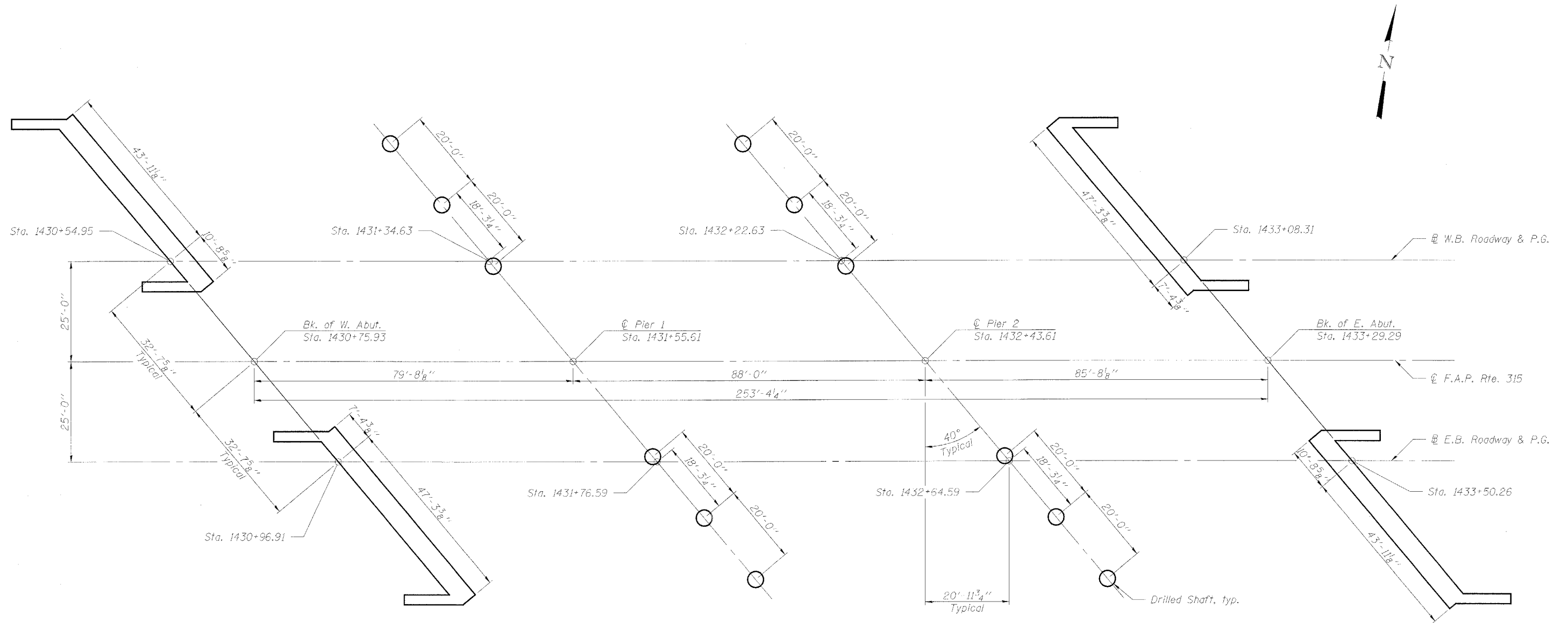


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	201	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



PLAN

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH

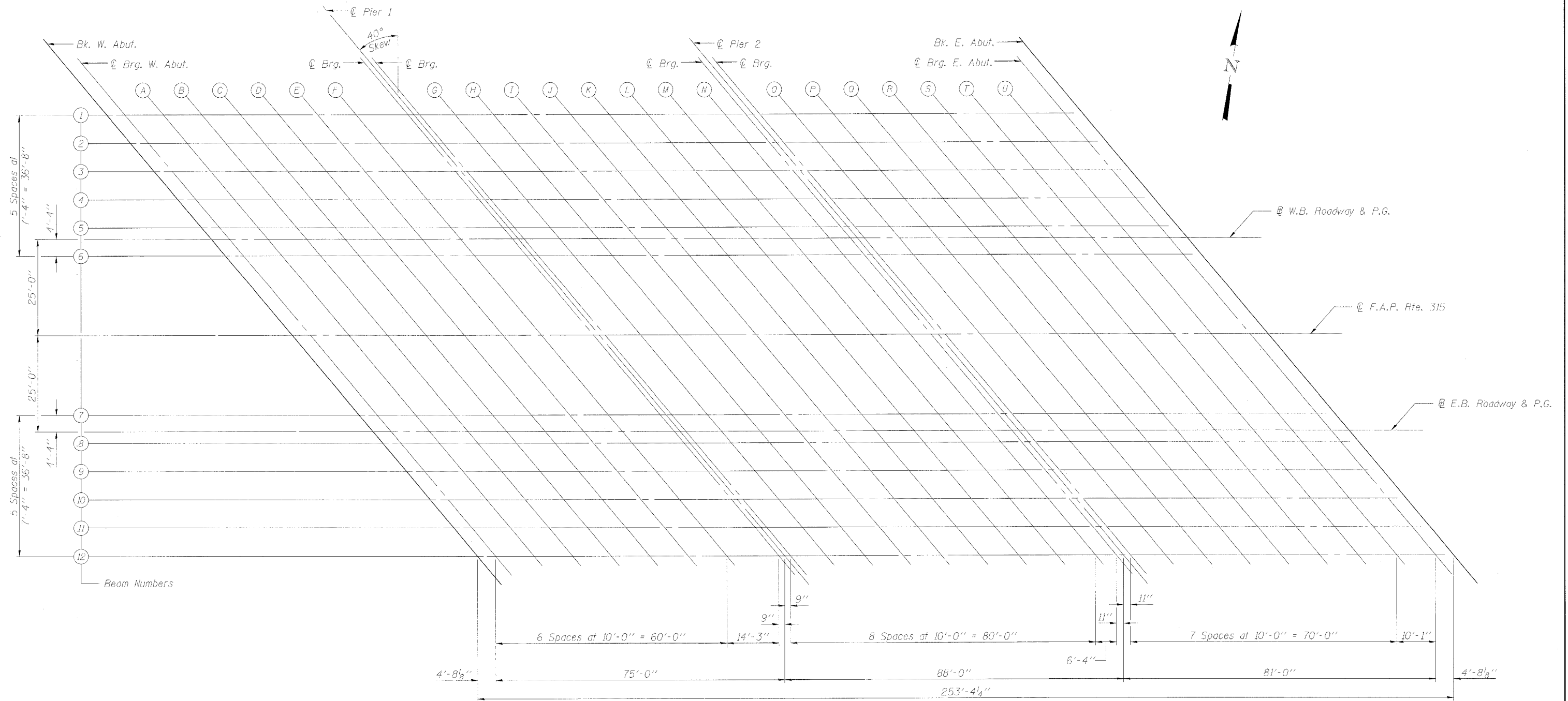
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**SUBSTRUCTURE LAYOUT**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	202	
FED. ROAD DIST. NO. 7	STATEWORK	FED. AID PROJECT			

Contract #68206



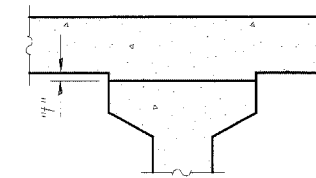
PLAN

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

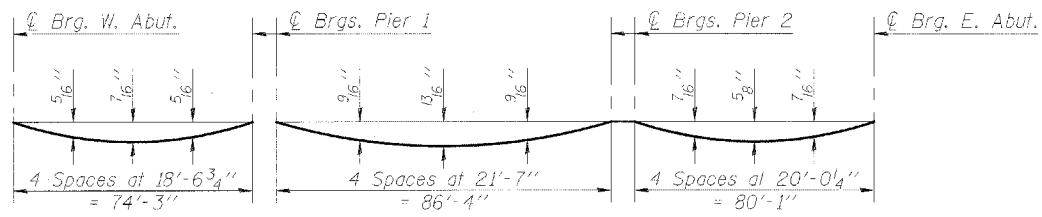
DECK ELEVATIONS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	203
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT	

Contract #68206



**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete, excluding beams).

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheets 6 and 7 of 36.

To determine "f": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "f" above top flanges of beams.

**FILLET HEIGHTS**

**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1430+27.82	-57.333	542.960	542.960
Q BRG. W. ABUT.	1430+32.50	-57.333	542.984	542.984
A	1430+42.50	-57.333	543.034	543.050
B	1430+52.50	-57.333	543.084	543.113
C	1430+62.50	-57.333	543.134	543.170
D	1430+72.50	-57.333	543.184	543.222
E	1430+82.50	-57.333	543.234	543.266
F	1430+92.50	-57.333	543.284	543.305
Q BRG. PIER 1	1431+06.75	-57.333	543.355	543.355
Q PIER 1	1431+07.50	-57.333	543.359	543.359
Q BRG. PIER 1	1431+08.25	-57.333	543.363	543.363
G	1431+18.25	-57.333	543.413	543.438
H	1431+28.25	-57.333	543.463	543.509
I	1431+38.25	-57.333	543.513	543.574
J	1431+48.25	-57.333	543.563	543.632
K	1431+58.25	-57.333	543.613	543.680
L	1431+68.25	-57.333	543.663	543.719
M	1431+78.25	-57.333	543.713	543.751
N	1431+88.25	-57.333	543.763	543.778
Q BRG. PIER 2	1431+94.58	-57.333	543.794	543.794
Q PIER 2	1431+95.50	-57.333	543.799	543.799
Q BRG. PIER 2	1431+96.42	-57.333	543.803	543.803
O	1432+06.42	-57.333	543.853	543.873
P	1432+16.42	-57.333	543.903	543.940
Q	1432+26.42	-57.333	543.953	544.001
R	1432+36.42	-57.333	544.003	544.055
S	1432+46.42	-57.333	544.053	544.101
T	1432+56.42	-57.333	544.103	544.140
U	1432+66.42	-57.333	544.153	544.173
Q BRG. E. ABUT.	1432+76.50	-57.333	544.204	544.204
BK. E. ABUT.	1432+81.18	-57.333	544.227	544.227

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1430+33.98	-50.000	543.144	543.144
Q BRG. W. ABUT.	1430+38.65	-50.000	543.167	543.167
A	1430+48.65	-50.000	543.217	543.233
B	1430+58.65	-50.000	543.267	543.295
C	1430+68.65	-50.000	543.317	543.353
D	1430+78.65	-50.000	543.367	543.404
E	1430+88.65	-50.000	543.417	543.449
F	1430+98.65	-50.000	543.467	543.488
Q BRG. PIER 1	1431+12.90	-50.000	543.539	543.539
Q PIER 1	1431+13.65	-50.000	543.542	543.542
Q BRG. PIER 1	1431+14.40	-50.000	543.546	543.546
G	1431+24.40	-50.000	543.596	543.621
H	1431+34.40	-50.000	543.646	543.691
I	1431+44.40	-50.000	543.696	543.756
J	1431+54.40	-50.000	543.746	543.813
K	1431+64.40	-50.000	543.796	543.861
L	1431+74.40	-50.000	543.846	543.901
M	1431+84.40	-50.000	543.896	543.934
N	1431+94.40	-50.000	543.946	543.961
Q BRG. PIER 2	1432+00.74	-50.000	543.978	543.978
Q PIER 2	1432+01.65	-50.000	543.982	543.982
Q BRG. PIER 2	1432+02.57	-50.000	543.987	543.987
O	1432+12.57	-50.000	544.037	544.056
P	1432+22.57	-50.000	544.087	544.123
Q	1432+32.57	-50.000	544.137	544.183
R	1432+42.57	-50.000	544.187	544.237
S	1432+52.57	-50.000	544.237	544.283
T	1432+62.57	-50.000	544.287	544.322
U	1432+72.57	-50.000	544.337	544.356
Q BRG. E. ABUT.	1432+82.65	-50.000	544.387	544.387
BK. E. ABUT.	1432+87.33	-50.000	544.411	544.411

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1430+40.13	-42.667	543.295	543.295
Q BRG. W. ABUT.	1430+44.81	-42.667	543.318	543.318
A	1430+54.81	-42.667	543.368	543.383
B	1430+64.81	-42.667	543.418	543.446
C	1430+74.81	-42.667	543.468	543.503
D	1430+84.81	-42.667	543.518	543.554
E	1430+94.81	-42.667	543.568	543.599
F	1431+04.81	-42.667	543.618	543.639
Q BRG. PIER 1	1431+19.06	-42.667	543.689	543.689
Q PIER 1	1431+19.81	-42.667	543.693	543.693
Q BRG. PIER 1	1431+20.56	-42.667	543.697	543.697
G	1431+30.56	-42.667	543.747	543.771
H	1431+40.56	-42.667	543.797	543.842
I	1431+50.56	-42.667	543.847	543.907
J	1431+60.56	-42.667	543.897	543.964
K	1431+70.56	-42.667	543.947	544.012
L	1431+80.56	-42.667	543.997	544.052
M	1431+90.56	-42.667	544.047	544.084
N	1432+00.56	-42.667	544.097	544.111
Q BRG. PIER 2	1432+06.89	-42.667	544.128	544.128
Q PIER 2	1432+07.81	-42.667	544.133	544.133
Q BRG. PIER 2	1432+08.72	-42.667	544.138	544.138
O	1432+18.72	-42.667	544.188	544.207
P	1432+28.72	-42.667	544.238	544.273
Q	1432+38.72	-42.667	544.288	544.334
R	1432+48.72	-42.667	544.338	544.387
S	1432+58.72	-42.667	544.388	544.434
T	1432+68.72	-42.667	544.438	544.473
U	1432+78.72	-42.667	544.488	544.506
Q BRG. E. ABUT.	1432+88.81	-42.667	544.538	544.538
BK. E. ABUT.	1432+93.48	-42.667	544.561	544.561

Note:  
Offsets are based off of Q F.A.P. Rte. 315.

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF/EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**DECK ELEVATIONS**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

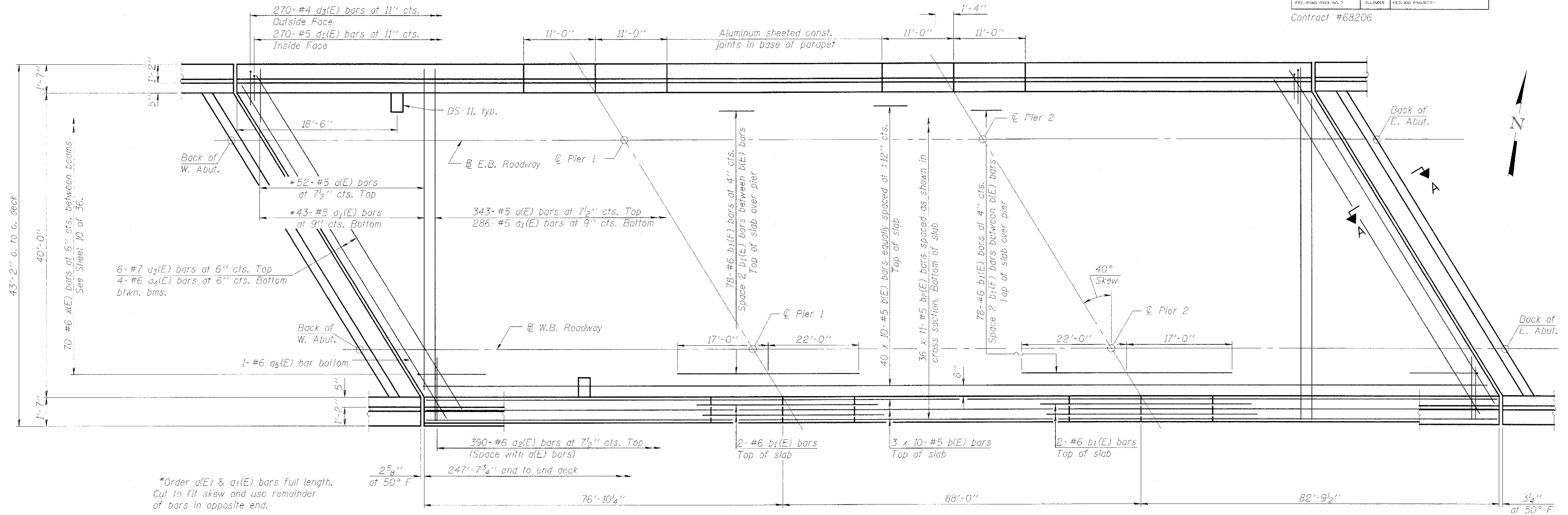




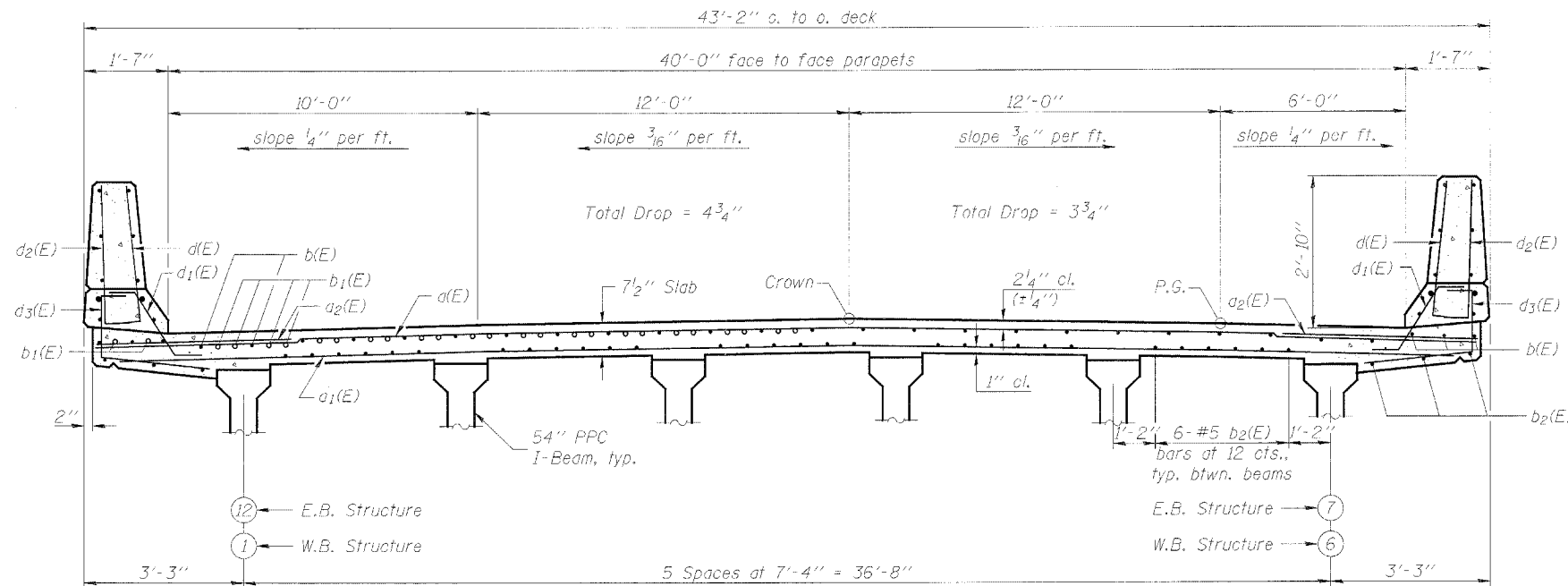
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	206	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



PLAN



CROSS SECTION

(W.B. Structure Looking East)  
(E.B. Structure Looking West)

Notes:  
See sheet 9 of 36 for superstructure details and Bill of Material.  
For Section A-A and diaphragm details see sheet 10 of 36.  
Reinforcement bars designated (E) shall be epoxy coated.  
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.  
See sheet 9 of 36 for parapet reinforcement.

**SUPERSTRUCTURE DETAILS I**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

DESIGNED	KLH
CHECKED	FML
DRAWN	EML
CHECKED	KLH

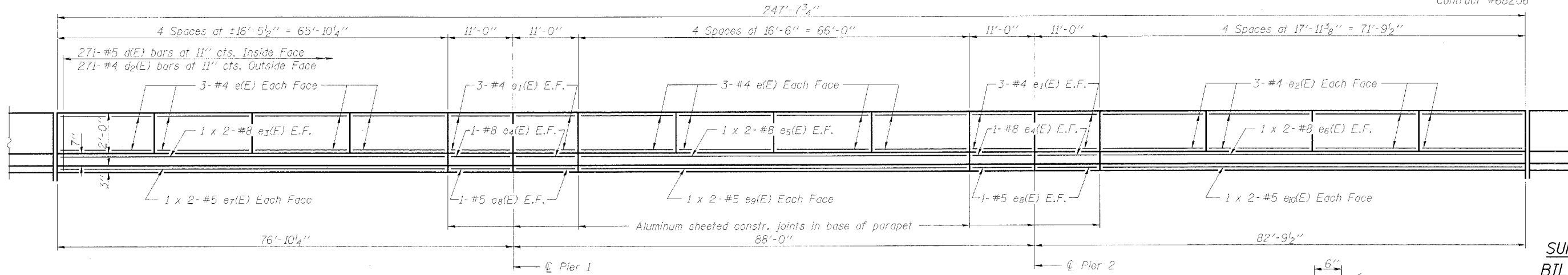
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

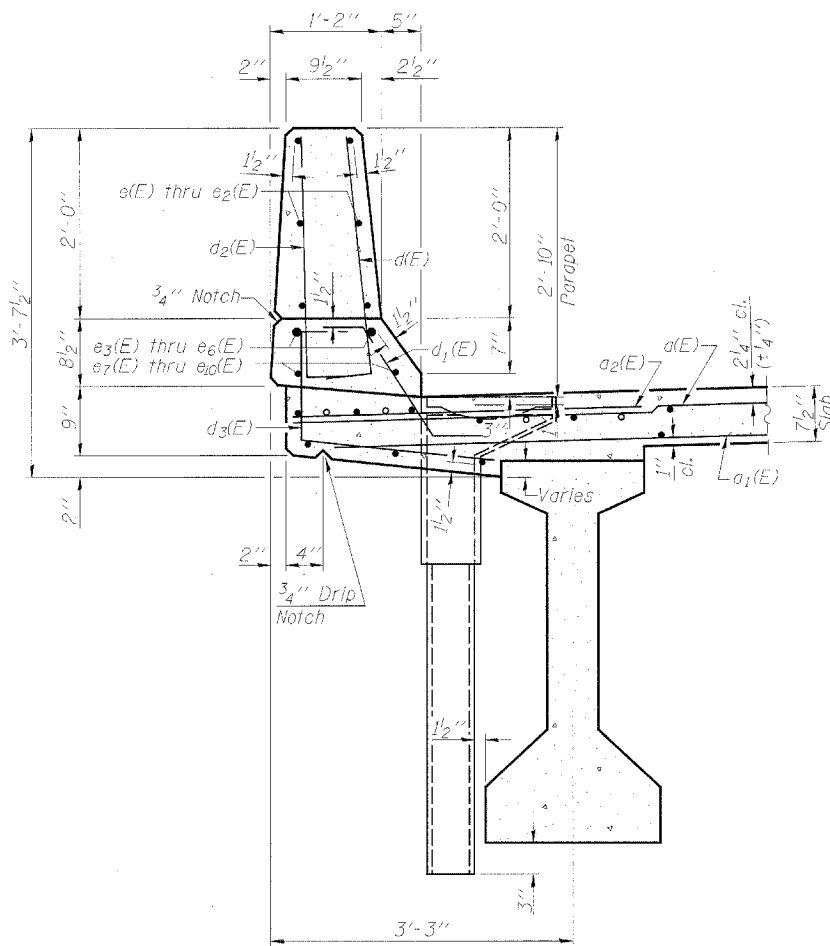
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	207
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9  
36 SHEETS

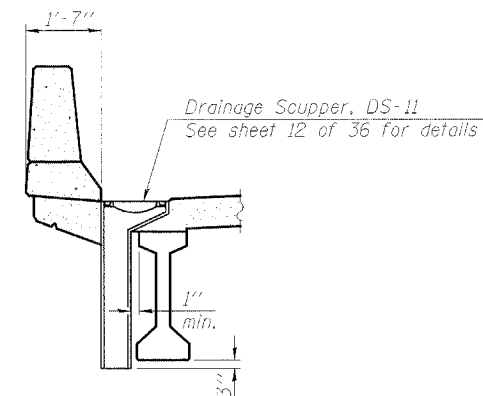
Contract #68206



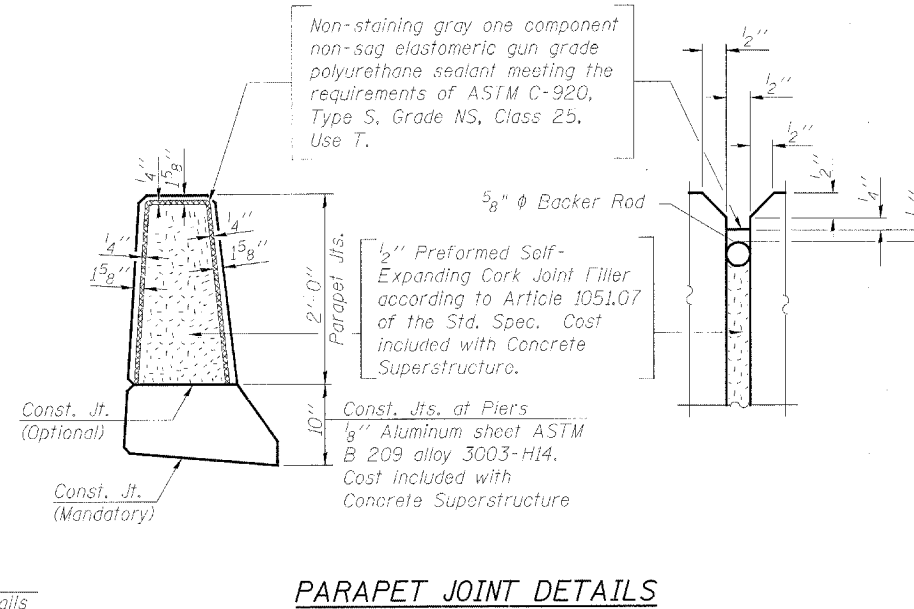
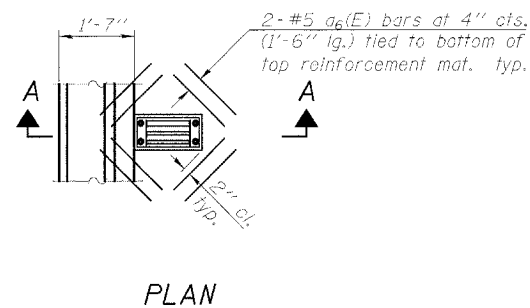
INSIDE ELEVATION OF PARAPET



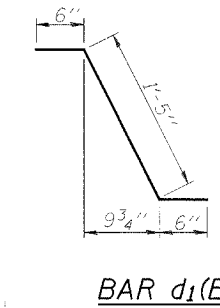
SECTION THRU PARAPET



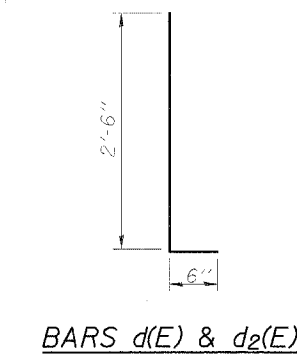
SECTION A-A



PARAPET JOINT DETAILS



BAR d<sub>1</sub>(E)



BARS d(E) & d<sub>2</sub>(E)



BAR d<sub>3</sub>(E)

SUPERSTRUCTURE  
BILL OF MATERIAL  
(ONE STRUCTURE)

Bar	No.	Size	Length	Shape
a(E)	395	#5	42'-7"	—
a <sub>1</sub> (E)	329	#5	41'-7"	—
a <sub>2</sub> (E)	780	#6	6'-0"	—
a <sub>3</sub> (E)	12	#7	53'-4"	—
a <sub>4</sub> (E)	40	#6	8'-7"	—
a <sub>5</sub> (E)	2	#6	46'-10"	—
a <sub>6</sub> (E)	16	#5	1'-6"	—
b(E)	460	#5	27'-9"	—
b <sub>1</sub> (E)	164	#6	39'-0"	—
b <sub>2</sub> (E)	396	#5	25'-6"	—
d(E)	542	#5	3'-0"	┌
d <sub>1</sub> (E)	540	#5	2'-5"	┌
d <sub>2</sub> (E)	542	#4	3'-0"	┌
d <sub>3</sub> (E)	540	#4	3'-8"	┌
e(E)	96	#4	16'-2"	—
e <sub>1</sub> (E)	48	#4	10'-8"	—
e <sub>2</sub> (E)	48	#4	17'-8"	—
e <sub>3</sub> (E)	8	#8	36'-2"	—
e <sub>4</sub> (E)	16	#8	10'-8"	—
e <sub>5</sub> (E)	8	#8	36'-5"	—
e <sub>6</sub> (E)	8	#8	39'-2"	—
e <sub>7</sub> (E)	8	#5	34'-5"	—
e <sub>8</sub> (E)	16	#5	10'-8"	—
e <sub>9</sub> (E)	8	#5	34'-6"	—
e <sub>10</sub> (E)	8	#5	37'-5"	—
m(E)	60	#4	8'-7"	—
m <sub>1</sub> (E)	20	#6	6'-10"	—
m <sub>2</sub> (E)	12	#8	5'-10"	┌
s(E)	30	#4	12'-9"	┌
s <sub>1</sub> (E)	30	#4	12'-7"	┌
x(E)	140	#6	8'-6"	┌
Reinforcement Bars, Epoxy Coated		Lbs.	88640	
Concrete Superstructure		Cu. Yds.	367.7	

Reinforcement bars designated (E) shall be epoxy coated.

MIN. BAR LAP

#5 bars = 3'-3"  
#8 bars = 6'-9"

DESIGNED	KLH
CHECKED	FMI
DRAWN	EML
CHECKED	KLH/JGC

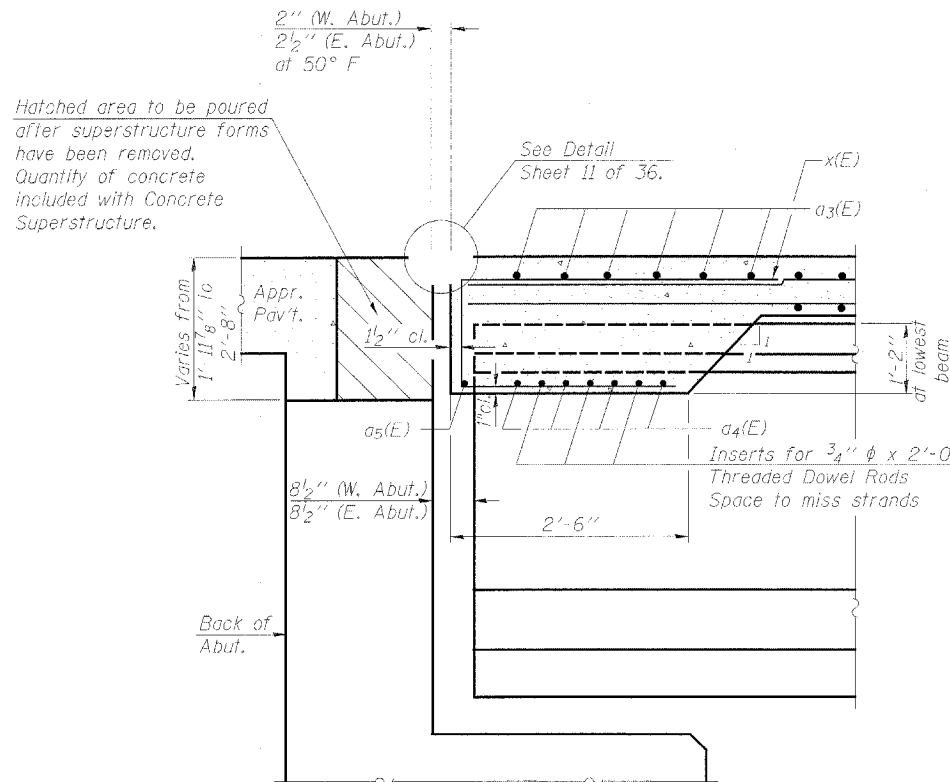
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

SUPERSTRUCTURE DETAILS II  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

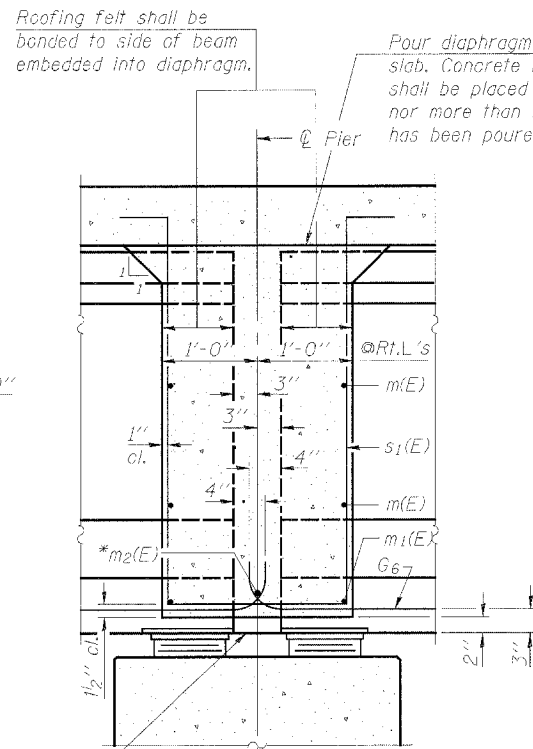
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	208	36 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

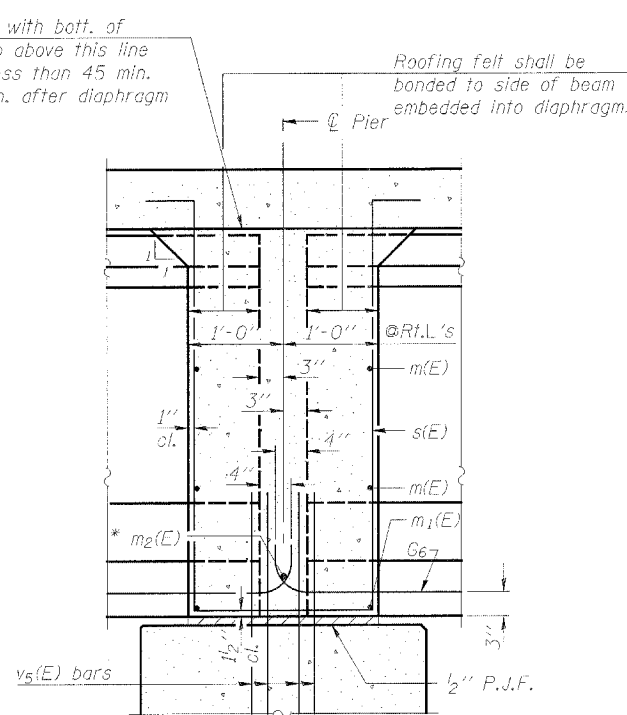
Contract #68206



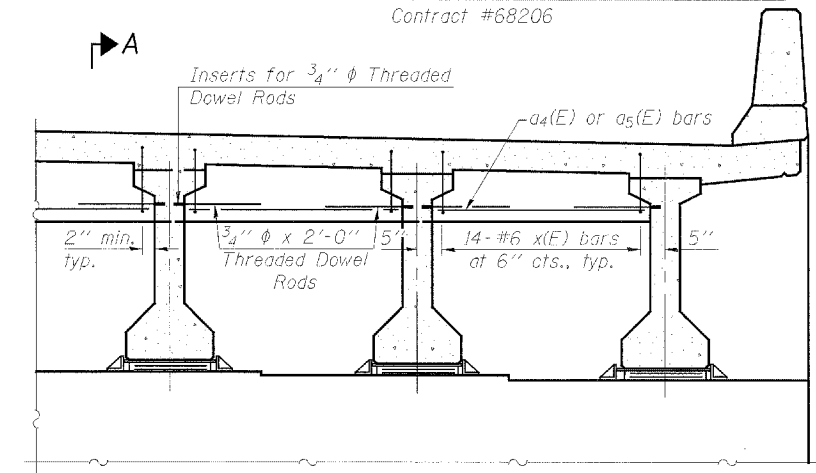
**SECTION A-A  
AT ABUTMENT**  
(at Rt. L.s)



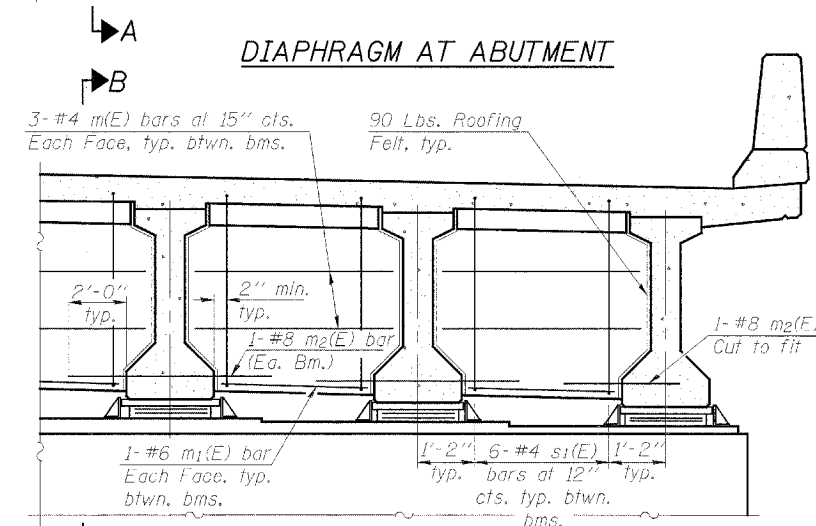
**SECTION B-B  
AT PIER**  
(Expansion)



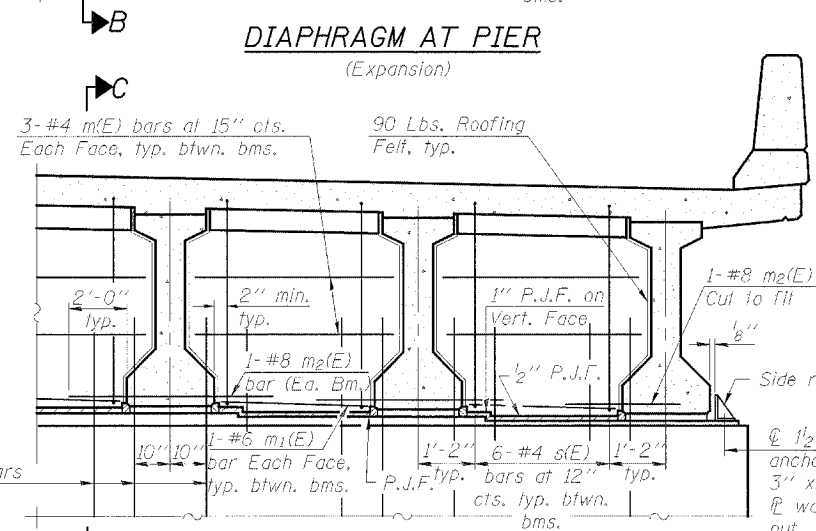
**SECTION C-C  
AT PIER**  
(Fixed)



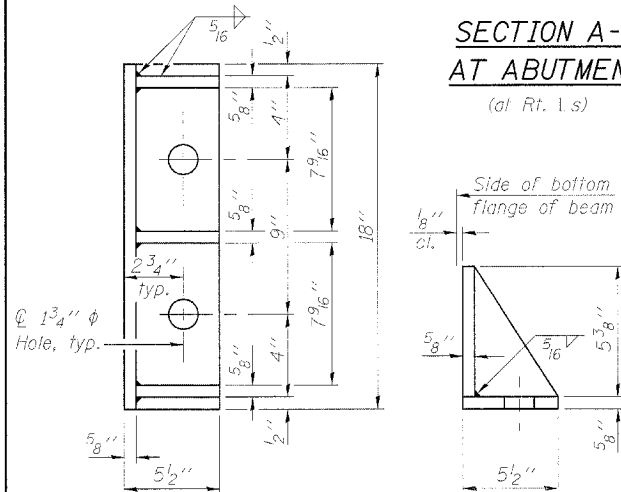
**DIAPHRAGM AT ABUTMENT**



**DIAPHRAGM AT PIER**  
(Expansion)

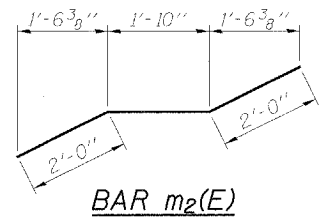


**DIAPHRAGM AT PIER**  
(Fixed)



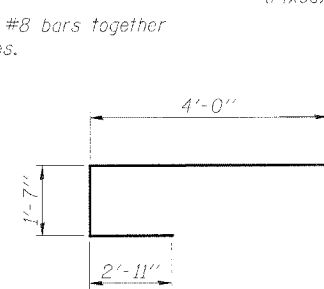
**SIDE RETAINER**

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

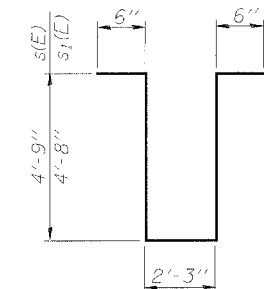


**BAR m<sub>2</sub>(E)**

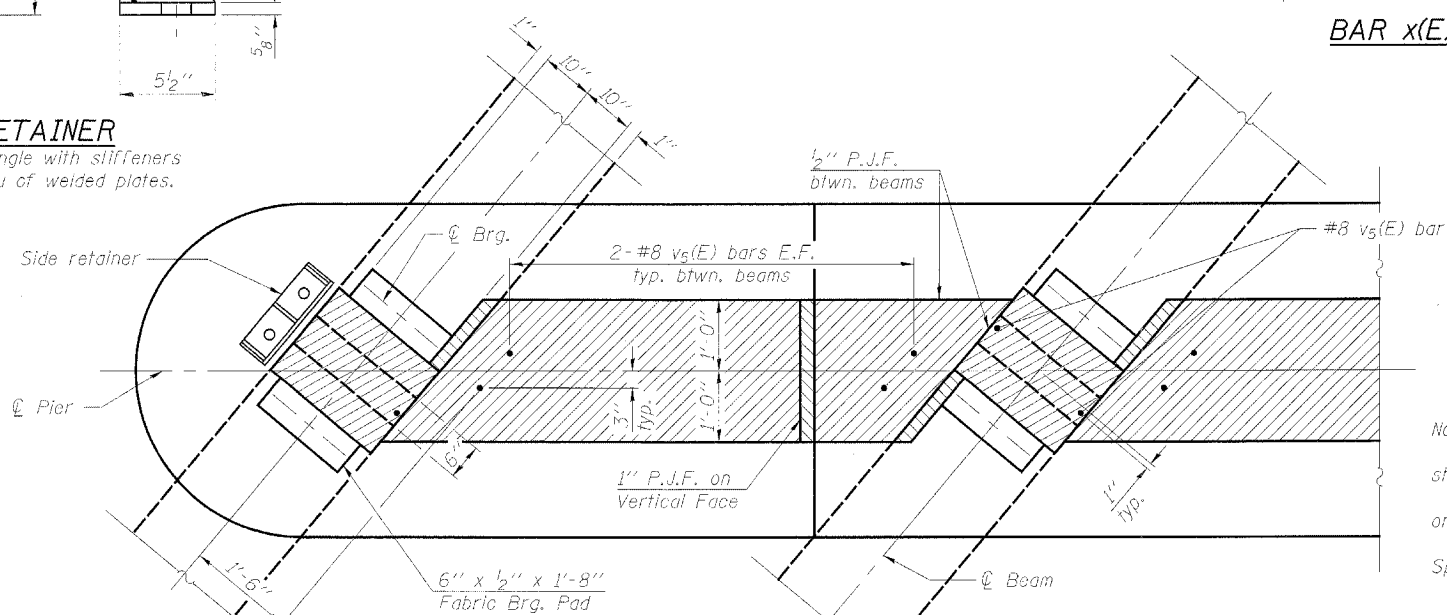
\*Tightly fasten the #8 bars together with No. 9 wire ties.



**BAR x(E)**



**BARS s(E) & s<sub>1</sub>(E)**



**BEARING PAD DETAIL**  
(Fixed Pier Only)

Notes:  
Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 36.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 36.  
The s(E), s<sub>1</sub>(E) and x(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.  
Cost of 90 Lb. roofing felt is included with Concrete Superstructure. See sheet 20 of 36 for anchor bolt details.  
Horizontal dimensions for Sec. B-B and Sec. C-C are along  $\text{\textcircled{C}}$  of beam unless otherwise noted.  
The v<sub>5</sub>(E) bars are billed with substructure on sheets 27 and 28 of 36.

DESIGNED	KLH
CHECKED	FMI
DRAWN	KB/EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**SUPERSTRUCTURE DETAILS III**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATE SHEETS	SHEET NO.	SHEET NO. 11 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	209	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

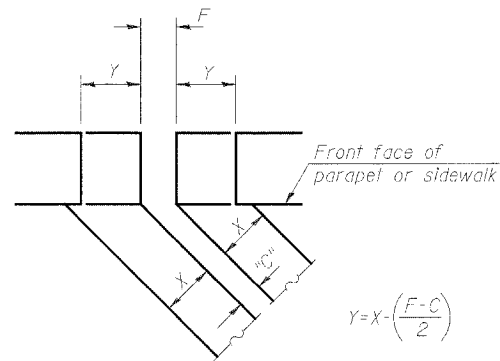
**INSTALLATION NOTES**

- Install continuous seal in roadway, parapet, curb, and sidewalk.
- Install anchor blocks as indicated.

Note A:  
Maximum spacing of anchor bolts shall be 12" centers.

**SKREW LIMITATIONS**

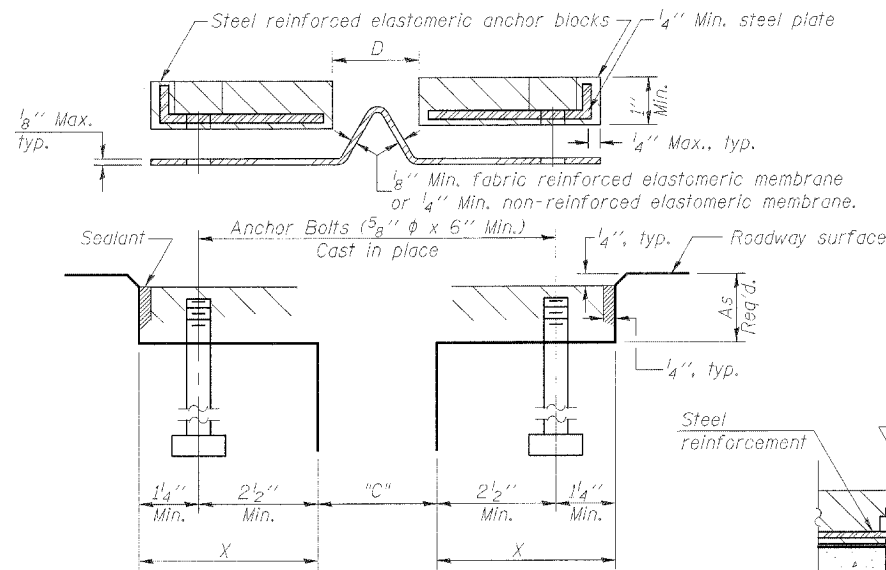
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



$$Y = X \cdot \left( \frac{F - C}{2} \right)$$

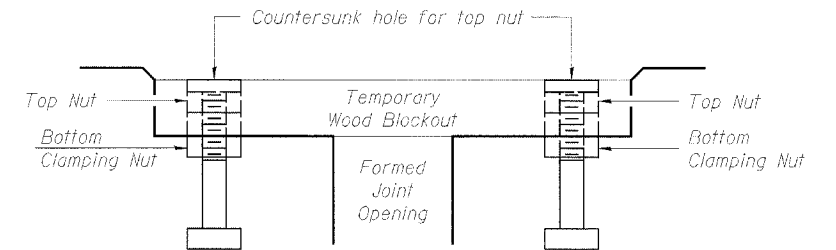
For dimension "F" see sheet 8 of 36.

**FORMING BLOCKOUT SKETCH**



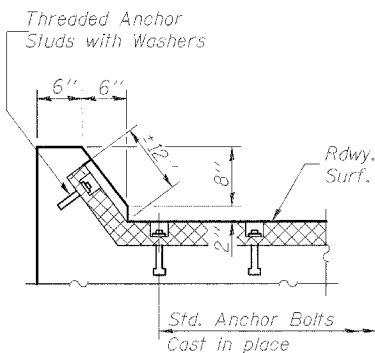
**CROSS SECTION**

**ANCHOR BLOCK WITH ASPHALT SURFACE**

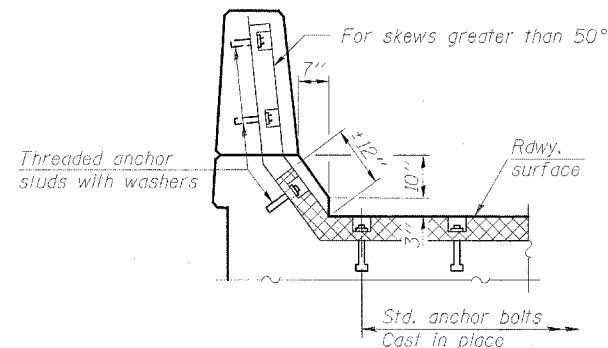


Note:  
Stud needs to be threaded lower to allow for use of clamping nut.

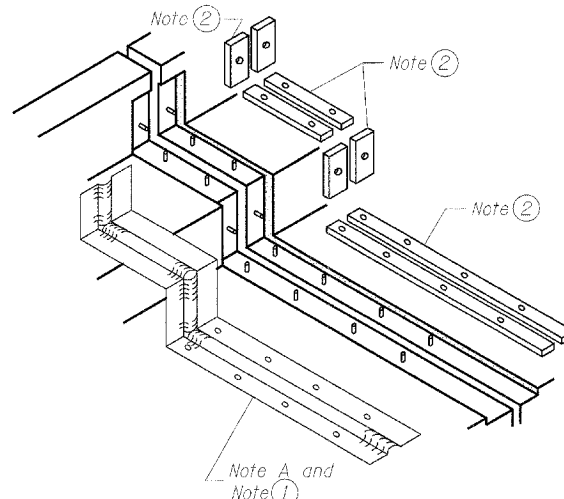
Anchor studs should be stainless  
**RECOMMENDED BLOCKOUT DETAIL**



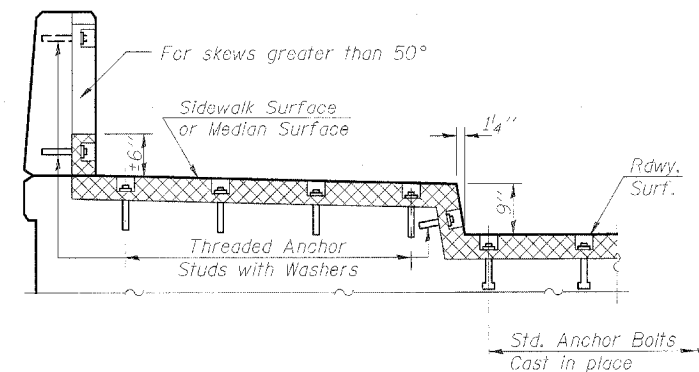
**AT CURB**



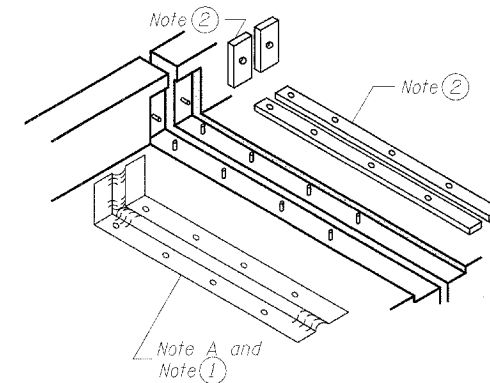
**AT PARAPET**



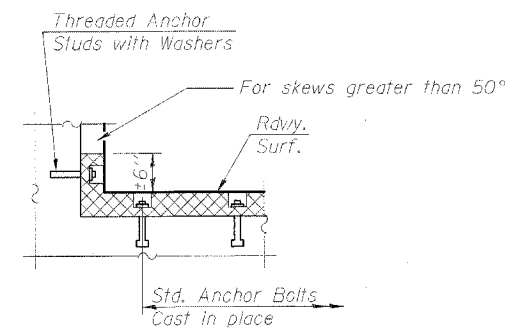
**AT SIDEWALK OR MEDIAN**



**AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS**



**AT WALL**



**AT WALL**

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KLH
EJ-CS	

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

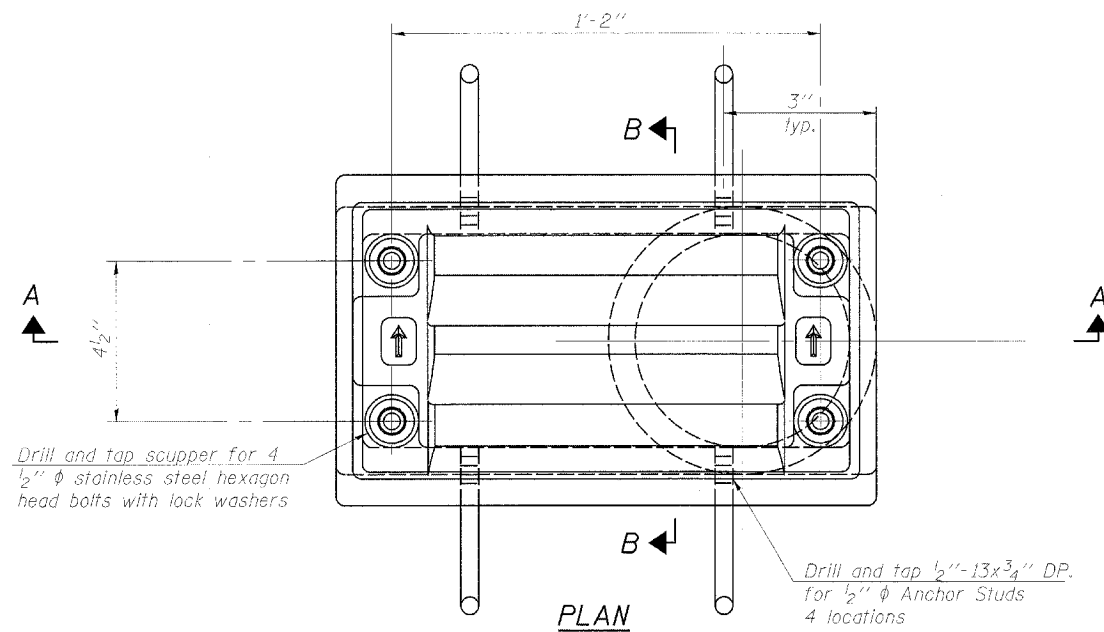
9-01-03

**CONTINUOUS SEAL TYPE  
NEOPRENE EXPANSION JOINTS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)**

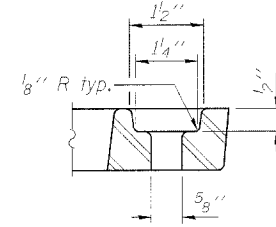
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
F.A.P. 315	34-6, 55-1	HANCOCK	433	210	36 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

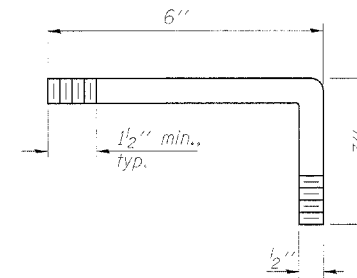
Contract #68206



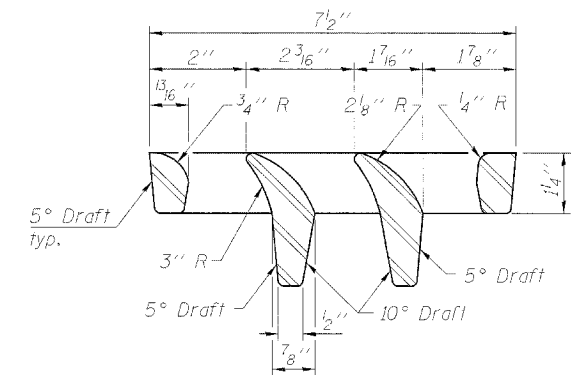
PLAN



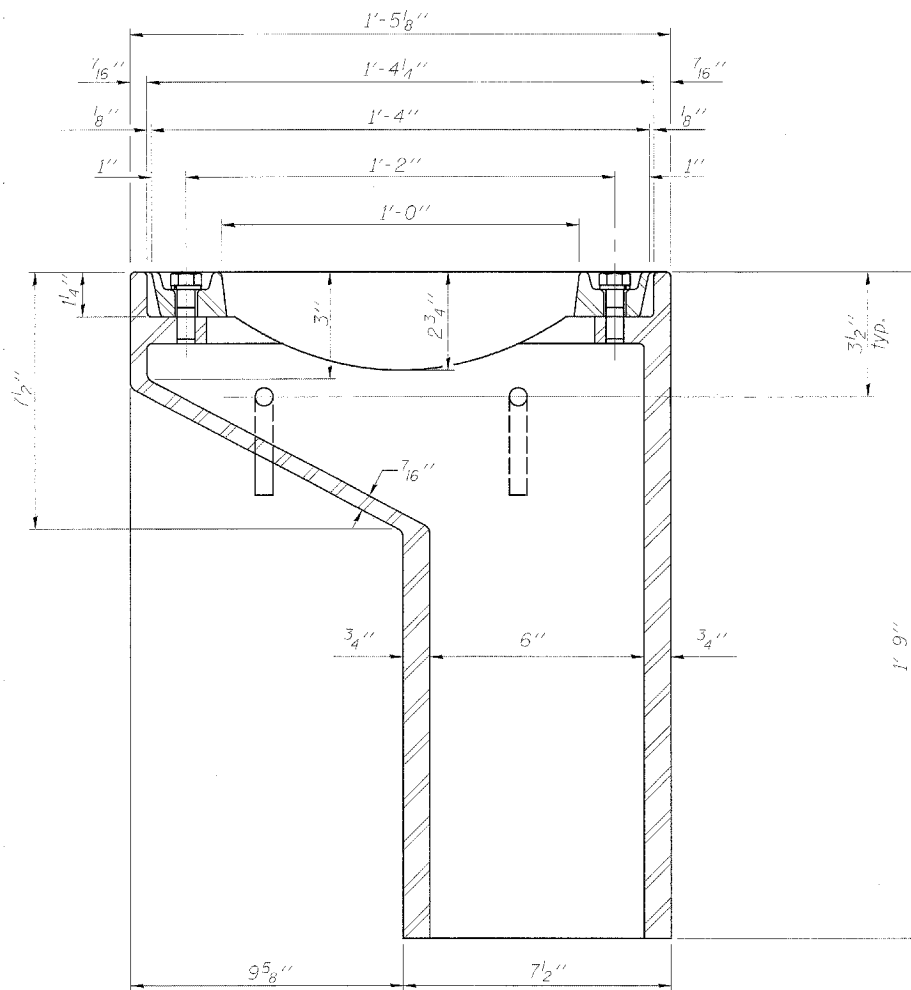
BOLT HOLE DETAIL



ANCHOR STUD DETAIL

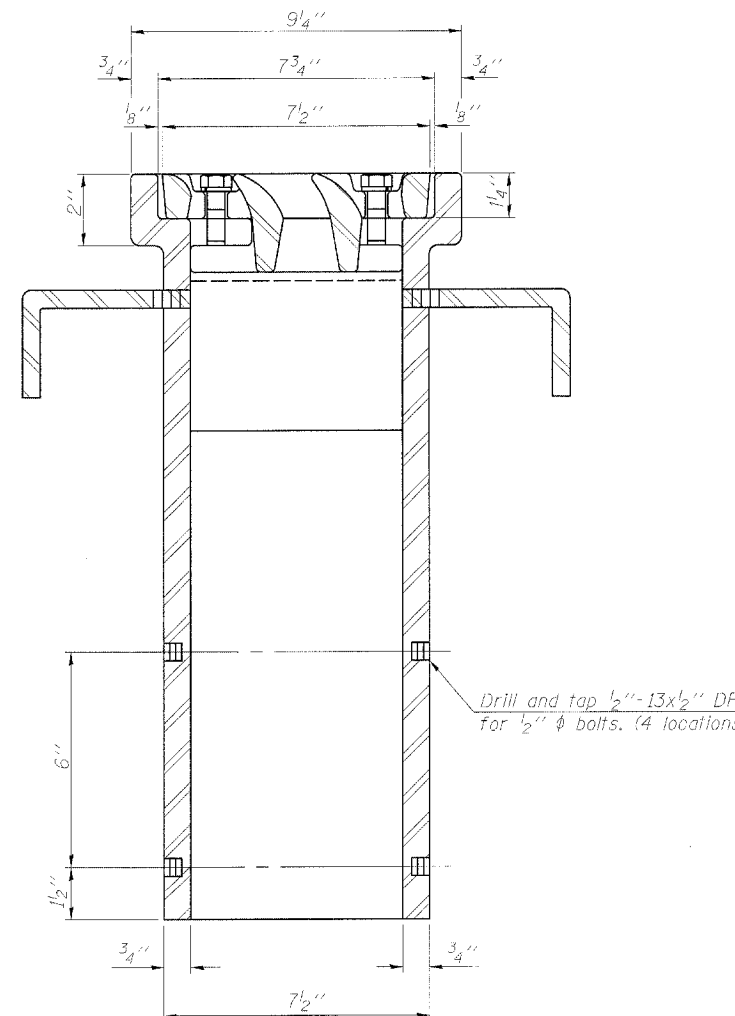


VANE GRATE DETAIL



SECTION A-A

See sheet 9 of 36 for scupper location relative to parapet.



SECTION B-B

Drill and tap 1/2"-13x1/2" DP. for 1/2" φ bolts. (4 locations)

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

BILL OF MATERIAL  
(ONE STRUCTURE)

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KLH
DS-11	

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ENGINEERS ■ ARCHITECTS ■ PLANNERS

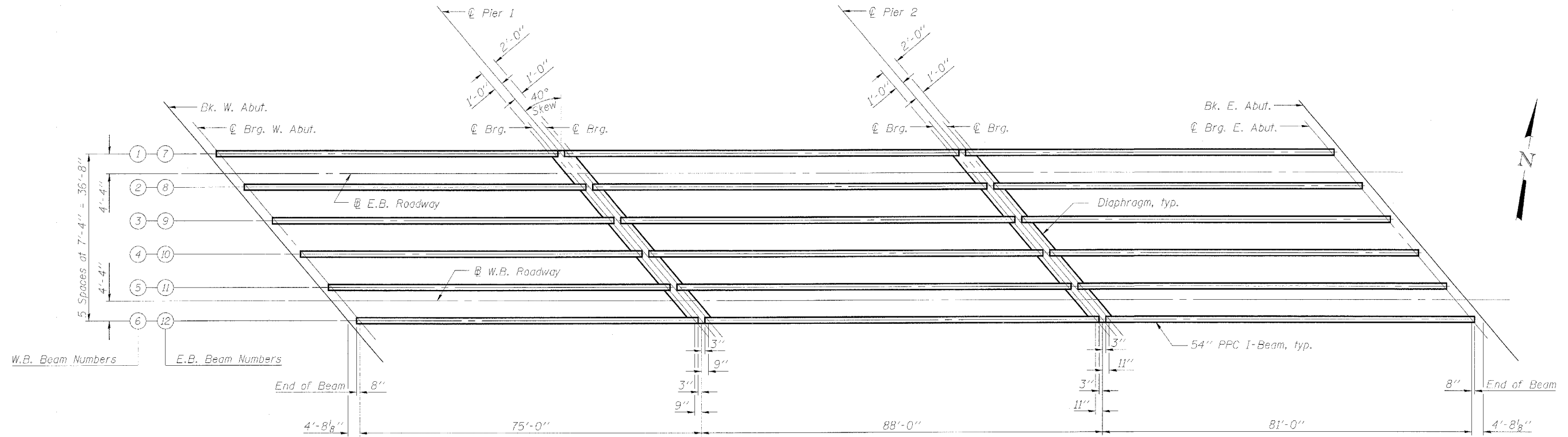
8-11-02

DRAINAGE SCUPPER, DS-11  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	211	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



**PLAN**

(E.B. Structure and W.B. Structure)

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
$I$	(in <sup>4</sup> ) 213715		213715		213715
$I'$	(in <sup>4</sup> ) 495935		495935		495935
$S_b$	(in <sup>3</sup> ) 8559		8559		8559
$S_b'$	(in <sup>3</sup> ) 12642		12642		12642
$S_t$	(in <sup>3</sup> ) 7362		7362		7362
$S_t'$	(in <sup>3</sup> ) 22269		22269		22269
DC1	(k/')		1.332		1.332
M DC1	(k)		1241.0		1025.0
DC2	(k/')	0.150	0.150	0.150	0.150
M DC2	(k)	97.4	41.9	109.2	74.4
DW	(k/')	0.333	0.333	0.333	0.333
M DW	(k)	216.5	93.1	242.6	165.3
M <sub>4</sub> + Imp	(k)	1056.6	955.2	1113.3	1105.37

$I$  and  $I'$  are the moment of inertia and composite moment of inertia of the beam section.  
 $S_b$  and  $S_b'$  are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.  
 $S_t$  and  $S_t'$  are the non-composite and composite section modulus for the top fiber of the prestressed beam.  
 $M_{Imp}$  is the moment due to live load impact on the composite section.  
DC1 is the dead load acting on the non-composite section.  
DC2 is the dead load acting on the long-term composite section.  
DW is the dead load acting on the long-term composite section due to wearing surface.

	W. Abut.	Pier 1 Span 1	Pier 1 Span 2	Pier 2 Span 2	Pier 2 Span 3	E. Abut.
R DC1 (k)	54.7	49.5	57.5	63.3	59.1	58.5
R DC2+DW (k)	13.9	21.6	21.6	22.8	22.8	15.2
R <sub>4</sub> (k)	76.4	54.3	54.3	56.1	56.1	78.8
R Imp (k)	19.3	10.9	10.9	11.2	11.2	19.8
R Total (k)	164.3	136.2	144.3	153.4	149.2	172.3

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH

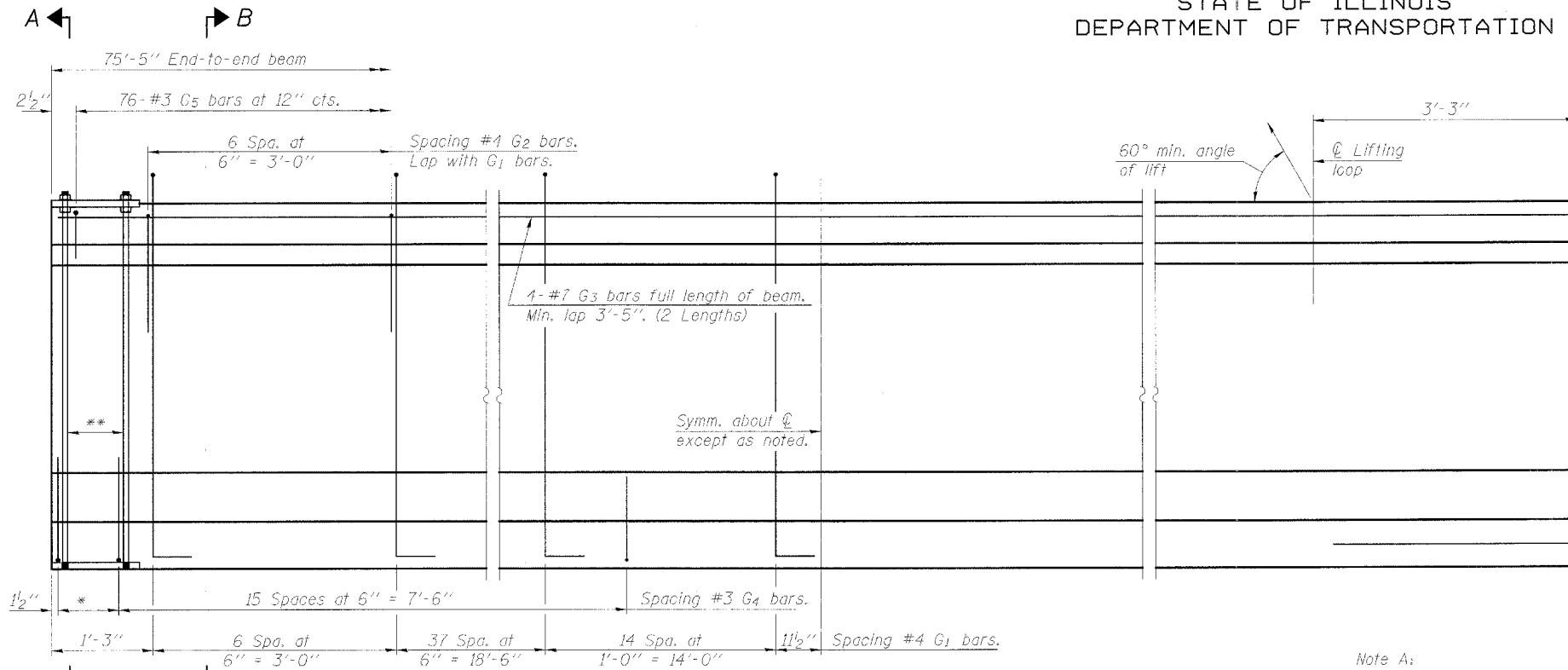
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**FRAMING PLAN**  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14
F.A.P. 315	34-6, 55-1	HANCOCK	433	212	36 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

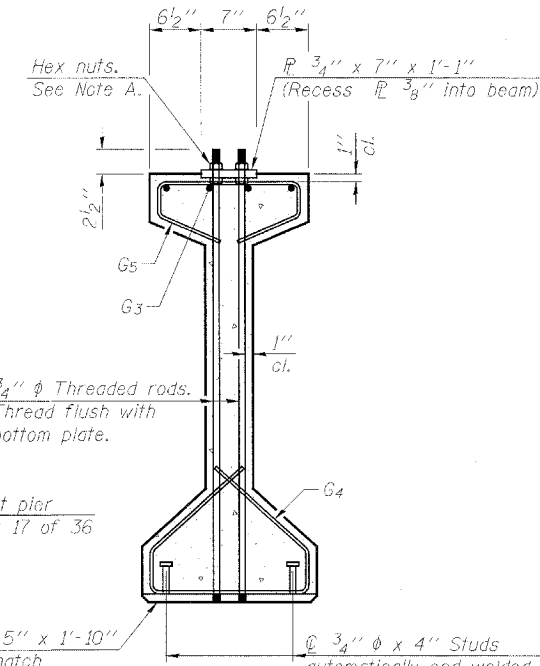
Contract #68206



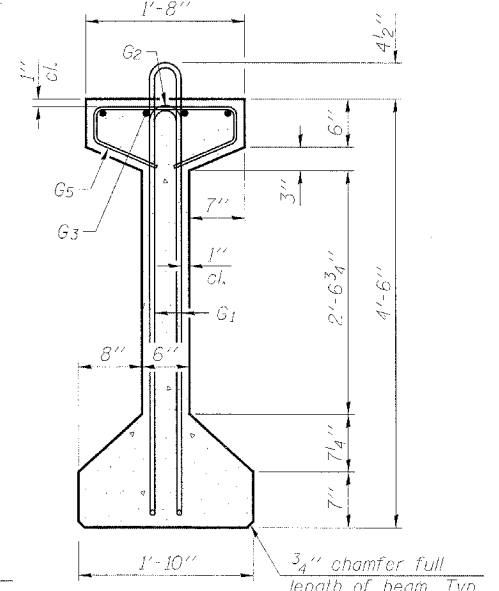
**ELEVATION OF BEAM**  
(Showing reinforcement & dimensions)

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

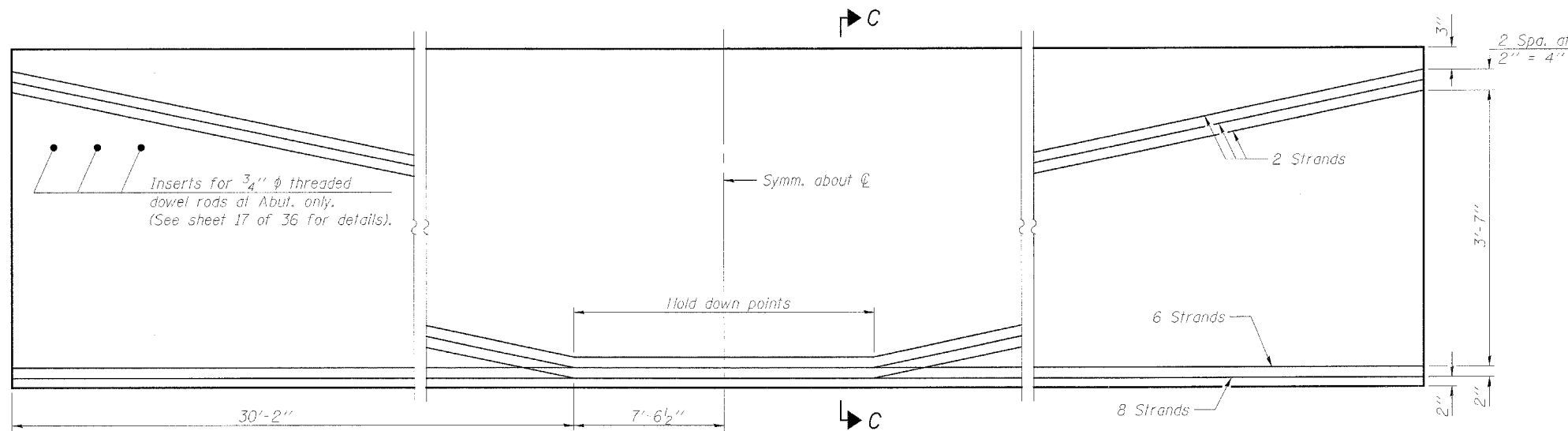
Note A:  
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



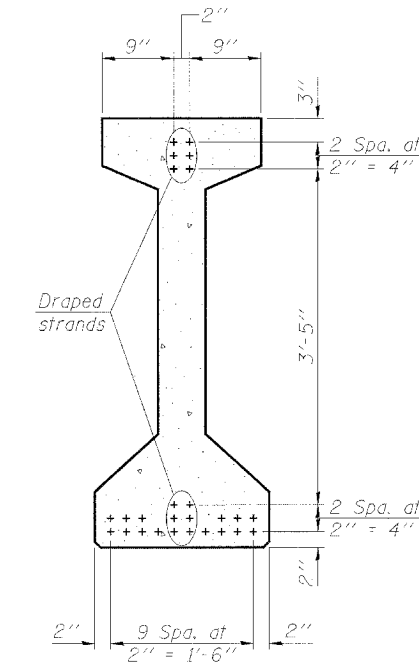
**SECTION A-A**



**SECTION B-B**



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



**SECTION C-C**

**BAR LIST  
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G <sub>1</sub>	116	#4	10'-5"	⊔
G <sub>2</sub>	14	#4	5'-4"	⊔
G <sub>3</sub>	8	#7	39'-4"	—
G <sub>4</sub>	38	#3	4'-11"	⊔
G <sub>5</sub>	76	#3	3'-5"	⊔
G <sub>6</sub>	2	#8	3'-9"	⊔

Notes:  
See sheet 17 of 36 for additional details and Bill of Material.  
Required release strength,  $f'_{ci}$ , shall be 6,000 psi.

DESIGNED	KLH
CHECKED	EML
DRAWN	KRF/EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

PI-4-54

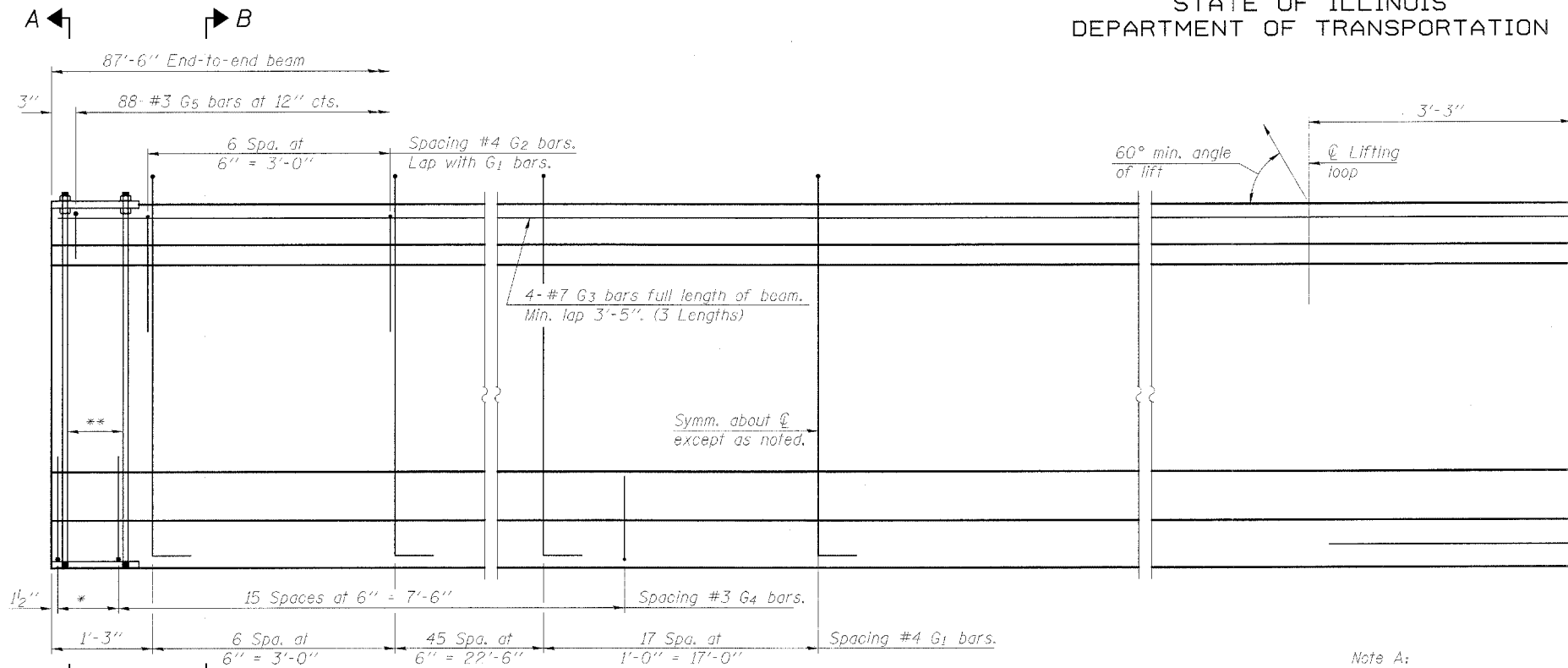
7-15-05

**54" PPC I-BEAM, SPAN 1**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	133	213
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT		

Contract #68206



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

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

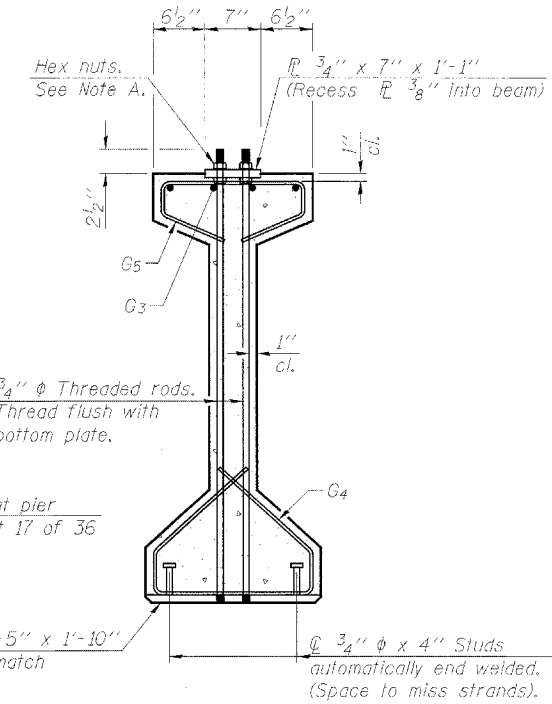
Note A:  
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

2-#8 G6 bars at pier only. (See sheet 17 of 36 for details).

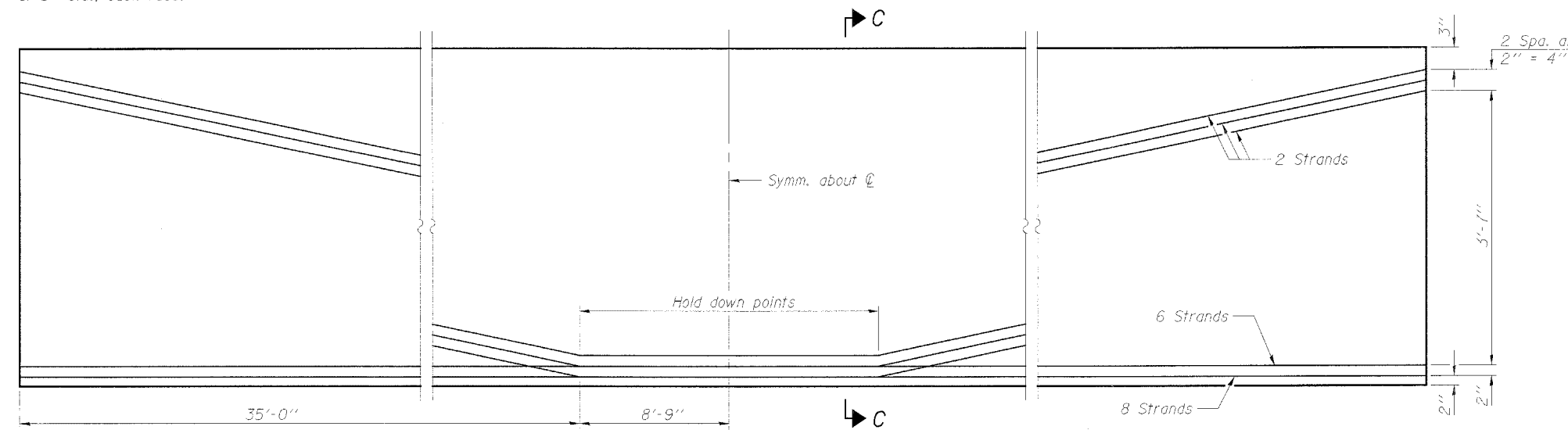
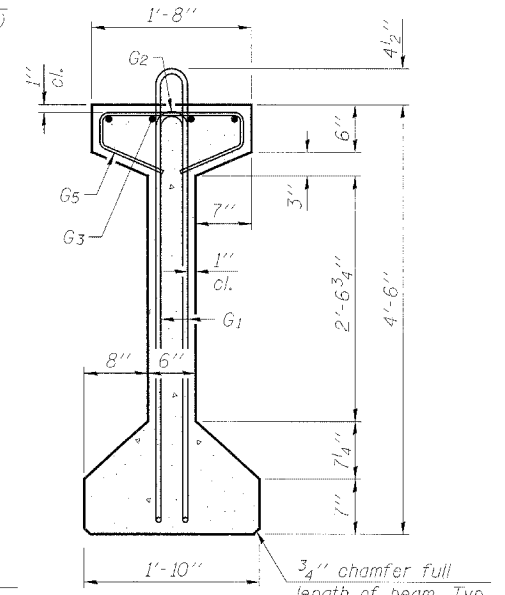
1" x 1'-5" x 1'-10" (Bevel to match chamfer).

3/4"  $\phi$  Threaded rods. Thread flush with bottom plate.

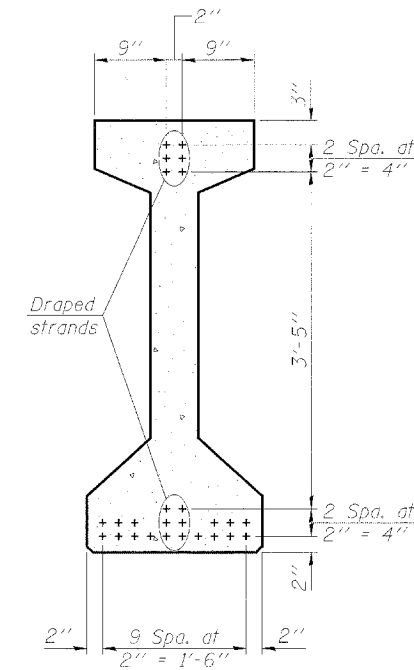
**SECTION A-A**



**SECTION B-B**



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



**SECTION C-C**

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

Bar	No.	Size	Length	Shape
G1	137	#4	10'-5"	∩L
G2	14	#4	5'-4"	∩
G3	12	#7	31'-5"	
G4	38	#3	4'-11"	∩D
G5	88	#3	3'-5"	∩
G6	4	#8	3'-9"	U

Notes:  
See sheet 17 of 36 for additional details and Bill of Material.  
Required release strength, f'cl, shall be 6,000 psi.

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF/EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

PI-4-54

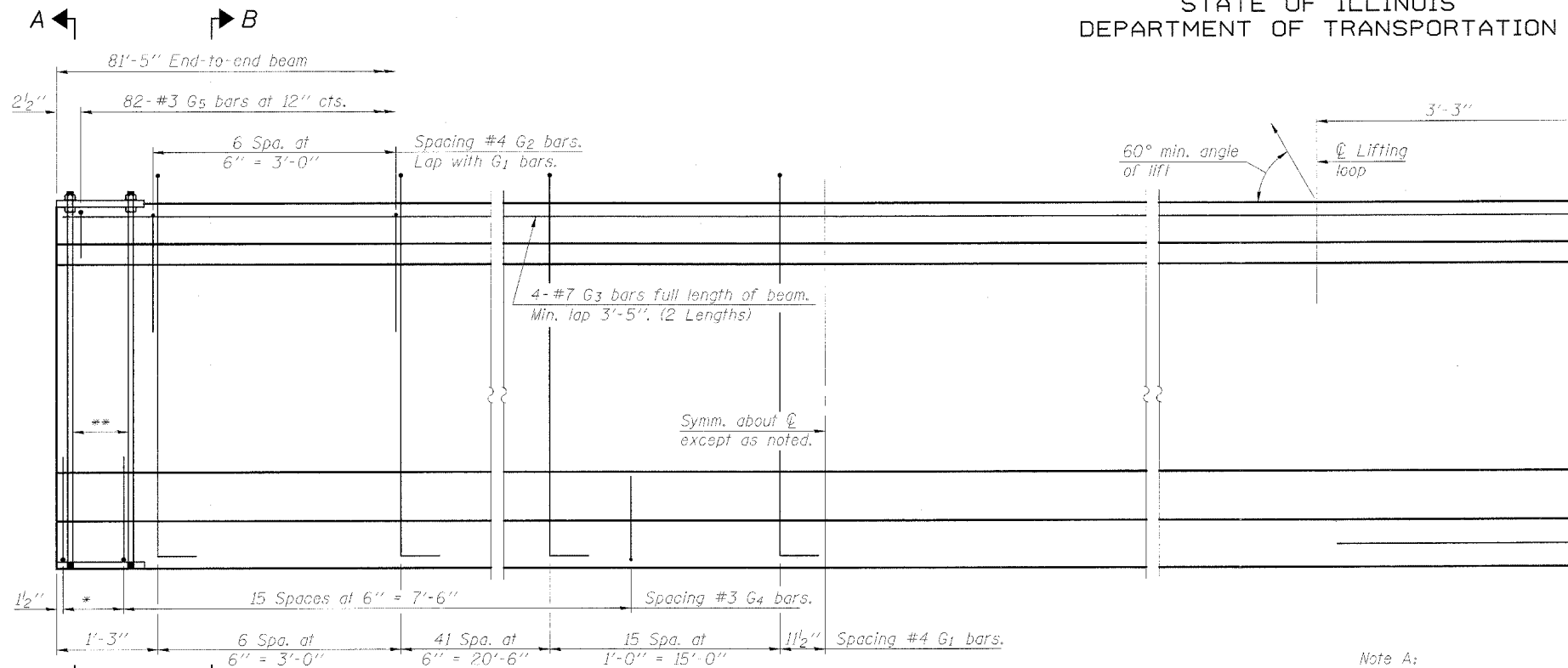
7-15-05

**54" PPC I-BEAM, SPAN 2**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16 36 SHEETS
F.A.P. 315	54-6, 55-1	HANCOCK	433	214	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



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

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

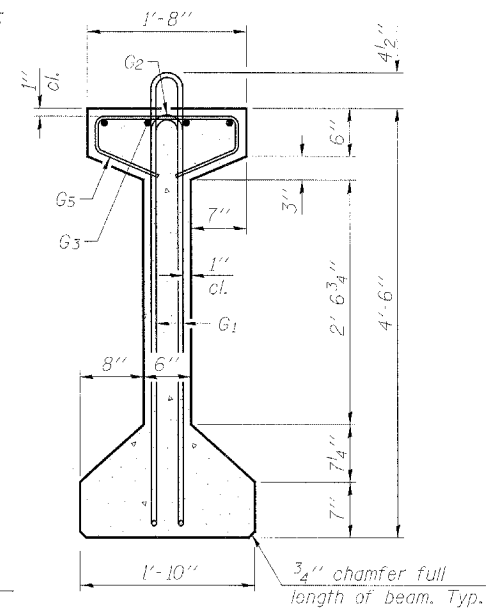
Note A:  
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

2-#8 G6 bars at pier only. (See sheet 17 of 36 for details).

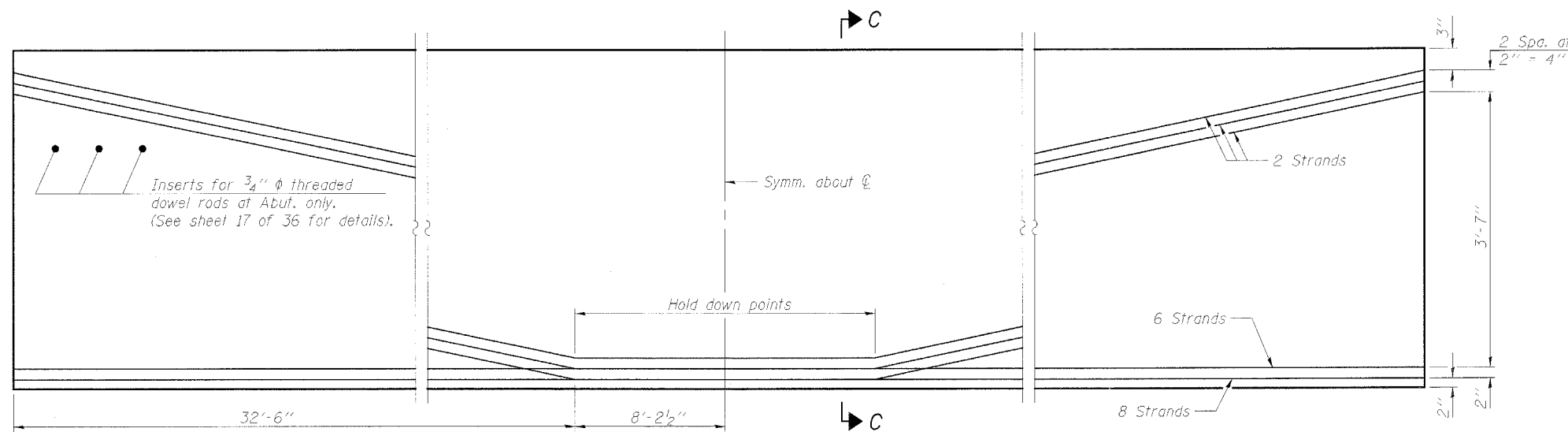
1" x 1'-5" x 1'-10" (Bevel to match chamfer).

3/4"  $\phi$  x 4" Studs automatically end welded. (Space to miss strands).

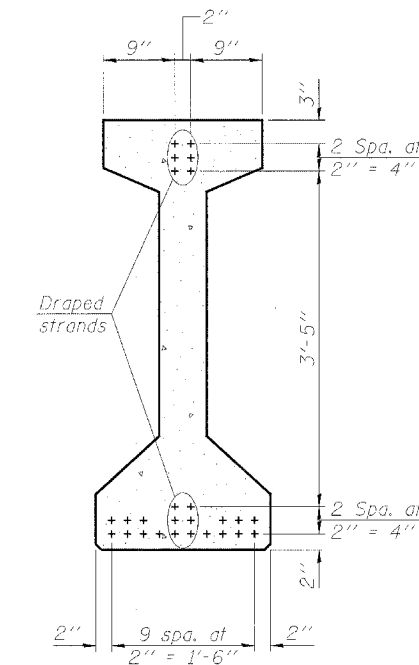
**SECTION A-A**



**SECTION B-B**



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



**SECTION C-C**

**BAR LIST  
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G1	126	#4	10'-5"	NL
G2	14	#4	5'-4"	n
G3	8	#7	42'-4"	—
G4	38	#3	4'-11"	—
G5	82	#3	3'-5"	—
G6	2	#8	3'-9"	—

Notes:  
See sheet 17 of 36 for additional details and Bill of Material.  
Required release strength,  $f'_{ci}$ , shall be 6,000 psi.

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF/EML
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

PI-4-54

7-15-05

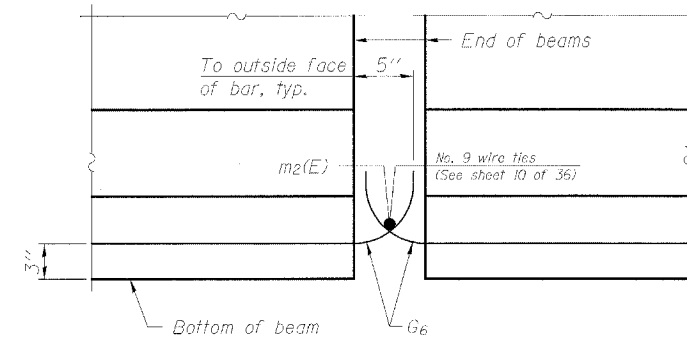
54" PPC I-BEAM, SPAN 3  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

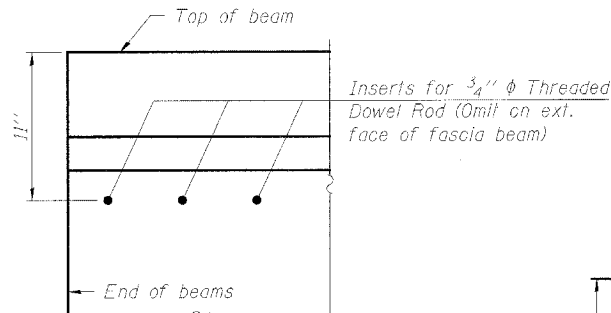
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	215
FED. ROAD DIST. NO. 7	DIST. NO.	FED. AID PROJECT-		

SHEET NO. 17  
36 SHEETS

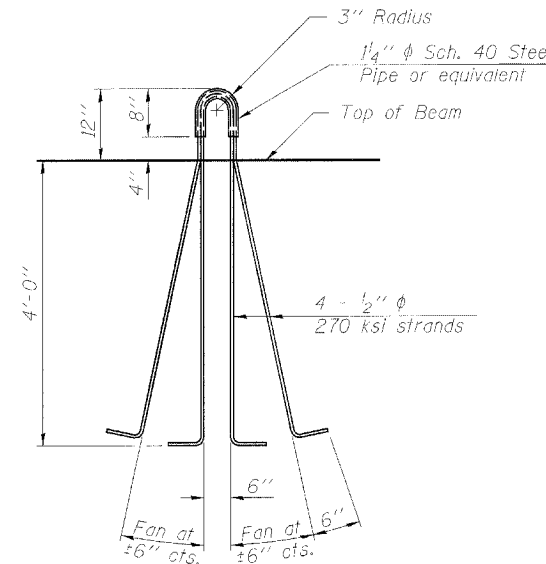
Contract #68206



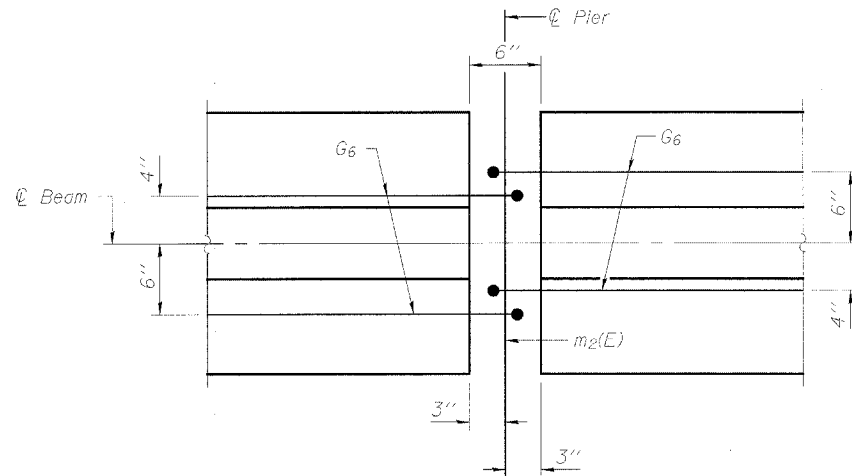
ELEVATION OF BEAM AT PIER



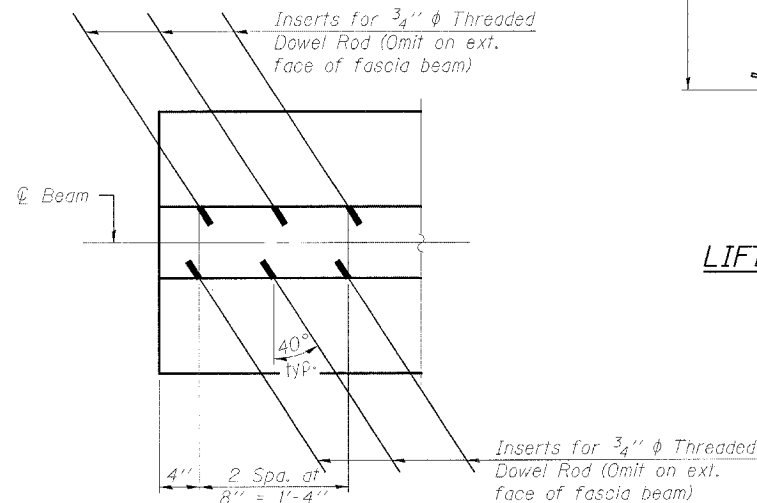
ELEVATION OF BEAM AT ABUT.



LIFTING LOOP DETAIL



PLAN OF BEAM AT PIER



PLAN OF BEAM AT ABUT.

**NOTES**

Inserts for 3/4"  $\phi$  threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, 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.

Non-prestressing steel shall conform to AASHTO designation M-31 or M-322, Grade 60.

A minimum 2 1/2"  $\phi$  lifting pin shall be used to engage the lifting loops during handling.

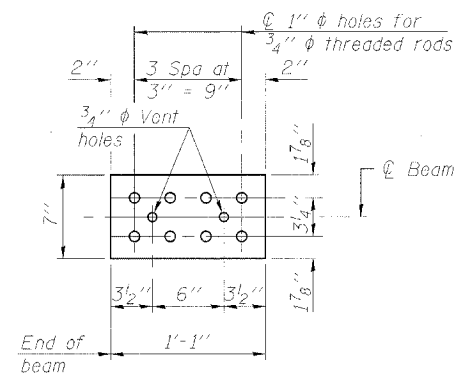
Reinforcement bars designated (E) shall be epoxy coated.

Cut G6 bars when necessary to maintain 1/2" clearance.

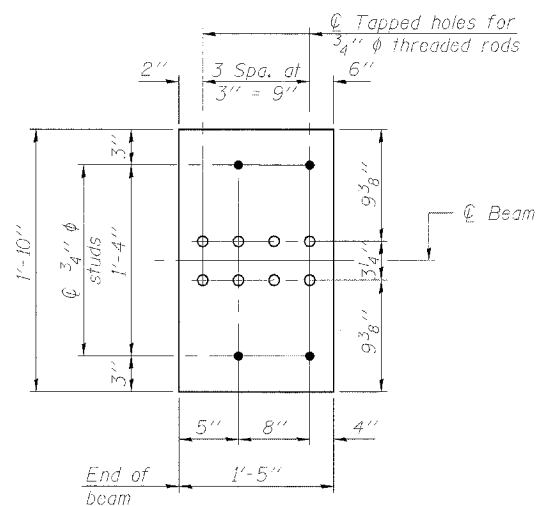
The bottom plates and studs shall be galvanized according to AASHTO M11 and ASTM A385.

Threaded rods shall be ASTM F 1554 Grade 55.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 54 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

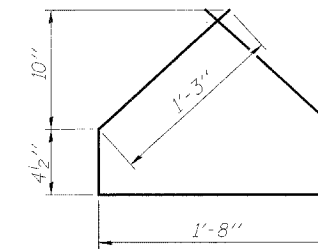


TOP PLATE

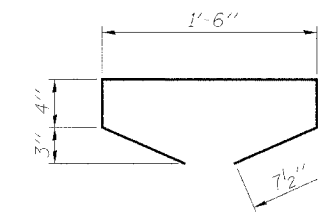


BOTTOM PLATE

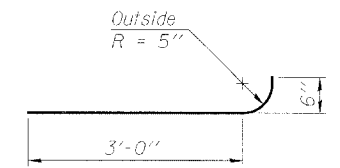
See bearing details for pin/le hole locations when required.



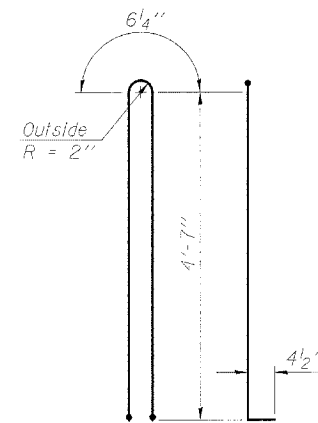
BAR G4



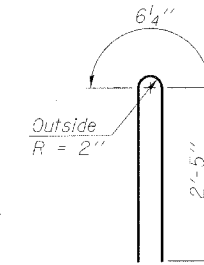
BAR G5



BAR G6



BAR G1



BAR G2

**BILL OF MATERIAL  
(ONE STRUCTURE)**

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 54"	Fl.	1466

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KLH

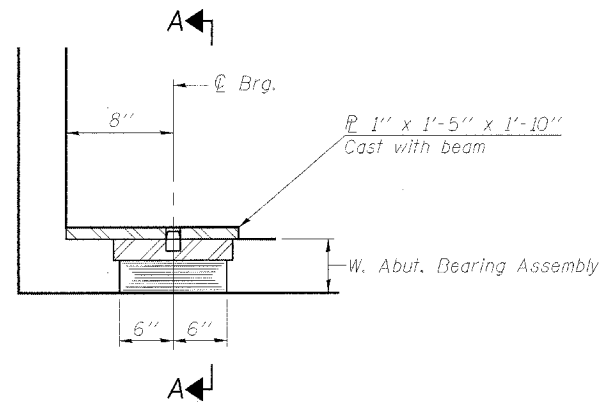
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

54" PPC I-BEAM DETAILS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

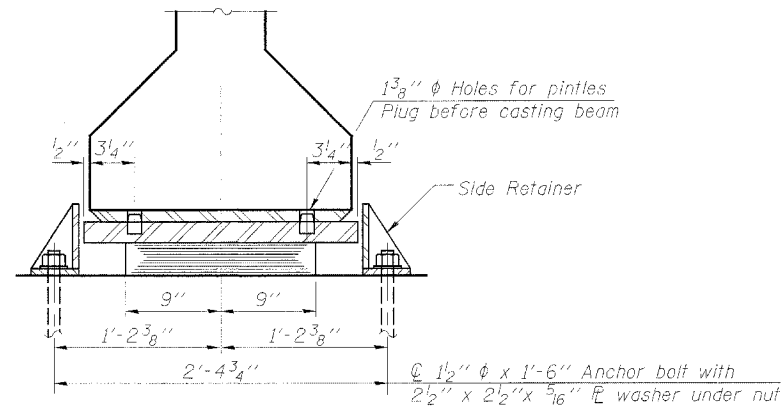
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.	SHEET NO. 18 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	216	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

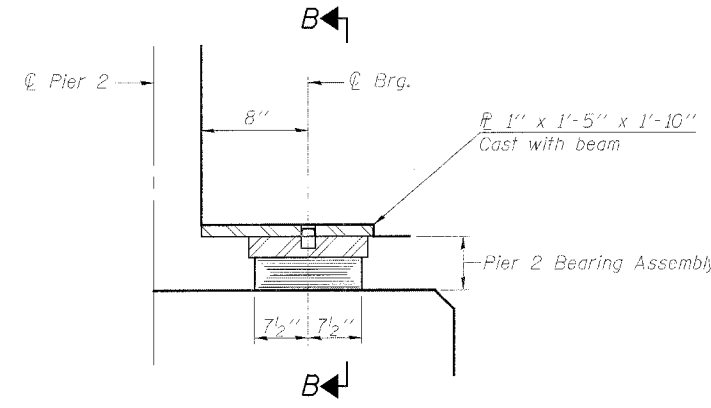
Contract #68206



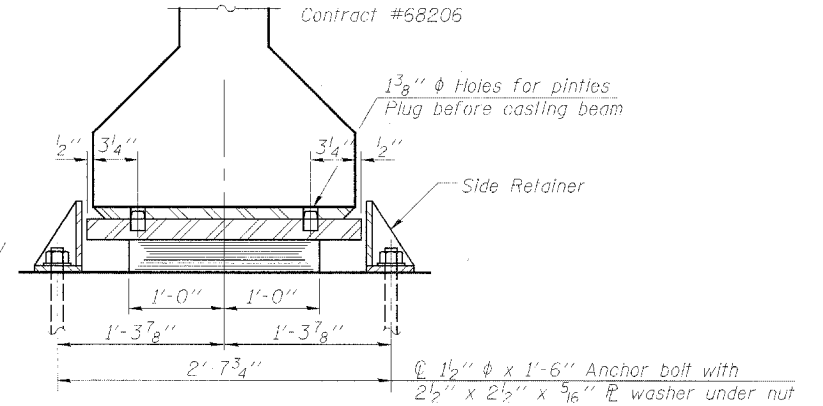
SECTION AT W. ABUT.



SECTION A-A

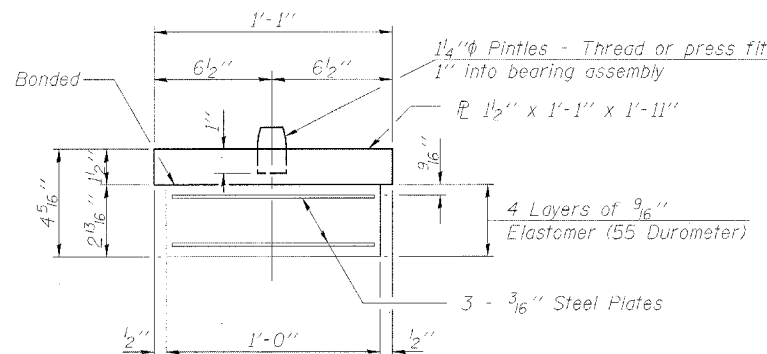


SECTION AT PIER 2

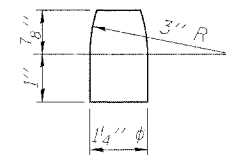


SECTION B-B

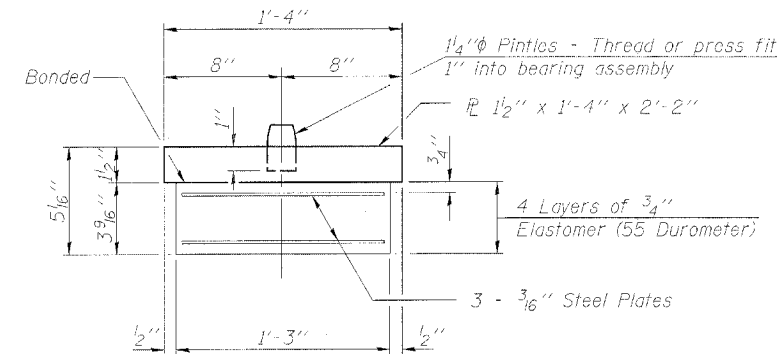
TYPE I ELASTOMERIC EXP. BRG.



W. ABUT. BEARING ASSEMBLY



PINTLE



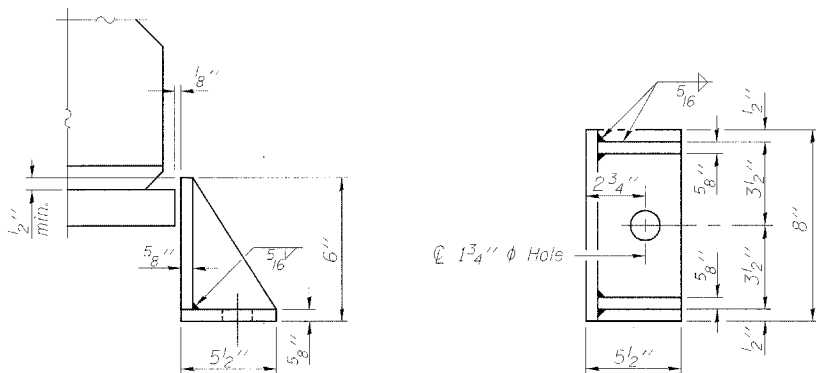
PIER 2 BEARING ASSEMBLY

Notes:

Holes at expansion bearings shall be drilled and anchor bolts grouted in place after beams have been erected.

See sheet 20 of 36 for anchor bolt installation.

See sheet 17 of 36 for additional details of plate cast with beam.



SIDE RETAINER

Cost included with Elastomeric Bearing Assembly, Type I.

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

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF/EML
CHECKED	KPH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

BILL OF MATERIAL (W. ABUT.)  
(ONE STRUCTURE)

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	6

BILL OF MATERIAL (PIER 2)  
(ONE STRUCTURE)

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12

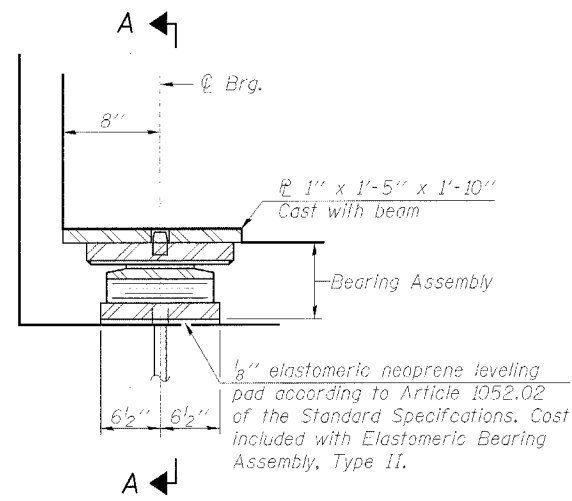
BEARING DETAILS, TYPE I  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)



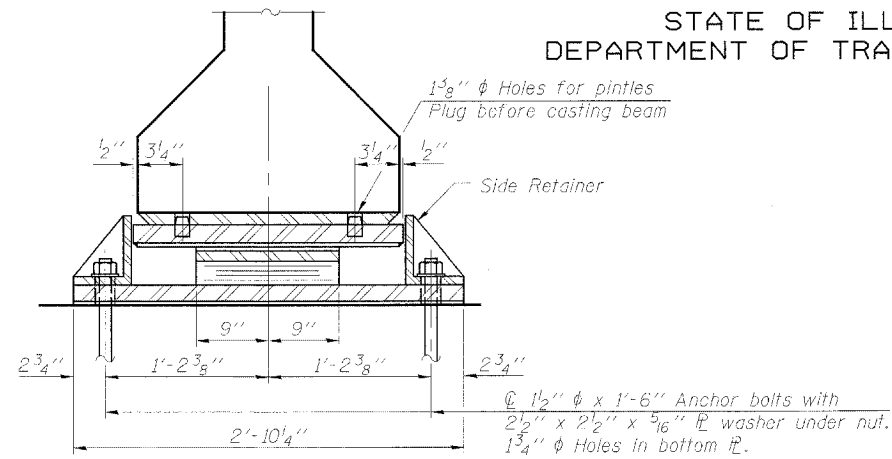
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 19 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	217	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



SECTION AT E. ABUT.



SECTION A-A

Notes:

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.

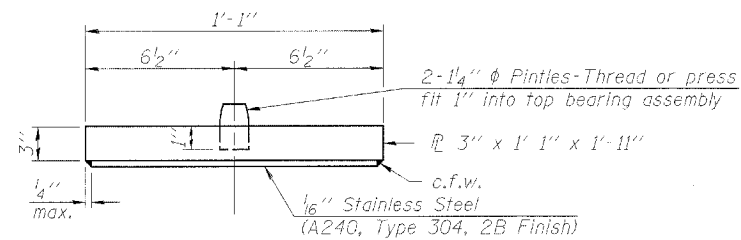
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Holes at expansion bearings shall be drilled and anchor bolts grouted in place after beams have been erected.

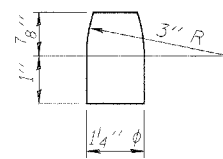
See sheet 20 of 36 for anchor bolt installation.

See sheet 17 of 36 for additional details of plate cast with beam.

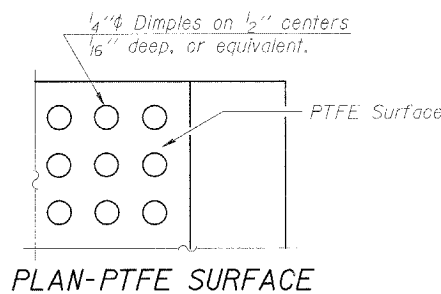
TYPE II ELASTOMERIC EXP. BRG.



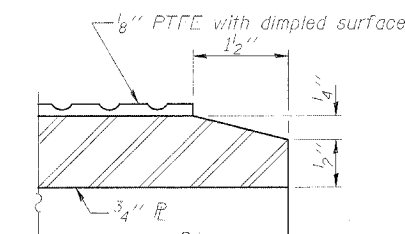
TOP BEARING ASSEMBLY



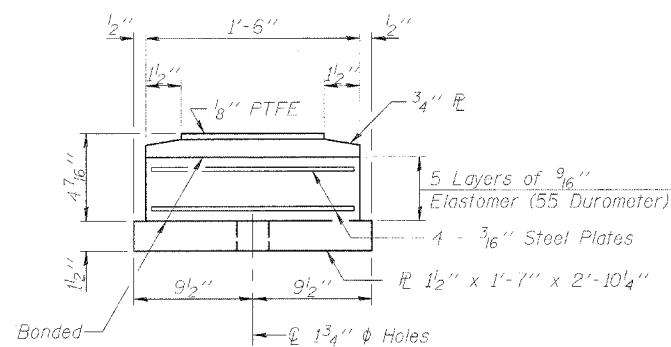
PINTLE



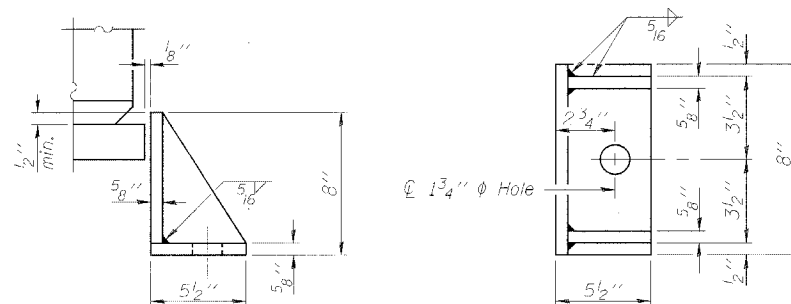
PLAN-PTFE SURFACE



SECTION THRU PTFE

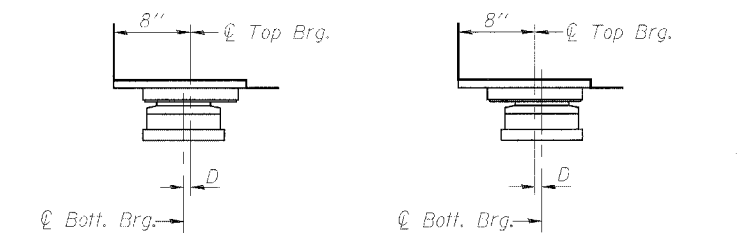


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

Cost included with Elastomeric Bearing Assembly, Type II. Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



(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.

BILL OF MATERIAL (E. ABUT.)  
(ONE STRUCTURE)

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	6

BEARING DETAILS, TYPE II  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KPH

HORNER & SHIFRIN, INC.  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

PI-2E-2

7-15-05

Contract #68206

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

**MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT**

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.  
The coil wire shall be made of any suitable soft steel wire.  
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.  
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

**GENERAL NOTES**

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.  
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.  
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

**INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT**

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

**ALTERNATE ANCHOR BOLTS**

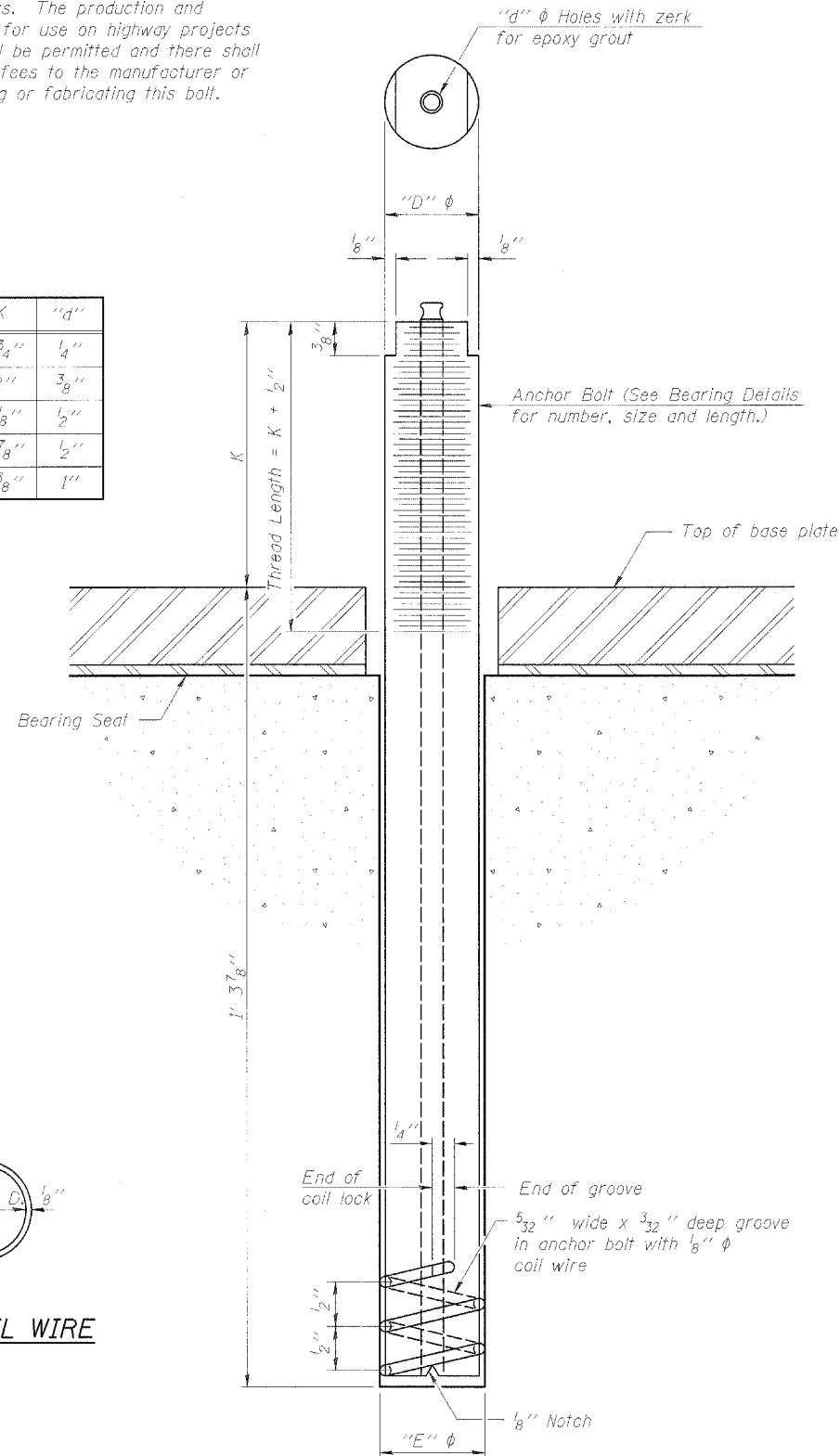
The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
  2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
W. Abut.	A307
Pier 1	A325
Pier 2	A325
E. Abut.	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 11/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



**ILLINOIS COIL-LOCK ANCHOR BOLT**

**PLAN-COIL WIRE**

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KPH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**ANCHOR BOLT DETAILS**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

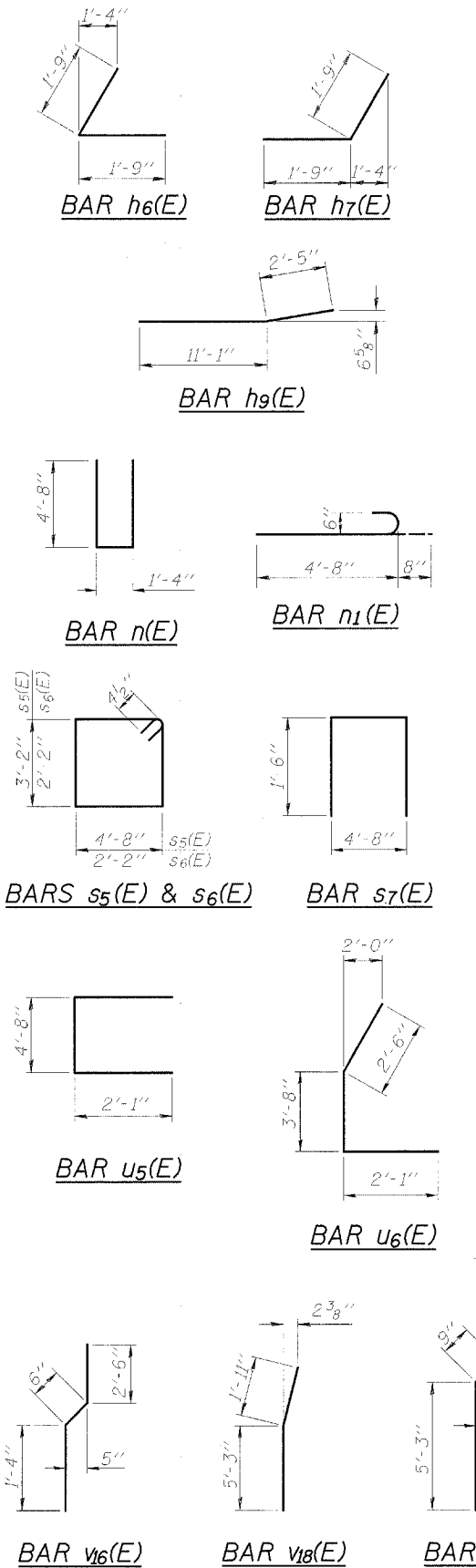
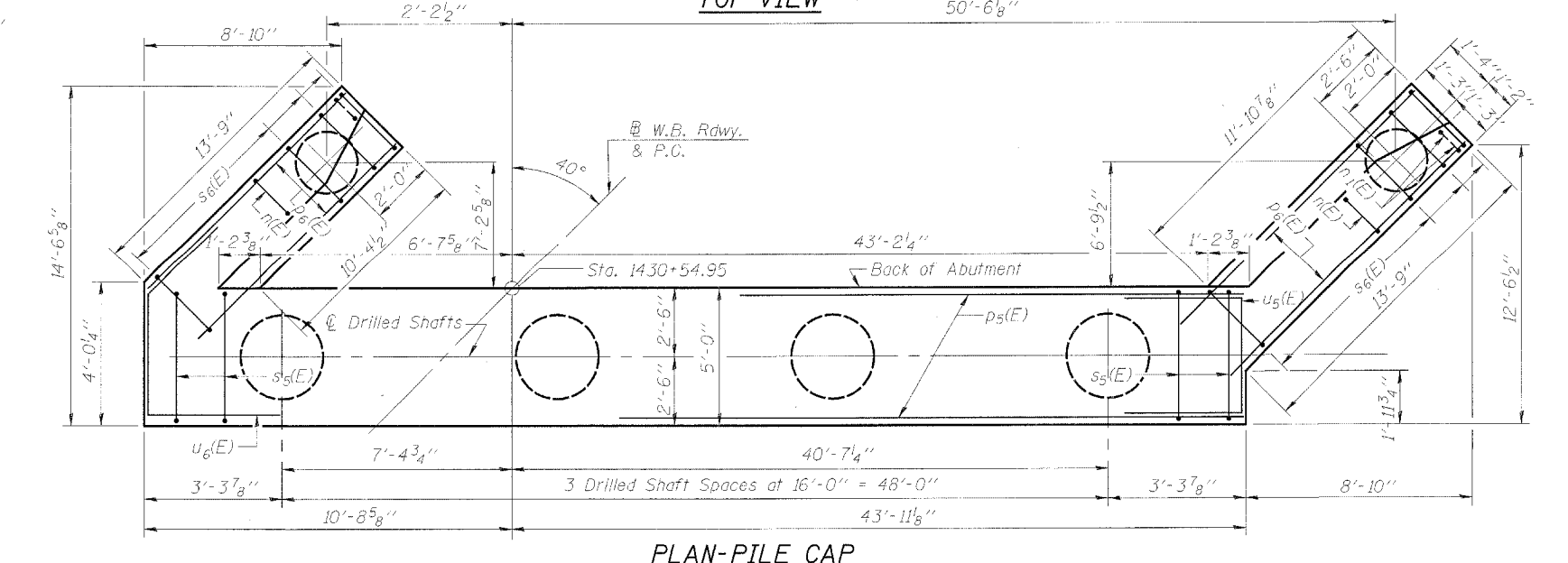
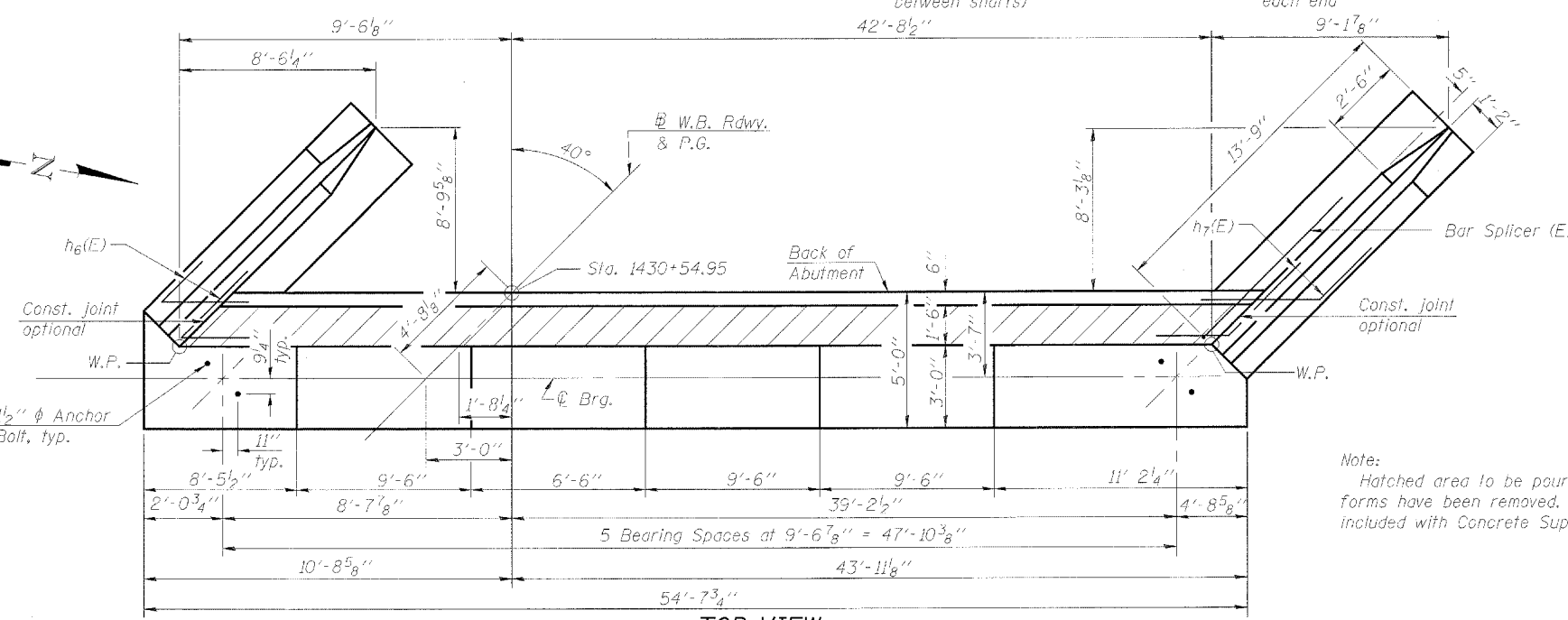
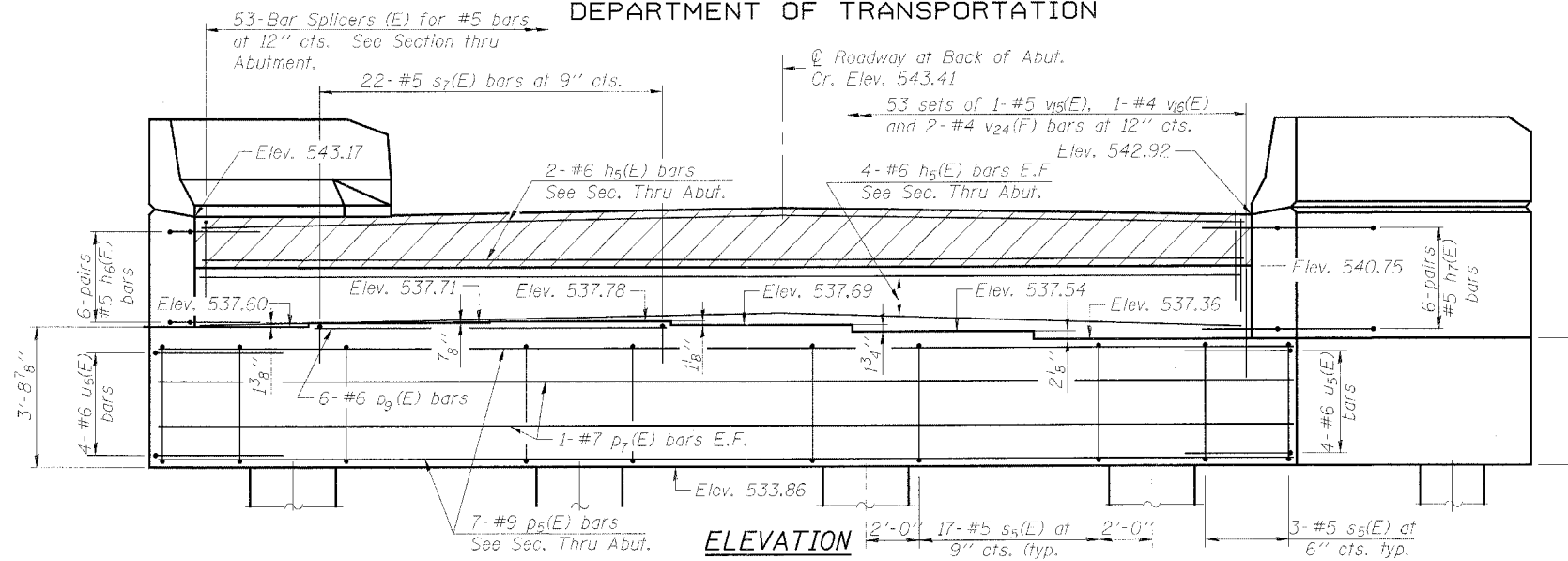
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 21
F.A.P. 315	34-6, 55-1	HANCOCK	433	219	36 SHEETS
FED. ROAD DIST. NO. 7	SUBDIVISION	FED. AID PROJECT			

Contract #68206

ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h <sub>5</sub> (E)	12	#6	52'-0"	—
h <sub>6</sub> (E)	12	#5	3'-6"	—
h <sub>7</sub> (E)	12	#5	3'-6"	—
h <sub>8</sub> (E)	24	#4	13'-5"	—
h <sub>9</sub> (E)	16	#4	13'-6"	—
n(E)	24	#6	10'-8"	—
n <sub>1</sub> (E)	12	#6	5'-4"	—
n <sub>2</sub> (E)	76	#10	7'-0"	—
n <sub>3</sub> (E)	12	#8	5'-0"	—
p <sub>5</sub> (E)	14	#9	54'-4"	—
p <sub>6</sub> (E)	12	#7	13'-6"	—
p <sub>7</sub> (E)	4	#7	54'-4"	—
p <sub>9</sub> (E)	6	#6	15'-9"	—
s <sub>5</sub> (E)	57	#5	16'-5"	□
s <sub>6</sub> (E)	28	#4	9'-5"	□
s <sub>7</sub> (E)	22	#5	7'-8"	□
* SP <sub>10</sub>	2	#4	18'-4"	▨
* SP <sub>11</sub>	4	#4	26'-10"	▨
u <sub>5</sub> (E)	4	#6	8'-10"	—
u <sub>6</sub> (E)	4	#6	8'-3"	—
v <sub>15</sub> (E)	53	#5	3'-2"	—
v <sub>16</sub> (E)	53	#4	4'-4"	—
v <sub>17</sub> (E)	28	#6	8'-2"	—
v <sub>18</sub> (E)	5	#6	7'-2"	—
v <sub>19</sub> (E)	24	#6	7'-11"	—
v <sub>20</sub>	76	#10	26'-7"	—
v <sub>21</sub>	12	#8	18'-1"	—
v <sub>24</sub> (F)	106	#4	5'-6"	—
Structure Excavation		Cu. Yd.	107	
Drilled Shaft in Soil 42" Dia.		Foot	48	
Drilled Shaft in Rock 36" Dia.		Foot	60	
Drilled Shaft in Soil 24" Dia.		Foot	24	
Drilled Shaft in Rock 18" Dia.		Foot	13	
Concrete Structures		Cu. Yd.	75.4	
Reinforcement Bars, Epoxy Coated		Pound	10660	
Reinforcement Bars		Pound	10740	
Bar Splicer (E)		Each	53	

Reinforcement Bars designated (E) shall be epoxy coated.  
For details of Bar Splicers, see sheet 31 of 36.  
Space reinforcement to miss anchor bolts.  
\* Length is height of spiral.  
Cast steps monolithically with cap.



DESIGNED	KLH
CHECKED	EML
DRAWN	JGC
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

WEST ABUTMENT DETAILS - W.B. STRUCTURE  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

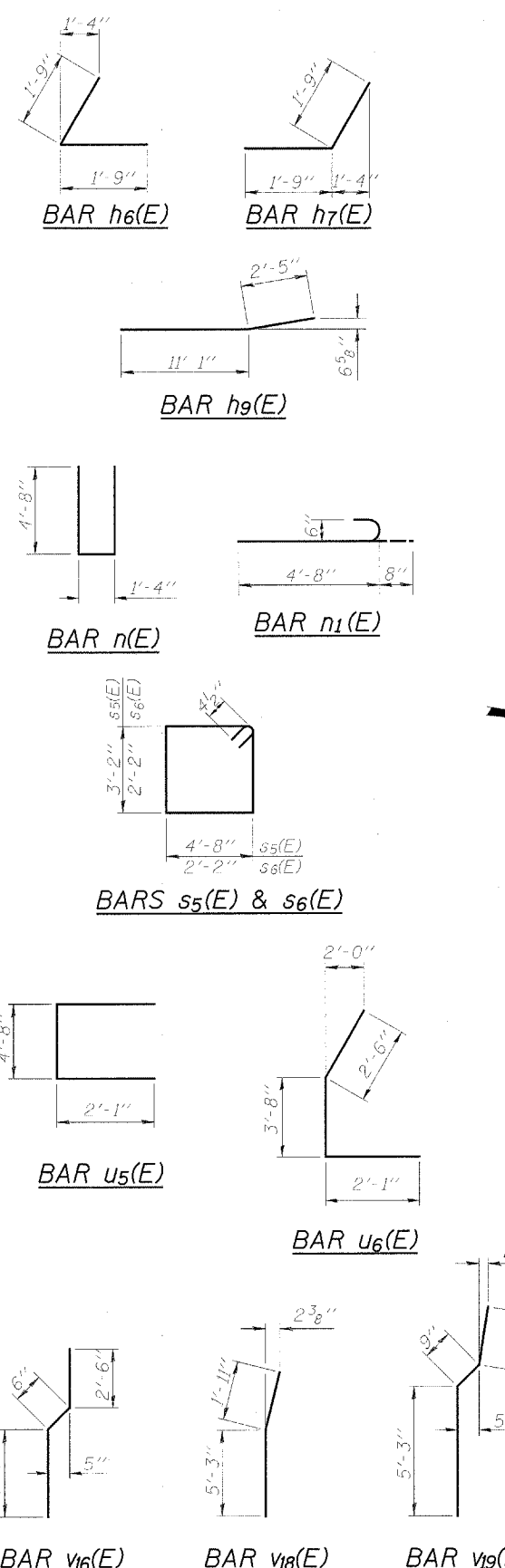
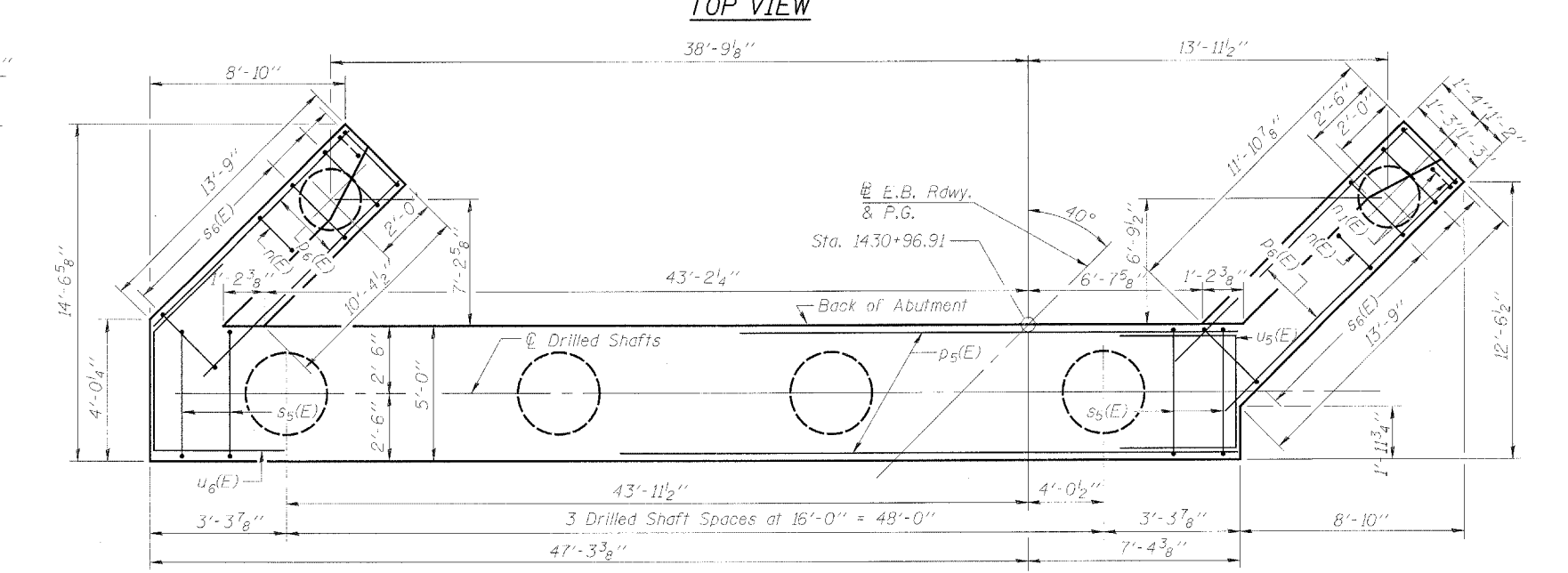
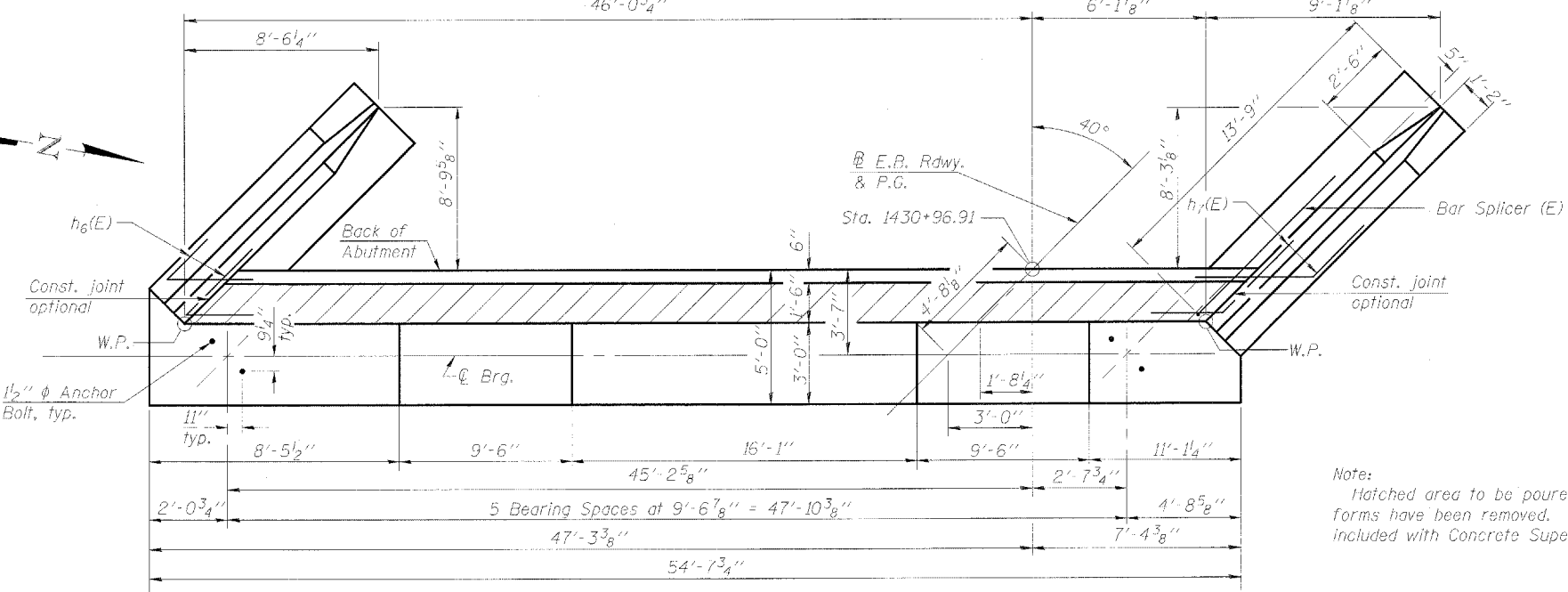
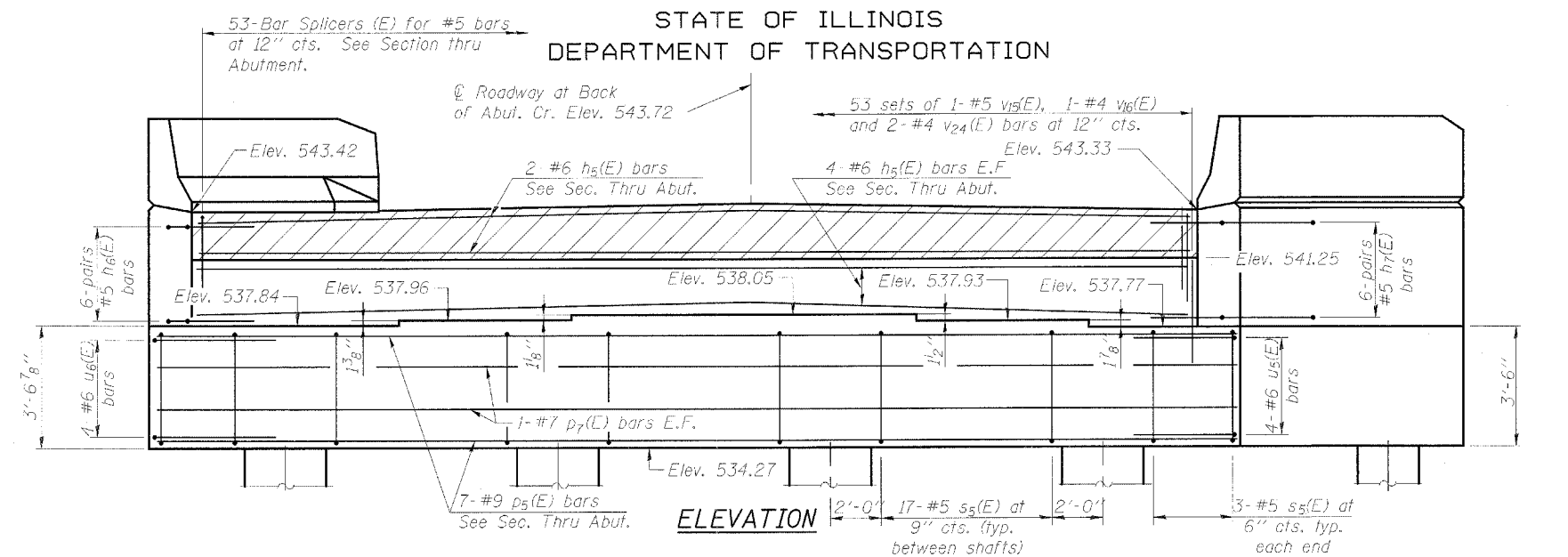
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	220
FED. ROAD DIST. NO. 7	F.L. ENDIS	FILE NO. PROJECT-		

Contract #68206

ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_5(E)$	12	#6	52'-0"	—
$h_6(E)$	12	#5	3'-6"	—
$h_7(E)$	12	#5	3'-6"	—
$h_8(E)$	24	#4	13'-5"	—
$h_9(E)$	16	#4	13'-6"	—
$n(E)$	24	#6	10'-8"	—
$n_1(E)$	12	#6	5'-4"	—
$n_2(E)$	76	#10	7'-0"	—
$n_3(E)$	12	#8	5'-0"	—
$p_5(E)$	14	#9	54'-4"	—
$p_6(E)$	12	#7	13'-6"	—
$p_7(E)$	4	#7	54'-4"	—
$s_5(E)$	57	#5	16'-5"	—
$s_6(E)$	28	#4	9'-5"	—
* $sp_{12}$	2	#4	18'-9"	—
* $sp_{13}$	4	#4	27'-3"	—
$u_5(E)$	4	#6	8'-10"	—
$u_6(E)$	4	#6	8'-3"	—
$v_{15}(E)$	53	#5	3'-2"	—
$v_{16}(E)$	53	#4	4'-4"	—
$v_{17}(E)$	28	#6	8'-2"	—
$v_{18}(E)$	6	#6	7'-2"	—
$v_{19}(E)$	24	#6	7'-11"	—
$v_{22}$	76	#10	27'-0"	—
$v_{23}$	12	#8	18'-4"	—
$v_{24}(E)$	106	#4	5'-6"	—
Structure Excavation		Cu. Yd.	108	
Drilled Shaft in Soil 42" Dia.		Foot	55	
Drilled Shaft in Rock 36" Dia.		Foot	54	
Drilled Shaft in Soil 24" Dia.		Foot	28	
Drilled Shaft in Rock 18" Dia.		Foot	10	
Concrete Structures		Cu. Yd.	74.5	
Reinforcement Bars, Epoxy Coated		Pound	10340	
Reinforcement Bars		Pound	10910	
Bar Splicer (E)		Each	53	

Reinforcement Bars designated (E) shall be epoxy coated.  
For details of Bar Splicers, see sheet 31 of 36.  
Space reinforcement to miss anchor bolts.  
\* Length is height of spiral.  
Cast steps monolithically with cap.



DESIGNED	KLH
CHECKED	EML
DRAWN	JGC
CHECKED	KLH

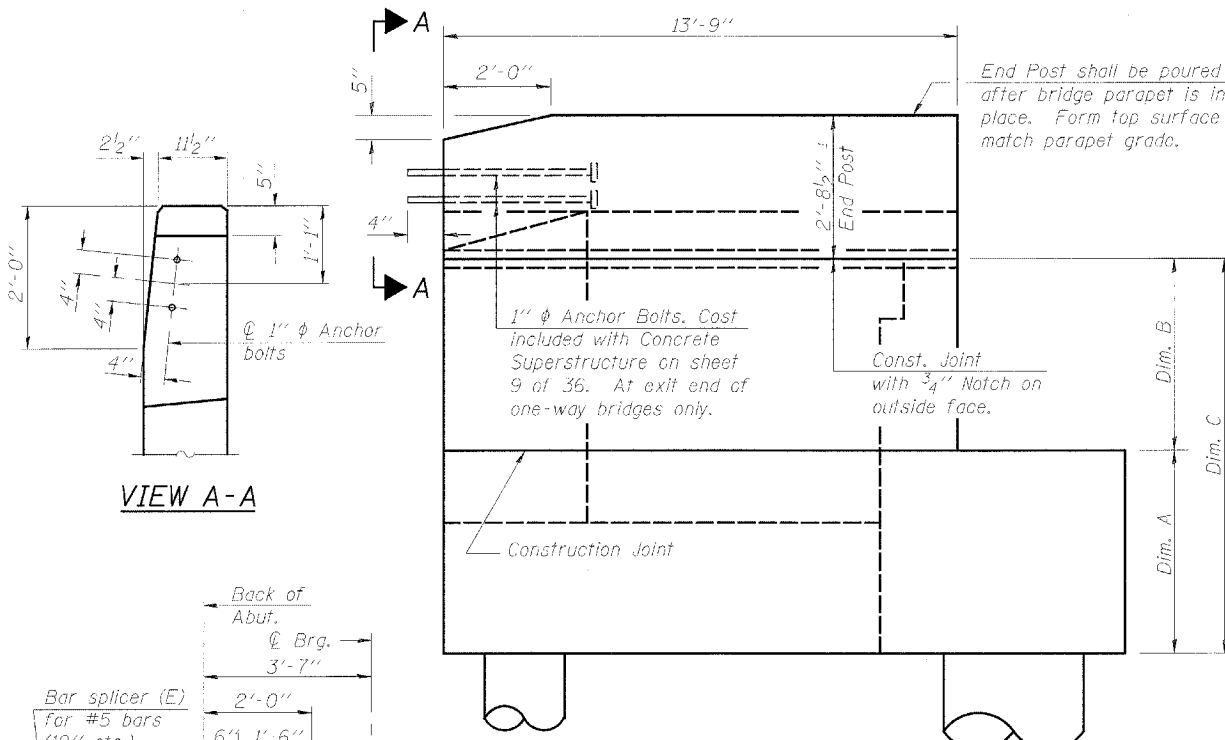
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

WEST ABUTMENT DETAILS - E.B. STRUCTURE  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

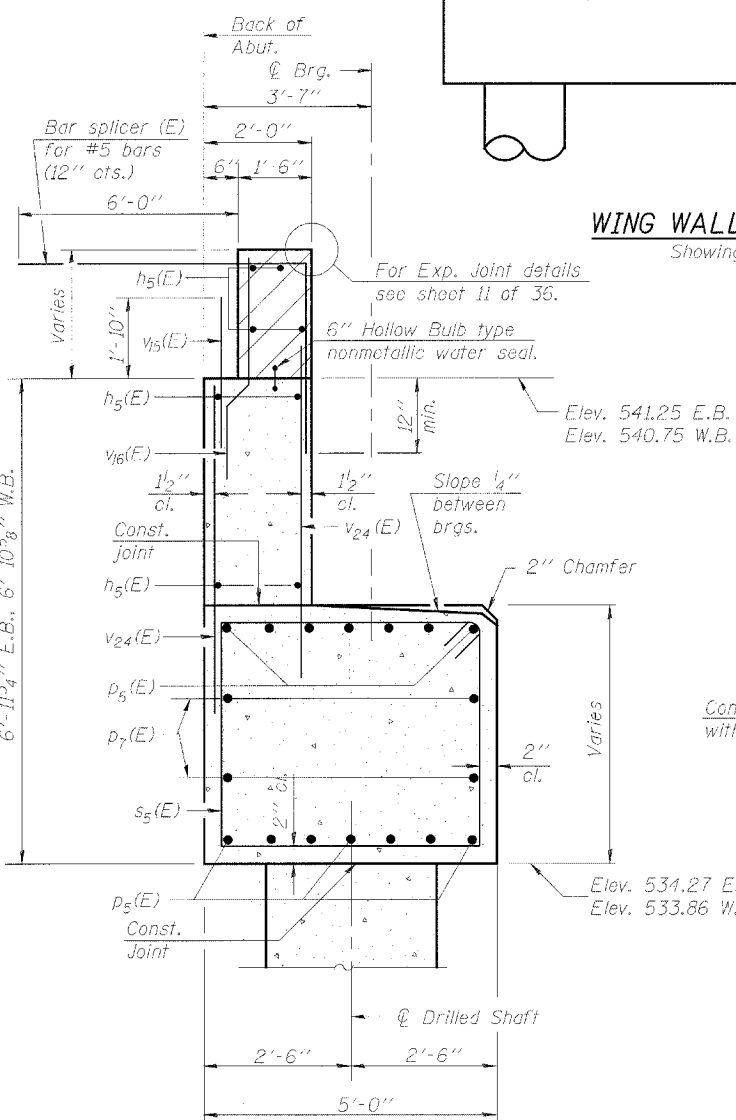
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATION	SHEET NO.	SHEET NO. 23
F.A.P. 315	34-6, 55-1	HANCOCK	433	221	36 SHEETS
FED. ROAD DIST. NO. 7	ILL. BRIDGE	FED. AID PROJECT			

Contract #68206



VIEW A-A

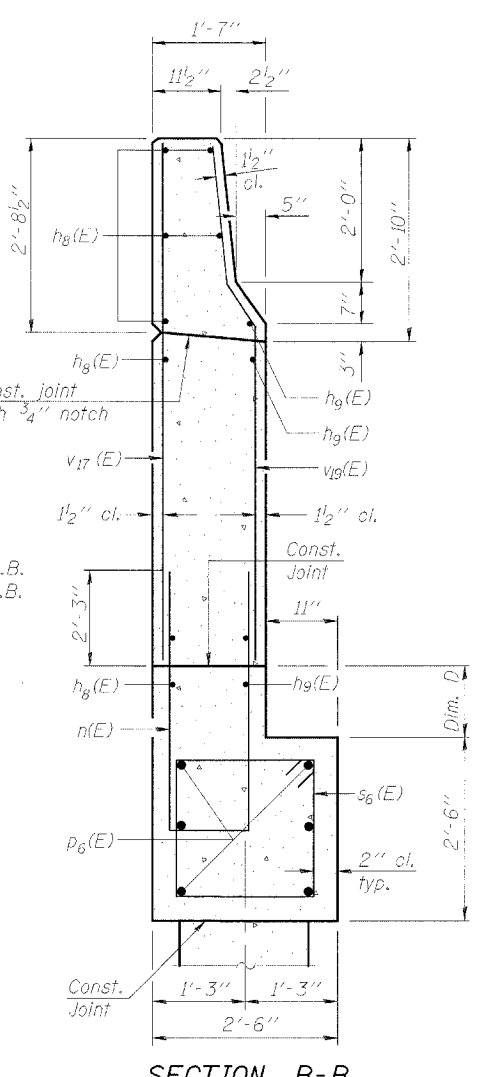


WING WALL ELEVATION  
Showing Dimensions

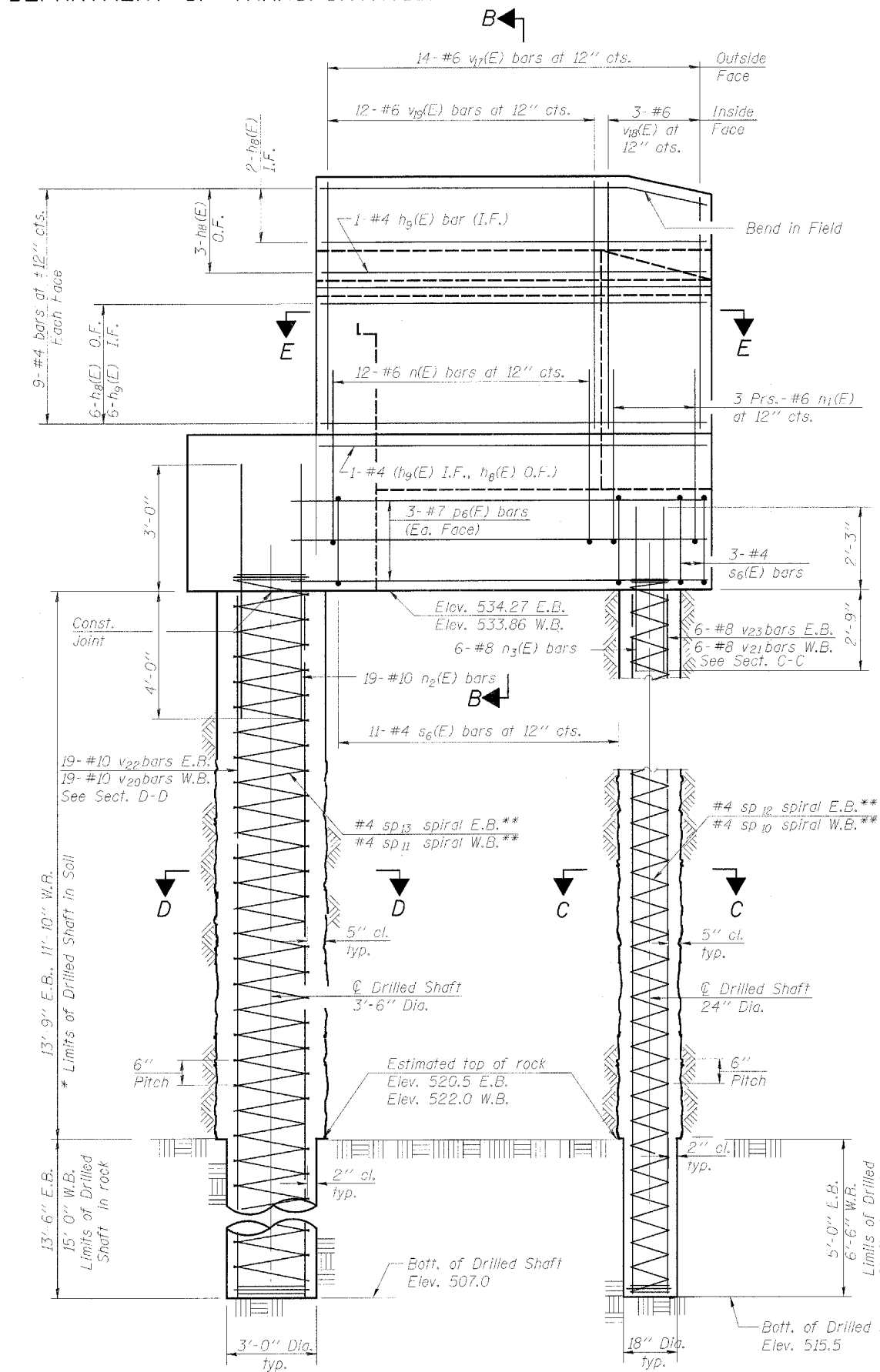
SECTION THRU ABUTMENT

DESIGNED	KLH
CHECKED	EML
DRAWN	JGC
CHECKED	KLH

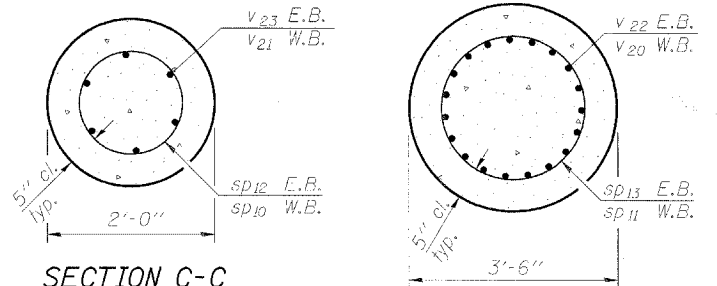
**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS



SECTION B-B

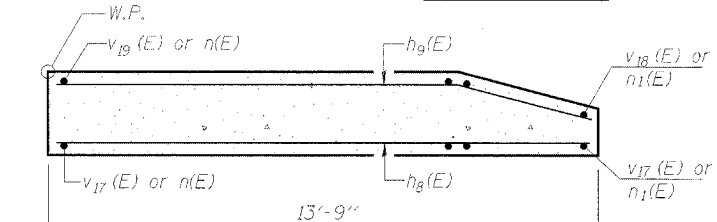


WING WALL & DRILLED SHAFT ELEVATION  
Showing Reinforcement

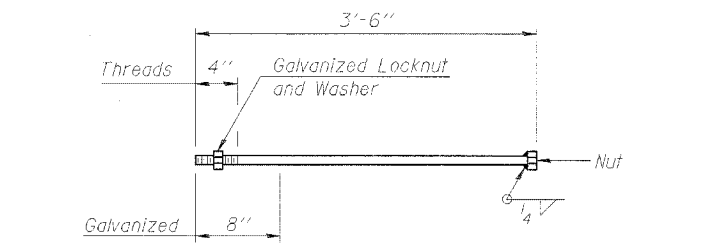


SECTION C-C

SECTION D-D



SECTION E-E



1" ANCHOR BOLT

WING WALL DATA

	Dim. A	Dim. B	Dim. C	Dim. D
North Wing Wall W.B.	3'-6"	5'-6 3/4"	9'-0 3/4"	1'-0"
South Wing Wall W.B.	3'-8 7/8"	5'-6 7/8"	9'-3 3/4"	1'-2 7/8"
North Wing Wall E.B.	3'-6"	5'-6 3/4"	9'-0 3/4"	1'-0"
South Wing Wall E.B.	3'-6 7/8"	5'-7"	9'-1 7/8"	1'-0 7/8"

Notes:  
\* The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.  
Reinforcement bars designated (E) shall be epoxy coated. Quantity of concrete in end post included with Concrete Superstructure on sheet 9 of 36.  
\*\* Provide 1/2 extra turns top and bottom of each drilled shaft. Extend spiral 2" into abutment or wingwall cap. Provide min. 4-#4 spacers or equivalent. Min. lap for spirals = 3'-0".

**WEST ABUTMENT DETAILS**  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

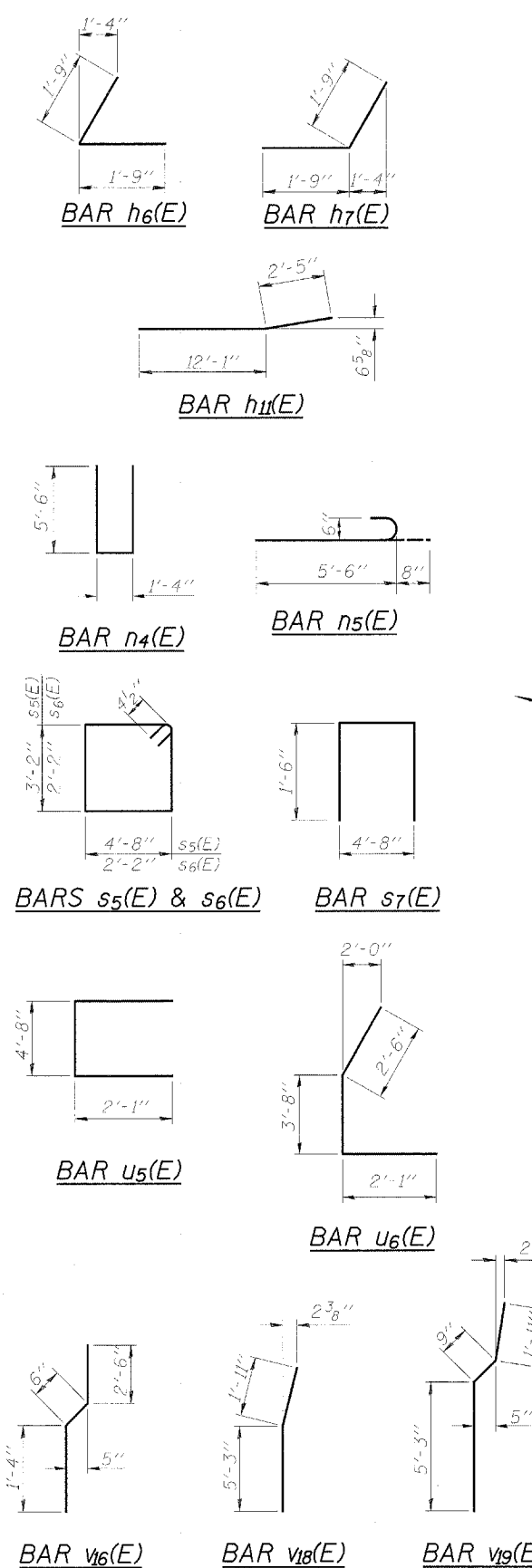
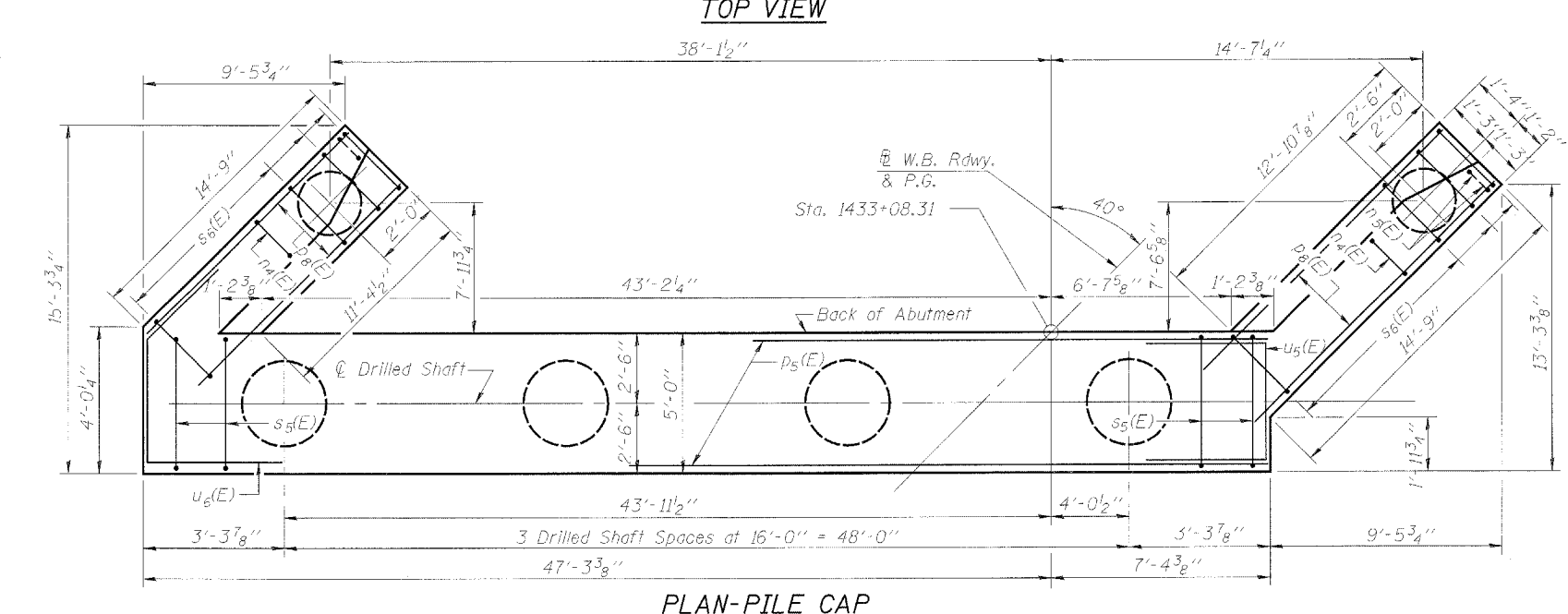
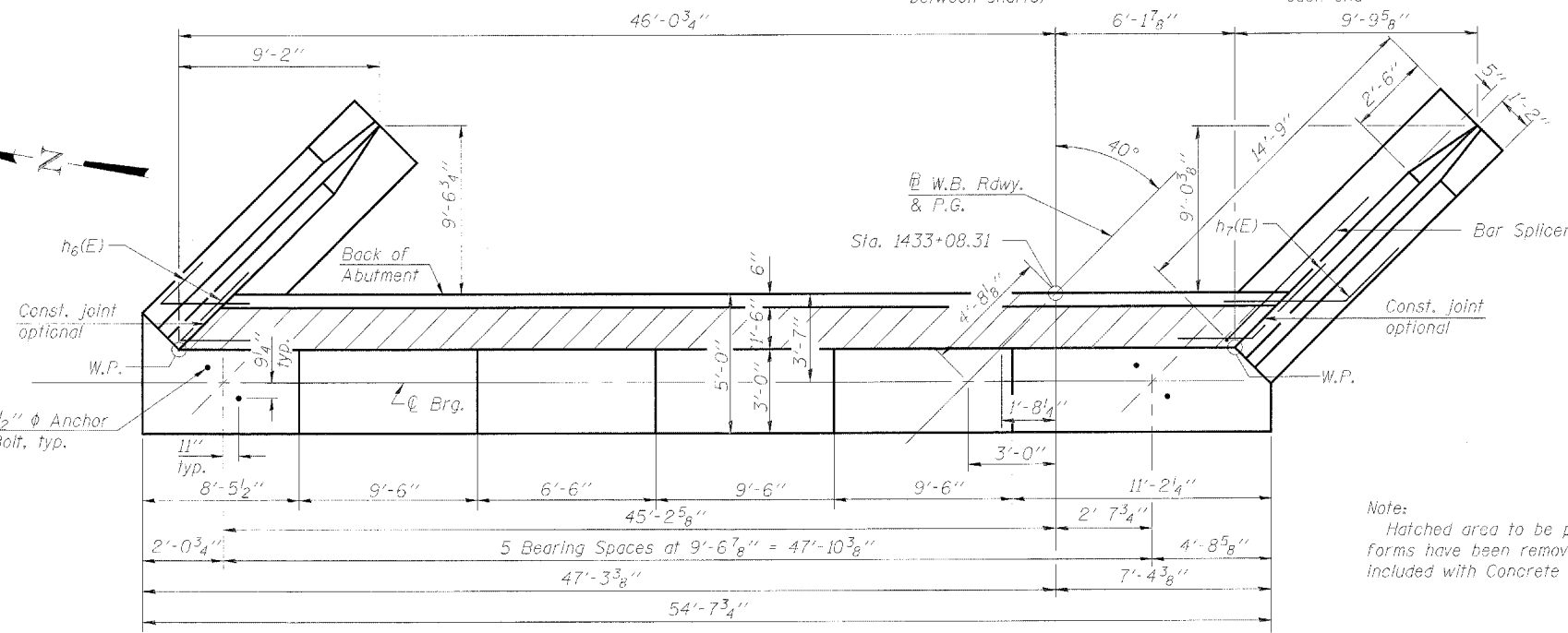
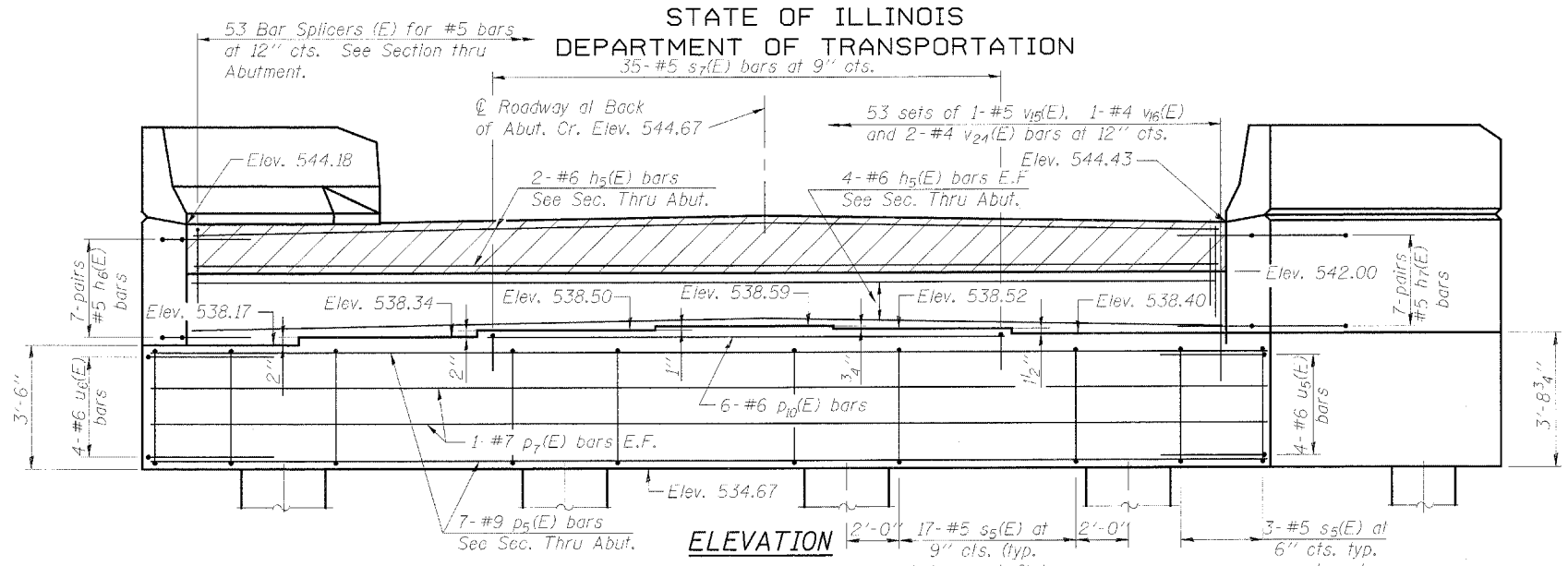
ROUTE NO.	SECTION	COUNTY	LENG.	SHEET NO.	SHEET NO. 24 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	222	
FED. ROAD DIST. NO. 7	LANSING	FED. AID PROJECT			

Contract #68206

ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h <sub>6</sub> (E)	12	#6	52'-0"	—
h <sub>6</sub> (E)	14	#5	3'-6"	└
h <sub>7</sub> (E)	14	#5	3'-6"	└
h <sub>10</sub> (E)	24	#4	14'-5"	—
h <sub>11</sub> (E)	16	#4	14'-6"	—
n <sub>2</sub> (E)	88	#10	7'-0"	—
n <sub>3</sub> (E)	12	#8	5'-0"	—
n <sub>4</sub> (E)	26	#6	12'-4"	—
n <sub>5</sub> (E)	12	#6	6'-2"	—
p <sub>5</sub> (E)	14	#9	54'-4"	—
p <sub>7</sub> (E)	4	#7	54'-4"	—
p <sub>8</sub> (E)	12	#7	14'-6"	—
p <sub>9</sub> (E)	6	#6	25'-3"	—
s <sub>5</sub> (E)	57	#5	16'-5"	└
s <sub>6</sub> (E)	30	#4	9'-5"	└
s <sub>7</sub> (E)	35	#5	7'-8"	└
* s <sub>D14</sub>	2	#4	40'-8"	
* s <sub>D15</sub>	4	#4	49'-8"	
u <sub>5</sub> (E)	4	#6	8'-10"	└
u <sub>6</sub> (E)	4	#6	8'-3"	└
v <sub>15</sub> (E)	53	#5	3'-2"	—
v <sub>16</sub> (E)	53	#4	4'-4"	—
v <sub>17</sub> (E)	30	#6	8'-2"	—
v <sub>18</sub> (E)	6	#6	7'-2"	—
v <sub>19</sub> (E)	26	#6	7'-11"	—
v <sub>24</sub> (E)	106	#4	5'-6"	—
v <sub>25</sub>	88	#11	49'-4"	—
v <sub>26</sub>	12	#8	40'-4"	—
Structure Excavation		Cu. Yd.	107	
Drilled Shaft in Soil		Foot	143	
Drilled Shaft in Rock		Foot	56	
Drilled Shaft in Soil		Foot	72	
Drilled Shaft in Rock		Foot	10	
Concrete Structures		Cu. Yd.	79.2	
Reinforcement Bars, Epoxy Coated		Pound	11450	
Reinforcement Bars		Pound	27070	
Bar Splicer (E)		Each	53	

Reinforcement Bars designated (E) shall be epoxy coated.  
For details of Bar Splicers, see sheet 31 of 36.  
Space reinforcement to miss anchor bolts.  
\* Length is height of spiral.  
Cast steps monolithically with cap.

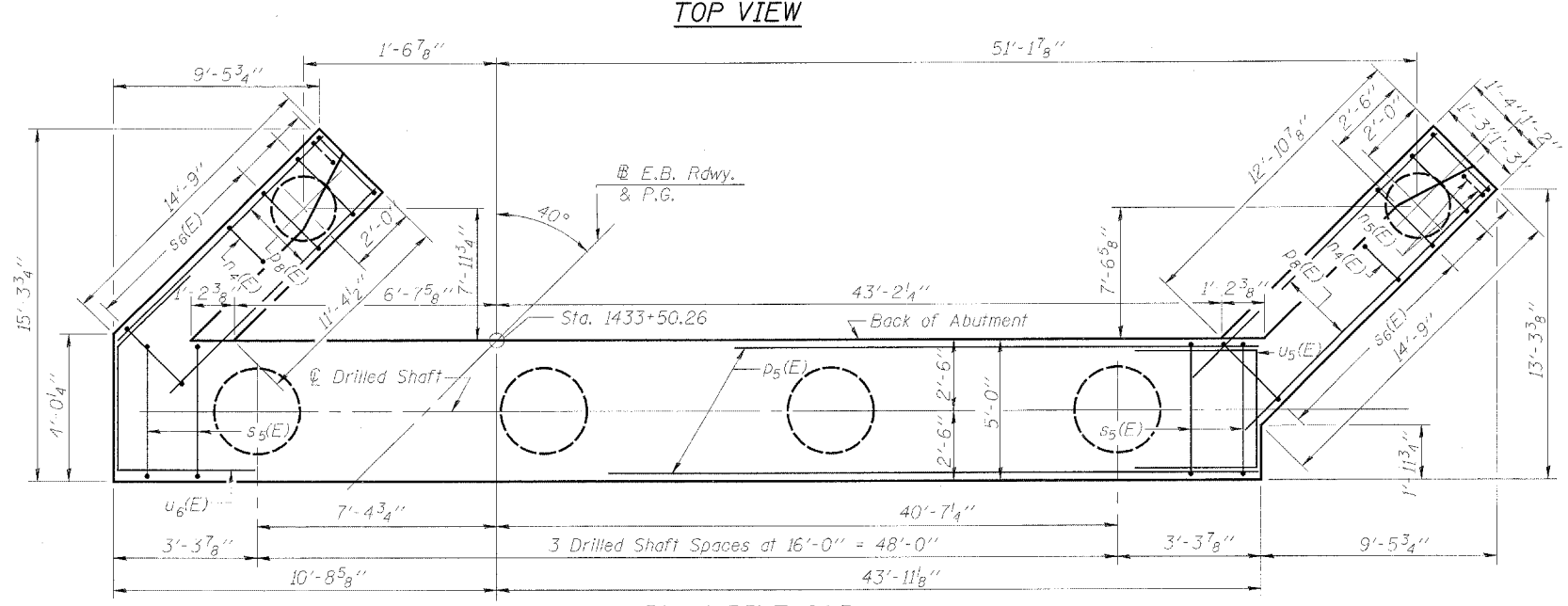
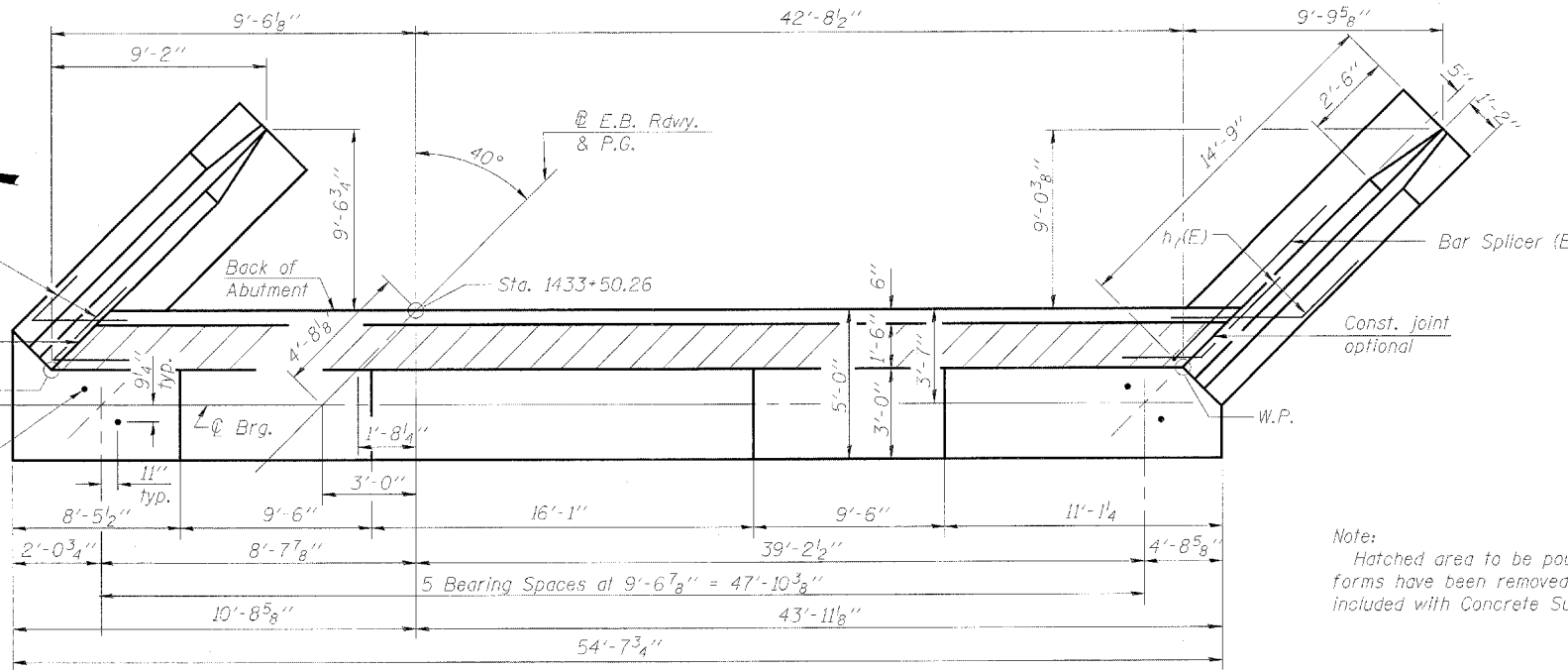
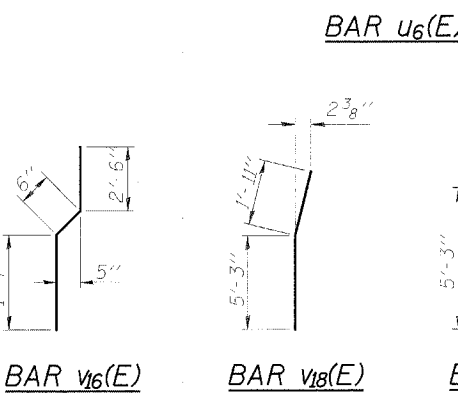
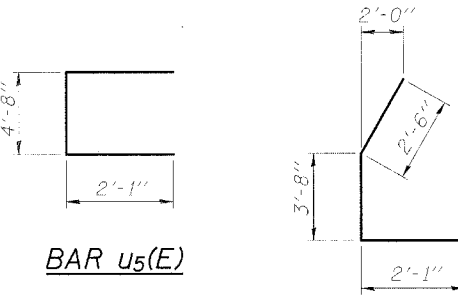
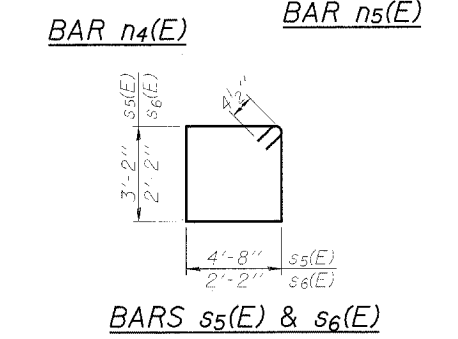
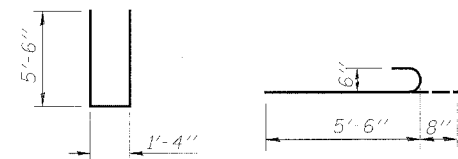
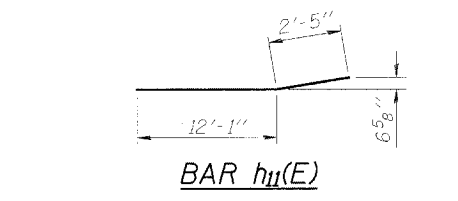
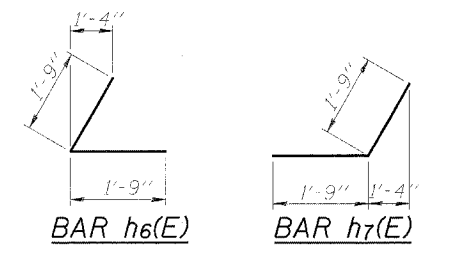
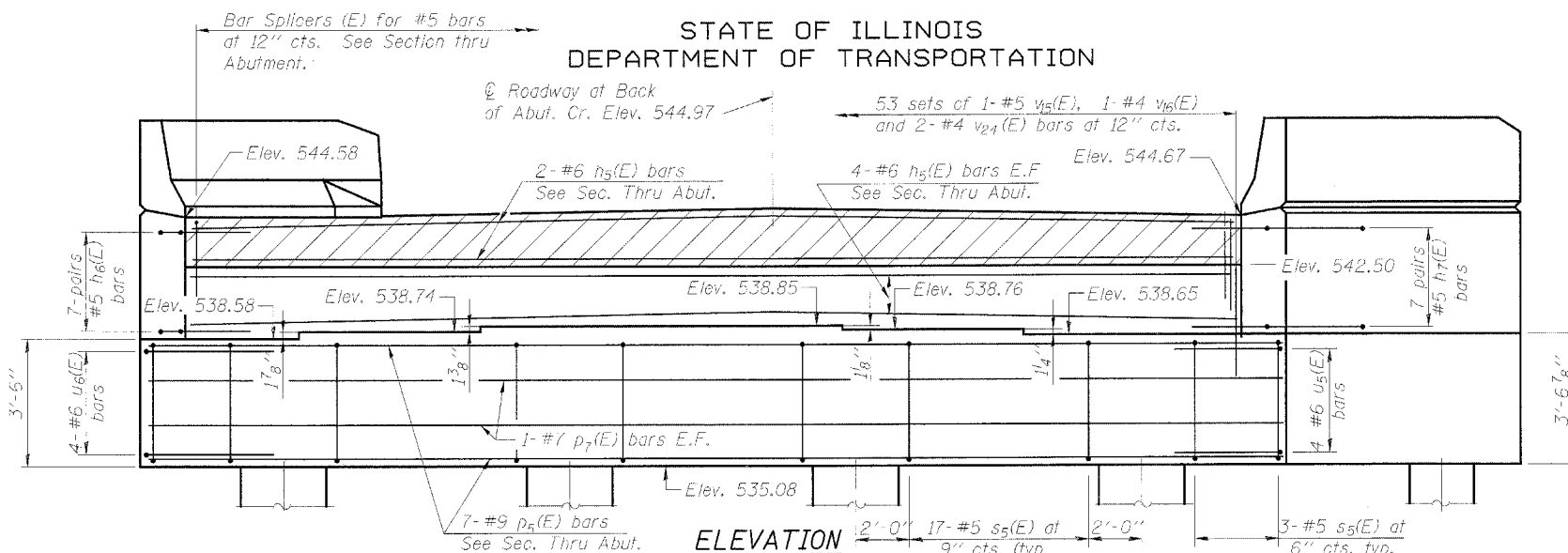


DESIGNED	KLH
CHECKED	EML
DRAWN	JGC
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ARCHITECTS PLANNERS

**EAST ABUTMENT DETAILS - W.B. STRUCTURE**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h <sub>5</sub> (E)	12	#6	52'-0"	
h <sub>6</sub> (E)	14	#5	3'-6"	
h <sub>7</sub> (E)	14	#5	3'-6"	
h <sub>10</sub> (E)	24	#4	14'-5"	
h <sub>11</sub> (E)	16	#4	14'-6"	
n <sub>2</sub> (E)	88	#10	7'-0"	
n <sub>3</sub> (E)	12	#8	5'-0"	
n <sub>4</sub> (E)	26	#6	12'-4"	
n <sub>5</sub> (E)	12	#6	6'-2"	
p <sub>5</sub> (E)	14	#9	54'-4"	
p <sub>7</sub> (E)	4	#7	54'-4"	
p <sub>8</sub> (E)	12	#7	14'-6"	
s <sub>5</sub> (E)	57	#5	16'-5"	
s <sub>6</sub> (E)	30	#4	9'-5"	
* s <sub>p16</sub>	2	#4	41'-1"	
* s <sub>p17</sub>	4	#4	50'-1"	
u <sub>5</sub> (E)	4	#6	8'-10"	
u <sub>6</sub> (E)	4	#6	8'-3"	
v <sub>15</sub> (E)	53	#5	3'-2"	
v <sub>16</sub> (E)	53	#4	4'-4"	
v <sub>17</sub> (E)	30	#6	8'-2"	
v <sub>18</sub> (E)	6	#6	7'-2"	
v <sub>19</sub> (E)	26	#6	7'-11"	
v <sub>24</sub> (E)	106	#4	5'-6"	
v <sub>27</sub>	88	#11	49'-9"	
v <sub>28</sub>	12	#8	40'-9"	
Structure Excavation			Cu. Yd.	109
Drilled Shaft in Soil 42" Dia.			Foot	137
Drilled Shaft in Rock 36" Dia.			Foot	64
Drilled Shaft in Soil 24" Dia.			Foot	69
Drilled Shaft in Rock 18" Dia.			Foot	14
Concrete Structures			Cu. Yd.	78.2
Reinforcement Bars, Epoxy Coated			Pound	10950
Reinforcement Bars			Pound	27300
Bar Splicer (E)			Each	53

Note:  
Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

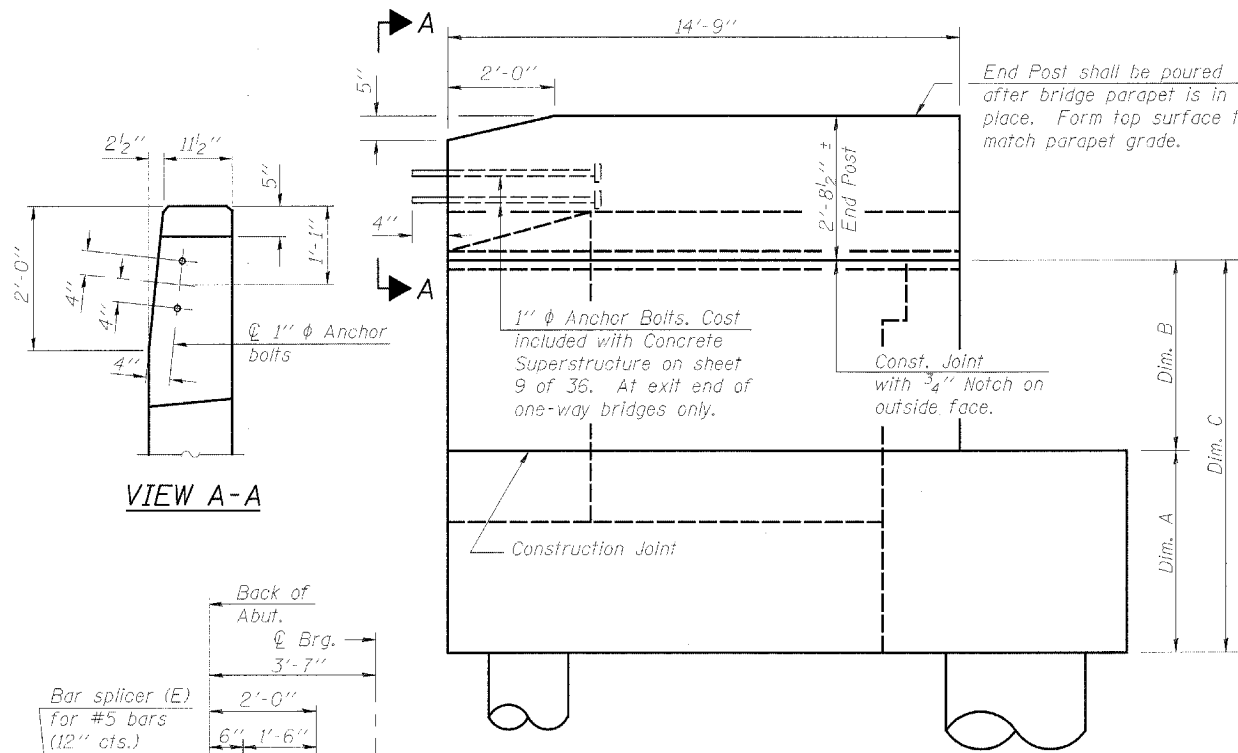
Reinforcement Bars designated (E) shall be epoxy coated.  
For details of Bar Splicers, see sheet 31 of 36.  
Space reinforcement to miss anchor bolts.  
\* Length is height of spiral.  
Cast steps monolithically with cap.

DESIGNED	KLH
CHECKED	EML
DRAWN	JGC
CHECKED	KLH

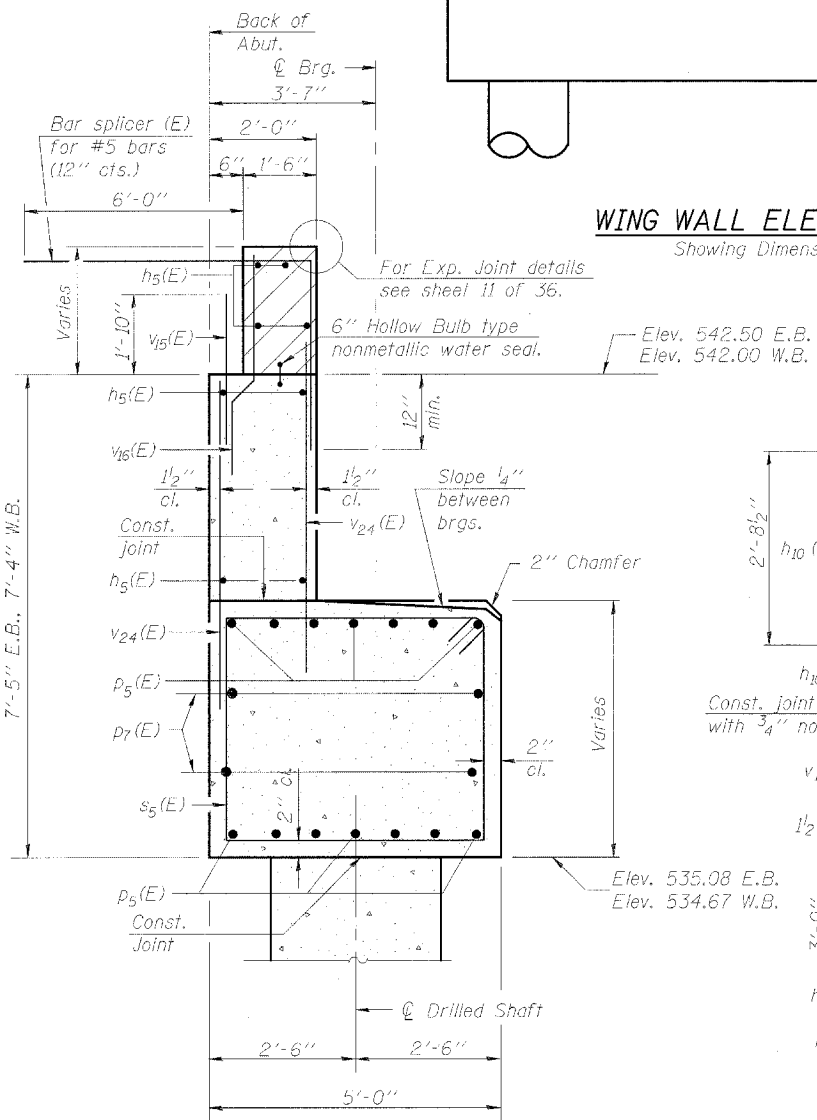
**HORNER & SHIFRIN, INC.**  
ENGINEERS ARCHITECTS PLANNERS

**EAST ABUTMENT DETAILS - E.B. STRUCTURE**  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

Contract #68206

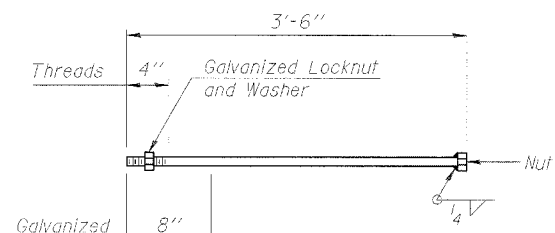
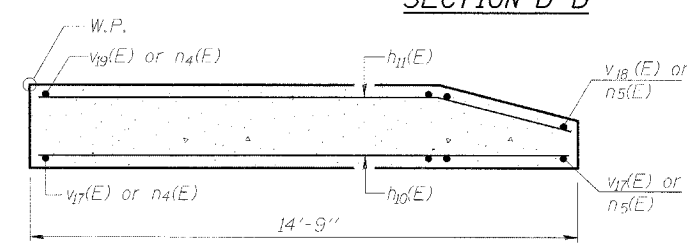
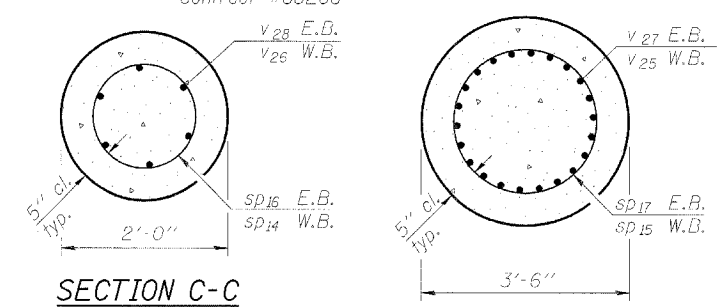
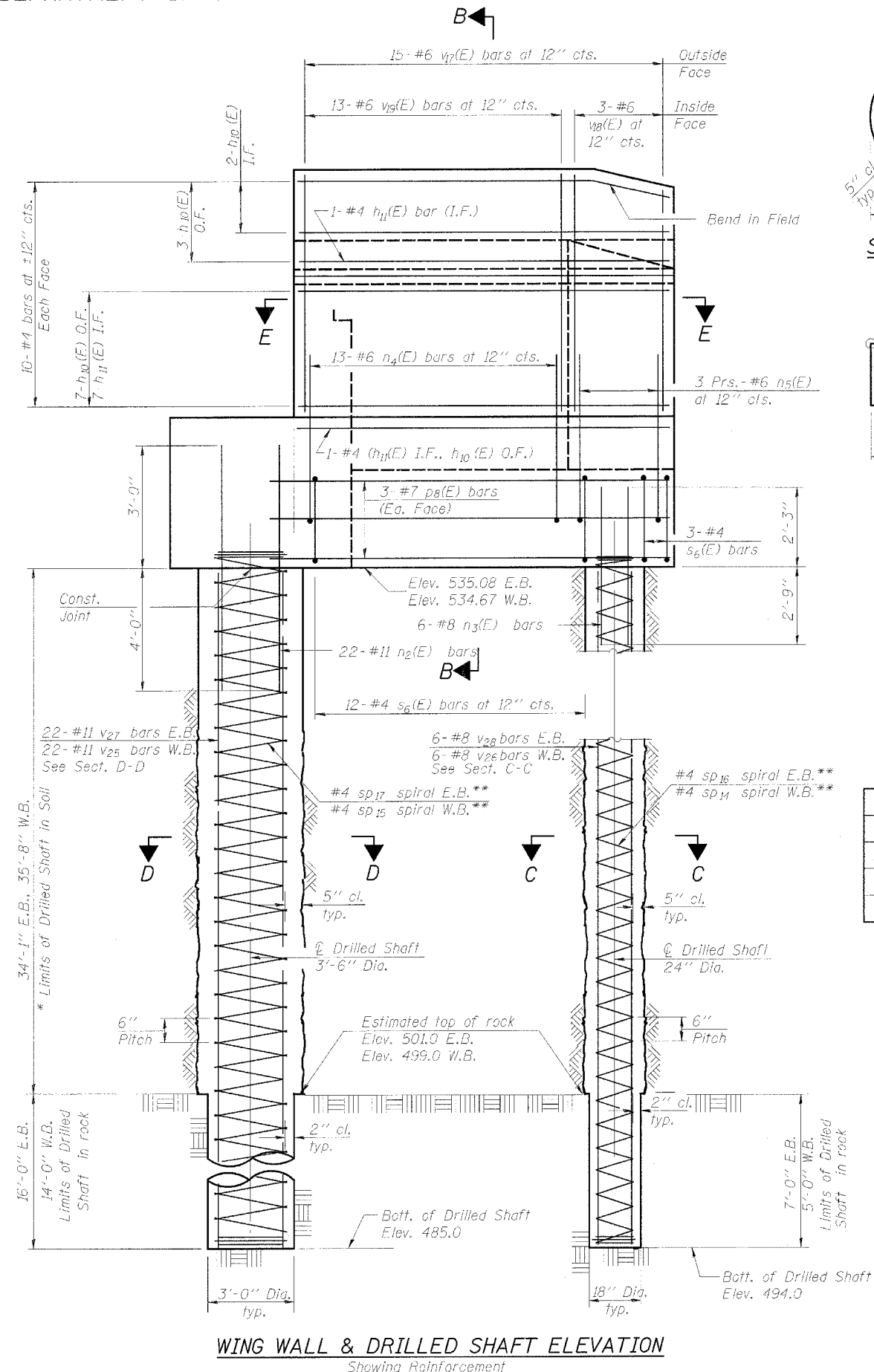
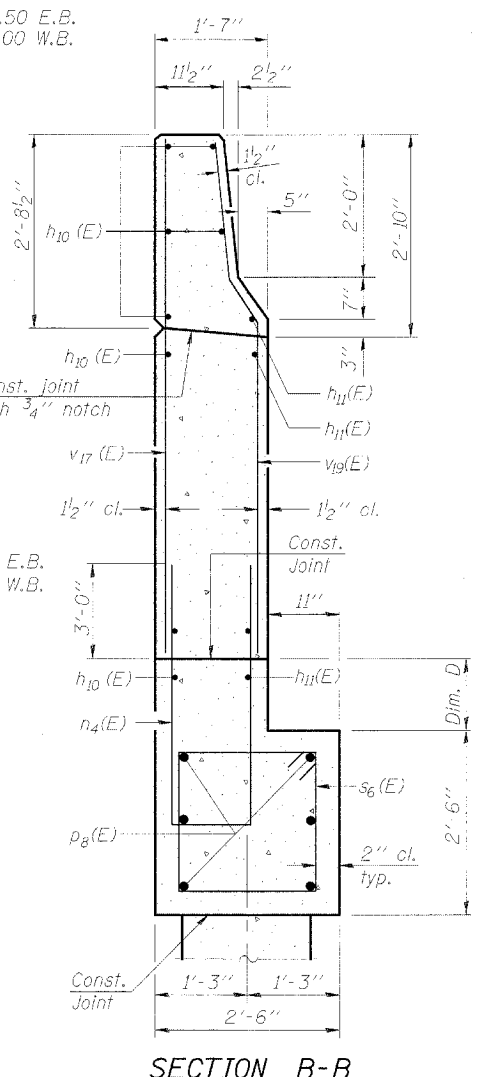


WING WALL ELEVATION  
Showing Dimensions



DESIGNED	KLH
CHECKED	EMI
DRAWN	JGC
CHECKED	KLH

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS



WING WALL DATA

	Dim. A	Dim. B	Dim. C	Dim. D
North Wing Wall W.B.	3'-6"	6'-0 1/8"	9'-6 1/8"	1'-0"
South Wing Wall W.B.	3'-8 3/4"	6'-0 3/8"	9'-9 1/8"	1'-2 3/4"
North Wing Wall E.B.	3'-6"	6'-0"	9'-6"	1'-0"
South Wing Wall E.B.	3'-6 7/8"	6'-0 1/4"	9'-7 1/8"	1'-0 7/8"

Notes:  
\* The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.  
Reinforcement bars designated (E) shall be epoxy coated. Quantity of concrete in end post included with Concrete Superstructure on sheet 9 of 36.  
\*\* Provide 1/2 extra turns top and bottom of each drilled shaft. Extend spiral 2" into abutment or wingwall cap. Provide min. 4- #4 spacers or equivalent. Min. lap for spirals = 3'-0".

**EAST ABUTMENT DETAILS**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

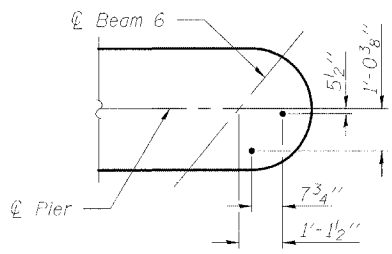
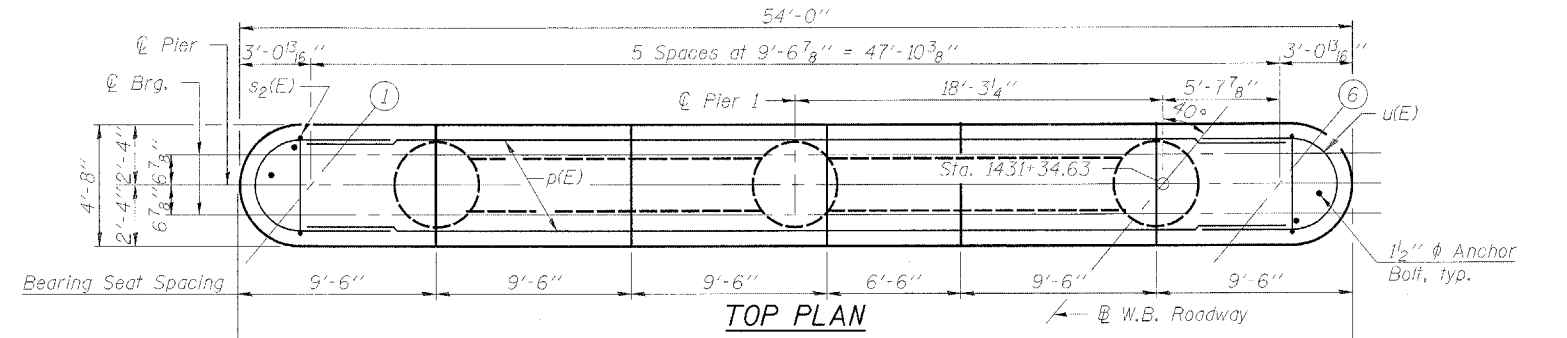


Contract #68206

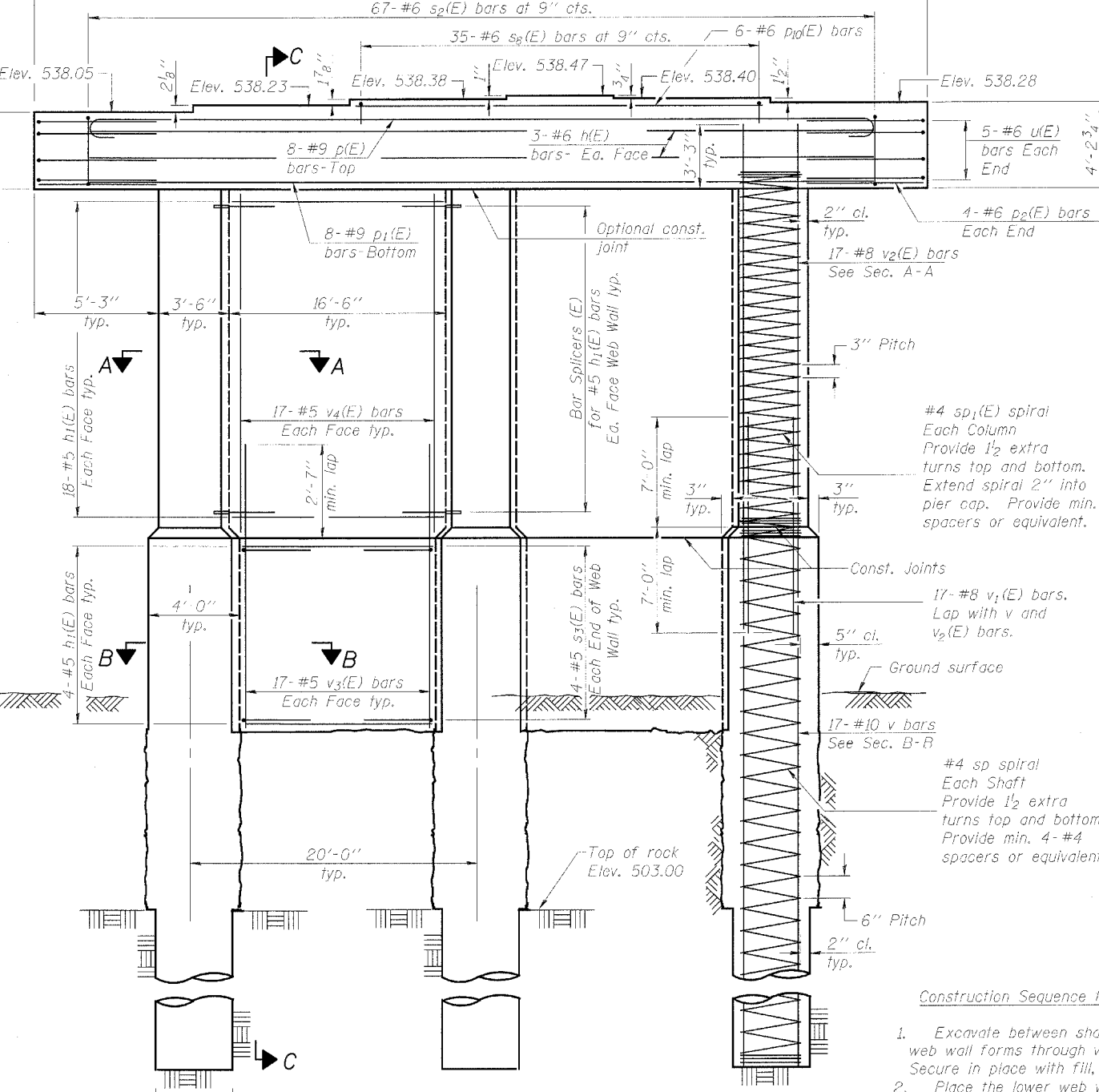
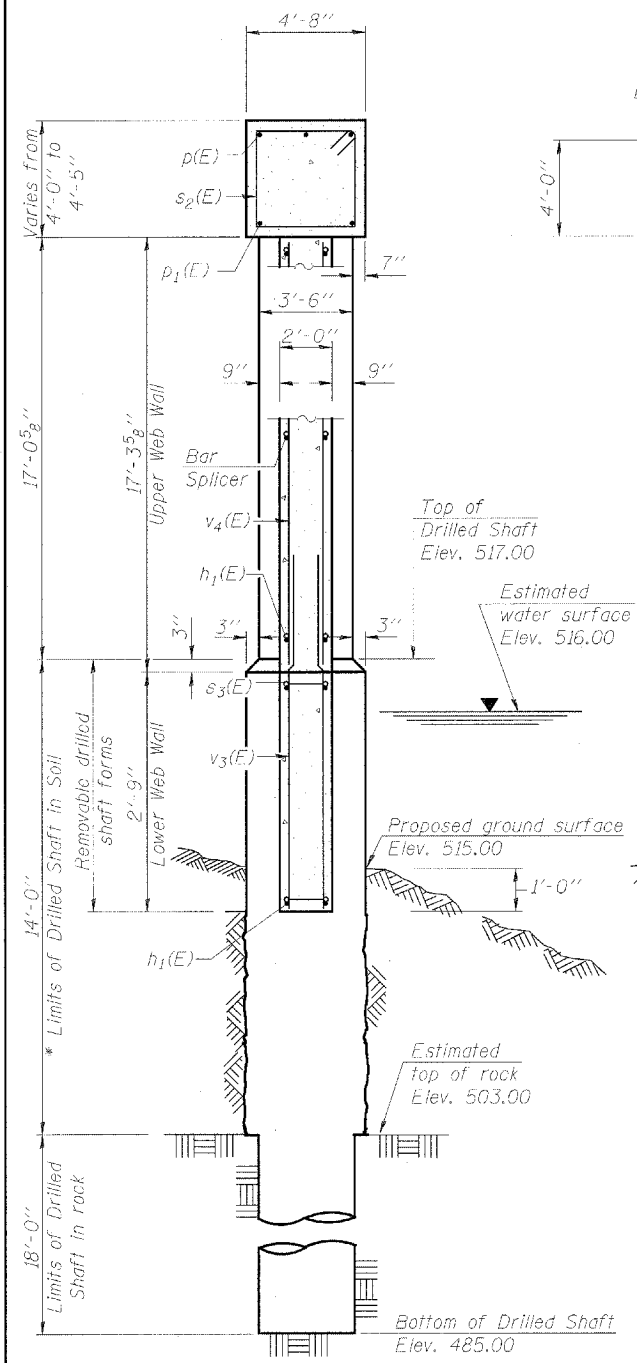
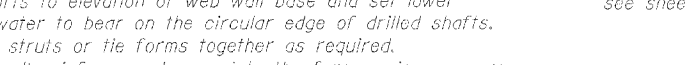
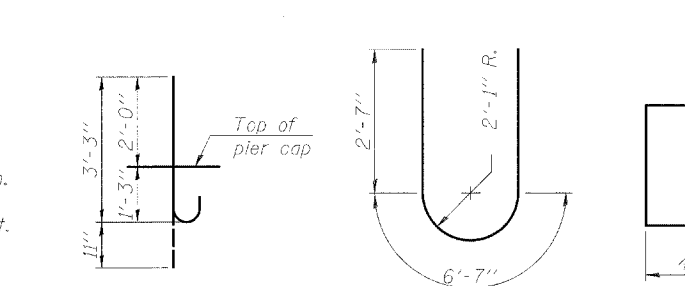
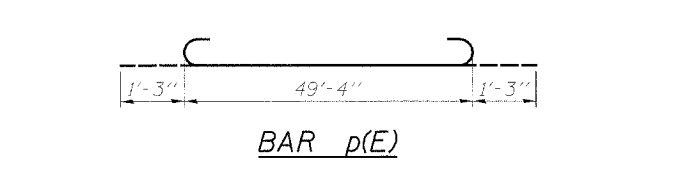
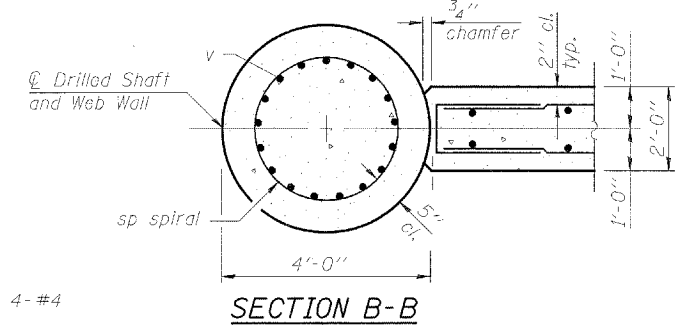
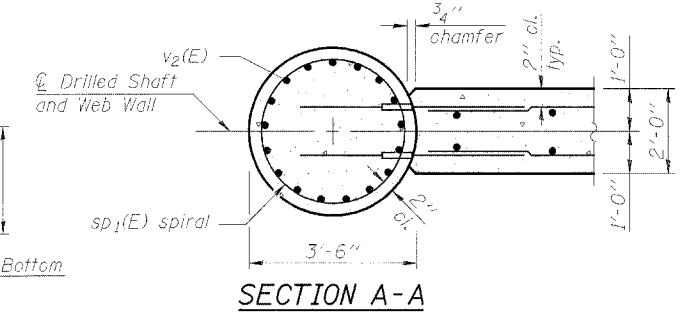
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	6	#6	49'-4"	—
h <sub>1</sub> (E)	88	#5	15'-8"	—
p(E)	8	#9	51'-10"	—
p <sub>1</sub> (E)	8	#9	49'-4"	—
p <sub>2</sub> (E)	8	#6	6'-0"	—
p <sub>10</sub> (E)	6	#6	25'-3"	—
s <sub>2</sub> (E)	57	#6	17'-4"	□
s <sub>3</sub> (E)	16	#5	5'-0"	□
s <sub>8</sub> (E)	35	#6	7'-8"	□
sp	3	#4	31'-8"	⋈
sp <sub>1</sub> (E)	3	#4	17'-1"	⋈
u(E)	10	#6	11'-9"	—
v	51	#10	31'-8"	—
v <sub>1</sub> (E)	51	#8	14'-0"	—
v <sub>2</sub> (E)	51	#8	20'-2"	—
v <sub>3</sub> (E)	68	#5	5'-4"	—
v <sub>4</sub> (E)	68	#5	17'-0"	—
v <sub>5</sub> (E)	30	#8	4'-2"	—
Underwater Structure				
Excavation Protection	Each		1	
Location-1				
Drilled Shaft in Soil	Foot		42	
48" Dia.				
Drilled Shaft in Rock	Foot		54	
42" Dia.				
Concrete Structures	Cu. Yd.		106.1	
Reinforcement Bars, Epoxy Coated	Pound		15330	
Reinforcement Bars	Pound		8270	
Bar Splicers	Each		144	

Reinforcement Bars designated (E) shall be epoxy coated.  
 Cast steps monolithically with cap.  
 Space cap reinforcement to miss anchor balls.  
 Minimum lap for spirals = 3'-0"  
 \*\*Length is height of spiral.



**ANCHOR BOLT LAYOUT**  
 (Layout applicable at Beam 1 by rotation)



- Construction Sequence for Web Wall:**
- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
  - Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
  - If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tained concrete out the top of the forms.
  - Construct Columns.
  - Construct upper web walls.

\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH



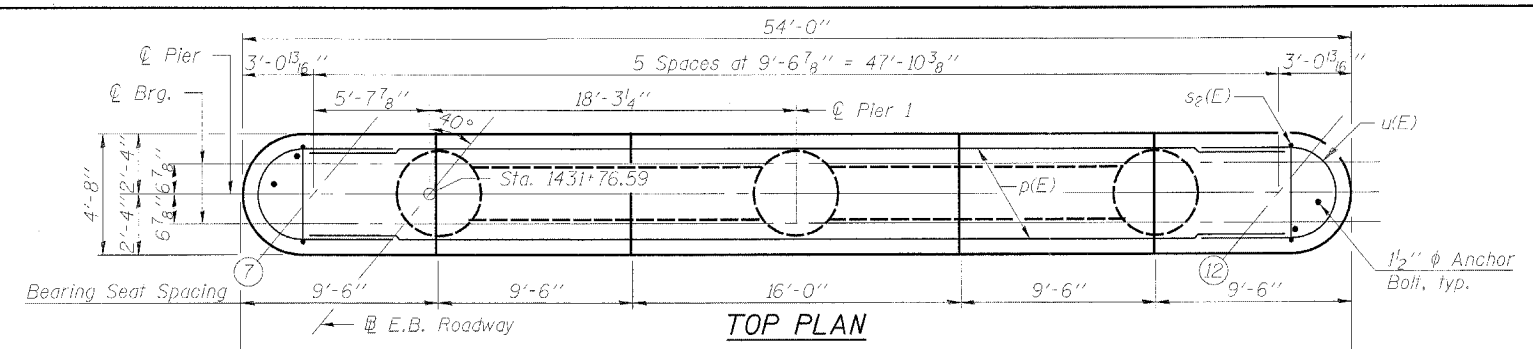
**PIER 1 DETAILS - W.B. STRUCTURE**  
 ILLINOIS ROUTE 336 OVER  
 EAST FORK OF THE LAMOINE RIVER  
 F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
 HANCOCK COUNTY; STA. 1432+02.61  
 STRUCTURE NO. 034-0511 (E.B.)  
 STRUCTURE NO. 034-0512 (W.B.)

Contract #68206

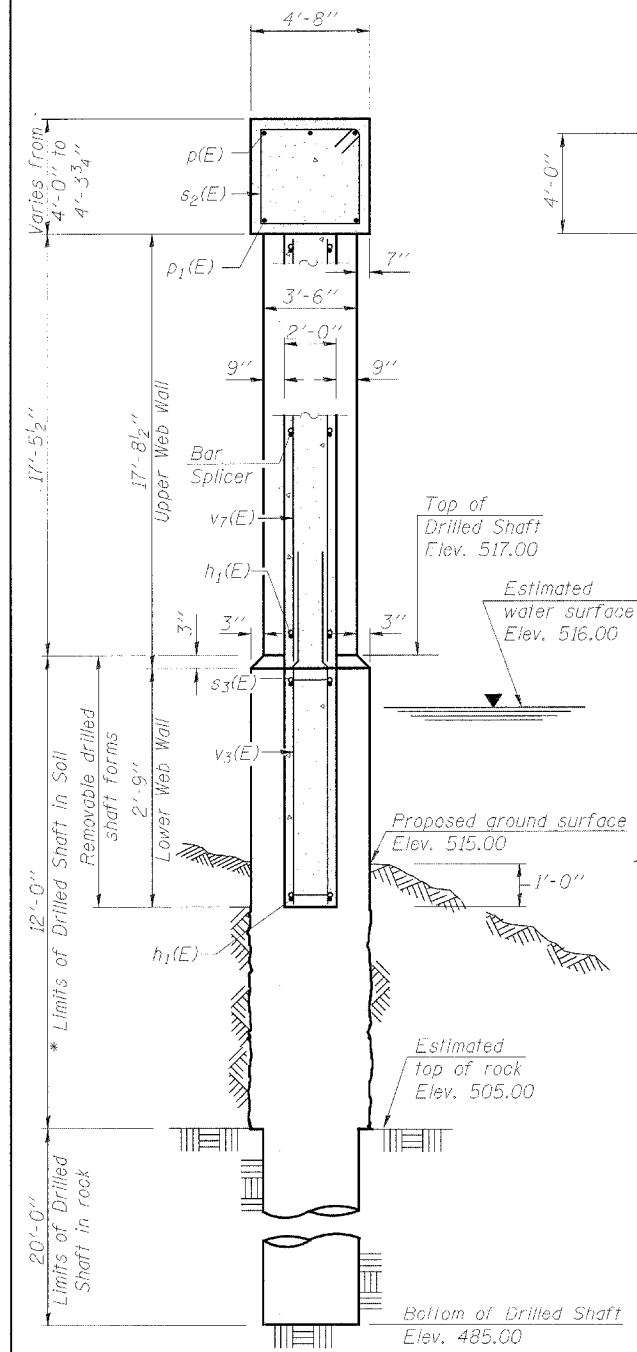
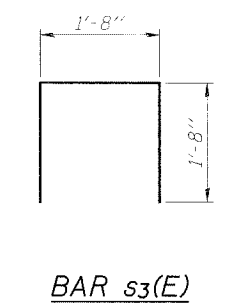
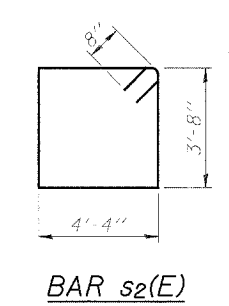
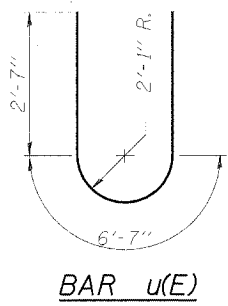
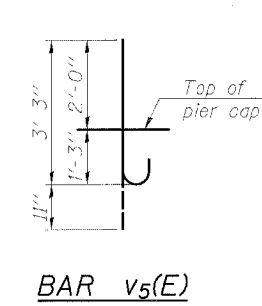
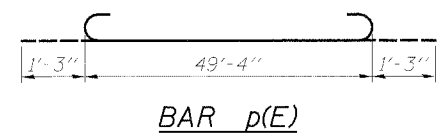
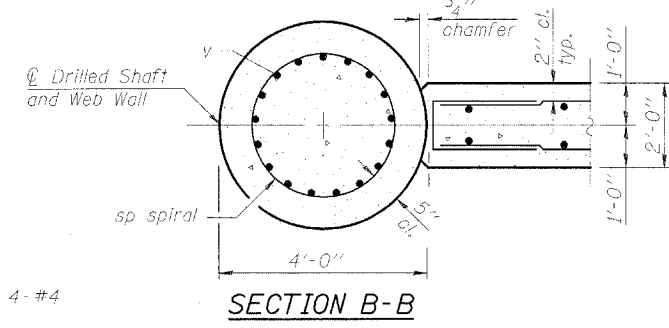
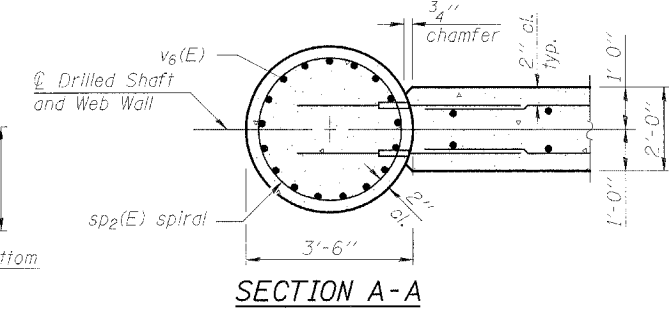
**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h(E)	#6	49'-4"	—
h <sub>1</sub> (E)	#8	15'-8"	—
p(E)	#8	51'-10"	U
p <sub>1</sub> (E)	#9	49'-4"	—
p <sub>2</sub> (E)	#6	6'-0"	—
s <sub>2</sub> (E)	#6	17'-4"	□
s <sub>3</sub> (E)	#5	5'-0"	□
sp	#4	31'-8"	W
sp <sub>2</sub> (E)	#4	17'-6"	W
u(E)	#6	11'-9"	U
v	#10	31'-8"	—
v <sub>1</sub> (E)	#8	14'-0"	—
v <sub>3</sub> (E)	#8	5'-4"	—
v <sub>5</sub> (E)	#8	4'-2"	U
v <sub>6</sub> (E)	#8	20'-7"	—
v <sub>7</sub> (E)	#5	17'-4"	—
Underwater Structure		Each	1
Excavation Protection Location-2		Foot	36
Drilled Shaft in Soil 48" Dia.		Foot	60
Drilled Shaft in Rock 42" Dia.		Foot	60
Concrete Structures	Cu. Yd.		107.1
Reinforcement Bars, Epoxy Coated	Pound		14820
Reinforcement Bars	Pound		8270
Bar Splicers	Each		144

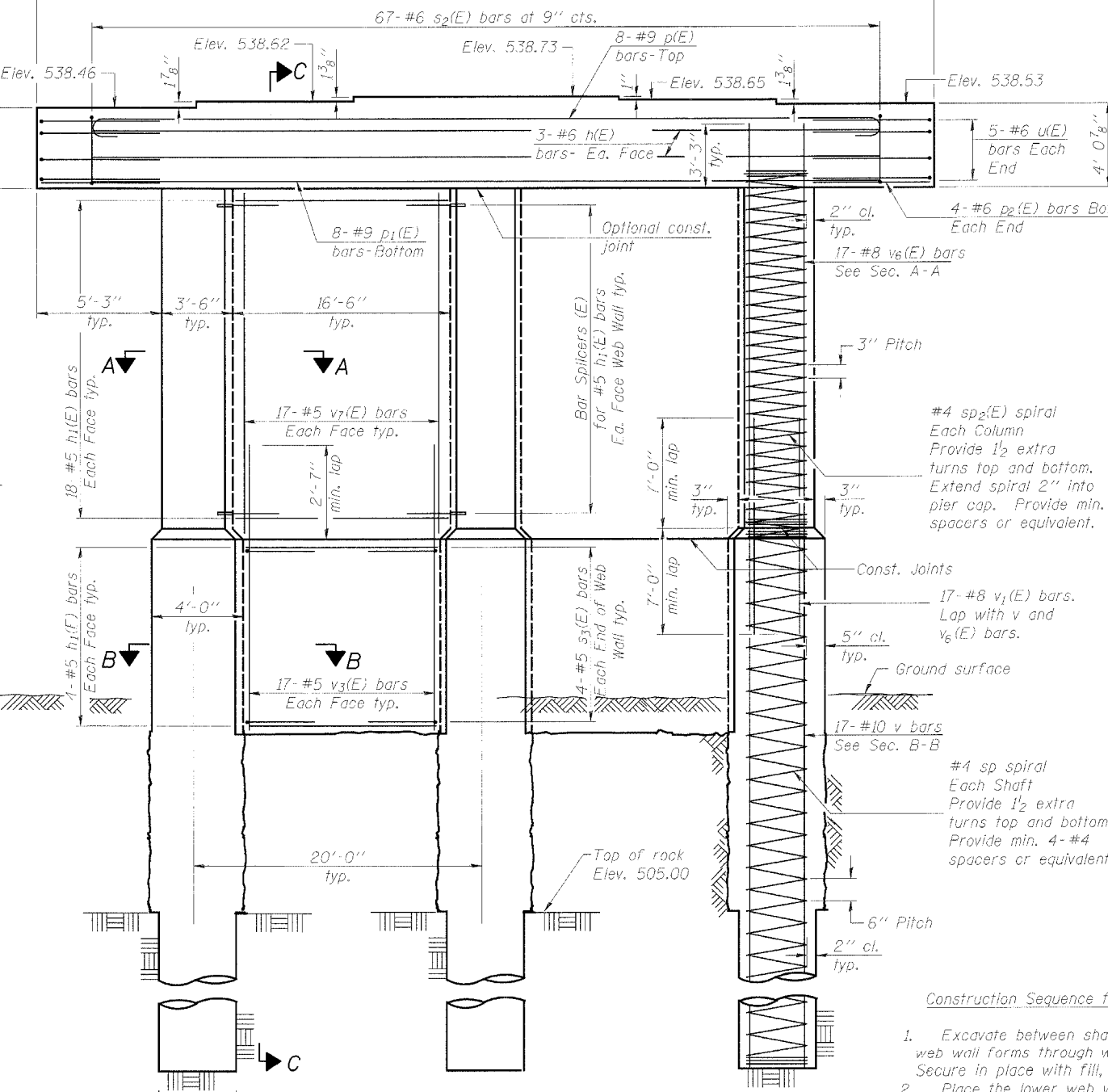
Reinforcement Bars designated (E) shall be epoxy coated.  
 Cast steps monolithically with cap.  
 Space cap reinforcement to miss anchor bolts.  
 Minimum lap for spirals = 3'-0".  
 \*\*Length is height of spiral.



**ANCHOR BOLT LAYOUT**  
 (Layout applicable at Beam 7 by rotation)



**SECTION C-C**



**ELEVATION**  
 (Looking East)

**Construction Sequence for Web Wall:**

- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
- Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
- If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and taint concrete out the top of the forms.
- Construct Columns.
- Construct upper web walls.

\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH



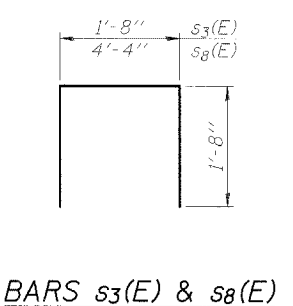
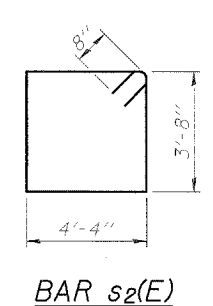
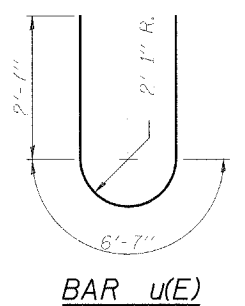
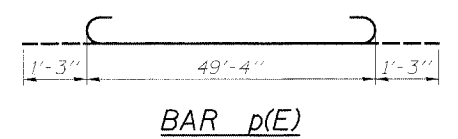
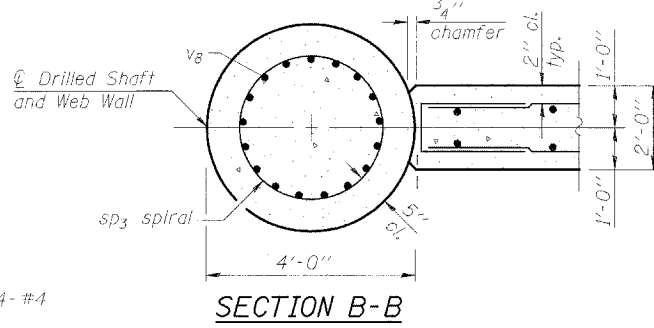
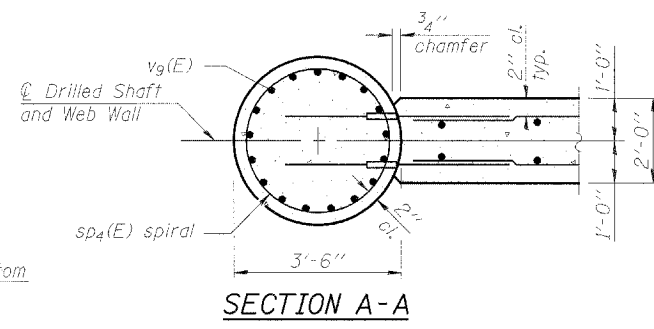
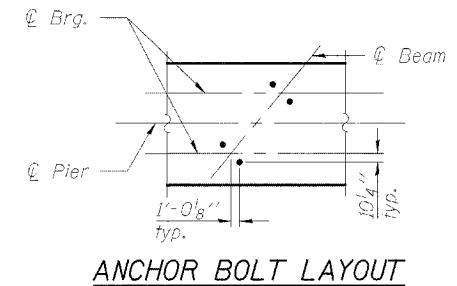
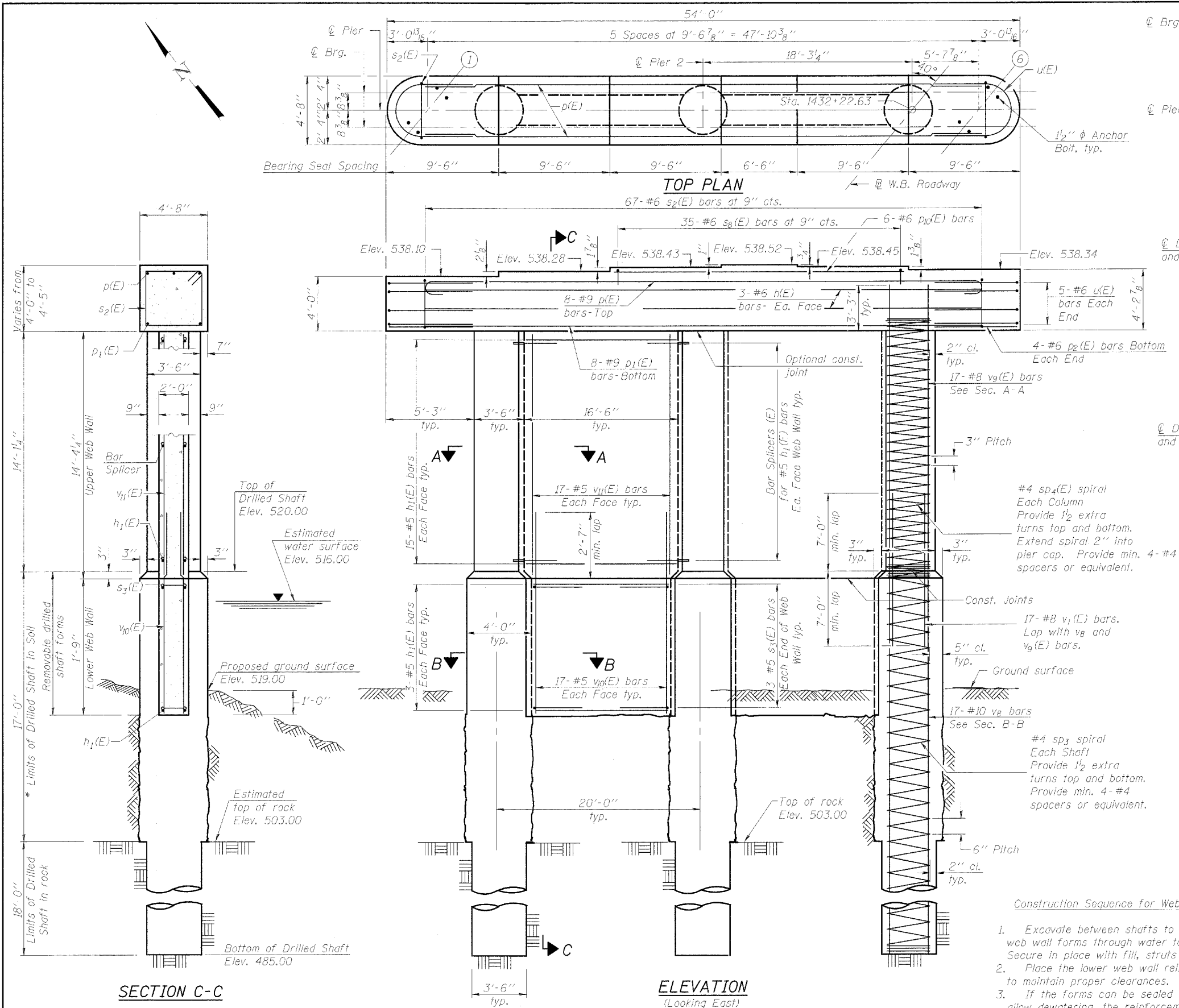
**PIER 1 DETAILS - E.B. STRUCTURE**  
**ILLINOIS ROUTE 336 OVER**  
**EAST FORK OF THE LAMOINE RIVER**  
**F.A.P. ROUTE 315 - SECTION 34-6, 55-1**  
**HANCOCK COUNTY; STA. 1432+02.61**  
**STRUCTURE NO. 034-0511 (E.B.)**  
**STRUCTURE NO. 034-0512 (W.B.)**

Contract #68206

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	6	#6	49'-4"	—
h <sub>1</sub> (E)	72	#5	15'-8"	—
p(E)	8	#9	51'-10"	U
p <sub>1</sub> (E)	8	#9	49'-4"	—
p <sub>2</sub> (E)	8	#6	6'-0"	—
p <sub>3</sub> (E)	6	#6	25'-3"	—
s <sub>2</sub> (E)	67	#6	17'-4"	□
s <sub>3</sub> (E)	12	#5	5'-0"	□
s <sub>8</sub> (E)	35	#6	7'-8"	□
sp <sub>3</sub>	3	#4	34'-8"	~
sp <sub>4</sub> (E)	3	#4	14'-4"	~
u(E)	10	#6	11'-9"	U
v <sub>1</sub> (E)	51	#8	14'-0"	—
v <sub>8</sub>	51	#10	34'-8"	—
v <sub>9</sub> (E)	51	#8	17'-3"	—
v <sub>10</sub> (E)	68	#5	4'-4"	—
v <sub>11</sub> (E)	68	#5	14'-0"	—
Underwater Structure Excavation Protection Location-3	Each		1	
Drilled Shaft in Soil 48" Dia.	Foot		51	
Drilled Shaft in Rock 42" Dia.	Foot		54	
Concrete Structures	Cu. Yd.		93.4	
Reinforcement Bars, Epoxy Coated	Pound		13820	
Reinforcement Bars	Pound		9050	
Bar Splicers	Each		120	

Reinforcement Bars designated (E) shall be epoxy coated.  
Cast steps monolithically with cap.  
Space cap reinforcement to miss anchor bolts.  
Minimum lap for spirals = 3'-0".  
\*\*Length is height of spiral.



**Construction Sequence for Web Wall:**

- Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
- Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
- If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
- Construct Columns.
- Construct upper web walls.

\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

DESIGNED	KLH
CHECKED	EML
DRAWN	FMI
CHECKED	KLH

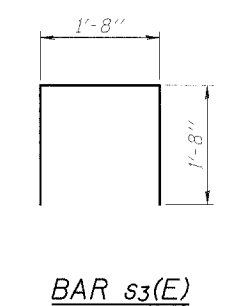
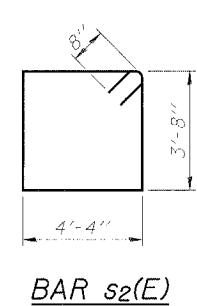
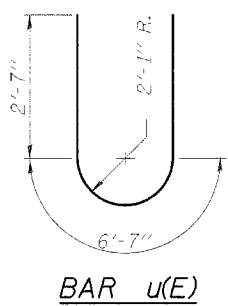
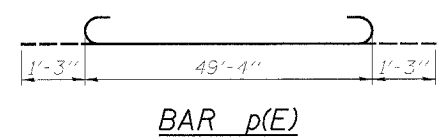
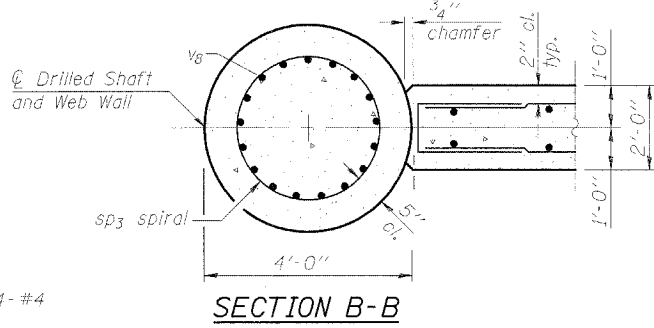
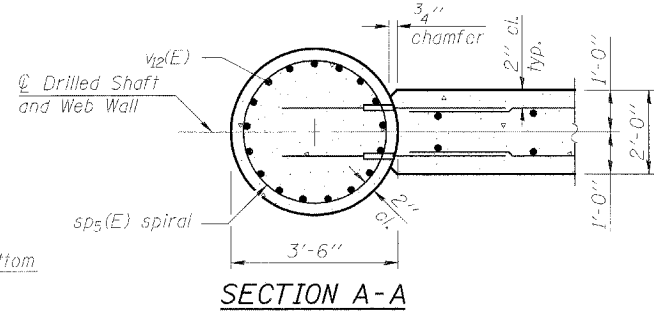
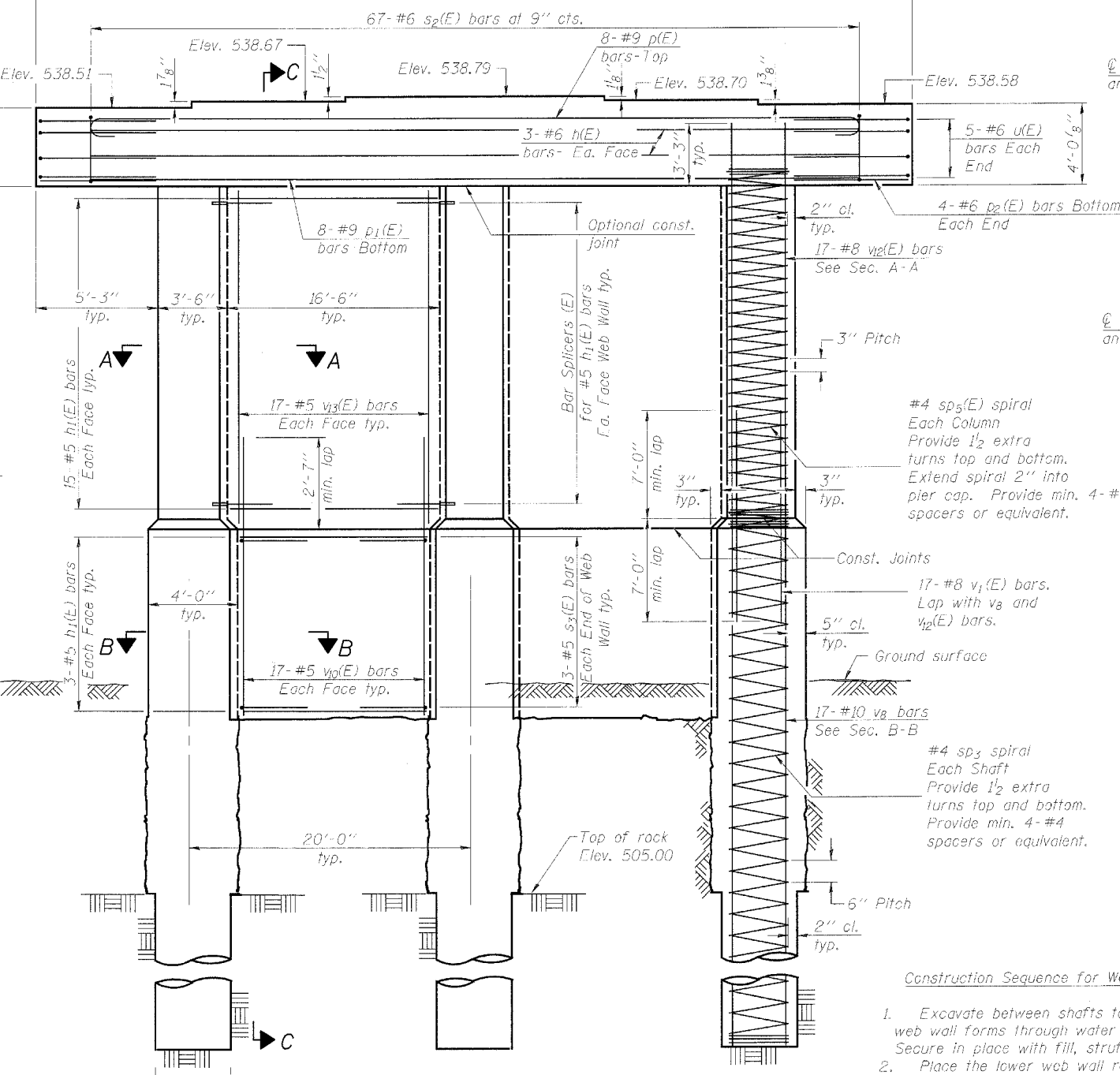
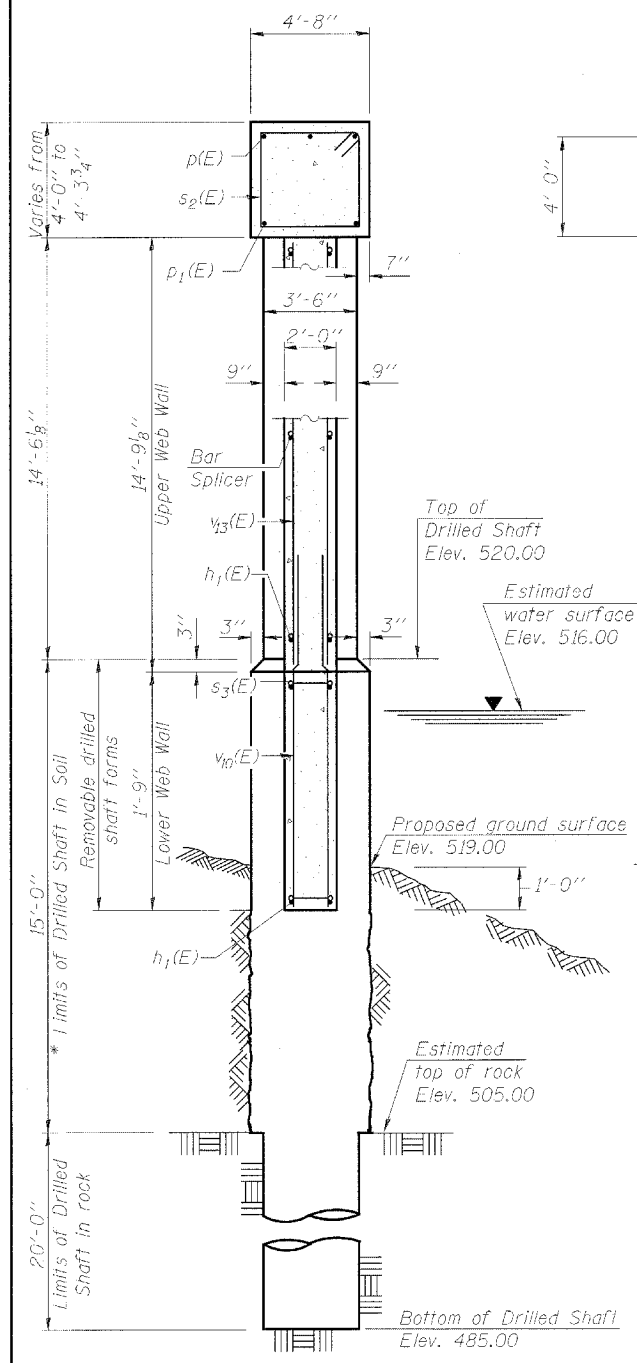
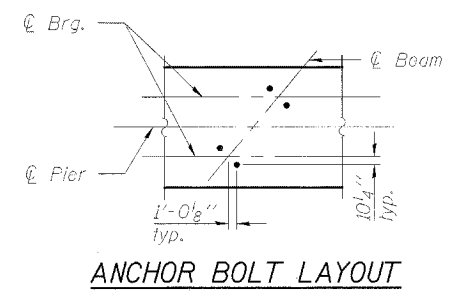
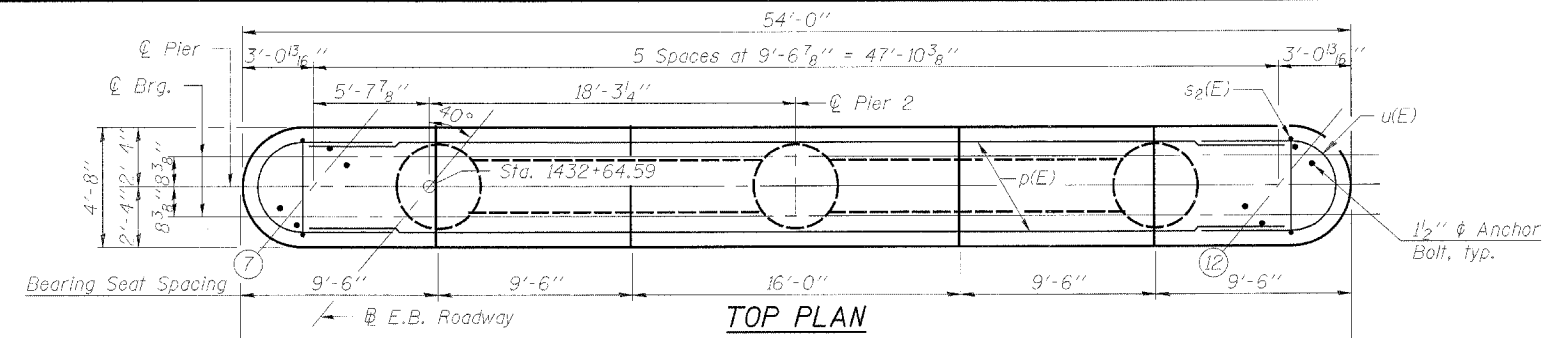


**PIER 2 DETAILS - W.B. STRUCTURE**  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h(E)	#6	49'-4"	—
h <sub>1</sub> (E)	#5	15'-8"	—
p(E)	#8	51'-10"	U
p <sub>1</sub> (E)	#9	49'-4"	—
p <sub>2</sub> (E)	#6	6'-0"	—
s <sub>2</sub> (E)	#6	17'-1"	□
s <sub>3</sub> (E)	#5	5'-0"	□
sd <sub>3</sub>	#4	34'-8"	~
sp <sub>5</sub> (E)	#4	14'-6"	~
u(E)	#6	11'-9"	U
v <sub>1</sub> (E)	#8	14'-0"	—
v <sub>8</sub>	#10	34'-8"	—
v <sub>10</sub> (E)	#5	4'-4"	—
v <sub>12</sub> (E)	#8	17'-8"	—
v <sub>13</sub> (E)	#5	14'-5"	—
Underwater Structure			
Excavation Protection	Each	1	
Location-4			
Drilled Shaft in Soil	Foot	45	
48" Dia.			
Drilled Shaft in Rock	Foot	60	
42" Dia.			
Concrete Structures	Cu. Yd.	94.3	
Reinforcement Bars, Epoxy Coated	Pound	13290	
Reinforcement Bars	Pound	9050	
Bar Splicers	Each	120	

Reinforcement Bars designated (E) shall be epoxy coated.  
 Cast steps monolithically with cap.  
 Space cap reinforcement to miss anchor bolts.  
 Minimum lap for spirals = 3'-0".  
 \*\*Length is height of spiral.



**Construction Sequence for Web Wall:**

1. Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct upper web walls.

\* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH



**PIER 2 DETAILS - E.B. STRUCTURE**  
 ILLINOIS ROUTE 336 OVER  
 EAST FORK OF THE LAMOINE RIVER  
 F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
 HANCOCK COUNTY; STA. 1432+02.61  
 STRUCTURE NO. 034-0511 (E.B.)  
 STRUCTURE NO. 034-0512 (W.B.)

Contract #68206

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_t$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is equal or larger than the diameter of bar spliced.

**ROLLED THREAD DOWEL BAR**



\*\* ONE PIECE

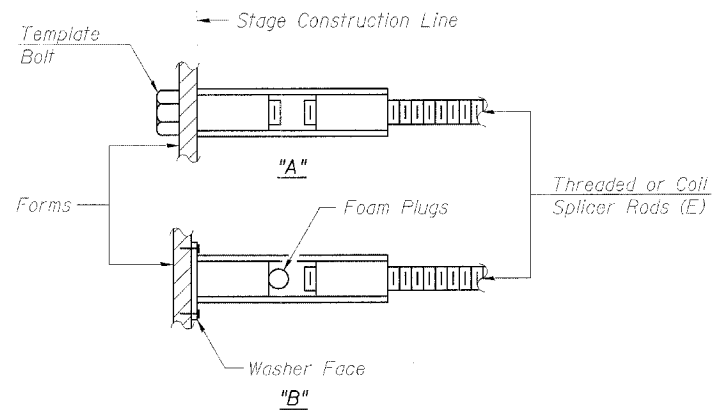
Wire Connector



**WELDED SECTIONS**

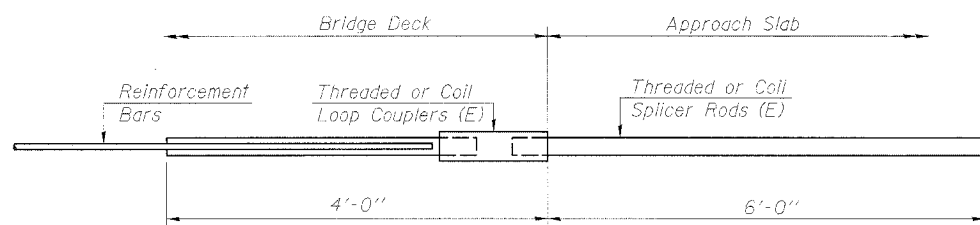
**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



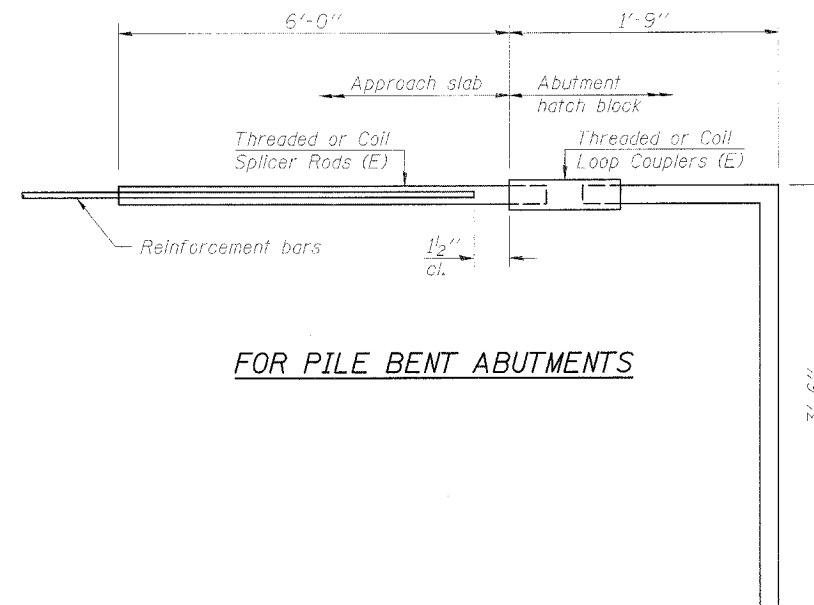
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
(E) : Indicates epoxy coating.



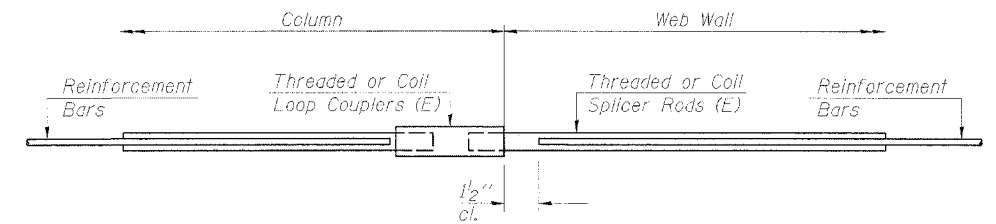
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =



**FOR PILE BENT ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 212



**STANDARD**

Bar Size	No. Assemblies Required	Location
#5	144	Pier 1-W.B. Str.
#5	144	Pier 1-E.B. Str.
#5	120	Pier 2-W.B. Str.
#5	120	Pier 2-E.B. Str.

**BAR SPLICER ASSEMBLY DETAILS**  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	JGC

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	230
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 32  
36 SHEETS

Contract #68206



SOIL BORING LOG

Page 1 of 2

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON  
SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.  
COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H	B L O W S	U C I S T	M O S T	Surface Water Elev.		Groundwater Elev.
					ft	ft	
BB-62 W Abut. WBL Station 1430+46 Offset 60.00ft LT Ground Surface Elev. 535.70 ft	(ft)	(6")	(tsf)	(%)			First Encounter DRY ft Upon Completion 532.1 ft After 24 Hrs. 530.8 ft
DK BR SILTY CLAY LOAM, A-6 W ROOTS & FIBERS 534.70		6					25.0
BR & GR SILTY LOAM, A-4 532.70		11	7.3	10.0			
RD BR, BR & GR CLAY LOAM, A-6 527.70		9	7.5	12.0			
RD BR, BR & GR SILTY CLAY LOAM, A-7-6 526.20		11	3.9	10.0			
GR WEATHERED LIMESTONE W CLAY SEAMS 524.70		43		3.0			
Borehole continued with rock coring.							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator)  
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)



ROCK CORE LOG

Page 2 of 2

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON  
SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.  
COUNTY McDon. & Hancock CORING METHOD

STRUCT. NO. Station	CORING BARREL TYPE & SIZE	D C O R E D I A M E T E R (in)	C O R E L E N G T H (ft)	R E C O R D E D C O R E L E N G T H (ft)	C O R E S T R E N G T H (tsf)	S T R E N G T H (tsf)
BB-62 W Abut. WBL Station 1430+46 Offset 60.00ft LT Ground Surface Elev. 535.70 ft	NX					
GR WEATHERED LIMESTONE 534.70				48	0	
GR LIMESTONE 522.20				100	86	520.6
513.70						
End of Boring						

Color pictures of the cores  
Cores will be stored for examination until  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-938)

BBS, form 138 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON  
SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.  
COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H	B L O W S	U C I S T	M O S T	Surface Water Elev.		Groundwater Elev.
					ft	ft	
BB-63 W Abut. Station 1430+76 Offset 0.00ft (on CL) Ground Surface Elev. 535.30 ft	(ft)	(6")	(tsf)	(%)			First Encounter NONE ft Upon Completion 528.7 ft After 24 Hrs. 528.7 ft
DK BR SILTY CLAY LOAM, A-6 W ROOTS & FIBERS 534.30		4					25.0
BR & GR SILTY CLAY, A-7-6 529.50		6	0.9	27.0			
RD BR & RD BR SILTY CLAY LOAM, A-6 527.50		4					
RD BR & BR SANDY LOAM, A-4 527.20		5	1.3	23.0			
GRN GR CLAY SHALE 524.50		7		17.0			
GR LIMESTONE 521.80		100@ 0"		14.0			
End of Boring 516.80		100@ 0"		6.0			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator)  
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	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KPH



BORING LOGS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SOIL BORING LOG

Page 1 of 2  
Date 2/29/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY C. WHITEMAN

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E L C O	B L C O	U C I S	M O S I	Surface Water Elev. ft	D E L C O	B L C O	U C I S	M O S I
BORING NO. BB-57 W Abut. EBL Station 1430+97 Offset 48.20ft RT Ground Surface Elev. 541.30 ft					520.3 ft				
PAVEMENT MATERIALS 102mm Asphalt, 254mm. POC					520.80				
FILL: BR SILTY CLAY LOAM, A-6									
DK BR, RD BR & GR SILTY LOAM, A-4									
BR, RD BR & GR SILTY CLAY LOAM, A-6									
BR, RD BR & GR SILTY LOAM, A-6									
BR & RD BR SILTY CLAY LOAM, A-6									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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)



ROCK CORE LOG

Page 2 of 2  
Date 2/29/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY C. WHITEMAN

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock CORING METHOD

STRUCT. NO. Station	CORING BARREL TYPE & SIZE	D E L C O	B L C O	U C I S	M O S I	Core Diameter in	Top of Rock Elev. ft	Begin Core Elev. ft	Ground Surface Elev. ft	R E C O R D E D E T H	C O R E S T R E N G T H	C O R E T E M P E R A T U R E	C O R E D I A M E T E R	C O R E L E N G T H
GR LIMESTONE														
End of Boring														

Color pictures of the cores  
Cores will be stored for examination until  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1  
Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E L C O	B L C O	U C I S	M O S I	Surface Water Elev. ft	D E L C O	B L C O	U C I S	M O S I
BORING NO. BB-64 W Pier Station 1481+86 Offset 2.30ft LT Ground Surface Elev. 528.80 ft					508.9 ft				
TOPSOIL FILL: DK BR SANDY LOAM, A-2-4 WROOTS & FIBERS					527.80				
FILL: BR SANDY LOAM, A-2-4 W/LIMESTONE FRAGMENTS									
FILL: DK BR & RD BR SILTY CLAY LOAM, A-7-6 W/LIMESTONE FRAGMENTS									
BR & GR CLAY LOAM, A-6 WSAND, A-3 SEAMS									
DK BR SILTY LOAM, A-6									
WOOD FIBER RD BR & GR SILTY LOAM, A-4									
GR & RD BR SILTY LOAM, A-4									
GR SILTY LOAM, A-4									
GRN GR SILTY CLAY, A-7-6									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KPH



BORING LOGS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Contract #68206



SOIL BORING LOG

Page 1 of 1

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON

SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H	B L O S S	U C I S	M O S T	Surface Water Elev. ft	Stream Bed Elev. ft	D E P T H	B L O S S	U C I S	M O S T
BORING NO. BB-58 W Pier, EBL Station 1431+74 Offset 65.60ft RT Ground Surface Elev. 520.50 ft										
BR SAND, A-3 W/FIBERS										
BR CLAY LOAM, A-6										
BR & GR CLAY LOAM, A-6 W/SAND, A-3 SEAMS										
DK BR SILTY LOAM, A-6										
RD BR & GR SILTY LOAM, A-4										
GR & RD BR SILTY LOAM, A-4										
GRN GR SILTY LOAM, A-6										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON

SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H	B L O S S	U C I S	M O S T	Surface Water Elev. ft	Stream Bed Elev. ft	D E P T H	B L O S S	U C I S	M O S T
BORING NO. BB-65 E Pier, WBL Station 1432+00 Offset 63.40ft LT Ground Surface Elev. 529.00 ft										
BLK SILTY CLAY LOAM, A-7-6 W/ROOTS & FIBERS										
DK BR SILTY CLAY LOAM, A-6 W/ROOTS & FIBERS										
BR & GR TO DK BR & GR SILTY CLAY LOAM, A-6										
DK BR & BR SILTY LOAM, A-4										
BR, RD BR & GR SILTY LOAM, A-4										
GR SILTY LOAM, A-4										
GR SILTY LOAM, A-4										
GR & RD BR SILTY LOAM, A-4										
GRN GR SILTY LOAM, A-6										
WOOD FRAGMENTS										
BR TO RD BR SAND, A-1-b										
WOOD FIBERS										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 2/22/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D. ANDERSON

SECTION 24, 31, 32 LOCATION SEC., TWP., RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H	B L O S S	U C I S	M O S T	Surface Water Elev. ft	Stream Bed Elev. ft	D E P T H	B L O S S	U C I S	M O S T
BORING NO. BB-59 E Pier Station 1432+48 Offset 4.90ft RT Ground Surface Elev. 527.60 ft										
TOPSOIL FILL: BLK SILTY CLAY A-7-6 W/ROOTS & FIBERS										
FILL: DK BR SILTY CLAY LOAM, A-6 W/FIBERS & COAL FRAGMENTS										
FILL: DK BR SILTY CLAY LOAM, A-6 W/LIMESTONE FRAGMENTS										
GR SILTY LOAM, A-4										
GR SANDY LOAM, A-2-4 W/ FIBERS										
GR SILTY LOAM, A-4										
GR GRAVELLY SAND A-1-a W/LIMESTONE FRAGMENTS										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KPH



BORING LOGS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 315	34-6, 55-1	HANCOCK	433	233
FED. ROAD DIST. NO. 7		F.L. NO.	FED. AID PROJECT	

Contract #68206



SOIL BORING LOG

Page 1 of 2  
Date 2/1/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D.ANDERSON

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E L C O S	B L C O S	U T W S	M O S I S	Surface Water Elev. ft	Stream Bed Elev. ft	D E L C O S	B L C O S	U T W S	M O S I S
BORING NO. BB-66 E. Abut. WBL Station 1432+75 Offset 60.000 LT Ground Surface Elev. 529.17 ft										
DK BR SILTY CLAY LOAM, A-6 W ROOT & FIBERS										
BR SILTY CLAY LOAM, A-6										
BR & GR TO DK BR & GR SILTY CLAY LOAM, A-6										
BR SILTY CLAY LOAM, A-6										
RD BR & GR TO GR SILTY LOAM, A-4										
GR SILTY LOAM, A-4										
BR TO RD BR & GR SAND, A-1-b										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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)



ROCK CORE LOG

Page 2 of 2  
Date 2/1/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D.ANDERSON

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock CORING METHOD NX

STRUCT. NO. Station	CORING BARREL TYPE & SIZE	Core Diameter in	Top of Rock Elev. ft	Begin Core Elev. ft	R E C O R D	R E C O R D	C O R E	S T R E T
BORING NO. BB-66 E. Abut. WBL Station 1432+75 Offset 60.000 LT Ground Surface Elev. 529.17 ft								
GRN GR LIMESTONE								
GR LIMESTONE								
End of Boring								

Color pictures of the cores  
Cores will be stored for examination until  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1  
Date 2/1/00

ROUTE IL 336 DESCRIPTION Proposed IL 336 over E. Fork of Lamoine R. LOGGED BY D.ANDERSON

SECTION 24.31.32 LOCATION SEC. TWP. RNG.

COUNTY McDon. & Hancock DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E L C O S	B L C O S	U T W S	M O S I S	Surface Water Elev. ft	Stream Bed Elev. ft	D E L C O S	B L C O S	U T W S	M O S I S
BORING NO. BB-69 E. Abut Station 1433+04 Offset 0.000 (on CL) Ground Surface Elev. 527.82 ft										
TOPSOIL FILL: DK BR SILTY CLAY LOAM, A-6 W ROOTS & FIBERS										
BR SILTY CLAY LOAM, A-6										
BR & RD BR SILTY LOAM, A-4										
RD BR & GR TO GR SILTY LOAM, A-4										
GR SILTY LOAM, A-4										
BR TO RD BR & GR SAND, A-1-b										
BR SAND, A-3										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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)

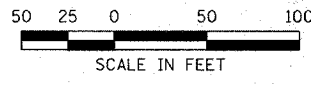
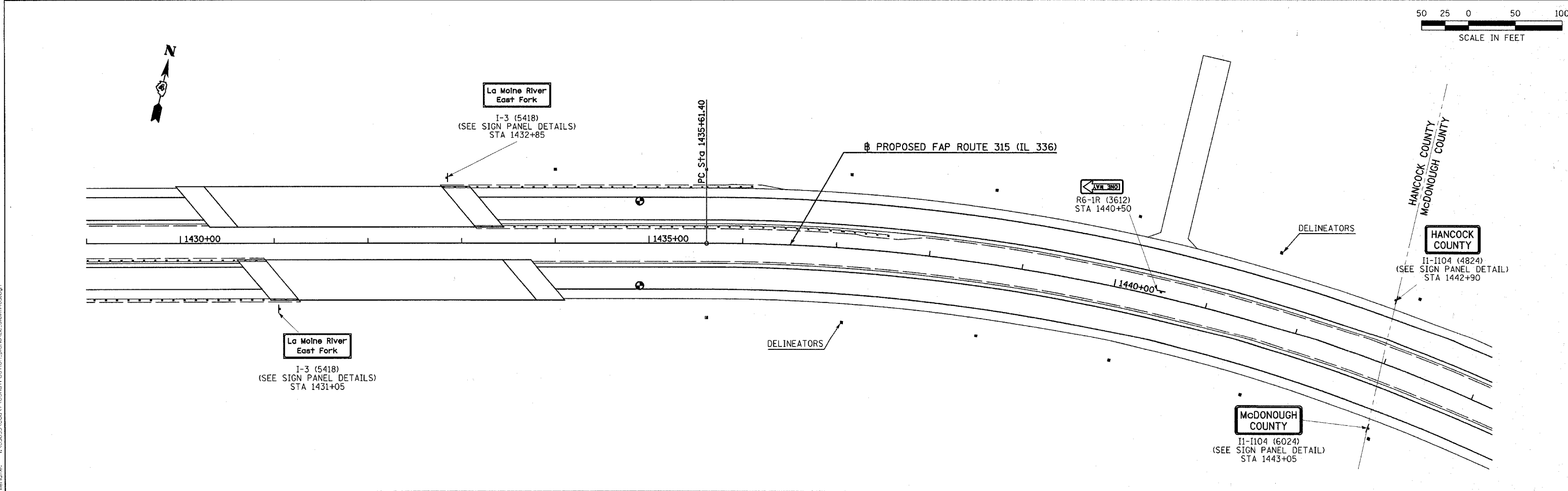
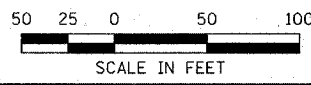
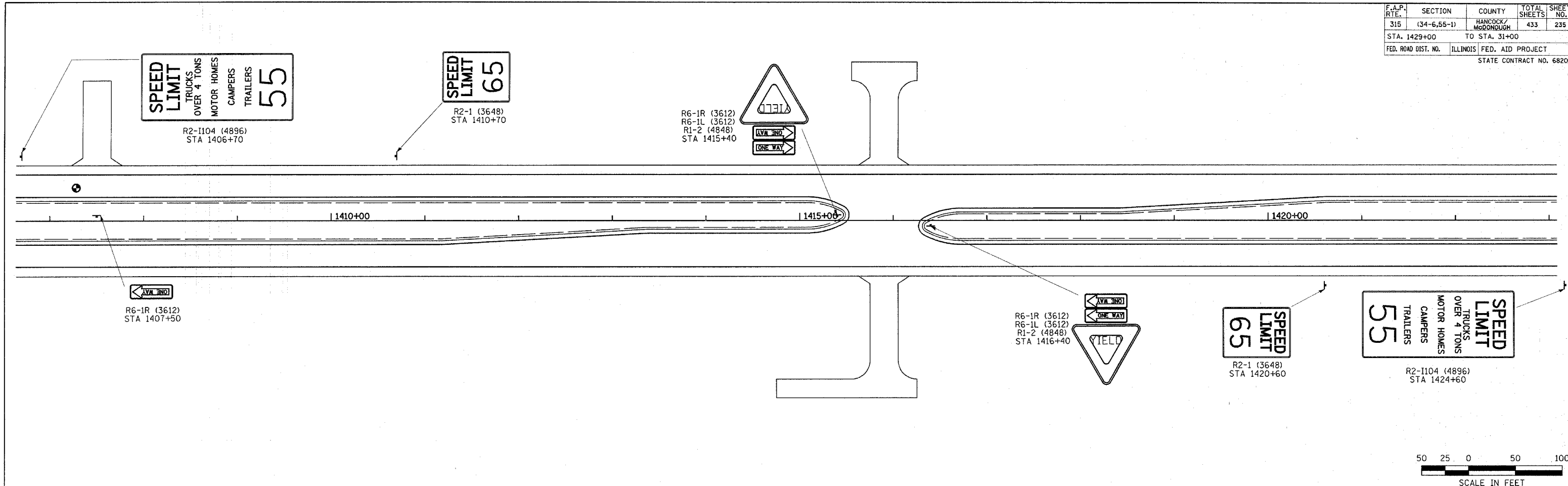
DESIGNED	KLH
CHECKED	EML
DRAWN	KBF
CHECKED	KPH



BORING LOGS  
ILLINOIS ROUTE 336 OVER  
EAST FORK OF THE LAMOINE RIVER  
F.A.P. ROUTE 315 - SECTION 34-6, 55-1  
HANCOCK COUNTY; STA. 1432+02.61  
STRUCTURE NO. 034-0511 (E.B.)  
STRUCTURE NO. 034-0512 (W.B.)

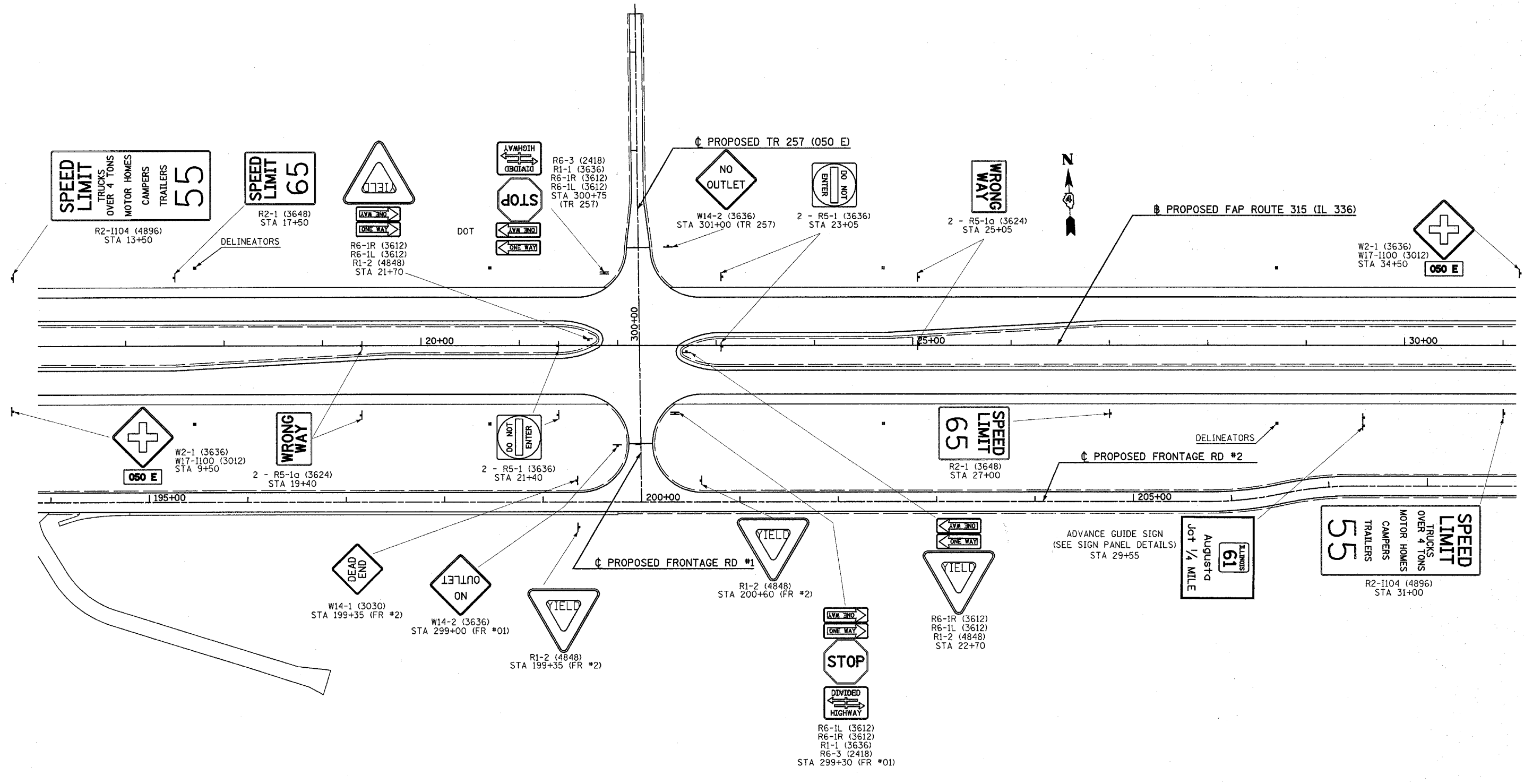


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	235
STA. 1429+00 TO STA. 31+00		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				



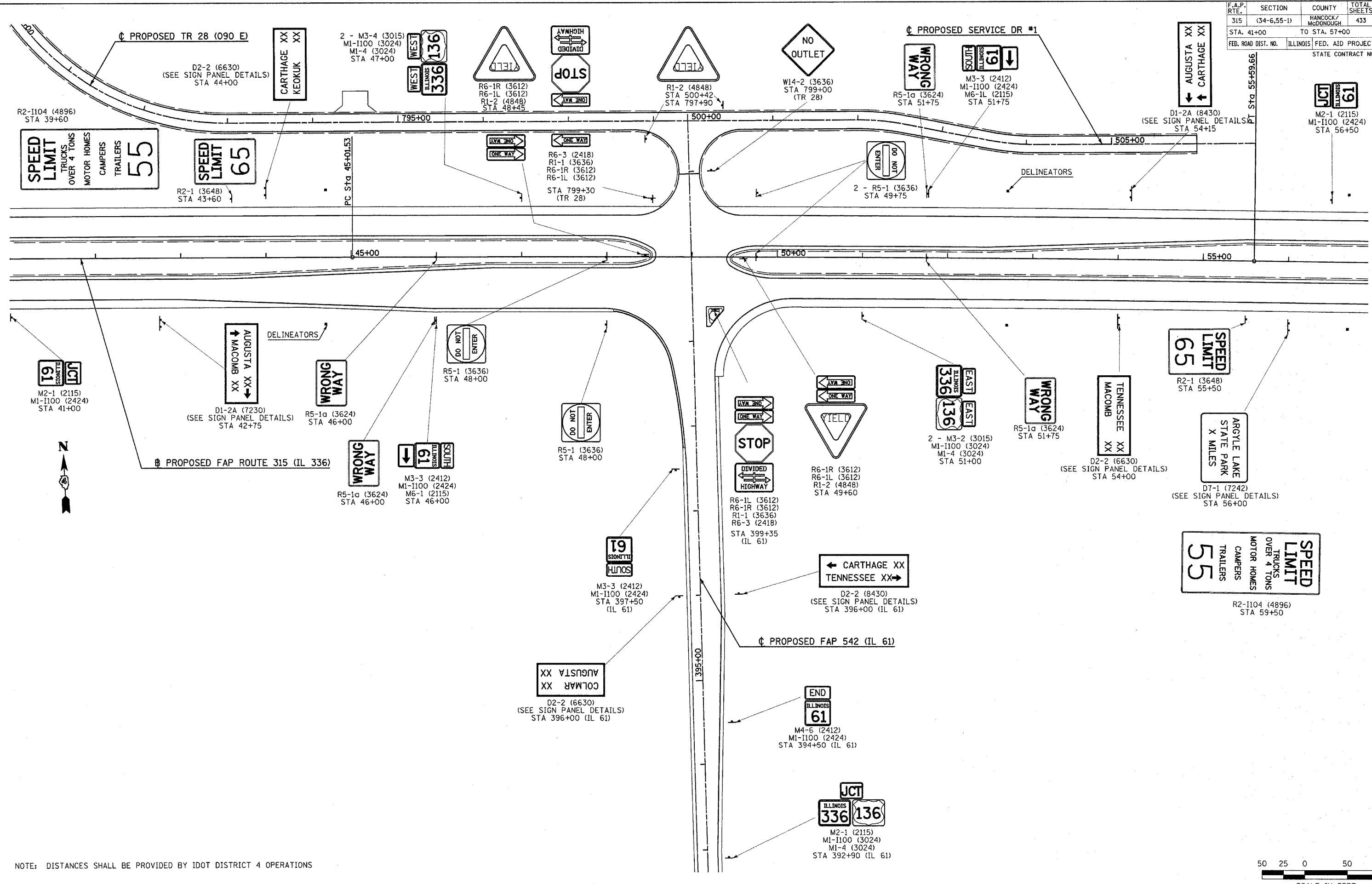
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	236
STA. 1429+00		TO STA. 31+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				

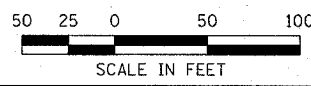


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	237
STA. 41+00 TO STA. 57+00		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				

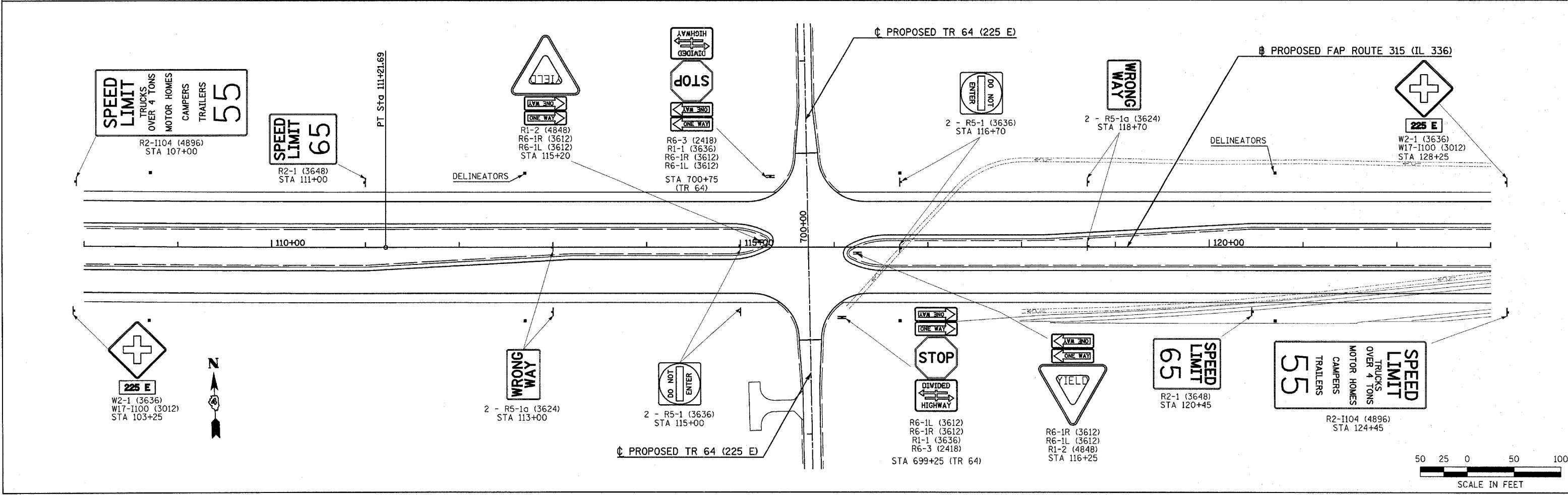
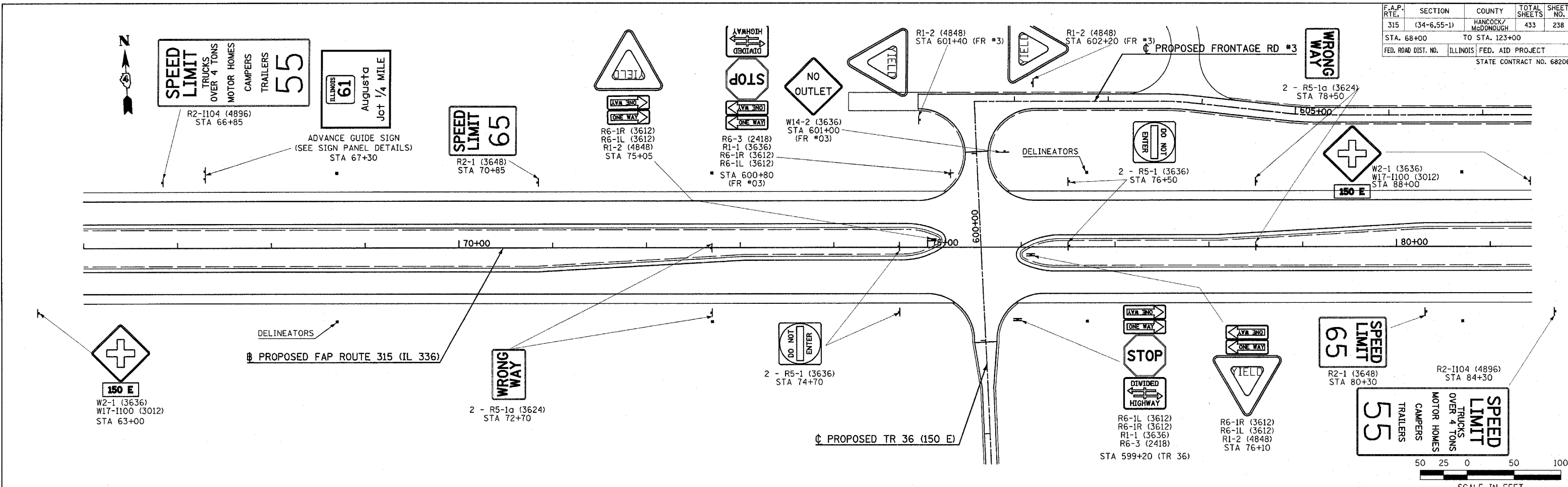


NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS



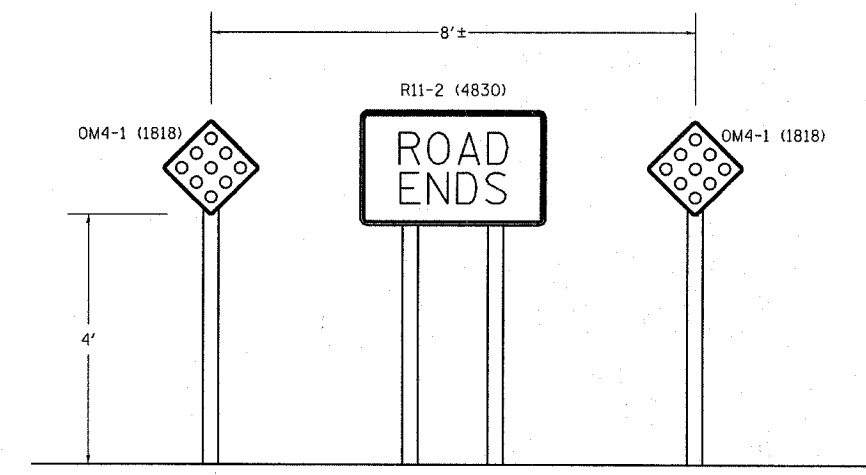
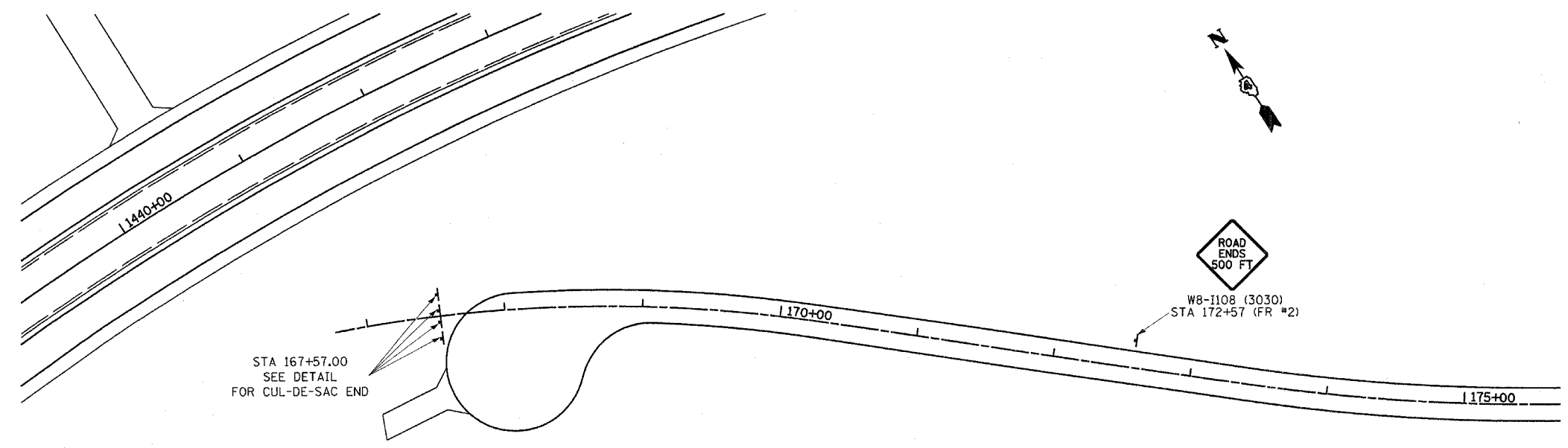
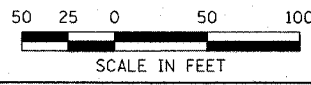
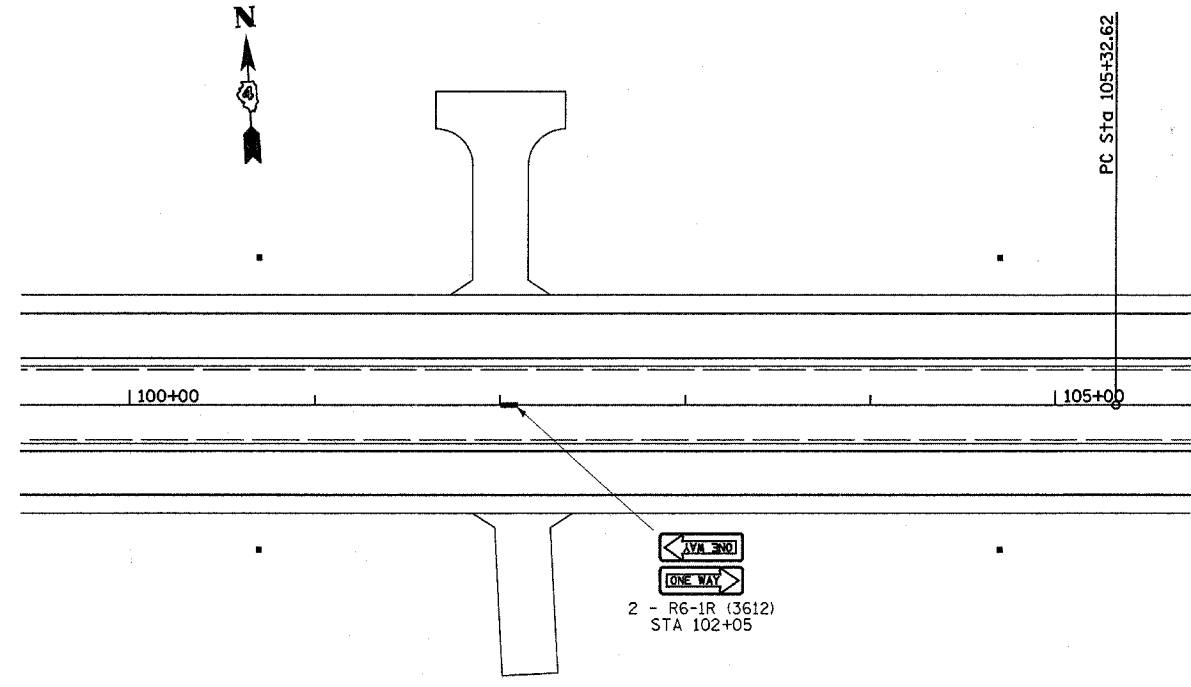
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	238
STA. 68+00		TO STA. 123+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				



Plot Date: 7/18/2006  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	239
STA. 166+76.74		TO STA. 178+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
STATE CONTRACT NO. 68206				



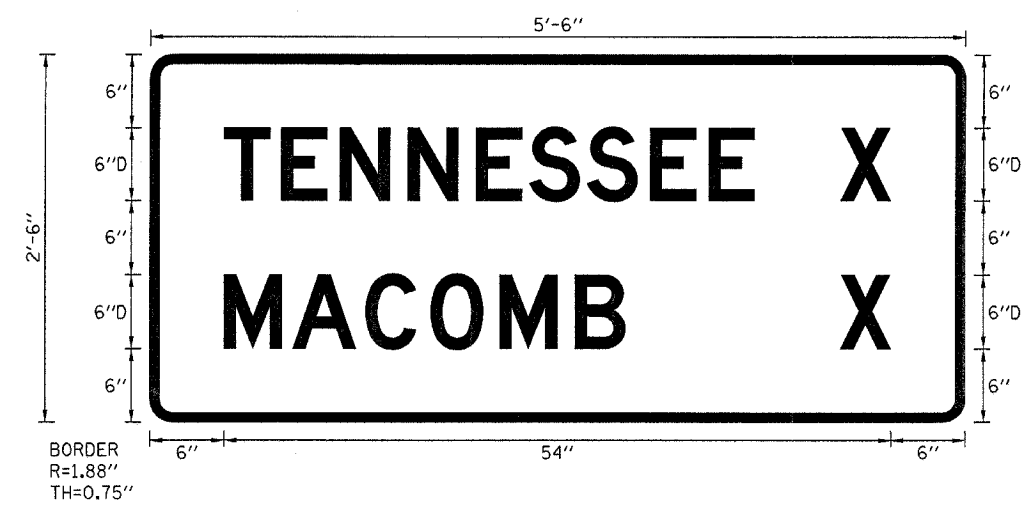
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NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	240
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				

**SIGN DETAIL**  
1:10



<b>SIGN NUMBER</b>	D2-2
<b>WIDTH x HGHT.</b>	5'-6" x 2'-6"
<b>BORDER WIDTH</b>	0.75"
<b>CORNER RADIUS</b>	1.88"
<b>MOUNTING</b>	Ground
<b>BACKGROUND</b>	<b>TYPE:</b> Reflective
	<b>COLOR:</b> Green
<b>LEGEND/BORDER</b>	<b>TYPE:</b> Reflective
	<b>COLOR:</b> White/Pure White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: D2-2.ssi  
Dimensions are in inches.tenths

Letter spacings are to start of next letter

LETTER POSITIONS (X)											LENGTH	SERIESIZE		
	T	E	N	N	E	S	S	E	E	X			D 2000	
6	4.6	4.7	5.5	5.5	4.3	4.7	5.1	4.7	3.7	7	4.1	6	54	6
	M	A	C	O	M	B		X						D 2000
6	5.6	5.9	5.3	5.6	6.1	4.1	17.4	4.1	6				54	6

Plot Date: 7/19/2006  
Plot Time: 10:27:40 AM  
Plotted By: bschmidt  
Pen Tables: ldot11.tbl  
Filename: I:\02052\Coa1\Construction\Plans\223.Detail\SignPanel.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SIGN PANEL STANDARDS**  
SHEET 1 OF 14  
SCALE: VERT. N/A  
          HORIZ. N/A  
DATE: 6/21/04  
DRAWN BY: BDS  
CHECKED BY: SRD

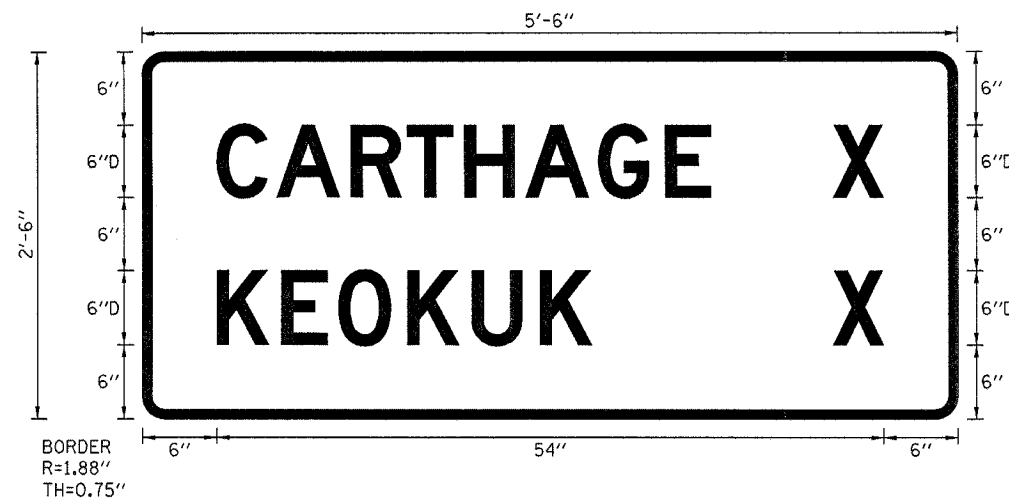


NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	241
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
STATE CONTRACT NO. 68206				

**SIGN DETAIL**

1:10



Panel Style: D2-2.ssi  
 Dimensions are in inches.tenths

SIGN NUMBER	D2-2	
WIDTH x HGT.	5'-6" x 2'-6"	
BORDER WIDTH	0.75"	
CORNER RADIUS	1.88"	
MOUNTING	Ground	
BACKGROUND	TYPE:	Reflective
	COLOR:	Green
LEGEND/BORDER	TYPE:	Reflective
	COLOR:	White/Pure White

SYMBOL	ROT	X	Y	WID	HT

Letter spacings are to start of next letter

**LETTER POSITIONS (X)**

	C	A	R	T	H	A	G	E	X									LENGTH	SERIES/SIZE
6	4.9	6	4.6	4.6	5	5.9	5.4	3.7	9.9	4.1	6							54	D 2000
6	5.2	4.6	5.6	5.2	5.5	4.2	19.6	4.1	6									54	D 2000

Plot Date: 7/19/2006  
 Plot Time: 10:27:10 AM  
 Plotted By: bschmidt  
 Pen Table: idot.tbl  
 Plotname: c:\32033\cadd\cadd\construction\plans\222\_details\signpanel.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SIGN PANEL STANDARDS**  
 SHEET 2 OF 14

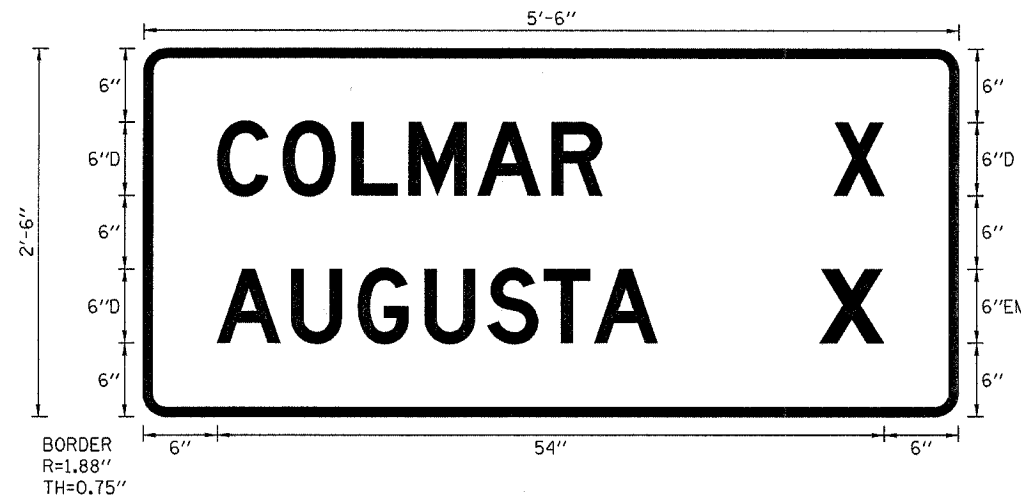
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 HORIZ. N/A  
 DATE: 6/21/04  
 DRAWN BY: BDS  
 CHECKED BY: SRD

NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	242
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
STATE CONTRACT NO. 68206				

**SIGN DETAIL**

1:10



Panel Style: D2-2.ssi  
Dimensions are in inches, tenths

SIGN NUMBER	D2-2
WIDTH x HGT.	5'-6" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	1.88"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT

Letter spacings are to start of next letter

LETTER POSITIONS (X)

	C	O	L	M	A	R	X				LENGTH	SERIESSIZE
											D 2000	
6	5.3	5.6	4.6	5.6	6	4.1	18.8	4.1	6	54	6	
											D 2000,EM 2000	
6	6	5.4	5.4	5.1	4.6	4.1	5.1	13.1	5.2	6	54	6

Plot Date: 7/19/2006  
Plot Time: 10:27:10 AM  
Plotted By: bschmidt  
Pen Table: idot1131  
Filename: I:\2005\Cad\Construction\Plans\233.Dat\015SignPanel.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SIGN PANEL STANDARDS**  
SHEET 3 OF 14

SCALE: VERT. N/A  
HORIZ. N/A  
DATE 6/21/04

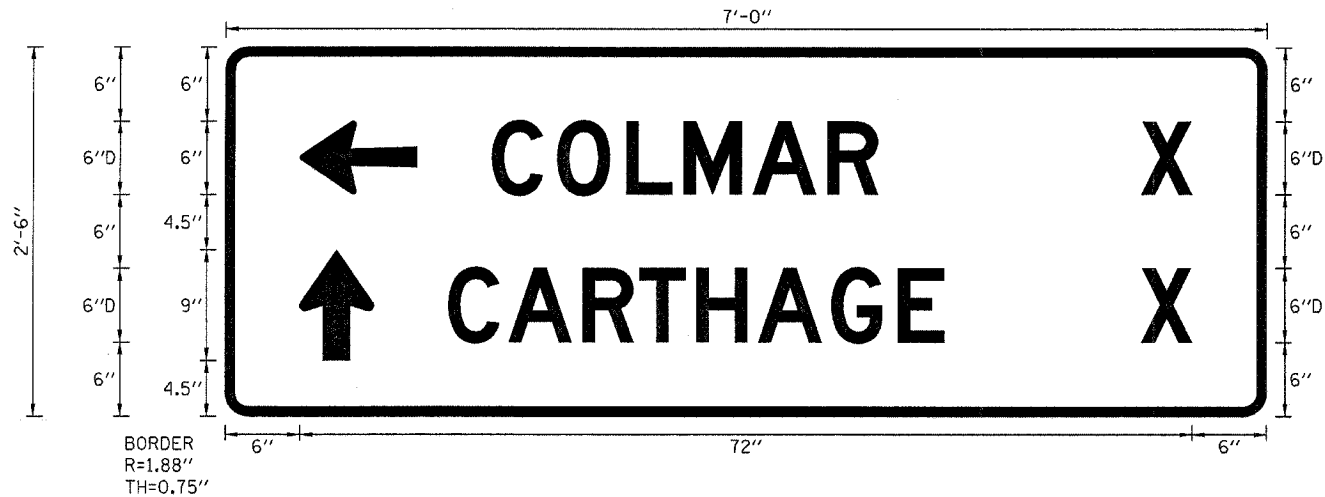
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CHECKED BY: SRD



NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	244
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				

**SIGN DETAIL**  
1:10



Panel Style: D1-2A.ssi  
Dimensions are in inches.tenths

SIGN NUMBER	D1-2A	
WIDTH x HGHT.	7'-0" x 2'-6"	
BORDER WIDTH	0.75"	
CORNER RADIUS	1.88"	
MOUNTING	Ground	
BACKGROUND	TYPE:	Reflective
	COLOR:	Green
LEGEND/BORDER	TYPE:	Reflective
	COLOR:	White/Pure White

SYMBOL	ROT	X	Y	WID	HT
ARMED	180	6	18	6	9.5
ARUP	0	6	4.5	6	9

Letter spacings are to start of next letter

**LETTER POSITIONS (X)**

	C	O	L	M	A	R	X												LENGTH	SERIES/SIZE
																				D 2000
21.5	5.3	5.6	4.6	5.6	6	4.1	21.3	4.1	6									56.5	6	
	C	A	R	T	H	A	G	E	X											D 2000
18	4.9	6	4.6	4.6	5	5.9	5.4	3.7	15.9	4.1	6							60	6	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SIGN PANEL STANDARDS**  
SHEET 5 OF 14

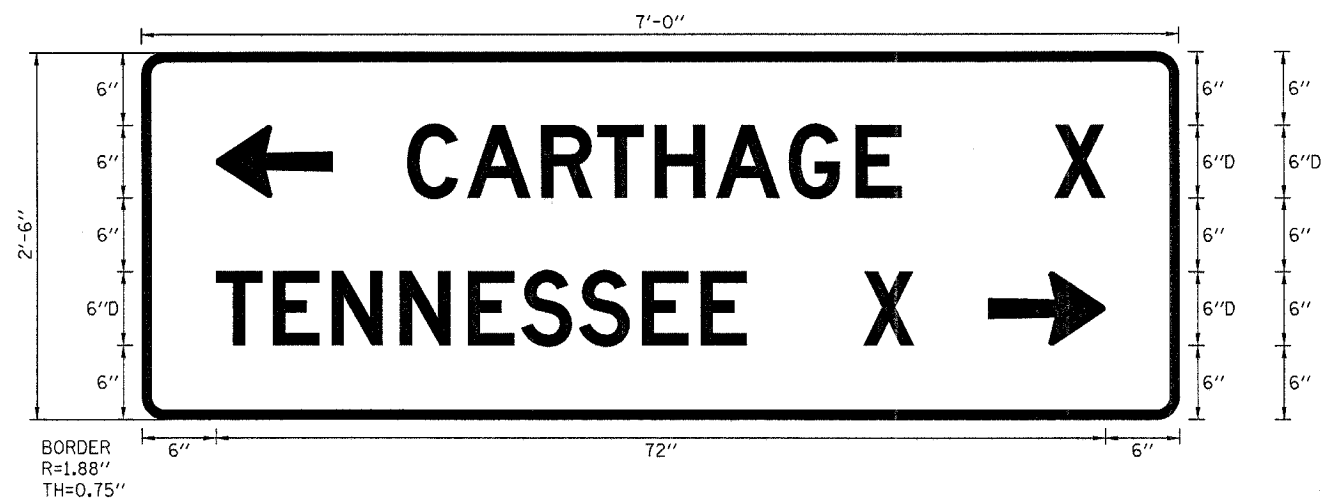
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HORIZ. N/A  
DATE 6/21/04  
DRAWN BY BDS  
CHECKED BY SRD

Plot Date: 7/19/2006  
Plot Time: 10:27:10 AM  
By: [unclear]  
Plot: [unclear]  
File Name: I:\03\033\Code\1\Constr\action\Plans\223\_Det\015\SignPanel.dgn

NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	245
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		STATE CONTRACT NO. 68206

**SIGN DETAIL**  
1:10



Panel Style: D1-2A.ssi  
Dimensions are in inches.tenths

Letter spacings are to start of next letter

SIGN NUMBER	D1-2A
WIDTH x HGHT.	7'-0" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	1.88"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
ARMED	180	6	18	6	9.4
ARMED	0	68.5	6	6	9.5

**LETTER POSITIONS (X)**

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
	C	A	R	T	H	A	G	E	X			D 2000	
21.5	4.9	6	4.6	4.6	5	5.9	5.4	3.7	12.4	4.1	6	56.5	6
	T	E	N	N	E	S	S	E	E	X		D 2000	
6	4.6	4.7	5.5	5.5	4.3	4.7	5.1	4.7	3.7	9.5	4.1	56.5	6

Plot Date: 7/19/2006  
Plot Time: 10:27:40 AM  
Plotted By: bschmidt  
Pen Table: 1007.tbl  
Filename: I:\2005\315\34-6,55-1\Cons\Function\_Plans\223\_Det\215SignPanel.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SIGN PANEL STANDARDS**  
SHEET 6 OF 14  
SCALE: VERT. N/A  
HORIZ. N/A  
DATE 6/21/04  
DRAWN BY: BDS  
CHECKED BY: SRD

NOTE: DISTANCES SHALL BE PROVIDED BY IDOT DISTRICT 4 OPERATIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/McDONOUGH	433	246
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
STATE CONTRACT NO. 68206				

**SIGN DETAIL**  
1:10



SIGN NUMBER	Advance Guide Sign
WIDTH x HGHT.	8'-6" x 7'-6"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Pure White

SYMBOL	ROT	X	Y	WID	HT
M124_2	0	39	53.3	24	24

Panel Style: guide\_exp\_advance\_a.ssi  
Dimensions are in inches.tenths  
BORDER R=12" TH=2"

Letter spacings are to start of next letter

LETTER POSITIONS (X)													LENGTH	SERIES/SIZE					
A	u	g	u	s	t	a											D 2000		
19.2	12.9	10	10.5	9.7	6.8	6.1	7.6	19.2									63.6	13.39.7	
J	c	t		1/4		M	I	L	E									D 2000	
10.8	8.3	6.4	4	10	13.3	10	10.3	4	7.8	6.3	10.8							80.4	10.17.4

Plot Date: 7/19/2006  
Plot Time: 10:21:40 AM  
Plotted By: bschmidt  
Pen Table: idot.tbl  
Plotter: 8703033\csp1\Construction\_Plane\223.Dwt\61516r.pencal.cgm

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SIGN PANEL STANDARDS**  
SHEET 7 OF 14

SCALE: VERT. N/A  
HORIZ. N/A  
DATE 6/21/04

DRAWN BY: BDS  
CHECKED BY: SRD













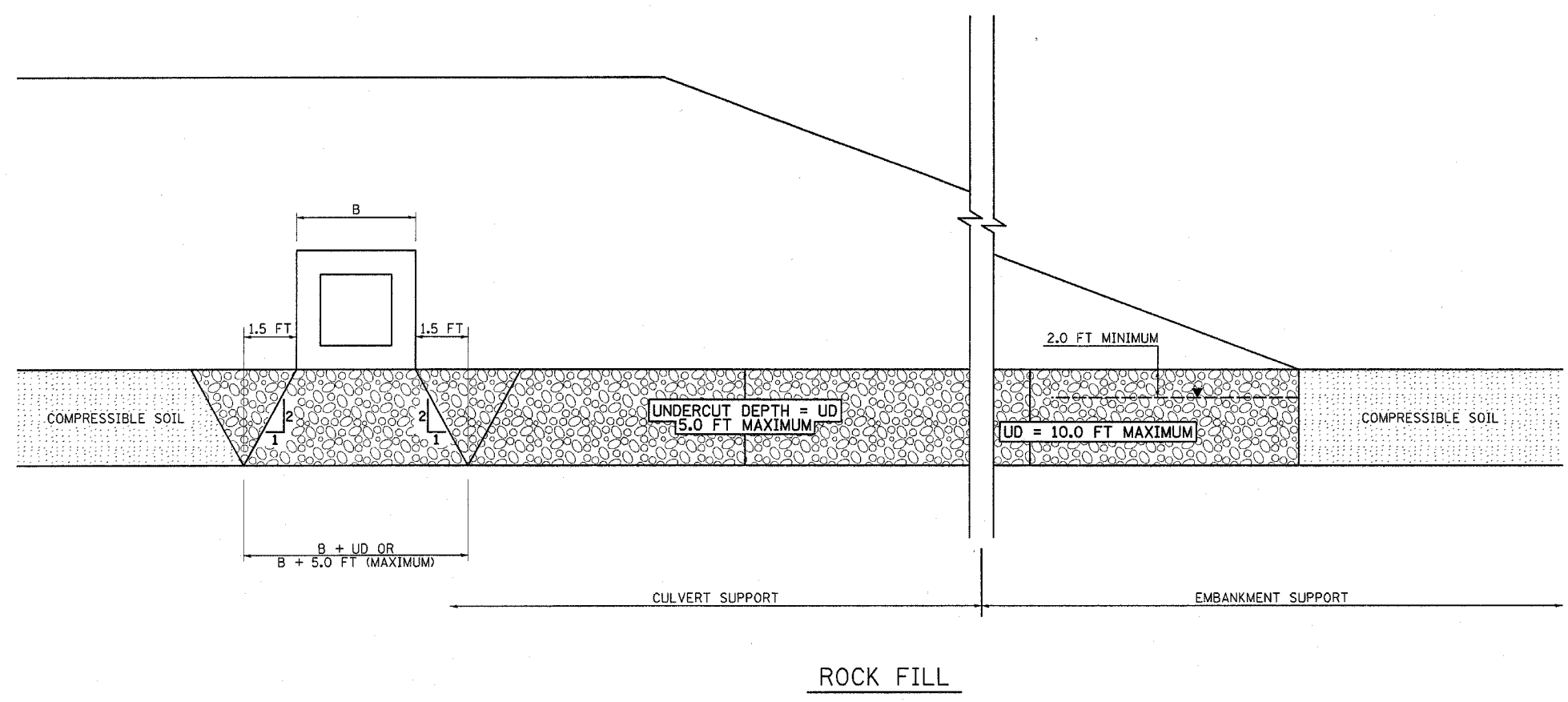




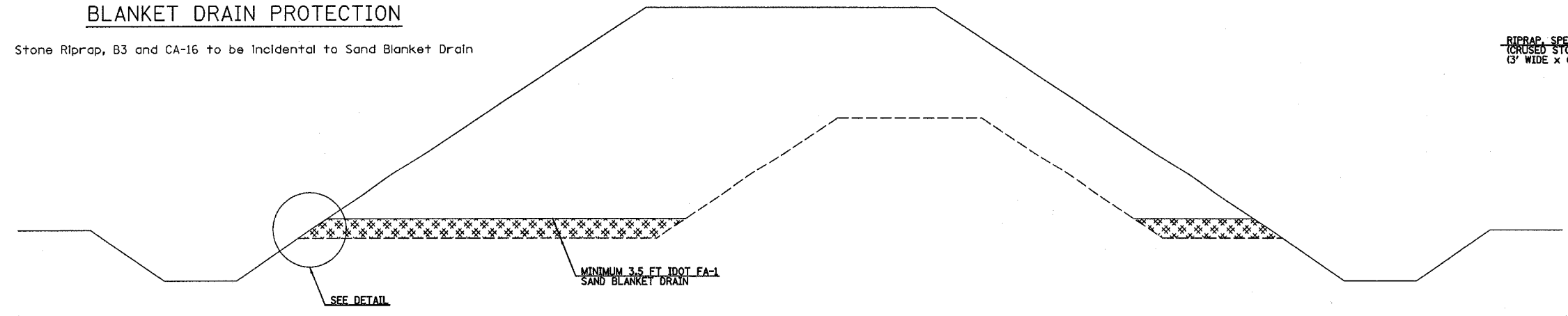
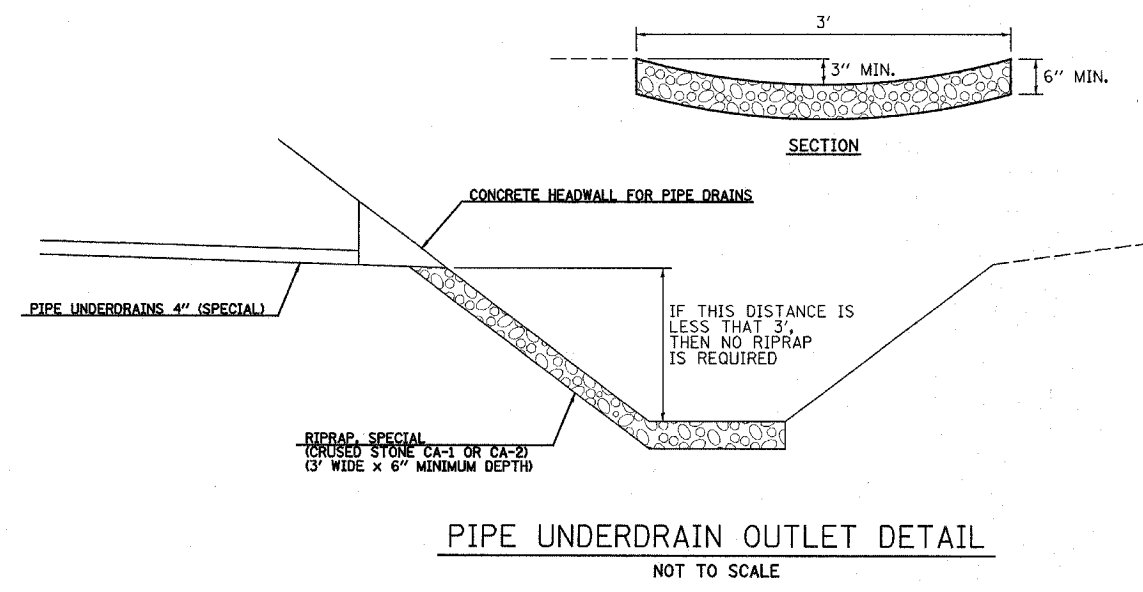
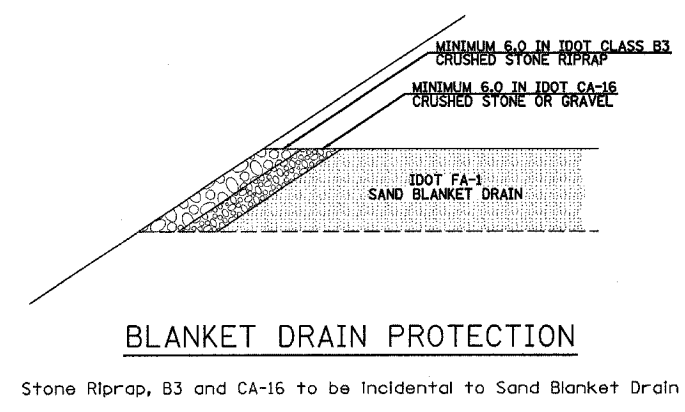


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	255
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		STATE CONTRACT NO. 68206

**NOTE**  
SEE SPECIAL PROVISIONS FOR ROCK FILL



**ROCK FILL**



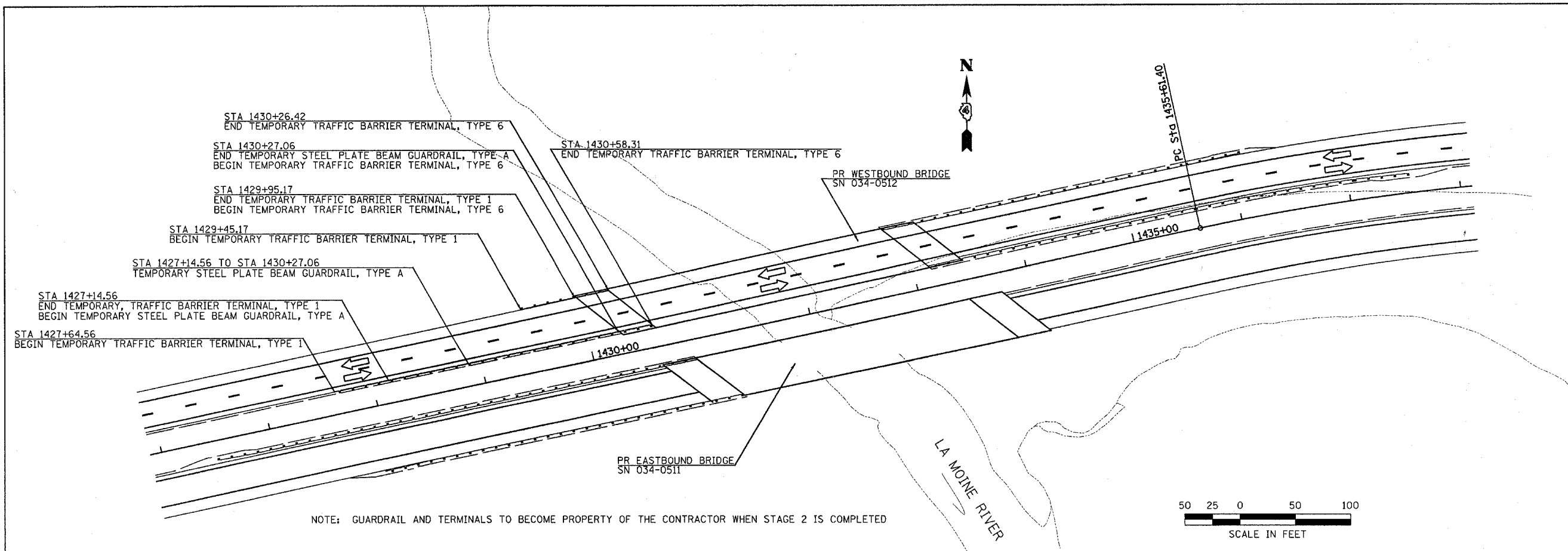
**DESIGN EMBANKMENT - DRAINAGE SECTION**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DESIGN DETAILS**  
ROCK FILL  
SAND DRAINAGE BLANKET DETAILS  
PIPE UNDERDRAIN OUTLET DETAIL  
SCALE: VERT. VARIES  
HORIZ. VARIES  
DATE: 8/31/05  
DRAWN BY: SSM  
CHECKED BY: BOS

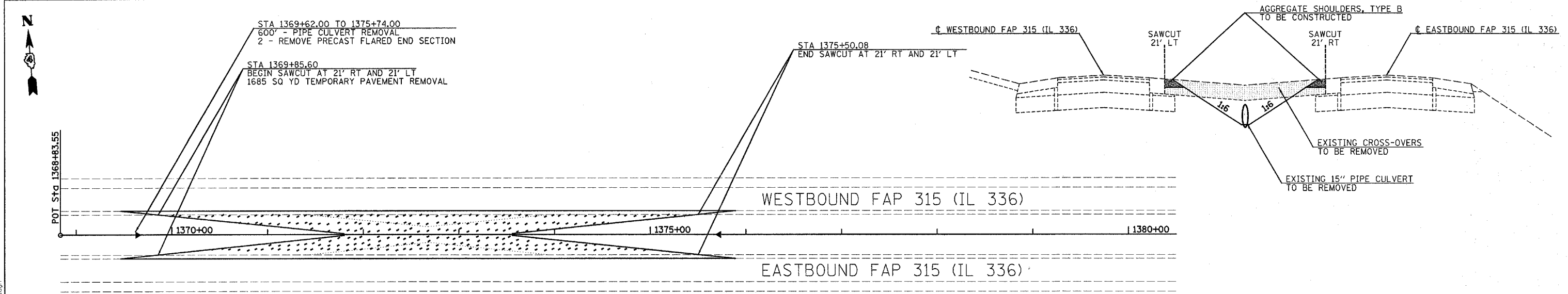
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 Plot Time: 3:52:02 PM  
 Plotted By: bschmidt  
 Pen Table: ldr1.tbl  
 Filename: I:\03\03\road\1\construction\plans\254\_detailed.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	256
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	

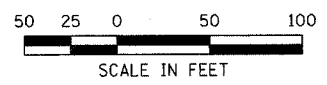


NOTE: GUARDRAIL AND TERMINALS TO BECOME PROPERTY OF THE CONTRACTOR WHEN STAGE 2 IS COMPLETED

STAGE 2 TEMPORARY STEEL PLATE BEAM GUARDRAIL AND TERMINAL END SECTIONS



REMOVAL OF TEMPORARY CROSSOVERS ON WEST END



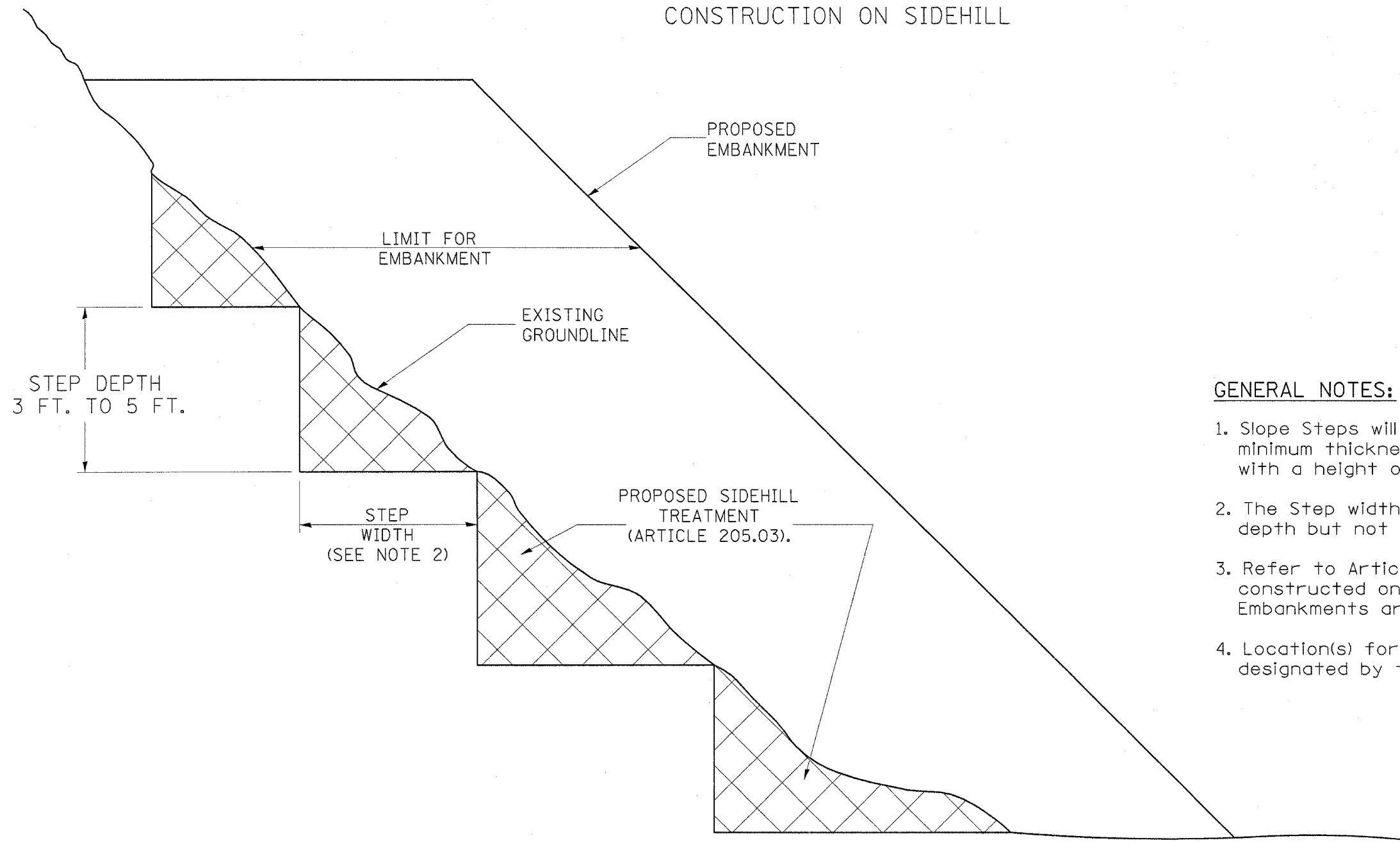
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<b>DESIGN DETAILS</b> STAGE 2 TEMPORARY GUARDRAIL & CROSSOVER REMOVAL AT BEGINNING OF JOB  SCALE: VERT. VARIES HORIZ. VARIES DATE 9/1/2005  DRAWN BY BDS CHECKED BY SRD

Plot Date: 7/18/2006  
 Time: 3:52:00 PM  
 Plot Path: I:\2003\33\road\1\construct\west\_end\_planes\224\_detailed.dgn  
 Pen Tables: 1801.tbl  
 File Name: I:\2003\33\road\1\construct\west\_end\_planes\224\_detailed.dgn



## SLOPE STEPS DETAIL

### TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



#### GENERAL NOTES:

1. Slope Steps will be required for all 300(12) minimum thickness "silver fills" and on a fills with a height of 3.0m(10').
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.
4. Location(s) for slope step treatment shall be designated by the Resident Engineer.

#### REPLACEMENT MATERIAL:



STANDARD EMBANKMENT  
(IN ACCORDANCE WITH  
205 OF THE STANDARD SPECIFACATION).

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

### DESIGN DETAILS

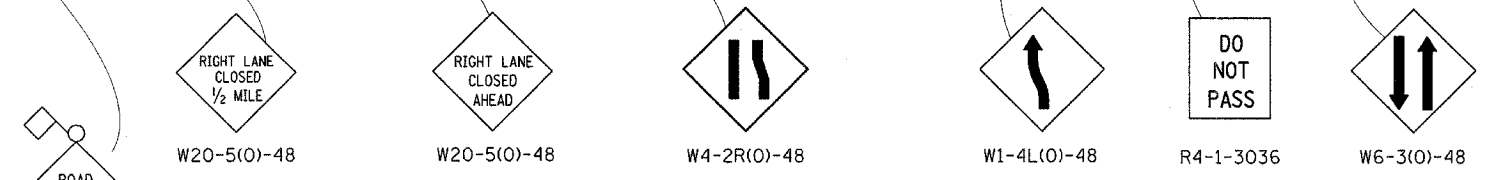
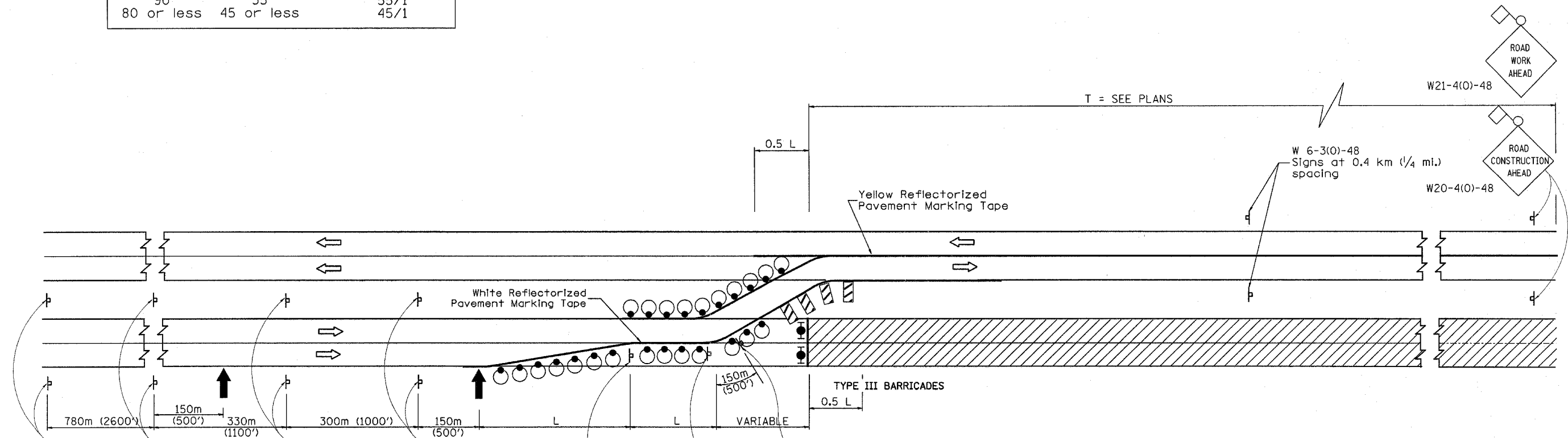
#### SLOPE STEPS DETAIL

SCALE: VERT. VARIES  
HORIZ. VARIES  
DATE 4/5/2006

DRAWN BY BDS  
CHECKED BY SRD

Plot Date: 7/19/2006  
 Plot Time: 10:00:00 AM  
 Plot Path: C:\Users\BDS\AppData\Local\Temp\1\1001-101  
 File Name: I:\030333\cod\1\constr\function\_plans\224\_detailed.dgn

L = LANE WIDTH X TAPER RATIO		
Normal Posted Speed		Taper Ratio
km/h	mph	
110	65	65/1
100	60	60/1
90	55	55/1
80 or less	45 or less	45/1



**SYMBOLS**

- Arrow Board
- Work Area
- 450x450 (18x18) minimum Orange Flag
- Sign on Portable or Permanent Support
- Drum with Steady Burning Light
- Vertical Panel
- Barricade

W13-1(O)-2424  
(SEE NOTE 4)

**GENERAL NOTES**

- This Standard is used where, at anytime, any vehicle, equipment, workers or their activities require the closure of two adjacent lanes and a temporary crossover is provided by making use of one lane of pavement normally used by opposing flow of traffic and positive barrier is not used to separate the opposing traffic.
- Reflective, solid edge lines and a double yellow center-line shall be used when the closure time exceeds four days or when the normal posted speed outside the area of operations exceeds 80 kph (50 mph). Reflectorized Pavement Marking tape shall be used for marking the edge lines and center line on existing pavement. Either tape or reflectorized pavement marking paint shall be used for markings on the paved crossovers. Raised Reflective Pavement Markers at 7.5 m (25 ft.) centers shall also be installed to provide additional delineation. All existing pavement markings which conflict with the revised traffic pattern shall be removed.
- All drums and vertical panels shall be at 15 m (50 ft.) centers.
- The speed limit to be shown on the advisory speed plate shall be 15kph (10 mph) below the normal posted speed limit or 80kph (45 mph), whichever is less.
- Signs mounted in the median may be omitted when the median is less than 3 m (10 ft.) wide.
- Steady burning lights will not be required on drums for day operations. All drum lights shall be mono-directional.
- All signs shall be post mounted if the closure time exceeds four days.
- Flashing lights shall be used on each approach in advance of the work area during hours of darkness and installed above the first two signs in each series.
- Longitudinal dimensions may be adjusted to fit field conditions.
- Form BT 725 is required.

All dimensions are in millimeters (Inches) unless otherwise noted.

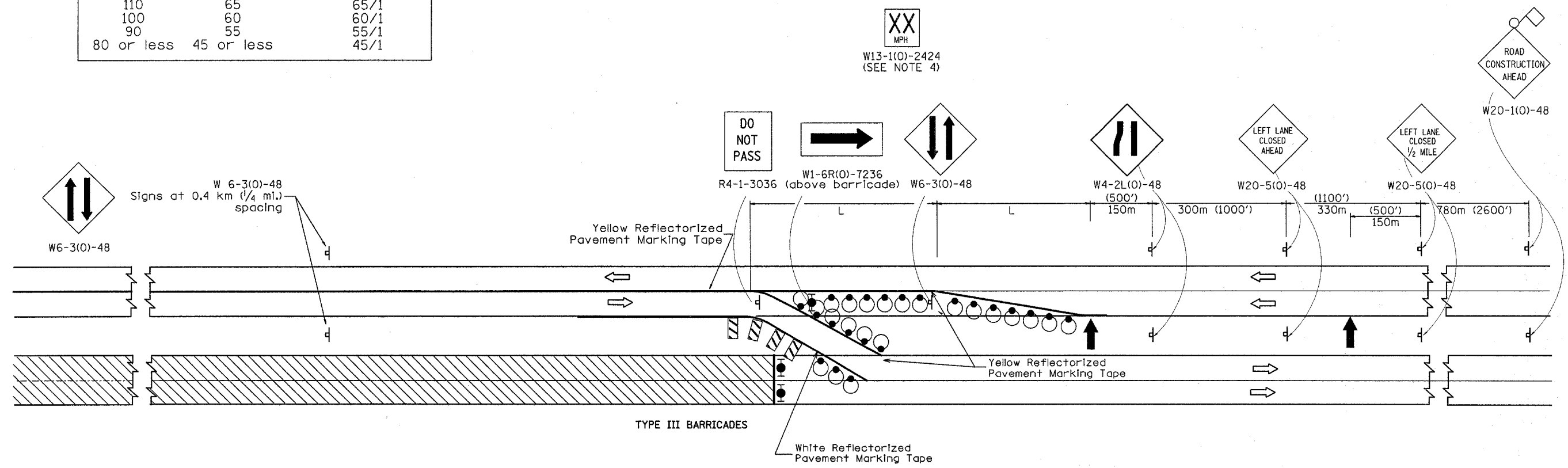
DATE	REVISIONS	BY
1-1-97	RENUM F-6.22, NEW REVISION BOX, REVISED DESIGNER NOTES	T.P.

**LANE CLOSURE, MULTILANE, DIVIDED WITH CROSSOVER FOR SPEEDS >45MPH (STANDARD 701416 SPECIAL)**








SCALE: NOT DRAWN TO SCALE  
DATE: 5/19/06  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

Plot Date: 7/8/2006  
Plot File: 34-6,55-1.dwg  
Plot Title: 34-6,55-1.dwg  
Pen Tables: 1800-1.tbl  
Filename: I:\02023\road\1\construction\plans\234.dwg\table.dgn

L = LANE WIDTH X TAPER RATIO		
Normal Posted Speed		Taper Ratio
km/h	mph	
110	65	65/1
100	60	60/1
90	55	55/1
80 or less	45 or less	45/1



**SYMBOLS**

-  Arrow Board
-  Work Area
-  450x450 (18x18) minimum Orange Flag
-  Sign on Portable or Permanent Support
-  Drum with Steady Burning Light
-  Vertical Panel
-  Barricade

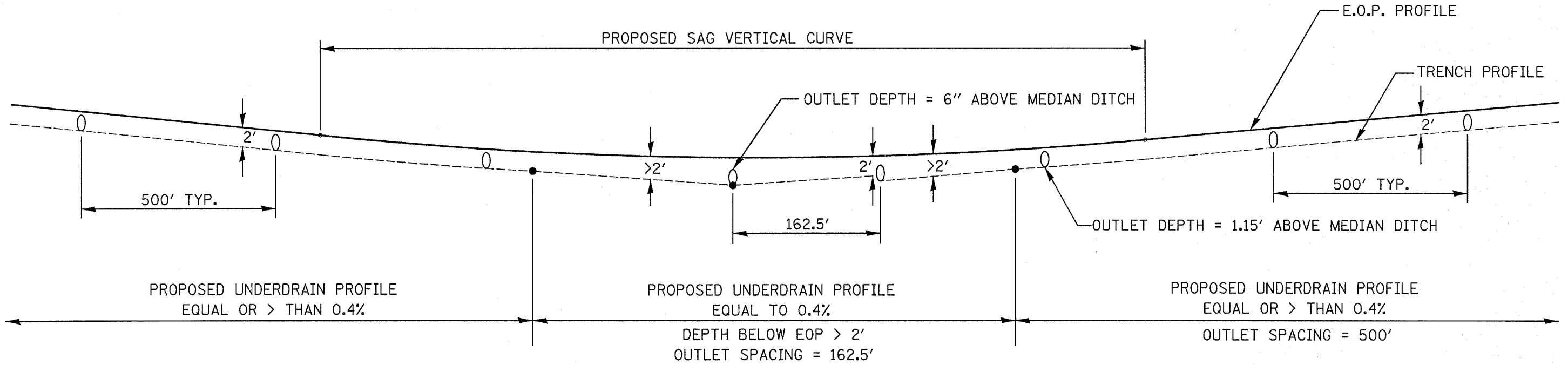
DATE	REVISIONS	BY
1-1-97	RENJUM F-6.22, NEW REVISION BOX, REVISED DESIGNER NOTES	T.P.

All dimensions are in millimeters (inches) unless otherwise noted.

**LANE CLOSURE, MULTILANE, DIVIDED WITH CROSSOVER FOR SPEEDS >45MPH (STANDARD 701416 SPECIAL)**

SCALE: NOT DRAWN TO SCALE      DRAWN BY  
DATE 5/19/06      CHECKED BY

Plot Date: 7/18/2006  
Plot Time: 3:32:02 PM  
Plotted By: bschmidt  
Pen Table: ldot.tbl  
Filename: R:\03033\road\1\construction\plans\224\_dettollemisc.dgn



Pct Dctn: 7/18/2006  
 Pln: 352000.PM  
 Pict: 10011101  
 Pen: Tables: 10011101  
 Filename: I:\3033\cod\1\construction\plans\225.dwg\edist1.rct.dgn

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<b>DISTRICT DETAILS</b> UNDERDRAIN TREATMENT AT CREST AND SAG AREAS

SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE: 07/19/04

DRAWN BY: D4  
 CHECKED BY: XXX

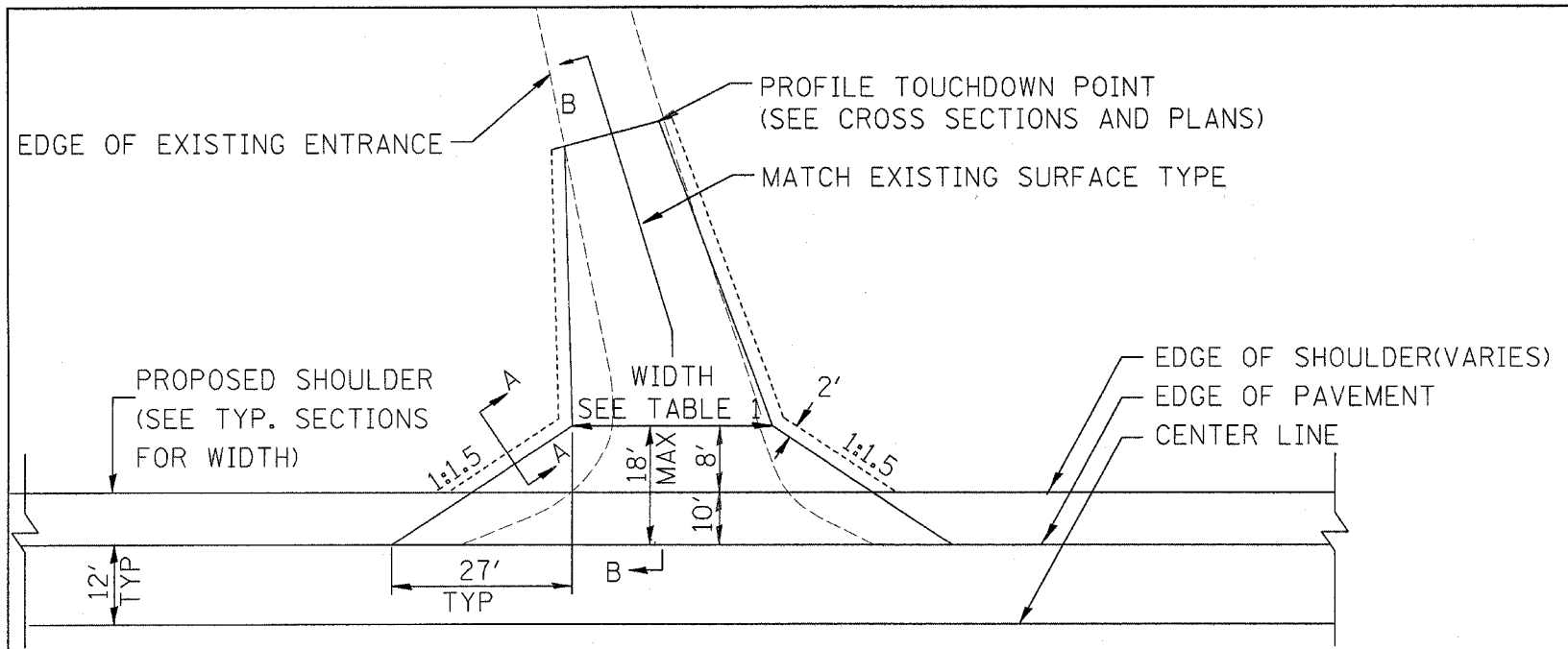
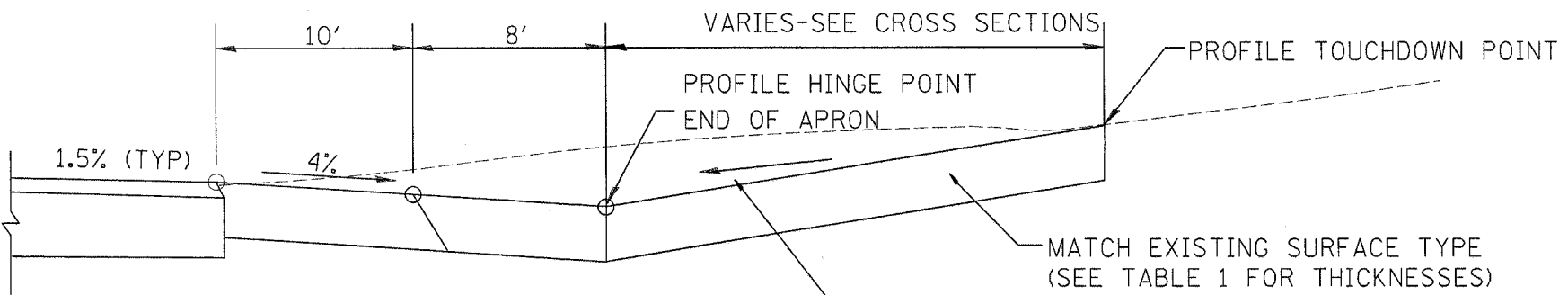
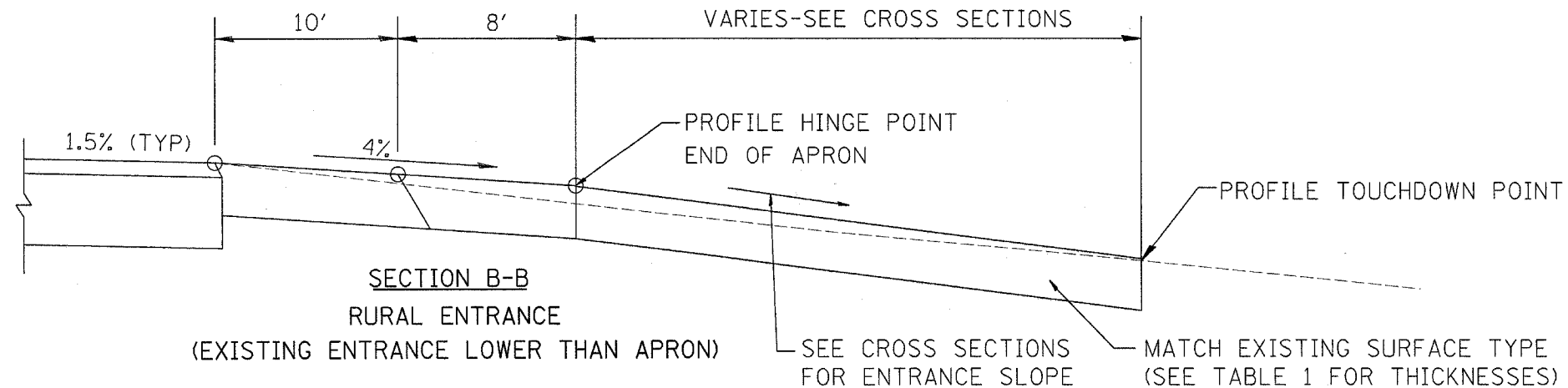


TABLE 1					
RURAL ENTRANCE DESIGN					
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT	COMMERCIAL	
				1-WAY OPERATION	2-WAY OPERATION
WIDTH (W)	3.6m(12') MIN.	7.2m(24') MAX.	9.0m(30')	4.3m(14') MIN.	7.2m(24') MAX.
FLARE	1:1.5				
MAX. GRADE (G)	12%		12%	10%	
SURFACE TYPE					
INCIDENTAL BITUMINOUS SURFACING	6"		—	8"	
AGGREGATE SURFACE COURSE	6"		8"	8"	
PCC DRIVEWAY PAVEMENT	6"		—	7"	

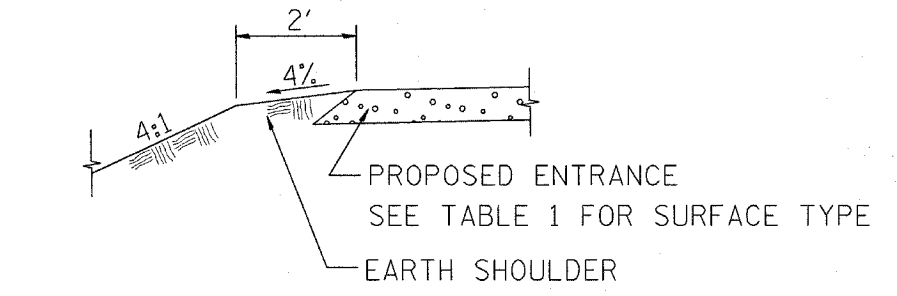
PLAN  
COMMERCIAL / FARM-RELATED ENTRANCE



SECTION B-B  
RURAL ENTRANCE  
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B  
RURAL ENTRANCE  
(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A  
SHOULDER TREATMENT FOR RURAL ENTRANCES

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT DETAILS**  
ENTRANCE DETAILS  
FOR IL 336 AND US 136

SCALE: VERT. 1"=XX'  
HORIZ. 1"=XX'

DATE XX/XX/XX

DRAWN BY XXX  
CHECKED BY XXX

Plot Date: 7/8/2006  
 Plot Time: 8:23:03 PM  
 Pen Tables: Icbt.tbl  
 Filenames: I:\03033\cadd\Construction\plans\225.dwg

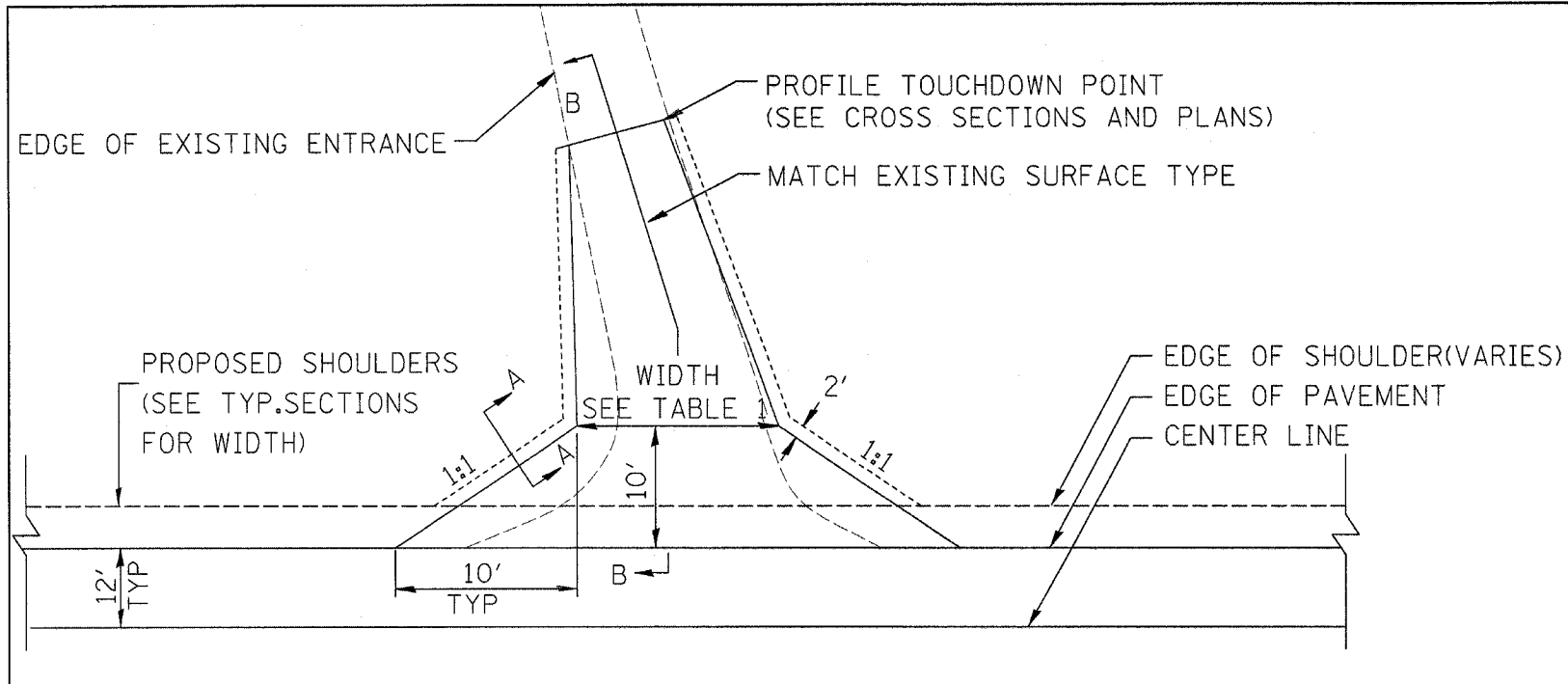
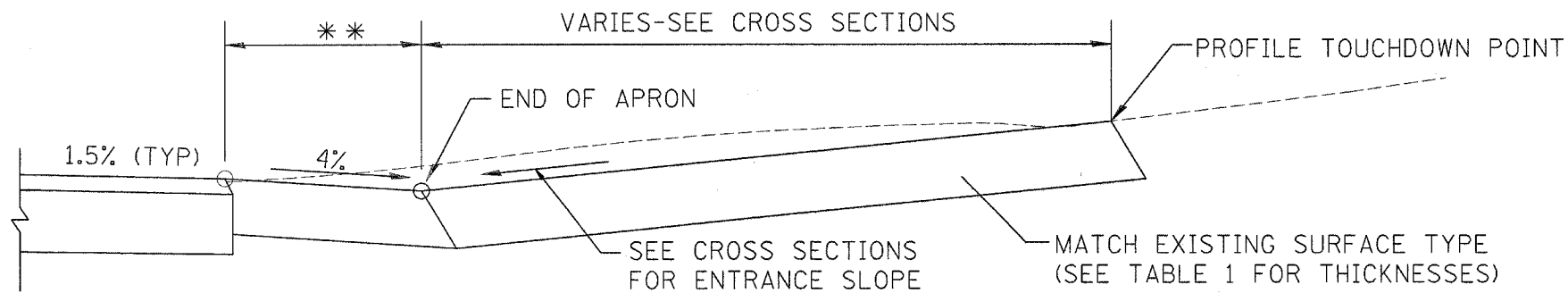
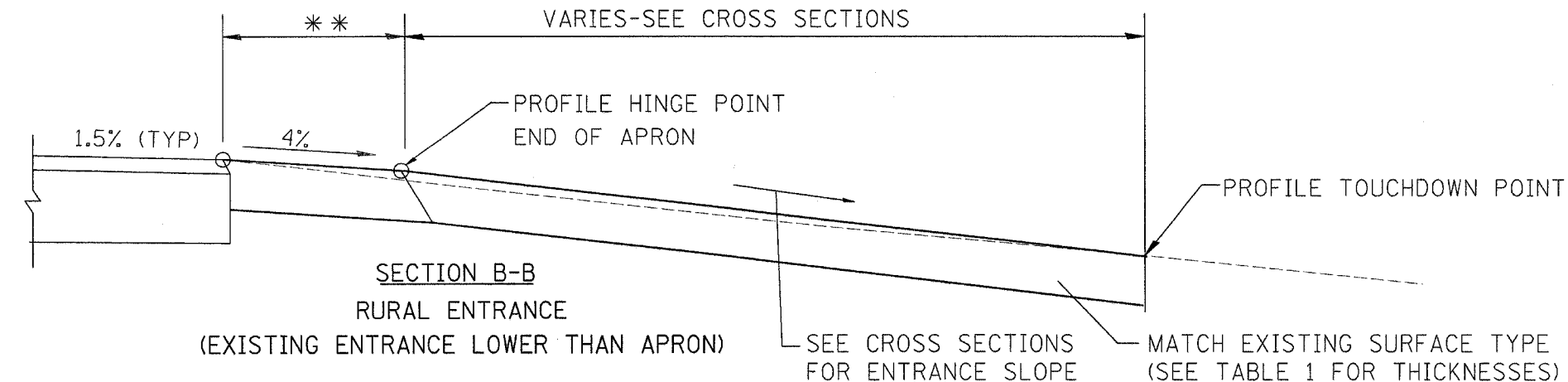


TABLE 1						
RURAL ENTRANCE DESIGN						
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT	COMMERCIAL		
				1-WAY OPERATION		2-WAY OPERATION
WIDTH (W)	3.6m(12') MIN.	7.2m(24') MAX.	9.0m(30')	4.3m(14') MIN.	7.2m(24') MAX.	7.2m(24') MIN., 10.7m(35') MAX.
FLARE	1:1					
MAX. GRADE (G)	12%		12%	10%		
SURFACE TYPE						
INCIDENTAL BITUMINOUS SURFACING	6"		—	8"		
AGGREGATE SURFACE COURSE	6"		8"	8"		
PCC DRIVEWAY PAVEMENT	6"		—	7"		

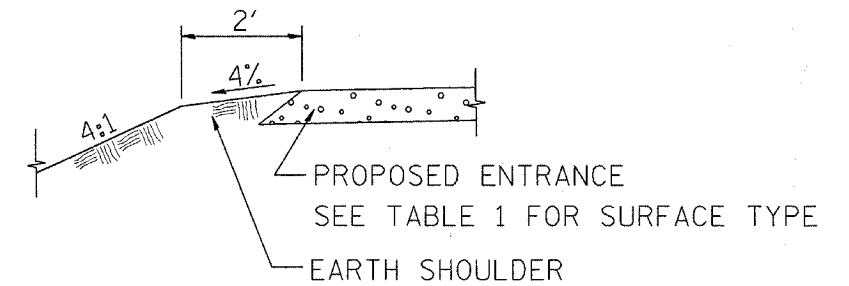
PLAN  
COMMERCIAL / FARM-RELATED ENTRANCE



SECTION B-B  
RURAL ENTRANCE  
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B  
RURAL ENTRANCE  
(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A  
SHOULDER TREATMENT FOR RURAL ENTRANCES

\*\* 10' OR C.L. DITCH (WHICHEVER IS LESS)

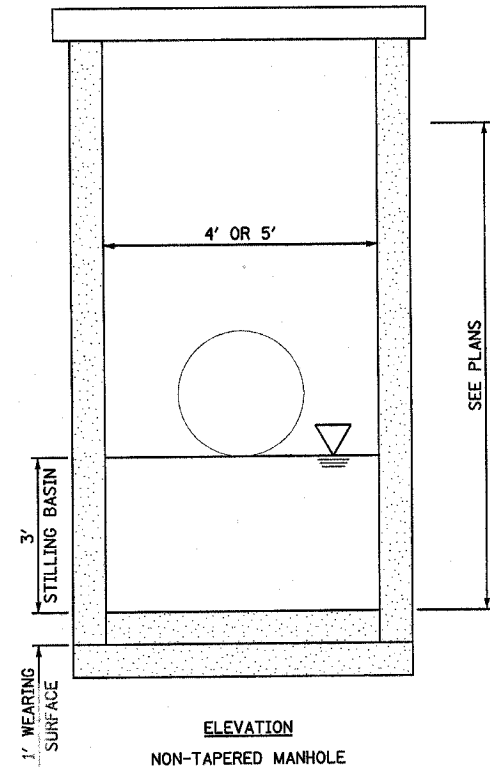
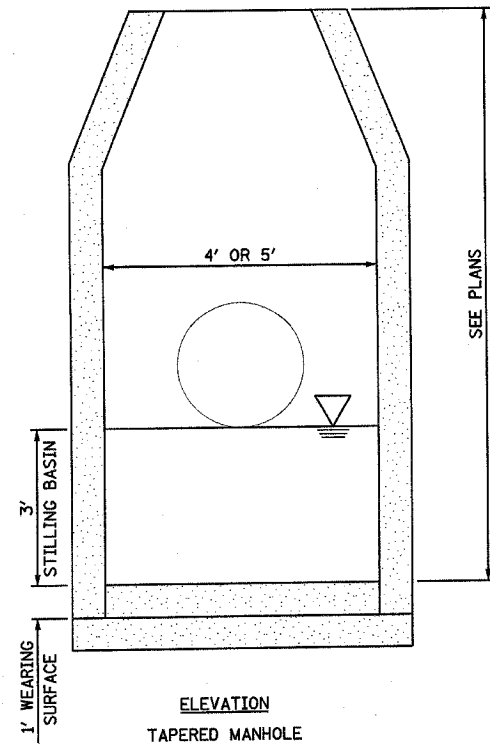
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT DETAILS**  
**ENTRANCE DETAILS**  
**FOR LOCAL ROAD**

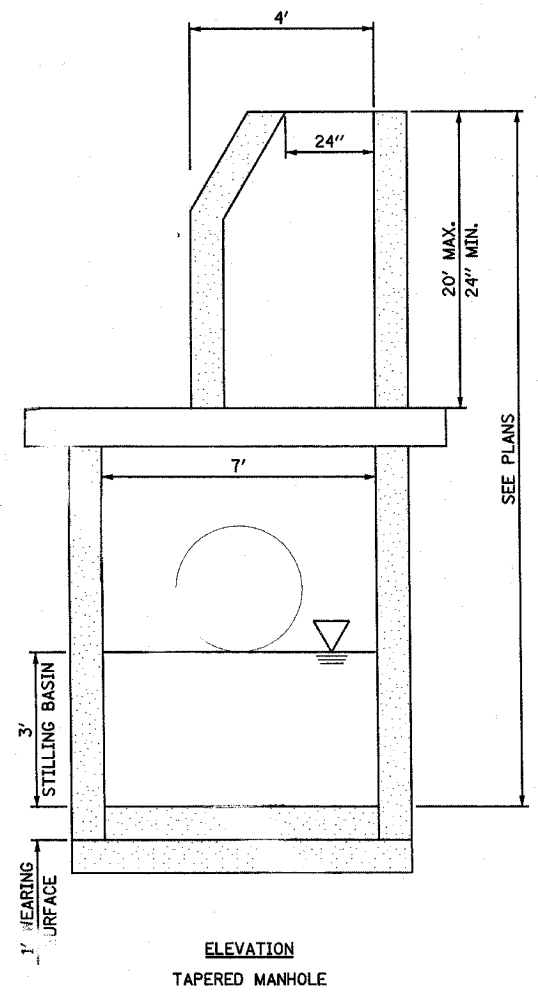
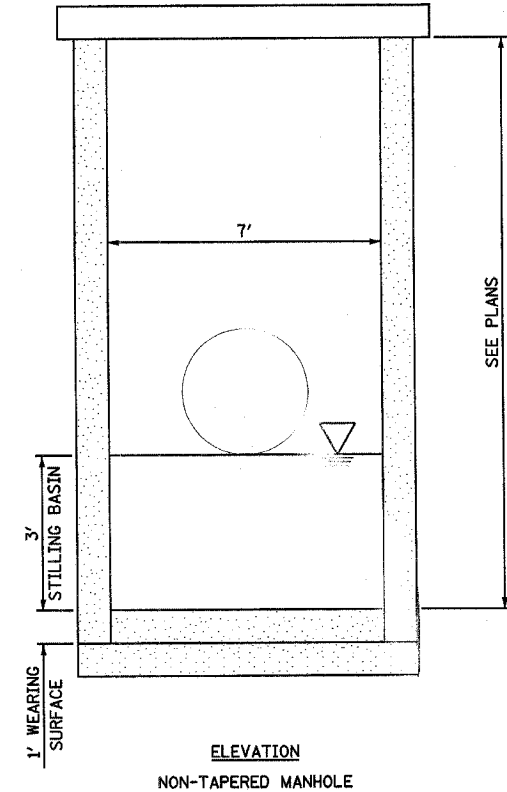
SCALE: VERT. 1"=XX'  
HORIZ. 1"=XX'  
DATE XX/XX/XX

DRAWN BY XXX  
CHECKED BY XXX



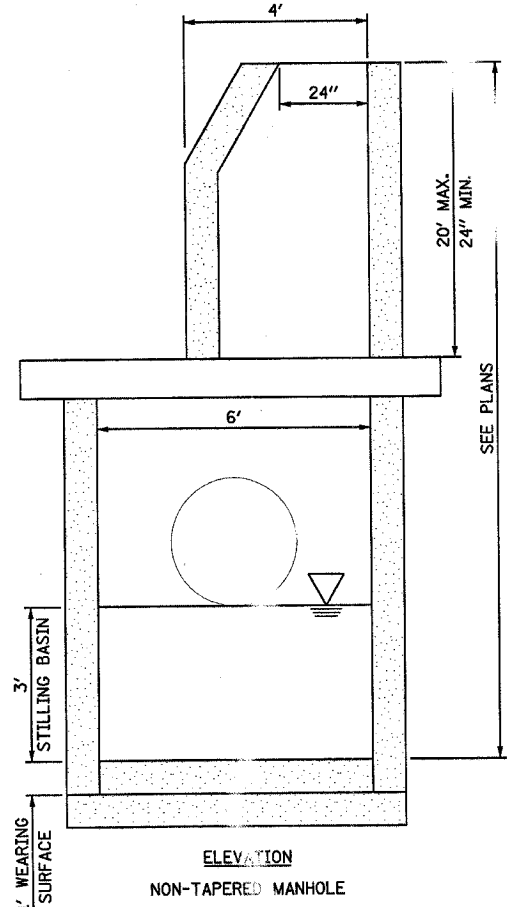
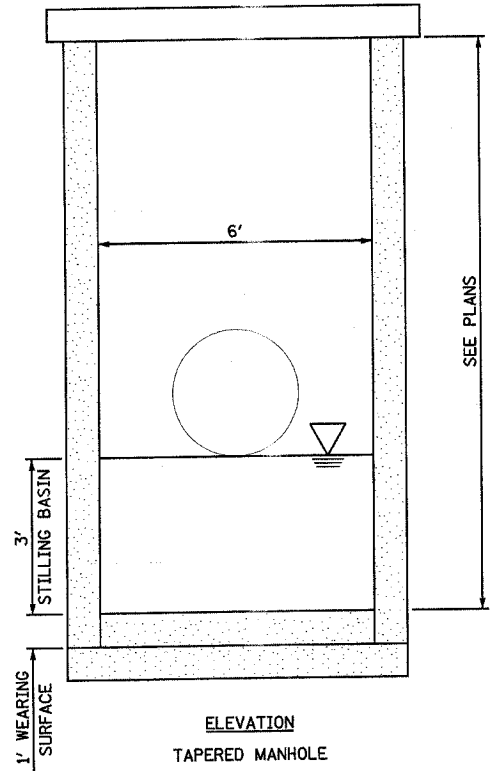
**MANHOLE TYPE A 4' AND 5' DIAMETER**

**NOTES:**  
 1. CONSTRUCT MANHOLE, TYPE A ACCORDING TO STD. 602401-01 AND 602401 EXCEPT AS MODIFIED BY THIS DETAIL.



**MANHOLE TYPE A 7' DIAMETER**

**NOTES:**  
 1. CONSTRUCT MANHOLE, TYPE A 7' DIA. ACCORDING TO STD. 602411 AND 602601 EXCEPT AS MODIFIED BY THIS DRAWING.



**MANHOLE TYPE A 6' DIAMETER**

**NOTES:**  
 1. CONSTRUCT MANHOLE, TYPE A 6' DIA. ACCORDING TO STD. 602406-02 AND 602601 EXCEPT AS MODIFIED BY THIS DRAWING.

REVISIONS	
NO.	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

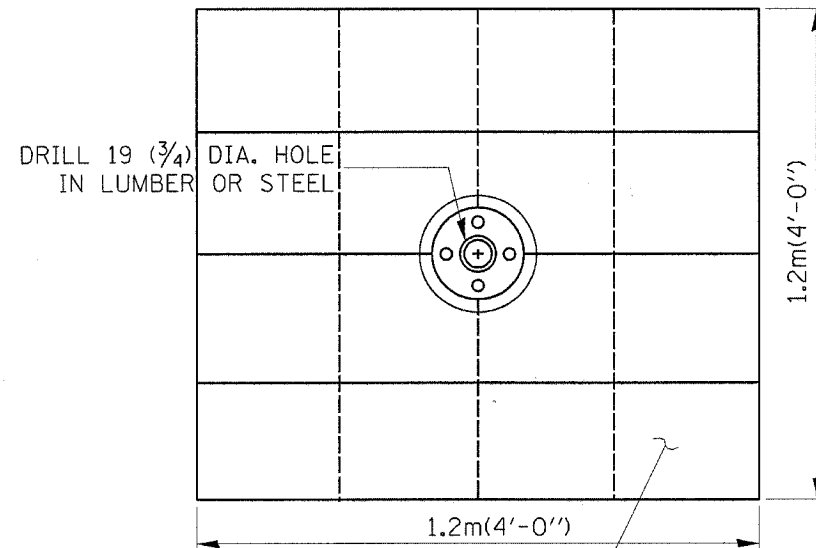
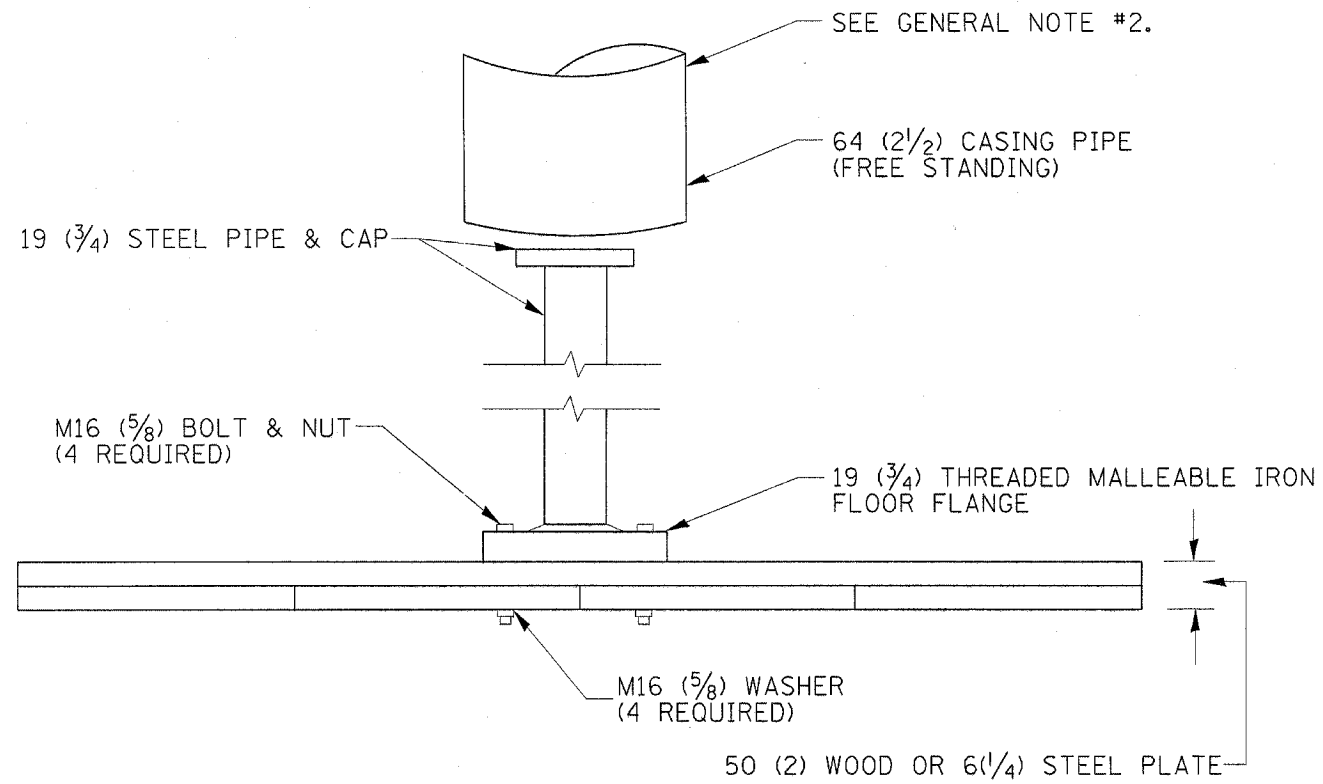
**DISTRICT DETAILS**

**MANHOLE, TYPE A, SPECIAL**

SCALE: VERT. NONE  
 HORIZ. NONE

DATE: \_\_\_\_\_ DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

Plot Date: 8/20/2006  
 Plot Time: 12:48:30 PM  
 Plot By: sbrincus  
 Plotter: eplott  
 File: \\p01333\p01333\constr\constr\plans\225\_def\all\st1101.dgn



SOUND LUMBER - 25(1) x 300(12) NAILED TOGETHER OR 6(1/4) THICK BY 1.2m(4') SQUARE STEEL PLATE

### GENERAL NOTES:

1. Settlement Platform shall be in accordance with the applicable portions of Article 204.06 of the Standard Specifications.
2. Do Not install casing pipe until after one section of 19 mm(3/4") has been covered with earth. The casing pipe should not rest on platform.

All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD

DATE	REVISIONS	BY
1-1-97	RENUM. L-5.04, NEW REVISION BOX, REVISED NOTES, REVISED TITLE BOX	T.P.
4-14-99	ADDED "CASING PIPE" REQUIREMENT	J.A.
5-19-99	CORRECTIONS TO CASING PIPE	J.A.
8-23-01	UPDATE FOR NEW SPEC	M.A.

SETTLEMENT PLATFORM

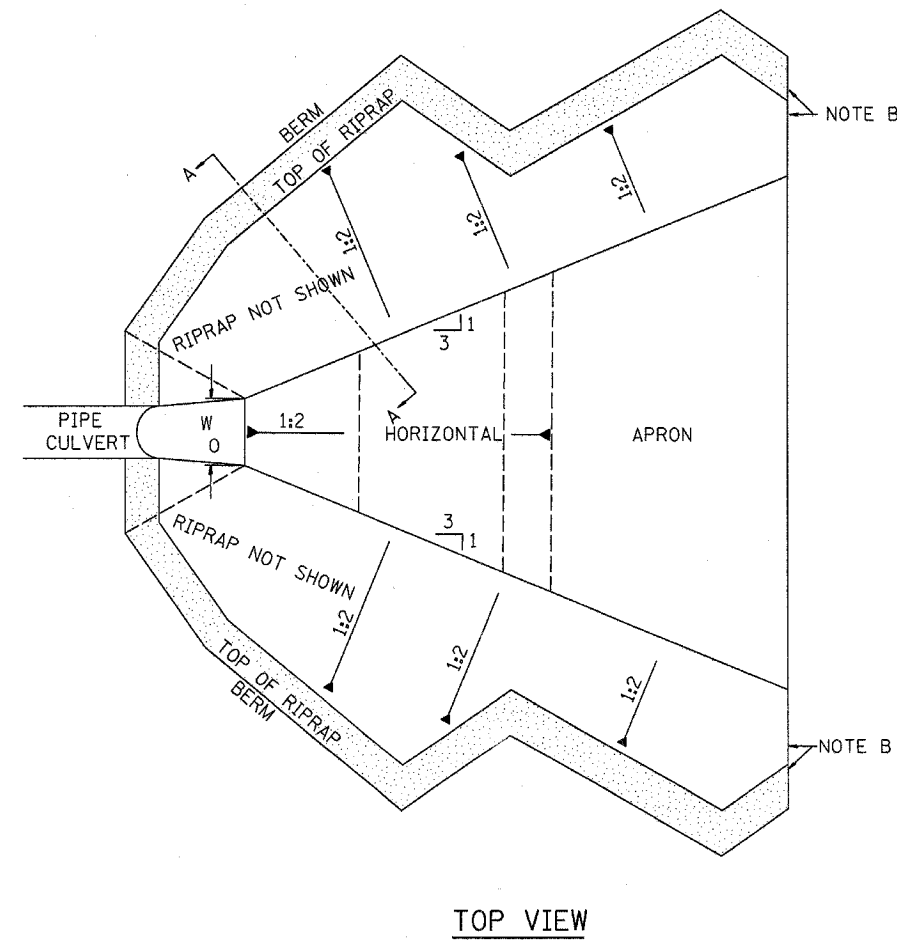
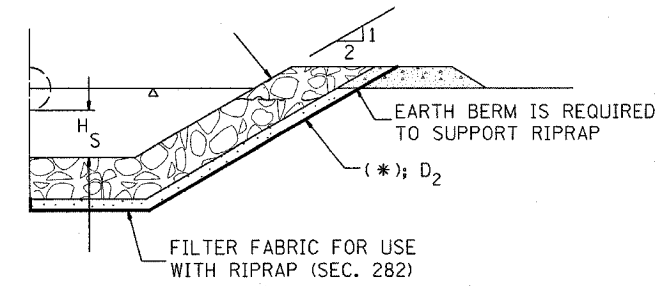
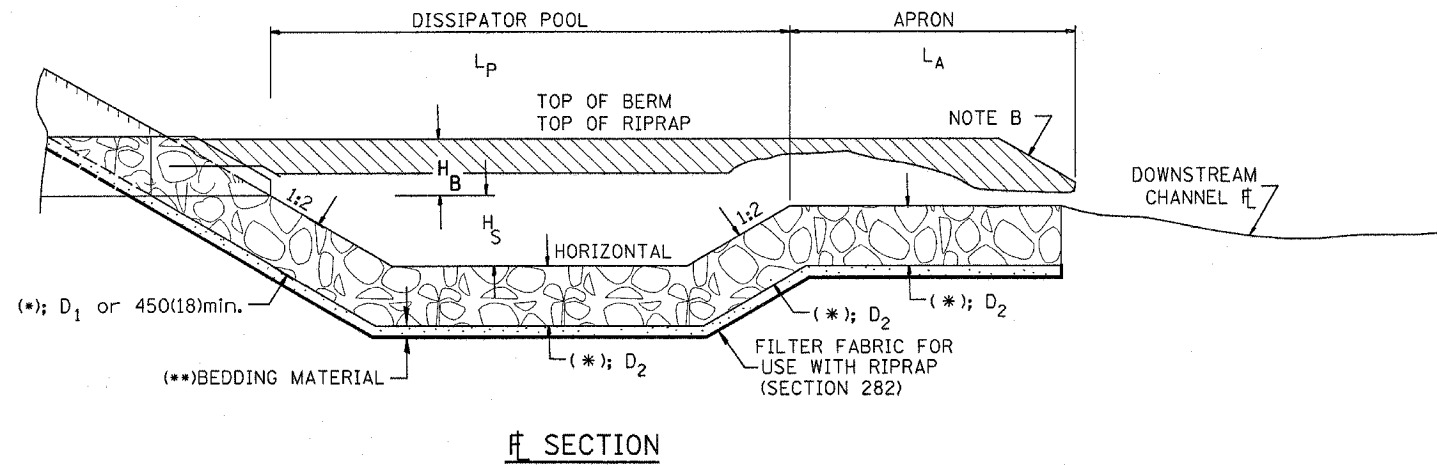
CADD STD. 205101-D4  
SCALE: NOT DRAWN TO SCALE  
DATE 7/18/2006  
DRAWN BY CADD  
CHECKED BY

205101-D4

DESIGNER NOTES:  
1. SEE SOILS REPORT AND BUREAU OF MATERIALS FOR USAGE, LOCATIONS, AND SETTLEMENT RATES.  
2. CONSIDER USE ON BRIDGE EMBANKMENT AND OTHER SETTLEMENT SENSITIVE FILLS.  
3. THIS DRAWING ALLOWS FOR WOODBASE PLATE OPTION.

7/18/2006





SECTION A-A

STATION	(*)			(**)			(***)		
	W <sub>0</sub>	L <sub>P</sub>	L <sub>A</sub>	H <sub>S</sub>	H <sub>B</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	

NOTE B: WARP BASIN TO CONFORM TO NATURAL STREAM CHANNEL

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

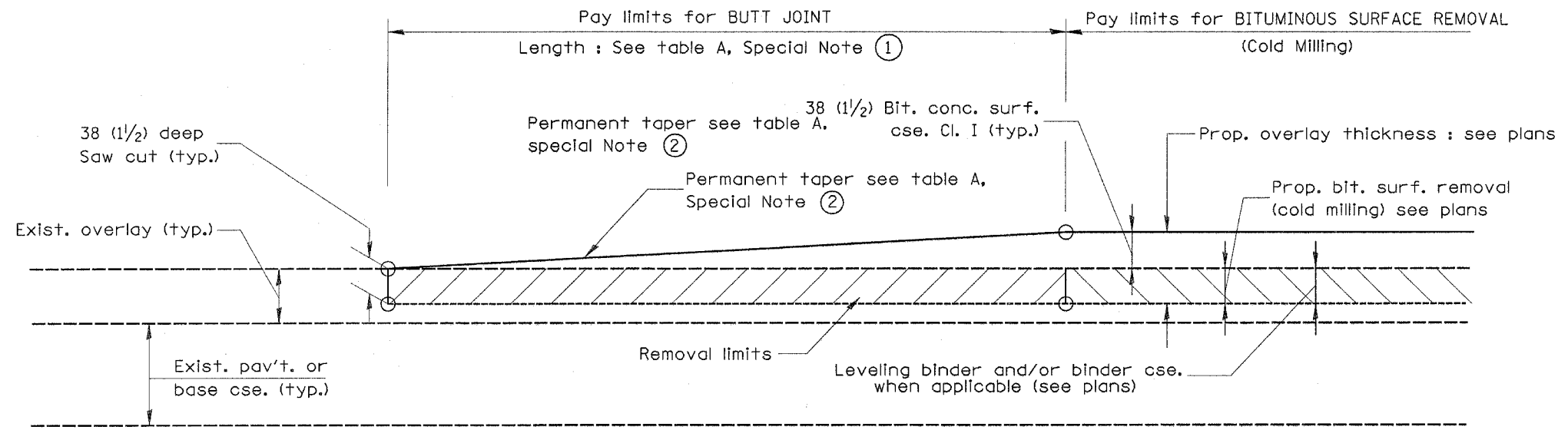
All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
SPECIAL DETAIL SHEET	
<b>RIPRAP ENERGY DISSIPATOR</b>	
CADD DETAIL 281101-D4	DRAWN BY CADD
SCALE: NOT DRAWN TO SCALE	CHECKED BY
DATE 7/18/2006	

DATE	REVISIONS	BY
1-1-97	RENUM. A-12.03, NEW REVISION BOX	T.P.

- Designer NOTES:
1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
  2. (\*) Designer to specify pay item including material, quality, and gradation.
  3. (\*\*) Designer to specify thickness of bedding material.
  4. Include District Special Provision if needed.

7/18/2006



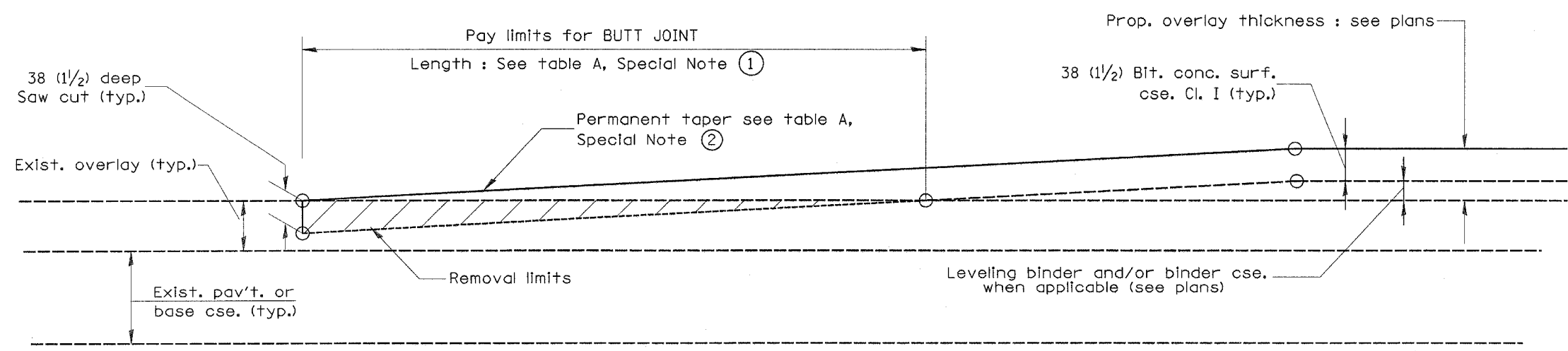
**CASE 1 : WITH BITUMINOUS SURFACE REMOVAL (COLD MILLING)**

**TABLE A**  
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
1	LENGTH OF BUTT JOINT	18.0 m(60')	9.0 m(30')
2	PERMANENT TAPER RATE	1:480	1:240
3	TEMPORARY RAMP TAPER RATE	1:80	1:40
4	TEMPORARY RAMP LENGTH	3.0 m(10')	1.5 m(5')

**GENERAL NOTES**

- The work shall be done in accordance with Article 406.18 and the Special Provision for Butt Joints.
- The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.03 and the Special Provisions for Butt Joints.
- The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.06.



**CASE 2 : NO BITUMINOUS SURFACE REMOVAL (COLD MILLING)**

DESIGNER NOTES:  
1. Include District Special Provision for Butt Joints & for Bituminous Surface Removal (Cold Milling).  
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Bituminous Surface Removal (Cold Milling).

7/18/2006

All dimensions are in millimeters (inches) unless otherwise noted.

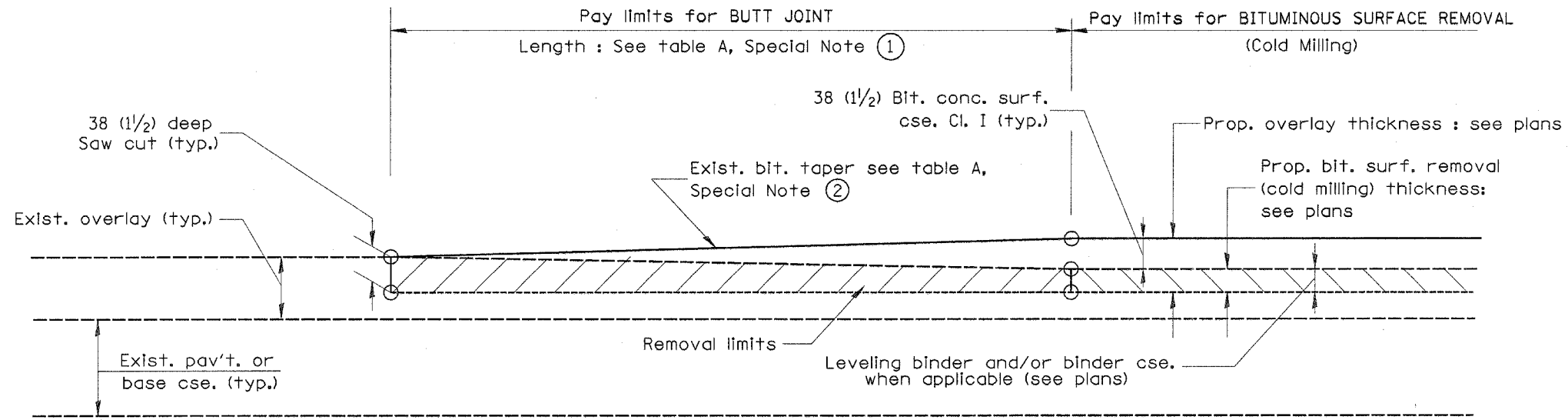
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT CADD STANDARD**

DATE	REVISIONS	BY
1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
4-1-97	CORRECTION TO DEPTH	J.A.

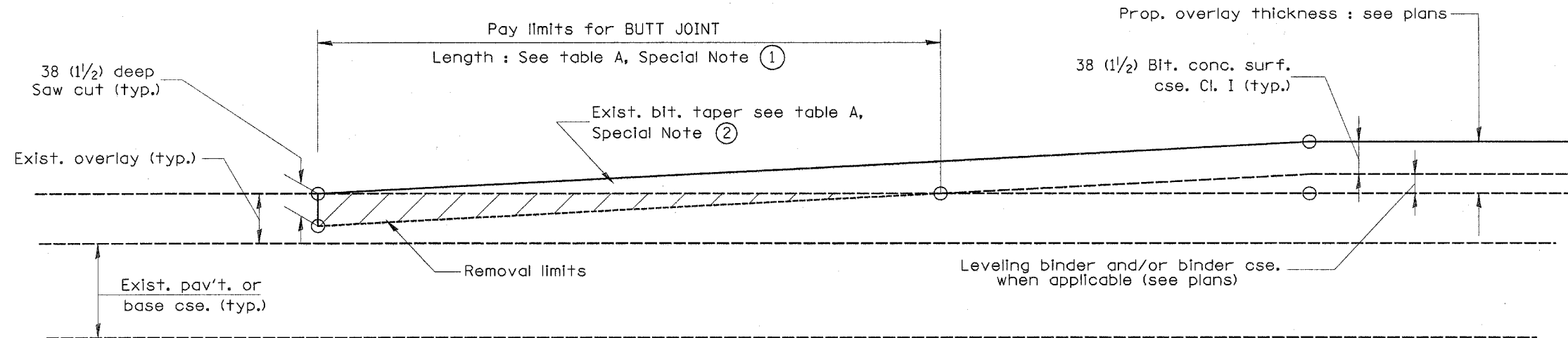
**BUTT JOINTS**

CADD STD NO. 406101-D4 SHEET 1 OF 2  
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD  
DATE 7/18/2006 CHECKED BY

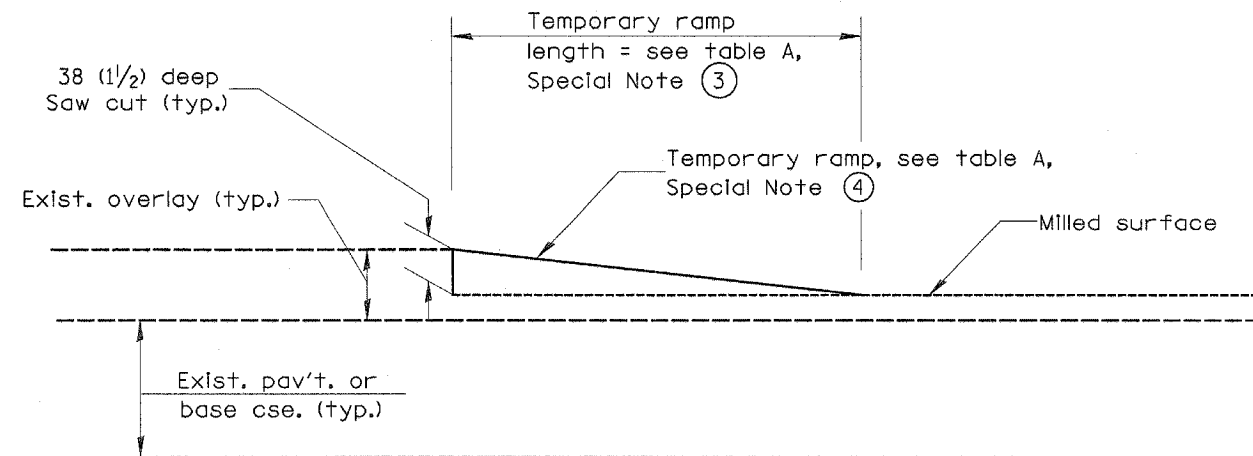
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MCDONOUGH	433	266
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
STATE CONTRACT NO. 68206				



**CASE 3 : WITH BITUMINOUS SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER**



**CASE 4 : NO BITUMINOUS SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER**



**DETAIL TEMPORARY RAMP**

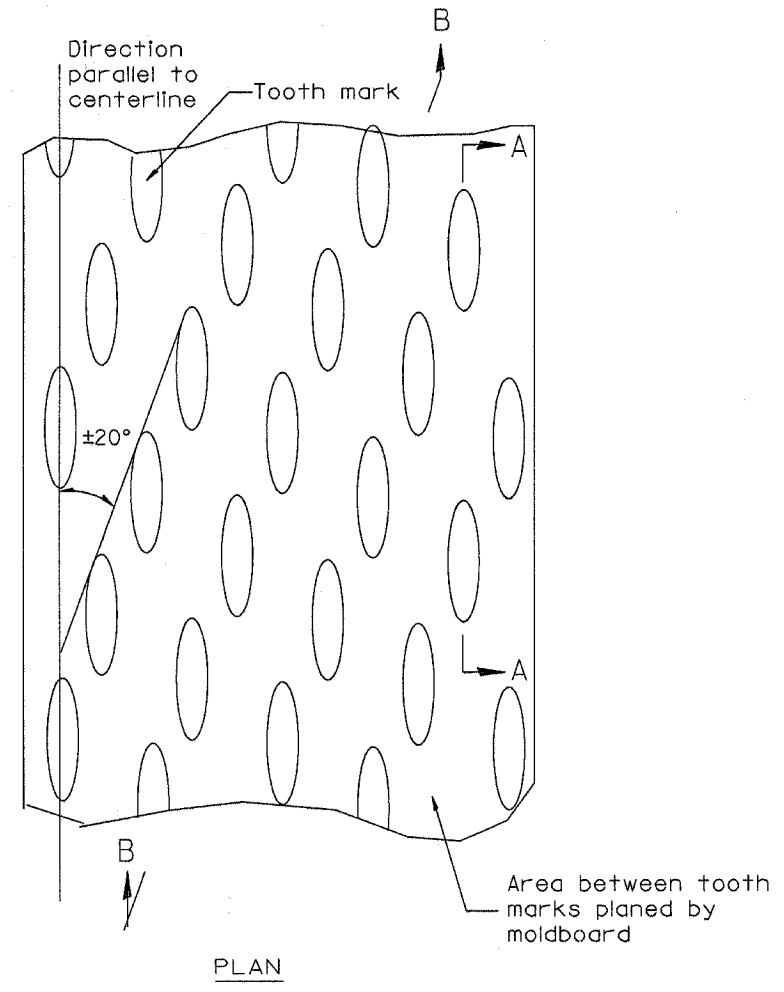
All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD

BUTT JOINTS  
CADD STD NO. 406101-D4 SHEET 2 OF 2  
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD  
DATE 7/18/2006 CHECKED BY

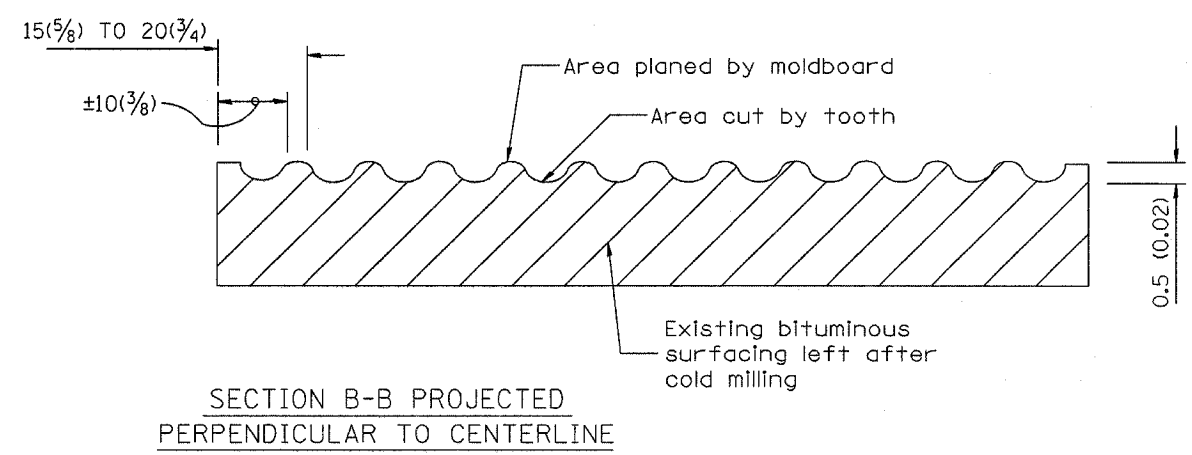
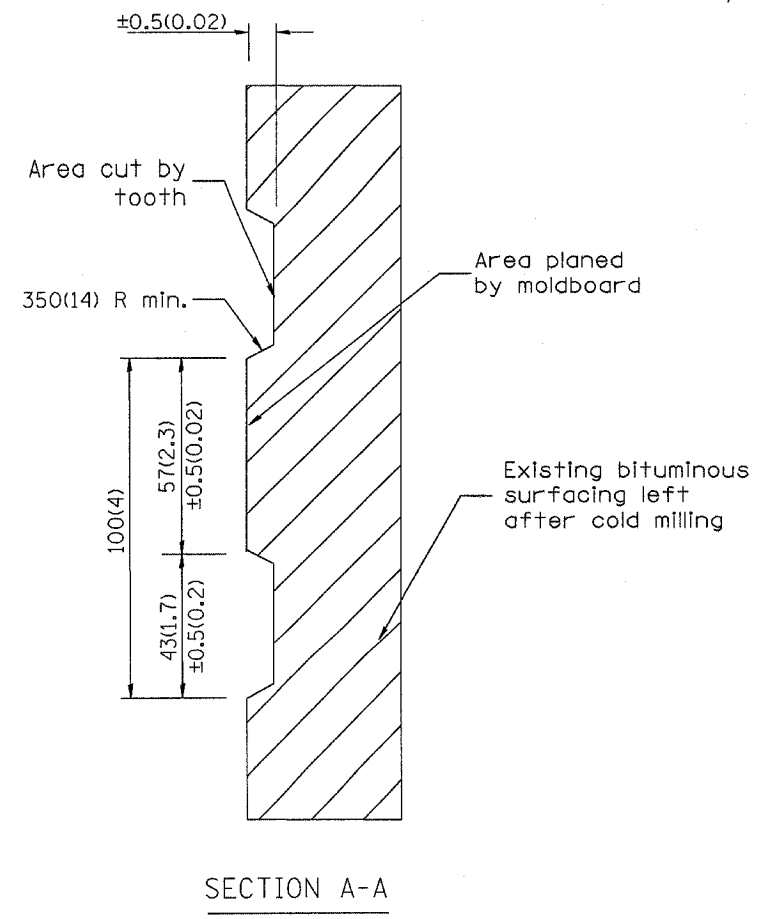
406101-D4 (2)

7/18/2006



General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.



All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT CADD STANDARD**

**BITUMINOUS SURFACE REMOVAL (COLD MILLING)**

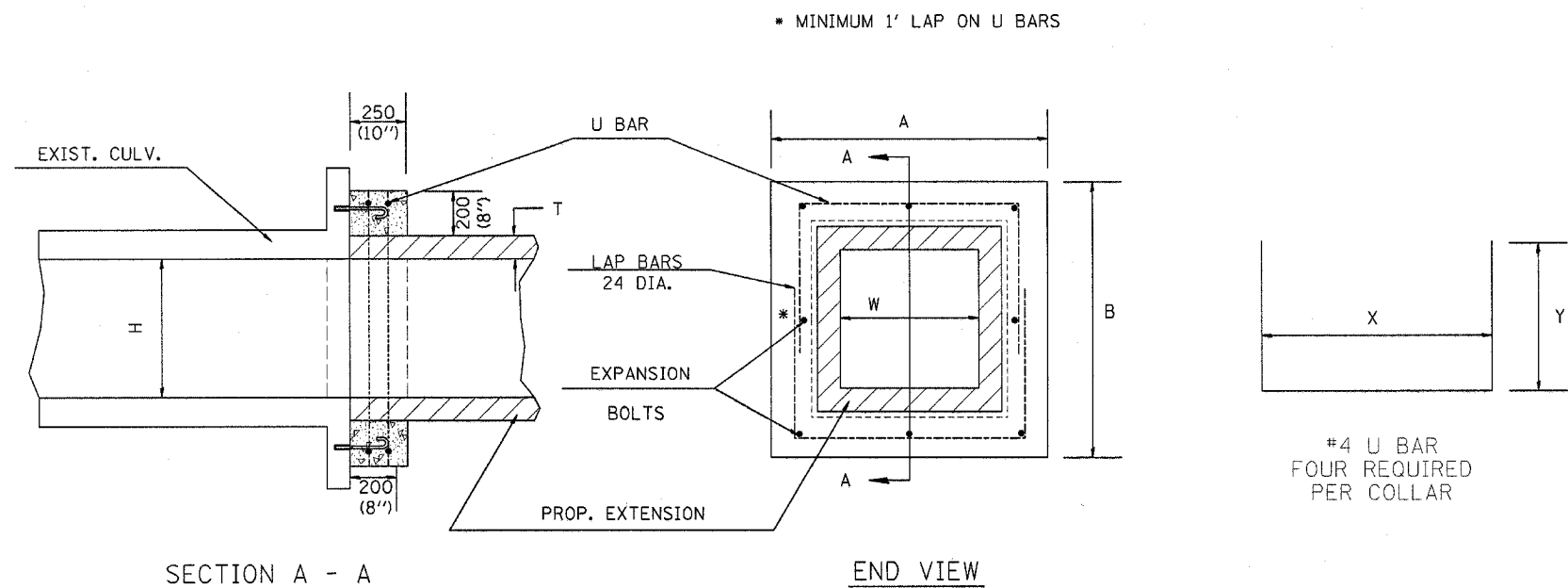
CADD STD NO. 440001-D4  
 SCALE: NOT DRAWN TO SCALE  
 DATE 7/18/2006

DRAWN BY CADD  
 CHECKED BY

DATE	REVISIONS	BY
1- 1-97	RENUM. C-104.01, NEW REVISION BOX	T. P.
4-20-98	REMOVED MILLING DETAIL FROM STD.	J. A.
9-08-98	CORRECT NOTE LEADER PLACEMENT	R. W.

DESIGNER NOTE  
 1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

7/18/2006



GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. REINFORCEMENT BARS shall conform to section 508.
2. Expansion bolts shall consist of approved expansions anchors, and M20 (3/4'') hook bolts which conform to Section 1006.09. These bolts shall extend at least 200(8'') into the new concrete.

\* Dimensions for ASTM C789.

DIMENSIONS

EXISTING BOX		A	B	T *	EACH COLLAR				
W mm (ft)	H mm (ft)				CL SI m <sup>3</sup> (CU YD)	REINFORCEMENT BARS		EXPANSION BOLTS	
					X	Y	kg (POUNDS)	NO.	
600(2)	600(2)	1.22m (4'-0'')	1.22m (4'-0'')	100(4'')	0.21(0.27)	1.02m (3'-4'')	660(26'')	16(21)	8
900(3)	600(2)	1.52m (5'-0'')	1.22m (4'-0'')	100(4'')	0.24(0.32)	1.32m (4'-4'')	660(26'')	18(23)	8
900(3)	750(2.5)	1.52m (5'-0'')	1.37m (4'-6'')	100(4'')	0.26(0.34)	1.32m (4'-4'')	737(29'')	19(25)	8
900(3)	900(3)	1.52m (5'-0'')	1.52m (5'-0'')	100(4'')	0.28(0.36)	1.32m (4'-4'')	813(32'')	20(26)	8
900(3)	1200(4)	1.57m (5'-2'')	1.88m (6'-2'')	125(5'')	0.31(0.41)	1.37m (4'-6'')	991(39'')	22(29)	10
1200(4)	900(3)	1.88m (6'-2'')	1.57m (5'-2'')	125(5'')	0.31(0.41)	1.68m (5'-6'')	838(33'')	22(29)	10
1200(4)	1200(4)	1.88m (6'-2'')	1.88m (6'-2'')	125(5'')	0.34(0.45)	1.68m (5'-6'')	991(39'')	25(32)	12
1200(4)	1500(5)	1.93m (6'-4'')	2.24m (7'-4'')	150(6'')	0.39(0.51)	1.73m (5'-8'')	1.17m (3'-10'')	28(36)	14
1500(5)	1200(4)	2.24m (7'-4'')	1.93m (6'-4'')	150(6'')	0.39(0.51)	2.03m (6'-8'')	1.02m (3'-4'')	28(36)	14
1500(5)	1500(5)	2.24m (7'-4'')	2.24m (7'-4'')	150(6'')	0.42(0.55)	2.03m (6'-8'')	1.17m (3'-10'')	29(38)	16
1500(5)	1800(6)	2.29m (7'-6'')	2.59m (8'-6'')	175(7'')	0.46(0.60)	2.08m (6'-10'')	1.35m (4'-5'')	32(42)	16
1800(6)	1200(4)	2.59m (8'-6'')	1.98m (6'-6'')	175(7'')	0.43(0.56)	2.39m (7'-10'')	1.04m (3'-5'')	30(39)	14
1800(6)	1500(5)	2.59m (8'-6'')	2.29m (7'-6'')	175(7'')	0.46(0.60)	2.39m (7'-10'')	1.19m (3'-11'')	32(42)	16
1800(6)	1800(6)	2.59m (8'-6'')	2.59m (8'-6'')	175(7'')	0.49(0.64)	2.39m (7'-10'')	1.35m (4'-5'')	35(45)	16
1800(6)	2400(8)	2.64m (8'-8'')	3.25m (10'-8'')	200(8'')	0.57(0.74)	2.44m (8'-0'')	1.68m (5'-6'')	39(51)	18
2400(8)	2400(8)	3.25m (10'-8'')	3.25m (10'-8'')	200(8'')	0.63(0.82)	3.05m (10'-0'')	1.68m (5'-6'')	43(56)	20

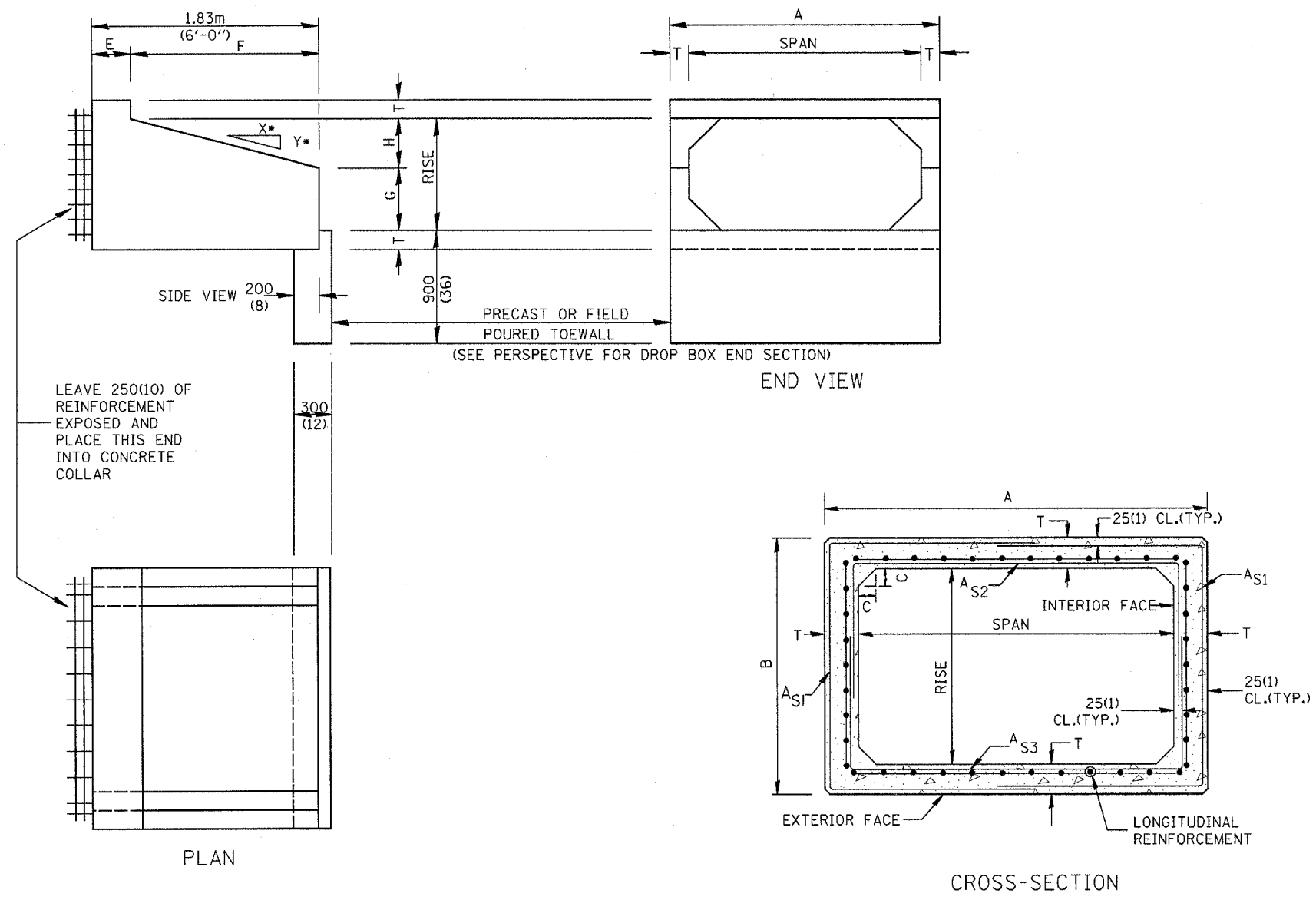
All dimensions are in millimeters (Inches) unless otherwise noted.

QUANTITIES

CALC. BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

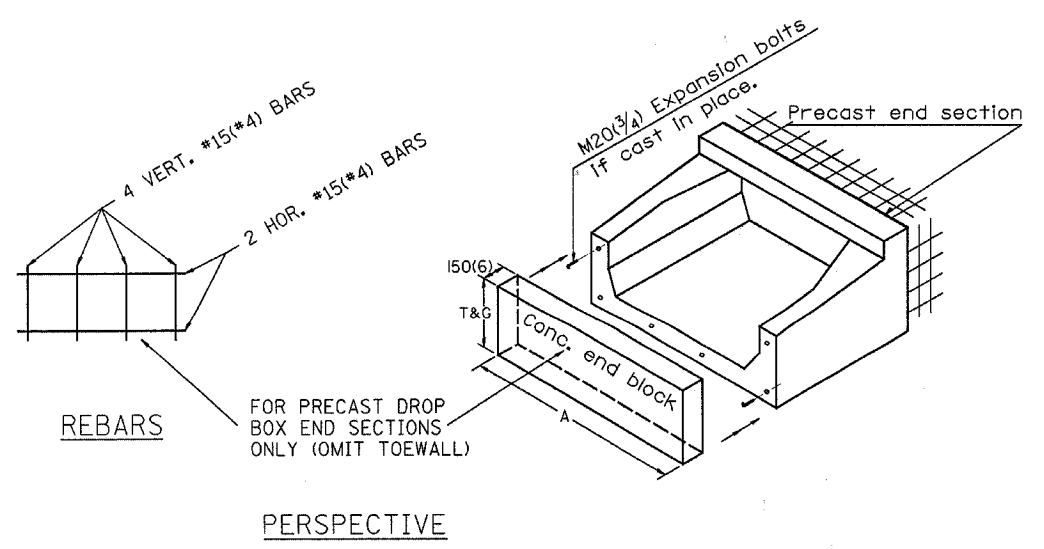
DATE	REVISIONS	BY
1-1-97	RENUM. J-12-01, METRICS, NEW REVISION BOX, REVISED TITLE BOX, ADDED QUANTITY CALCULATION BOX.	T.P.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT CADD STANDARD  
 COLLAR FOR BOX CULVERT EXTENSIONS  
 CADD STANDARD 540001-D4  
 SCALE: NOT DRAWN TO SCALE  
 DATE 7/18/2006  
 DRAWN BY CADD  
 CHECKED BY



- GENERAL NOTES:**
1. The Box Culvert Sections shall conform to ASTM C789 for 0.6 m(2') cover or more. If less than 0.6 m(2') of cover exists, then ASTM C-850 applies and modify Table 'B' and drawing.
  2. The Aggregate shall conform to the requirements of Articles 1003.02 and 1004.02 of the Standard Specifications. The gradation requirements do not apply.
  3. The External Sealing Band shall conform to ASTM C 877. The appropriate portions of Articles 550.02(1) and 1057.01 of the Standard Specifications shall apply.
  4. Shop plans for the Precast Reinforced Box Culvert Sections, End Sections and Drop Box End Sections shall be submitted in accordance with Article 504.04(a) of the Standard Specifications.
  5. All dimensions shall be verified with the Supplier.

DESIGNER NOTES:  
 1. INSERT DISTRICT SPECIAL PROVISION.  
 2. TO BE USED IN CONJUNCTION WITH CONCRETE COLLAR.



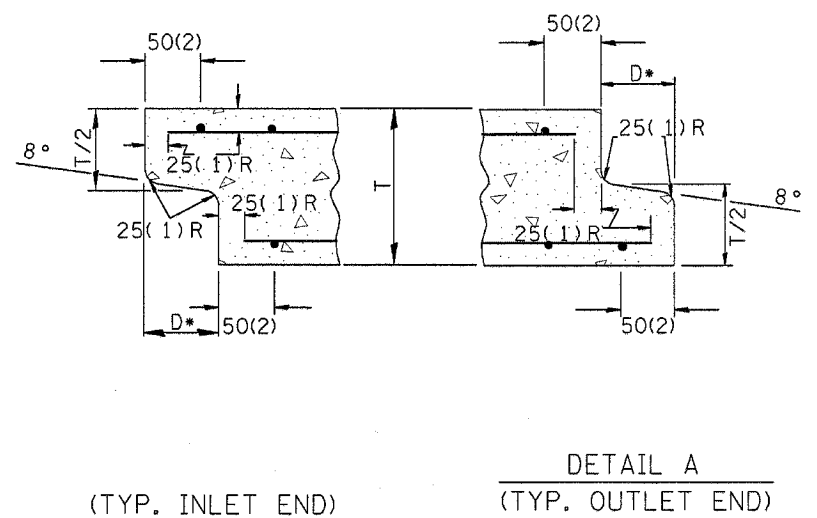
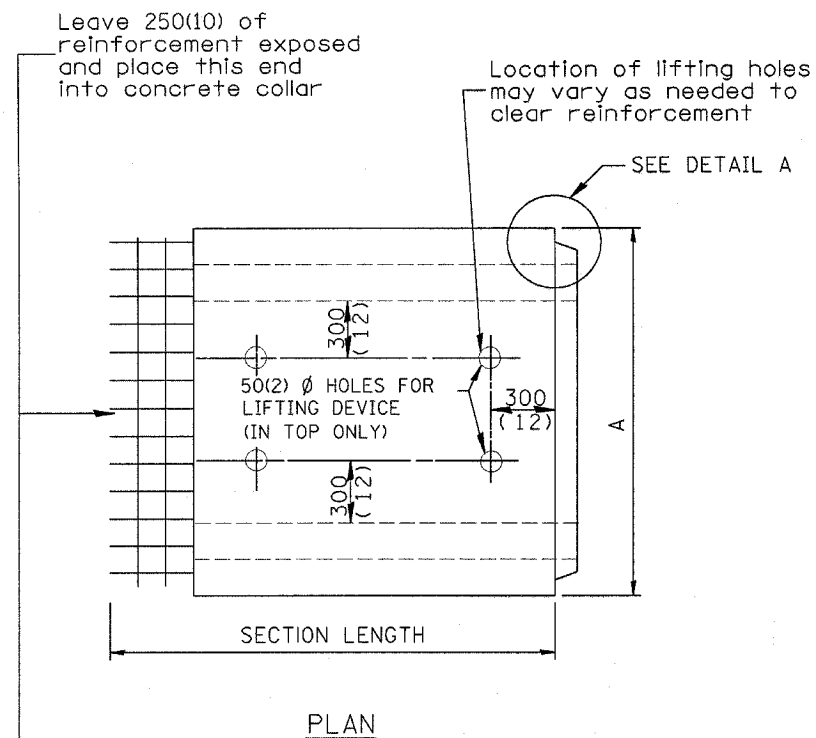
All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
PRECAST CONCRETE BOX CULVERTS (SPECIAL), END SECTION (SPECIAL), & DROP BOX END SECTIONS (SPECIAL)	
CADD STANDARD 540401-D4(1)	DRAWN BY CADD
SCALE: NOT DRAWN TO SCALE	CHECKED BY
DATE 7/18/2006	SHEET 1 OF 2

DATE	REVISIONS	BY
1-1-97	RENUM. J-12.08 AND J-12.09, NEW FORMAT, METRICS, NEW REVISION BOX, NOTES.	T.P.
5-1-97	CORRECT TITLE & GEN. NOTES	J.A.
6-17-99	CORRECT DIMENSIONS	J.A.

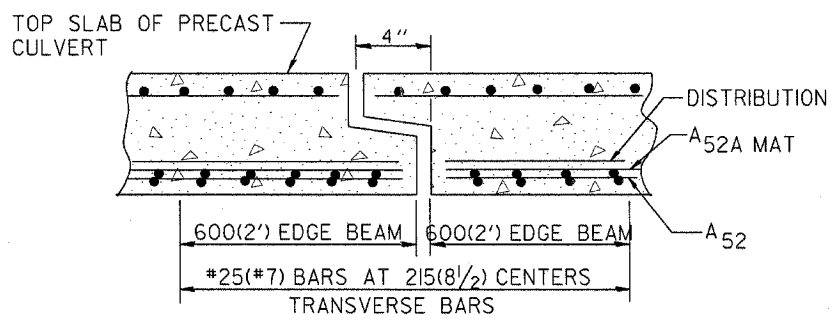
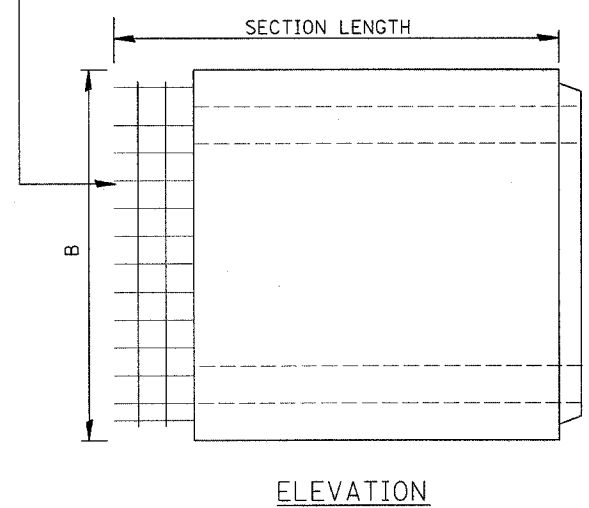
7/18/2006

(DIMENSIONS APPLY TO END SECTION AND BOX SECTION DETAILS)



NOTE: Inlet and outlet ends shall be compatible.

\*The D dimension shall conform to the manufacturer's standards.



TYP. JOINT SHOWING EDGE BEAM REINFORCEMENT

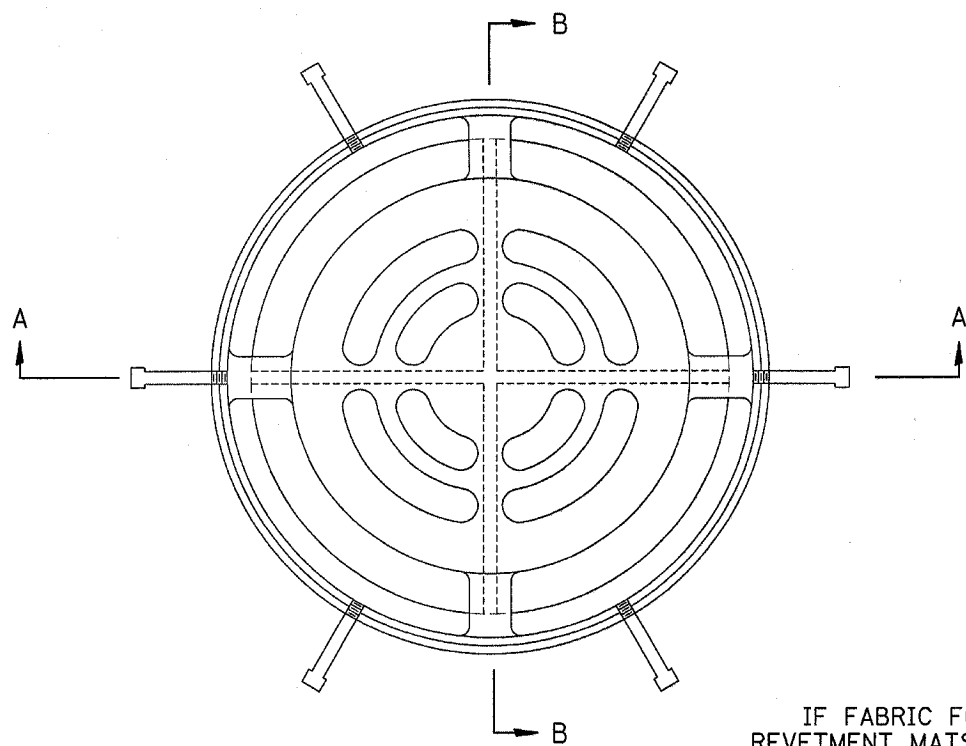
NOTE: The additional Reinforcing Steel required for edge beams shall have the same length as As2A. The required area, As10, may be combined with As2 in a single mat or placed in a separate layer as shown above. The additional Steel may be Welded Wire Fabric or grade 60 Deformed Bars.

(See GENERAL NOTES on sheet 1 of 2)

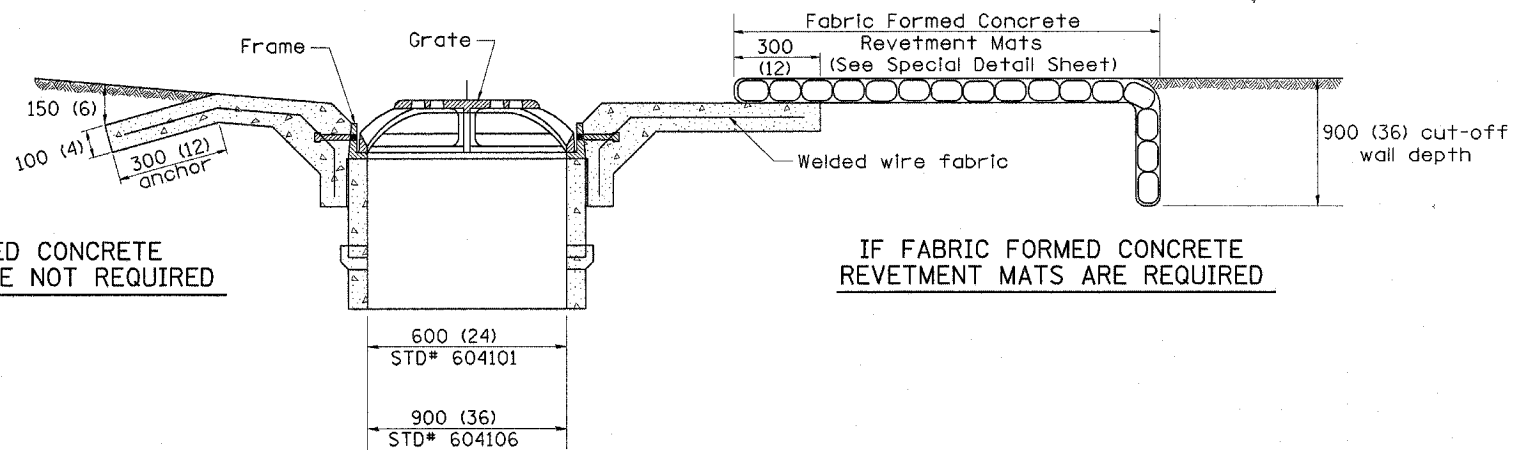
SPAN X RISE mm (ft)	T mm (in)	A	B	C mm (in)	E mm (in)	F	G	H mm (in)	SLOPE (Y : X)
600x600 (2x2)	100(4)	815(32)	815(32)	100(4)	915(36)	915(36)	305(12)	305(12)	1 : 3
600x900 (2x3)	100(4)	815(32)	1.12m (3'-8")	100(4)	610 (24)	1.22m (4'-0")	510(20)	410(16)	1 : 3
900x600 (3x2)	100(4)	1.12m (3'-8")	815(32)	100(4)	915(36)	915(36)	305(12)	305(12)	1 : 3
900x750 (3x2.5)	100(4)	1.12m (3'-8")	965(38)	100(4)	760(30)	1.07m (3'-6")	410(16)	355(14)	1 : 3
900x900 (3x3)	100(4)	1.12m (3'-8")	1.12m (3'-8")	100(4)	610(24)	1.22m (4'-0")	510(20)	410(16)	1 : 3
1200x600 (4x2)	125(5)	1.48m (4'-10")	865(34)	125(5)	915(36)	915(36)	305(12)	305(12)	1 : 3
1200x900 (4x3)	125(5)	1.48m (4'-10")	1.17m (3'-10")	125(5)	610(24)	1.22m (4'-0")	510(20)	410(16)	1 : 3
1200x1200 (4x4)	125(5)	1.48m (4'-10")	1.48m (4'-10")	125(5)	610(24)	1.22m (4'-0")	610(24)	610(24)	1 : 2
1200x1500 (4x5)	125(5)	1.48m (4'-10")	1.78m (5'-10")	125(5)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
1200x1800 (4x6)	125(5)	1.48m (4'-10")	2.09m (6'-10")	125(5)	610(24)	1.22m (4'-0")	1.22m (4'-0")	610(24)	1 : 2
1500x600 (5x2)	150(6)	1.83m (6'-0")	915(36)	150(6)	915(36)	915(36)	305(12)	305(12)	1 : 3
1500x900 (5x3)	150(6)	1.83m (6'-0")	1.22m (4'-0")	150(6)	610(24)	1.22m (4'-0")	510(20)	410(16)	1 : 3
1500x1200 (5x4)	150(6)	1.83m (6'-0")	1.52m (5'-0")	150(6)	610(24)	1.22m (4'-0")	610(24)	610(24)	1 : 2
1500x1500 (5x5)	150(6)	1.83m (6'-0")	1.83m (6'-0")	150(6)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
1800x600 (6x2)	175(7)	2.17m (7'-2")	965(38)	175(7)	915(36)	915(36)	305(12)	305(12)	1 : 3
1800x900 (6x3)	175(7)	2.17m (7'-2")	1.27m (4'-2")	175(7)	610(24)	1.22m (4'-0")	510(20)	410(16)	1 : 3
1800x1200 (6x4)	175(7)	2.17m (7'-2")	1.57 (5'-2")	175(7)	610(24)	1.22m (4'-0")	610(24)	610(24)	1 : 2
1800x1500 (6x5)	175(7)	2.17m (7'-2")	1.88m (6'-2")	175(7)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
1800x1800 (6x6)	175(7)	2.17m (7'-2")	2.17m (7'-2")	175(7)	610(24)	1.22m (4'-0")	1.22m (4'-0")	610(24)	1 : 2
2100x1200 (7x4)	200(8)	2.54m (8'-4")	1.63m (5'-4")	200(8)	610(24)	1.22m (4'-0")	610(24)	610(24)	1 : 2
2100x1500 (7x5)	200(8)	2.54m (8'-4")	1.93m (6'-4")	200(8)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
2100x1800 (7x6)	200(8)	2.54m (8'-4")	2.24m (7'-4")	200(8)	610(24)	1.22m (4'-0")	1.22m (4'-0")	610(24)	1 : 2
2100x2100 (7x7)	200(8)	2.54m (8'-4")	2.54m (8'-4")	200(8)	610(24)	1.22m (4'-0")	1.52m (5'-0")	610(24)	1 : 2
2400x1200 (8x4)	200(8)	2.84m (9'-4")	1.63m (5'-4")	200(8)	610(24)	1.22m (4'-0")	610(24)	610(24)	1 : 2
2400x1500 (8x5)	200(8)	2.84m (9'-4")	1.93m (6'-4")	200(8)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
2400x1800 (8x6)	200(8)	2.84m (9'-4")	2.24m (7'-4")	200(8)	610(24)	1.22m (4'-0")	1.22m (4'-0")	610(24)	1 : 2
2700x1500 (9x5)	225(9)	3.2m (10'-6")	1.98m (6'-6")	225(9)	610(24)	1.22m (4'-0")	915(36)	610(24)	1 : 2
2700x1800 (9x6)	225(9)	3.2m (10'-6")	2.29m (7'-6")	225(9)	610(24)	1.22m (4'-0")	1.22m (4'-0")	610(24)	1 : 2

All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
PRECAST CONCRETE BOX CULVERTS (SPECIAL), END SECTION (SPECIAL), & DROP BOX END SECTIONS (SPECIAL)	
CADD STANDARD 540401-D4(2)	DRAWN BY CADD
SCALE: NOT TO SCALE	CHECKED BY
DATE: 7/18/2006	SHEET 2 OF 2



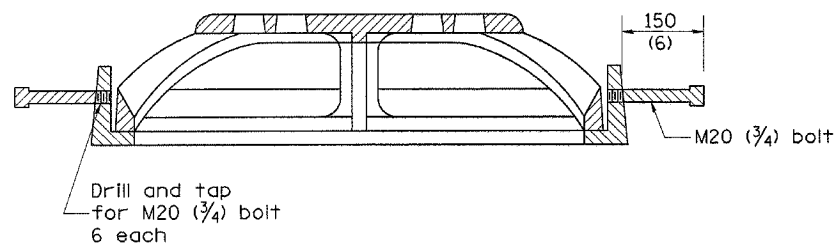
PLAN  
(STD# 604101 & 604106)



IF FABRIC FORMED CONCRETE REVETMENT MATS ARE NOT REQUIRED

IF FABRIC FORMED CONCRETE REVETMENT MATS ARE REQUIRED

SECTION B-B  
(STD# 604101 & 604106)



SECTION A-A  
(STD# 604101 & 604106)

GENERAL NOTES

- The applicable portions of Highway Standards 604101 and/or 604106 shall apply, except as noted herein.

All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD

DATE	REVISIONS	BY
1-1-97	RENUM. B-4.09, NEW REVISION BOX, REVISED DESIGNER NOTES.	T.P.

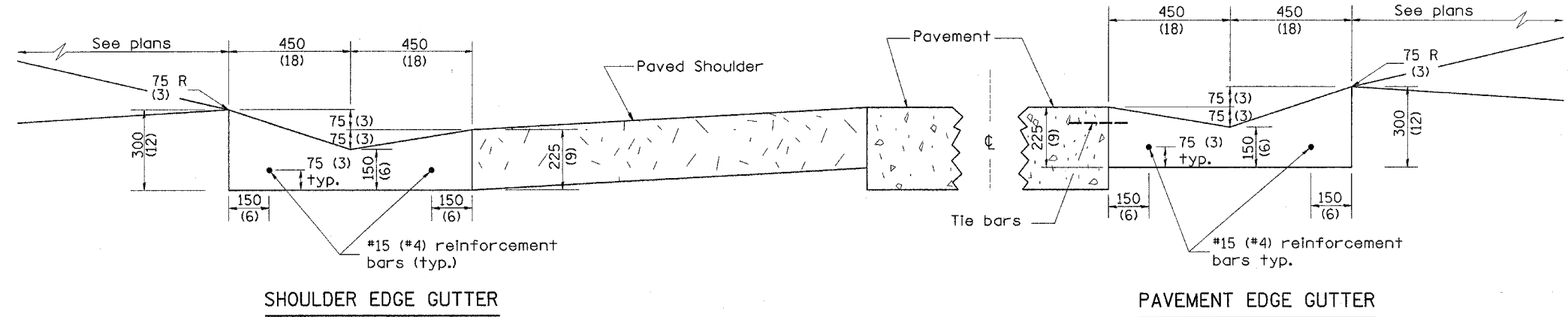
MEDIAN INLET (604101), SPECIAL AND  
MEDIAN INLET (604106), SPECIAL  
CADD STANDARD 604101-D4  
SCALE NOT TO SCALE  
DATE 7/18/2006

DRAWN BY CADD  
CHECKED BY  
604101-D4

Designer Notes: 1. This is to be used to supplement Standard 604101 and/or 604106  
2. If fabric formed concrete revetment mats are used, include District CADD drawing.  
3. Include District Special Provision.  
7/18/2006



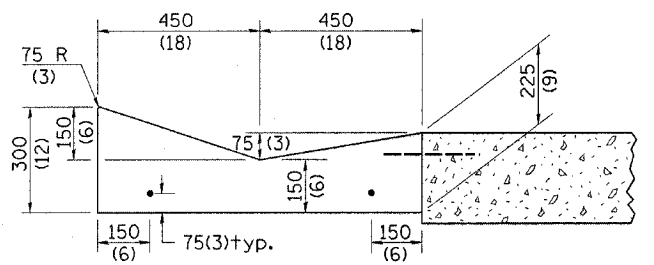
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/McDONOUGH	433	272
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		STATE CONTRACT NO. 68206



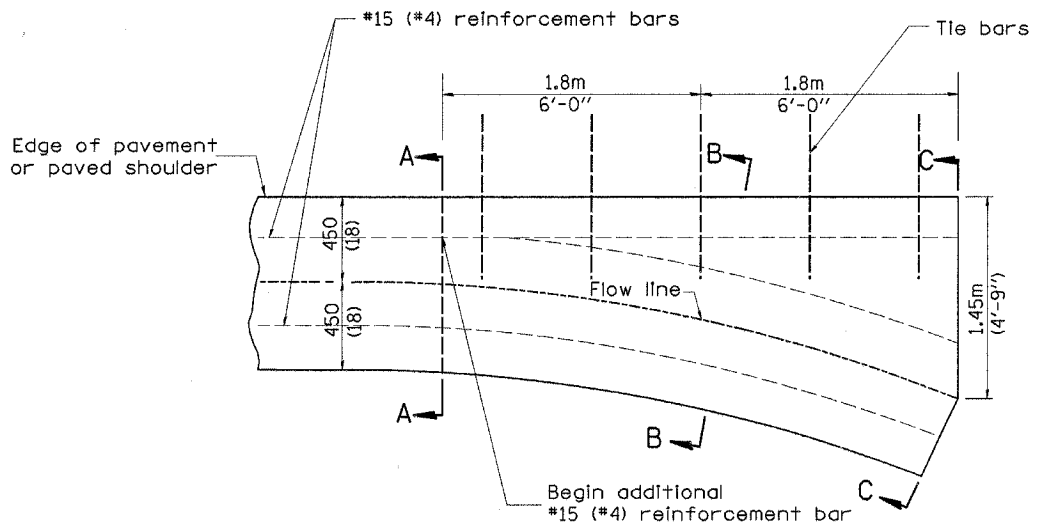
SHOULDER EDGE GUTTER

PAVEMENT EDGE GUTTER

TYPE A GUTTER (MODIFIED)



SECTION A-A

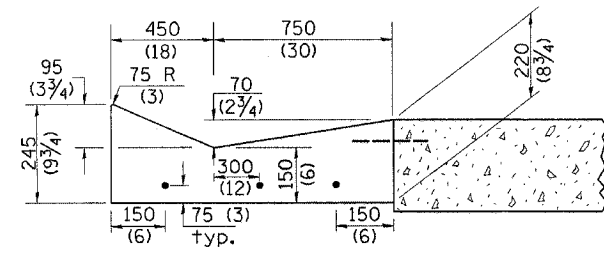


PLAN

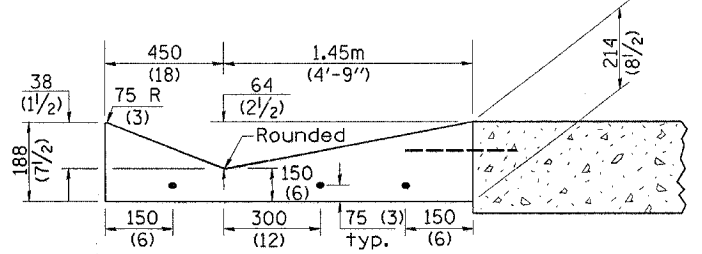
QUANTITY	
Section C-C to A-A	m <sup>3</sup> (cu. yd.) concrete.

GENERAL NOTES:

- TYPE A GUTTER (MODIFIED) shall conform to the applicable portions of Section 606.
- Tie bars shall be No. 20 (No. 6) at 600mm (24") centers unless otherwise shown.
- Gutter, gutter inlets, gutter outlets, and gutter entrances shall be tied to rigid pavement in accordance with details shown on Standard 420001.
- Joints shall be constructed in accordance with Article 606.06.
- Welded wire fabric shall conform to Article 1006.10(c)(1), and shall not be less than 2.83 kg/m<sup>2</sup> (58 lbs/100 sq.ft.).



SECTION B-B



SECTION C-C

INLET

All dimensions are in millimeters (Inches) unless otherwise noted.

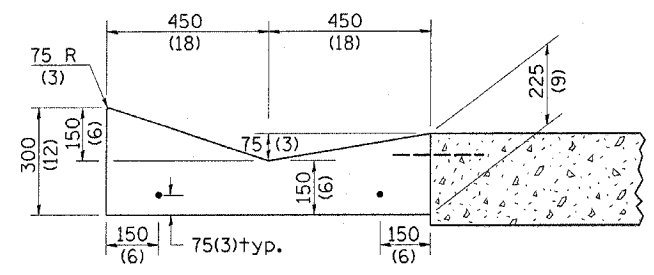
ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
TYPE A GUTTER, (MODIFIED)	
(INLET, OUTLET & ENTRANCE)	
CADD STANDARD 606101-D4	SHEET 1 OF 3
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
DATE 7/18/2006	CHECKED BY

DATE	REVISIONS	BY
1-1-97	RENUM. A-1.02, NEW REVISION	T.P.
	BOX, ELIMINATED EXPANSION	
	ANCHOR TIES.	
2-28-02	ENTRANCE TYPICALS REVISED	M.A.

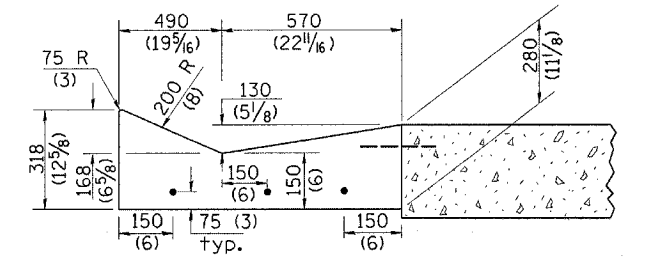
QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

DESIGNER NOTE:  
1. INCLUDE STATE STANDARD 420001.  
2. INCLUDE DISTRICT SPECIAL PROVISION.  
7/18/2006

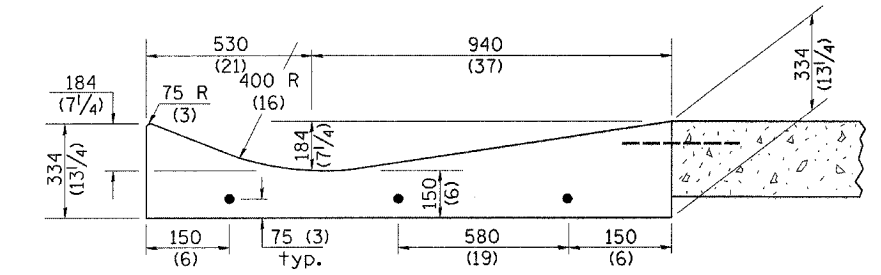
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	273
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		STATE CONTRACT NO. 68206



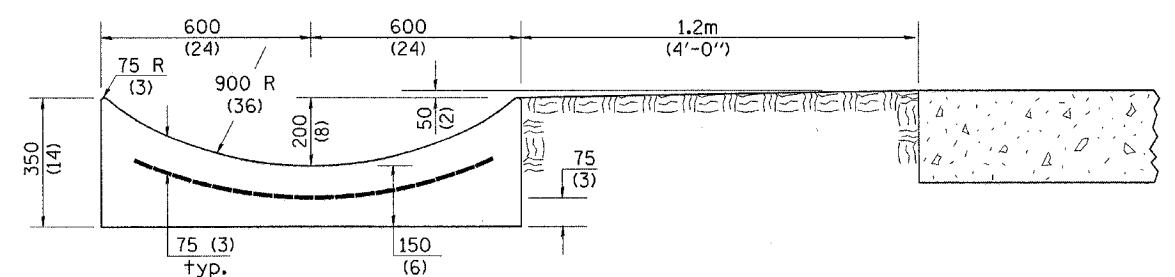
SECTION A-A



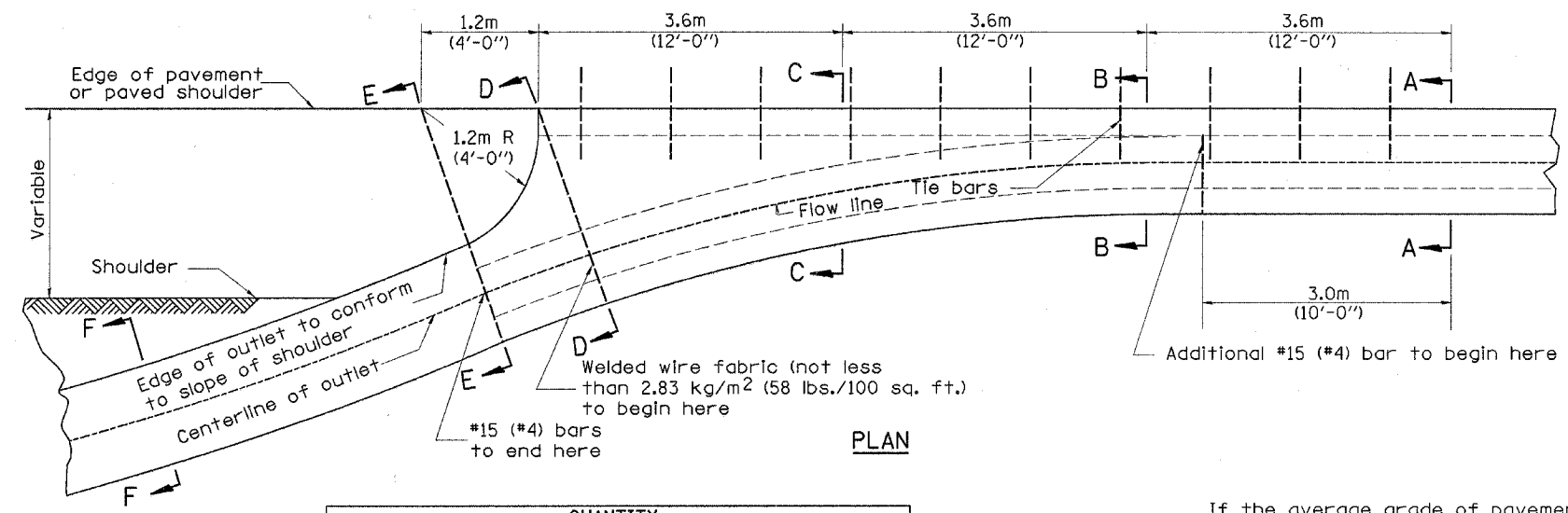
SECTION B-B



SECTION C-C



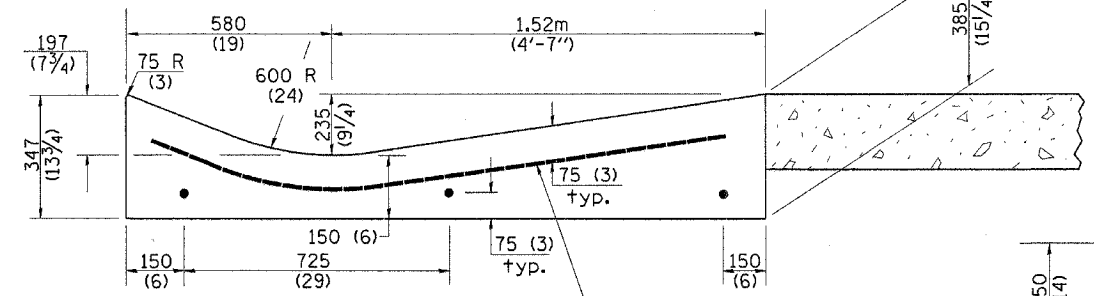
SECTION E-E



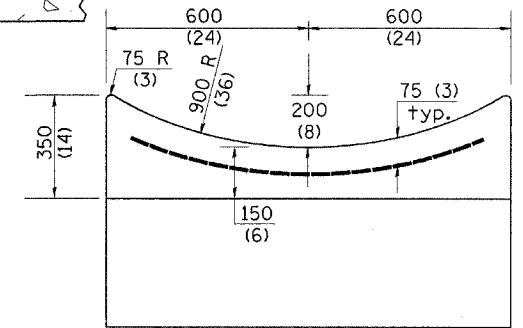
PLAN

**QUANTITY**  
 Section A-A to E-E= m<sup>3</sup> ( cu. yd.) concrete.  
 Section F-F= m<sup>3</sup> ( cu. yd./ft.) concrete.

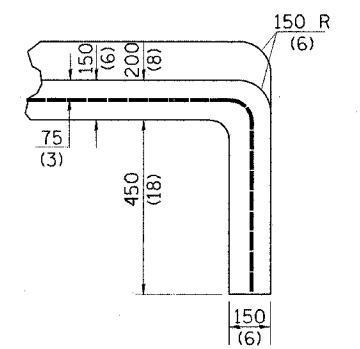
If the average grade of pavement for the distance from section A-A to section D-D exceeds 2%, this distance shall be increased 1.8 m (6 ft.) for each 1% increase in grade. A quantity adjustment is required.



SECTION D-D



SECTION F-F



SECTIONS AT END OF OUTLET (CURTAIN WALL)

**QUANTITY**  
 Curtain Wall  
 m<sup>3</sup> ( cu. yd. ) concrete.

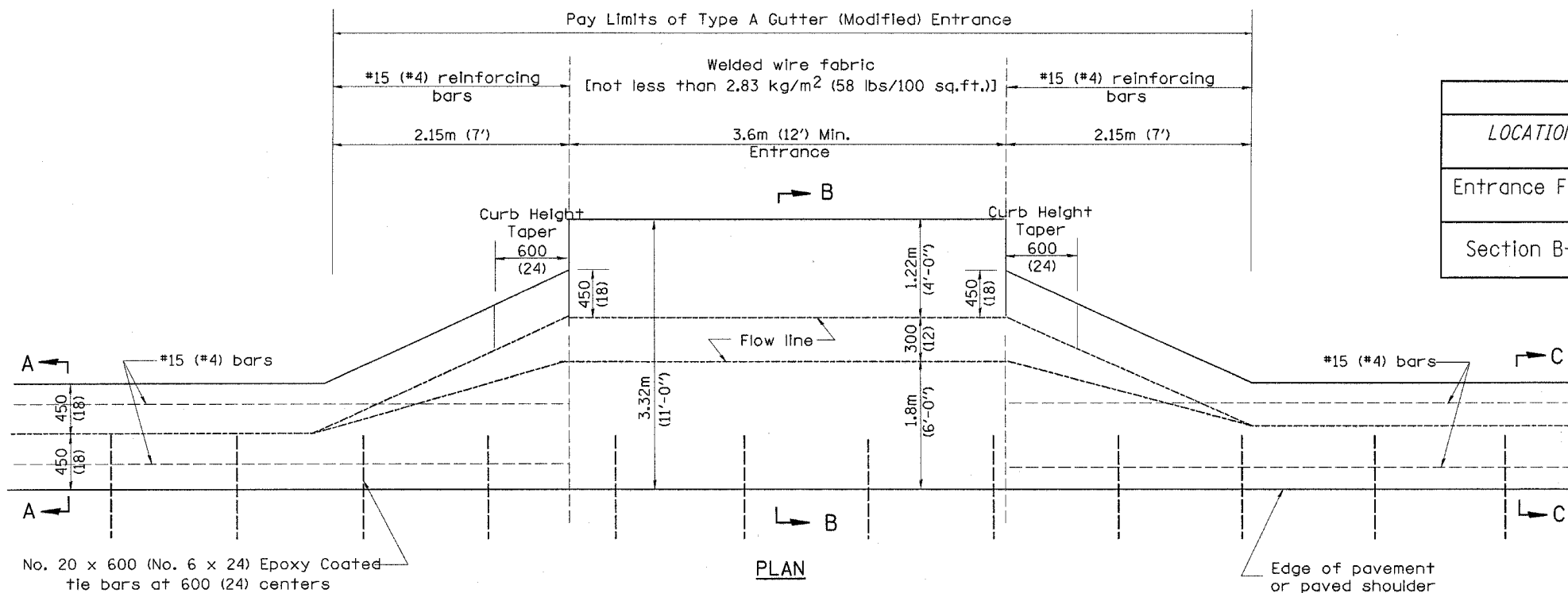
QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

7/18/2006

OUTLET

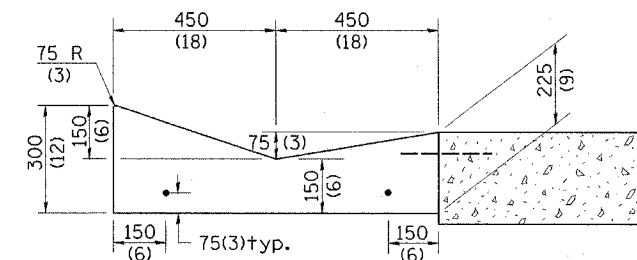
All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
TYPE A GUTTER, (MODIFIED) (INLET, OUTLET & ENTRANCE)	
CADD STANDARD 606101-D4	SHEET 2 OF 3
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
DATE 7/18/2006	CHECKED BY

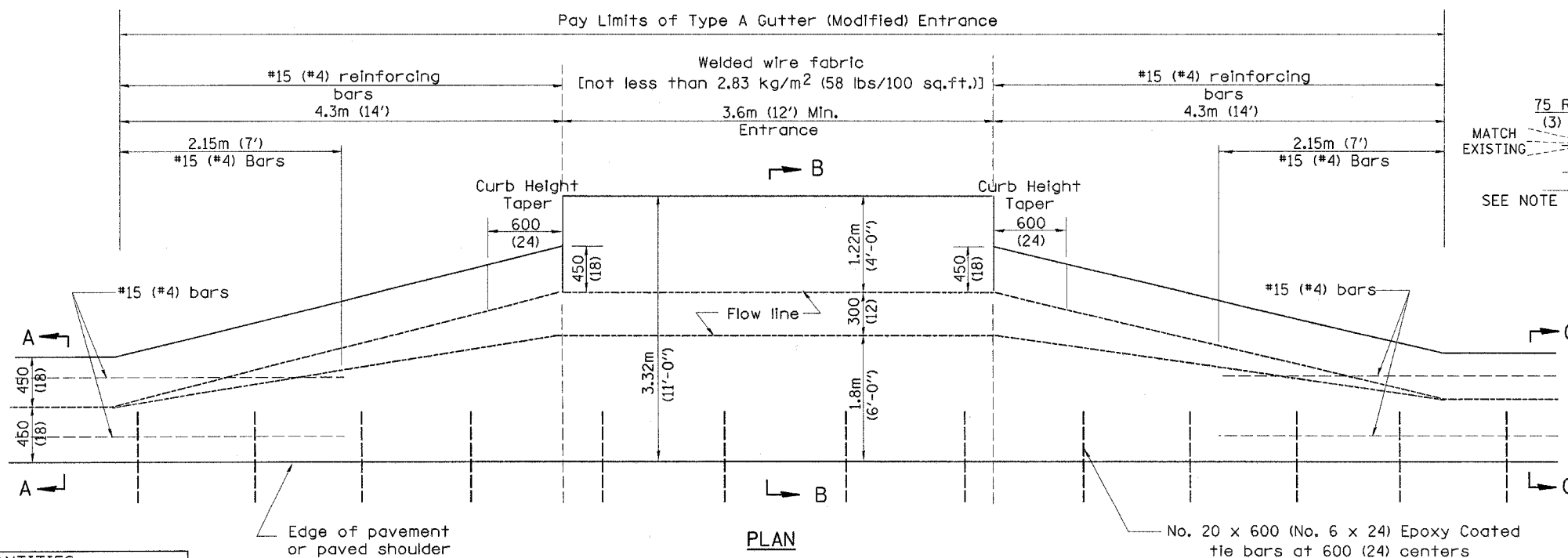


**TYPICAL URBAN ENTRANCE**

QUANTITY CALCULATION			
LOCATION	LENGTH	NON-COMMERCIAL	COMMERCIAL ENTRANCE
		150 (6)	200 (8)
Entrance Flare	2.15 m (7 Ft) Urban 4.30 m (14 Ft) Rural	0.37 Cu M / M (0.15 Cu Yd / Ft)	0.45 Cu M / M (0.18 Cu Yd / Ft)
Section B-B	See Plans	0.57 Cu M / M (0.23 Cu Yd / Ft)	0.70 Cu M / M (0.28 Cu Yd / Ft)

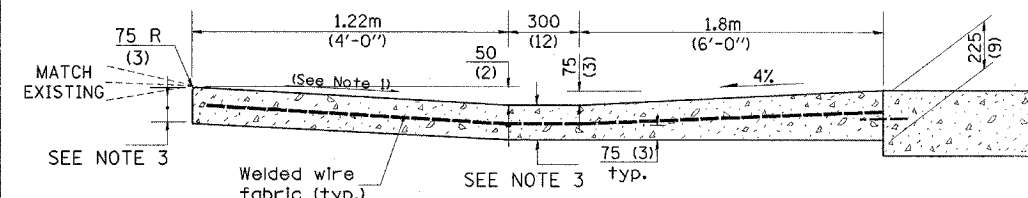


**SECTION A-A & C-C**



**TYPICAL RURAL ENTRANCE**

**ENTRANCE**



**SECTION B-B**

**GENERAL NOTES**

- Slope may be increased from 4% (min.) to 6% (max.) in order to match the existing.
- The cross-slope is to be constructed as given in the plans from back turnout to where driveway matches existing.
- For Non-Commercial Entrances the driveway thickness shall be 150 (6). For Commercial Entrances the driveway thickness shall be 200 (8).

All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT CADD STANDARD**  
**TYPE A GUTTER, (MODIFIED)**  
**(INLET, OUTLET & ENTRANCE)**

CADD STANDARD 606101-D4 SHEET 3 OF 3  
 SCALE: NOT DRAWN TO SCALE DRAWN BY CADD  
 DATE 7/18/2006 CHECKED BY

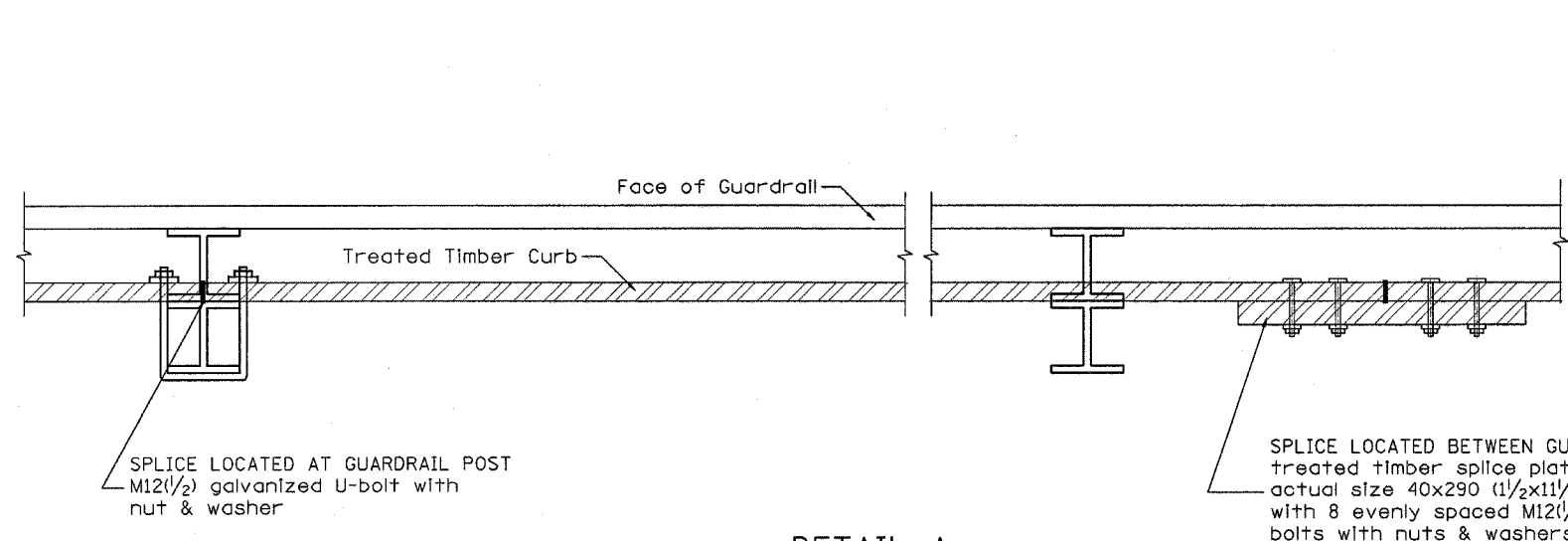
QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE, BUREAU OF PROJECT IMPLEMENTATION, DOCUMENTATION SECTION

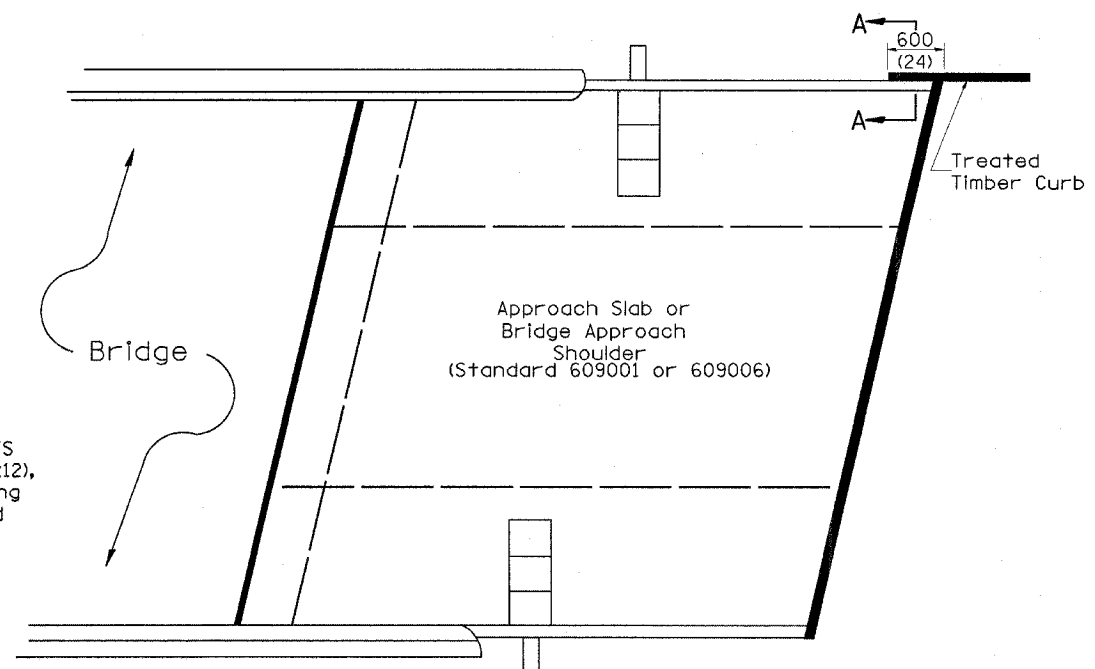
7/18/2006



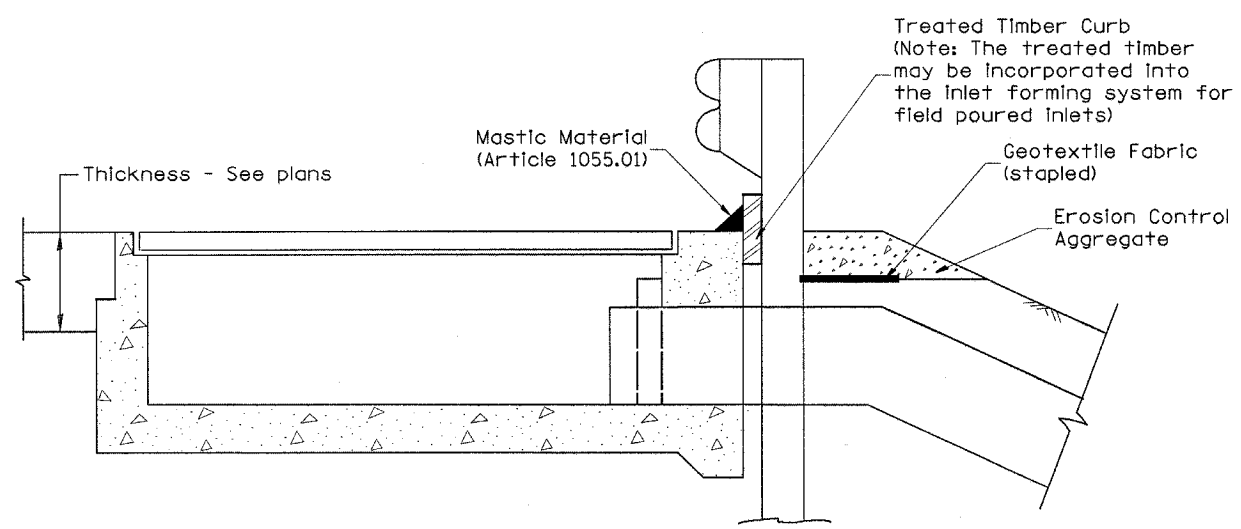
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	276
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
STATE CONTRACT NO. 68206				



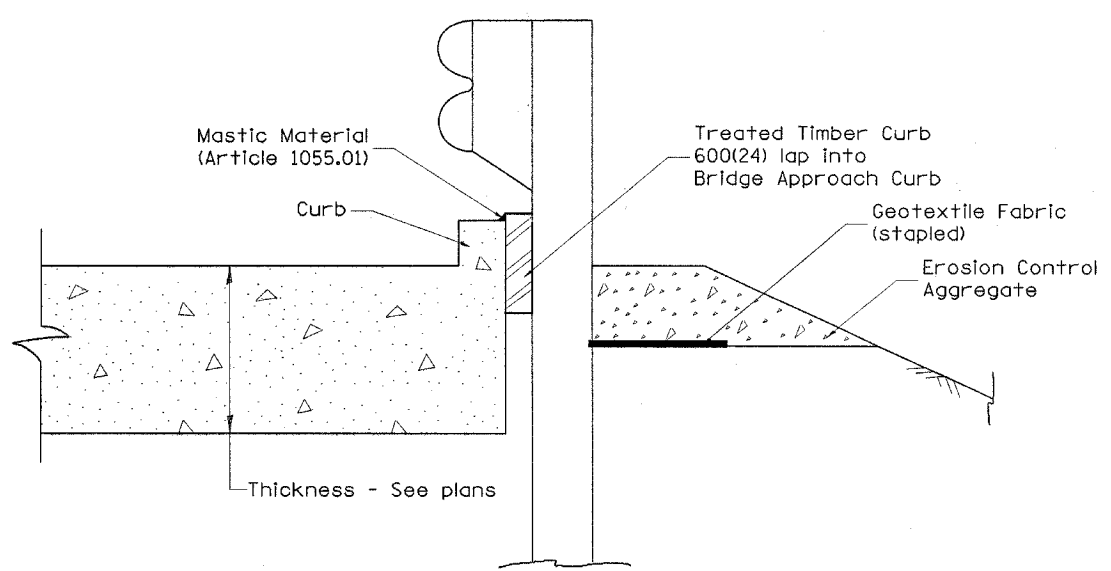
**DETAIL A**  
(Typical Treated Timber Splices)



**PLAN VIEW**  
**APPROACH SLAB OR BRIDGE APPROACH SHOULDER**  
(STANDARD 609001 or 609006)



**TYPICAL SECTION WITH EROSION CONTROL CURB**  
**AT INLETS TYPE E & F (STANDARD 610001)**

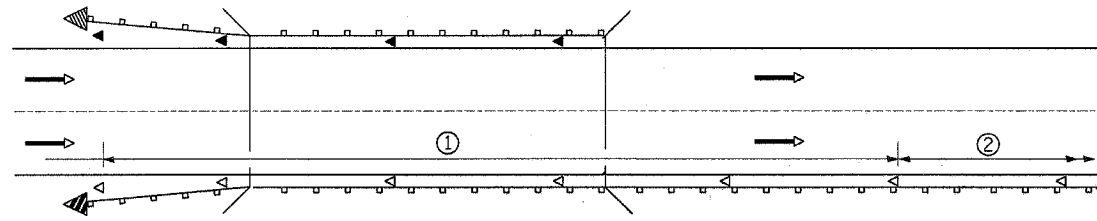


**SECTION A-A**  
**TYPICAL SECTION WITH EROSION CONTROL CURB**  
**AT BRIDGE APPROACH CURB**  
(STANDARD 609001 OR 609006)

All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
GUARDRAIL EROSION CONTROL TREATMENTS	
CADD STD NO. 630101-D4(2)	SHEET 2 OF 2
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
DATE 7/18/2006	CHECKED BY

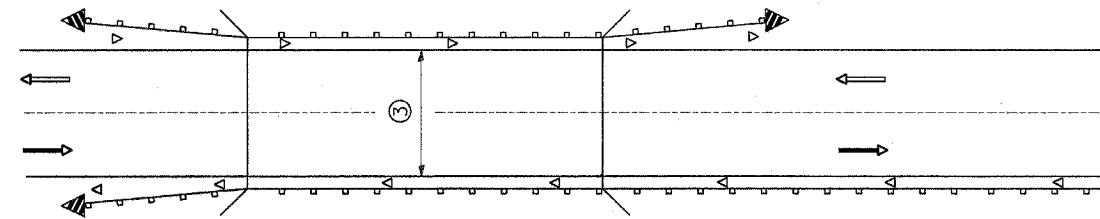
7/18/2006



① Spacing 24 m (80 ft.) max. for first 122 m (400 ft.) or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).

② After 122 m (400 ft.), transition to normal delineator spacing shown in Standard 635001, and continue as required.

**ONE-WAY TRAFFIC**



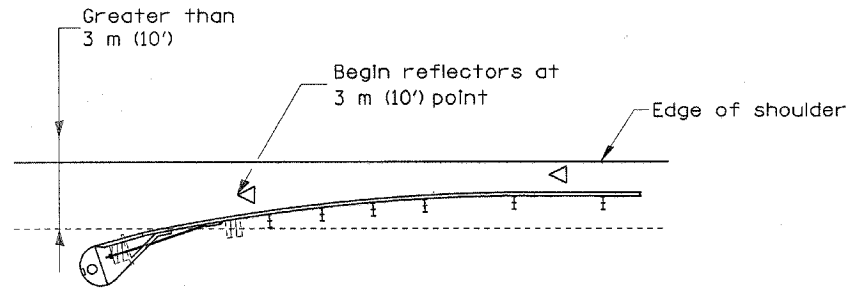
③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the bridge pavement is less than 610 (24) wider than the pavement approaching the bridge.

**TWO-WAY TRAFFIC**

**GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS**

**LEGEND**

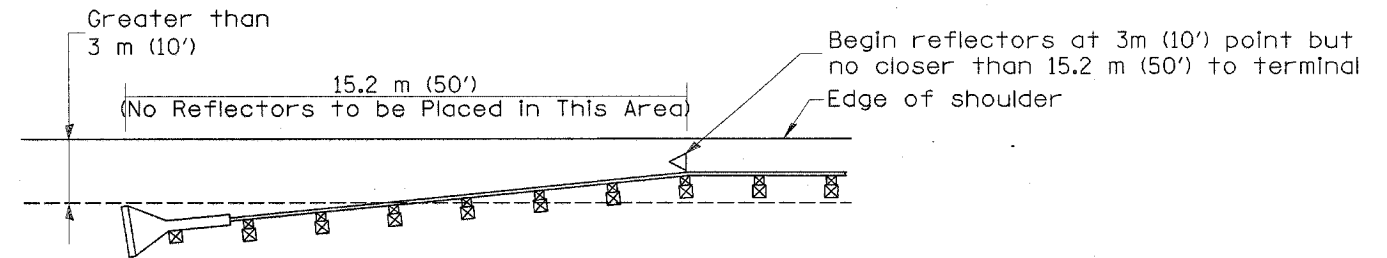
- ◁ Monodirectional silver
- ◄ Monodirectional amber
- ◄ Terminal Marker - Black/Yellow  
Left or Right as appropriate



NOTE: Omit terminal marker when terminal over 3 m (10') from edge of paved shoulder or break point of unpaved shoulder, or when terminal buried in backslope.

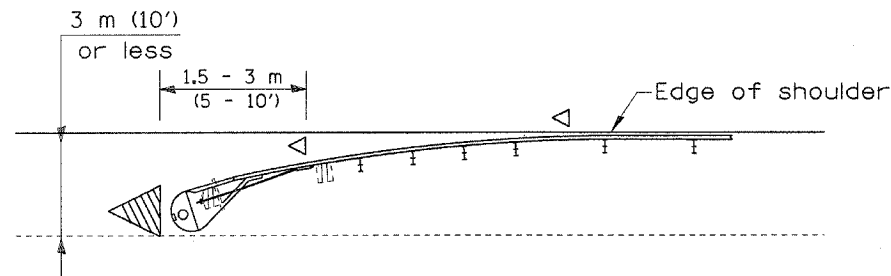
**Traffic Barrier Terminal Type(\*) and/or Turned-Down Terminal**

[Terminal over 3 m (10') from edge of shoulder]  
\*See Plans for Type



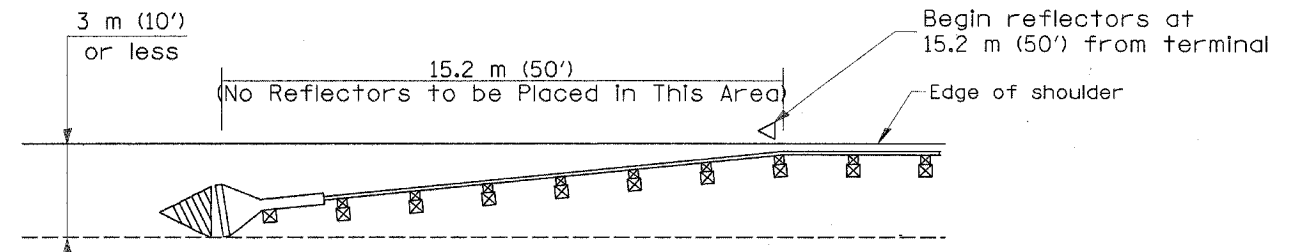
NOTE: Omit terminal marker when terminal over (10') from edge of paved shoulder or break point of unpaved shoulder.

**Traffic Barrier Terminal Type 1 (Special)**  
[Terminal over 3 m (10') from edge of shoulder]



**Traffic Barrier Terminal Type(\*) and/or Turned-Down Terminal**

[Terminal over 3 m (10') or less from edge of shoulder]  
\*See Plans for Type



**Traffic Barrier Terminal Type 1(Special)**  
[Terminal 3 m (10') or less from edge of shoulder]

All dimensions are in millimeters (Inches) unless otherwise noted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD**

**GUARDRAIL AND  
BARRIER WALL DELINEATION**

CADD STD. NO. 635101-D4 SHEET 1 OF 3  
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD  
DATE 7/18/2006 CHECKED BY

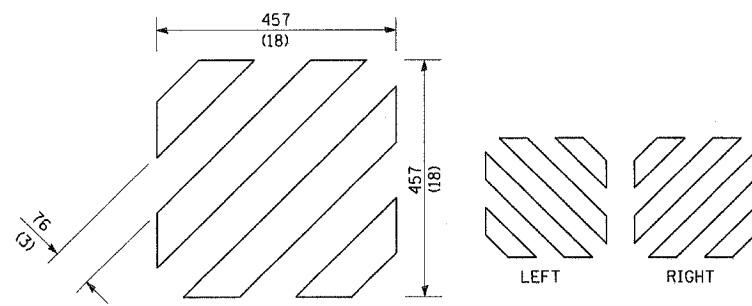
DATE	REVISIONS	BY
1-1-97	RENUM. E-10.02, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. SPEC. *	J.A.

**TERMINAL MARKER PLACEMENT**

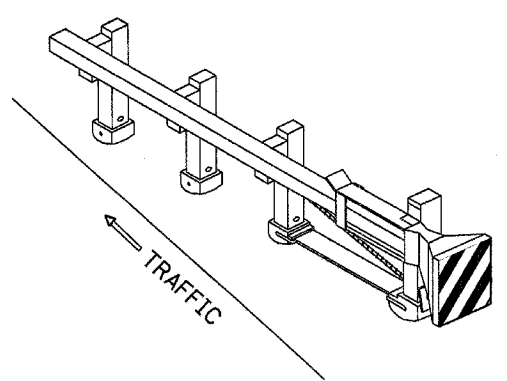
DESIGNER NOTE: 1. INCLUDE APPROPRIATE SPECIAL PROVISIONS FOR "GUARD RAIL DELINEATION POLICY: 1. TERMINAL MARKER, 2. TERMINAL MARK POST, AND 3. GUARDRAIL AND BARRIER WALL MARKERS." FROM INTERIM SPECIAL PROVISIONS 94-74; "GUARDRAIL AND BARRIER WALL DELINEATION." 2. IF POST MOUNT TERMINAL MARKER IS USED, INCLUDE STATE STD. 720011.

7/18/2006

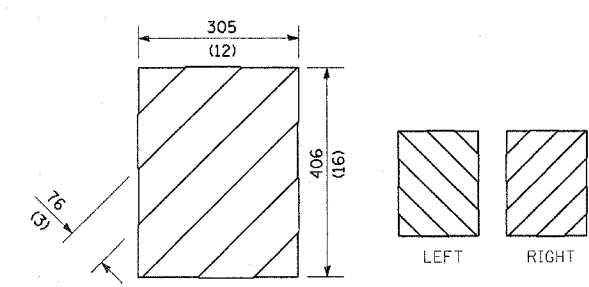
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	278
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		STATE CONTRACT NO. 68206



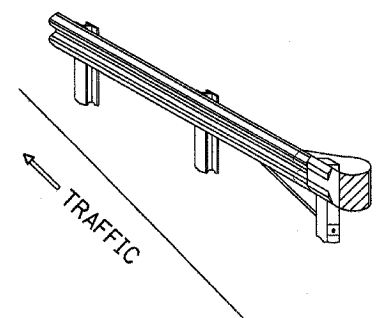
For Traffic Barrier Terminal Type 1 (Special)



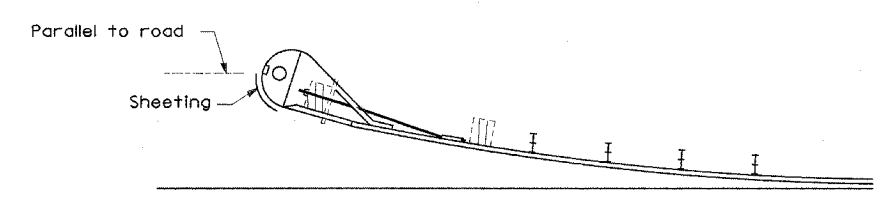
Standard Treatment - Direct Applied Sheetting  
Traffic Barrier Terminal Type 1 (Special)



For Traffic Barrier Terminal Type (\*)  
and Post Mount  
\* See Plans for Type



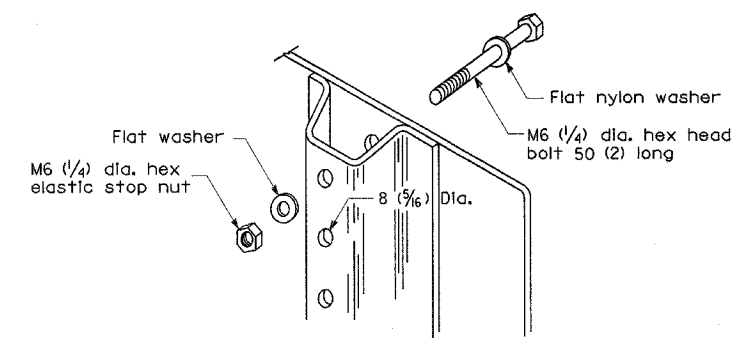
Standard Treatment - Direct Applied Sheetting  
Traffic Barrier Terminal Type (\*)  
\* See Plans for Type



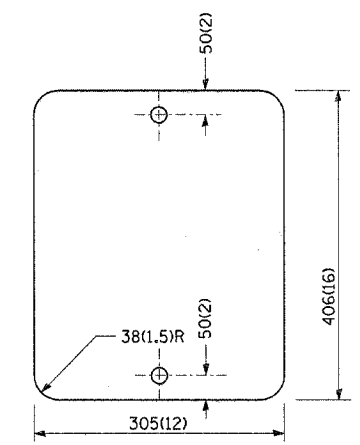
Sheeting Position for  
Traffic Barrier Terminal Type (\*)  
\* See Plans for Type

**TERMINAL MARKER DETAILS**

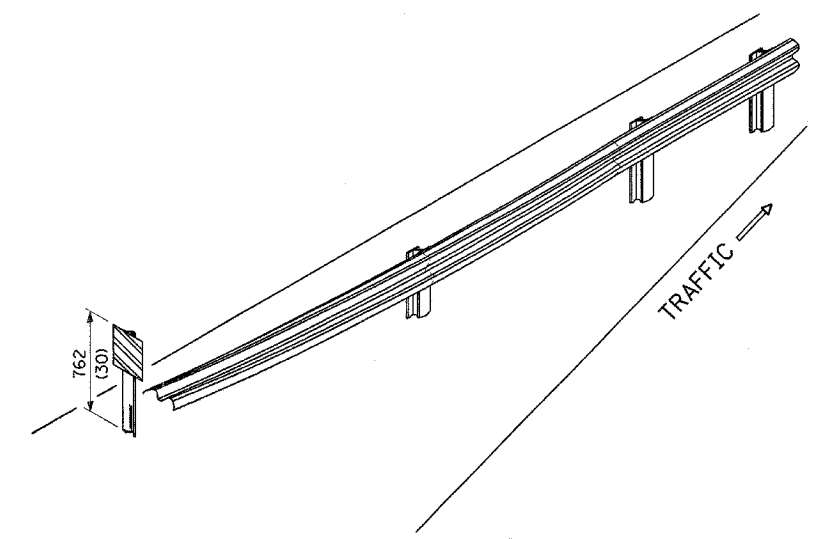
- Color: Black / Yellow reflectorized
- OM - I100 (L or R) Direct applied reflective sheeting
- OM - I200 (L or R) Post mounted



DETAIL OF MOUNTING TERMINAL MARKER TO POST



STANDARD TERMINAL MARKER



ALTERNATE TREATMENT - POST MOUNTED  
(For turned-down terminal where sheeting cannot be direct applied)

**TERMINAL MARKER TREATMENTS**

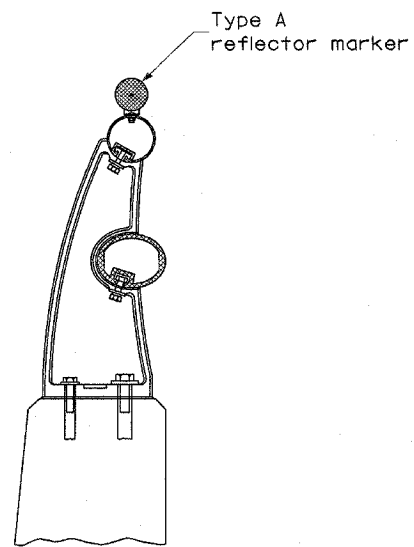
**GENERAL NOTES**

All dimensions are in millimeters (Inches) unless otherwise noted.

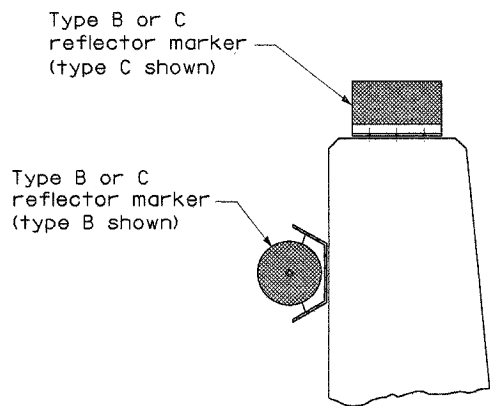
ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
GUARDRAIL AND BARRIER WALL DELINEATION	
CADD STD. NO. 635101-D4	SHEET 2 OF 3
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
DATE 7/18/2006	CHECKED BY

7/18/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	279
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
STATE CONTRACT NO. 68206				

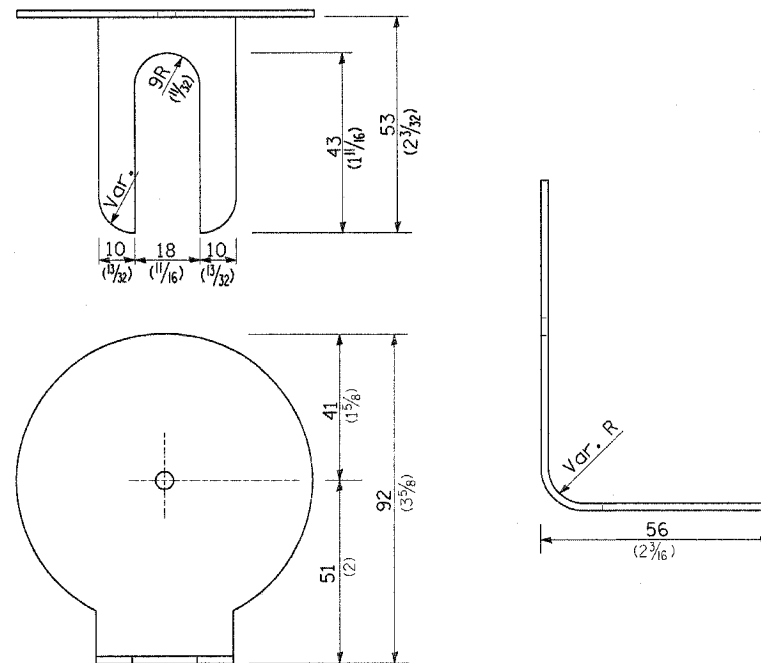


TYPICAL MOUNTING DETAIL FOR BRIDGE RAIL REFLECTOR

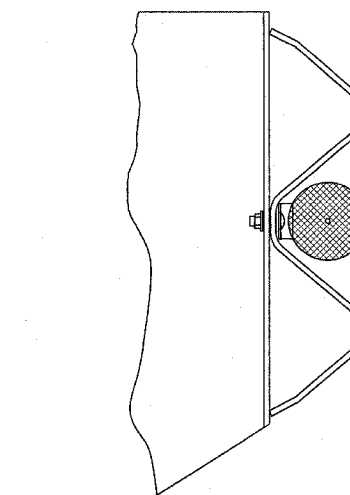


TYPICAL MOUNTING DETAIL FOR BARRIER WALL REFLECTOR

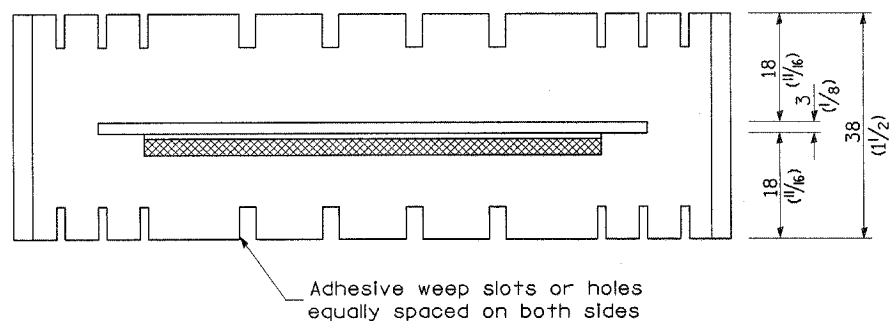
REFLECTOR MOUNTING



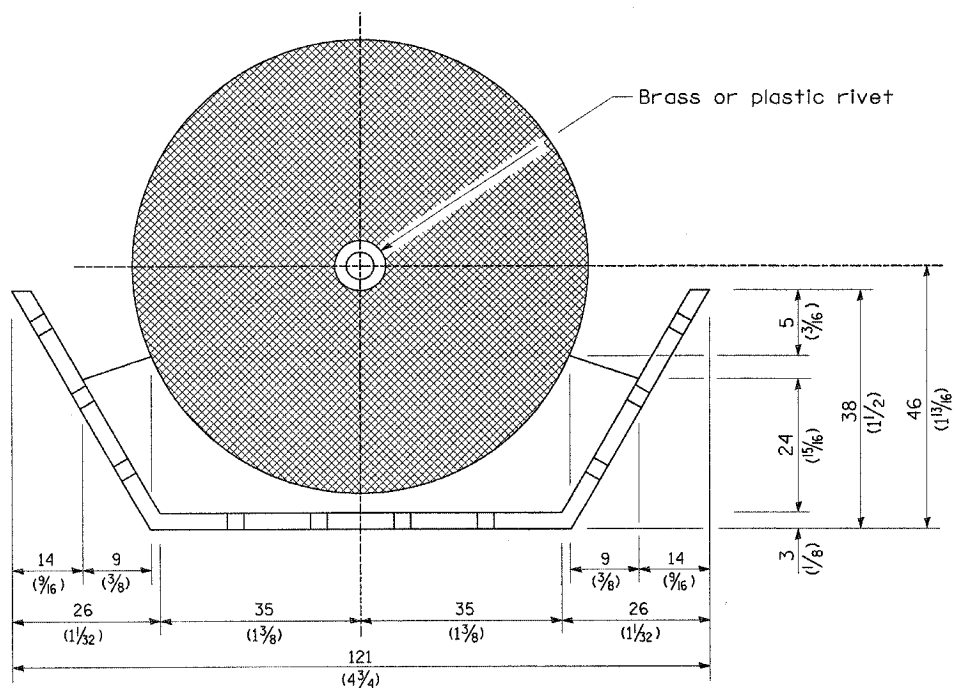
REFLECTOR MARKER TYPE A



TYPICAL GUARDRAIL MOUNTING WITH REFLECTOR MARKER TYPE A

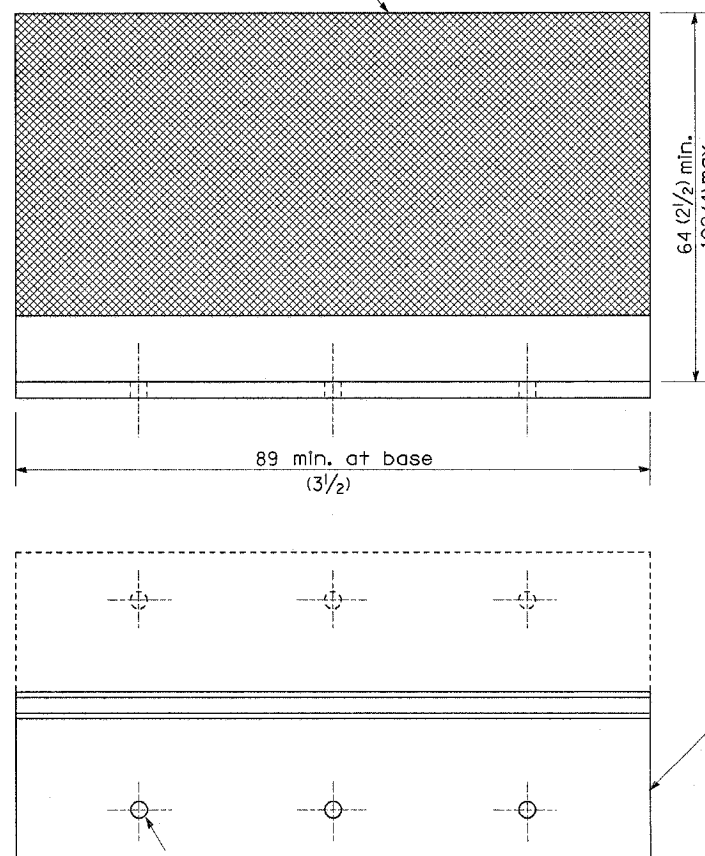


Adhesive weep slots or holes equally spaced on both sides

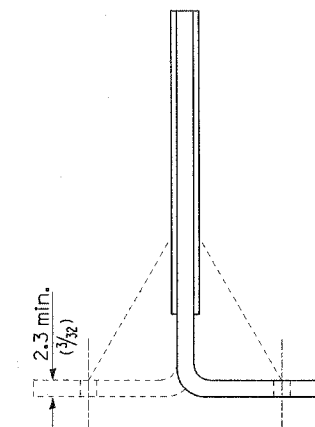


REFLECTOR MARKER TYPE B

Min. reflective area 4,194 mm<sup>2</sup> (6 1/2 Sq. In.) each side. May be rectangular or slight trapezoid.



REFLECTOR MARKER TYPE C



Cross section may be "T" or "L" shaped and may have side supports at ends.

REFLECTORS

Minimum total area of base 4,516 mm<sup>2</sup> (7.0 Sq. In.)

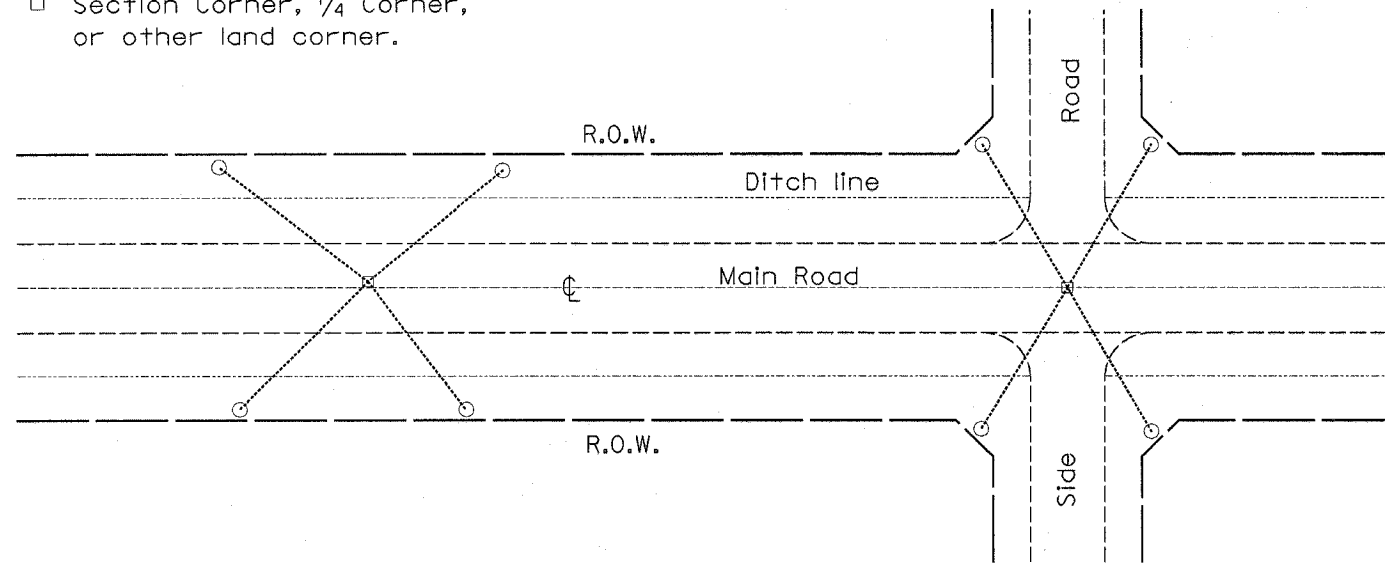
All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
GUARDRAIL AND BARRIER WALL DELINEATION	
CADD STD. NO. 635101-D4	SHEET 3 OF 3
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
DATE 7/18/2006	CHECKED BY



**PERMANENT SURVEY TIES**

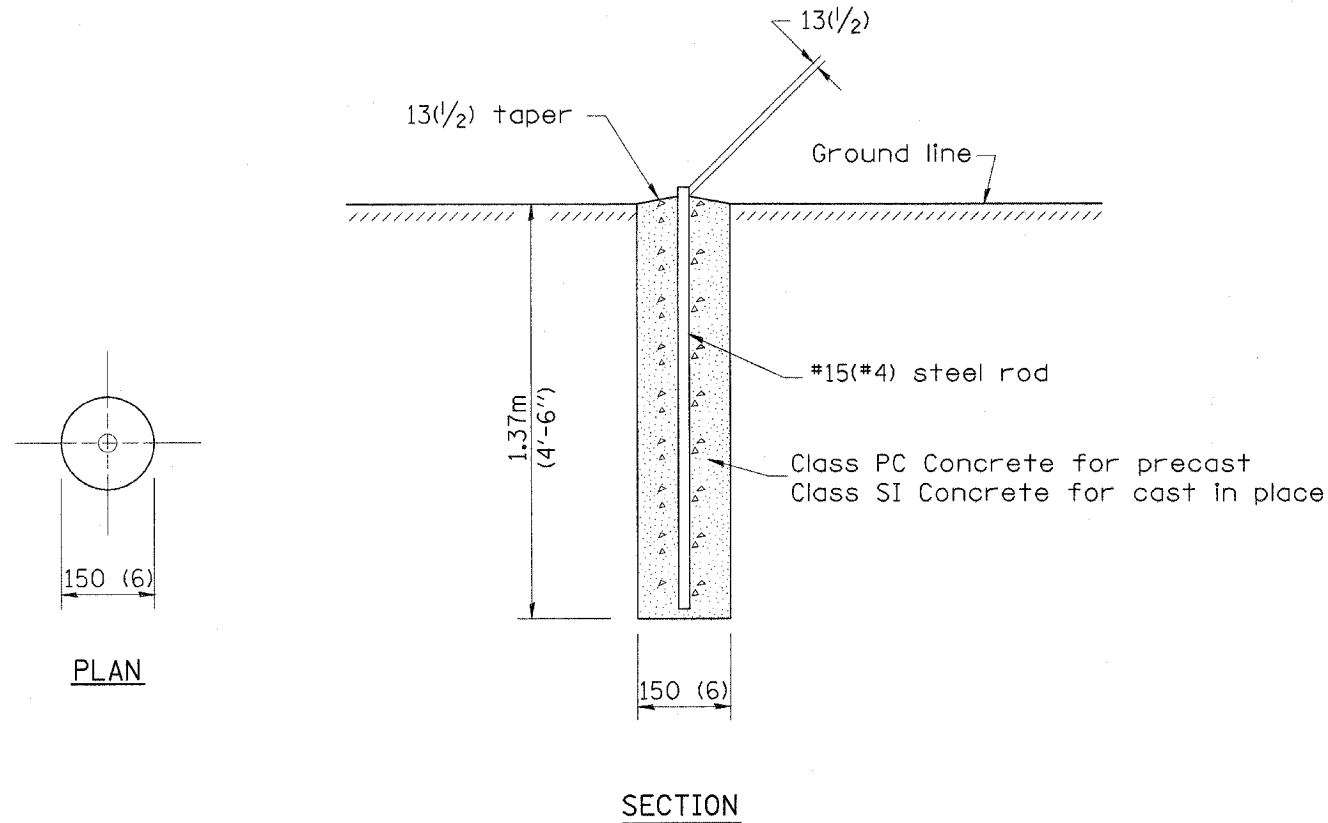
- Permanent Survey Tie
- Section Corner, 1/4 Corner, or other land corner.



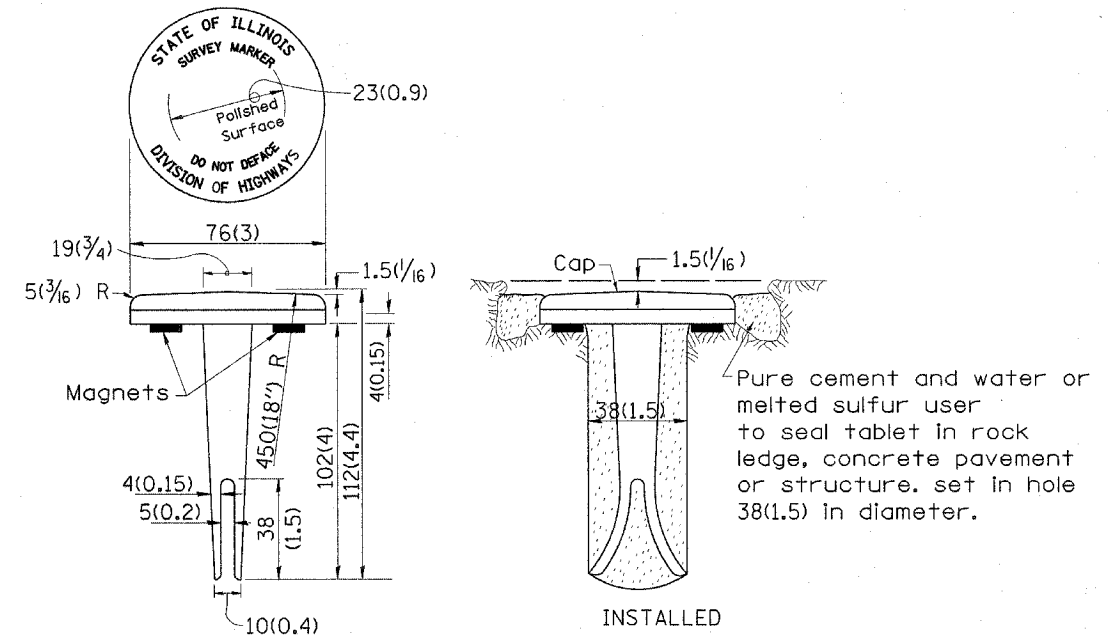
**TYPICAL APPLICATION**

**GENERAL NOTES**

- The marker may be either precast of Class PC Concrete, or cast in place of Class SI Concrete.
- Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
- The tie distances to the section corner shall be measured and recorded by the IDOT Chief of Surveys.



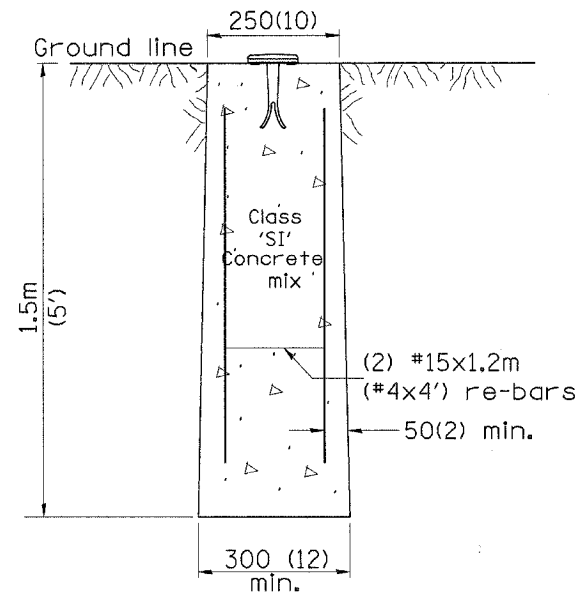
**PERMANENT SURVEY MARKERS**



**BRONZE TABLET - No Scale TYPE I**

**GENERAL NOTES**

- All type II markers shall be cast in place, and precast markers will not be allowed.
- Two permanent magnets, each having a diameter of 19 (3/4) and a thickness of 6 (1/4), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
- The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s and P.C.'s of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 300m(1000').
- The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
- The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.



**MARKER CAST IN PLACE TYPE II**

All dimensions are in millimeters (inches) unless otherwise noted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT CADD STANDARD**

**PERMANENT SURVEY TIE & PERMANENT SURVEY MARKERS TY.I - TY.II**  
 CADD STD. NO. 667101-D4  
 SCALE: NOT DRAWN TO SCALE  
 DATE 7/18/2006

DATE	REVISIONS	BY
1-1-97	RENJIM. D-3.01, NEW REVISION BOX	T.P.
7-7-98	ADD DESIGNER NOTE, REVISED TITLE BOX	J.A.
	ADD DESIGNER NOTE	

DRAWN BY CADD  
 CHECKED BY

DESIGNER NOTE:  
 1. ADD DISTRICT SPECIAL PROVISION.  
 2. MODIFIES STATE STD 667101 TO CALL FOR "BRONZE" TABLET.  
 7/18/2006





LOCATION	STATION	OFFSET	SIGN CODE	MESSAGE OR DESCRIPTION	SIGN DIMENSIONS		SIGN PANEL			WOOD SIGN SUPPORT		TELESCOPING STEEL SIGN SUPPORT	BASE FOR TELESCOPING STEEL SIGN SUPPORT	
					LENGTH	HEIGHT	TYPE I	TYPE II	TYPE III	POST 1	POST 2			
					In	In	sq ft	sq ft	sq ft	ft	ft			ft
IL 61	392+90.00	26' RT	M2-1		21	15	2.19				14.0			
			M1-I100		30	24	5.00							
	394+50.00	33' RT	M1-4		30	24	5.00							
			M6-4		24	12	2.00			14.0				
	396+00.00	25' LT	M1-I100		24	24	4.00							
			D2-2		66	30		14.00		14.5	15.0			
	396+00.00	45' RT	D2-2		84	30		18.00		14.5	15.5			
	397+50.00	26' RT	M3-3		24	12	2.00			14.0				
	399+35.00	26' RT	M1-I100		24	24	4.00							
			R1-1		36	36	9.00				14.0		1	
R6-3				24	18	3.00								
R6-1L				36	12	3.00								
		R6-1R		36	12	3.00								
TR 28	797+90.00	21' RT	R1-2		48	48	8.00				16.0			
	799+00.00	26' LT	W14-2		36	36	9.00				16.0			
	799+30.00	44' RT	R1-1		36	36	9.00				15.0			
			R6-3		24	18	3.00							
			R6-1L		36	12	3.00							
			R6-1R		36	12	3.00							
SD 01	500+42.00	18' LT	R1-2		48	48	8.00				16.0			
TR 36	599+20.00	35' RT	R1-1		36	36	9.00				15.0			
			R6-3		24	18	3.00							
			R6-1L		36	12	3.00							
			R6-1R		36	12	3.00							
FR 03	600+80.00	30' LT	R1-1		36	36	9.00				15.0			
			R6-3		24	18	3.00							
			R6-1L		36	12	3.00							
			R6-1R		36	12	3.00							
	601+00.00	30' RT	W14-2		36	36	9.00				16.0			
	601+40.00	60' LT	R1-2		48	48	8.00				16.0			
	602+20.00	20' LT	R1-2		48	48	8.00				16.0			
	TR 64	699+25.00	35' RT	R1-1		36	36	9.00				15.0		
				R6-3		24	18	3.00						
				R6-1L		36	12	3.00						
R6-1R					36	12	3.00							
700+75.00		35' LT	R1-1		36	36	9.00				15.0			
			R6-3		24	18	3.00							
			R6-1L		36	12	3.00							
			R6-1R		36	12	3.00							
SUBTOTAL MCDONOUGH COUNTY							753	220	384	1688.5	14.0	1		
PROJECT TOTAL							813	254	448	1937.5	14.0	1		

7/18/2006

All dimensions are in millimeters (Inches) unless otherwise noted.

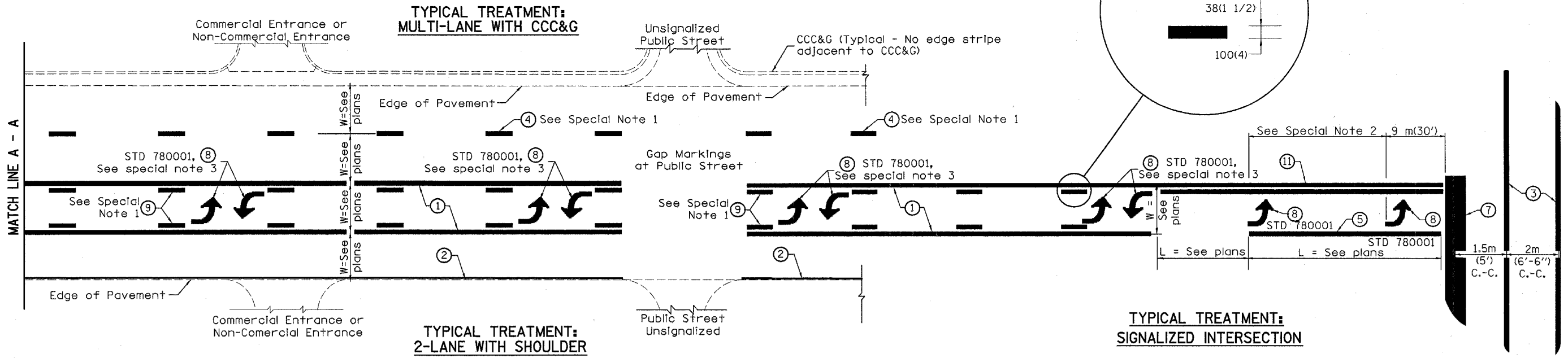
DATE	REVISIONS	BY
1-1-97	RENUM. E-3.04, METRICS, NEW REVISION BOX, REVISED TITLE BOX	T.P.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SPECIAL DETAIL SHEET**

**TABULATION OF SIGNS**

CADD STANDARD 720011-D4  
SCALE: NOT DRAWN TO SCALE  
DATE 7/18/2006

DRAWN BY CADD  
CHECKED BY



**FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION**

**TYPICAL PAVEMENT MARKING LEGEND**

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 100(4) Solid (Yellow)
- ② 100(4) Solid (White)
- ③ 2-150(6) Crosswalk @ 2m (6'-6") min C.-C. (White)  
2-200(8) Crosswalk @ 2m (6'-6") min C.-C. (White) (When traffic signals are present.)
- ④ 150(6) Skip-Dash (White) (See Special Note 1)
- ⑤ 200(8) Solid (White)
- ⑥ 300(12) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 600(24) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 100(4) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 300(12) Diagonal (Yellow) (See Table A) (See Table A)
- ⑪ 100(4) Double Solid (Yellow) (See Table A)

**SPECIAL NOTES**

- Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
- The following shall apply to arrows located in one-way left turn lanes:
  - A minimum of two (2) arrows is required.
  - The maximum spacing between arrows is 24 m (80').
  - Arrows shall be evenly spaced if three (3) or more are required.
- The following shall apply to arrow pairs located in two-way left turn lanes:
  - A minimum of two (2) arrow pairs is required.
  - The maximum spacing between arrow pairs is 61 m (200').
  - Arrow pairs shall be evenly spaced if three (3) or more are required.
  - The spacing between BI Directional Left Turn Arrows is 10 m (33').

**GENERAL NOTES**

- Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
- See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

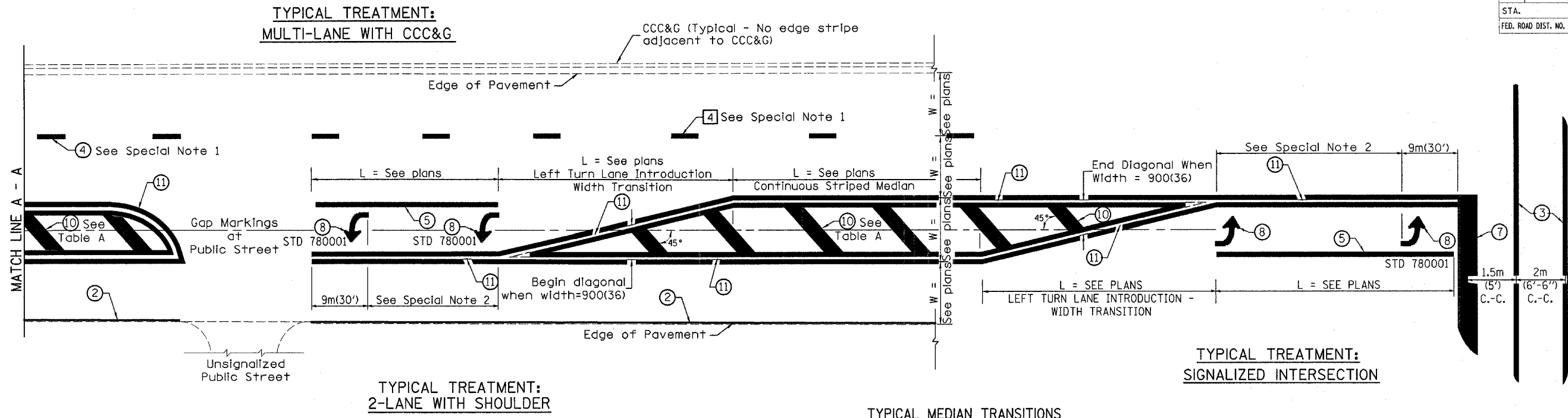
All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
TYPICAL PAVEMENT MARKINGS	
CADD STANDARD 780001-D4	SHEET 1 OF 2
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD CHECKED BY

DATE	REVISIONS	BY
1-1-97	RENUM. F-8.03, NEW REVISION BOX	T.P.
2-7-97	ADD BI DIRECTIONAL DIMENSION	J.A.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.
8-02	ADD CROSSWALK DIMNS. WITH T.S.	M.A.

DESIGNER NOTES:  
1. Include State Standard 780001 (Typical Pavement Markings)

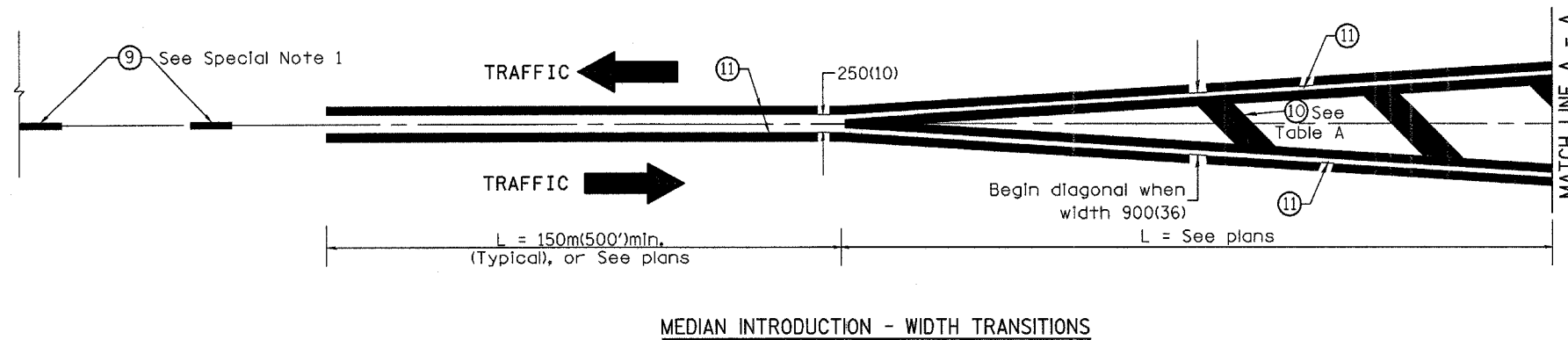
7/18/2006



**FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE**

**TABLE A**  
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 50 km/h (30 mph)	15m (50')	5m (15')
50 - 70 km/h (30 - 45 mph)	23m (75')	6m (20')
Over 70 km/h (45 mph)	46m (150')	9m (30')



All dimensions are in millimeters (Inches) unless otherwise noted.

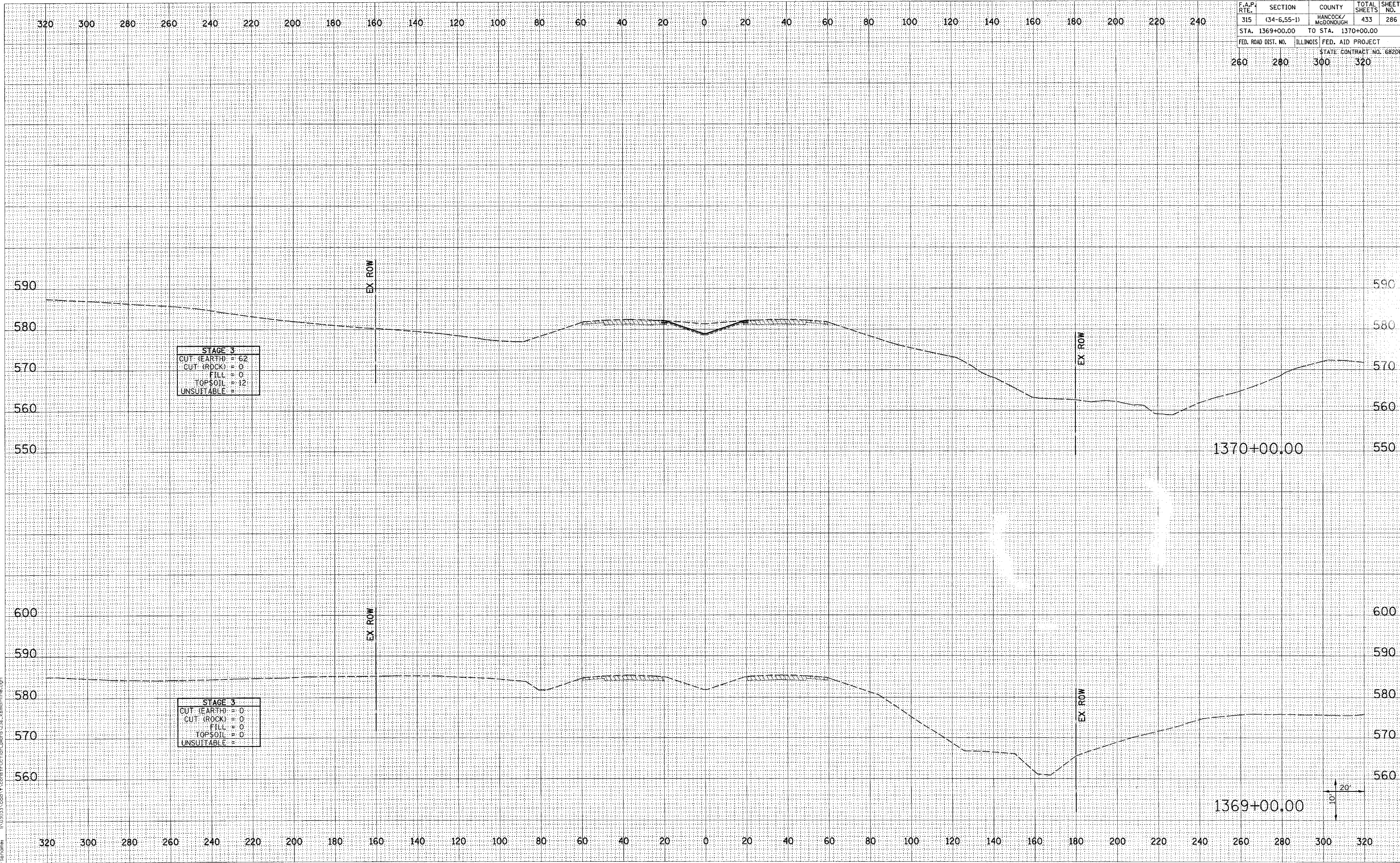
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT CADD STANDARD**  
**TYPICAL PAVEMENT MARKINGS**  
 CADD STANDARD 780001-D4 SHEET 2 OF 2  
 SCALE: NOT DRAWN TO SCALE DRAWN BY CADD CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	286
STA. 1369+00.00		TO STA. 1370+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

DATE	
BY	
SURVEYED	
PLOTTED	
NOTE BOOK	
TEMP. DATE	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
NOTE BOOK	
TEMP. DATE	
AREAS CHECKED	
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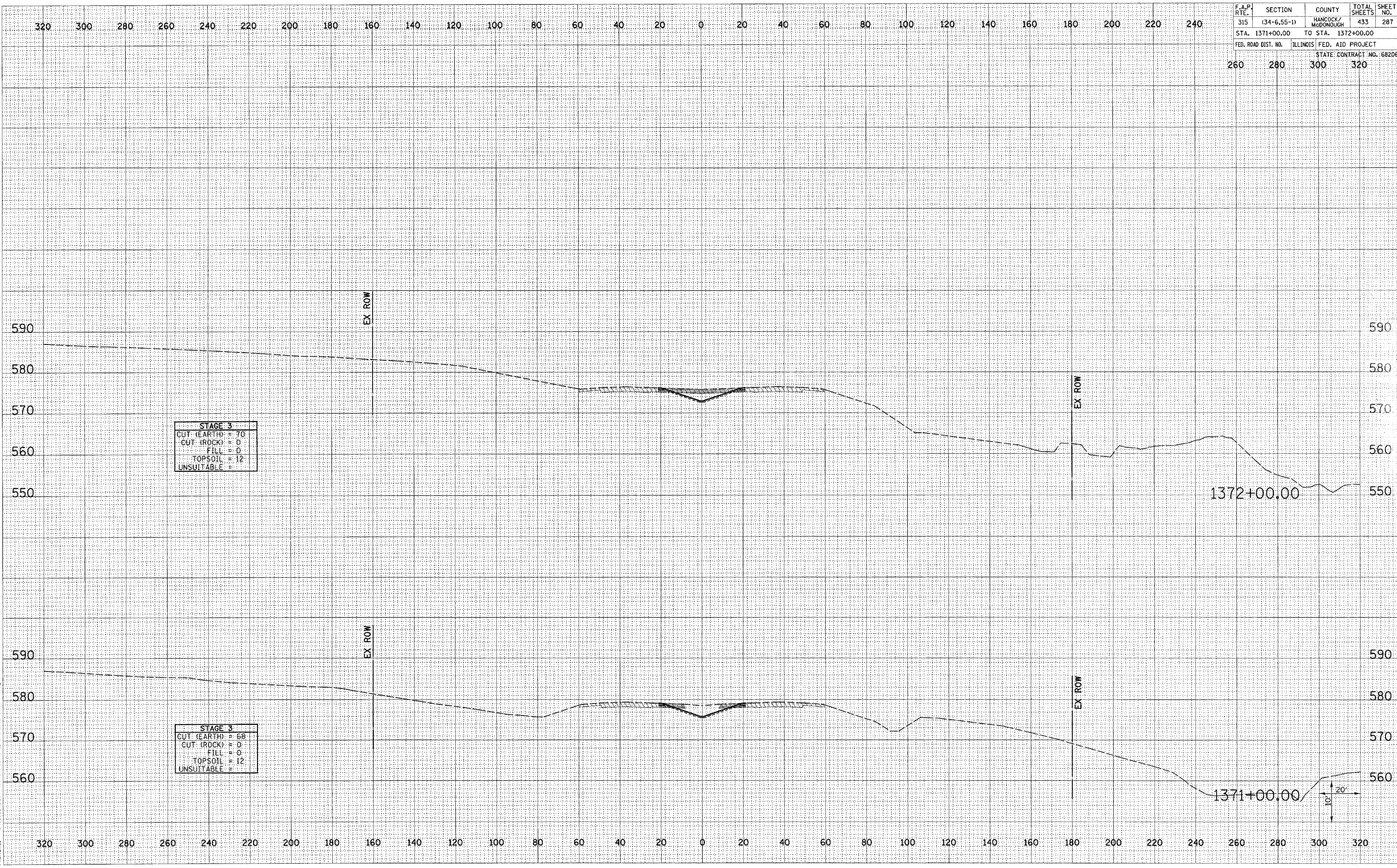
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	287
STA. 1371+00.00	TO STA. 1372+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

DATE	
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SURVEYED	
PLOTTED	
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AREAS	
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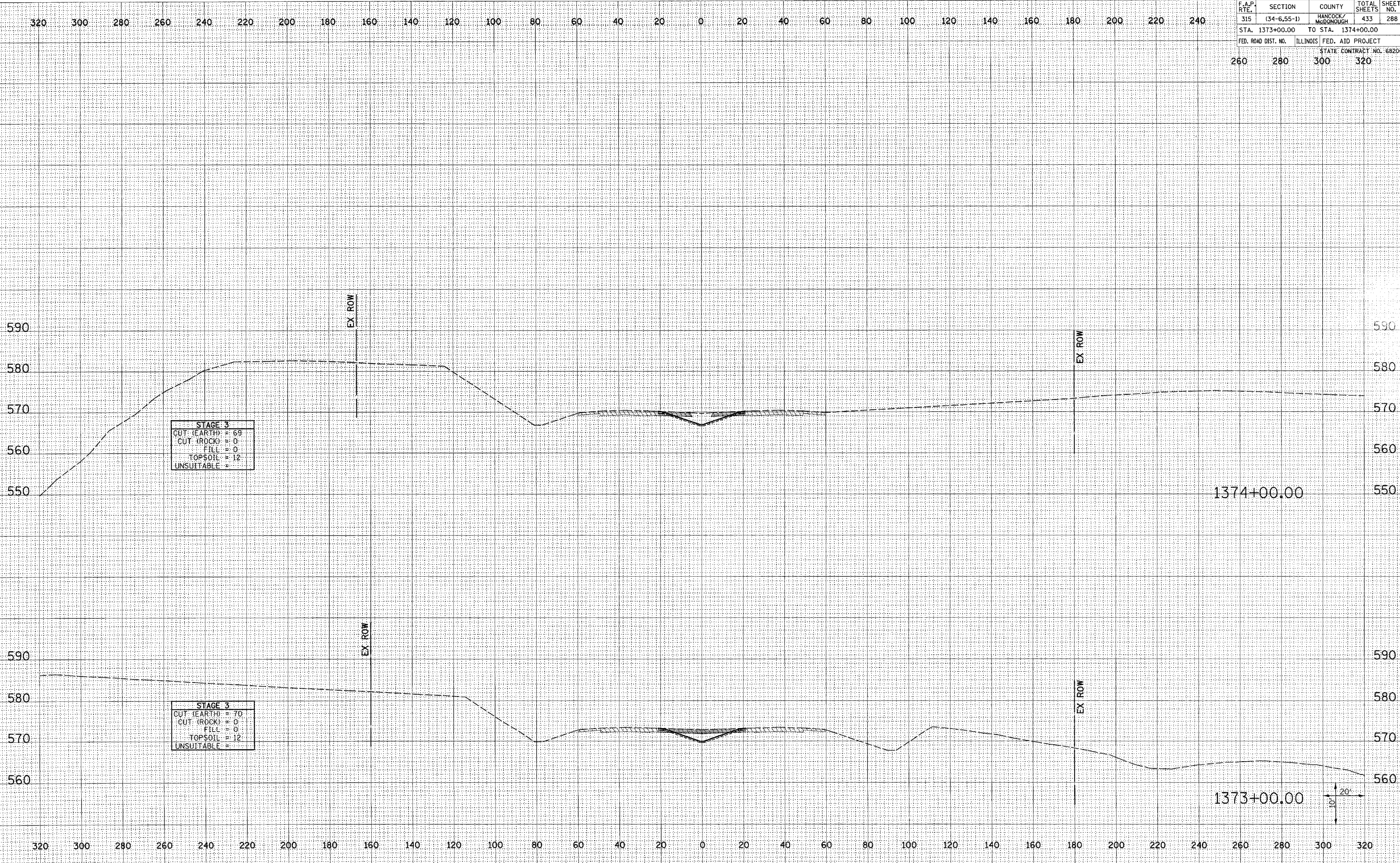
DATE	
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SURVEYED	
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DATE	
AREAS	
CHECKED	
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FAP ROUTE 315 (IL 336) CROSS SECTIONS STA 1371+00.00 TO 1372+00.00



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/MADISON	433	288
STA. 1373+00.00	TO STA. 1374+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	



DATE	BY
SURVEYED	
FLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	BY
SURVEYED	
FLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

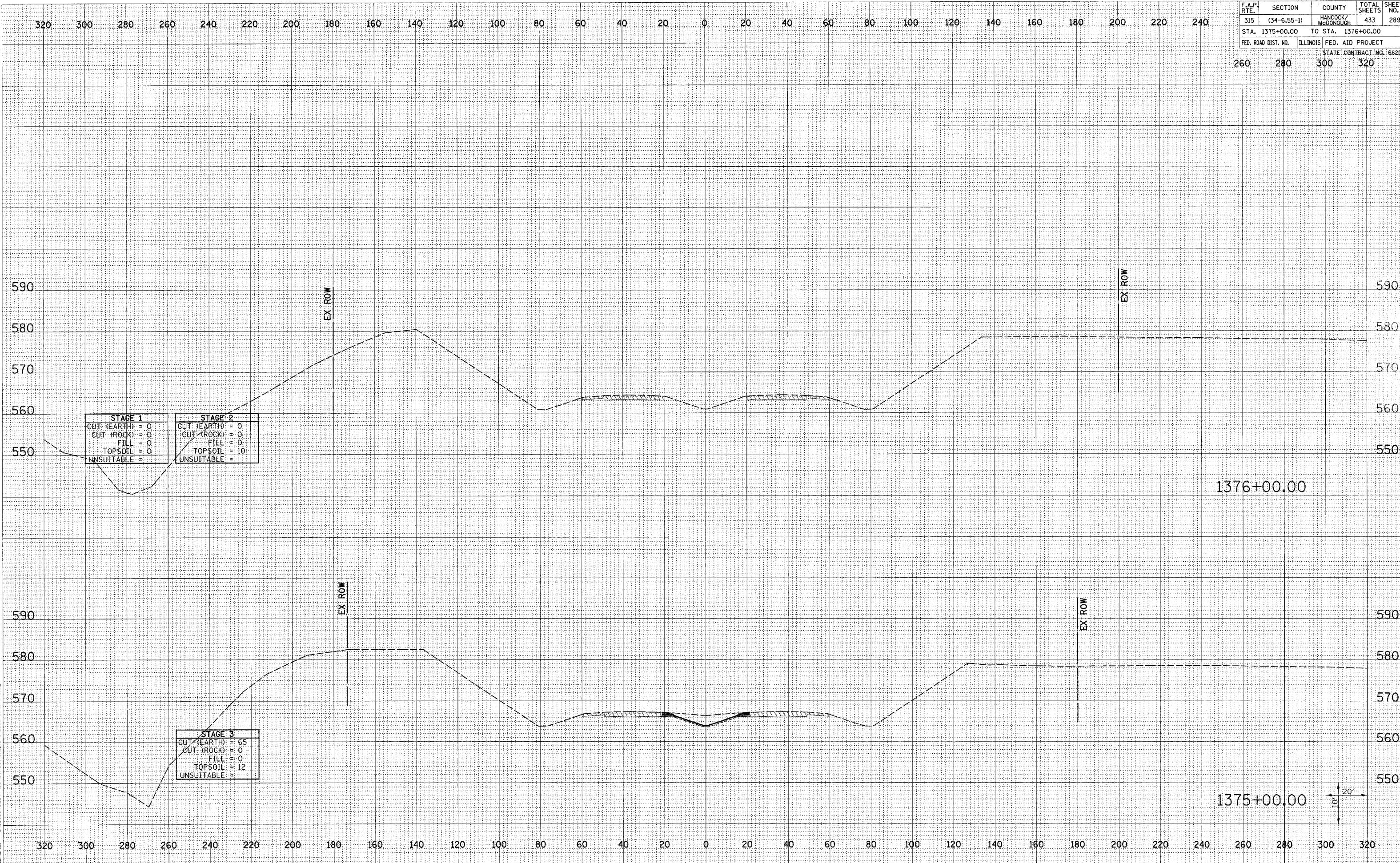
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	289
STA. 1375+00.00	TO STA. 1376+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

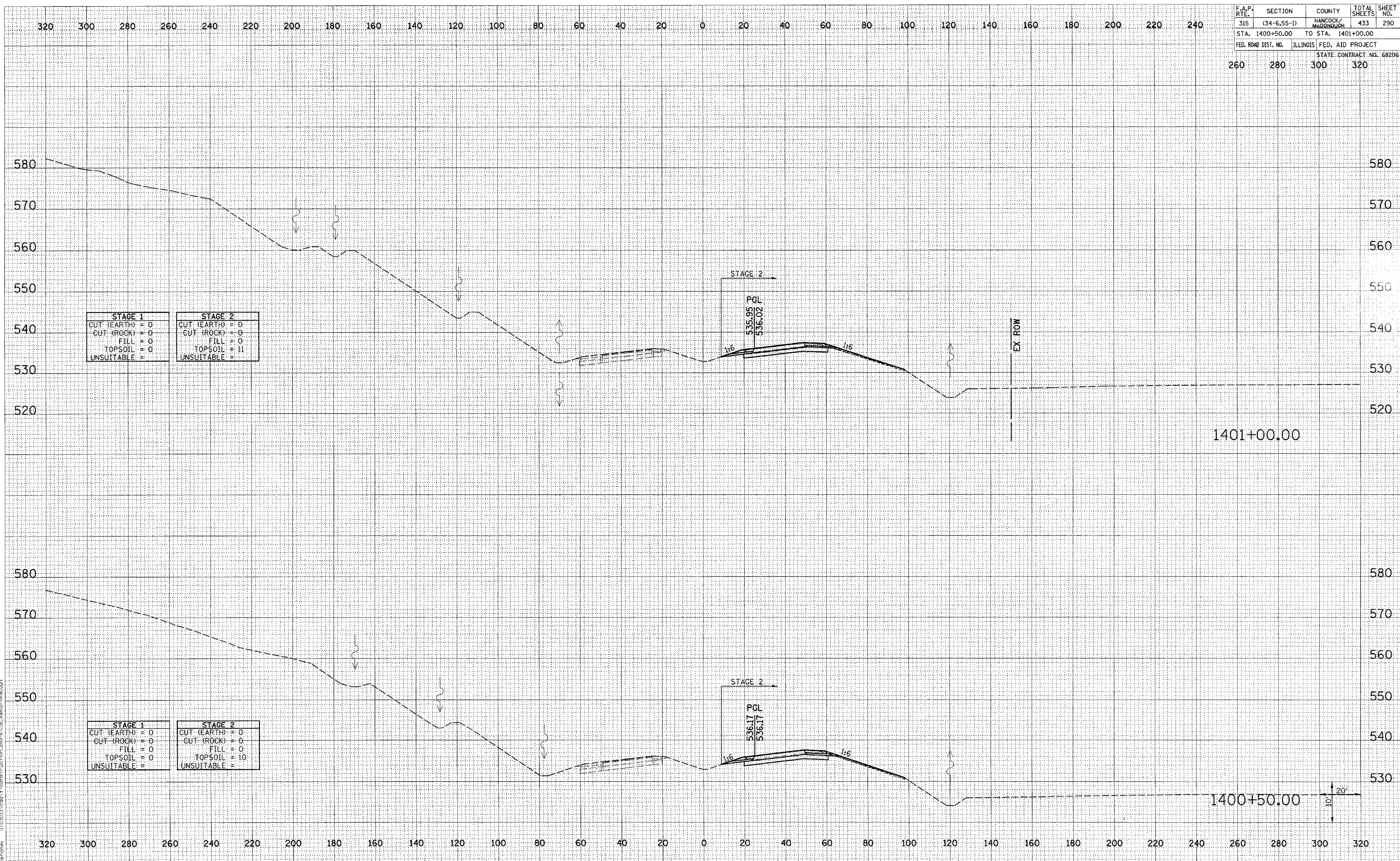
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DATE	BY

Plot Date: 7/18/2006  
 Plotter: J. Bar  
 Pen Table: 100, 101  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	290
STA. 1400+50.00		TO STA. 1401+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
260	280	300	320	STATE CONTRACT NO. 68206



STAGE 1		STAGE 2	
CUT (EARTH)	= 0	CUT (EARTH)	= 0
CUT (ROCK)	= 0	CUT (ROCK)	= 0
FILL	= 0	FILL	= 0
TOPSOIL	= 0	TOPSOIL	= 11
UNSUITABLE	= 0	UNSUITABLE	= 0

STAGE 1		STAGE 2	
CUT (EARTH)	= 0	CUT (EARTH)	= 0
CUT (ROCK)	= 0	CUT (ROCK)	= 0
FILL	= 0	FILL	= 0
TOPSOIL	= 0	TOPSOIL	= 10
UNSUITABLE	= 0	UNSUITABLE	= 0

STAGE 2  
PGL  
535.95  
536.02

STAGE 2  
PGL  
536.17  
536.17

EX ROW

1401+00.00

1400+50.00

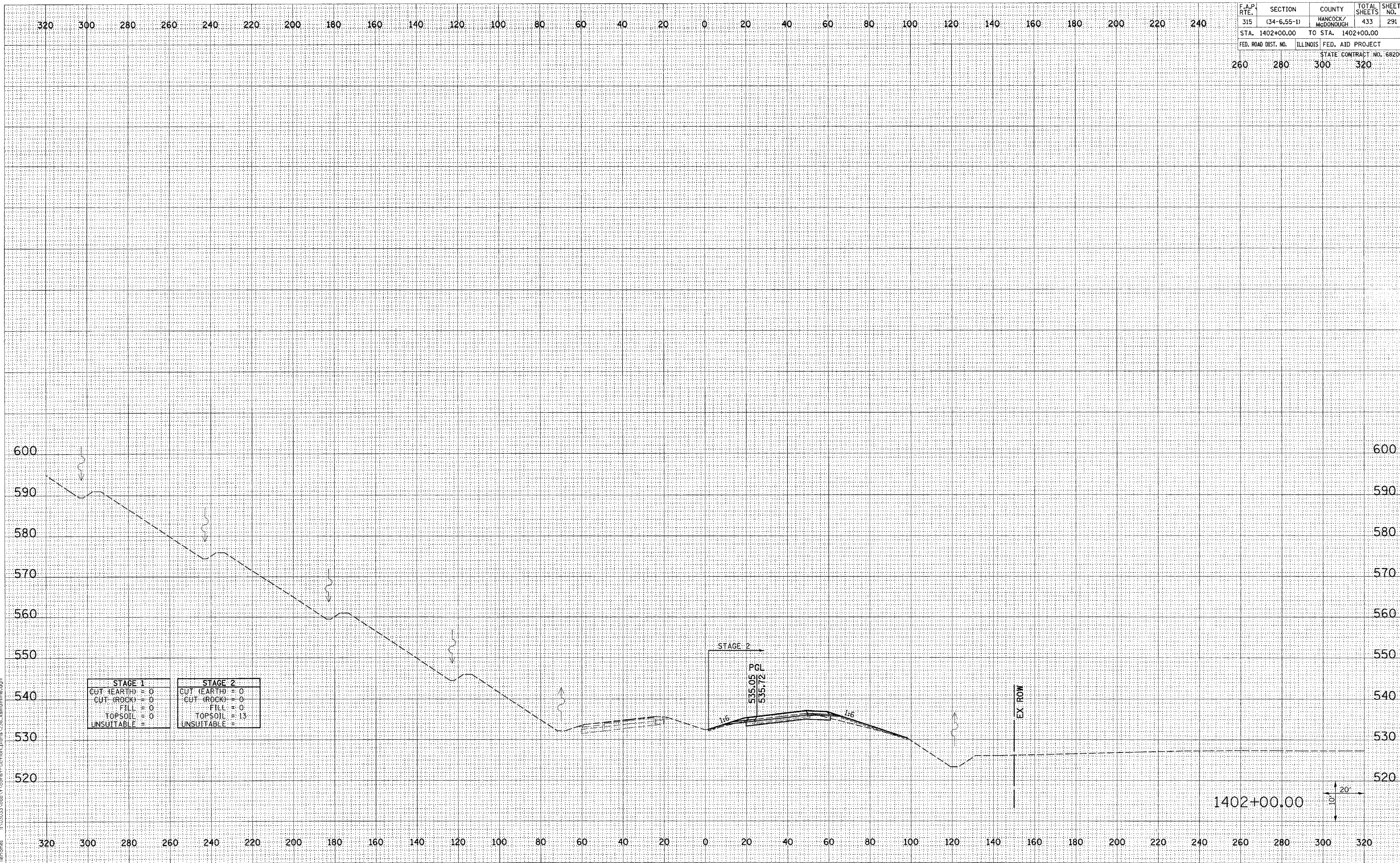
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DATE	
BY	
SURVEYED	
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TEMPLATE	
NOTE BOOK	
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SURVEYED	
PLOTTED	
TEMPLATE	
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	291
STA. 1402+00.00		TO STA. 1402+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	



STAGE 1		STAGE 2	
CUT (EARTH)	= 0	CUT (EARTH)	= 0
CUT (ROCK)	= 0	CUT (ROCK)	= 0
FILL	= 0	FILL	= 0
TOPSOIL	= 0	TOPSOIL	= 13
UNSUITABLE	=	UNSUITABLE	=

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NOTE BOOK	PLOTTED		
NO.	TEMP. AREAS		
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	AS NOTED		

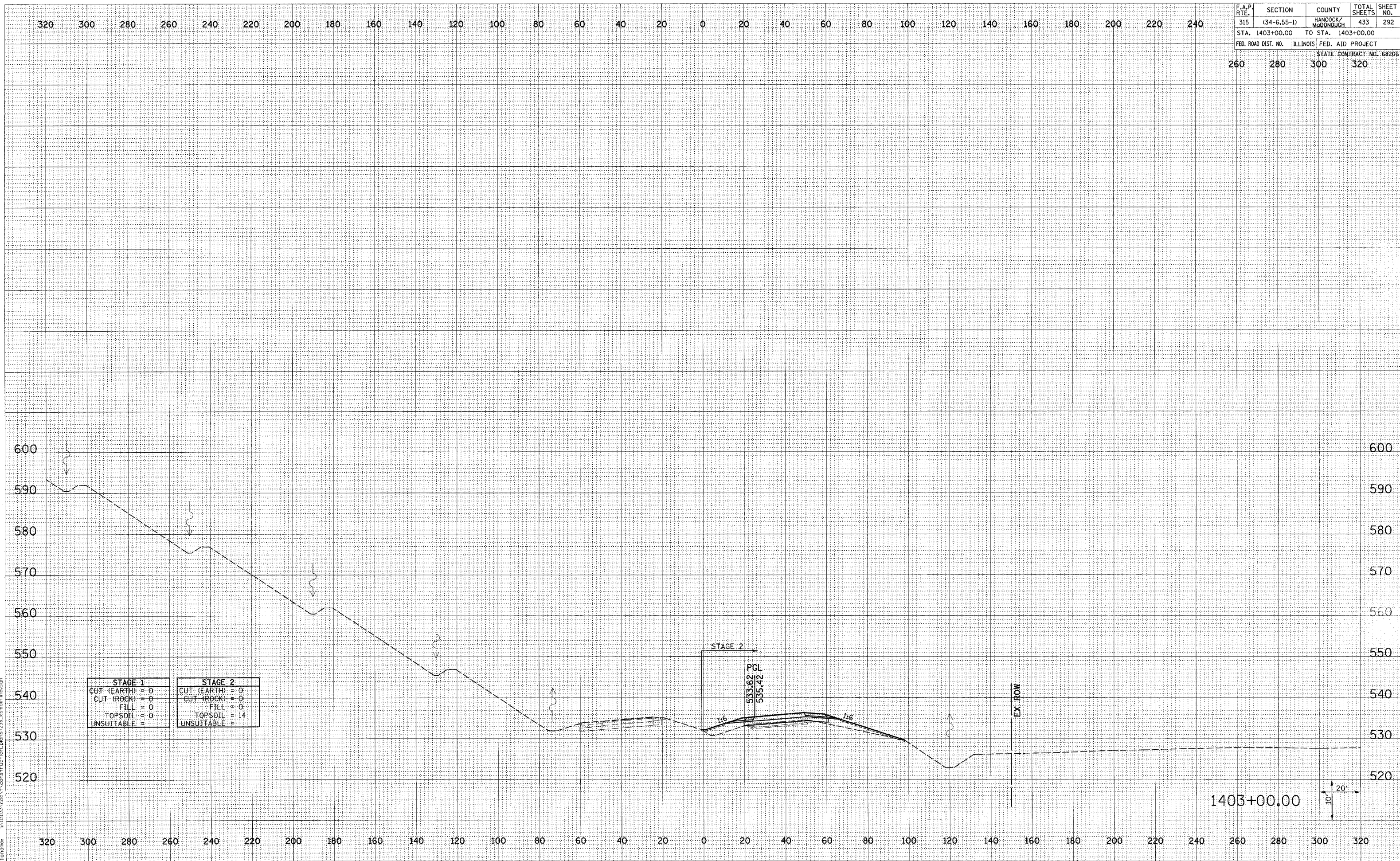
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NOTE BOOK	PLOTTED		
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	CHECKED		
	AS NOTED		

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	292
STA. 1403+00.00	TO STA. 1403+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	



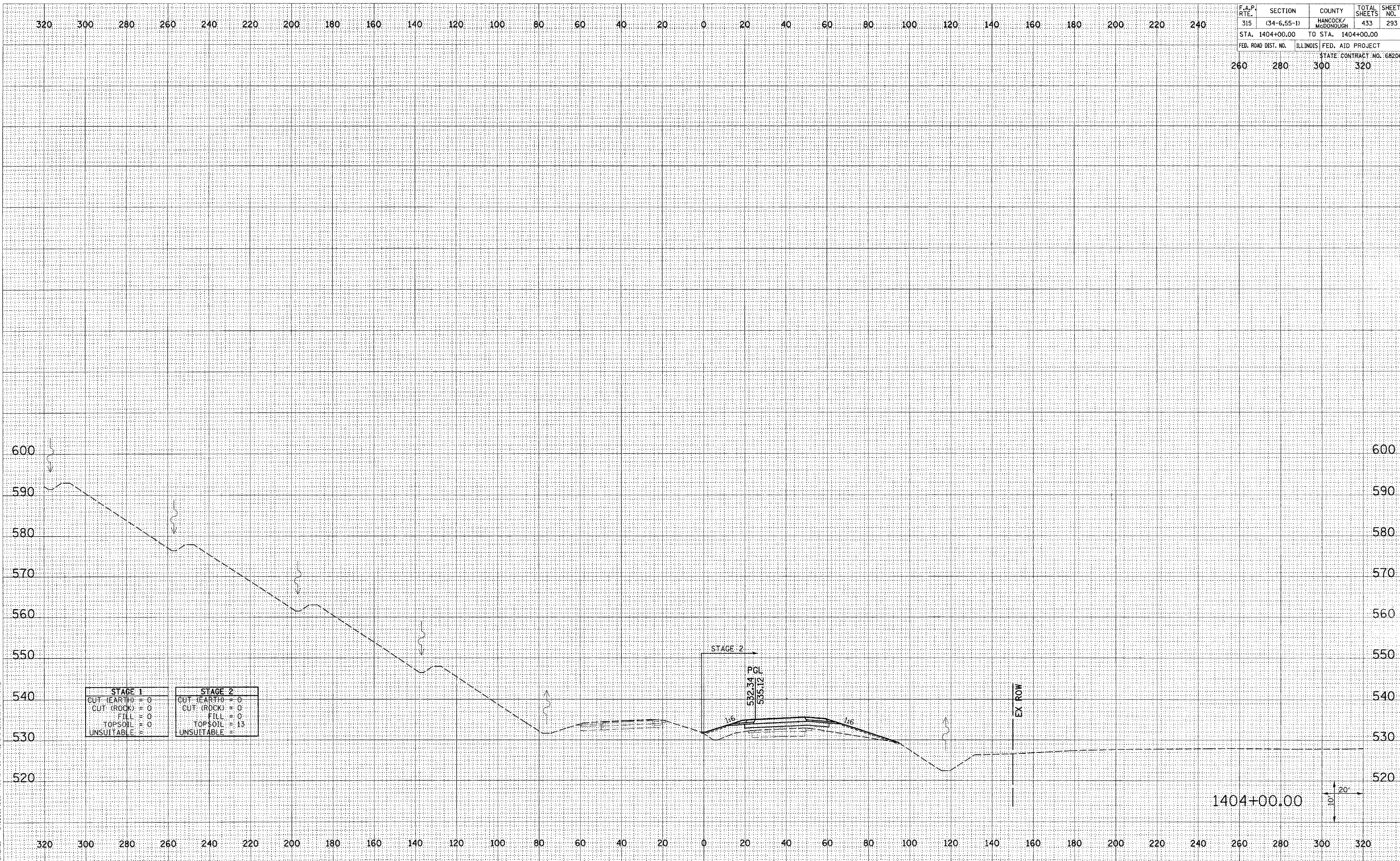
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	293
STA. 1404+00.00	TO STA. 1404+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

Plot Date: 7/18/2006  
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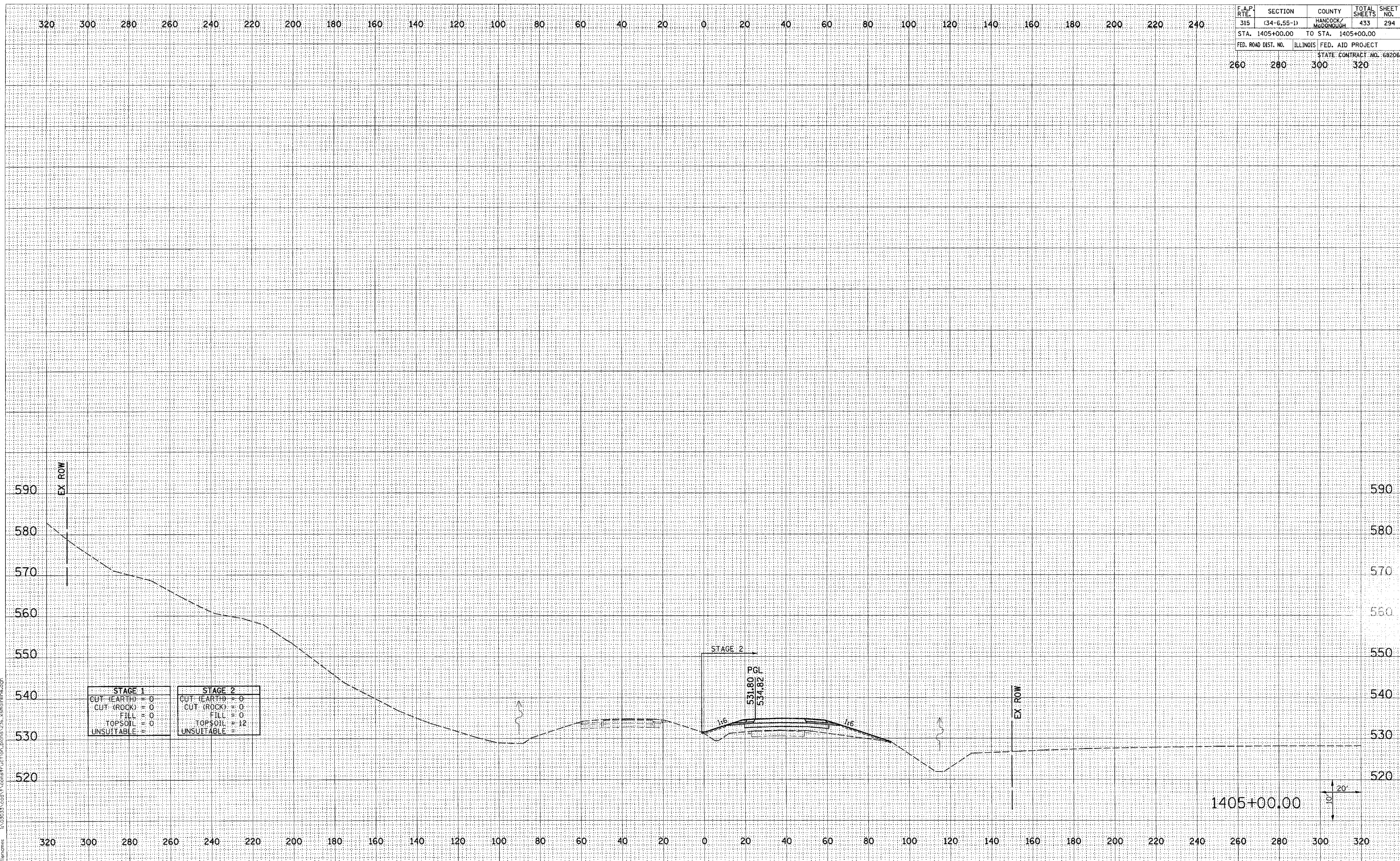


STAGE 1		STAGE 2	
CUT (EARTH)	= 0	CUT (EARTH)	= 0
CUT (ROCK)	= 0	CUT (ROCK)	= 0
FILL	= 0	FILL	= 0
TOPSOIL	= 0	TOPSOIL	= 13
UNSUITABLE	= 0	UNSUITABLE	= 13

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANEOK / McDONOUGH	433	294
STA. 1405+00.00		TO STA. 1405+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
260	280	300	320	
STATE CONTRACT NO. 68206				

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY



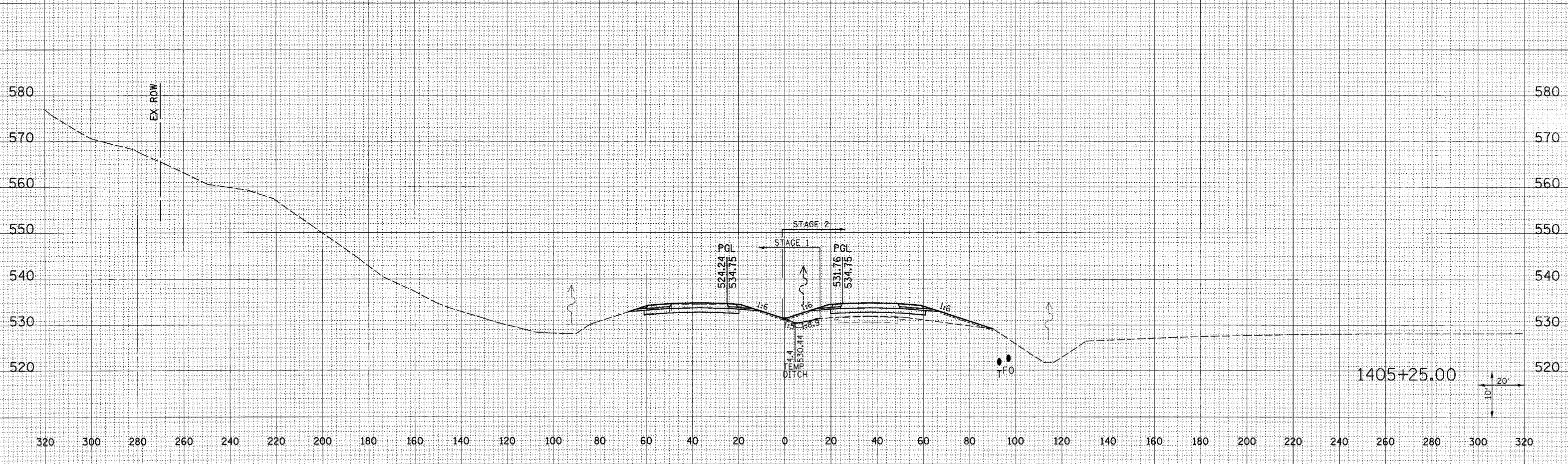
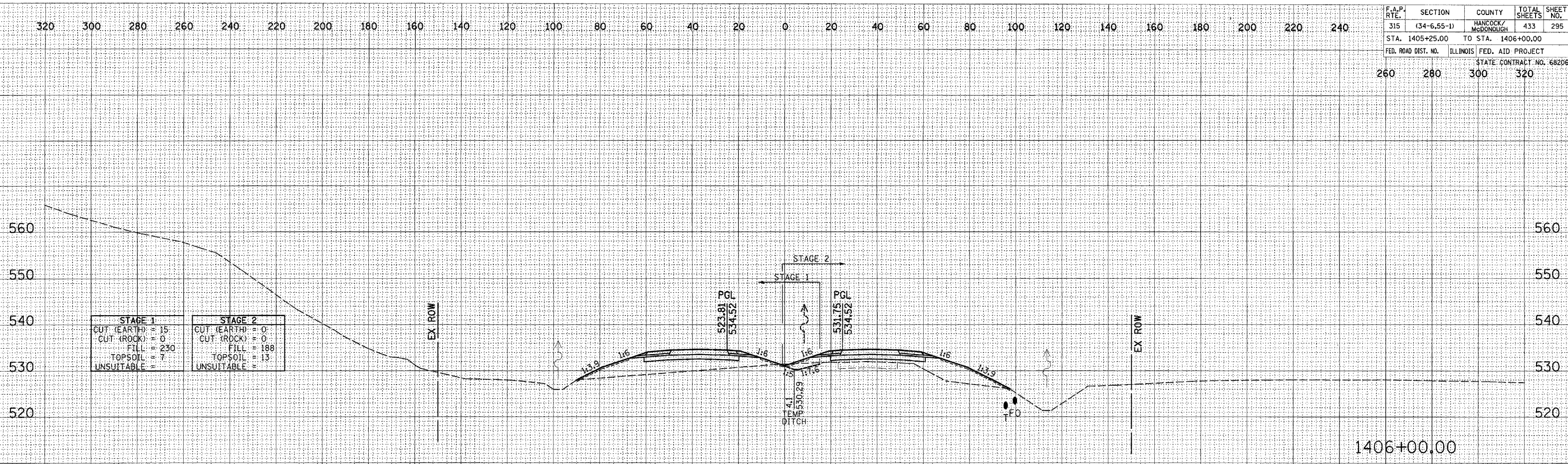
STAGE 1		STAGE 2	
CUT (EARTH)	= 0	CUT (EARTH)	= 0
CUT (ROCK)	= 0	CUT (ROCK)	= 0
FILL	= 0	FILL	= 0
TOPSOIL	= 0	TOPSOIL	= 12
UNSUITABLE	= 0	UNSUITABLE	= 0

1405+00.00



Plot Date: 7/18/2006  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	295
STA. 1405+25.00 TO STA. 1406+00.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		STATE CONTRACT NO. 68206		
260	280	300	320	

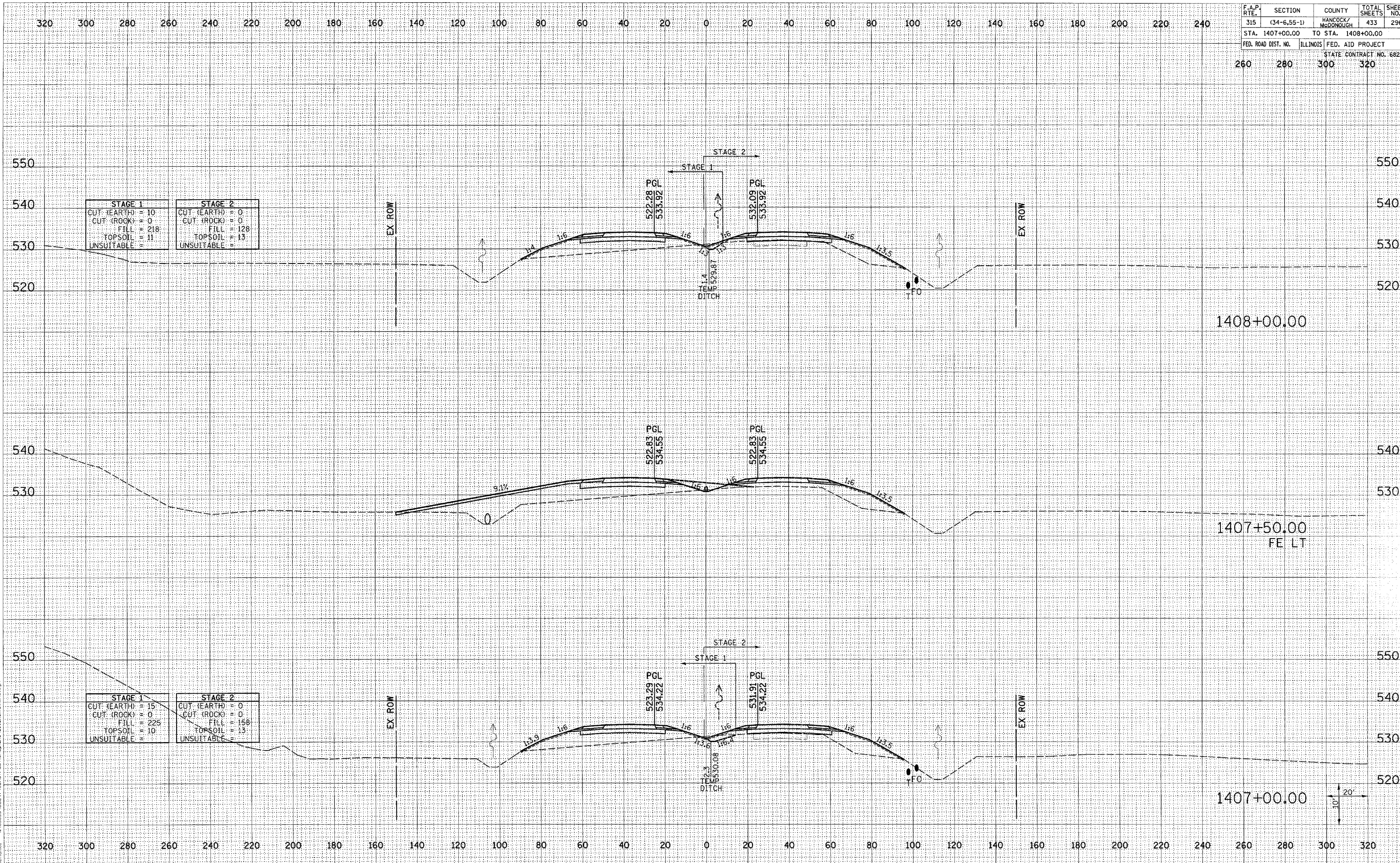


DATE	BY

DATE	BY

Plot Date: 7/18/2006  
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STAGE 1	STAGE 2
CUT (EARTH) = 10	CUT (EARTH) = 0
CUT (ROCK) = 0	CUT (ROCK) = 0
FILL = 218	FILL = 128
TOPSOIL = 11	TOPSOIL = 13
UNSUITABLE = 0	UNSUITABLE = 0

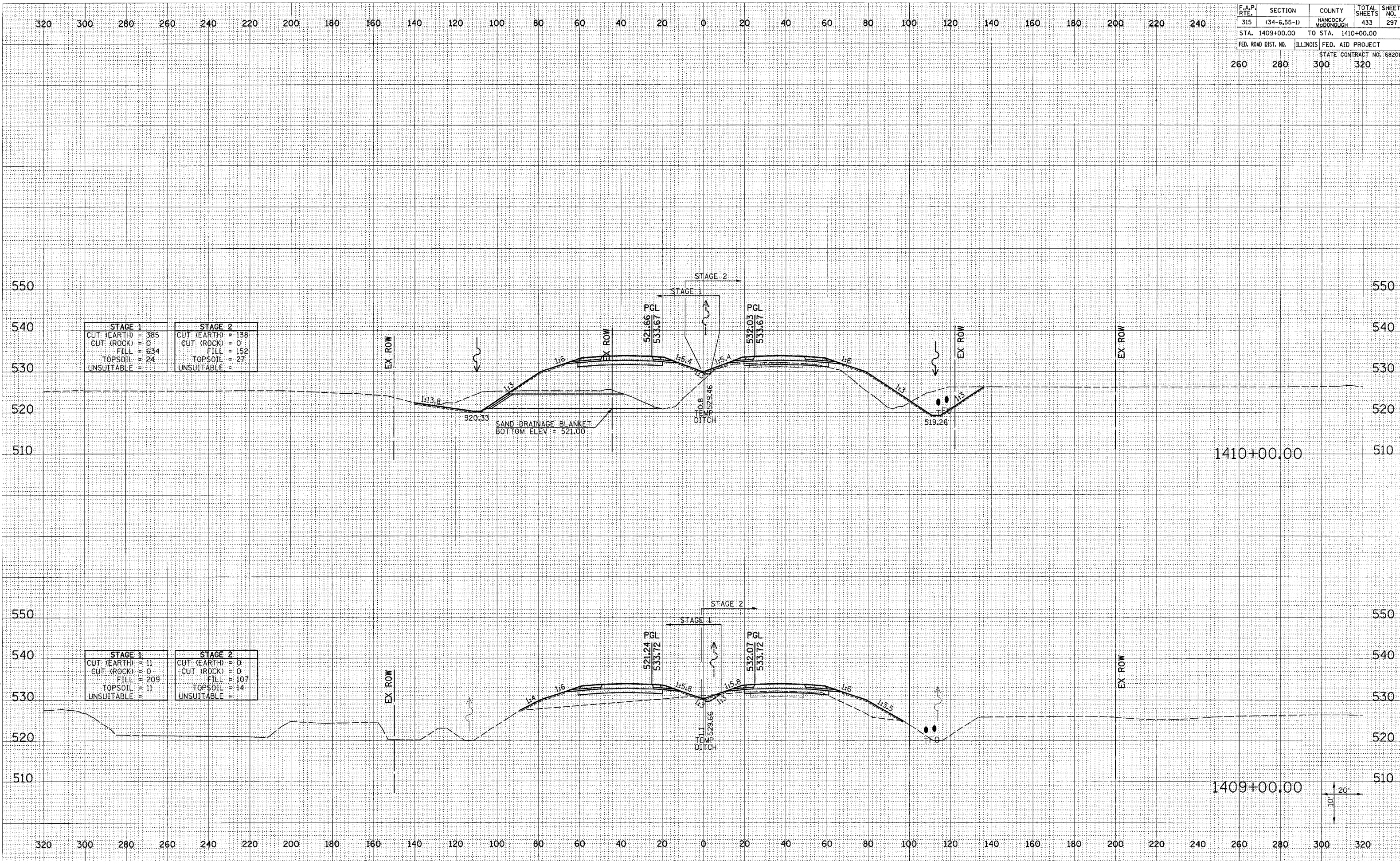
STAGE 1	STAGE 2
CUT (EARTH) = 15	CUT (EARTH) = 0
CUT (ROCK) = 0	CUT (ROCK) = 0
FILL = 225	FILL = 158
TOPSOIL = 10	TOPSOIL = 13
UNSUITABLE = 0	UNSUITABLE = 0

DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY

Plot Date: 7/18/2006  
 Plot Time: 1:33:51 PM  
 Plot User: jrb  
 Plot Scale: 1"=40'  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	297
STA. 1409+00.00		TO STA. 1410+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

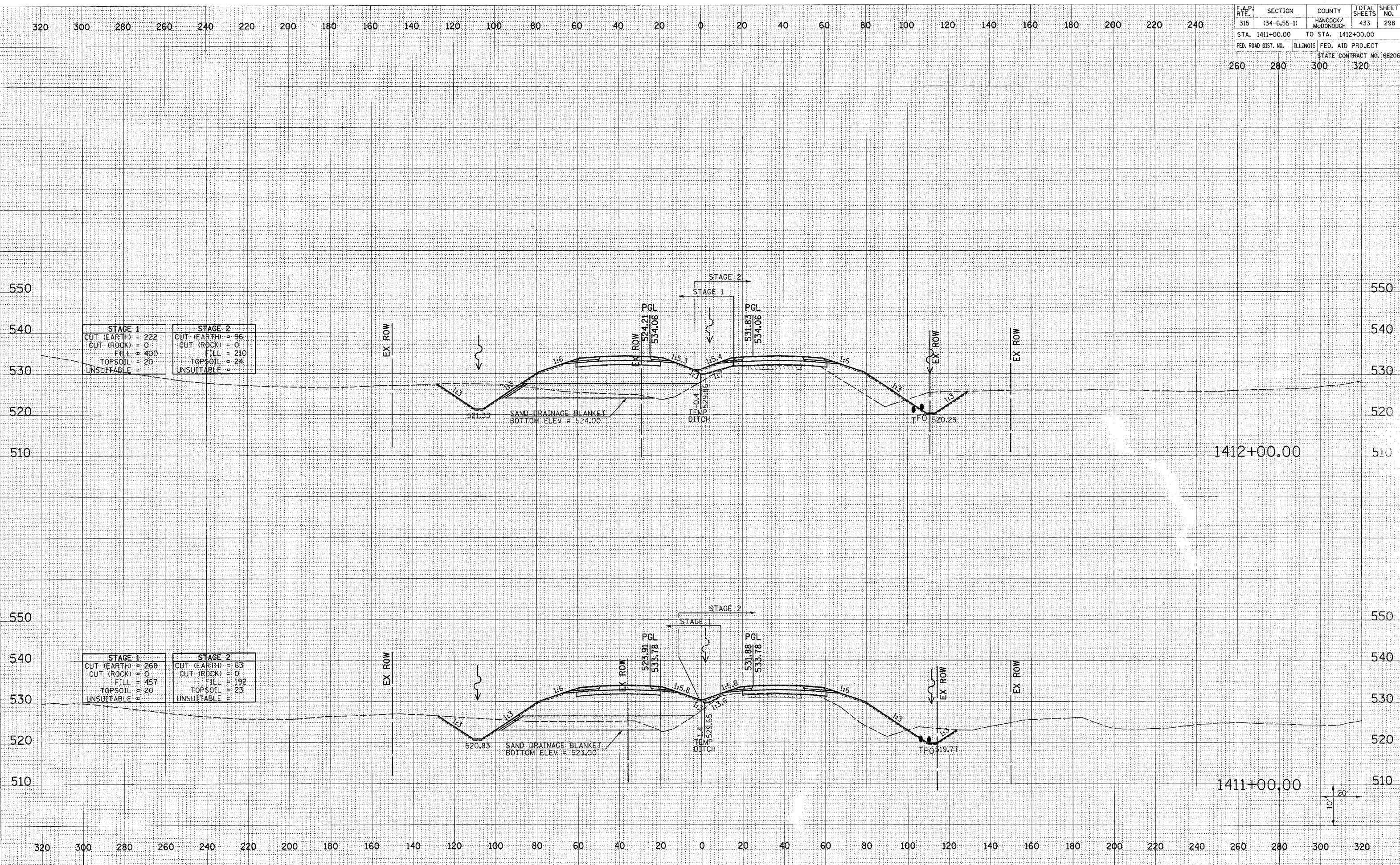


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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6,55-1)	HANCOCK/McDONOUGH	433	298
STA. 1411+00.00	TO STA. 1412+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	

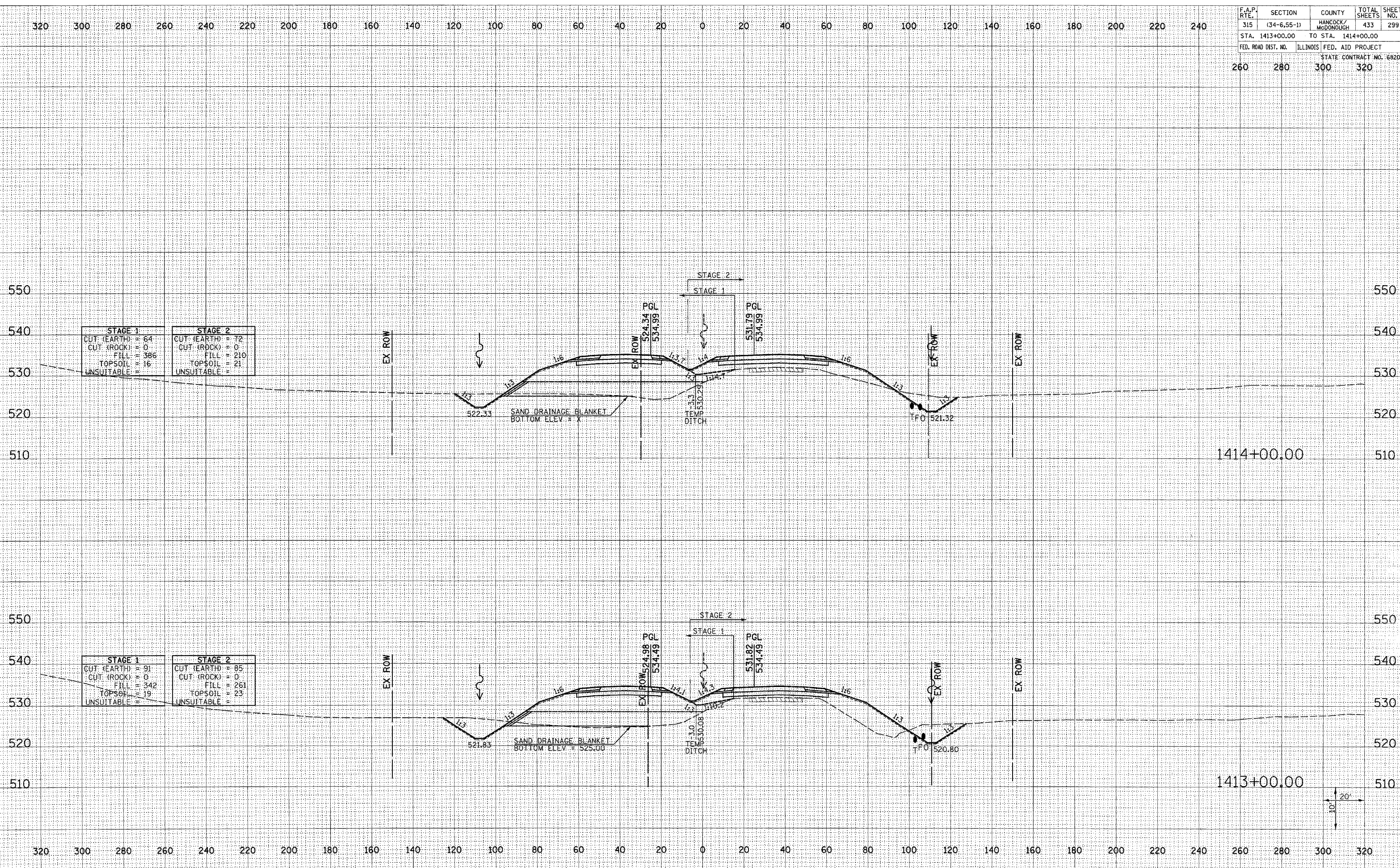


DATE	
BY	
REVIEWED	
PROJ. NO.	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY NOTE BOOK NO.	

DATE	
BY	
REVIEWED	
PROJ. NO.	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY NOTE BOOK NO.	

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/McDONOUGH	433	299
STA. 1413+00.00 TO STA. 1414+00.00		STATE CONTRACT NO. 68206		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
260	280	300	320	



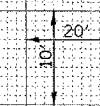
STAGE 1	STAGE 2
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CUT (ROCK) = 0	CUT (ROCK) = 0
FILL = 386	FILL = 210
TOPSOIL = 16	TOPSOIL = 21
UNSUITABLE =	UNSUITABLE =

STAGE 1	STAGE 2
CUT (EARTH) = 91	CUT (EARTH) = 85
CUT (ROCK) = 0	CUT (ROCK) = 0
FILL = 342	FILL = 261
TOPSOIL = 19	TOPSOIL = 23
UNSUITABLE =	UNSUITABLE =

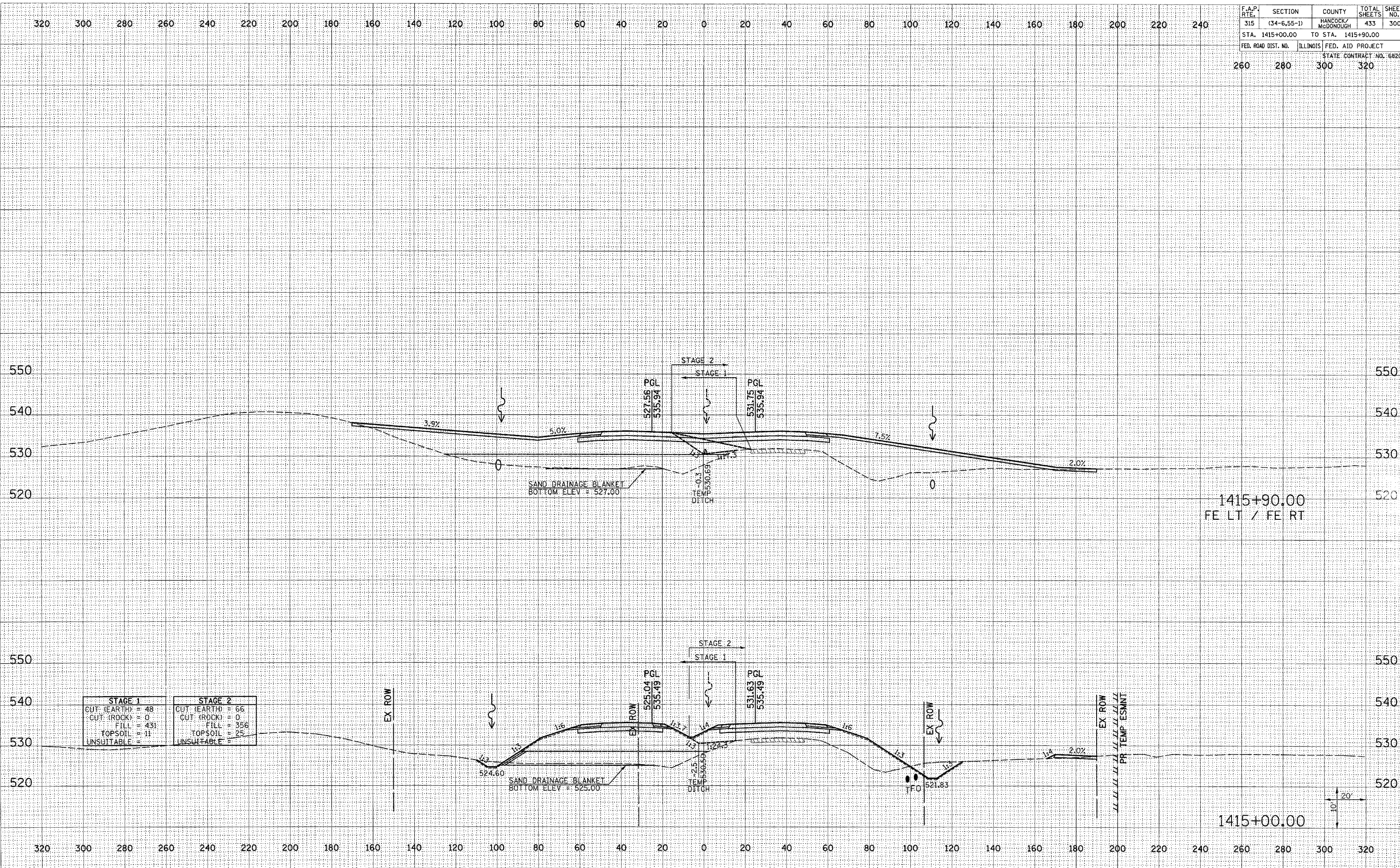
DATE	BY

DATE	BY

Plot Date: 7/18/2006  
 Plot Time: 3:36:00 PM  
 Plotter: B. J. Schmidt  
 Plot Size: 1001x701  
 Plotter: HP DesignJet 5000



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(34-6.55-1)	HANCOCK/MCDONOUGH	433	300
STA. 1415+00.00 TO STA. 1415+90.00				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	STATE CONTRACT NO. 68206	
260	280	300	320	



STAGE 1	STAGE 2
CUT (EARTH) 48	CUT (EARTH) 66
CUT (ROCK) 0	CUT (ROCK) 0
FILL 431	FILL 356
TOPSOIL 11	TOPSOIL 25
UNSUITABLE 0	UNSUITABLE 0

Plot Date: 7/18/2006  
 Plot Time: 3:26:00 PM  
 Plotted By: bshmidt  
 Pen Table: Idt+tbl  
 Filename: I:\03033\cadd\1\construction\pkns\236\_xsm\mfm.dgn