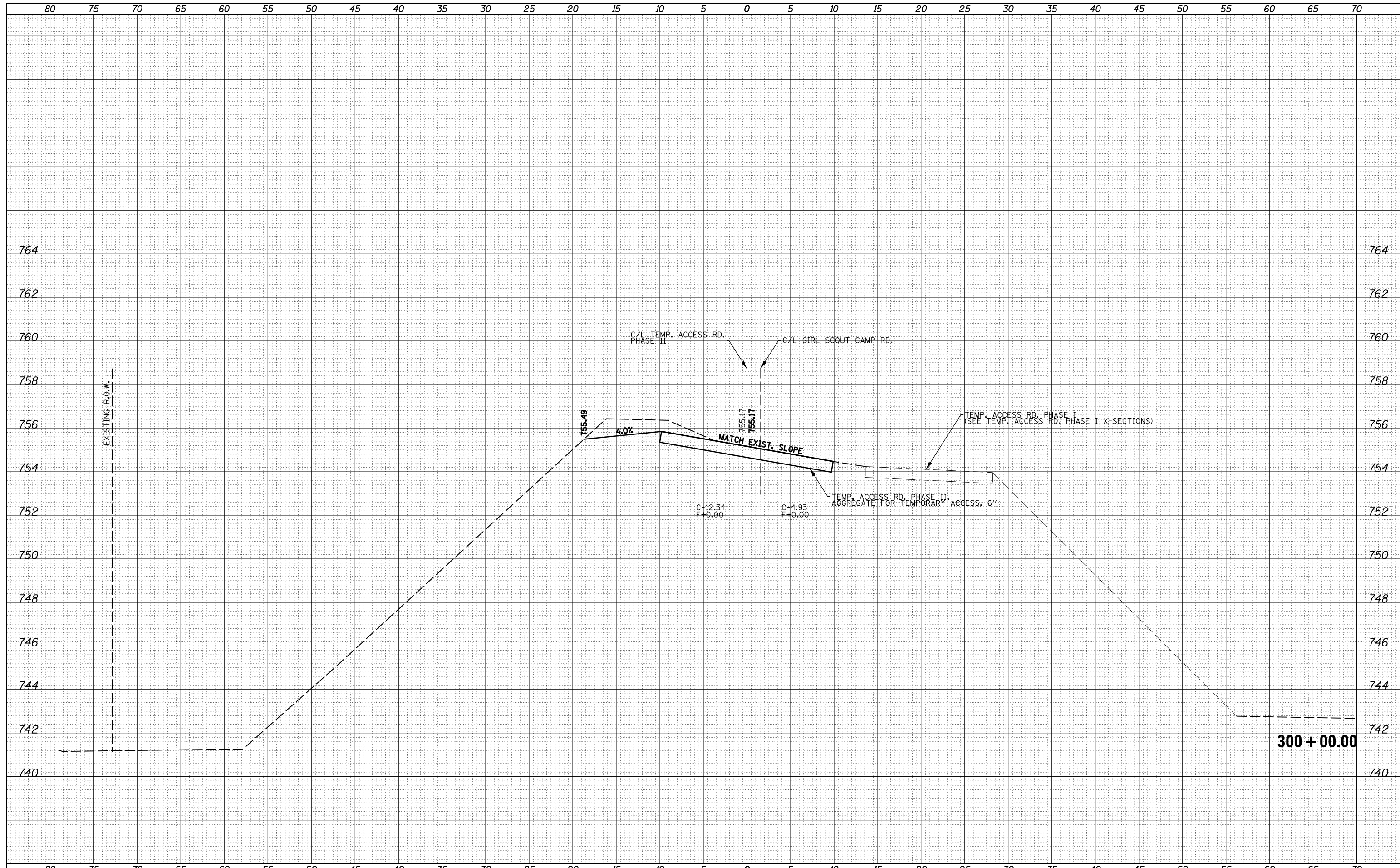
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	180
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	

**99 + 75.00**



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

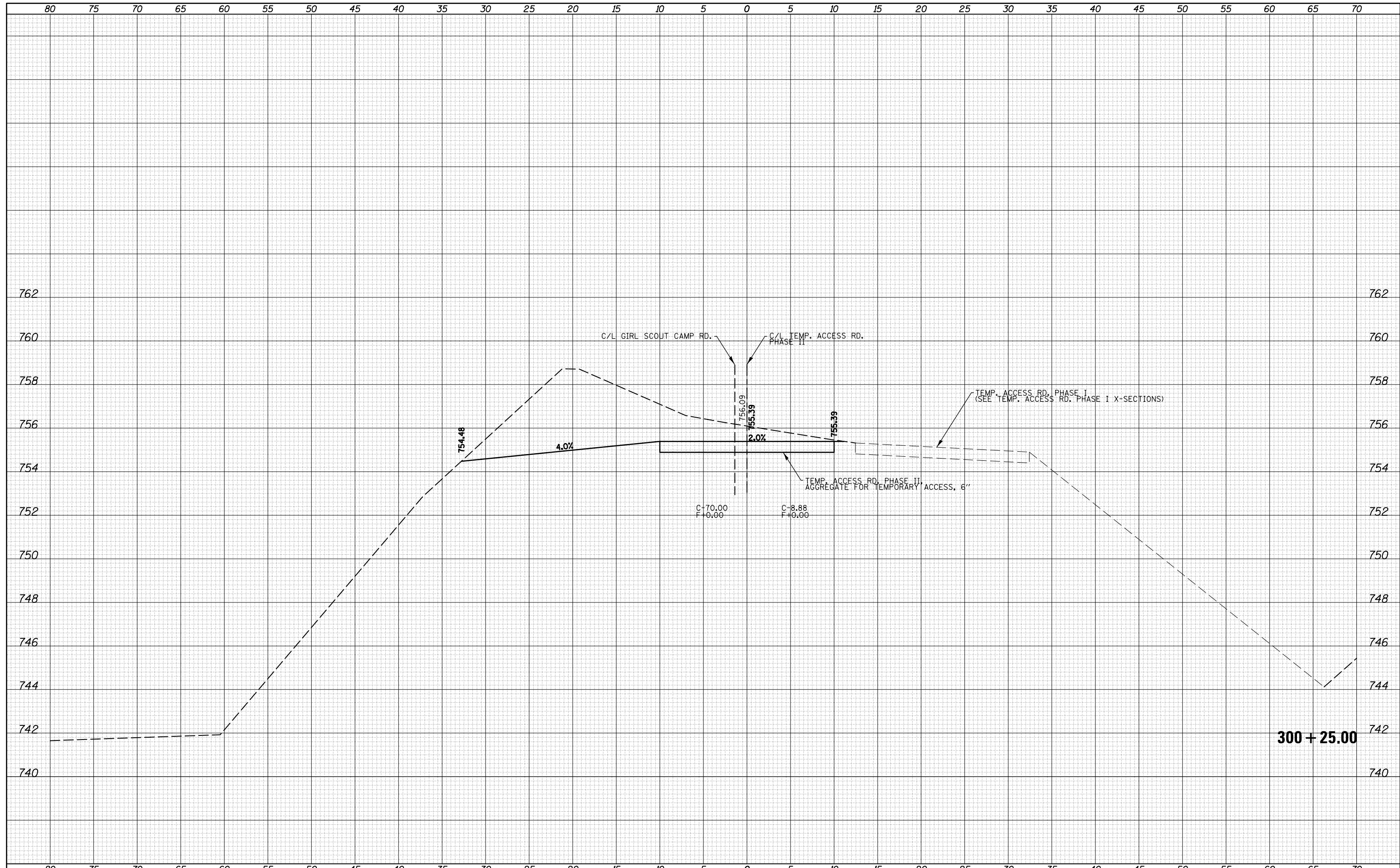
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 01 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	181
CONTRACT NO. 70700				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
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FINAL SURVEY	
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FILE NAME =  
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

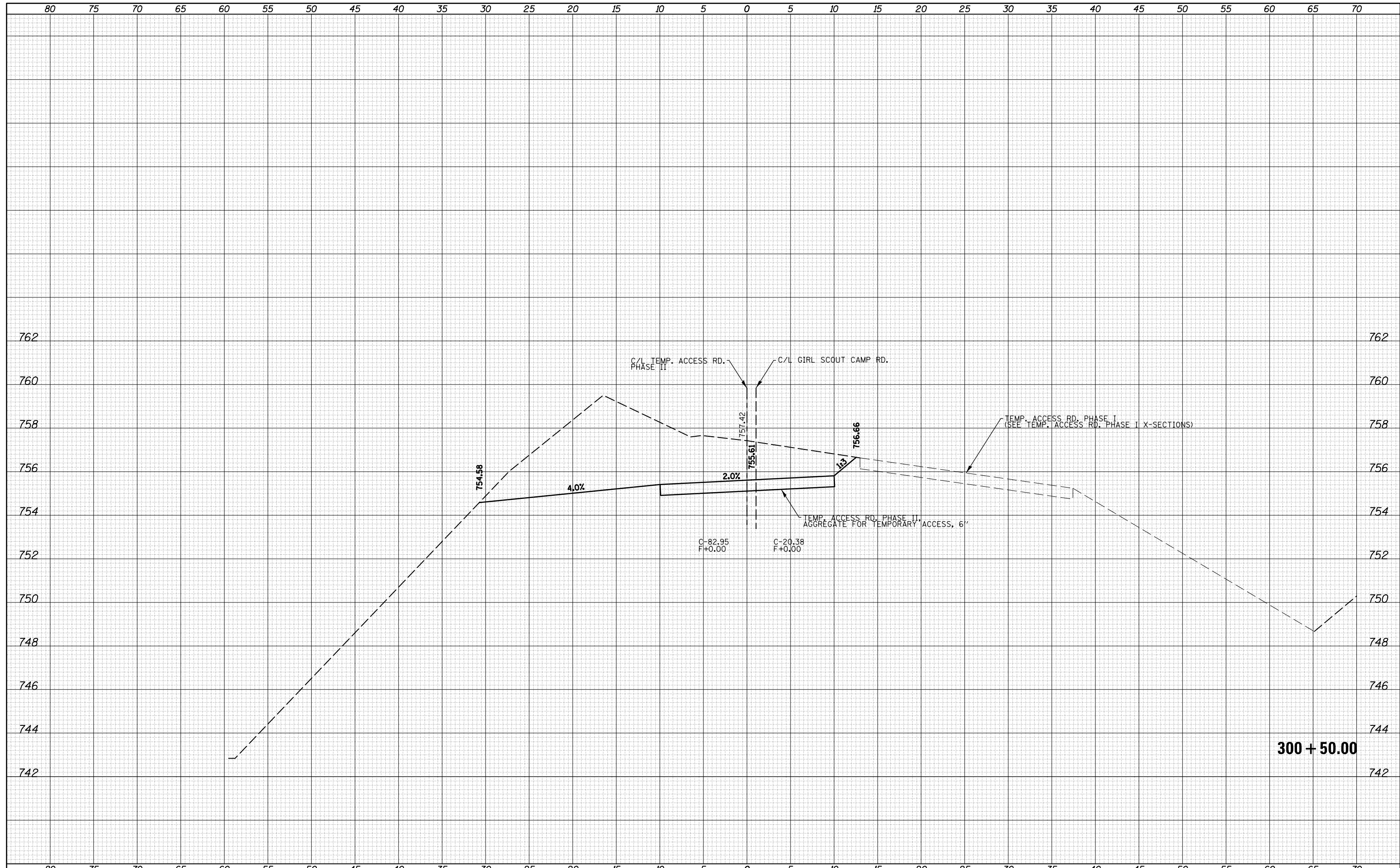
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 2 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	182
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

DATE	
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

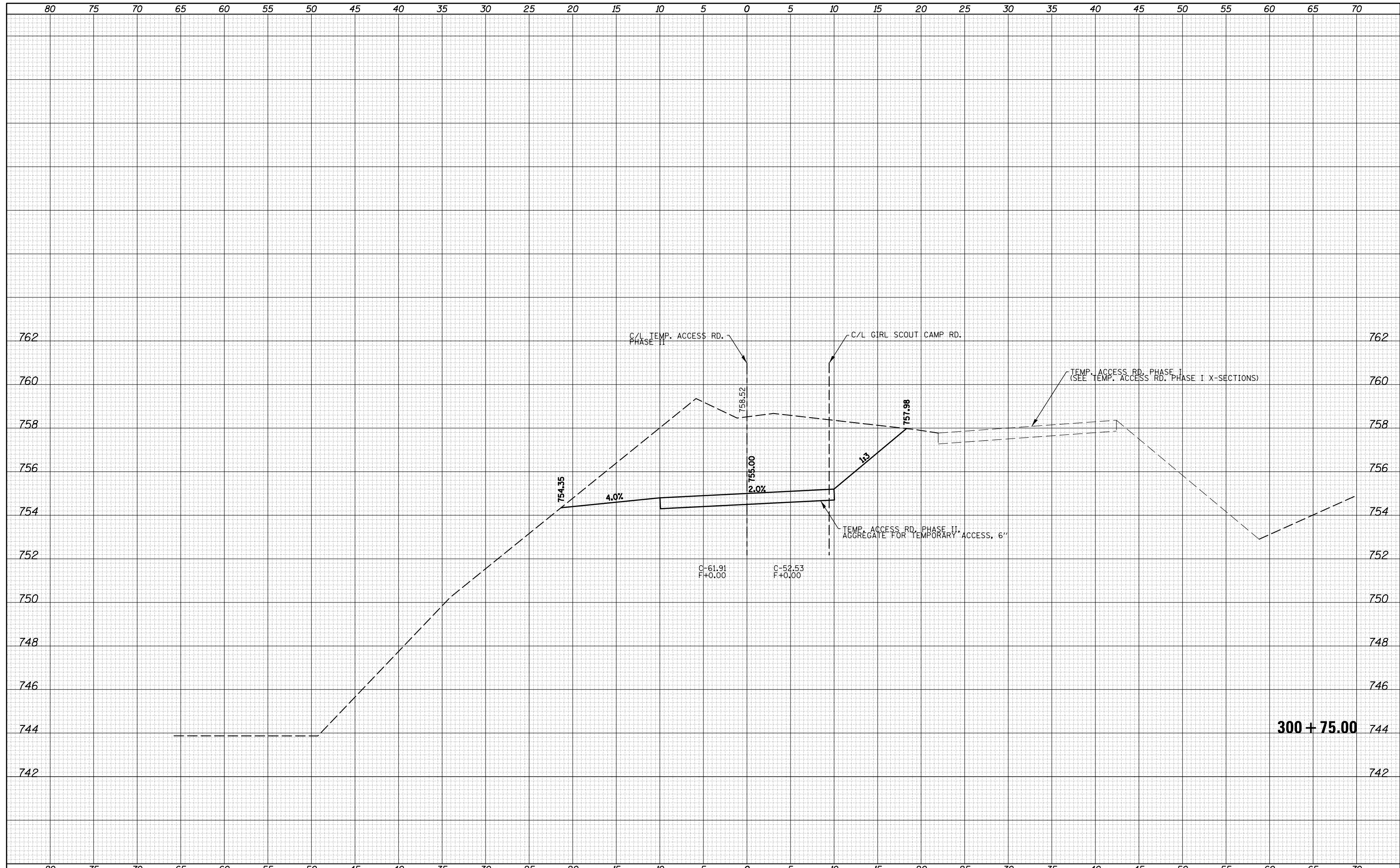
SCALE: SHEET 3 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	183
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

**300 + 50.00**

DATE	
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FINAL SURVEY	
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sh-t-XS-TEMPACCESSPHASE-II.dgn	DRAWN -	REVISIED -
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PLOT DATE = 11/9/2012	DATE -	REVISIED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

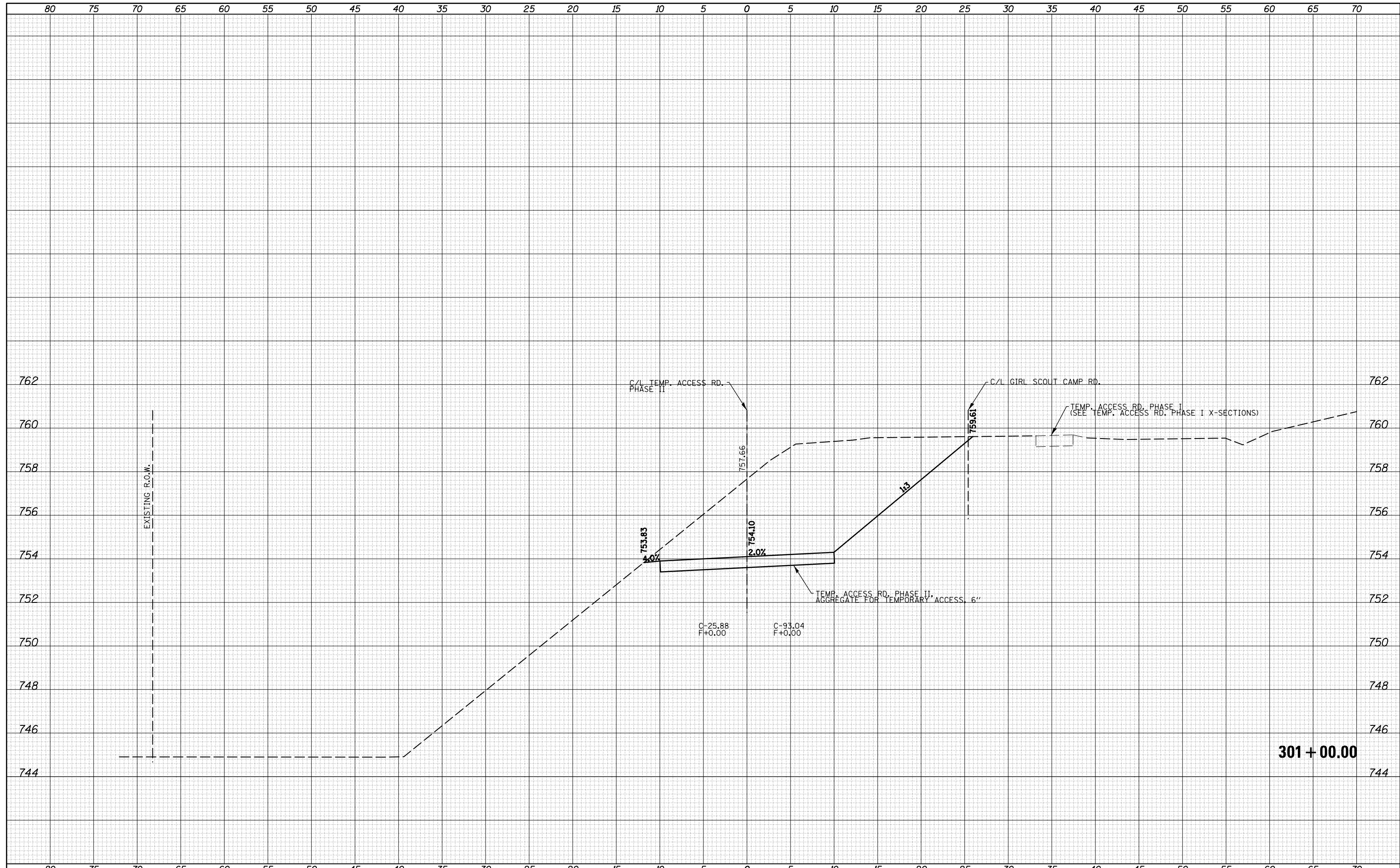
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 4 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	184
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

DATE	
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

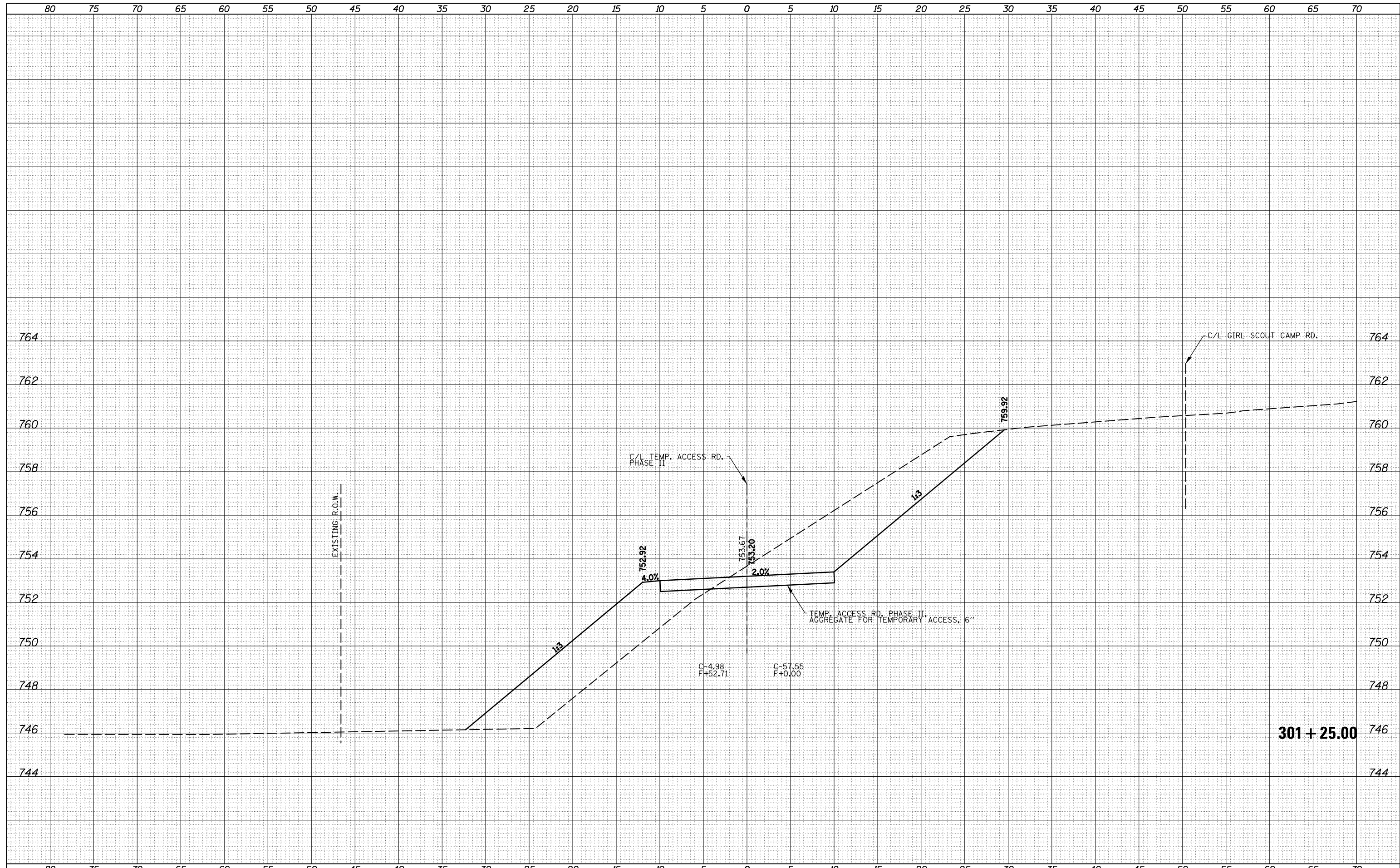
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 5 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	185
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

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PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

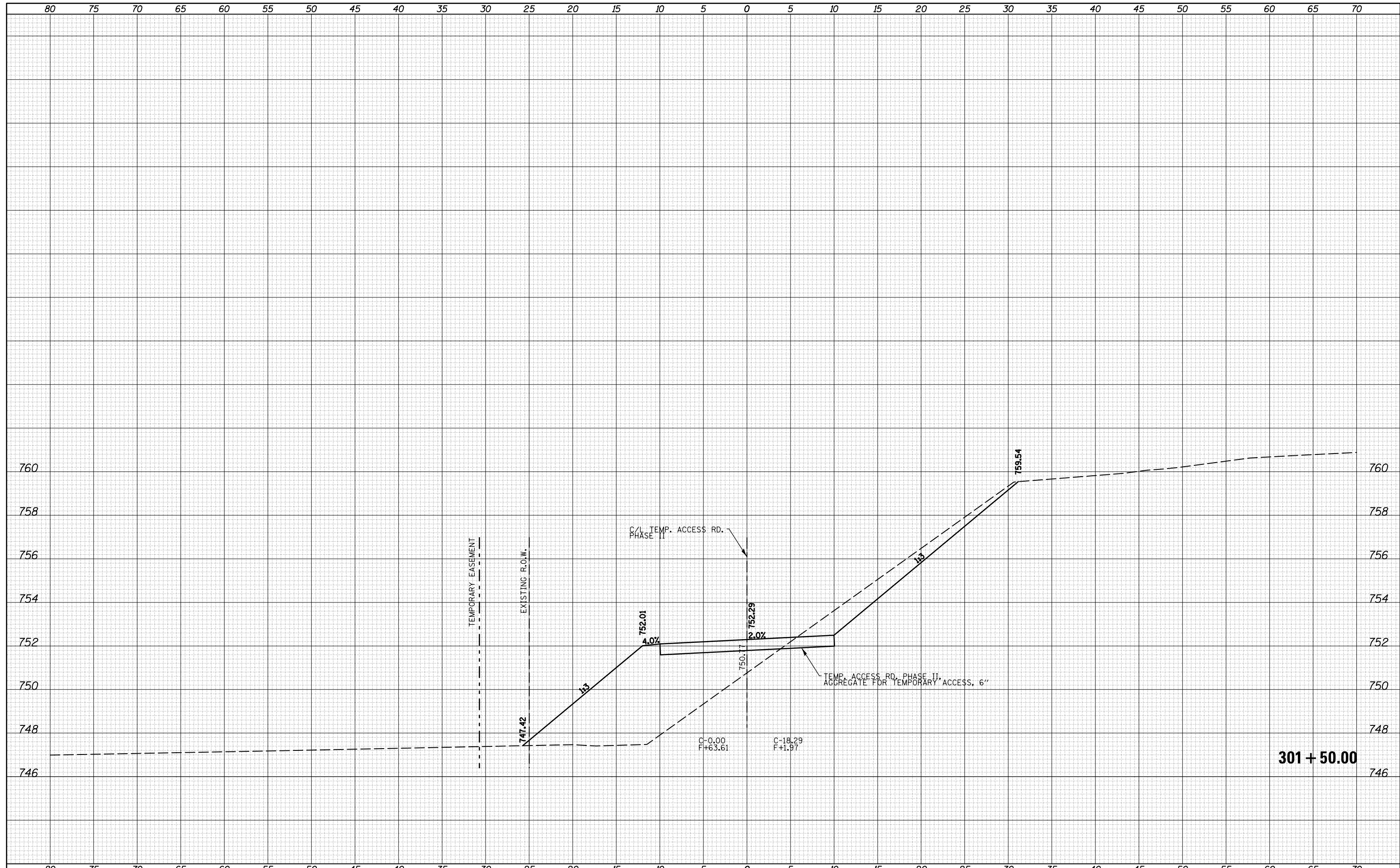
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 6 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	186
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

DATE	
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

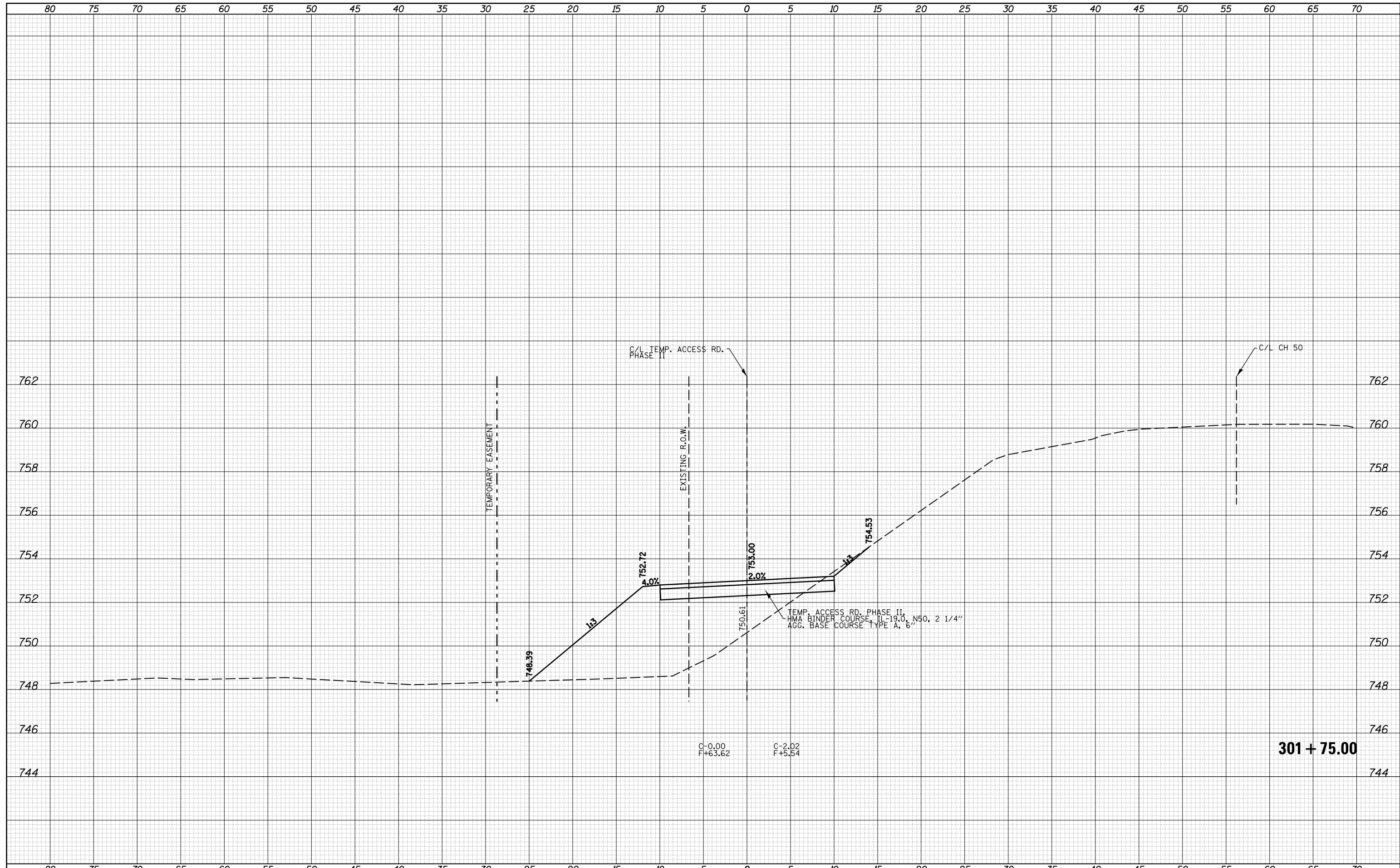
SCALE: SHEET 7 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	187
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

**301 + 50.00**

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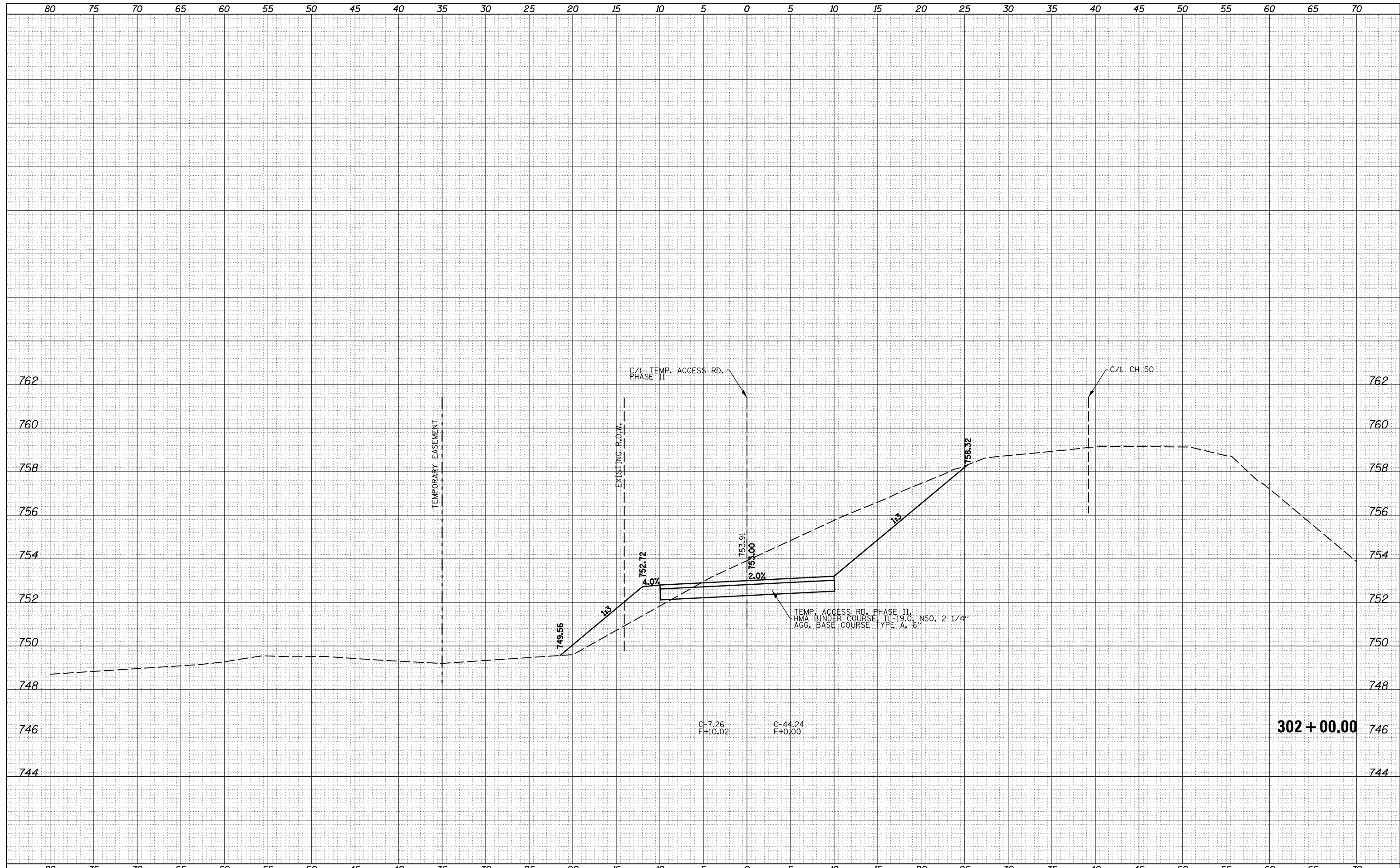


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c:\pw_work\pwidot\ceerlockbm\d0208368\0570700	sh-t-XS-TEMPACCESSPHASE-11.dgn	DRAWN -	REVISED -		74	10-4BR	CHAMPAIGN	290	188
Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET 8 OF 25 SHEETS STA. ---- TO STA. ----		CONTRACT NO. 70700		
	PLOT DATE = 11/9/2012	DATE -	REVISED -		ILLINOIS FED. AID PROJECT				



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FINAL SURVEY NO.	
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sh-t-XS-TEMPACCESSPHASE-11.dgn	DRAWN -	REVISED -
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PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

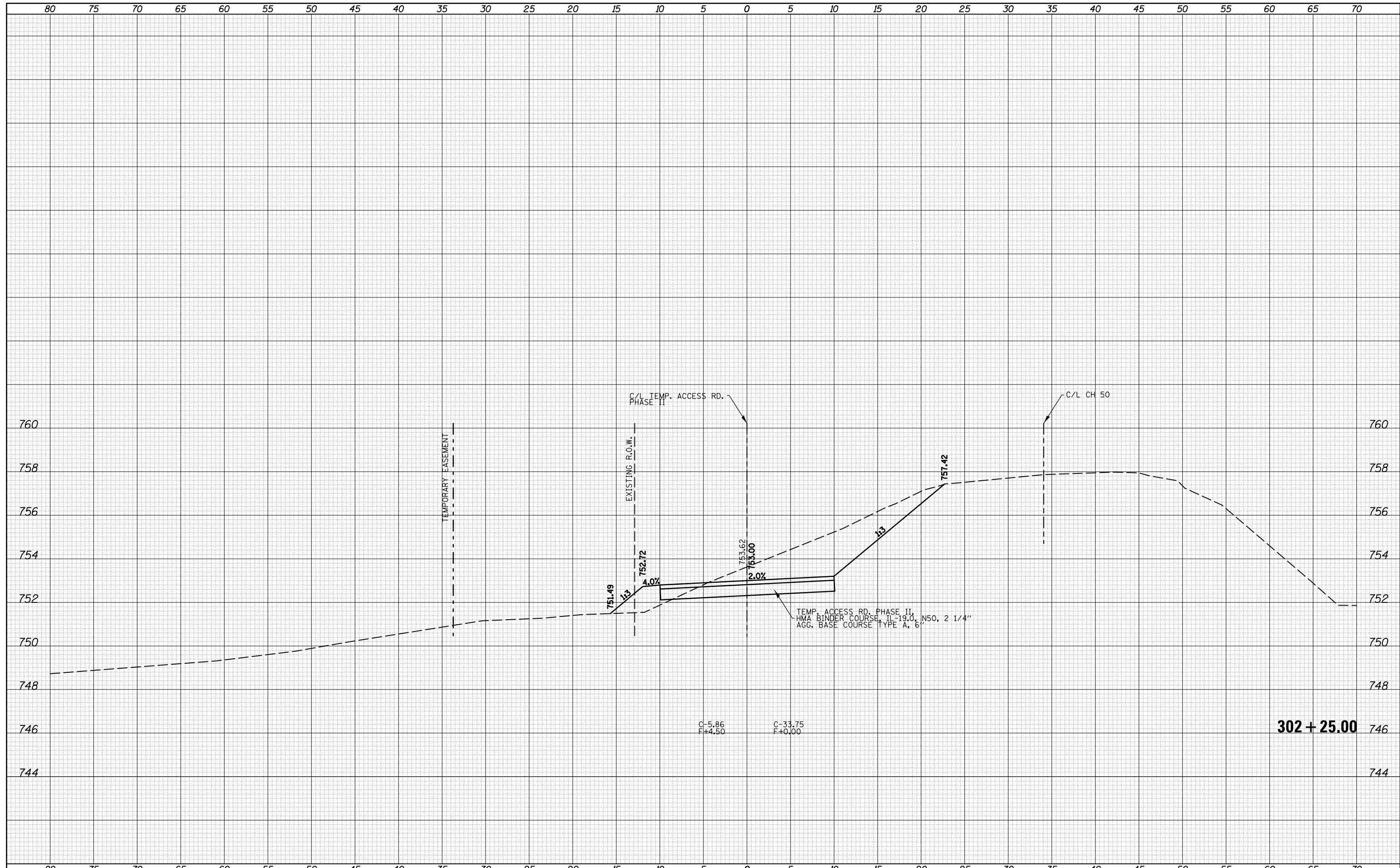
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 9 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	189
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

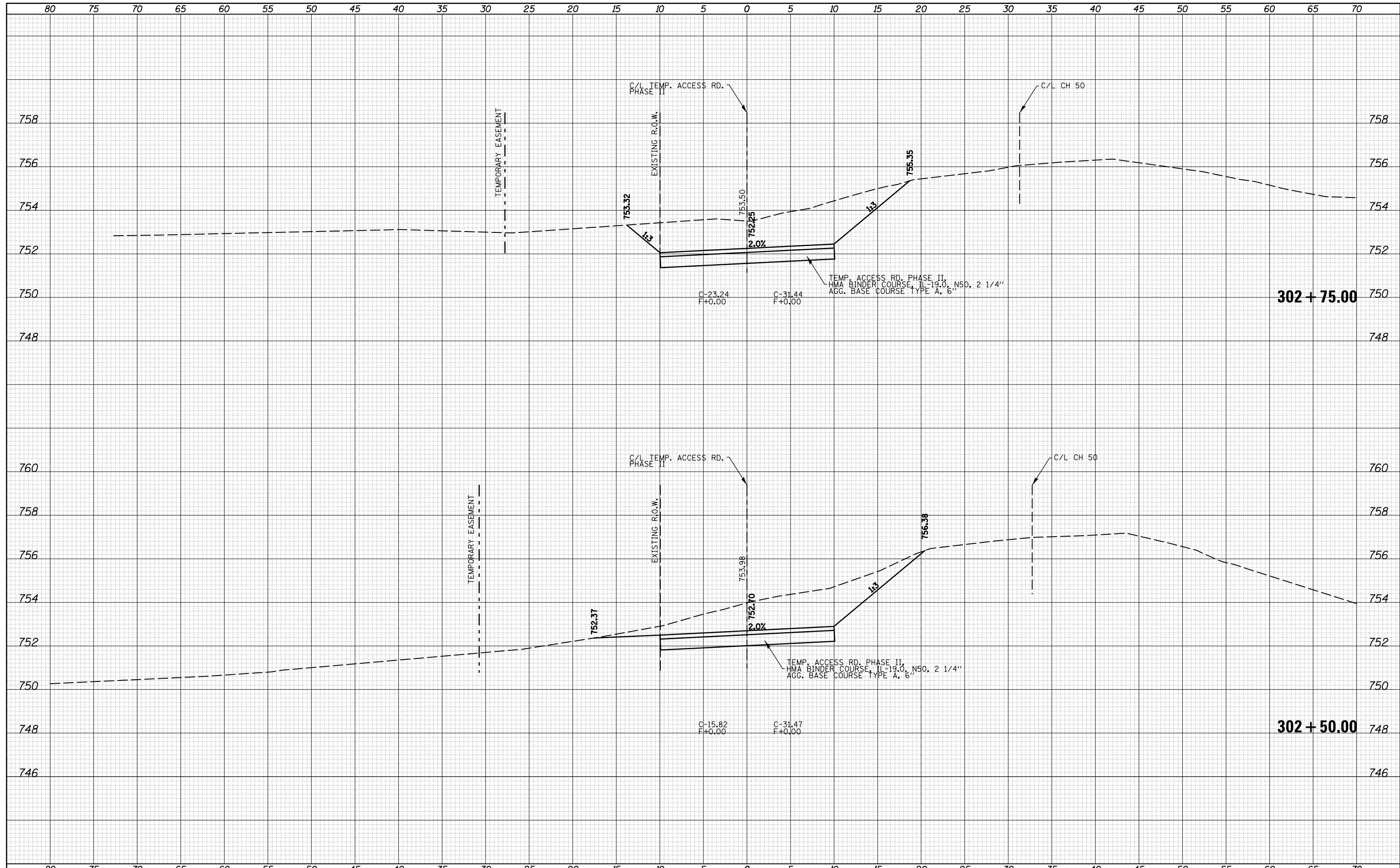
SCALE: SHEET 10 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	190
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

**302 + 25.00**

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FINAL SURVEY	
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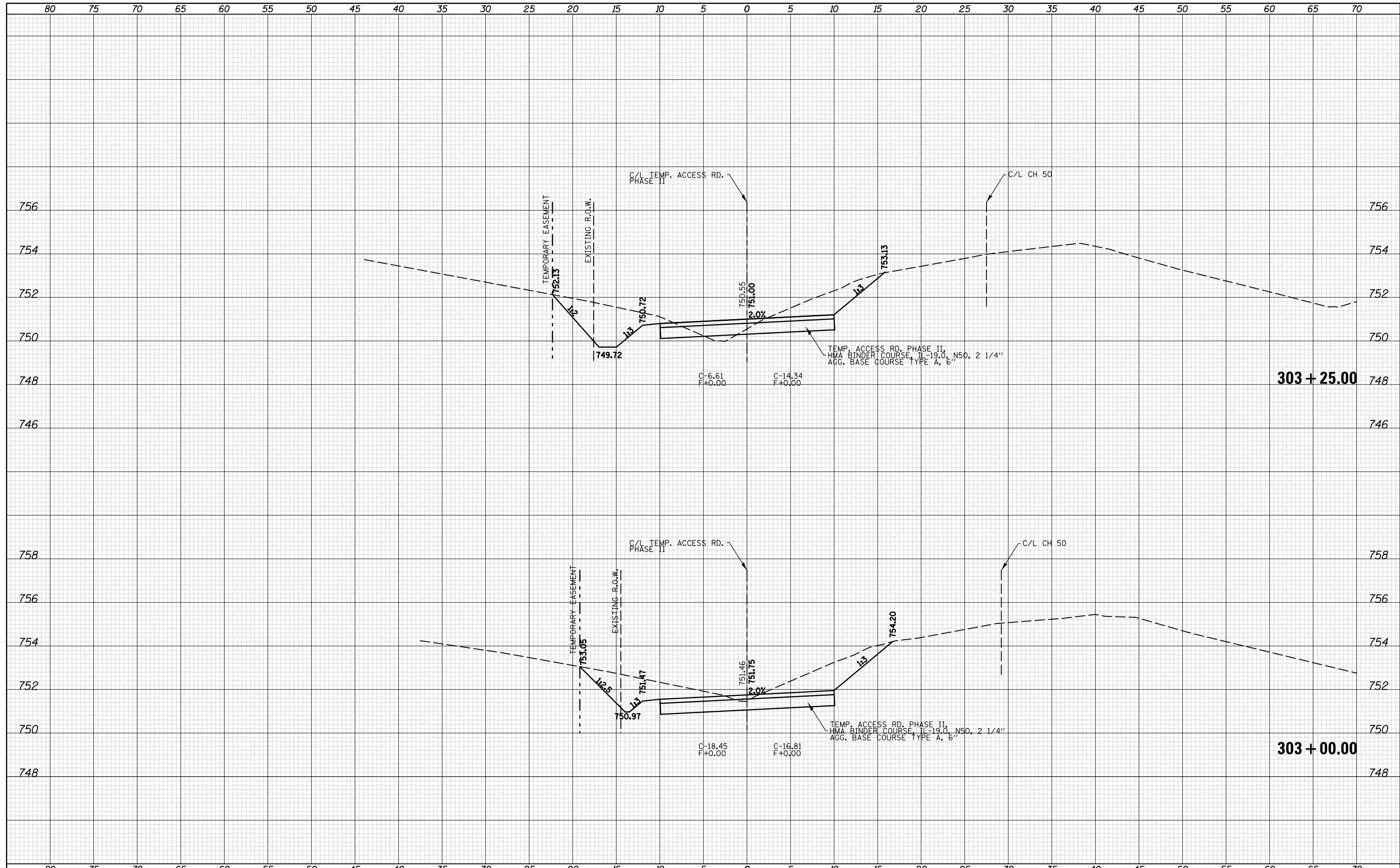
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**  
 SCALE: SHEET 11 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	191
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

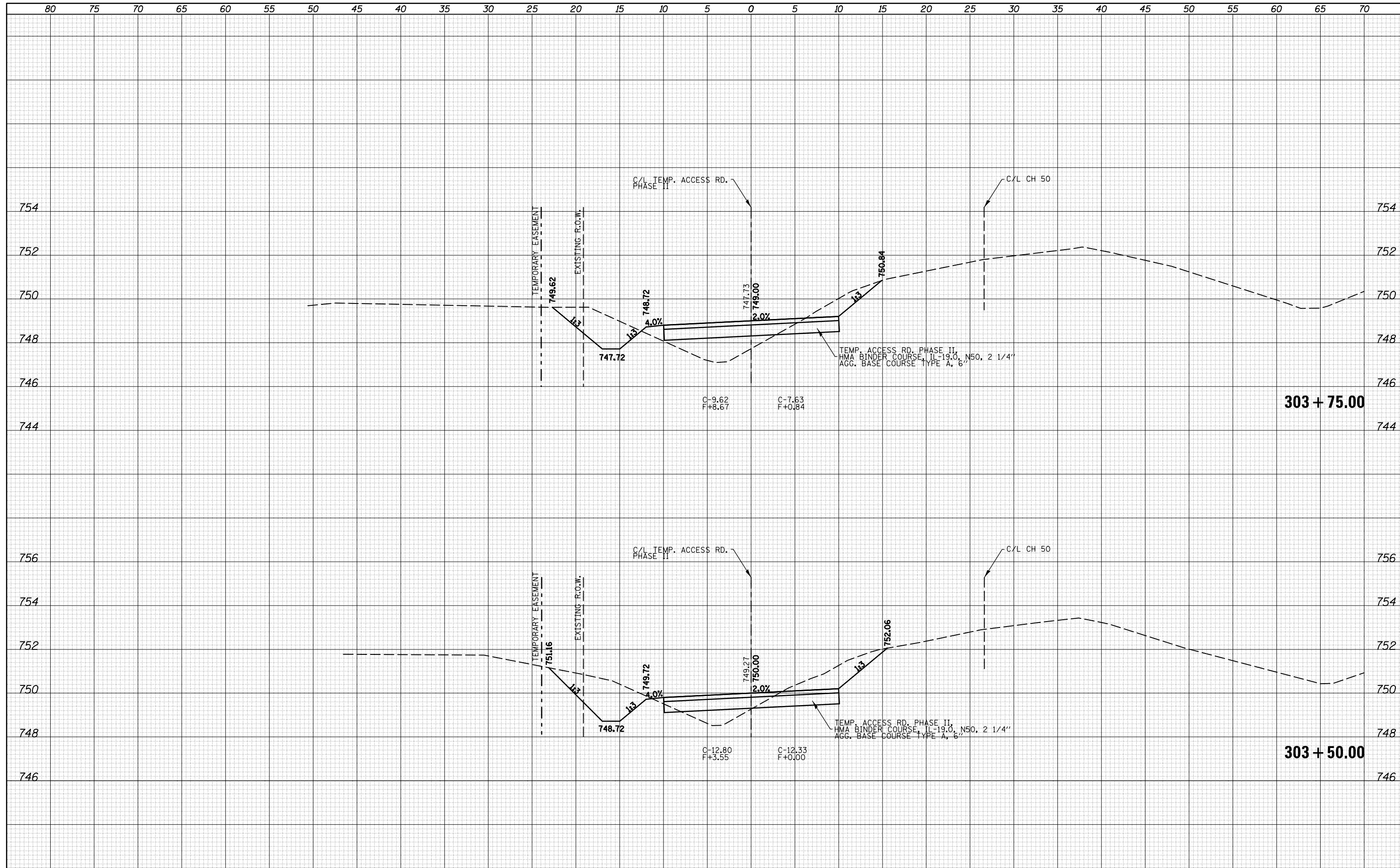
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

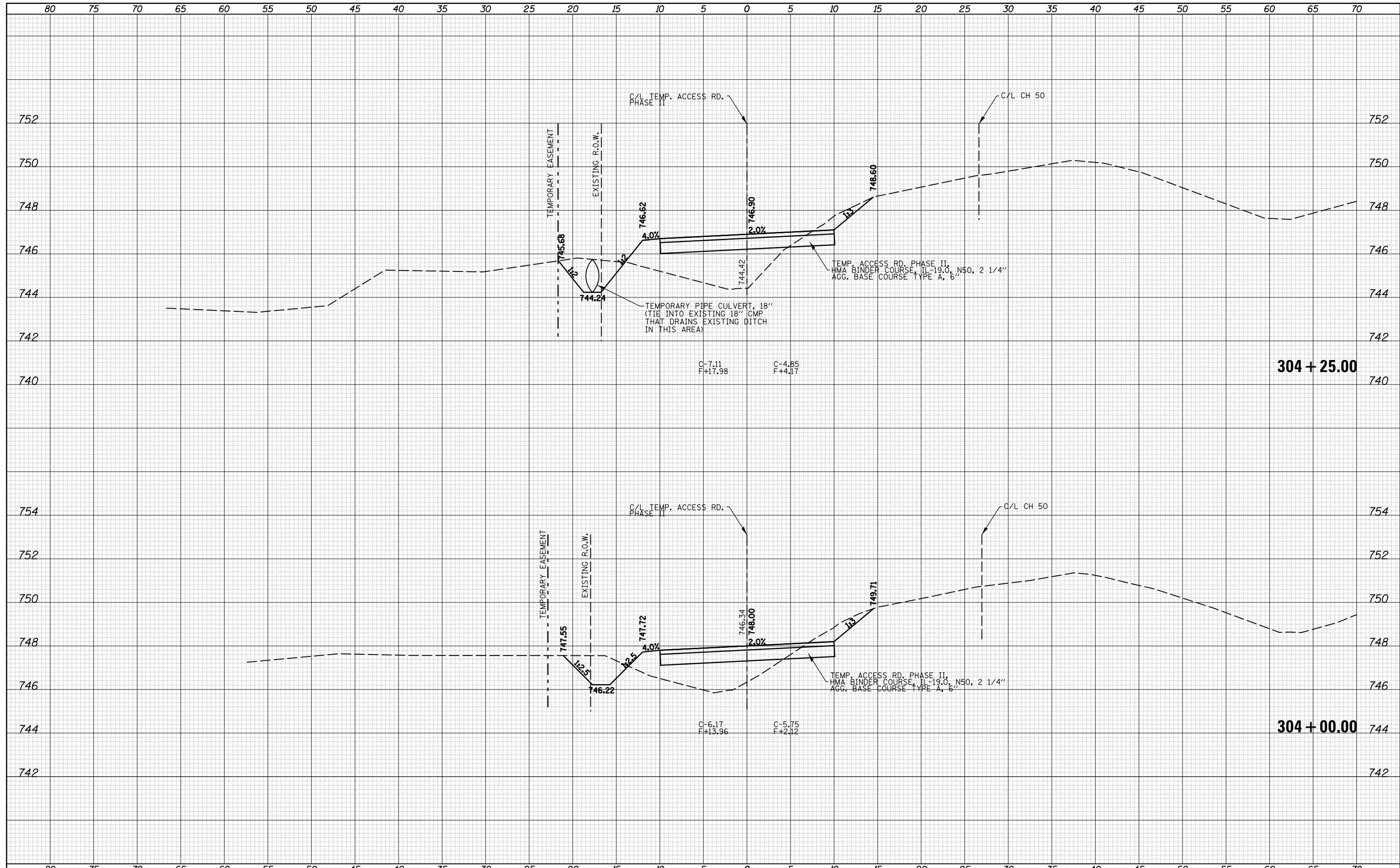
SCALE: SHEET 13 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	193
			CONTRACT NO. 70700	

ILLINOIS FED. AID PROJECT

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PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

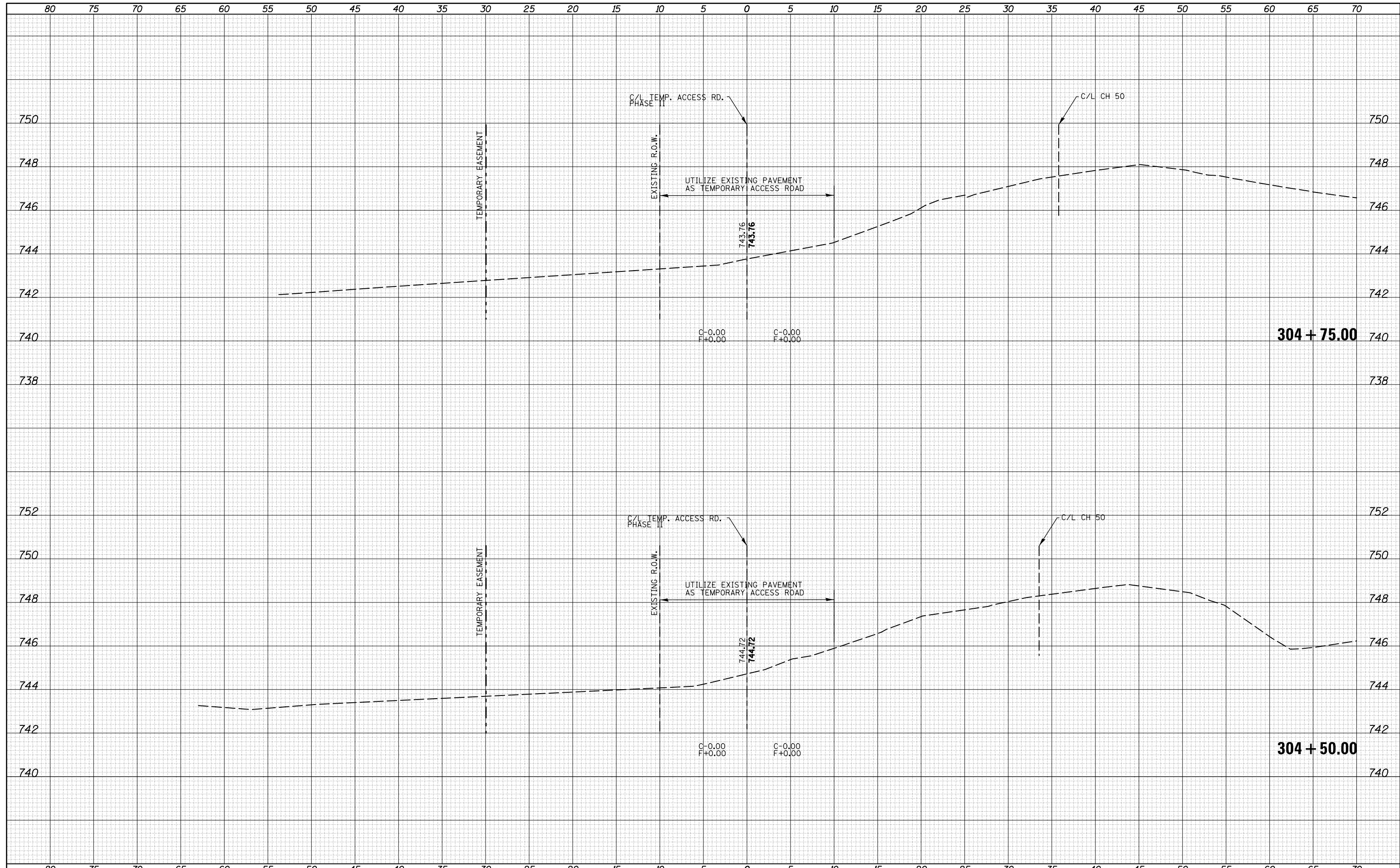
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 14 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	194
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	

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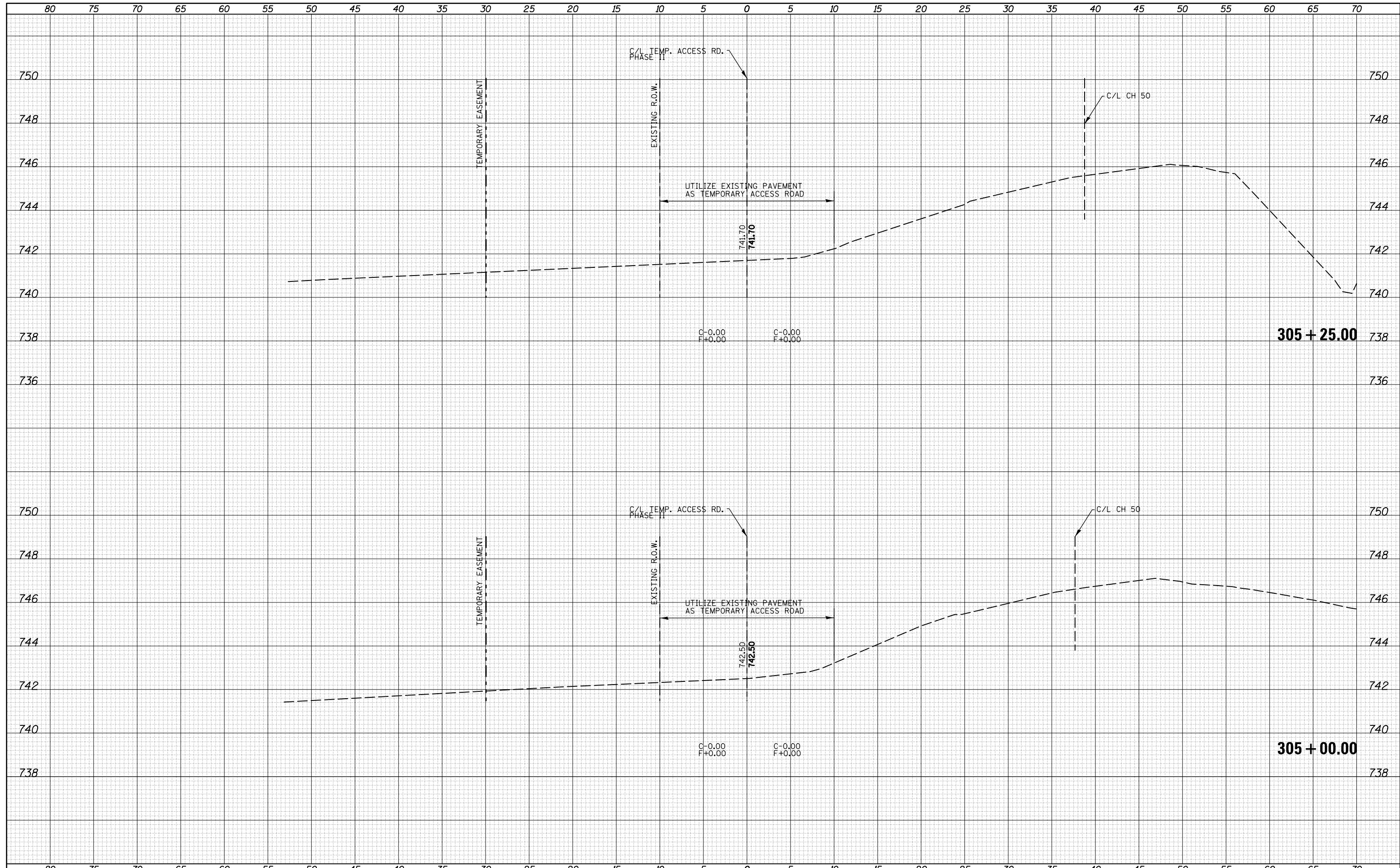
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**  
 SCALE: SHEET 15 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	195
			CONTRACT NO. 70700	
ILLINOIS FED. AID PROJECT				

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NOTE BOOK	PLOTTED
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NOTE BOOK	PLOTTED
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 PLOT DATE = 11/9/2012

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II

SCALE: SHEET 16 OF 25 SHEETS STA. ---- TO STA. ----

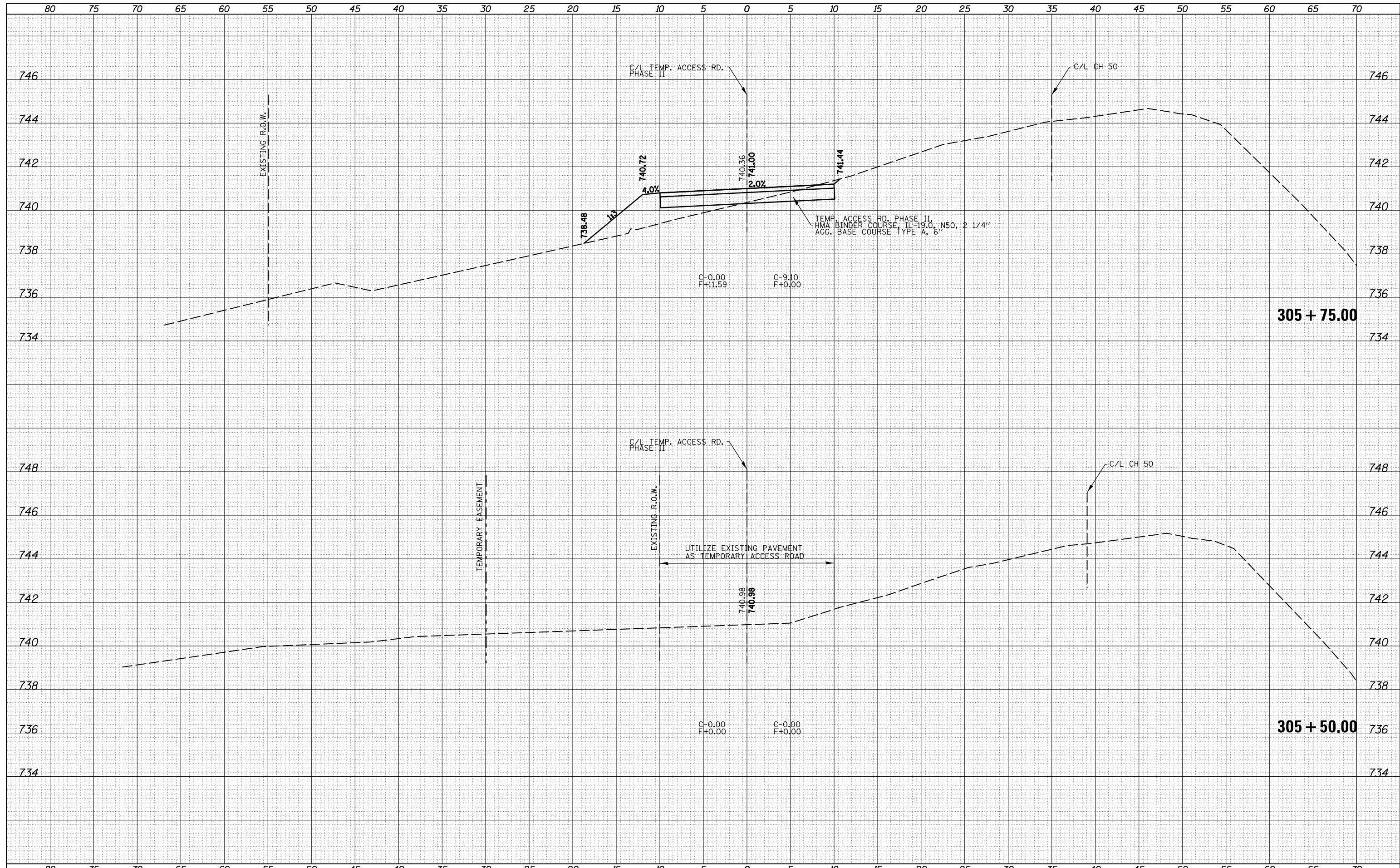
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	196
			CONTRACT NO. 70700	

ILLINOIS FED. AID PROJECT



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PLOT DATE = 11/9/2012	DATE -	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

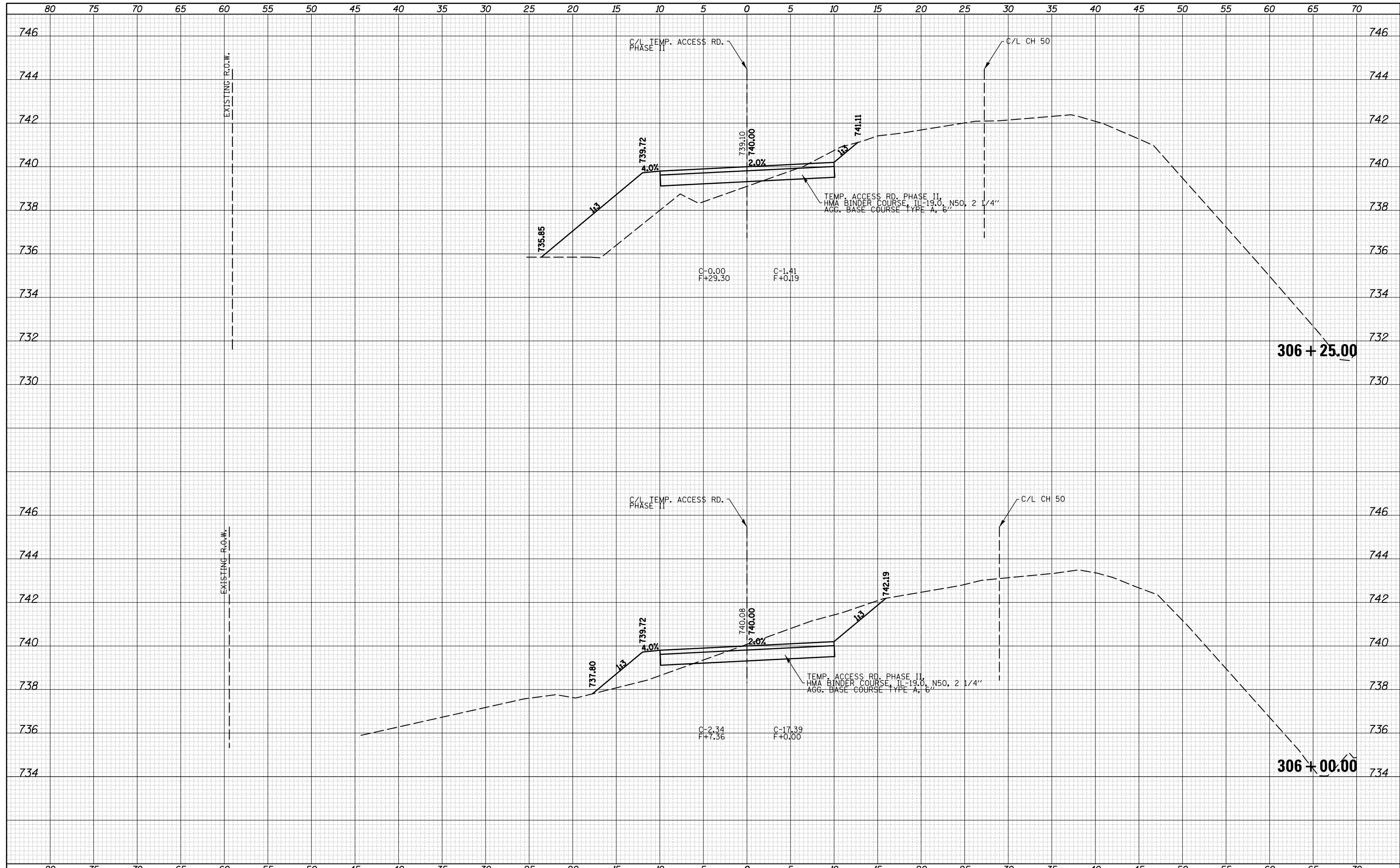
**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 17 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	197
			CONTRACT NO.	70700
ILLINOIS FED. AID PROJECT				

DATE	
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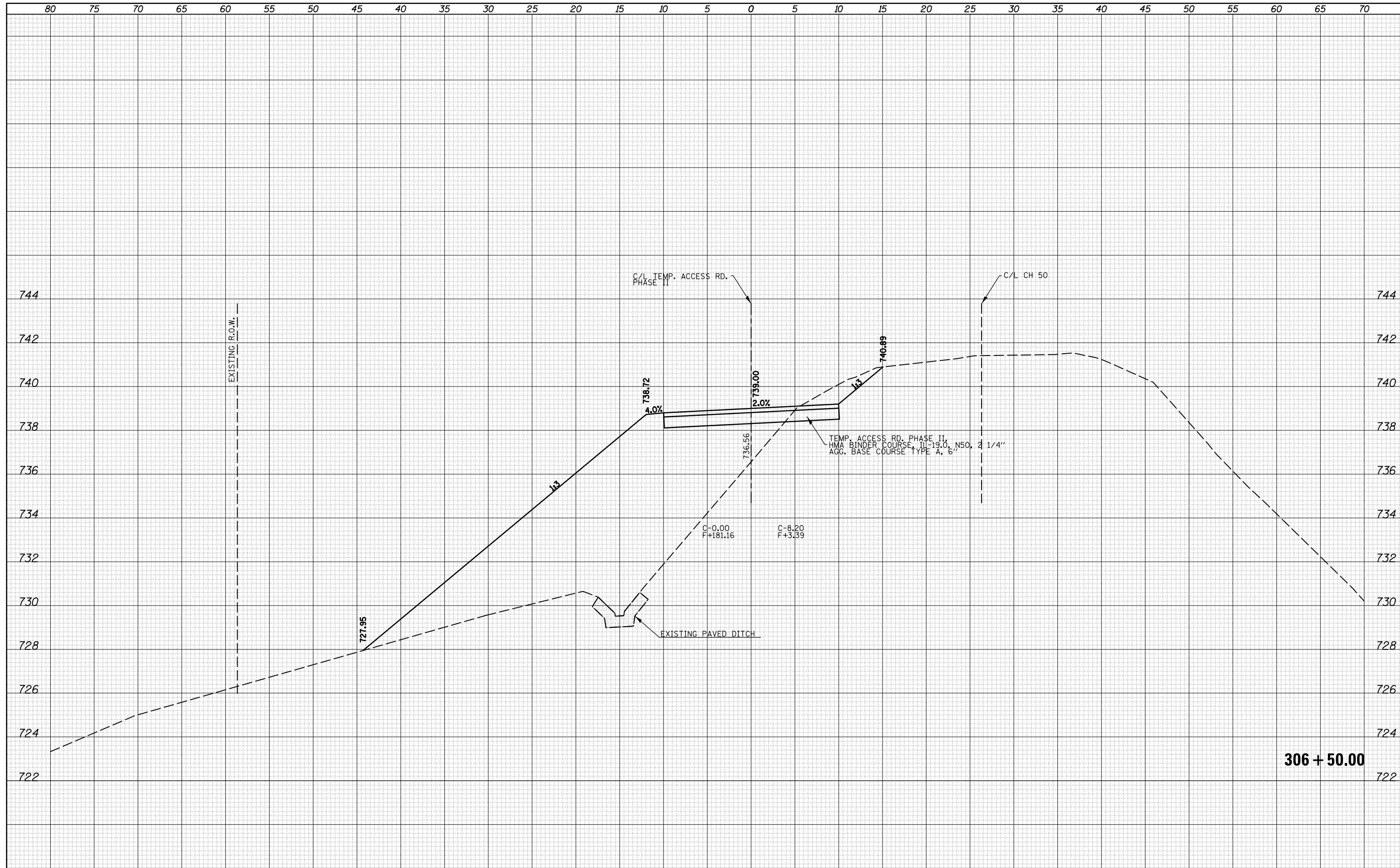
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c:\pw_work\pwidot\cealockbm\d0208368\0570700	sh-t-XS-TEMPACCESSPHASE-II.dgn	DRAWN -	REVISED -			74	10-4BR	CHAMPAIGN	290	198
Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 70700		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 11/9/2012	DATE -	REVISED -			SCALE:	SHEET 18 OF 25 SHEETS	STA. ----	TO STA. ----	

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FILE NAME =  
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USER NAME = cealockbm	DESIGNED -	REVISED -
sh-t-XS-TEMPACCESSPHASE-II.dgn	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 11/9/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

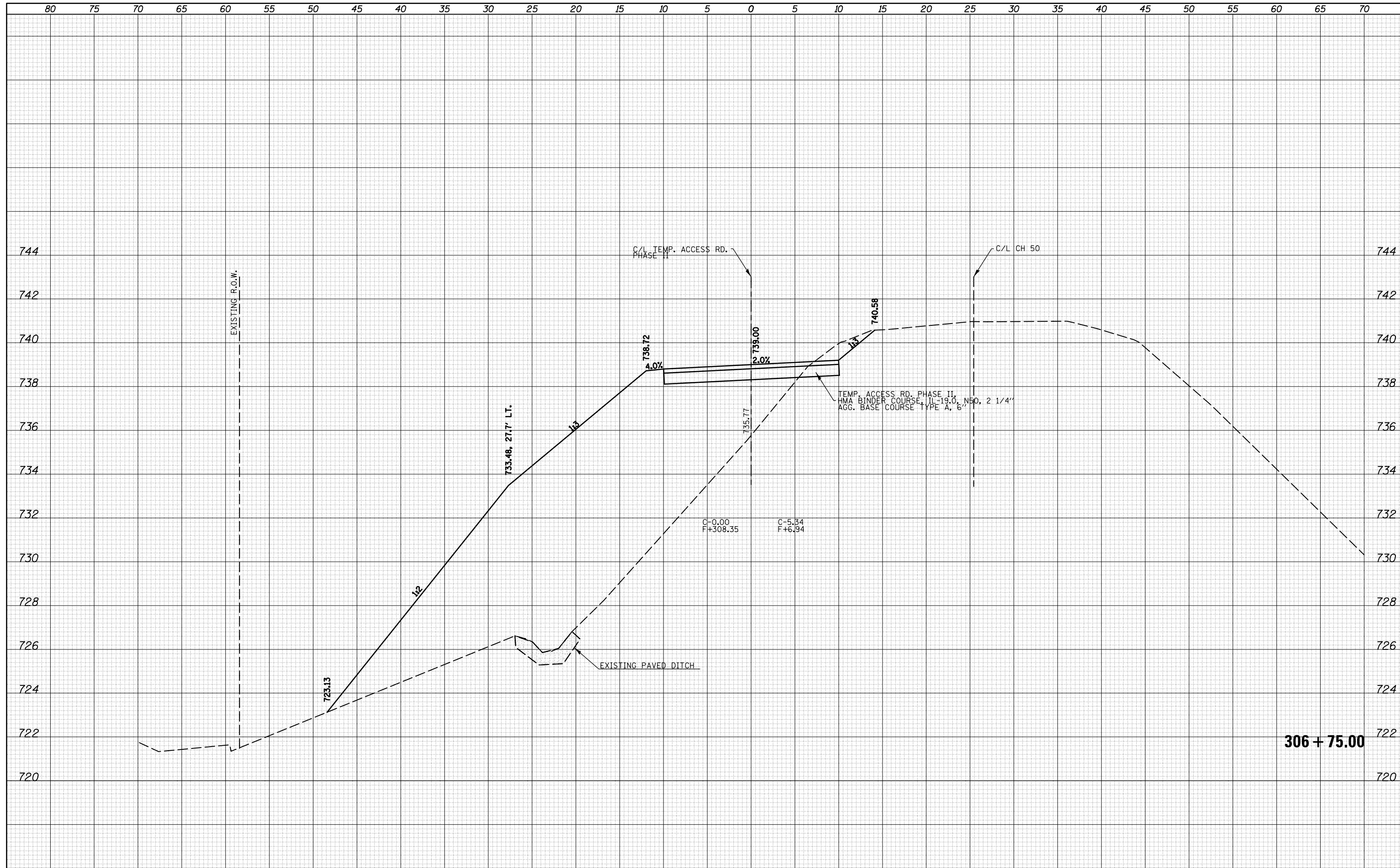
SCALE: SHEET 19 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	199
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	

**306 + 50.00**

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FINAL SURVEY	SURVEYED
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - TEMPORARY ACCESS ROAD PHASE II**

SCALE: SHEET 20 OF 25 SHEETS STA. ---- TO STA. ----

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	10-4BR	CHAMPAIGN	290	200
CONTRACT NO. 70700			ILLINOIS FED. AID PROJECT	

**306 + 75.00**