

**TWO ABUTMENTS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p	14	#7	16'-4"	
p1	14	#7	23'-4"	
s	76	#5	13'-11"	⊞
u	12	#6	11'-9"	⊞
h	48	#5	7'-2"	
h1	12	#5	17'-9"	
h2	12	#5	25'-9"	
v	56	#5	3'-3"	
v1	160	#4	2'-4"	
v2	72	#5	3'-3"	
h6	24	#5	3'-0"	
h7	14	#5	3'-4"	
		Class X Concrete		Cu Yd. 52.6
		Reinforcement Bars		Lb. 4280
		HP 12 x 53 Steel Piles		Lin Ft. 532

- PILE DATA**
- Type: HP 12x53  
Capacity: Drive to Refusal  
Est Length (West): 31'-0"  
Est Length (East): 45'-0"  
No. Req'd: 7 per Abutment
- NOTES:**
- Space reinforcing in abutment to miss dowels for deck beam anchorage.
  - h7 bars shall meet the requirements of AASHTO M.31 or M.59 Grade 40 except that the elongation shall not be less than 20%.
  - h7 bars shall be lapped with p & h1 bars in Stage I construction, straightened & lapped with p1 & h2 bars in Stage II construction.

DESIGNED R.A.R.  
CHECKED G.S.P.  
DRAWN P.V.  
CHECKED R.A.R. G.S.P.

**REVISIONS**

DATE	DESCRIPTION

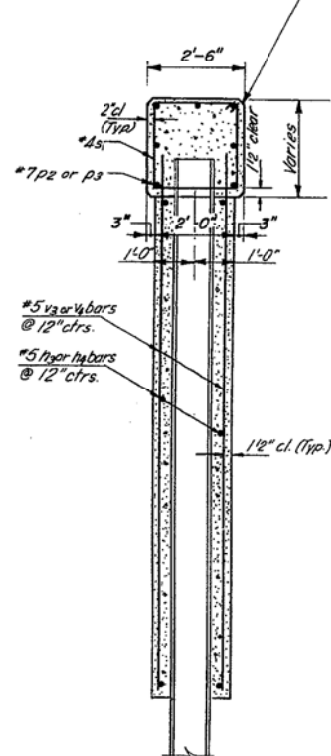
**ABUTMENTS  
FA. 17 (S.B.I. ROUTE 27) SEC. 4BR-2  
CARROLL COUNTY  
STA. 104+40**

SCALE: NONE  
DATE: 4/30/82  
SCHUMACHER AND SVOBODA, INC.  
CONSULTING ENGINEERS  
CHICAGO, ILLINOIS

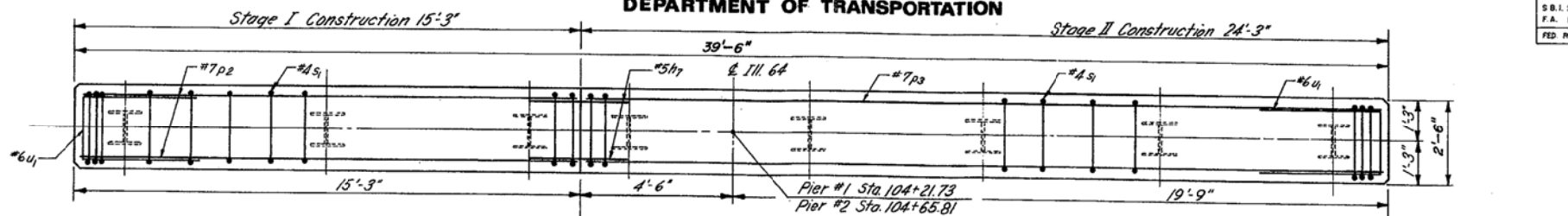
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
S.B.I. 27	4BR-2	CARROLL	18	17	SHEETS 8
F.A. 17					
FED. ROAD DIST NO. 7	ILLINOIS	FED. AID PROJECT			

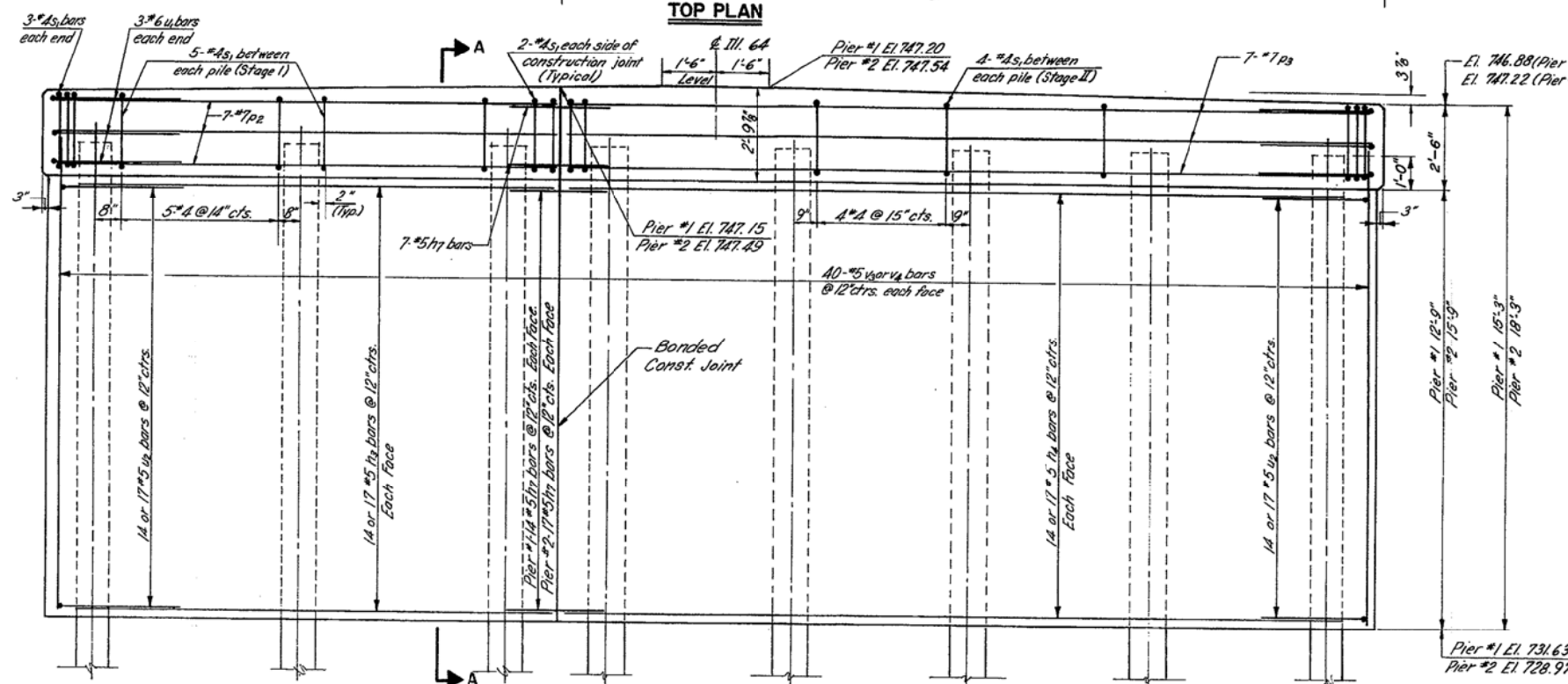
2" CHAMFER ALL AROUND (TYPICAL)



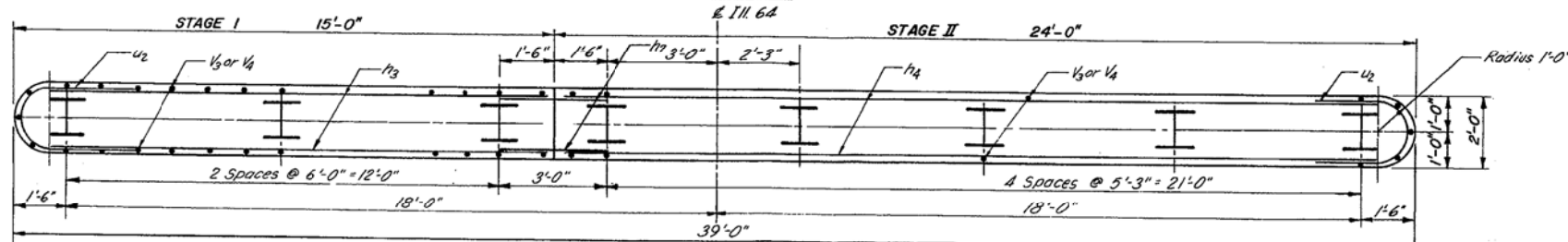
SECTION A-A



TOP PLAN



PIER ELEVATION (Facing East)



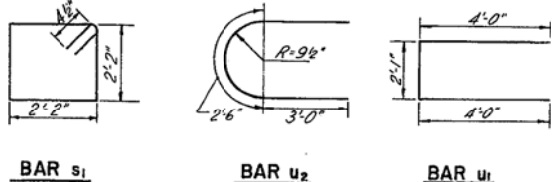
PILE DATA

TYPE: HP 12 X 53  
CAPACITY: DRIVE TO REFUSAL  
EST. LENGTH PIER #1 35'-0"  
EST. LENGTH PIER #2 39'-0"  
NO. REQ'D: 8 PER PIER

NOTES

1. Space reinforcement in cap to miss dowels for deck beam anchorage.
2. h3 bars shall meet the requirements of AASHTO M31 or M53 Grade 40 except that the elongation shall not be less than 20%.
3. h3 bars shall be lapped with p2 bars in Stage I construction, straightened & lapped with p3 & h4 bars in Stage II construction.

PILE PLAN



REVISIONS	
DATE	DESCRIPTION

BILL OF MATERIAL\*

Bar	Number	Size	Length	Shape
<b>PIER NO. 1</b>				
P2	7	#7	14'-10"	—
P3	7	#7	23'-10"	—
S1	36	#4	9'-5"	□
U1	6	#6	10'-1"	□
U2	28	#5	8'-6"	□
V3	80	#5	13'-9"	
h3	28	#5	13'-10"	—
h4	28	#5	22'-10"	—
h7	35	#5	3'-8"	—
<b>PIER NO. 2</b>				
P1	7	#7	14'-10"	—
P2	7	#7	23'-10"	—
S1	36	#4	9'-5"	□
U1	6	#6	10'-1"	□
U2	34	#5	8'-6"	□
V4	80	#5	16'-9"	
h3	34	#5	13'-10"	—
h4	34	#5	22'-10"	—
h7	41	#5	3'-8"	—
Class x Concrete		Cu Yd	102.0	
Reinforcement bars		Lb	7480	
Hp 12x53 Steel Piles		Lin. Ft	592	

\* TWO PIERS

TYPICAL PIER DETAILS  
F.A. 17 (S.B.I. ROUTE 27) SEC. 4BR-2  
CARROLL COUNTY  
STA. 104+40

SCALE: 1/4" = 1'-0"  
DATE: 4/30/82  
SCHUMACHER AND SVOBODA, INC.  
CONSULTING ENGINEERS  
CHICAGO, ILLINOIS

FILE NAME = ... \0264083-SHT-ExB-ridge.dgn

USER NAME = SAW  
DESIGNED - RAC  
DRAWN - LCR  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 6/27/2013

DESIGNED - RAC  
DRAWN - LCR  
CHECKED - DAZ  
DATE - 06-28-13

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ZROKA  
engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1982  
FOR INFORMATION ONLY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	102
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

INDEX C. SHEETS AND STANDARDS

Page	Description
1	COVER SHEET
2	SUMMARY OF QUANTITIES
3	GENERAL NOTES
4-5	TYPICAL SECTIONS
8	SCHEDULE OF QUANTITIES
7-8	HORIZONTAL & VERTICAL CONTROL
9-10	PLAN & PROFILE
11-20	STRUCTURE PLANS
21-23	STAGING DETAILS
DISTRICT STANDARDS	
24	LETTERING FOR NAME PLATE (89.4)
	STOP LINE SIGN FOR TEMPORARY SIGNALS (89.4)
	INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES) (39.2)
25	WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II (89.2)
	ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS (75.2)
26-27	TYPICAL PAVEMENT MARKINGS (41.1)

STATE STANDARDS

001001-01	AREAS OF REINFORCEMENT BARS
001500	DECIMAL OF AN INCH AND A FOOT
515001-02	NAME PLATE FOR BRIDGES
031001-08	TRAFFIC BARRIER TERMINAL, TYPE B
630006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
835011-01	REFLECTOR MARKER AND MOUNTING DETAILS
607101	PERMANENT SURVEY MARKERS
701006-02	TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
701011-02	TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
701321-09	TYPICAL APPLICATION OF TRAFFIC CONTROL STANDARD
701801	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER
120211	METAL POST FOR SIGNS, MARKERS AND DELINEATORS
728001	TELESCOPING STEEL SIGN SUPPORT
729001	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
805001	DETECTOR LOOP INSTALLATIONS
806008	TYPICAL LAYOUT FOR DETECTION LOOPS

SALEM TOWNSHIP SECTION 4, 5, 8, 9



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: REBECCA MARRUFFO  
SQUAD LEADER: FAITH DUNCAN  
(815) 284-5364

CONTRACT NO. 64D28

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

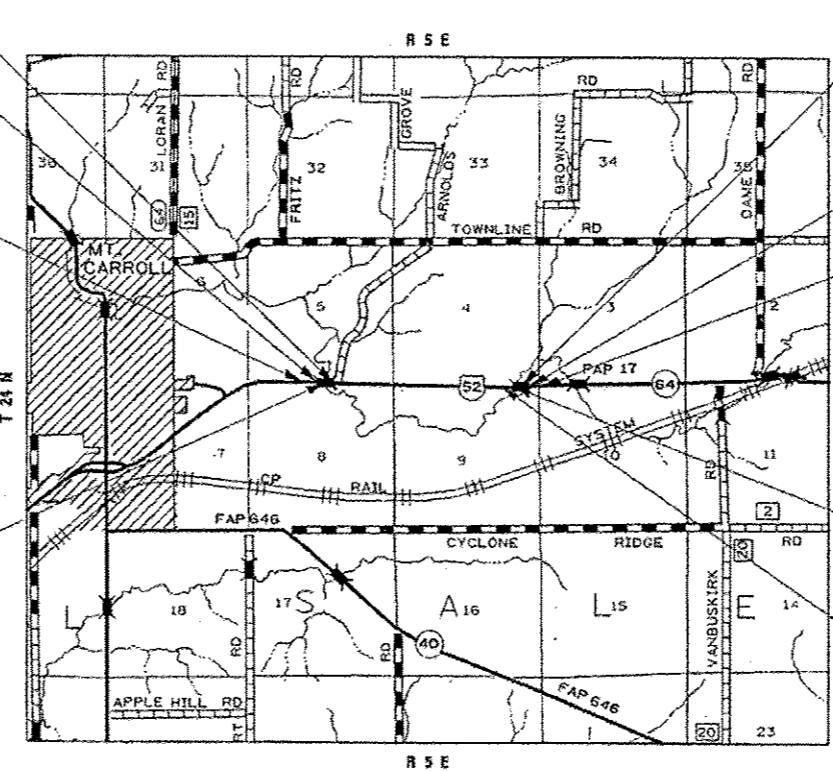
**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 17 (US 52/IL 64)  
SECTION (4BR-2)D & (4BR-1)D

CARROLL COUNTY

C-92-043-08

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	(4BR-2)D & (4BR-1)D	CARROLL	27	1
FED. ROAD DIST. NO. ILLINOIS CONTRACT NO. 64D28				



SECTION (4BR-1)D  
INCLUDES THE REMOVAL AND  
REPLACEMENT OF FOUR BEAMS  
ON THE EXISTING STRUCTURE  
SN 008-0029

SECTION BEGINS  
STA 673+68.48

IMPROVEMENT BEGINS  
STA 672+23.84

IMPROVEMENT SECTION ENDS  
STA 674+77.98

SECTION (4BR-2)D  
INCLUDES THE REMOVAL AND  
REPLACEMENT OF FOUR BEAMS  
ON THE EXISTING STRUCTURE  
SN 008-0030

SECTION ENDS  
STA 744+59.40

IMPROVEMENT ENDS  
STA 744+94.38

SECTION BEGINS  
STA 743+47.07

IMPROVEMENT BEGINS  
STA 743+12.45

GROSS LENGTH OF PROJECT = 7090.92 LIN FT = 1.34 MI  
NET LENGTH OF PROJECT = 221.83 LIN FT = 0.04 MI

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED: 1/25 2008  
James F. Ryan  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21, 2008  
Eric E. Harned  
ENGINEER OF DESIGN AND ENVIRONMENT

March 21, 2008  
Christina M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

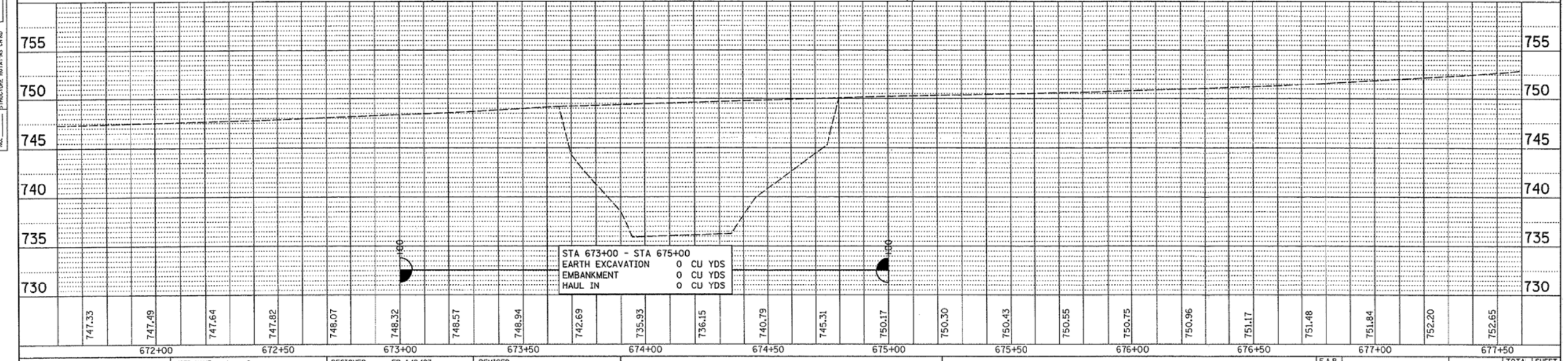
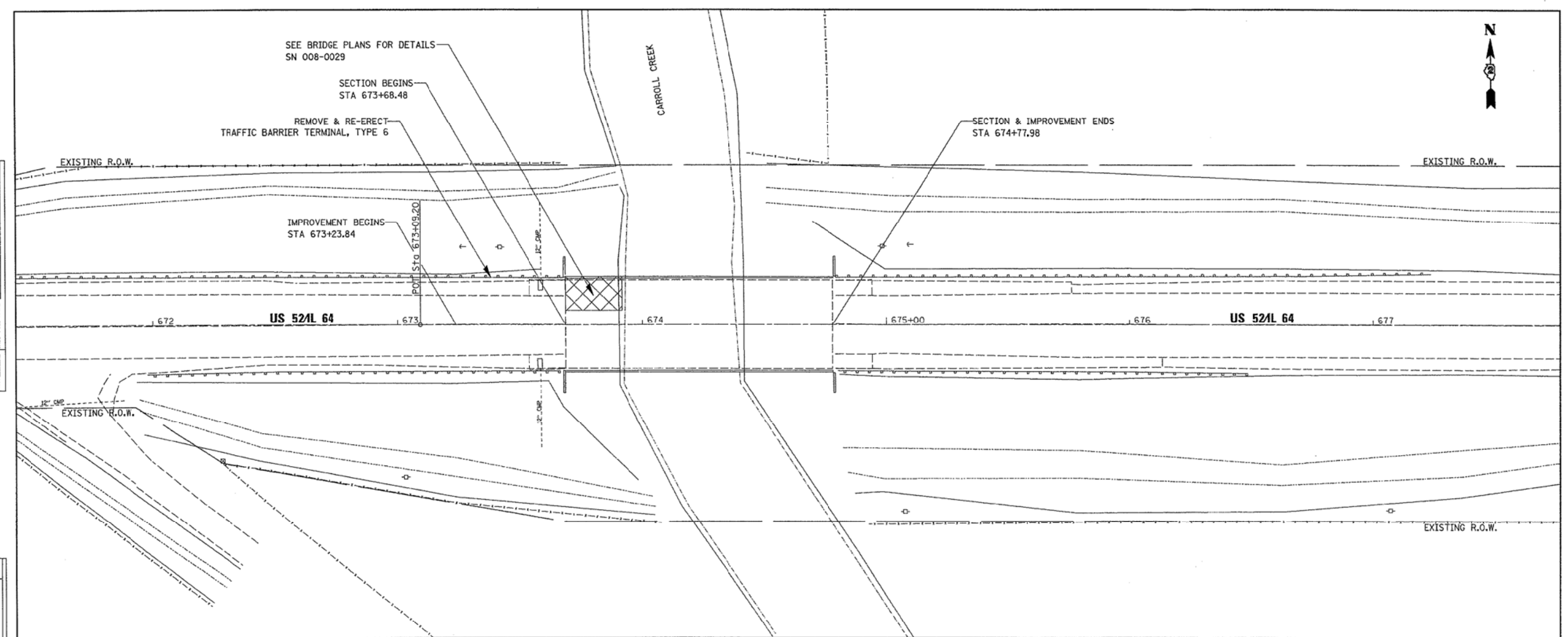
PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

FAP ROUTE 17 (US 52/IL 64) SECTION (4BR-2)D & (4BR-1)D CARROLL COUNTY CONTRACT NO. 64D28

FILE NAME: ... \0264083-SHT-ExBr.dwg	USER NAME: SAM	DESIGNED: RAC	REVISED:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ZROKA engineering	EXISTING BRIDGE PLANS - 1982 FOR INFORMATION ONLY	F.A.P. RTE. 17	SECTION 4BR-5 & 4BR-6	COUNTY CARROLL	TOTAL SHEETS 150	SHEET NO. 103
PLOT SCALE: 48.8888 / 1" = 100'	CHECKED: DAZ	DATE: 06-28-13	REVISOR:	SCALE: SHEET OF SHEETS	Zroka Engineering, P.C. 4216 North Hermitage Chicago, IL 60611	STA. TO STA.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 64D83			

PLAN	DATE
BY	
CHECKED	
IN CHARGE	
NO. OF SHEETS	
TOTAL SHEETS	
DATE	

PROFILE	DATE
BY	
CHECKED	
IN CHARGE	
NO. OF SHEETS	
TOTAL SHEETS	
DATE	



STA 673+00 - STA 675+00	
EARTH EXCAVATION	0 CU YDS
EMBANKMENT	0 CU YDS
HAUL IN	0 CU YDS

FILE NAME =	USER NAME = duncanfa	DESIGNED - FD 1/2/07	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 52/L 64 PLAN & PROFILE SHEETS	SCALE: 20	SHEET NO. 9 OF 27 SHEETS	STA. 672+00 TO STA. 677+00	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...		DRAWN - FD 11/2/07	REVISED -						17	*	CARROLL	27	9
PLOT SCALE = 28.0000' / in.		CHECKED -	REVISED -						CONTRACT NO. 64D28				
PLOT DATE = Thu Jan 24 11:00:10 2008		DATE -	REVISED -						ILLINOIS FED. AID PROJECT				

FILE NAME =	USER NAME = SAW	DESIGNED - RAC	REVISED -
...		DRAWN - LCR	REVISED -
PLOT SCALE = 40.0000' / in.		CHECKED - DAZ	REVISED -
PLOT DATE = 6/27/2013		DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

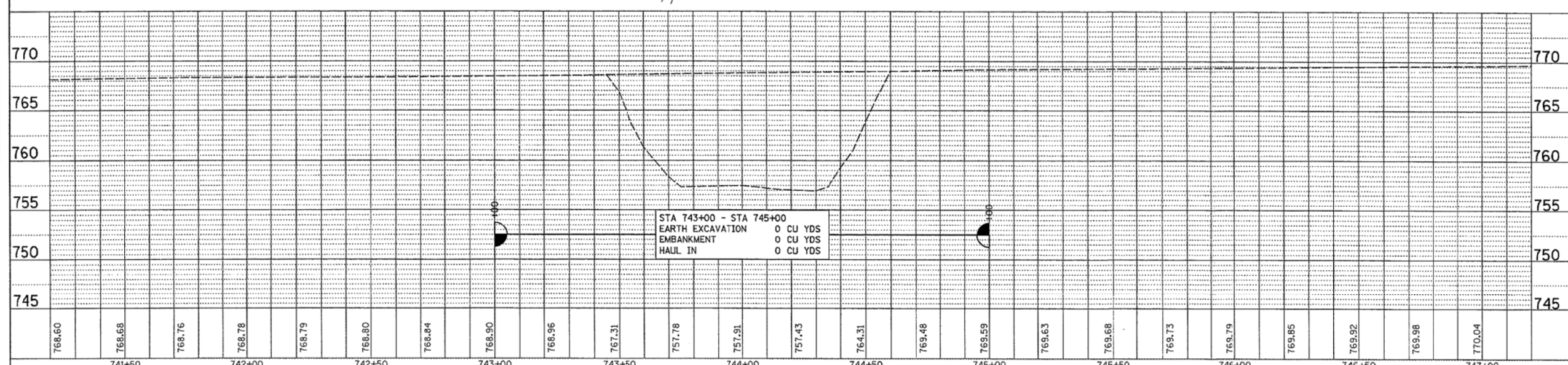
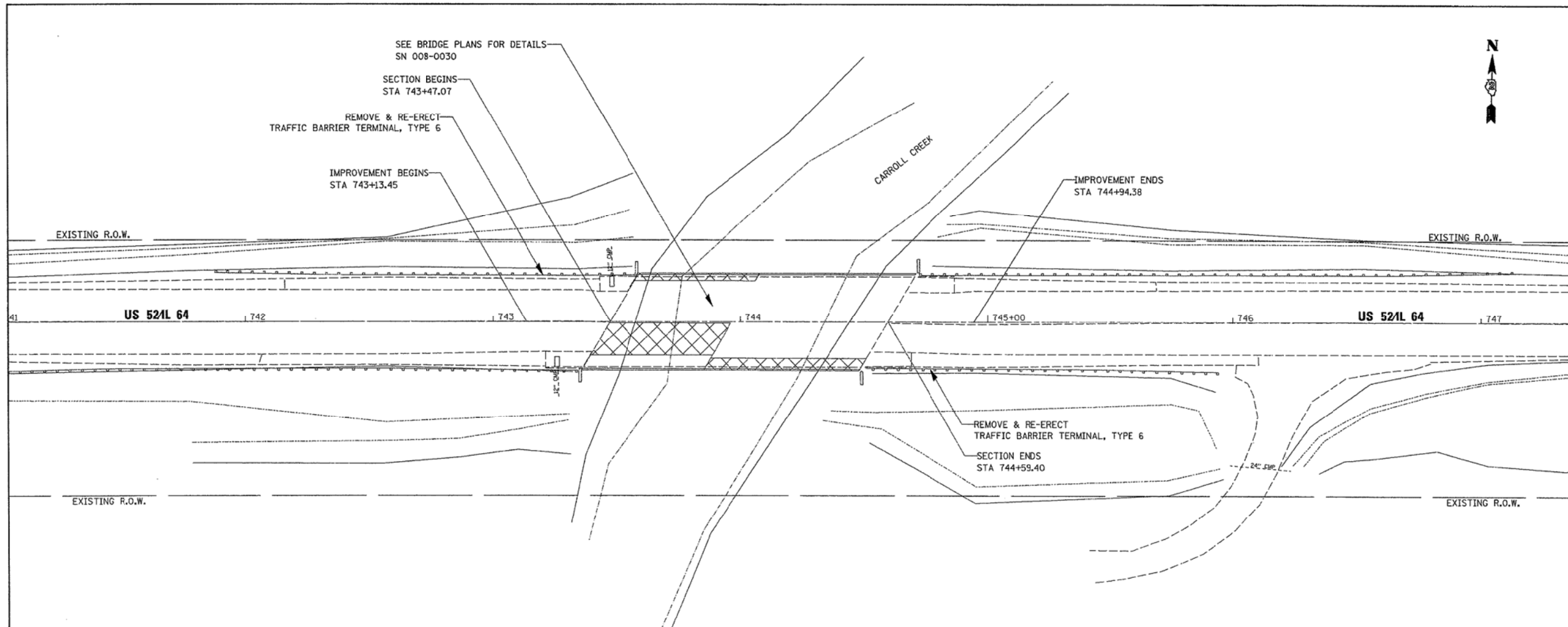
**ZROKA**  
engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1982  
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	104
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
DATE	
BY	
NOTE BOOK	
NO.	

DATE	
BY	
PROFILE	
DATE	
BY	
NOTE BOOK	
NO.	



FILE NAME =	USER NAME =	DESIGNED -	REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		US 52/L 64 PLAN & PROFILE SHEETS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\projects\p286887\d86887\pl\vdgn	dunanf	FD 11/2/07	REVISIONS			SCALE: 20		17	*	CARROLL	27	10
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISIONS			SHEET NO. 10 OF 27 SHEETS		STA. 741+50 TO STA. 747+00		ILLINOIS FED. AID PROJECT		CONTRACT NO. 64D28	
PLOT DATE = Thu Jan 24 15:41:09 2008	DATE -	REVISIONS							CONTRACT NO. 64D28		CONTRACT NO. 64D83	

FILE NAME =	USER NAME =	DESIGNED -	REVISIONS
... \D264DB3-SHT-ExBrIDGE.dgn	SAW	RAC	REVISIONS
		LCR	REVISIONS
		DAZ	REVISIONS
		DATE -	REVISIONS
		06-28-13	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ZROKA**  
engineering  
Zzoka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

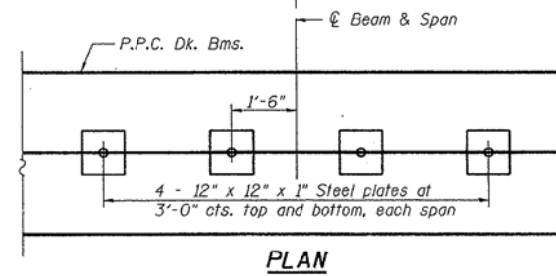
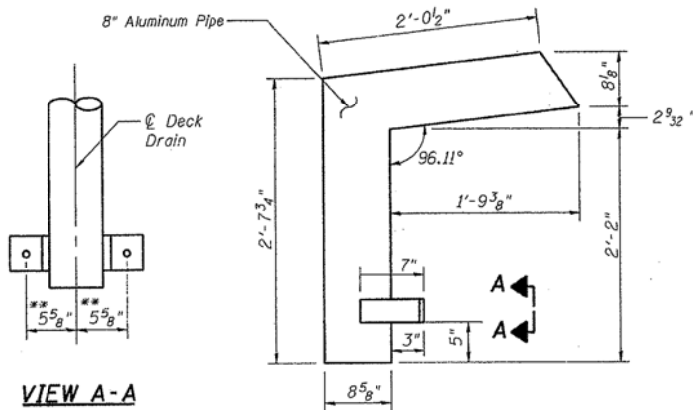
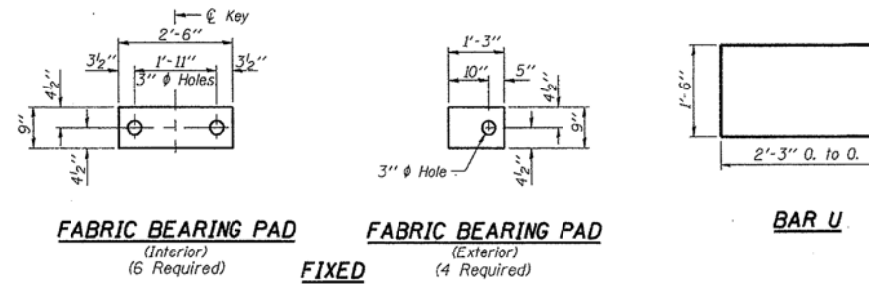
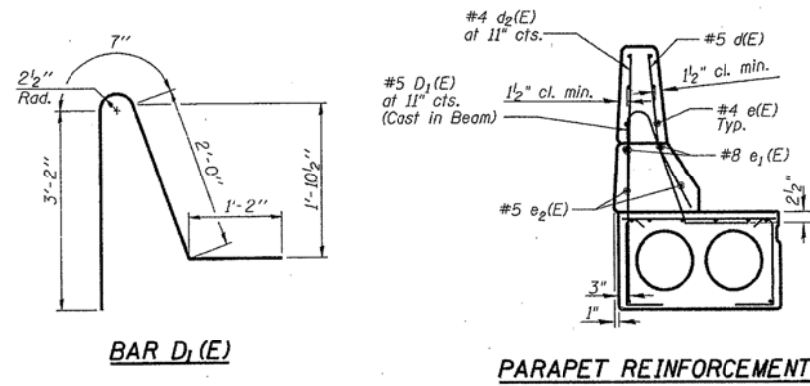
EXISTING BRIDGE PLANS - 1982  
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	105
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

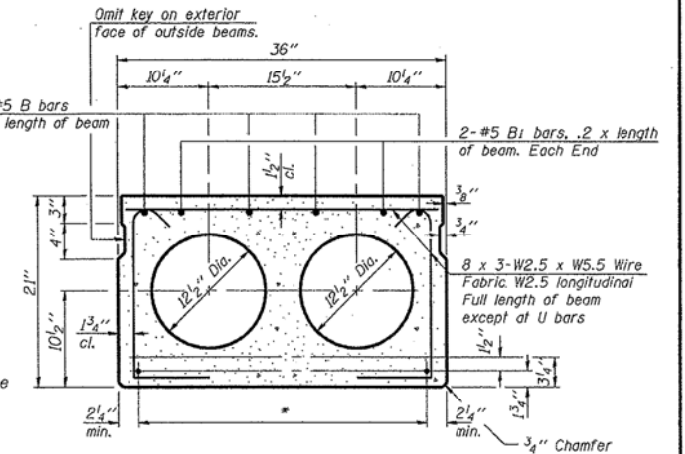
ROUTE NO.	SECTION	QUANTITY	DATE	SHEET NO.
F.A.P. 17	CARROLL	27	13	4 SHEETS
FED. ROAD DIST. NO. 7	ALLOTMENT	FED. AID PROJECT		



**\*TRANSVERSE  
PLACEMENT GUIDELINES**

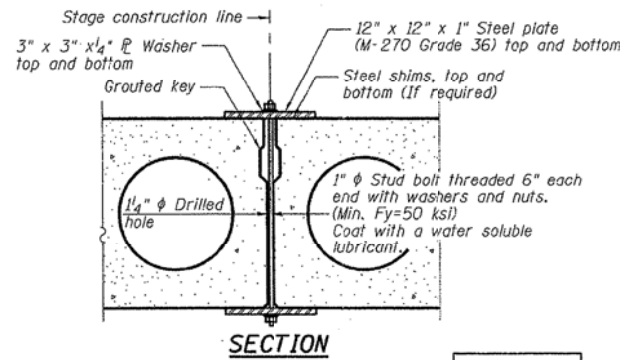
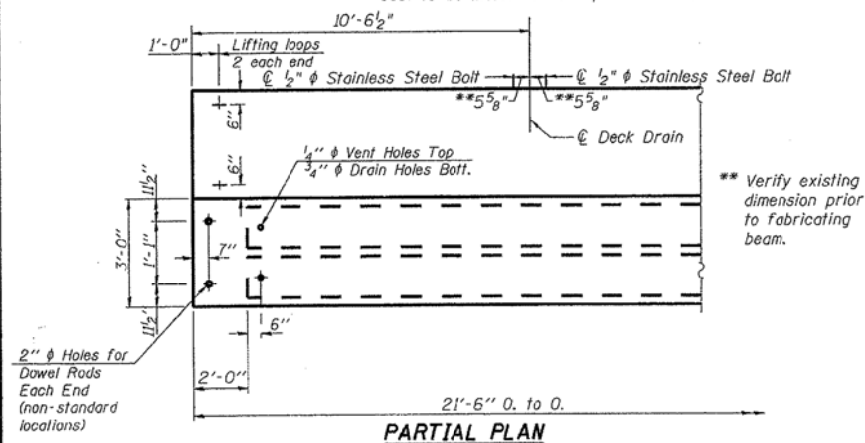
1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

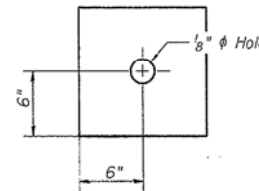


**TYPICAL SECTION**  
1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
3-Strands 1 3/4" up, 2-Strands 3/4" up

Note:  
Place strands symmetrically about  $\phi$  of beam.



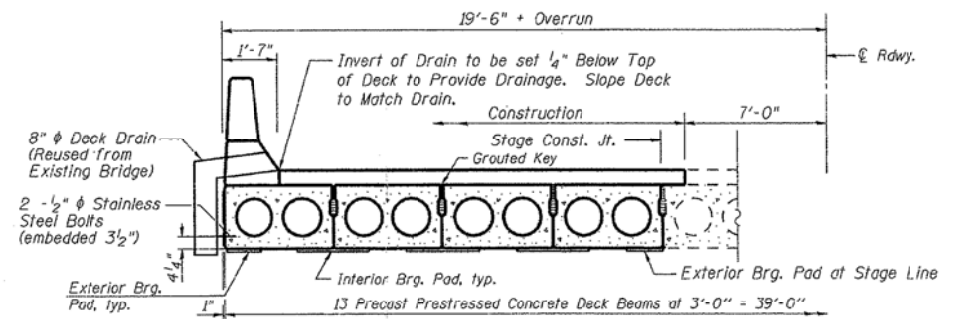
Notes:  
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.  
See Stage Construction Detail for traffic lane.  
Cost is included with Precast Prestressed Concrete Deck Beams.



**SHEAR KEY CLAMPING DETAIL  
AT STAGE CONST. JT.**

**NOTES**

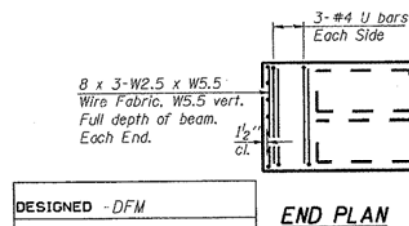
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2"  $\phi$  - 270 ksi strands, as shown. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/2" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'cl, shall be 4000 p.s.i.



**PARTIAL CROSS SECTION**

**BILL OF MATERIAL**

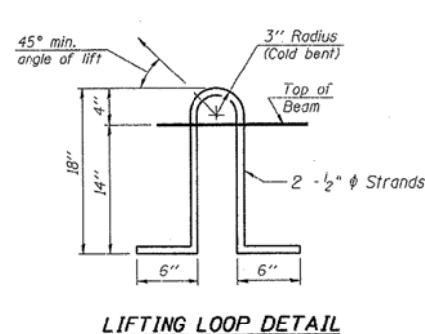
Precast Prestressed Conc. Deck Bms.	Sq. Ft.	258



DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

PD-3-S

11-1-06



**LIFTING LOOP DETAIL**

**DECK BEAM DETAILS  
SPAN 1  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0029**

FILE NAME = ... \0264083-SHT-ExBridge.dgn

USER NAME = SAW  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 6/27/2013

DESIGNED - RAC  
DRAWN - LCR  
CHECKED - DAZ  
DATE - 06-28-13

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ZROKA**  
engineering

Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

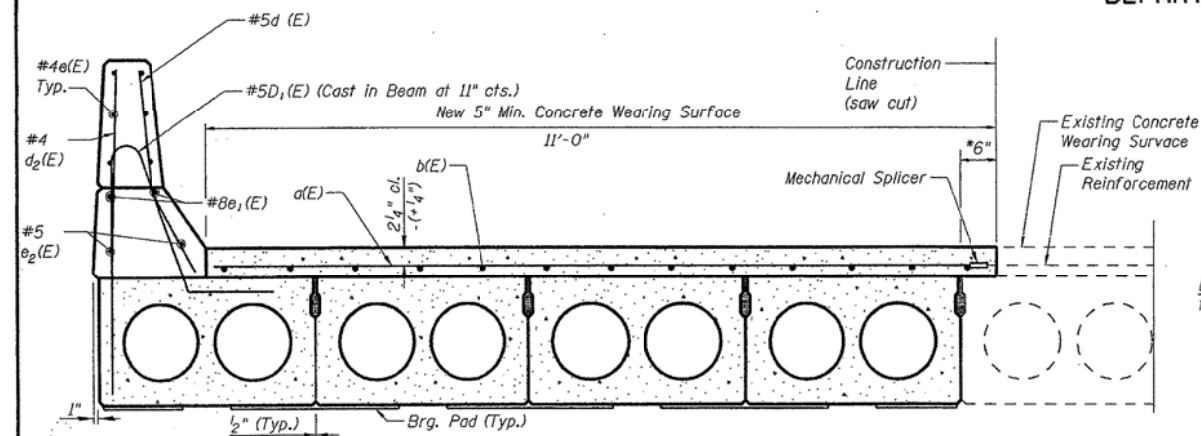
EXISTING BRIDGE PLANS - 1982  
FOR INFORMATION ONLY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	107
			CONTRACT NO. 64D83	
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO.
F.A.P. 17		CARROLL	27	14	4 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

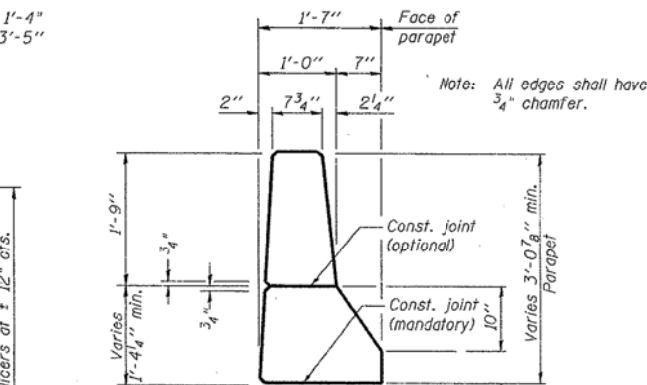


SECTION THRU BEAMS 1-4 & PARAPET

\* Limits of 5" min. Concrete Wearing Surface Removal. Cost included with Concrete Removal.

MIN. BAR LAP

#4 bar = 1'-4"  
#8 bar = 3'-5"



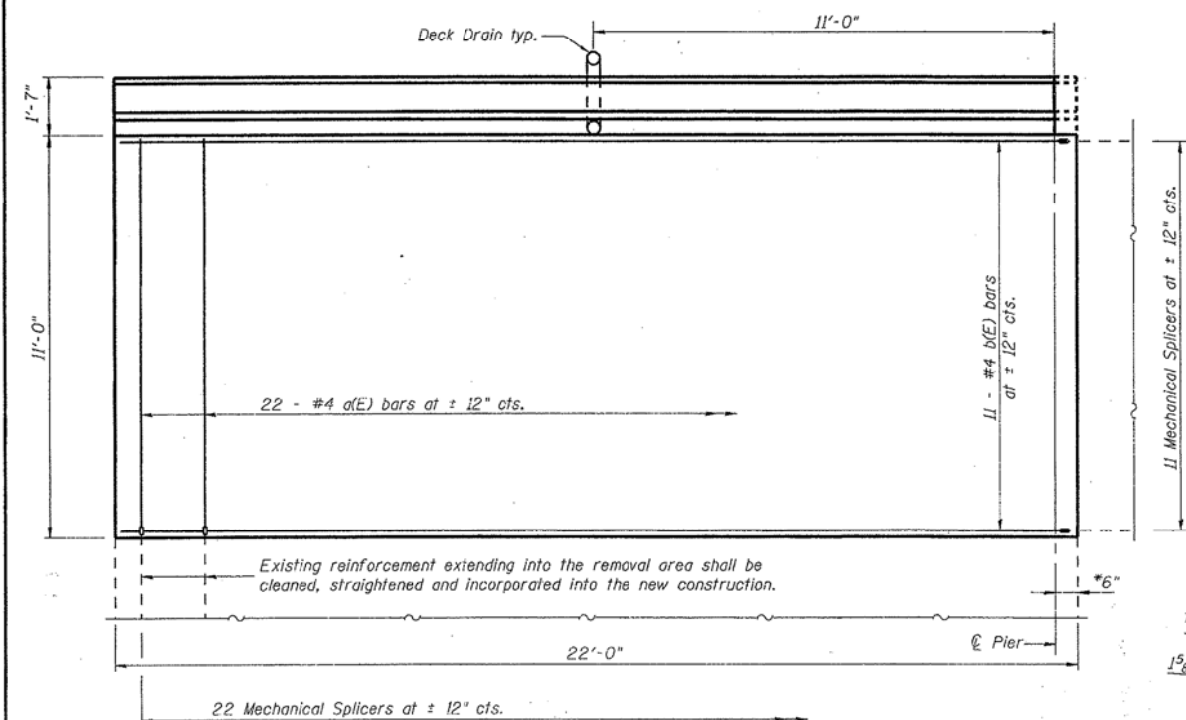
INSIDE ELEVATION OF PARAPET

7/16"  $\phi$  holes at 1'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed or clipped off flush with the plates after forms are removed.

3/4"  $\phi$  x 8" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" cts.

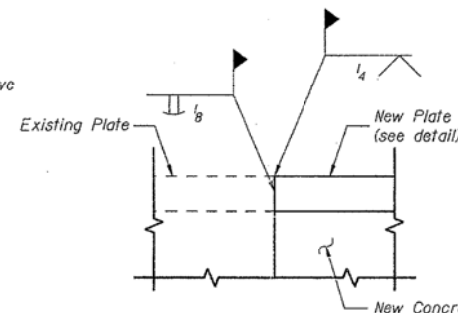
NEW PLATE DETAIL

(Cost Incidental to Concrete Wearing Surface, 5")



PLAN BEAMS 1-4

(Parapet & 5" Conc. Wearing Surface)

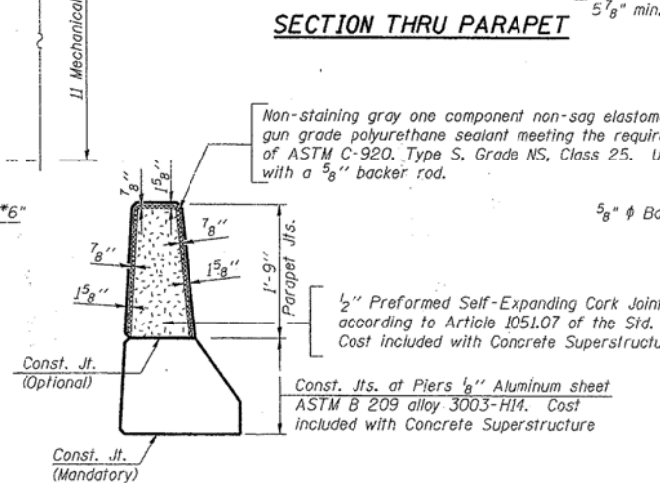


ELEVATION JOINT PLATE WELD

Cost Included with PPC Deck Beams



BAR d(E)



SECTION THRU PARAPET

PARAPET JOINT DETAILS

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod.

1/2" Preformed Self-Expanding Cork Joint Filler according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

Notes:  
The exterior surfaces of the floor drains in contact with concrete shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.

SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	22	#4	10'-6"	—
b(E)	11	#4	21'-6"	—
d(E)	24	#5	3'-0"	—
d2(E)	24	#4	2'-8"	—
e(E)	12	#4	10'-6"	—
e1(E)	2	#8	21'-2"	—
e2(E)	2	#5	21'-2"	—
Reinforcement Bars, Epoxy Coated	Pound		672	
Concrete Superstructure	Cu. Yds.		2.7	
Concrete Wearing Surface, 5"	Sq. Yds.		26.9	
Concrete Removal	Cu. Yds.		30.7	
Mechanical Splicers	Each		33	

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

SUPERSTRUCTURE DETAILS  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0029

DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

FILE NAME = ... \0264083-SHT-ExBr-ridge.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
		DRAWN - LCR	REVISED -
		CHECKED - DAZ	REVISED -
		DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ZROKA  
engineering

Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1982  
FOR INFORMATION ONLY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	108
			CONTRACT NO. 64D83	
		ILLINOIS	FED. AID PROJECT	



**INDEX of SHEETS**

Sheet No.	Title Sheet
2	Standard Cross Sections No. 1032 & 1130
3	Plan & Profile Sta. 21196 to Sta. 30100
4	" " " " " " 30100 " " 40100
5	" " " " " " 40100 " " 440100
6	" " " " " " 440100 " " 260100
7	" " " " " " 260100 " " 260100
8	" " " " " " 260100 " " 320100
9	" " " " " " 320100 " " 380100
10	" " " " " " 380100 " " 440100
11	" " " " " " 440100 " " 445145
12-49 Inclusive-Cross Sections	
49	Standard Culvert Design 610-7, 628-1
48	Standards No. 045, 047
50	" " " " " " 1085, 1162

**SUMMARY of QUANTITIES**

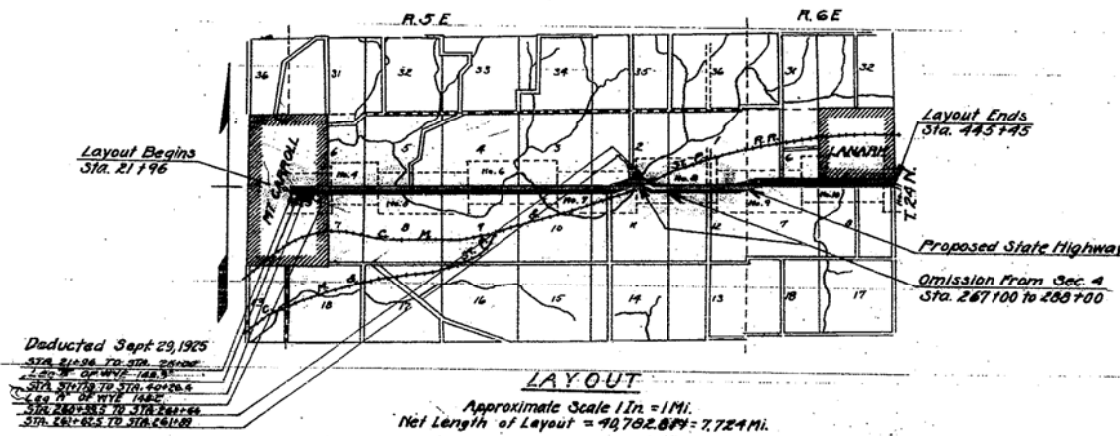
17,973	Cu. Yds. Class A Excavation
200	Cu. Yds. Class B Excavation
200	Cu. Yds. Class C Excavation
61	Rods. Headed Pulling
61,369	Sq. Yds. Pavement
1,720	Ln. Ft. Wood Guard Rail
193	Each. Setting Right of Way Markers
428.0	Cu. Yds. Class A Concrete
3710	Lbs. Reinforcing Steel

**SUMMARY of CONCRETE**

Standard Culvert Design No.	Class A	Class A
610-7	8.5	Cu. Yds.
620-1-1	7.5	" "
620-1-3	7.6	" "
620-1-5	2.2	" "
619-16	2.2	" "
<b>Total</b>		<b>43.0 cu yds.</b>

**ROUTE 27 SECTION 4 CARROLL COUNTY**

From a point near the N.W. Corner of Sec. 7, T.24 N. R.5 E. of the 4<sup>th</sup> P.M. to a point near the N.E. Corner of Sec. 6 T.24 N. R.6 E. of the 4<sup>th</sup> P.M.



**SUMMARY**

Station to Station	Width of Right of Way	Gross Length Along Transit Line	Corrections For Curves		Corrections for Relocations		Net Length Along Final Center Line	Omissions	Net Length to be Improved in Feet	Pavement Over Bridges		Sq. Yds. of Pavement
			Feet	Sta. to Sta.	Feet	Sta. to Sta.				Sta.	Feet	
21196	33100	78	1108.0				1108.0		1108.0			2208.0
37120	40100	70	298.0				298.0		298.0			497.0
"Leg B"												
40100	440100	70	190.3				190.3		190.3			280.0
"Leg A"												
33100	30100	78	508	36170.5	0.4		497.5		497.5			995.0
30100	40100	70	890	39190.5	0.5	40100	39192.6	1.4	790.1			1580.2
40100	76100	70	3888	333.00	0.0		3888.0		3888.0			6000.0
76100	140100	70	6400	60150.0	0.1		6399.9		6399.9			12799.8
140100	100100	70	4000	38150.0	0.5		3899.5		3899.5			7799.0
100100	200100	70	2000	18150.0	0.0		2000.0		2000.0			4000.0
200100	260100	70	2300	20150.0	0.1		2299.9		2299.9			4599.8
260100	320100	70	2300	20150.0	0.1		2299.9		2299.9			4599.8
320100	380100	70	2300	20150.0	0.1		2299.9		2299.9			4599.8
380100	440100	70	2300	20150.0	0.1		2299.9		2299.9			4599.8
440100	445145	70	2300	20150.0	0.1		2299.9		2299.9			4599.8
<b>TOTAL</b>												

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND  
DIVISION OF HIGHWAYS

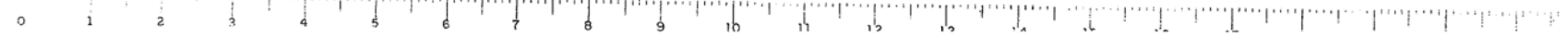
SUBMITTED: Oct 13 1925  
D.F. Goetz

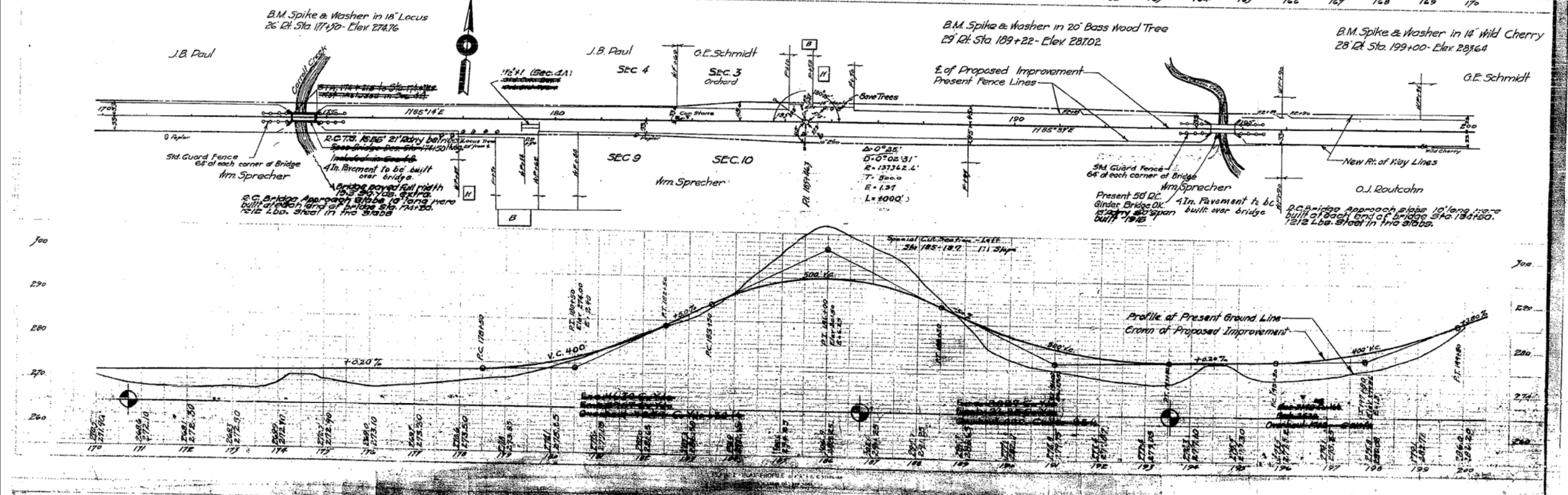
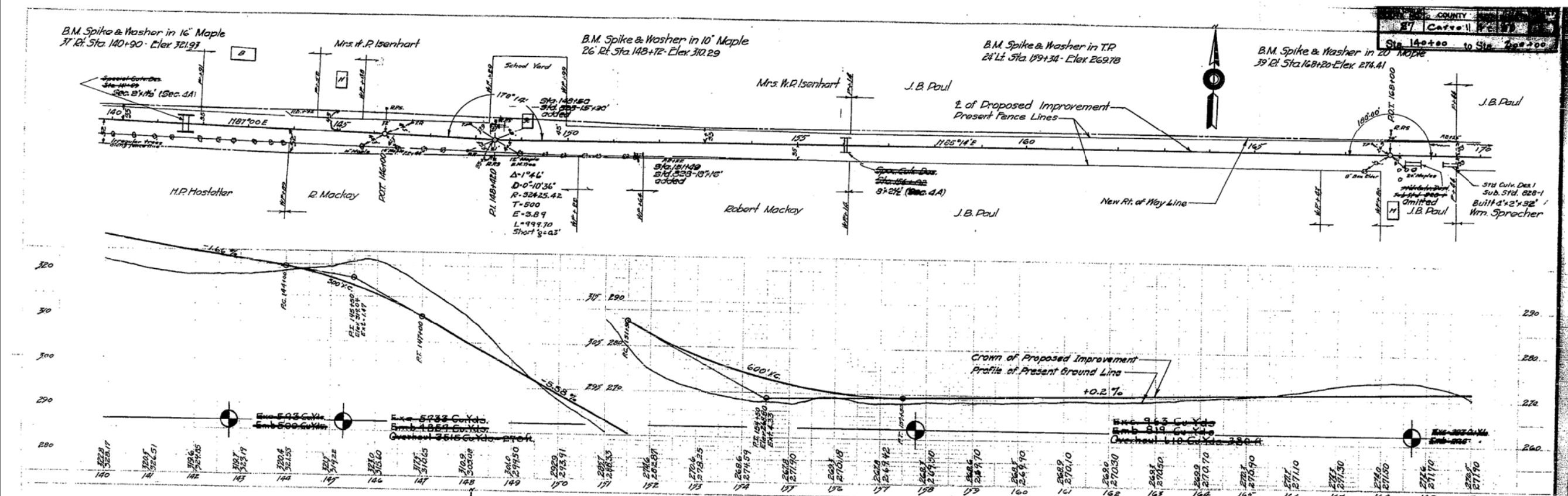
EXAMINED: Oct 13 1925  
V.L. Galt

PASSED: Oct 13 1925  
H.B. Galt

APPROVED: Oct 13 1925  
Galt

CARROLL 4 27





FILE NAME = ...N02640B3-SHT-Ex-Bridge.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ZROKA</b> engineering Zroka Engineering, P.C. 4216 North Hermitage Chicago, IL 60613	<b>EXISTING BRIDGE PLANS - 1994 FOR INFORMATION ONLY</b>	F.A.P. R.T.E. = 17	SECTION = 4BR-5 & 4BR-6	COUNTY = CARROLL	TOTAL SHEETS = 150	SHEET NO. = 110		
	PLOT SCALE = 40.0000' / in.	CHECKED - DAZ	REVISED -				CONTRACT NO. 64DB3						
	PLOT DATE = 6/27/2013	DATE = 06-28-13	REVISED -				ILLINOIS FED. AID PROJECT						
							SCALE:	SHEET OF	SHEETS STA.	TO STA.			

INDEX OF SHEETS  
SEE SHEET 2

DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

008-0030

FA 17	4BR-1	CARROLL	26	1
PROJECT	BR-F-17(62)			

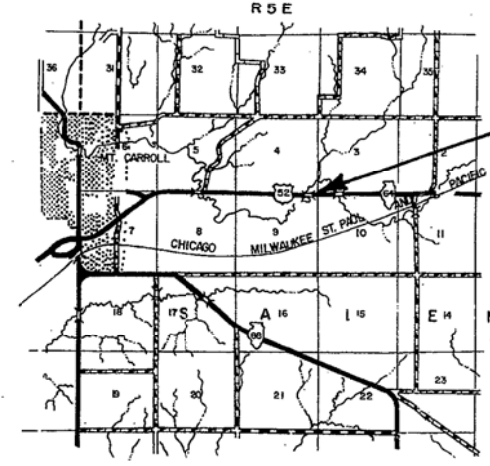
P-92-028-80

FA ROUTE 17  
SECTION 4BR-1  
PROJECT BR-F-17(62)  
CARROLL COUNTY



LOCATION OF SECTION INDICATED THUS:—

C-92-034-82



PROJECT BR-F 17 (62)  
BEGINS STA. 171+62.5  
ENDS STA. 177+37.5  
INCLUDES REMOVAL OF EXISTING R.C.  
THRU GIRDER AND REPLACEMENT  
WITH A 2 SPAN PRC. DECK BEAM  
BRIDGE 116' LONG. (CARRYING FA ROUTE  
17 OVER CARROLL CREEK)

DESIGN DESIGNATION  
ADT 3300(82) MAJOR HIGHWAY

"CALL J.U.L.I.E.  
BEFORE YOU DIG"  
800-892-0123  
SALEM TWP.

NET LENGTH OF PROJECT = 575.00 FT. = 0.109 MI.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED: March 10, 1982

EXAMINED: March 22, 1982 DISTRICT ENGINEER

PASSED: March 22, 1982 ENGINEER OF PLANS AND CONTRACTS

APPROVED: March 22, 1982 ENGINEER OF DESIGN

Steve Thompson DIRECTOR, DIVISION OF HIGHWAYS

CONTRACT NO. 35420

CARROLL COUNTY SECTION 4BR-1 F. A. ROUTE 17

FILE NAME = ... \D264DB3-SHT-ExBr1.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ZROKA engineering Zroka Engineering, P.C. 4216 North Hermitage Chicago, IL 60613	EXISTING BRIDGE PLANS - 1994 FOR INFORMATION ONLY	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT SCALE = 40.0000' / in.	DRAWN - LCR	REVISED -				17	4BR-5 & 4BR-6	CARROLL	150	111		
	PLOT DATE = 6/27/2013	CHECKED - DAZ	REVISED -				CONTRACT NO. 64D83						
		DATE - 06-28-13	REVISED -				ILLINOIS FED. AID PROJECT						

USGS DATUM  
5th GA 1929

STRUCTURE NO. = 008-0030

BM. "D" NW Wing Wall  
Elev. 768.34

FA17 4BR-1 CARROLL 22 5

**REMOVE AND RELAY PIPE CULVERTS 15"**  
LOCATION LIN. FT.  
FROM L. STA. 173+25 TO 25'L. 171+00 32

**BITUMINOUS CONCRETE BASE COURSE WIDENING 9"**  
LOCATION SQ. YD.  
L&R STA. 172+22.5 - 173+61.12 130.9  
L&R 175+30 - 176+77.5 139.2  
TOTAL 270.1

**BITUMINOUS CONCRETE BINDER COURSE**  
LOCATION TON  
STA. 171+62.5 - 172+22.5 (Taper) 2.7  
172+22.5 - 173+61.12 35.6  
175+30.07 - 176+77.5 35.8  
176+77.5 - 177+37.5 (Taper) 2.7  
TOTAL 76.8

**BITUMINOUS CONCRETE SURFACE COURSE MIXTURE D, CLASS I**  
LOCATION TON  
STA. 171+62.5 - 172+22.5 (Taper) 14.3  
172+22.5 - 173+61.12 33.6  
173+61.12 - 173+88.05 6.0  
175+03.14 - 175+30.07 35.8  
175+30.07 - 176+77.5 14.3  
176+77.5 - 177+37.5 (Taper) 14.3  
TOTAL 110.0

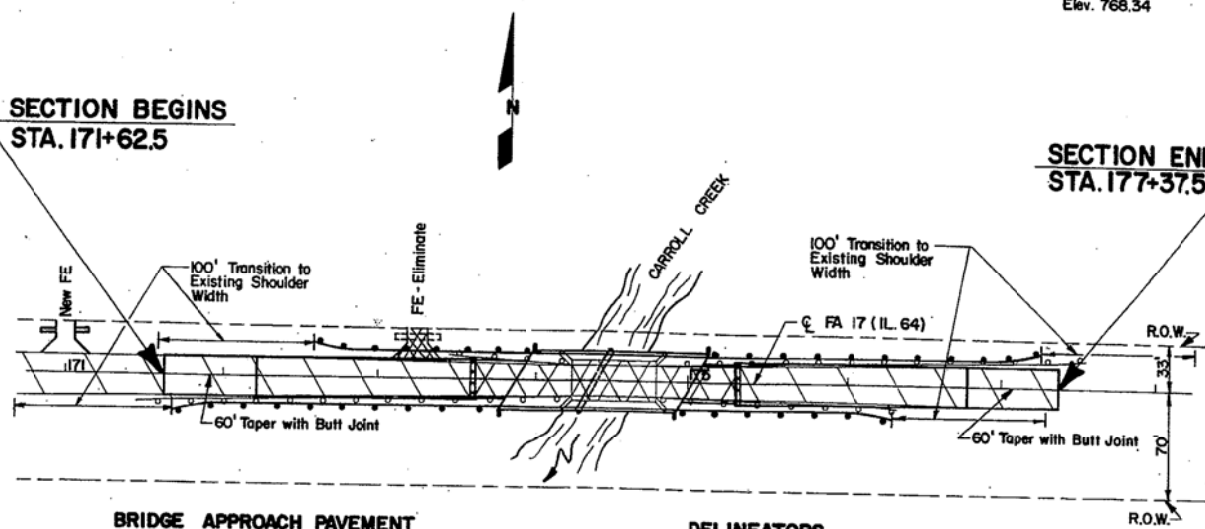
**AGGREGATE BASE COURSE, TYPE B**  
LOCATION TON  
L STA. 171+00 (FE) 17.2

**PERMANENT BENCH MARKS, TYPE I**  
LOCATION EACH  
BRIDGE 1

**AGGREGATE SHOULDERS, TYPE A 6"**  
LOCATION SQ. YD.  
R STA. 171+62.5 - 173+66.18 113.2  
L 171+62.5 - 173+88.05 125.4  
R 175+03.02 - 177+37.5 130.3  
L 175+24.86 - 177+37.5 118.1  
TOTAL 487.0

SECTION BEGINS  
STA. 171+62.5

SECTION ENDS  
STA. 177+37.5



**BRIDGE APPROACH PAVEMENT (STANDARD 2582)**  
LOCATION SQ. YD.  
STA. 173+61.12 - 173+88.05 71.8  
175+03.14 - 175+30.07 71.8  
TOTAL 143.6

**REINFORCEMENT BARS**  
LOCATION (BR. APPROACH PAVT.) POUND  
STA. 173+61.12 - 173+88.05 3036  
175+03.14 - 175+30.07 3036  
TOTAL 6072

**P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT**  
LOCATION SQ. YD.  
R STA. 173+66.18 - 173+80.53 9.8  
L 173+88.17 - 173+98.17 6.5  
R 174+93.02 - 175+03.02 7.7  
L 175+10.86 - 175+24.86 10.8  
TOTAL 37.7

**DELINEATORS**  
LOCATION EACH  
R STA. 171+66.86 1  
L 177+24.34 1  
TOTAL 2

**STEEL PLATE BEAM GUARD RAIL REMOVAL**  
LOCATION LIN. FT.  
R STA. 171+69 - 173+44 175

**PIPE DRAINS 12"**  
LOCATION LIN. FT.  
R STA. 173+68.43 (Includes 1 25° Elbow) 9  
L 173+90.30 (Includes 1 25° Elbow) 9  
TOTAL 18

**METAL END SECTIONS 12"**  
LOCATION EACH  
R STA. 173+68.43 1  
L 173+90.30 1  
TOTAL 2

**TYPE C INLET BOX STANDARD 2324**  
LOCATION EACH  
R STA. 173+68.43 1  
L 173+90.30 1  
TOTAL 2

**PAVEMENT REMOVAL AND BITUMINOUS REPLACEMENT, TYPE II, 9 INCH**  
LOCATION SQ. YD.  
STA. 173+61.12 6  
175+30.07 6  
TOTAL 12

**TRAFFIC BARRIER TERMINAL, TYPE 6**  
LOCATION EACH  
R STA. 173+54.36 1  
L 173+76.38 1  
R 175+14.8 1  
L 175+36.84 1  
TOTAL 4

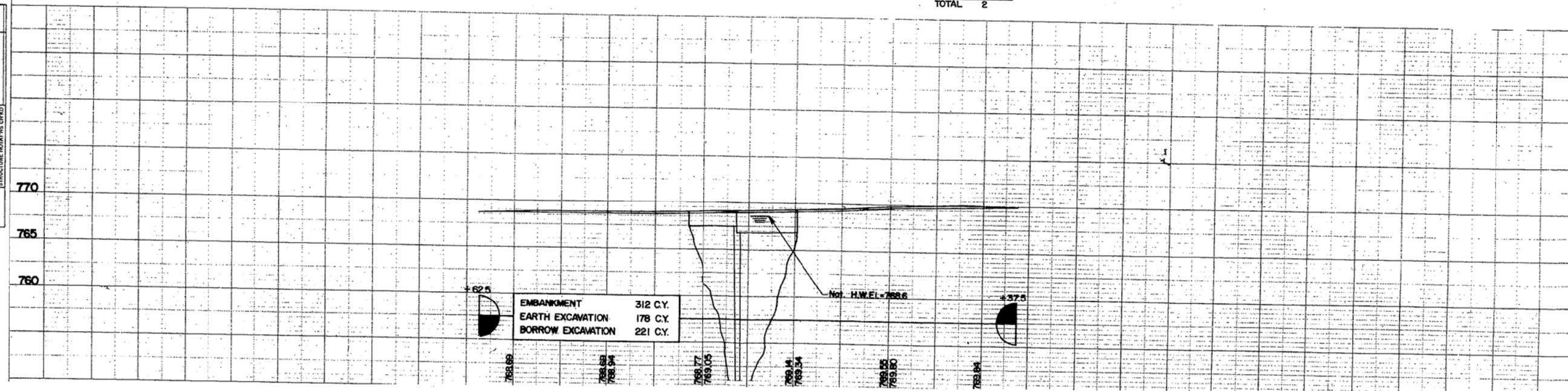
**REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL**  
LOCATION LIN. FT.  
R STA. 171+91.86 - 173+54.36 162.5  
L 172+88.88 - 173+76.38 87.5  
R 175+14.8 - 176+02.3 87.5  
L 175+36.84 - 176+99.34 162.5  
TOTAL 500.0

**REMOVAL AND REINSTALLATION OF EXISTING TRAFFIC BARRIER TERMINAL, TYPE I**  
LOCATION EACH  
R STA. 171+66.86 - 171+91.86 1  
L 172+88.88 - 172+88.88 1  
R 176+02.3 - 176+27.3 1  
L 176+99.34 - 177+24.34 1  
TOTAL 4

\*The existing Base Course from the rumaround will remain and aggregate added to bring up to final section.

PLAN  
DATE  
BY  
CHECKED  
DATE  
BY  
NOTE: BENCH MARKS TO BE SET AT THE LOCATION INDICATED.

PROFILE  
DATE  
BY  
CHECKED  
DATE  
BY  
NOTE: BENCH MARKS TO BE SET AT THE LOCATION INDICATED.



FILE NAME = ... \0264083-SHT-ExBr-ridge.dgn

USER NAME = SAW	DESIGNED - RAC	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - LCR	REVISED -
PLOT DATE = 6/27/2013	CHECKED - DAZ	REVISED -
	DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ZROKA** engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1994  
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	112
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

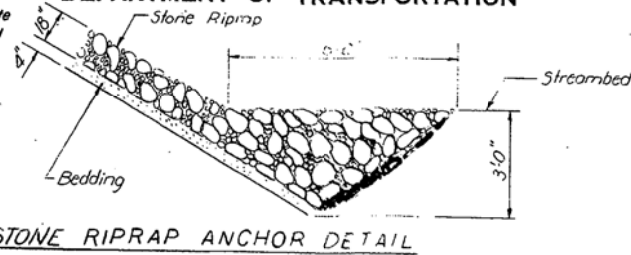
SCALE: SHEET OF SHEETS STA. TO STA.

B.M. Top of Northwest wingwall, elevation 768.34

Existing Structure: \*008-0004 The existing structure built in 1929 as SBI Rte. 27, Section 4B is a 58.3' Bk. to Bk. single span bridge. The existing structure has an out to out width of 26'-0" and is supported on transverse concrete T-beams which are supported on two concrete edge beams. The existing structure shall be removed and replaced with a new bridge. Stage construction shall be utilized so as to maintain one way traffic during reconstruction.

No salvage.

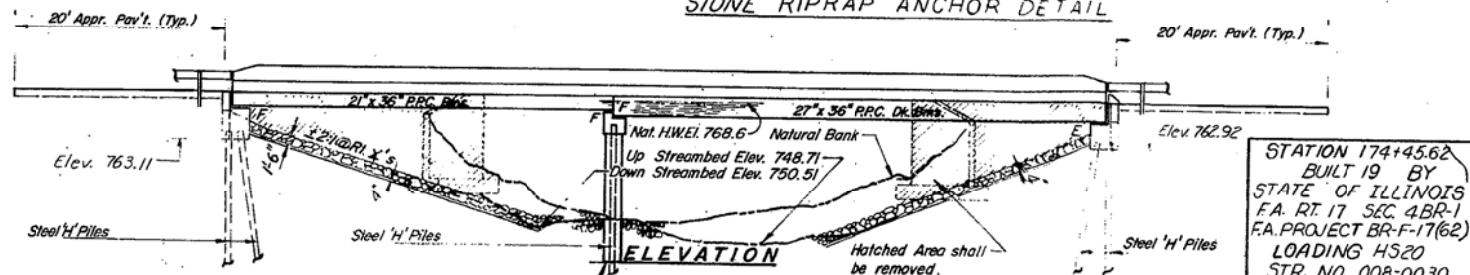
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
4BR-1		Carroll	22	11	12 SHEETS

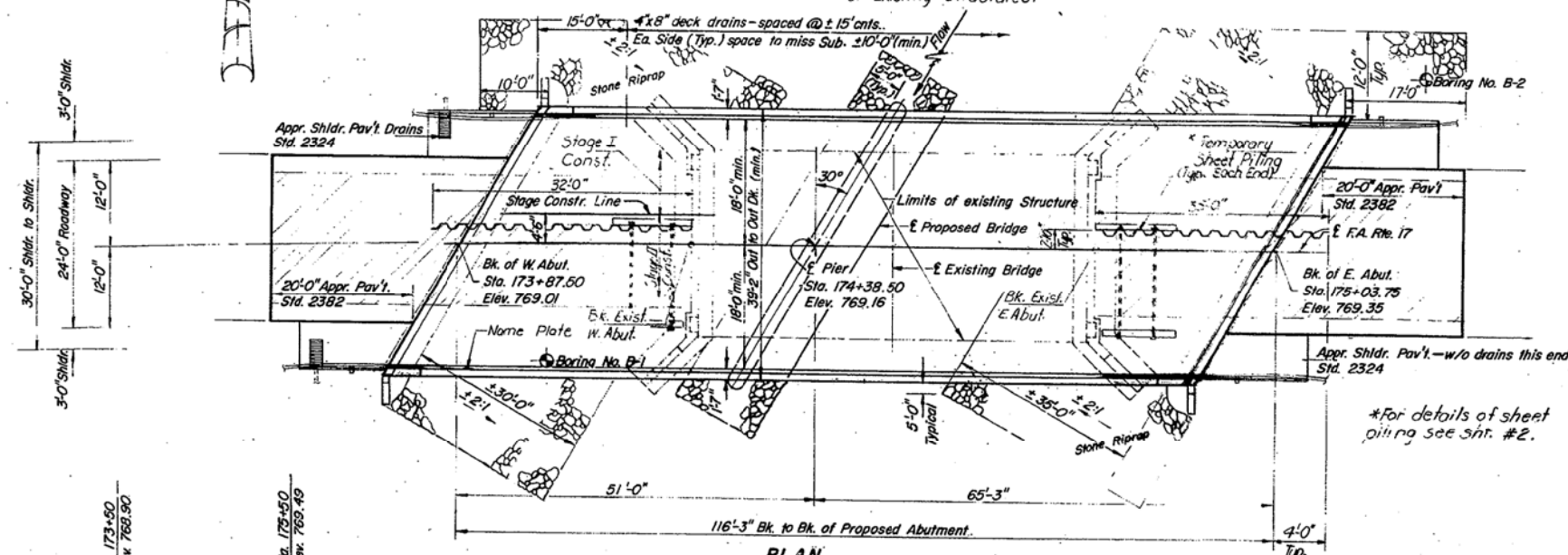
GENERAL NOTES

See Proposal for Boring Data.  
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".  
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 60.  
Limits of Waterproofing Membrane System shall be from east end of deck beams to two feet beyond west end of deck beams and toe to toe of parapets as shown on sheet #8.  
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.  
A Calcium Nitrate Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.  
The contractor shall drive one steel HP8 x36 test pile in a permanent location of the west abutment and one steel HP10x42 test pile in a permanent location of the east abutment as directed by the Engineer before ordering the remainder of piles.  
Layout of Stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.  
Sheet Piling and Tieback anchorage shall be installed prior to Stage I Removal. Steel Rod Tiebacks shall be installed under Stage I Traffic Lane.  
Sheet piling shall be removed after Stage II traffic lane is opened and prior to Stage II Construction. Cost of anchorage for sheet piling shall be incidental to Temporary Sheet Piling.



STATION 174+45.62  
BUILT BY  
STATE OF ILLINOIS  
FA. RT. 17 SEC. 4BR-1  
FA. PROJECT BR-F-17(62)  
LOADING HS20  
STR. NO. 008-0030

NAME PLATE  
(See Std. 2113)

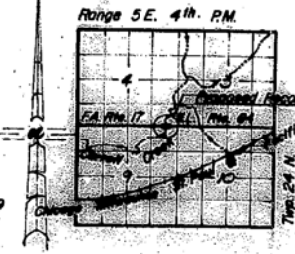


TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course, Class I	Tons	60		60
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		75	75
Cofferdam Excavation	Cu. Yd.		105	105
Cofferdams	Each		1	1
Protective Coat	Sq. Yd.	93		93
Class X Concrete	Cu. Yd.	38.9	1340	1729
Seal Coat Concrete	Cu. Yd.		58.6	58.6
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1919		1919
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2468		2468
Reinforcement Bars	Pound	1890	8100	9990
Reinforcement Bars (Epoxy Coated)	Pound	2100		2100
Steel Piles HP8x36	Lin. Ft.		660	660
Test Pile Steel HP8x36	Each		1	1
Steel Piles HP10x42	Lin. Ft.		168	168
Test Pile Steel HP10x42	Each		1	1
Name Plates	Each	1		1
Stone Riprap	Sq. Yd.		772	772
Temporary Bridge Rail	Lin. Ft.	113		113
Neoprene Expansion Joint 2"	Lin. Ft.	44		44
Portland Cement Mortar Jointing Course	Lin. Ft.	1350		1350
Waterproofing Membrane System	Sq. Yd.	458		458
Temporary Slab Support System	L. Sum		1	1
Temporary Sheet Piling	Sq. Ft.		1608	1608

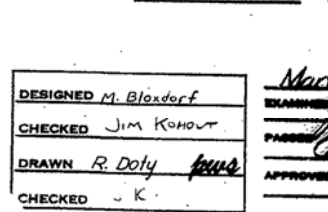
DESIGN STRESSES

FIELD UNITS  
f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinf.)  
f<sub>s</sub> = 20,000 psi (Struct.)  
PRECAST PRESTRESSED UNITS  
f<sub>c</sub> = 5,000 psi  
f<sub>ci</sub> = 4,000 psi  
f<sub>s</sub> = 270,000 psi (1/2" Strands)  
f<sub>si</sub> = 189,000 psi (1/2" Strands)  
LOADING HS 20-44  
Design Specifications: 1977 AASHTO; 1978, 1979  
1990 and 1981 Interim Specifications.  
Allow 25<sup>#</sup>/sq.ft. for future wearing surface.



GENERAL PLAN  
FA. RT. 17 OVER CARROLL CREEK  
FA. RT. 17 ILL. RT. 64 SECTION 4BR-1  
CARROLL COUNTY  
Sta. 174+45.62

PROFILE GRADE



WATERWAY INFORMATION

Drainage Area = 38.5 sq. mi. Low Grade El. 768.2 @ Sta. 172+00.00

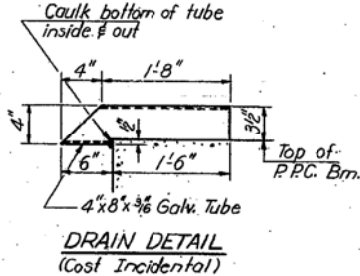
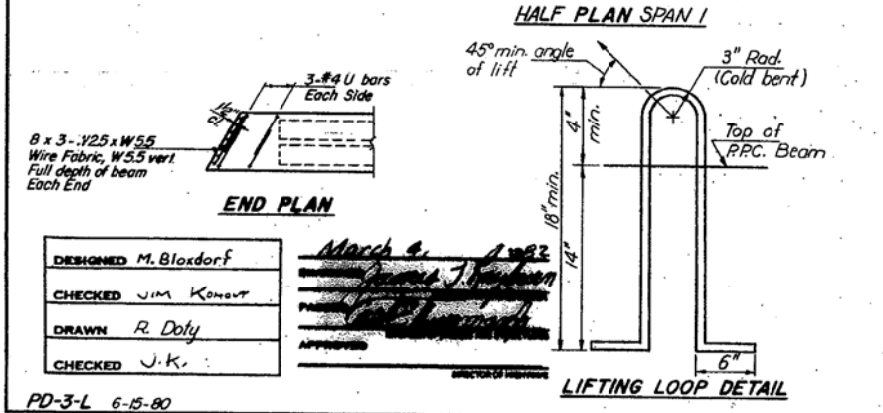
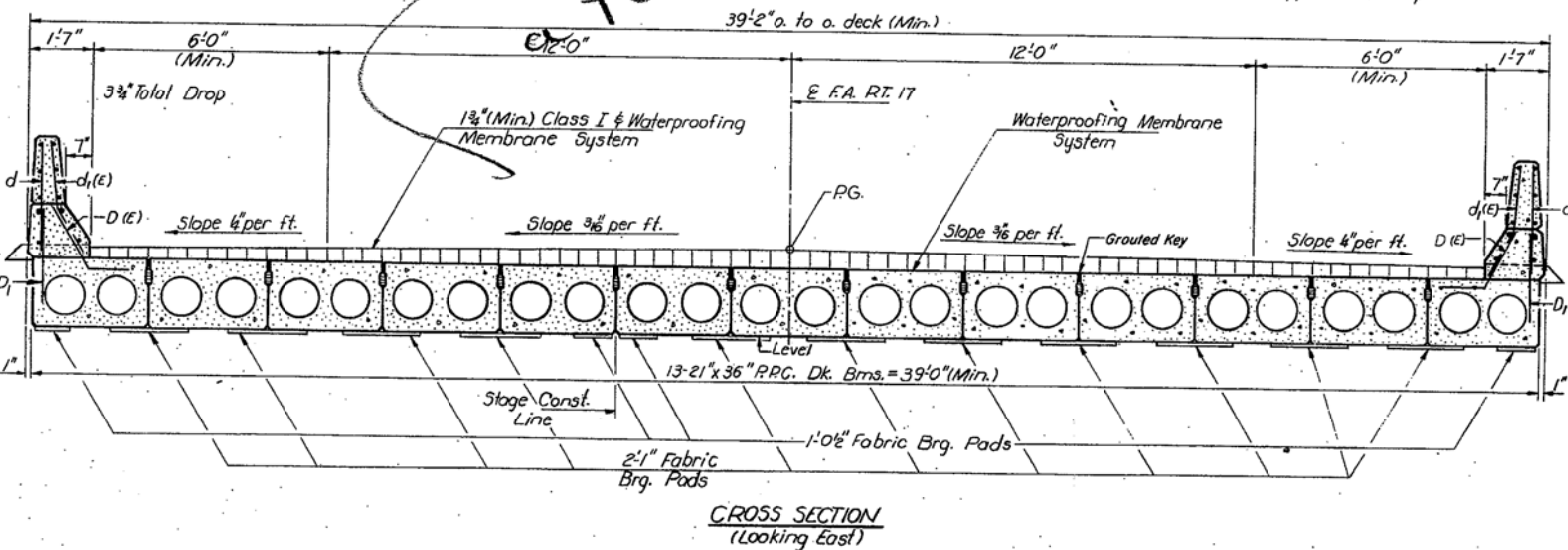
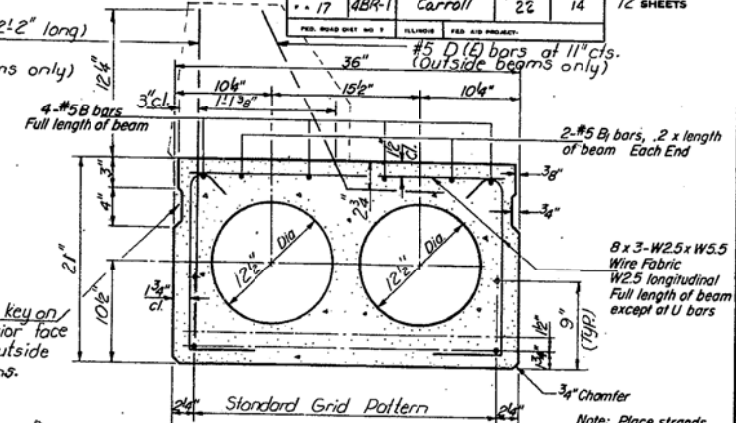
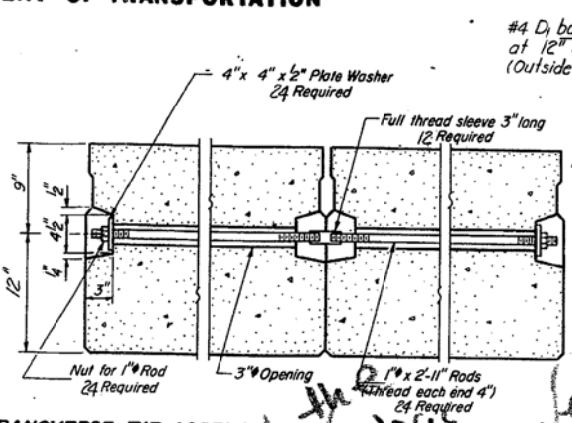
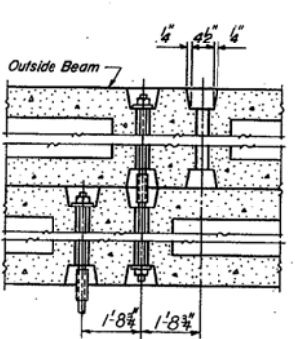
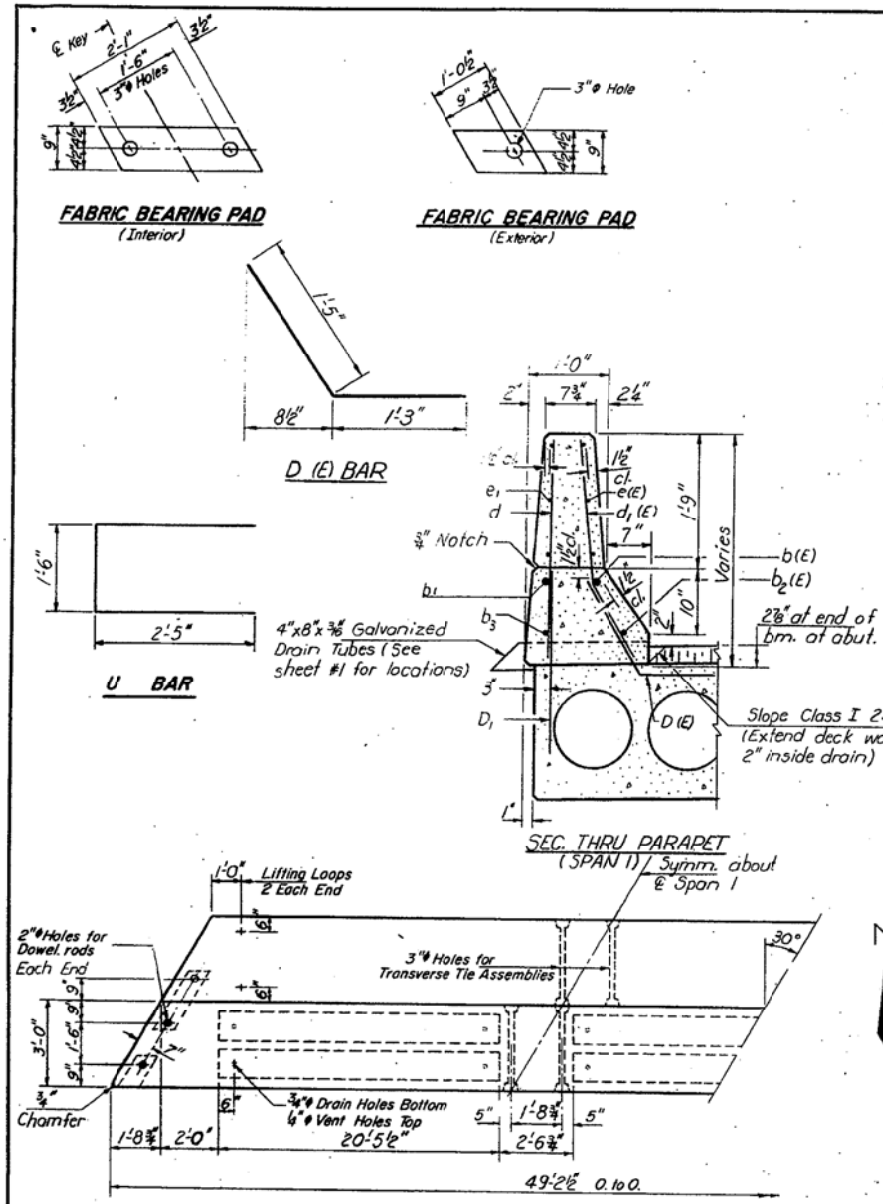
Flood	Freq. Yr.	Q C.F.S.	Opening Exist. Prop.	Sq. Ft. Exist. Prop.	Nat. H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	50	4802	443 635	768.6 0.59 0.42	769.19 769.02		
Base	100	5493	443 635	769.1 0.55 0.35	769.65 769.45		
Overlapping	25	4081	---	635	768.1	0.41	768.51
Max. Calc.	500						

DESIGNED M. Blosdorf  
CHECKED Jim Kohout  
DRAWN R. Doty  
CHECKED K.  
APPROVED [Signature]

Revised: 3-17-82 R.D. Revised: 4-23-82 R.D.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-1	Carroll	22	14



**NOTES**

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3/8" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. or 2-1/2" 270 ksi strands as shown. The 1/4" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.

Dowel rods shall be grouted after beams are in place and allowed to cure prior to grouting the shear keys.

For parapet reinforcement and Bill of Material see sheet #7.

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

**BILL OF MATERIAL**

Item	Unit	Total
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1919

**SUPERSTRUCTURE**  
SPAN I  
F.A. R.I. 17 SEC. 4BR-1  
CARROLL COUNTY  
STA. 174+45.62

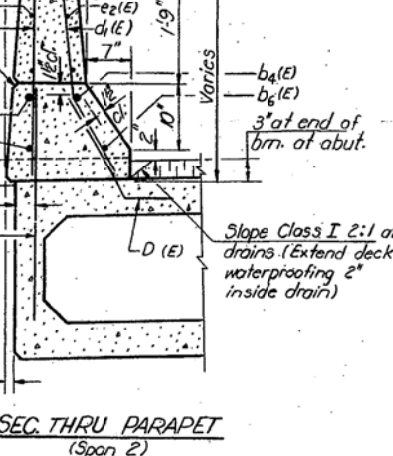
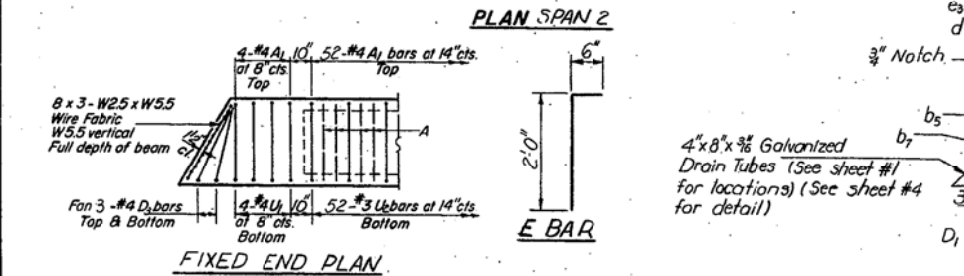
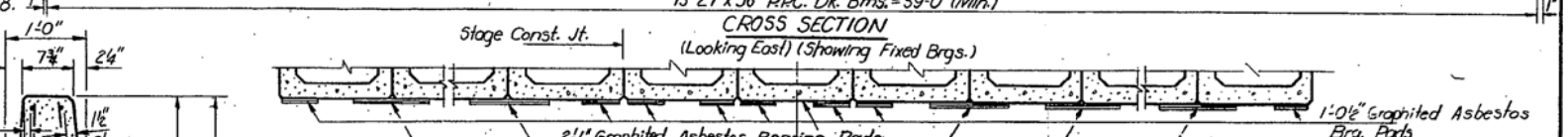
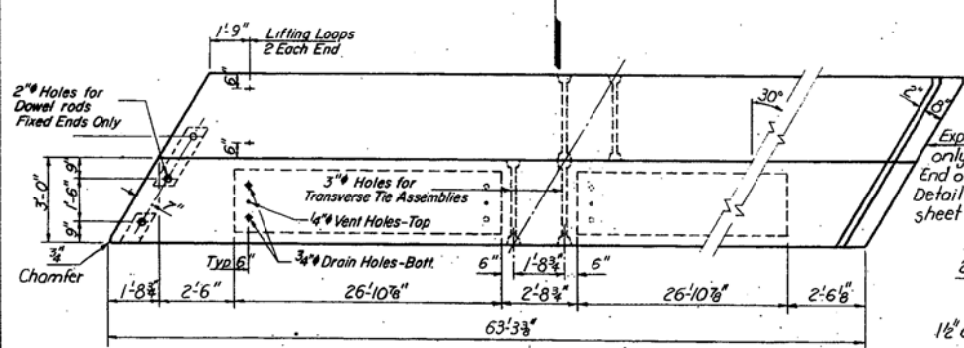
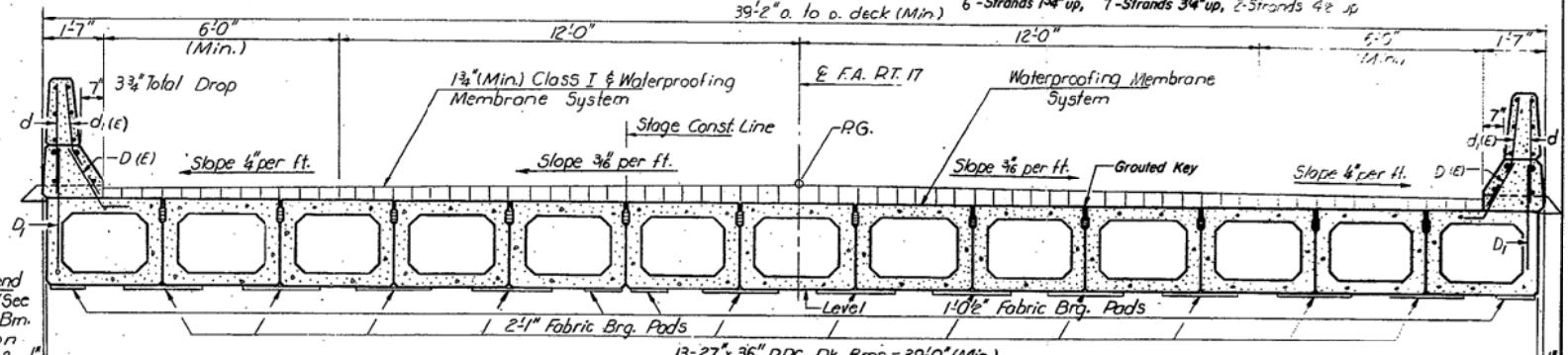
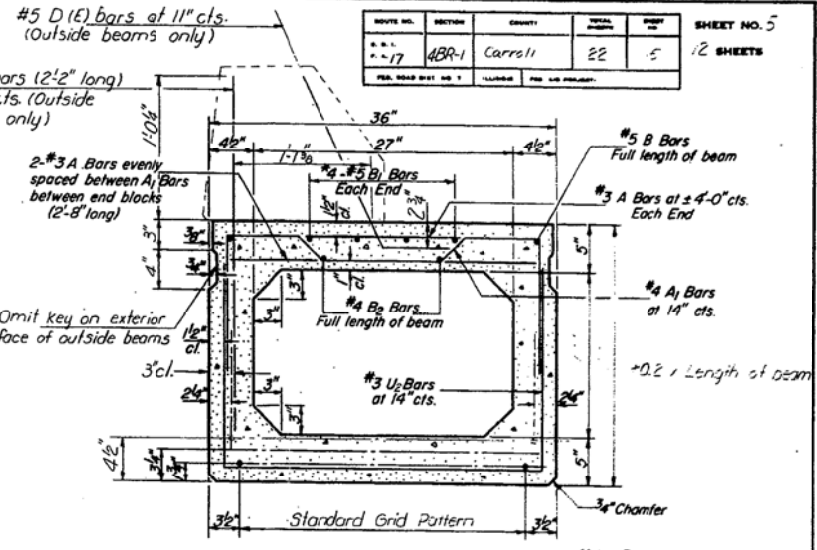
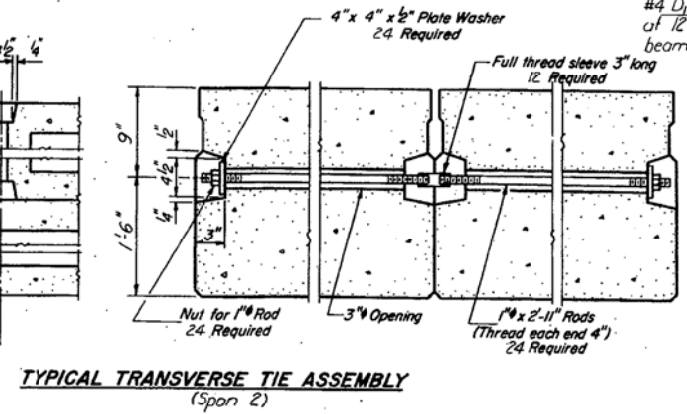
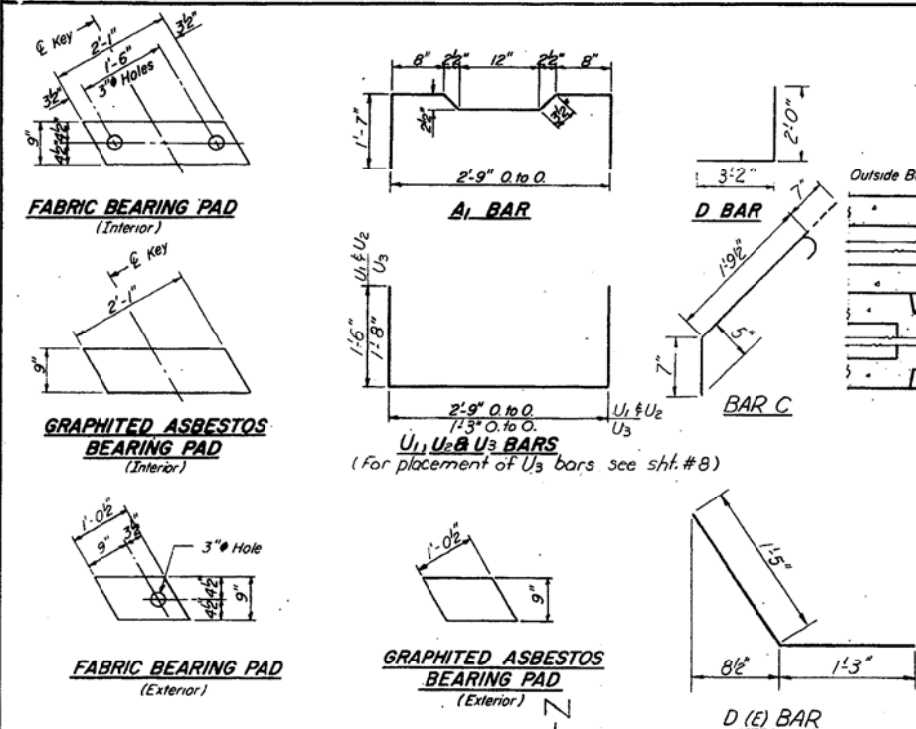
DESIGNED M. Blosdorf  
CHECKED JIM Konoval  
DRAWN R. Doty  
CHECKED J.K.

March 9, 1993  
APPROVED  
DIRECTOR OF HIGHWAYS

PD-3-L 6-15-80

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-1	Carroll	22	5



**NOTES**

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.533 sq. in. Lifting loops shall be 5/8" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. or 2-1/2" -270 ksi strands as shown on sht. #4. The 1/4" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to AASHTO M-31 or M-53, Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.

Dowel rods shall be grouted after beams are in place and allowed to cure prior to grouting the shear keys.

Reinforcement bars for parapets and expansion block-out and Class X Concrete are billed on sheet #7.

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

**BILL OF MATERIAL**

Item	Unit	Total
Precast Prestressed Concrete Deck Beams (21' Depth)	Sq. Ft.	2468

**SUPERSTRUCTURE**  
SPAN 2  
F.A. RT. 17 SEC. 4BR-1  
CARROLL COUNTY  
STA. 174+4562

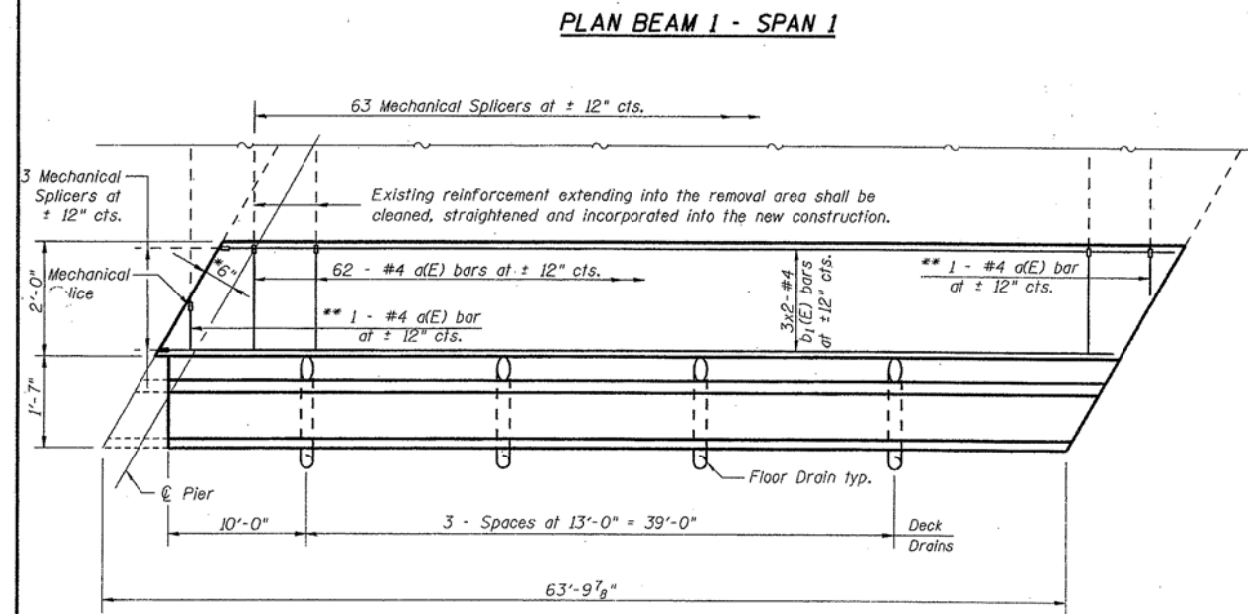
DESIGNED M. Bloxdorf  
CHECKED Jim Kohout  
DRAWN R. Doty  
CHECKED J. K.

March 4, 2002

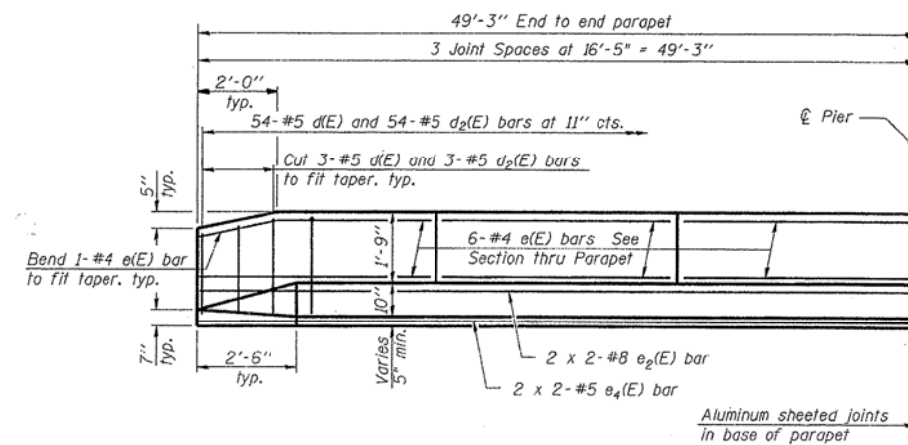
PD-5-L 6-15-80

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

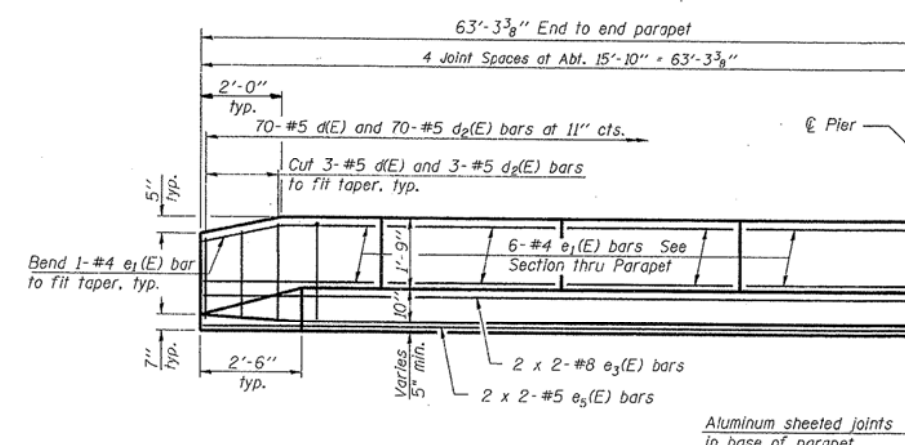
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 17		CARROLL	27	20
6 SHEETS				



PLAN BEAM 13 - SPAN 2  
(Parapet and 5" Concrete Wearing Surface)

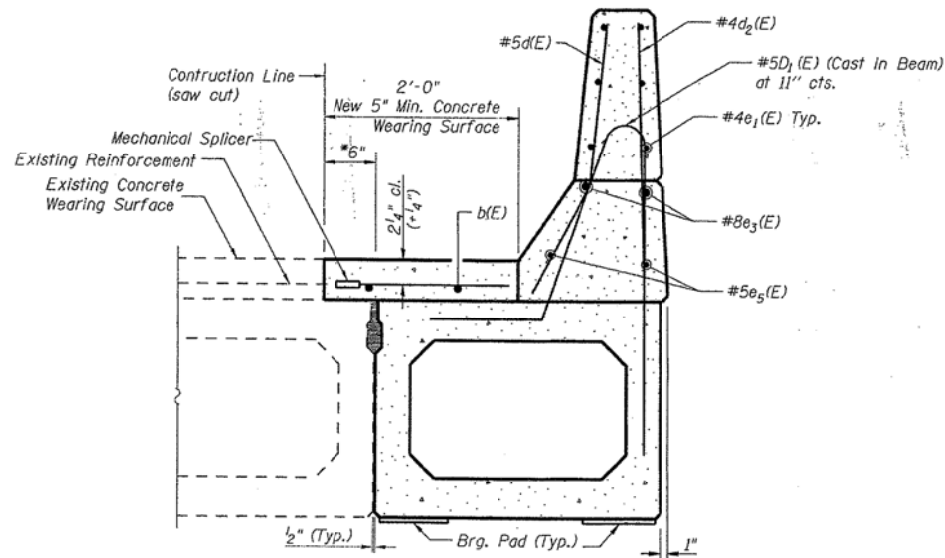


INSIDE ELEVATION OF NORTH PARAPET  
(SPAN 1)



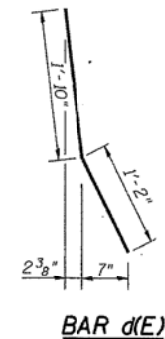
INSIDE ELEVATION OF SOUTH PARAPET  
(SPAN 2)

MIN. BAR LAP  
#4 bar = 1'-4"



SECTION THRU BEAM 13 & SOUTH PARAPET

\* Limits of 5" min. Concrete Wearing Surface Removal. Cost included with Concrete Removal.  
\*\* Order d(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



MIN. BAR LAP  
#4 bar = 1'-9"  
#5 bar = 2'-0"  
#8 bar = 4'-0"

SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	113	#4	2'-2"	—
d1(E)	192	#4	3'-8"	—
d2(E)	4	#4	3'-6"	—
d3(E)	4	#4	1'-8"	—
b(E)	22	#4	25'-6"	—
d1(E)	6	#4	32'-7"	—
d(E)	124	#5	3'-0"	—
d2(E)	124	#4	2'-8"	—
e(E)	18	#4	16'-2"	—
e1(E)	24	#4	15'-7"	—
e2(E)	4	#8	26'-6"	—
e3(E)	4	#8	33'-6"	—
e4(E)	4	#5	25'-6"	—
e5(E)	4	#5	32'-6"	—
Reinforcement Bars, Epoxy Coated	Pound		3,089	
Concrete Superstructure	Cu. Yds.		14.1	
Concrete Wearing Surface, 5"	Sq. Yds.		69.5	
Concrete Removal	Cu. Yds.		15.7	
Mechanical Splicers	Each		333	

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

SUPERSTRUCTURE DETAILS  
Sheet 2 of 2  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0030

DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

FILE NAME = ... \0264083-SHT-ExBridge.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
		DRAWN - LCR	REVISED -
		CHECKED - DAZ	REVISED -
		DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1994  
FOR INFORMATION ONLY

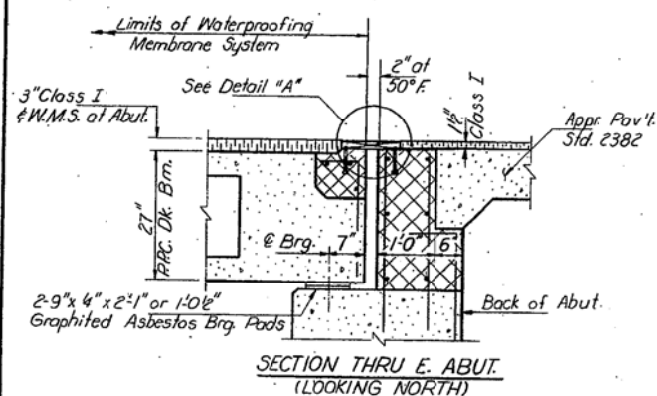
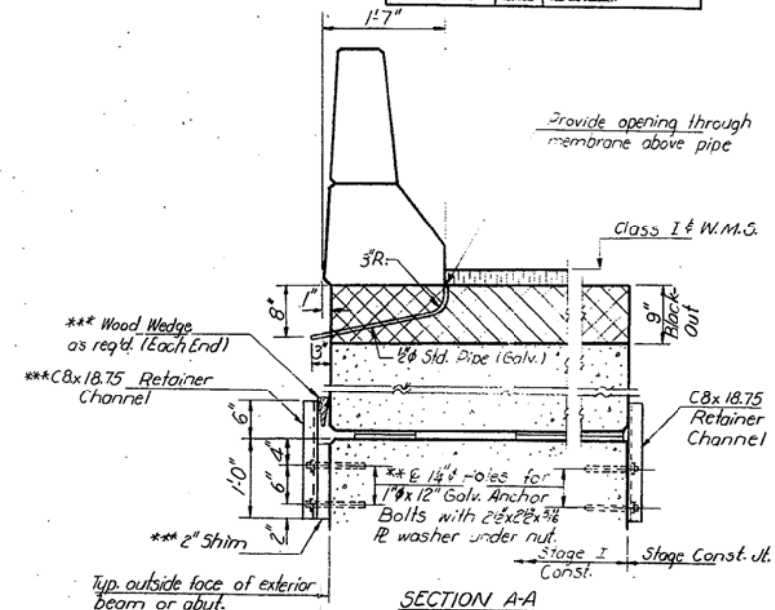
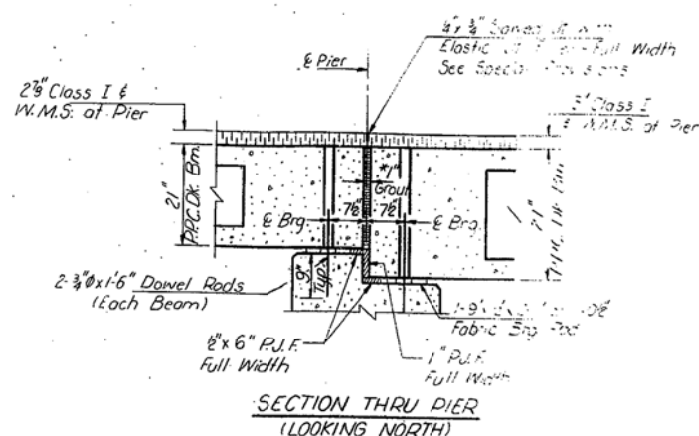
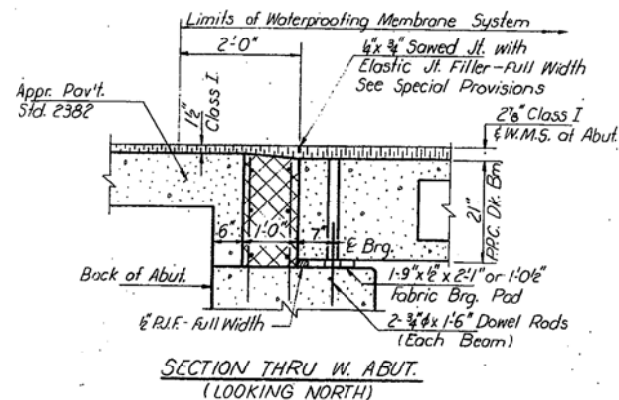
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	116
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

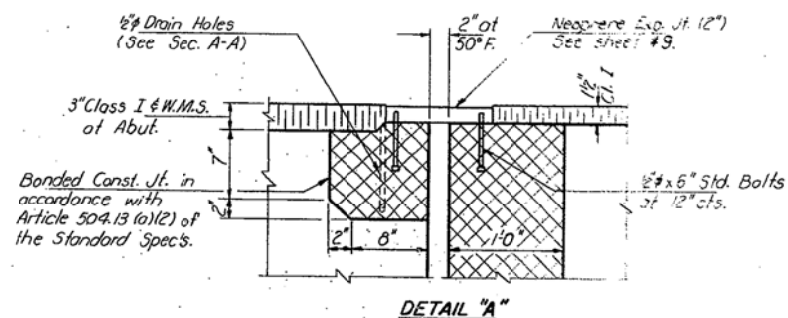


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

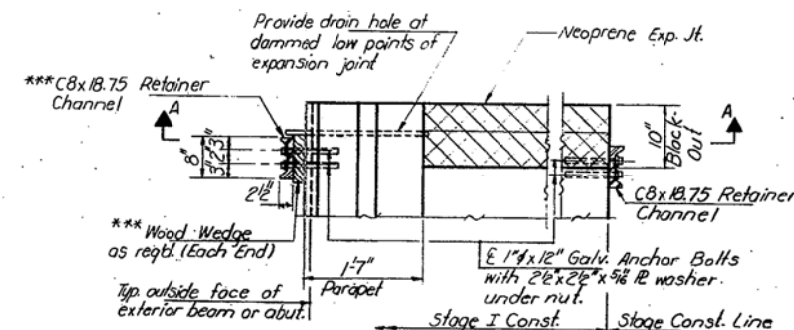
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A. 17	4BR-1	Carroll	22	18
SHEET NO. 8				
12 SHEETS				



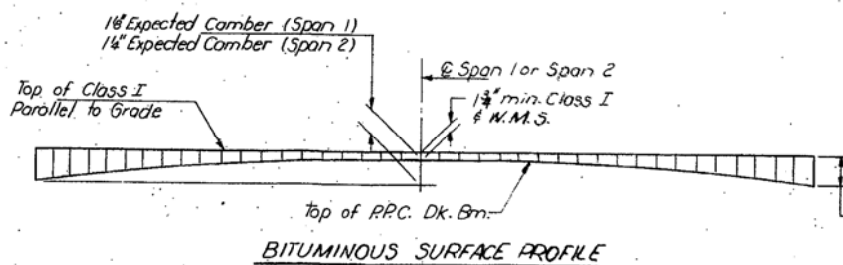
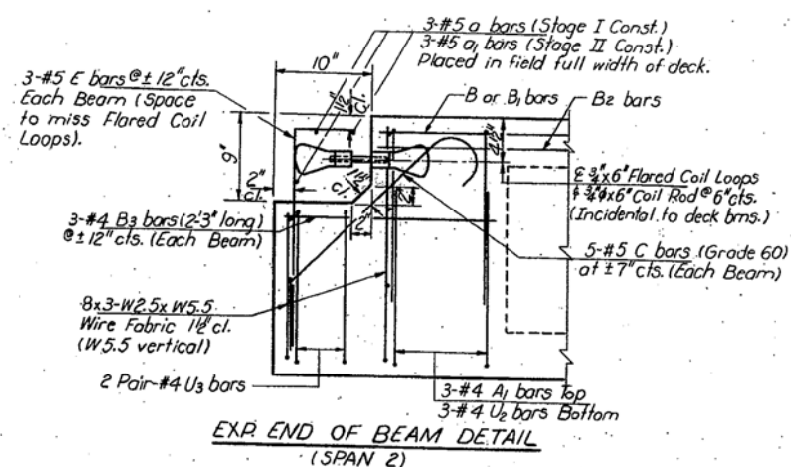
\*1" Joint shall be packed with a mix of 2:1 sand and P.C. mortar. This mortar may vary plus or minus to accommodate tolerance in beam lengths.



NOTES: Dimensions are at right angles. Cross hatched areas to be poured after beams have been erected and joints grouted. Ends of beams shall be aligned at the expansion joint. Any lineal variation in the beam lengths shall be placed at the fixed joint. See End of Beam Detail for reinforcement.



Note: After block-outs are poured and cured, the Retainer Channels shall be removed. Anchor bolts may be left in place. Cost for removal of channels shall be incidental.



DESIGNED M. Bloxdorf  
CHECKED Jim Kohout  
DRAWN R. Doty  
CHECKED J.K.

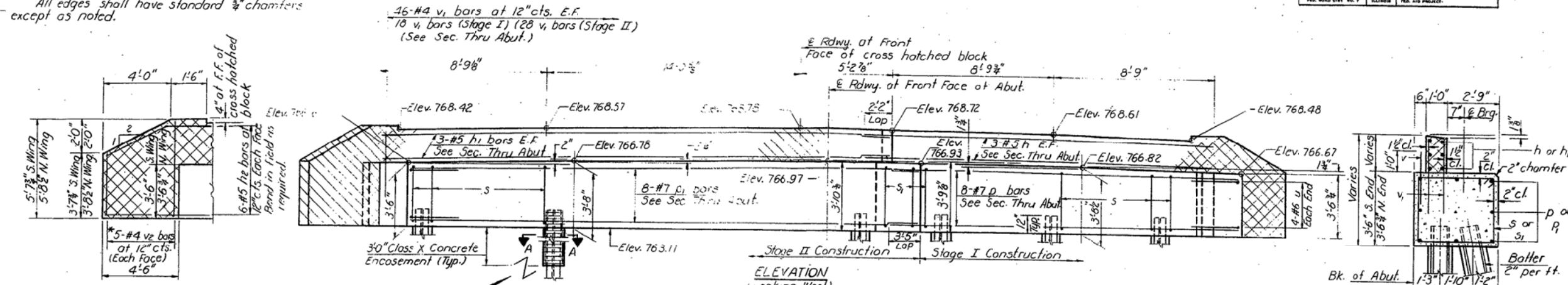
March 4, 1993

SUPERSTRUCTURE DETAILS  
F.A. 17 SEC. 4BR-1  
CARROLL COUNTY  
STA. 174+45.62

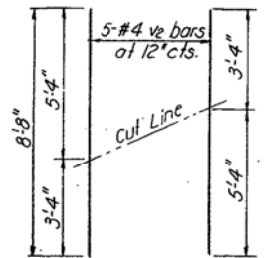
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4BR-1	Carroll	22	20	12 SHEETS

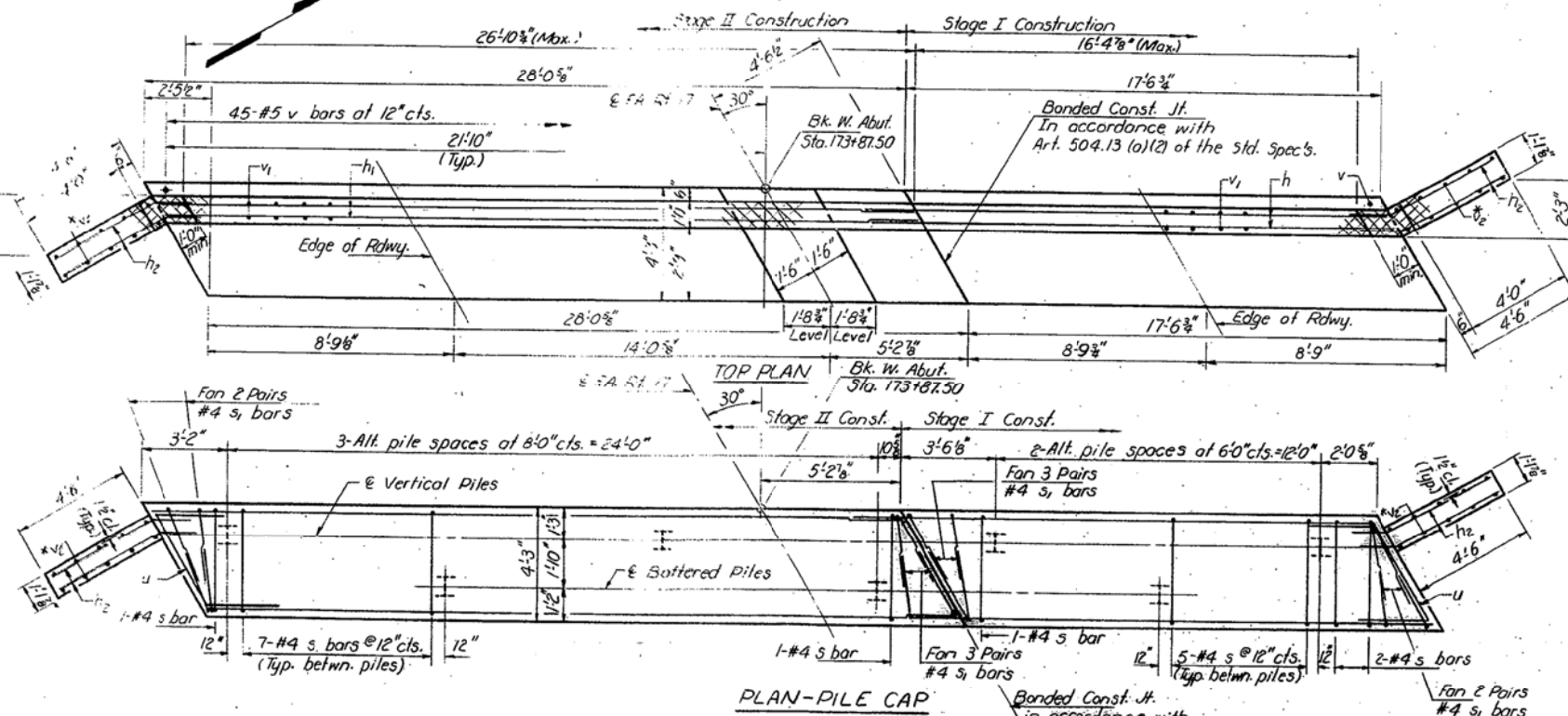
Notes:  
Cross hatched area to be poured after superstructure is in place. Quantity of Class X Concrete included with superstructure.  
All edges shall have standard 3/8" chamfers except as noted.



**FIELD CUTTING DIAGRAM**  
\*Order v<sub>2</sub> bars full length. Cut to fit as shown and use remainder of bars in opposite face.



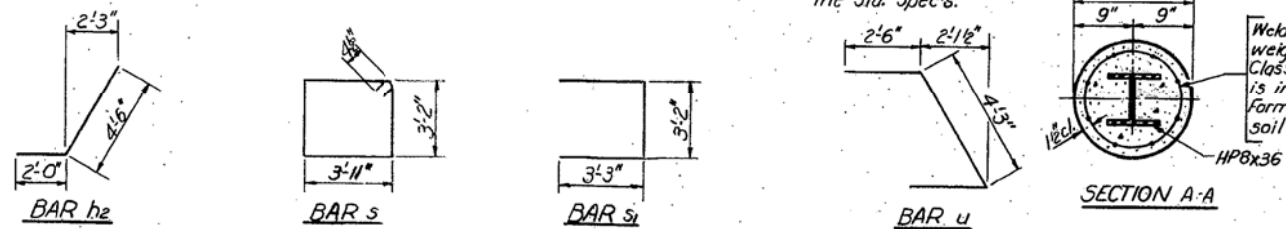
**PILE DATA**  
Type: Steel HPBx36  
Capacity: Drive to Refusal  
Est. Length: 38'  
No. Required: 6+1 test pile in a permanent location.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h	6	#5	19.8"	—
h <sub>1</sub>	6	#5	27.10"	—
h <sub>2</sub>	24	#4	6.6"	J
p	8	#7	20.11"	—
p <sub>1</sub>	8	#7	27.10"	—
s	36	#4	14.11"	□
s <sub>1</sub>	20	#4	9.18"	□
u	8	#6	9.13"	J
v	45	#5	2.0"	—
v <sub>1</sub>	92	#4	3.6"	—
v <sub>2</sub>	10	#4	8.9"	—
Class X Concrete		Cu. Yd.	26.3	
Reinforcement Bars		Pound	2160	
Steel Piles HPBx36		Lin. Ft.	228	
Test Pile Steel HPBx36		Each	1	

DESIGNED M. Bloxdorf  
CHECKED JIM KOHOUT  
DRAWN R. Doly  
CHECKED J.K.



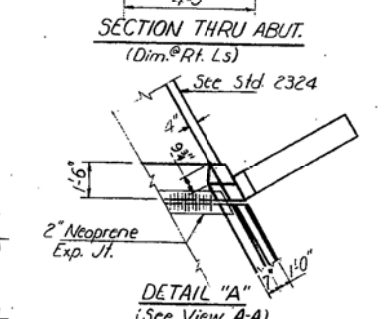
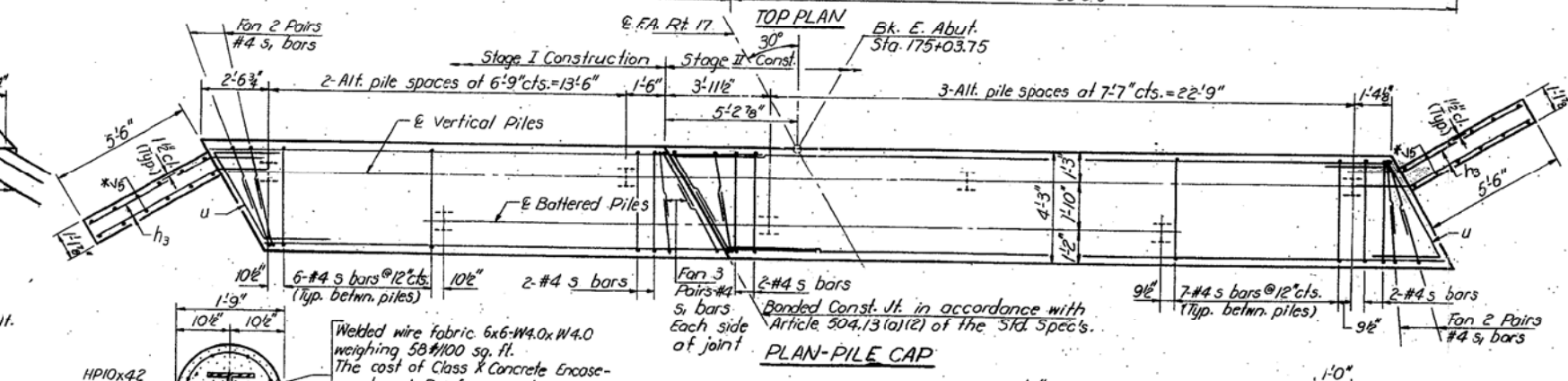
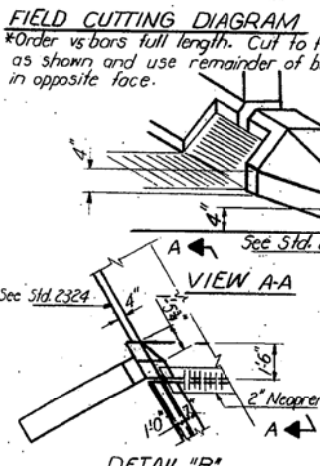
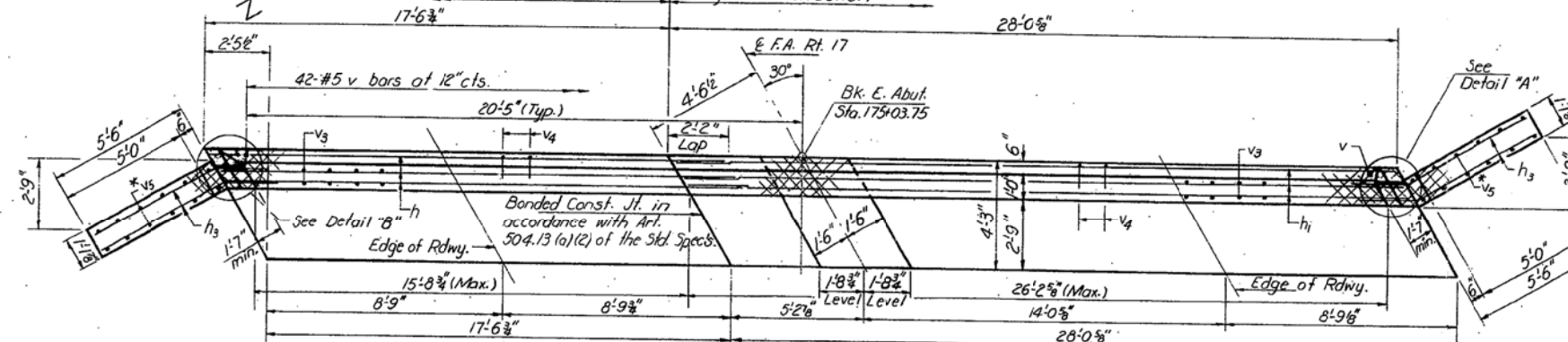
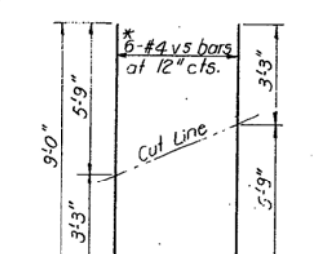
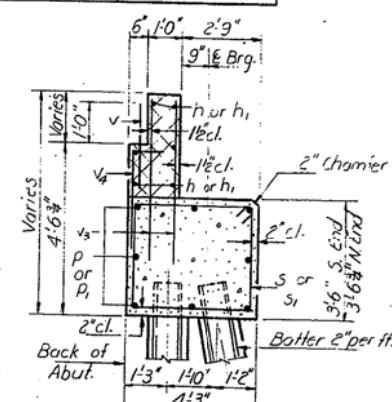
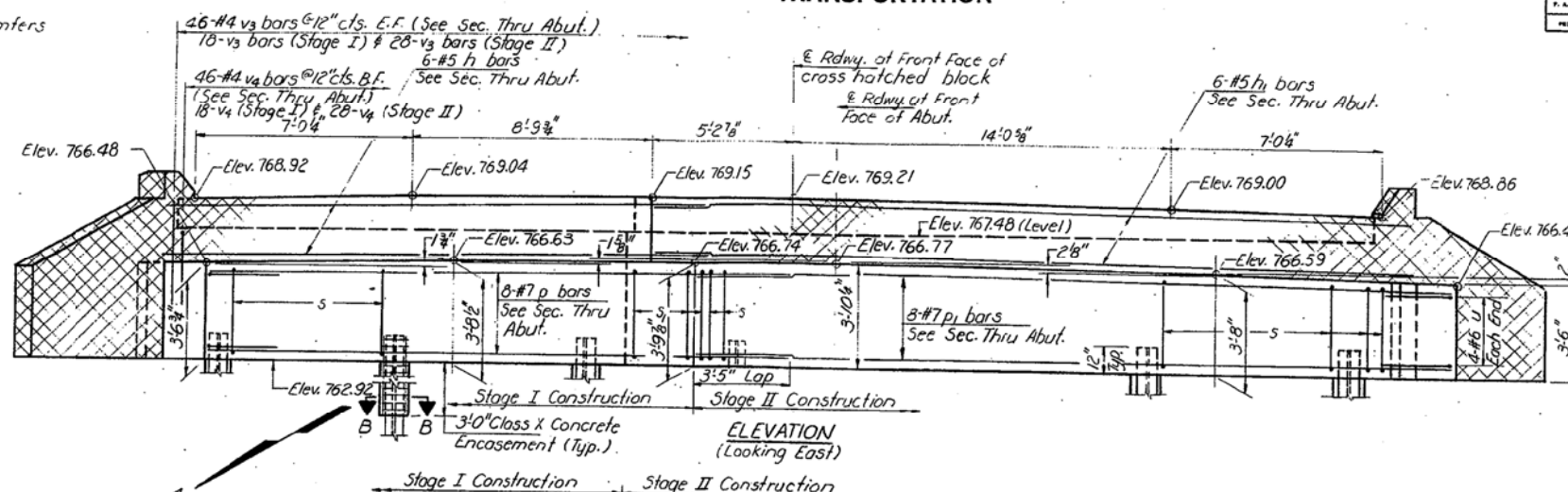
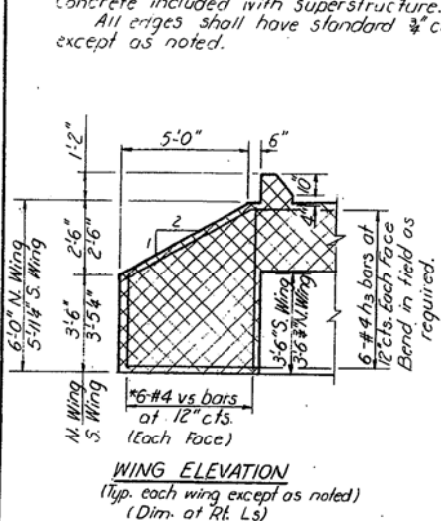
WEST ABUTMENT  
FA. RT. 17, SEC. 4BR-1  
CARROLL COUNTY  
STA. 174+45.62

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
17	4BR-1	Carroll	22	21
SHEET NO. 11 12 SHEETS				

Notes:

Cross hatched area to be poured after superstructure is in place. Quantity of Class X Concrete included with superstructure.  
All edges shall have standard chamfers except as noted.



**BILL OF MATERIAL**

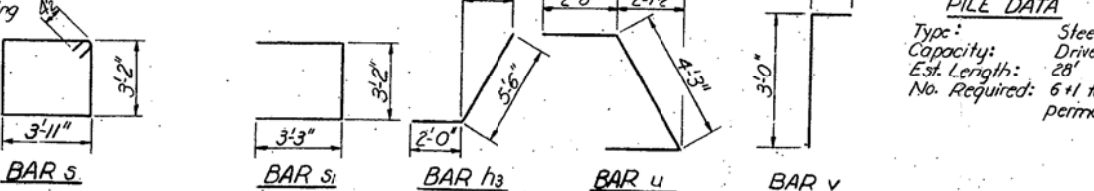
Bar	No.	Size	Length	Shape
h	6	#5	19'-8"	—
h <sub>1</sub>	6	#5	27'-10"	—
h <sub>2</sub>	24	#4	7'-6"	┘
p	8	#7	20'-11"	—
p <sub>1</sub>	8	#7	27'-10"	—
s	39	#4	14'-11"	┘
s <sub>1</sub>	20	#4	9'-8"	┘
u	8	#6	9'-3"	┘
v	42	#5	2'-0"	—
v <sub>1</sub>	84	#4	4'-0"	—
v <sub>2</sub>	46	#4	4'-0"	┘
v <sub>3</sub>	12	#4	9'-0"	—

Class X Concrete Cu. Yd. 26.3  
Reinforcement Bars Pound 2370  
Steel Piles HP10x42 Lin. Ft. 168  
Test Pile Steel HP10x42 Each 1

DESIGNED M. Bloxdorf  
CHECKED JIM KENOU  
DRAWN R. Doty  
CHECKED J.K.

March 1, 1994  
APPROVED  
[Signature]

SECTION B-B  
Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles. Forms for encasement may be omitted when soil conditions will permit.

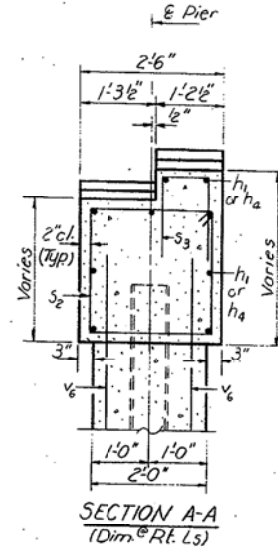
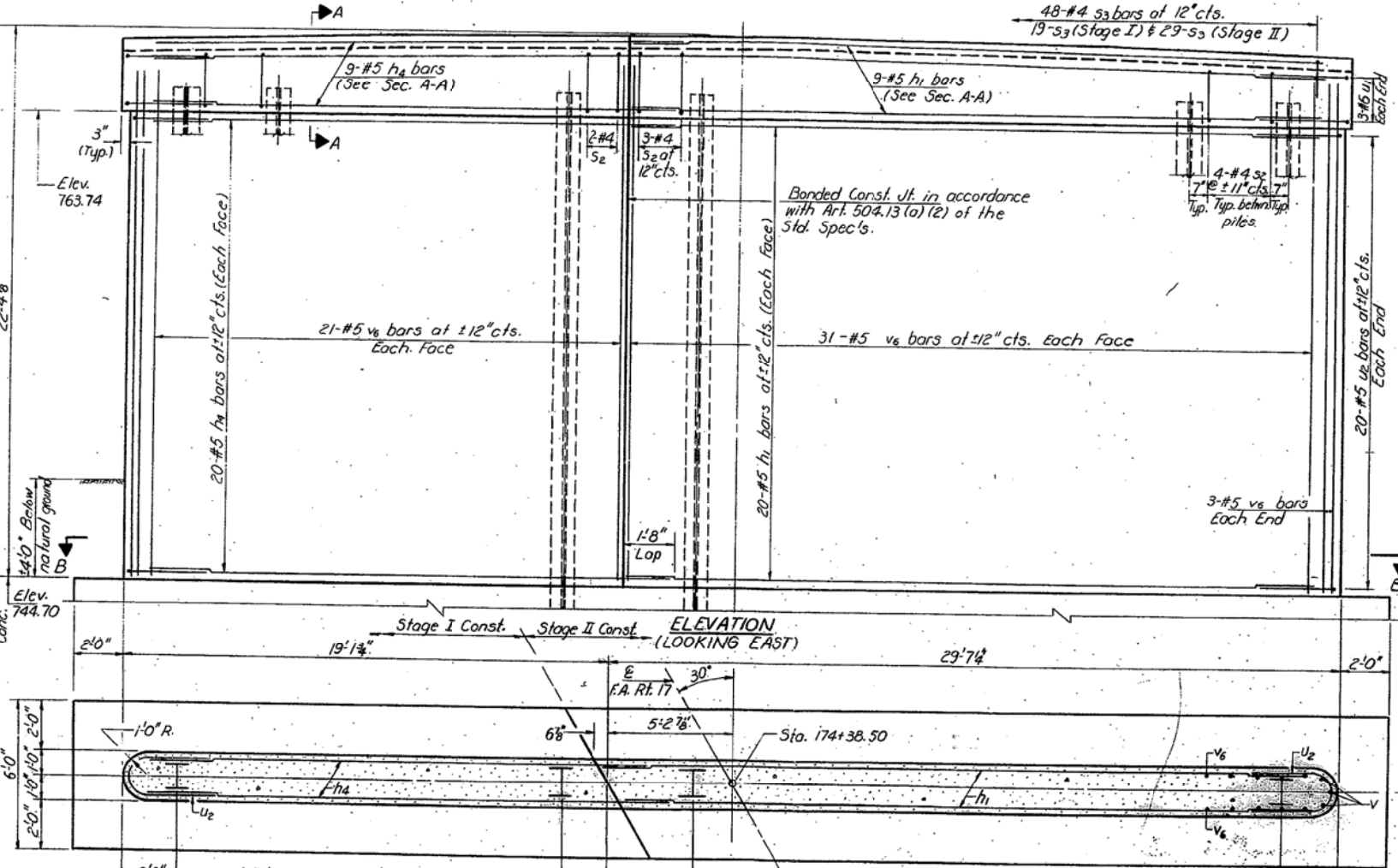
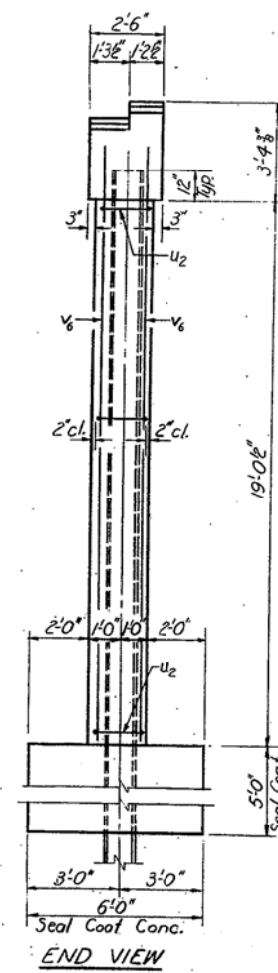
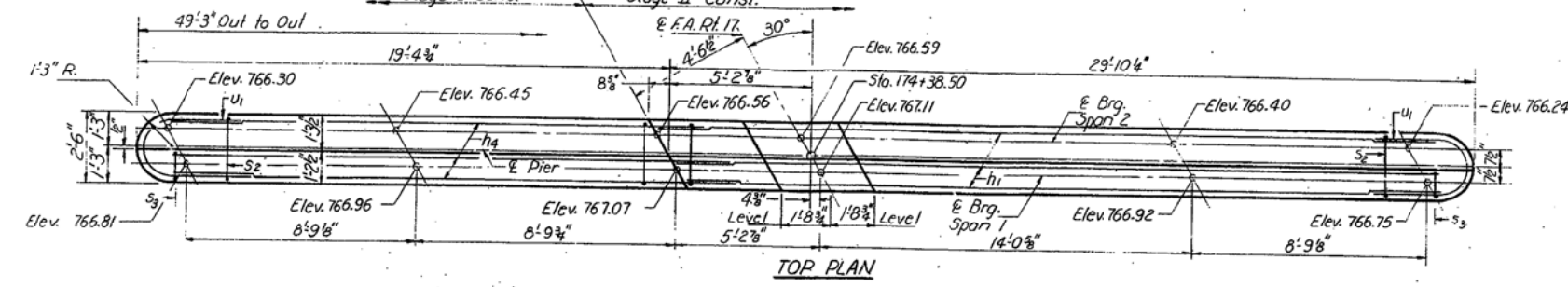


EAST ABUTMENT  
EA. RT. 17 SEC. 4BR-1  
CARROLL COUNTY  
STA. 174+45.62

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
A.A. 17	4BR-1	Carroll	22	22	12 SHEETS

**PILE DATA**  
 Type: Steel HP 8x36  
 Capacity: Drive to Refusal  
 Est. Length: 36'  
 No. Required: 12



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1	29	#5	27'10"	—
h4	29	#5	19'3"	—
s2	45	#4	9'7"	□
s3	48	#4	4'5"	□
u1	6	#6	9'11"	—
u2	40	#5	5'3"	—
v6	58	#5	20'6"	—

Class X Concrete	Cu. Yd.	81.4
Reinforcement Bars	Pound	3570
Cofferdams	Each	1
Seal Coat Concrete	Cu. Yd.	58.6
Steel Piles (HP8x36)	Lin. Ft.	432

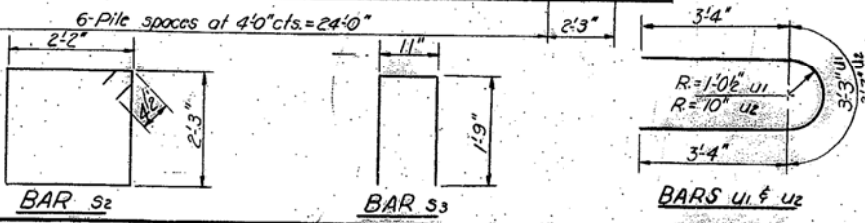
Note:  
The quantity of Seal Coat Concrete is based upon a design water elevation of 762.0.

DESIGNED M. Bloxdorf  
 CHECKED Jim Kohout  
 DRAWN R. Doty  
 CHECKED J.K.

March 4, 2013  
 James Thompson  
 PROJECT ENGINEER  
 APPROVED  
 REGISTERED PROFESSIONAL ENGINEER

Note:  
All edges shall have standard 3/8" chamfers.

SECTION B-B

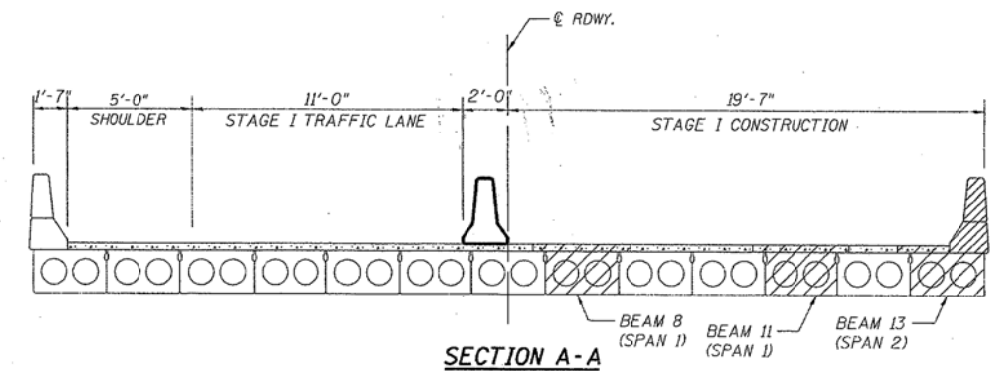
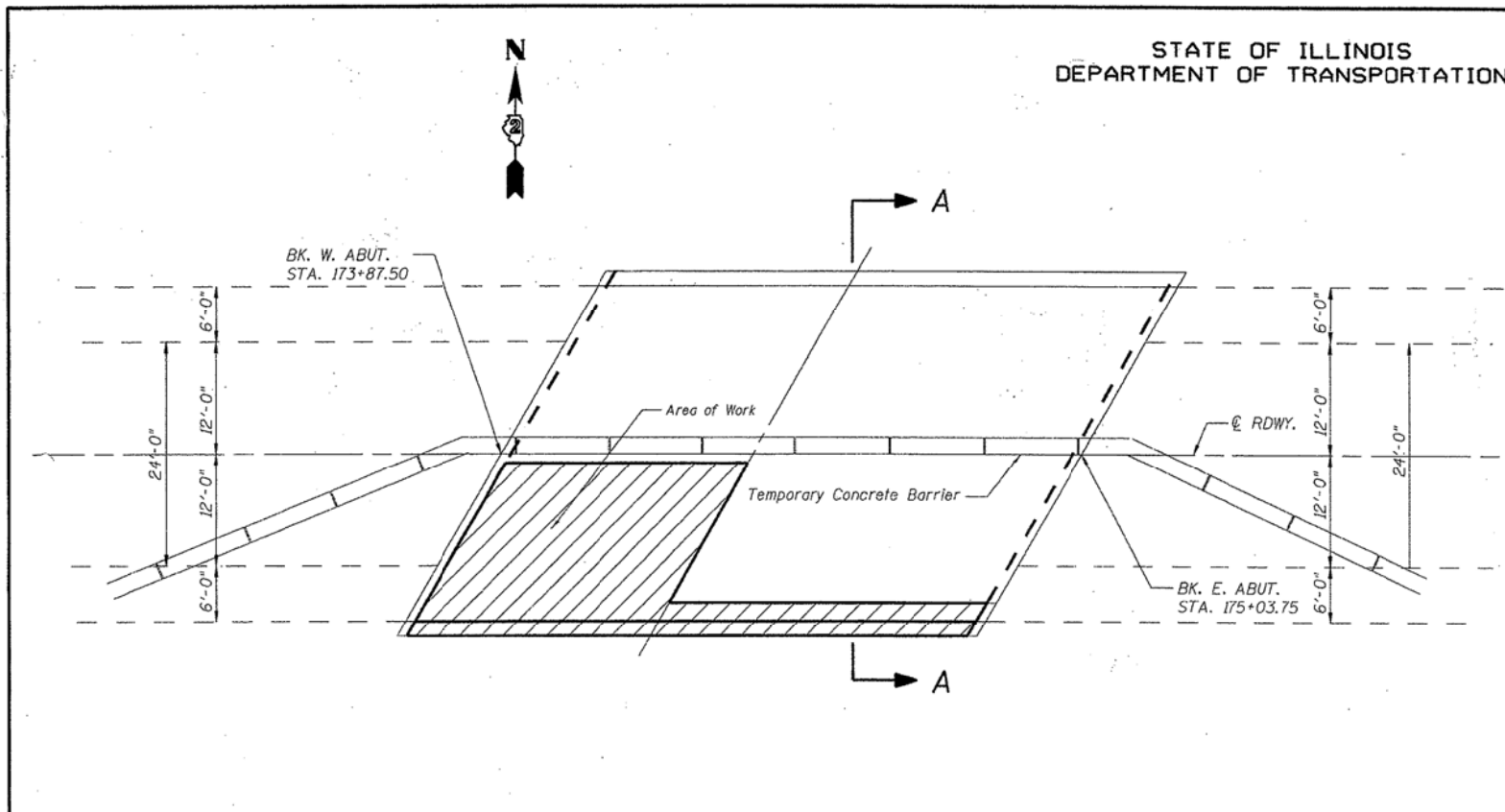


PIER  
 F.A. RT. 17 SEC. 4BR-1  
 CARROLL COUNTY  
 STA. 174+45.62



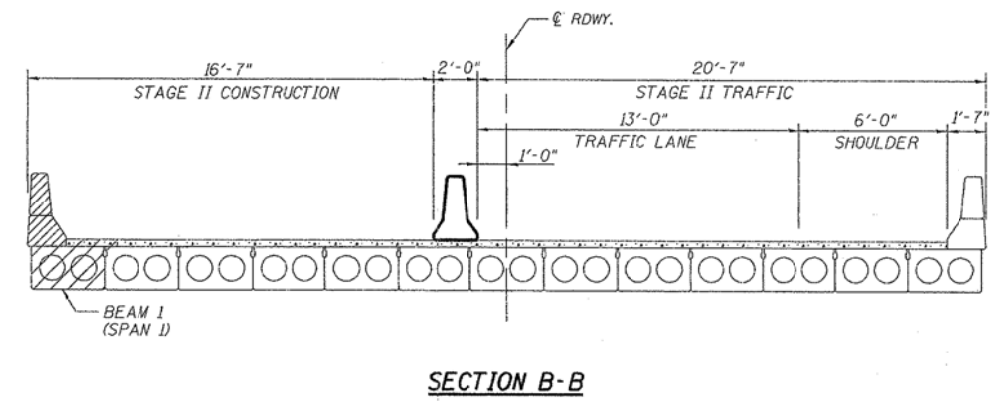
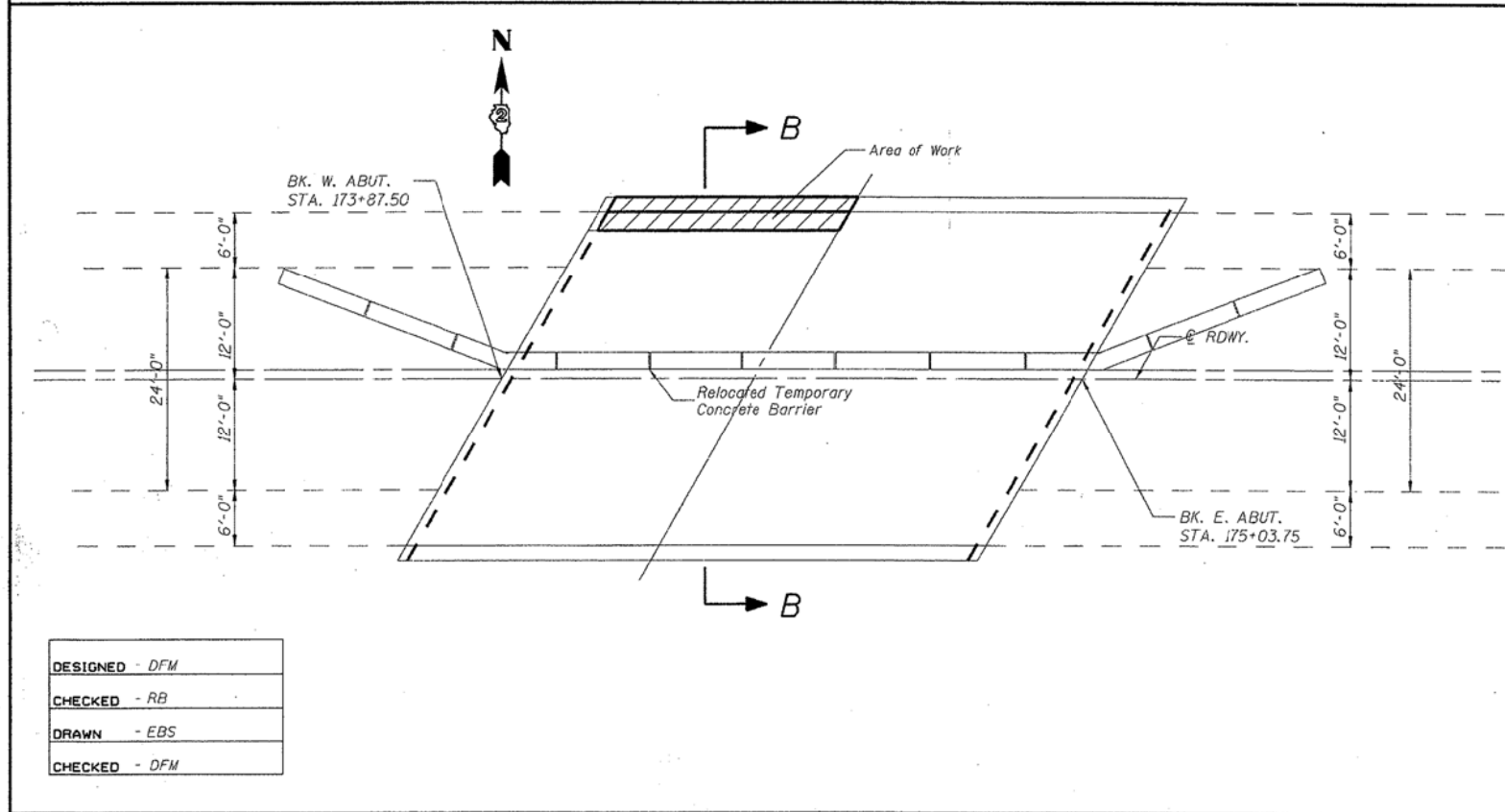
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO.
FAP 17		CARROLL	27	16	6 SHEETS
FED. AID PROJ. NO. 7	BRIDGE	FED. AID PROJECT			



**SECTION A-A**

**STAGE I CONSTRUCTION**  
 Install temporary concrete barrier as shown.  
 Move traffic to single Stage I traffic lane.  
 Sawcut concrete wearing surface, remove deck over Beams 8 & 11 (span 1) and Beam 13 (span 2). Disconnect tie rods. Remove beams.  
 Salvage existing deck drains through parapet, for reinstallation.  
 Replace beams, wearing surface, and parapet.



**SECTION B-B**

**STAGE II CONSTRUCTION**  
 Relocate temporary concrete barrier as shown.  
 Move traffic to Stage II traffic lanes.  
 Sawcut concrete wearing surface, remove deck over Beam 1 (Span 1). Disconnect tie rods. Remove beam.  
 Salvage existing deck drains through parapet, for reinstallation.  
 Replace beam, wearing surface, and parapet.  
 Remove temporary concrete barrier.

**STAGING PLAN**  
**F.A.P. 17 (US RTE 52 & IL RTE 64)**  
**CARROLL COUNTY**  
**STRUCTURE NO. 008-0030**

DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

FILE NAME = ... \0264083-SHT-ExB-ridge.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
		DRAWN - LCR	REVISED -
		CHECKED - DAZ	REVISED -
		DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ZROKA**  
 engineering  
 Zroka Engineering, P.C.  
 4216 North Hermitage  
 Chicago, IL 60613

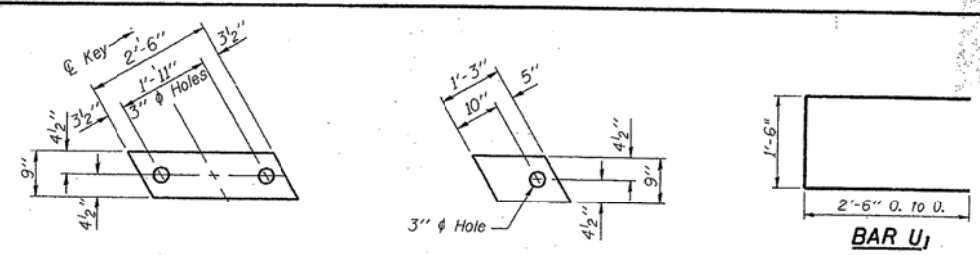
EXISTING BRIDGE PLANS - 1994  
 FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	122
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

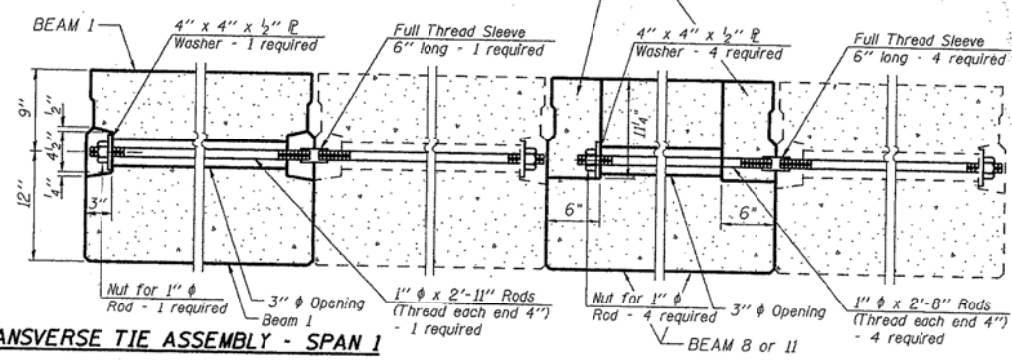
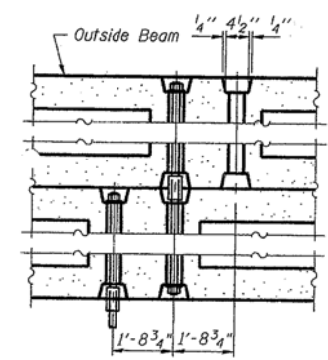
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 17		CARROLL	27	17
FED. ROAD DIST. NO.	BARRELS	FED. AID PROJECT		



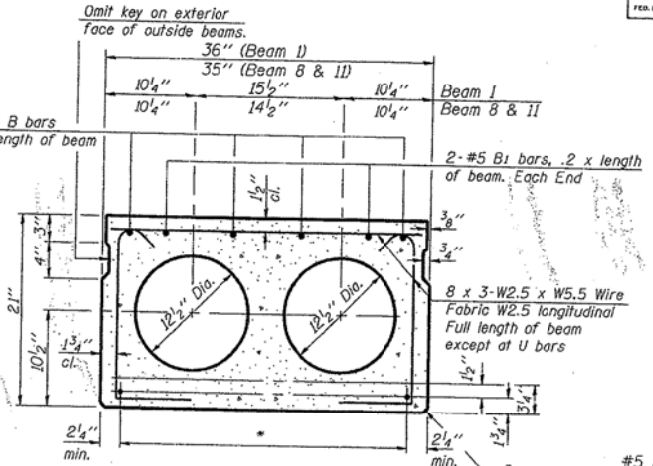
**FABRIC BEARING PAD**  
(Interior)  
(None Required)

**FABRIC BEARING PAD**  
(Exterior)  
(12 Required)

6" x 2'-7" x 11 1/4" Blockout to be filled with Class BS Concrete after Beams have been installed. Cost shall be Included in the cost of "Concrete Wearing Surface". Blockout needed on both sides, Beams B & 11.



**TYPICAL TRANSVERSE TIE ASSEMBLY - SPAN 1**



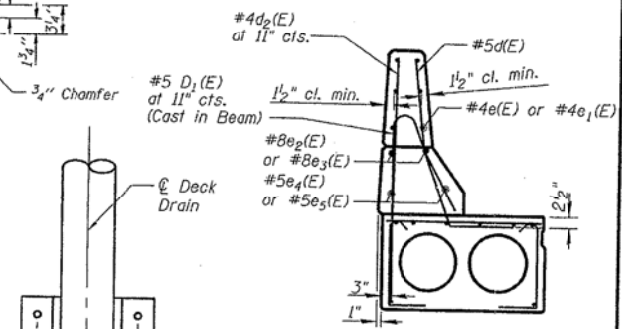
**TYPICAL SECTION**

1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
5-Strands 1 1/4" up, 8-Strands 3/4" up, 2-Strands 9" up  
Note: Place strands symmetrically about  $\phi$  of beam.

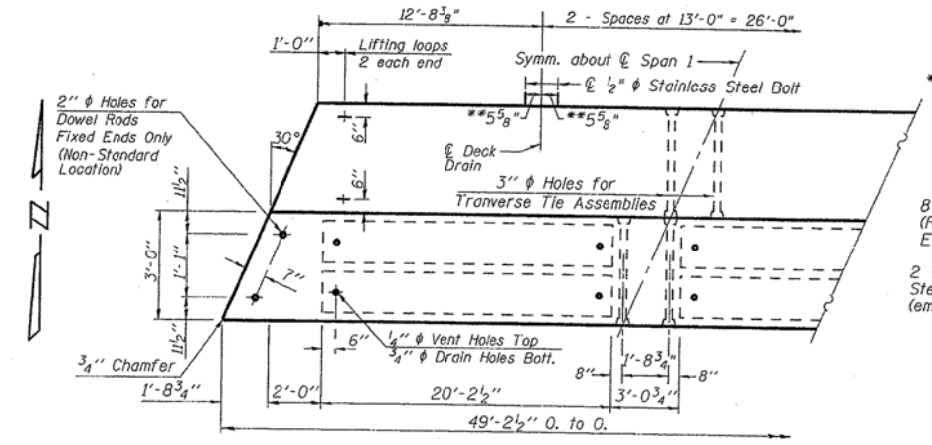
**TRANSVERSE PLACEMENT GUIDELINES**

- Place strands symmetrically about centerline of beam.
- The minimum distance from center to center of strands in all directions shall be 2".
- The minimum clearance from strand to dowel hole shall be 1/2".
- The minimum clearance from strand to void shall be 1/2".

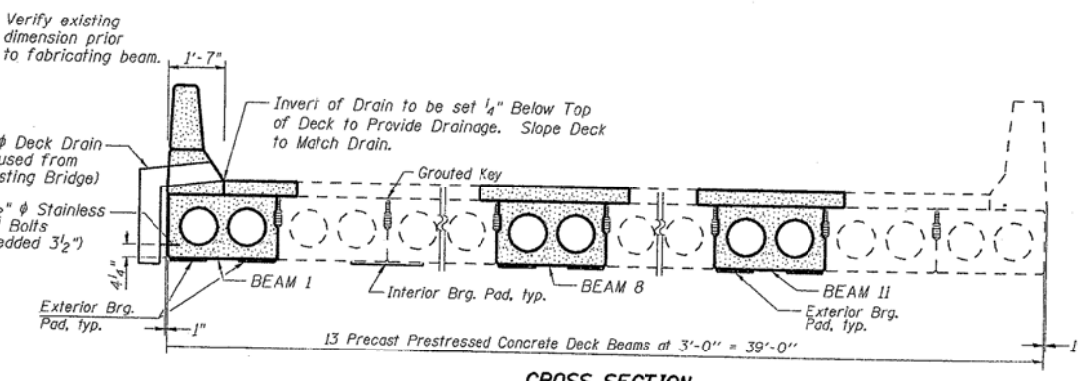
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



**PARAPET REINFORCEMENT**

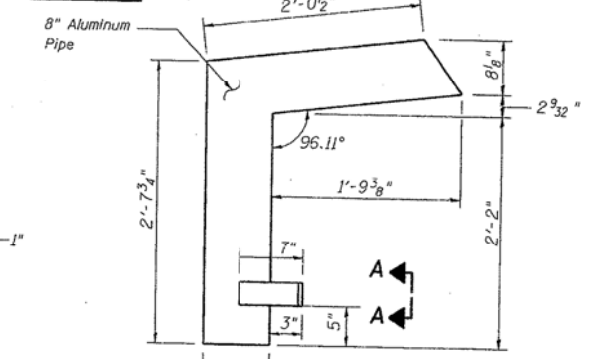


**PARTIAL PLAN SPAN 1**



**CROSS SECTION**

**VIEW A-A**



**ALUMINUM DECK DRAIN**

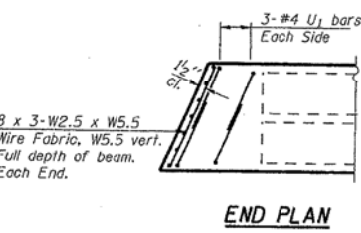
(Existing to be reinstalled in new parapet. Cost to be incidental to concrete superstructure.)

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (21" Deep)	Sq. Ft.	435
--	---------	-----

**DECK BEAM DETAILS**

SPAN 1  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0030

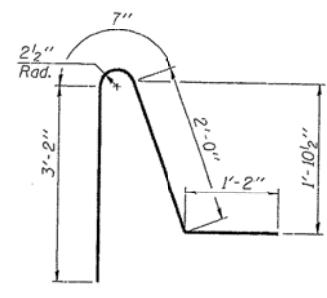


**END PLAN**

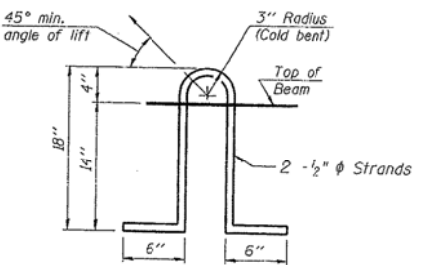
DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

PD-3-L

11-1-06



**BAR D1 (E)**



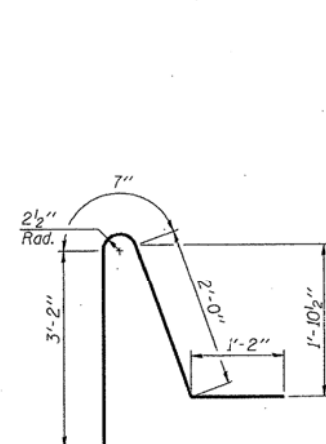
**LIFTING LOOP DETAIL**

**NOTES**

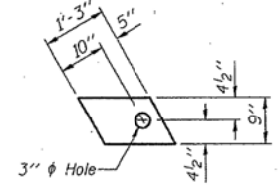
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2"  $\phi$  270 ksi strands, as shown. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Packets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4000 p.s.i.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

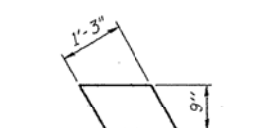
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 17		CARROLL	27	18
FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT	



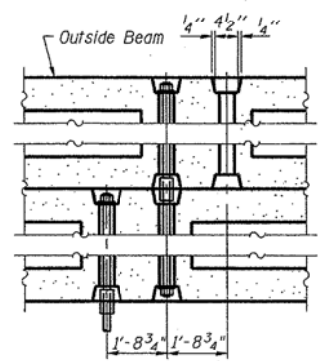
BAR D (E)



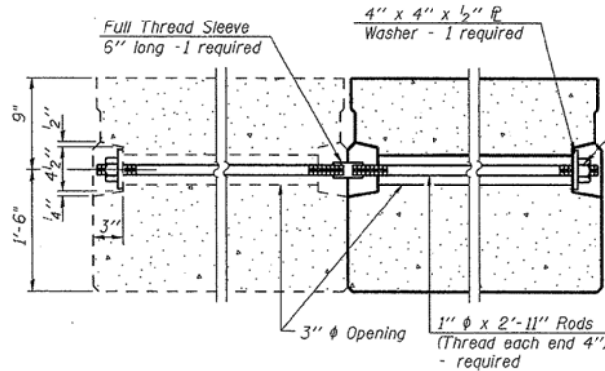
FABRIC BEARING PAD  
(Exterior)  
(2 Required)  
FIXED



FABRIC BEARING PAD  
(Exterior)  
(2 Required)  
EXPANSION



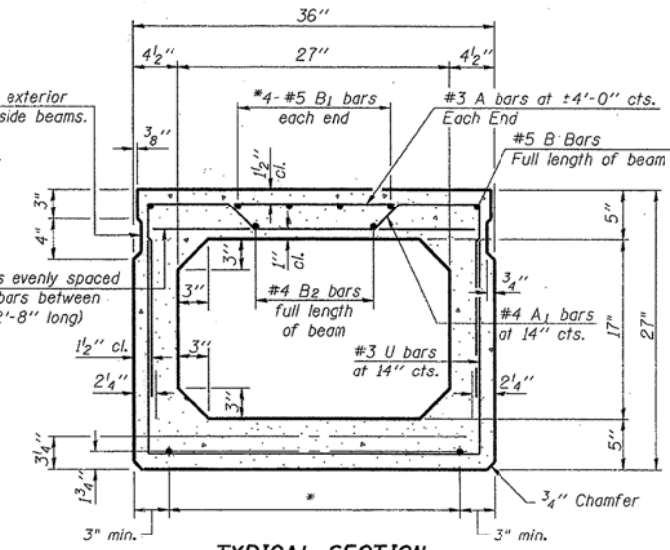
TYPICAL TRANSVERSE TIE ASSEMBLY - SPAN 2



Omit key on exterior face of outside beams.  
Nut for 1" rod - 1 required

2-#3 A bars evenly spaced between A1 bars between end blocks (2'-8" long)

\*0.2 x Length of beam



TYPICAL SECTION

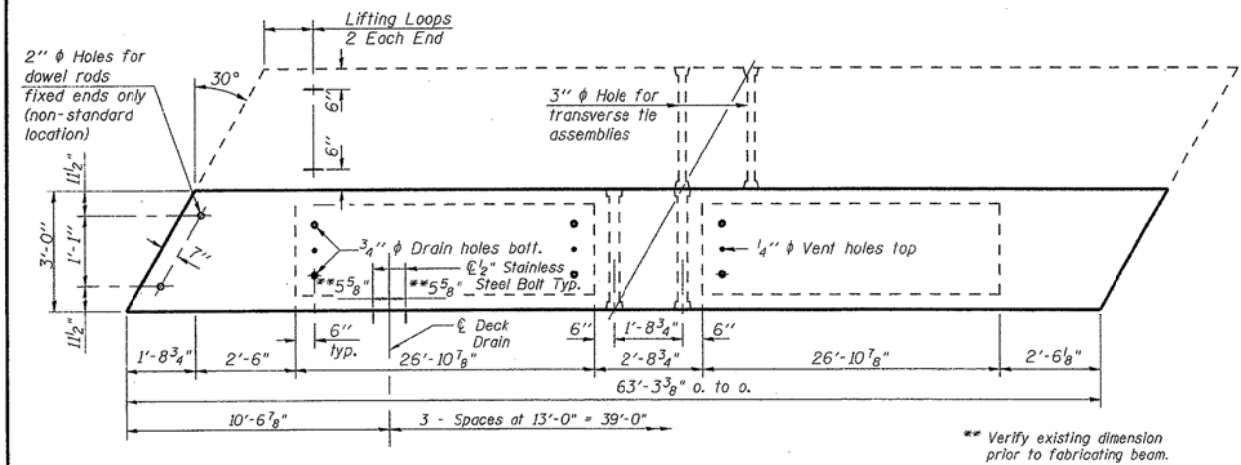
1/2" Strands, Each Strand Stressed to 30,900 Lbs.  
6-Strands 1 3/4" up, 6-Strands 3/4" up, 2-Strands 7/2" up, 2-Strands 10 1/2" up, 2-Strands 13 1/2" up

Note: Place strands symmetrically about centerline of beam.

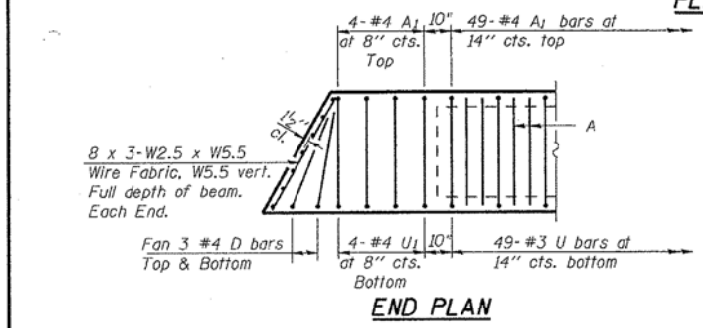
\*TRANSVERSE PLACEMENT GUIDELINES

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1/2".

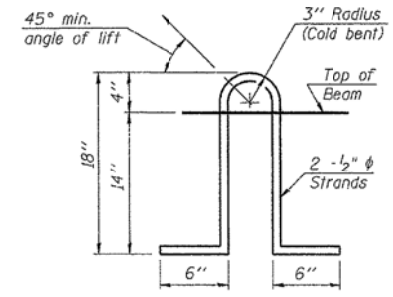
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



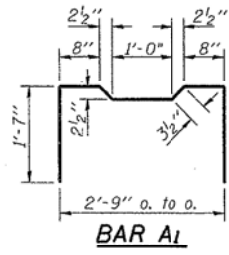
PLAN



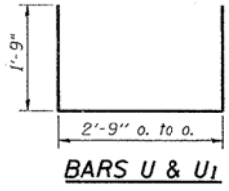
END PLAN



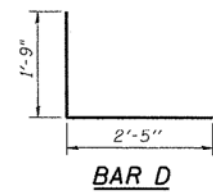
LIFTING LOOP DETAIL



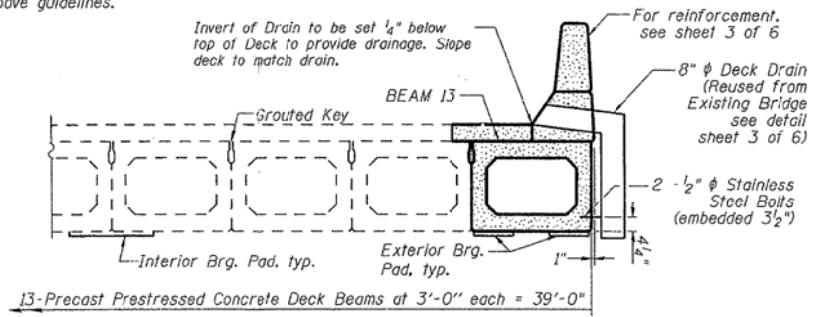
BAR A1



BARS U & U1



BAR D



PARTIAL CROSS SECTION

NOTES

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. Lifting loops shall be 2-1/2" phi-270 ksi strands, as shown. The 1" phi rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'cl, shall be 4000 p.s.i. See sheet 3 of 6 for Parapet Reinforcement and Deck Drain details.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" Deep)	Sq. Ft.	190
--	---------	-----

DECK BEAM DETAILS

SPAN 2  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0030

DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

PD-5-L 11-1-06

FILE NAME = ...N02640B3-SHT-Ex-Bridge.dgn

USER NAME = SAW  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 6/27/2013

DESIGNED - RAC  
DRAWN - LCR  
CHECKED - DAZ  
DATE - 06-28-13

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ZROKA engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

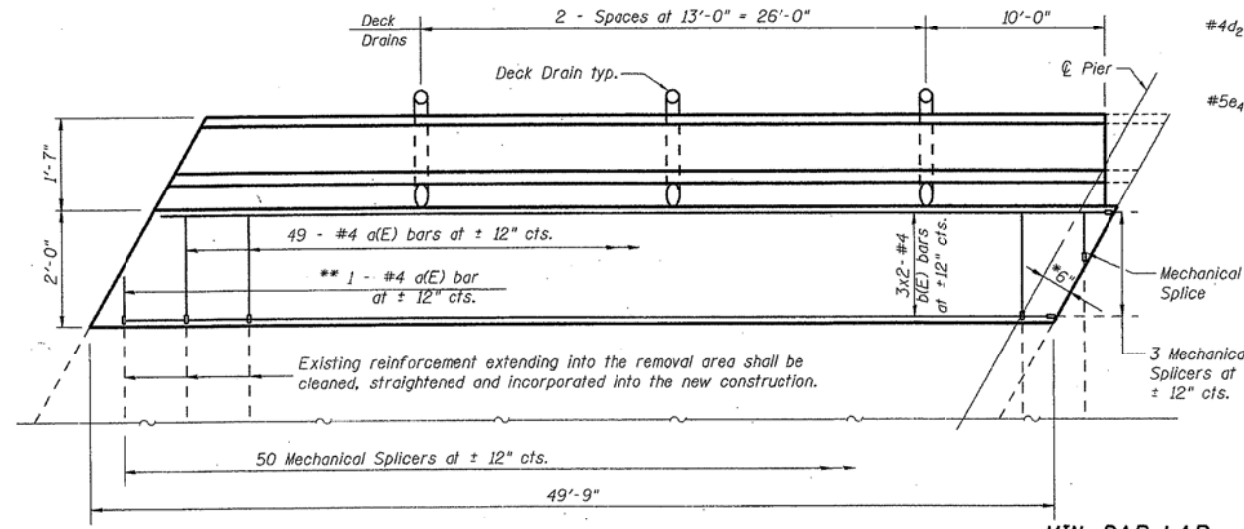
EXISTING BRIDGE PLANS - 1994  
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	124
			CONTRACT NO. 64DB3	
ILLINOIS FED. AID PROJECT				

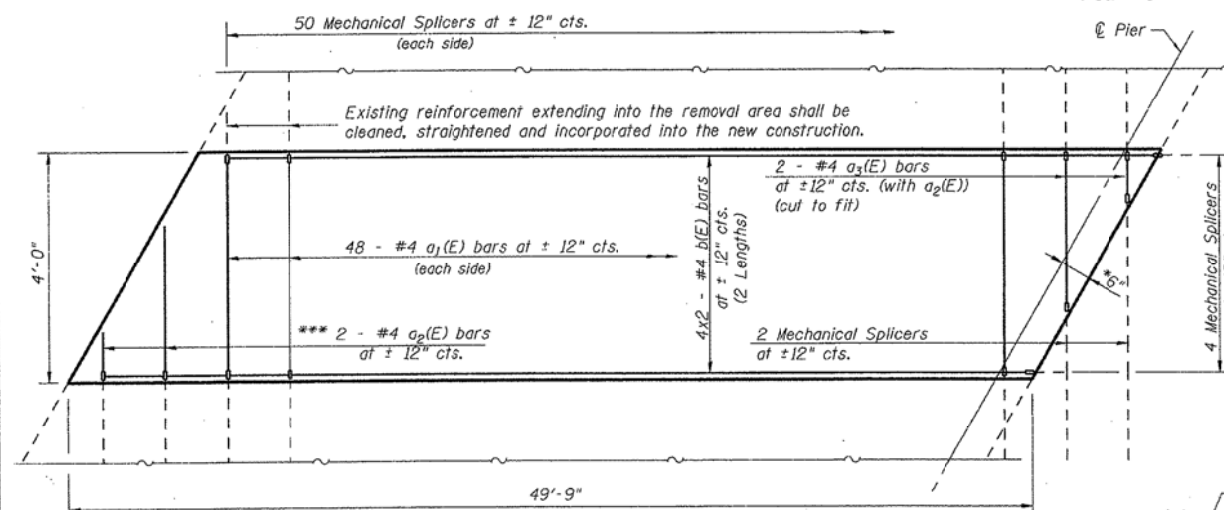


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 5 6 SHEETS
F.A.P. 17		CARROLL	27	19	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



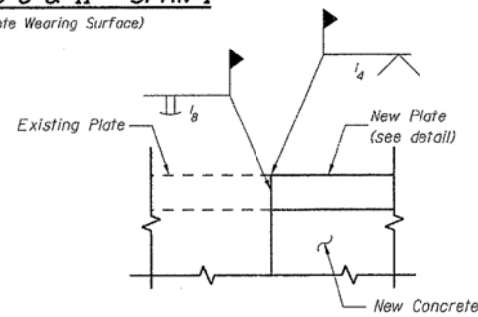
**PLAN BEAM 1 - SPAN 1**  
(Parapet & 5" Concrete Wearing Surface)



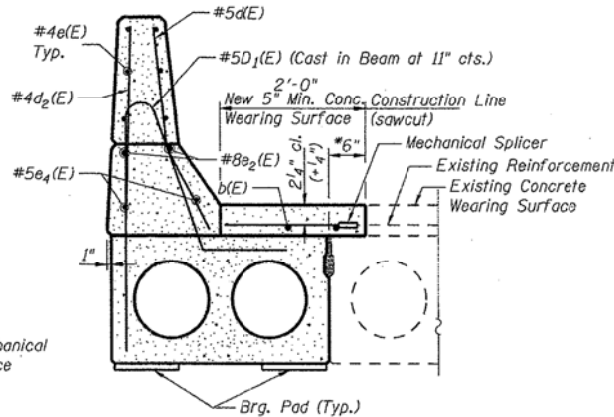
**PLAN BEAMS 8 & 11 - SPAN 1**  
(5" Concrete Wearing Surface)

\* Limits of 5" min. Concrete Wearing Surface Removal. Cost included with Concrete Removal.  
\*\*\* Order a2(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

DESIGNED - DFM
CHECKED - RB
DRAWN - EBS
CHECKED - DFM

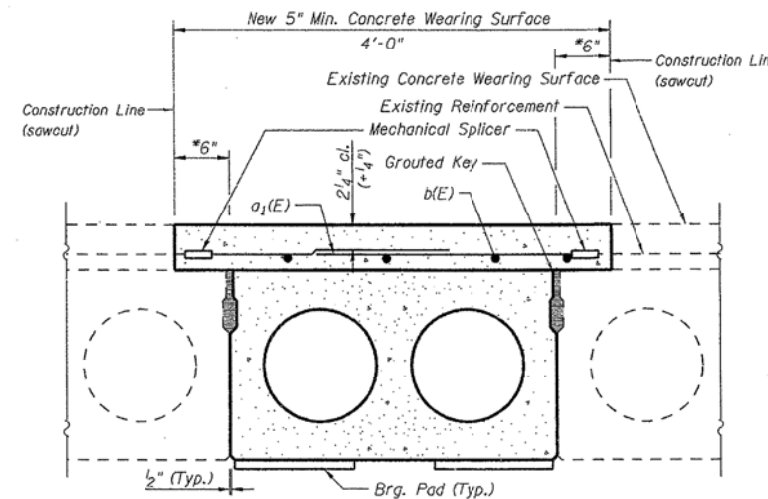


**ELEVATION JOINT PLATE WELD**  
Cost Included with PPC Deck Beams

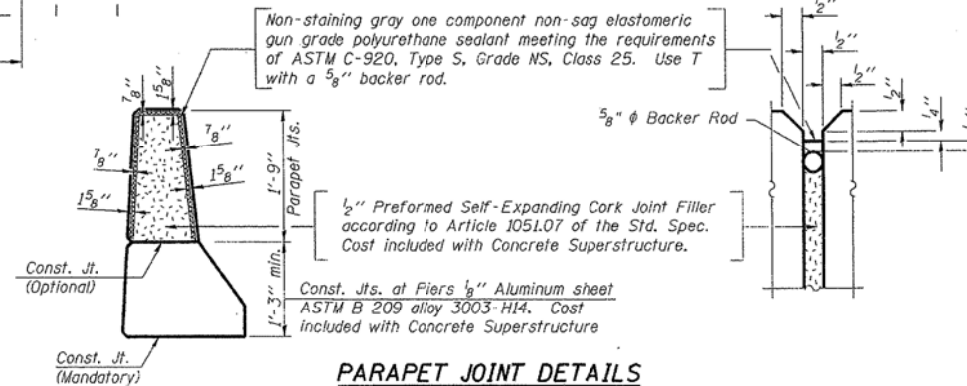


**SECTION THRU BEAM 1 & NORTH PARAPET**

\* Limits of 5" min. Concrete Wearing Surface Removal. Cost included with Concrete Removal.  
\*\* Order a(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



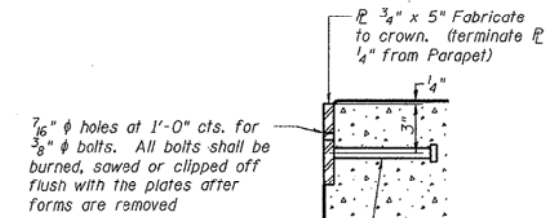
**SECTION THRU BEAMS 8 & 11**



**PARAPET JOINT DETAILS**

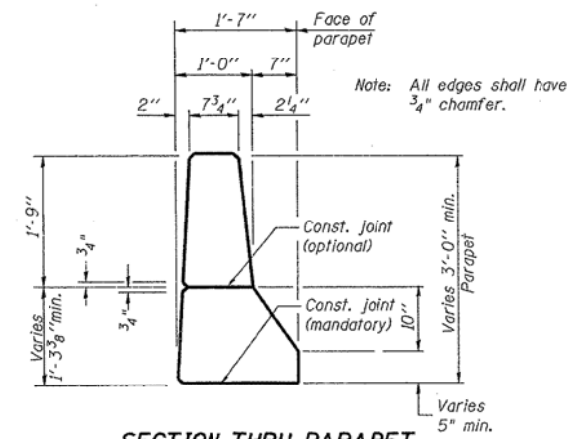
(see sheet 6 of 6 for locations)

Notes:  
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.



**NEW PLATE DETAIL**

(Cost Incidental to Concrete Wearing Surface, 5")



**SECTION THRU PARAPET**

**BILL OF MATERIALS**

See Sheet 6 of 6.

**SUPERSTRUCTURE DETAILS**

Sheet 1 of 2  
F.A.P. 17 (US RTE 52 & IL RTE 64)  
CARROLL COUNTY  
STRUCTURE NO. 008-0030

FILE NAME = ... \0264083-SHT-ExB-ridge.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
		DRAWN - LCR	REVISED -
		CHECKED - DAZ	REVISED -
		DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ZROKA**  
engineering

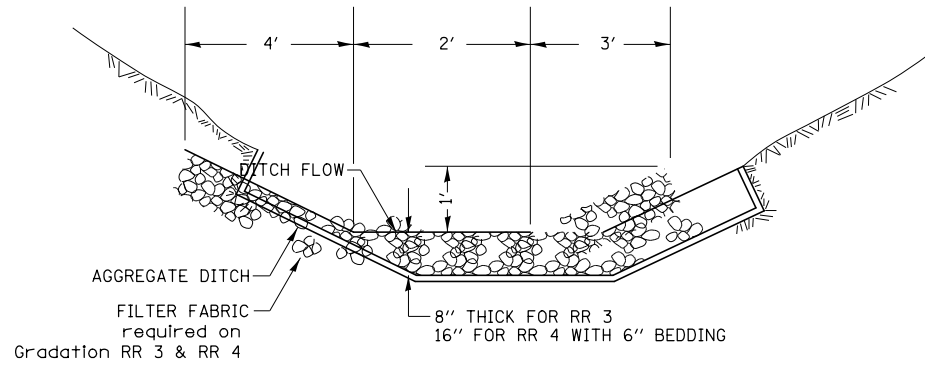
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1994  
FOR INFORMATION ONLY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	125
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

# AGGREGATE DITCH FOR FLEXIBLE DITCH LINING



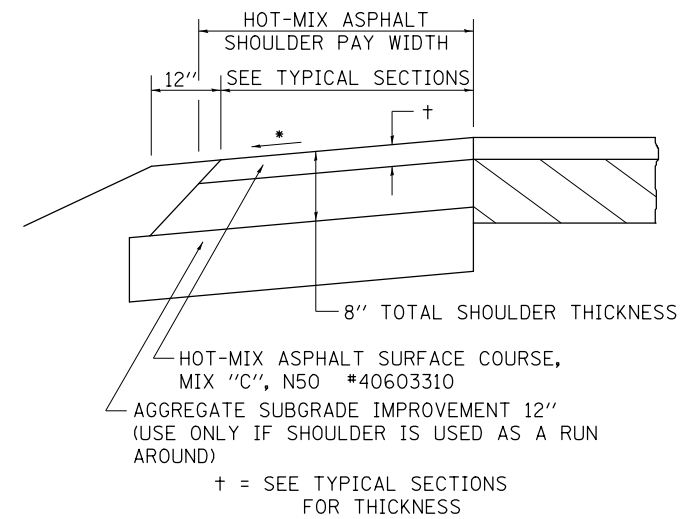
THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 281. AGGREGATE DITCH WILL BE MEASURED FOR PAYMENT IN PLACE AND THE AREA COMPUTED IN SQUARE YARDS OF ACTUAL SURFACE AREA. AGGREGATE DITCH WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR STONE RIPRAP CLASS A3 OR STONE RIPRAP CLASS A4 THE FILTER FABRIC SHALL BE ACCORDING TO SECTION 282. FILTER FABRIC WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR FILTER FABRIC.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 7-05-12

**AGGREGATE DITCH FOR FLEXIBLE DITCH LINING 21.4**

# HOT-MIX ASPHALT SHOULDER



**GENERAL NOTES**

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

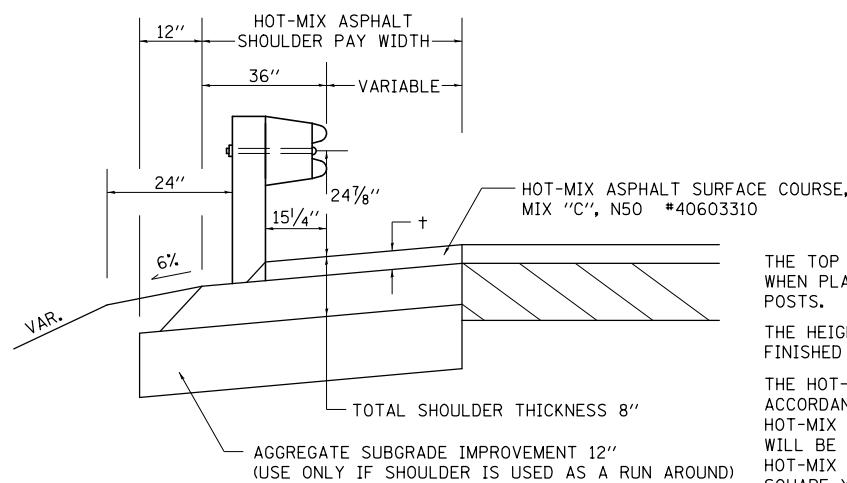
REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

REVISED - 3-13-13

**HOT-MIX ASPHALT SHOULDER 23.4a**

# DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL



+ = SEE TYPICAL SECTIONS FOR THICKNESS

**GENERAL NOTES**

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

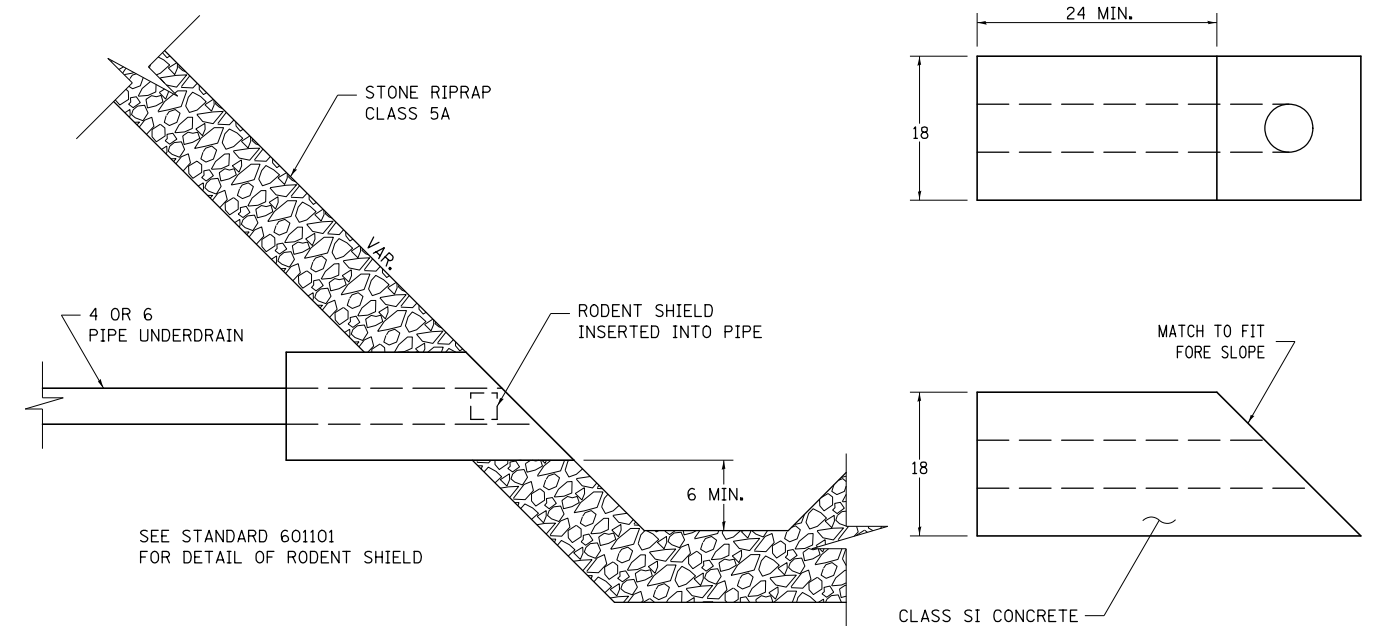
THE HEIGHT OF THE GUARD RAIL SHALL BE SET 24 7/8" FROM THE FINISHED SURFACE.

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

REVISED - 3-13-13

**DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL 23.4**

# CONCRETE HEADWALLS FOR PIPE DRAINS



SEE STANDARD 601101 FOR DETAIL OF RODENT SHIELD

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

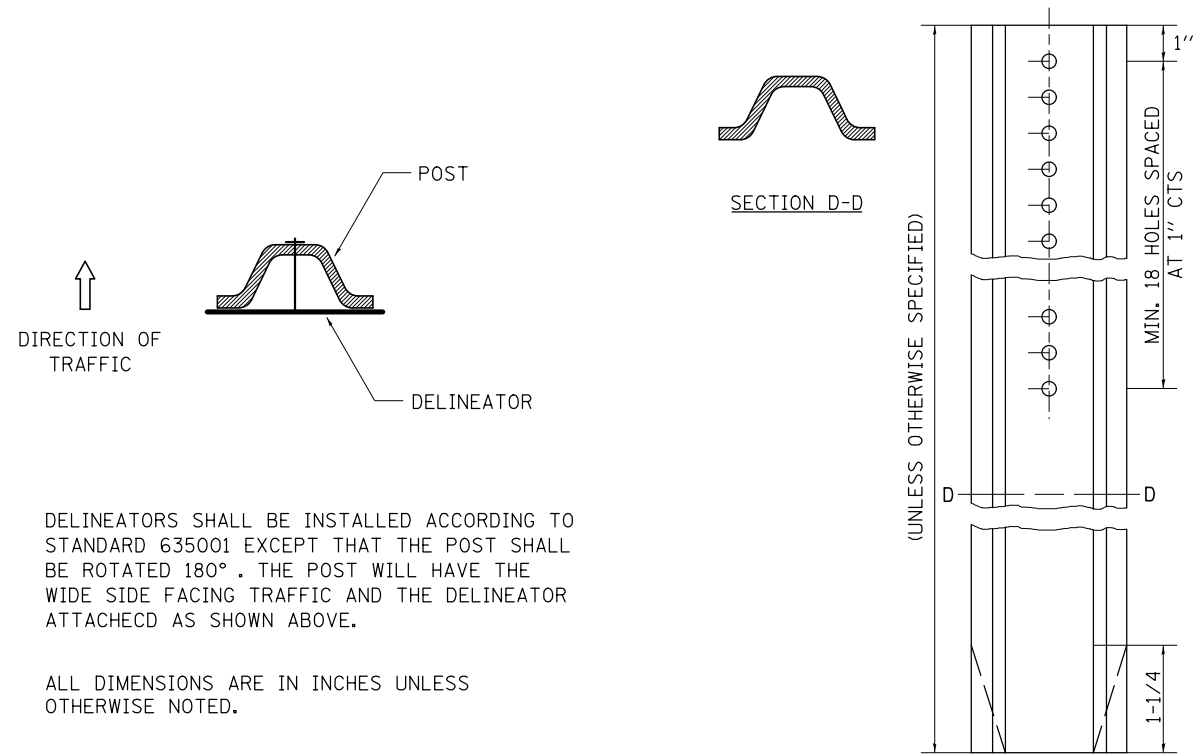
REVISED - 10-03-11

**CONCRETE HEADWALLS FOR PIPE DRAINS 27.4**

REVISED -	REGION 2 / DISTRICT 2 STANDARD				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -					17	4BR-5 & 4BR-6	CARROLL	150	126	
REVISED -					CONTRACT NO. 64D83					
REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
SCALE: *SCALE*	SHEET NO.	OF SHEETS	STA.	TO STA.						

PLOT DATE = \*DATE\*

# DELINEATOR AND POST ORIENTATION



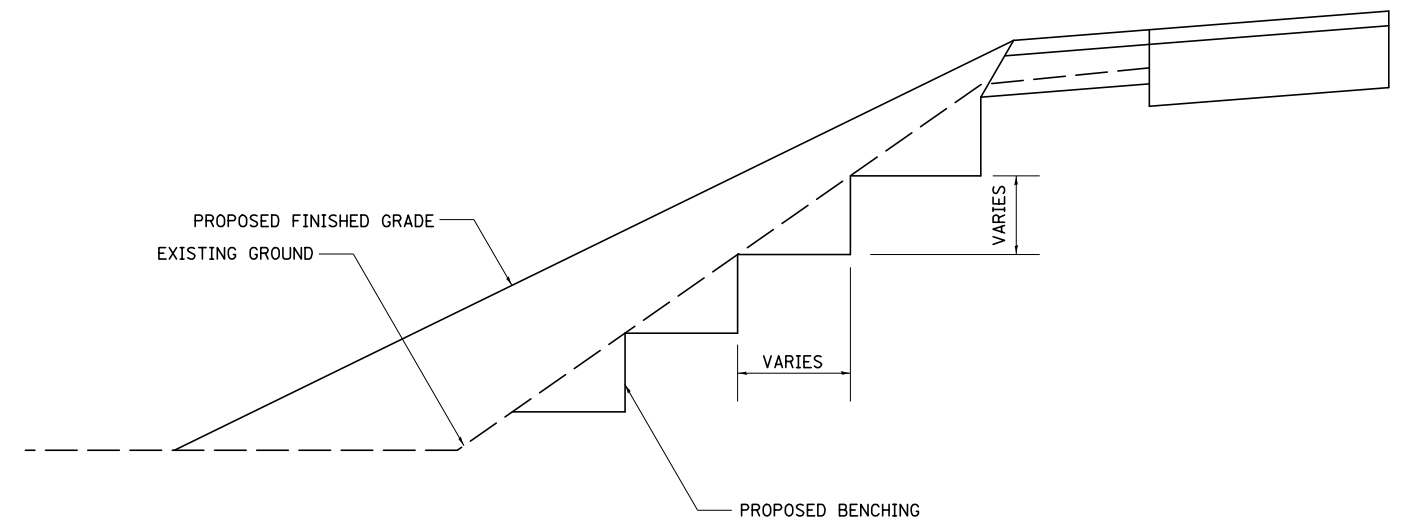
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11

## DELINEATOR AND POST ORIENTATION 37.4

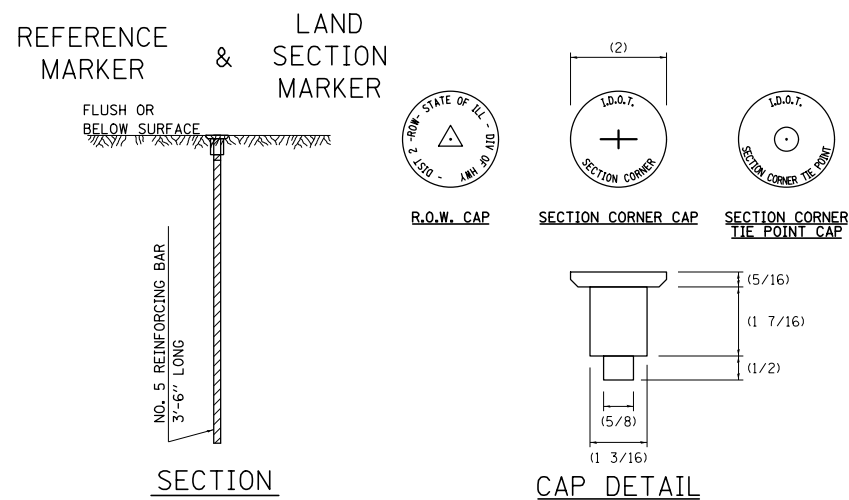
# TYPICAL BENCHING ON EXISTING EMBANKMENT



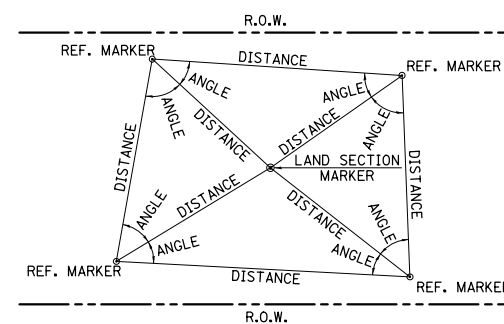
REVISED - 2-22-06

## TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

# LAND SECTION & REFERENCE MARKERS



### METHOD OF REFERENCING MARKERS



- USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC...)
- IN CULTIVATED FIELDS, SET 28" OR MORE BELOW GROUND SURFACE.
- IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL SO AS NOT TO BE DISTURBED BY MOWING.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

### METHOD OF REFERENCING POINTS

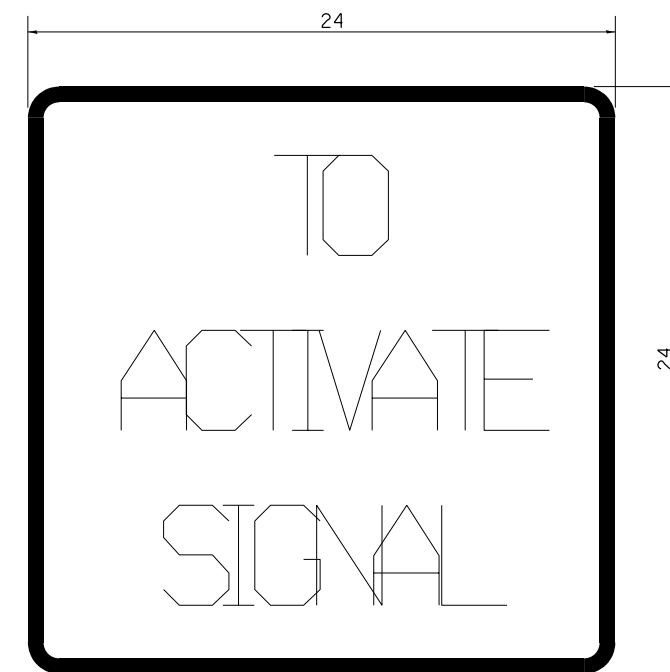
REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 3" BELOW THE SURFACE. LAND SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL BE REPLACED BY CORE DRILL AND RESETTING PIN.

ALUMINUM CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY THE SURVEYOR WHO IS RESPONSIBLE FOR MONUMENTING CORNERS.

REVISED - 3-05-10

## LAND SECTION & REFERENCE MARKERS 63.4

# STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 24 x 24  
 4 CAPITAL LETTERS - BLACK  
 1/2 BORDER - BLACK  
 WHITE REFLECTIVE - TYPE AP  
 HIGH INTENSITY PRISMATIC SHEETING

### GENERAL NOTE:

THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

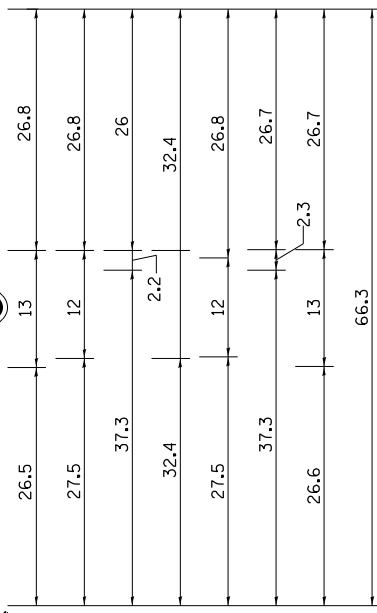
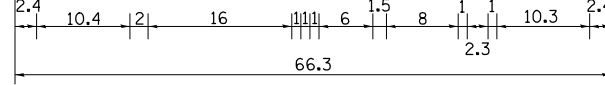
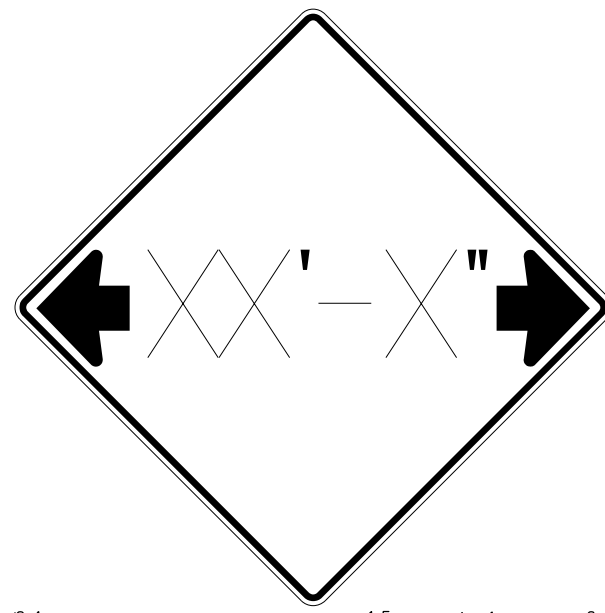
REVISED - 10-11-11

## STOP LINE SIGN FOR TEMPORARY SIGNALS 99.4

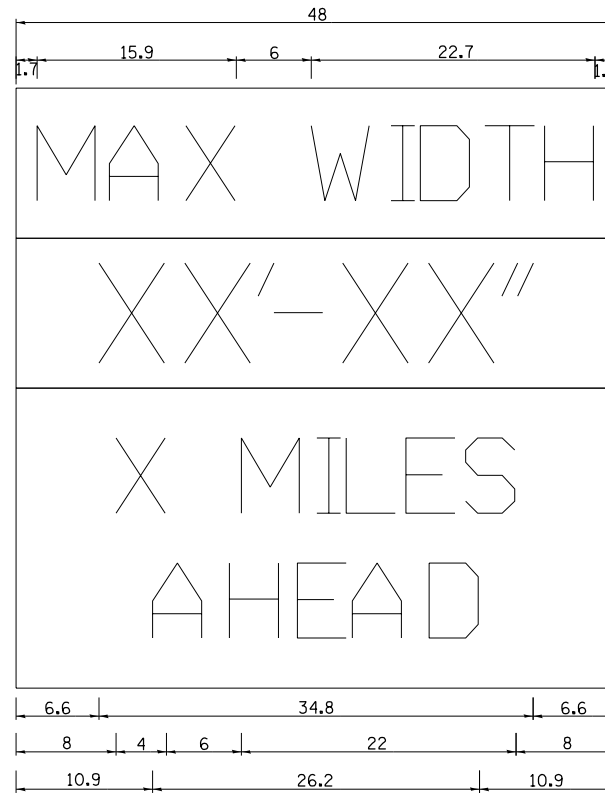
REVISED -	REGION 2 / DISTRICT 2 STANDARD				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -	SCALE: *SCALE*	SHEET NO.	OF SHEETS	STA.	TO STA.	17	4BR-5 & 4BR-6	WHITESIDE	150 127
REVISED -					CONTRACT NO. 64D83				
REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLOT DATE = \*DATE\*

# INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES  
 W12-2 - Horizontal Clearance Sign  
 48.0" across sides, 1.9" Radius,  
 0.8" Border, 0.5" Indent, Black on  
 Orange; Standard Arrow Custom  
 10.4" X 8.1" 180° Black 11 Inch  
 D Series Lettering; Standard Arrow  
 Custom 10.4" X 8.1" 0°



W12-1103 (Width is 8D);  
 No border, Black on White;  
 [MAX WIDTH] D;

No border, Black on Orange;  
 [XX'-XX''] D;

No border, Black on White;  
 [X MILES] D; [AHEAD] D;

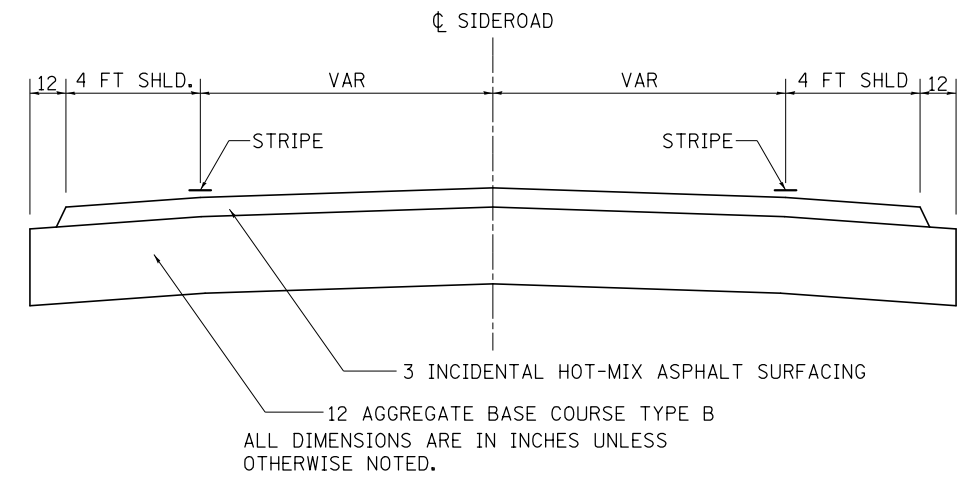
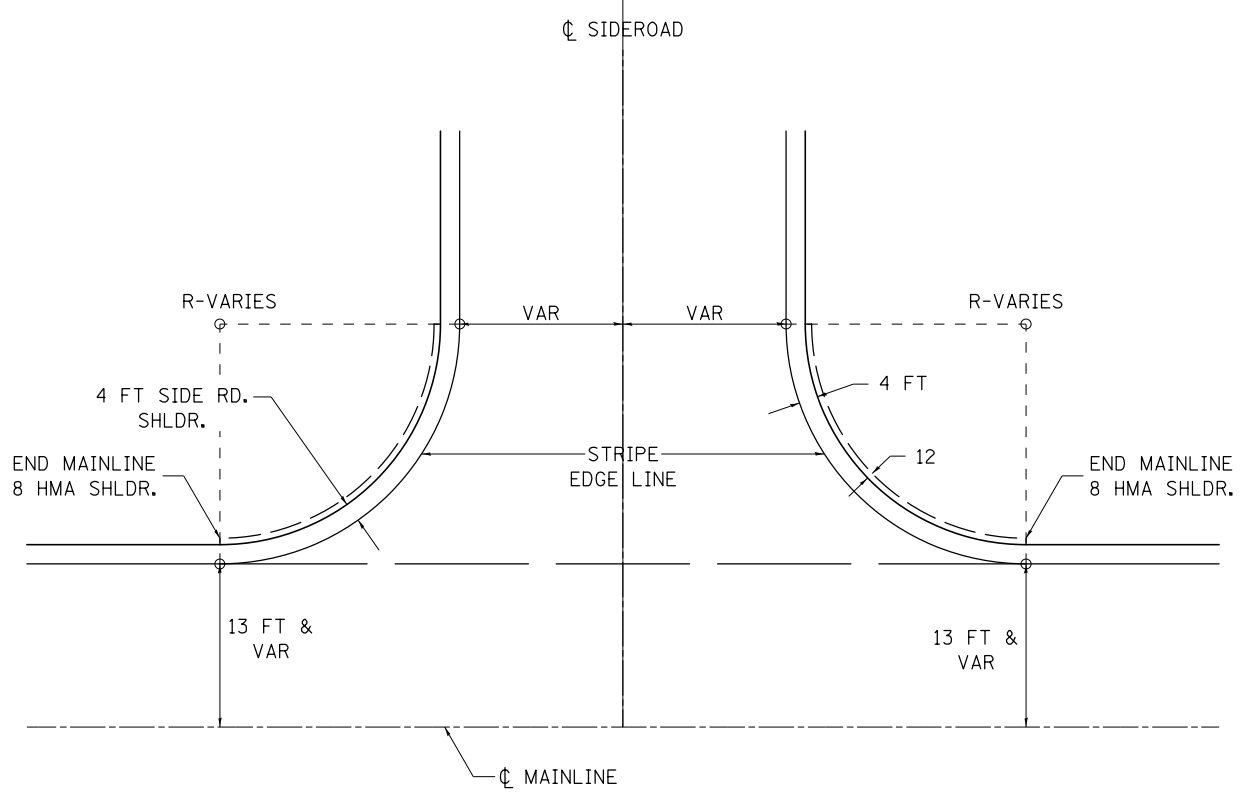
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

## INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) 39.2

# TYPICAL AGGREGATE BASE SIDEROAD



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

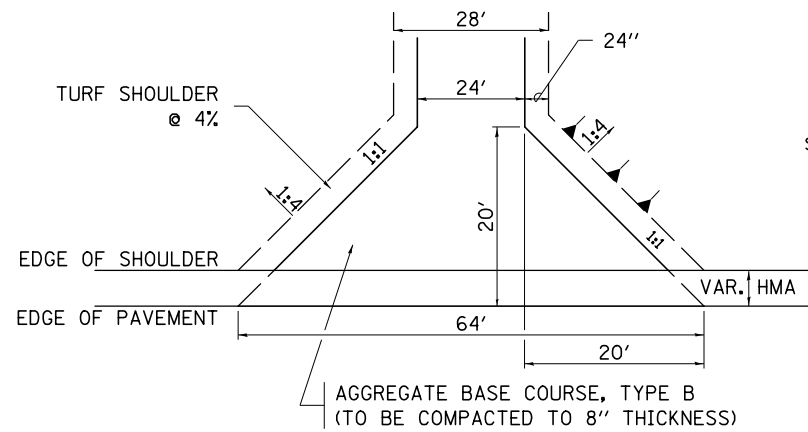
REVISED - 10-14-11

## TYPICAL AGGREGATE BASE SIDEROAD 93.2

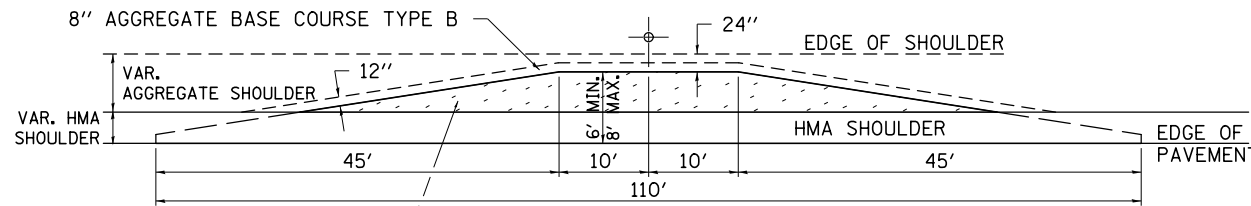
REVISED -	SCALE: *SCALE*	SHEET NO. OF SHEETS	STA. TO STA.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -				17	4BR-5 & 4BR-6	CARROLL	150	128
REVISED -				CONTRACT NO.				
REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLOT DATE = \$DATE\$

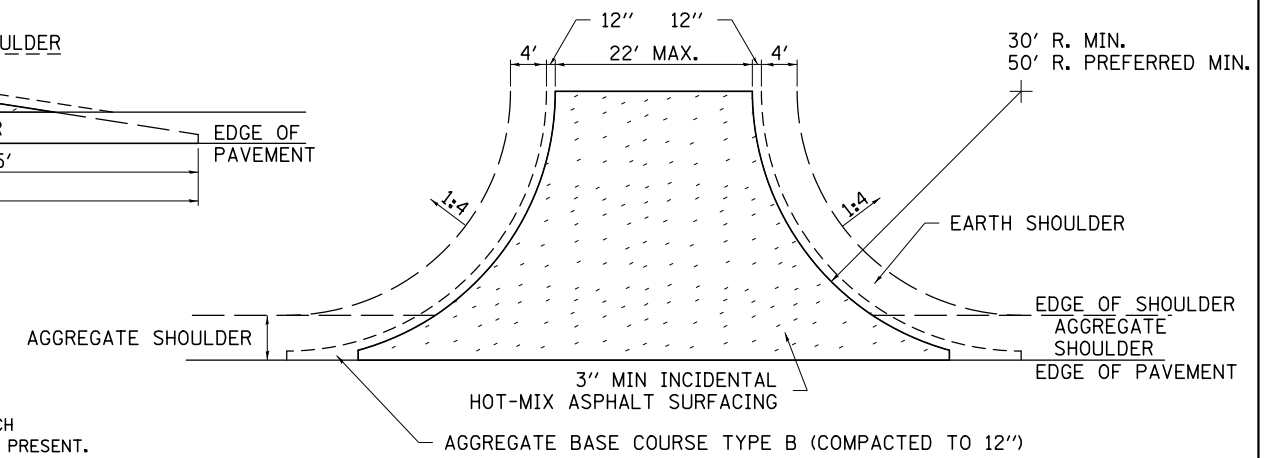
# HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS



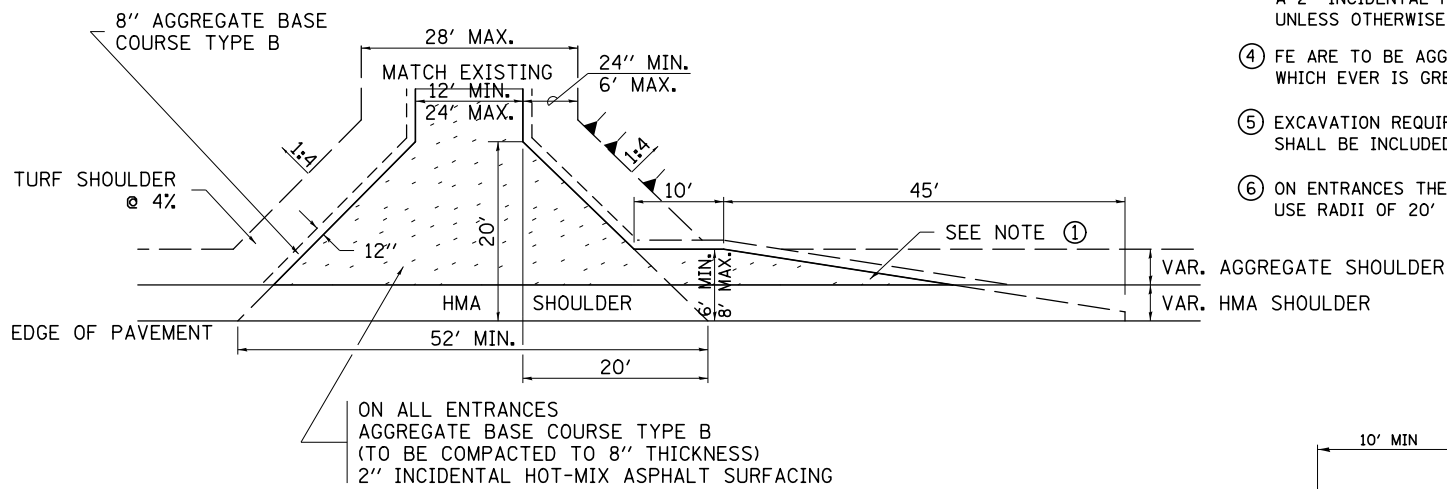
**FIELD ENTRANCE**



**MAILBOX TURNOUT**



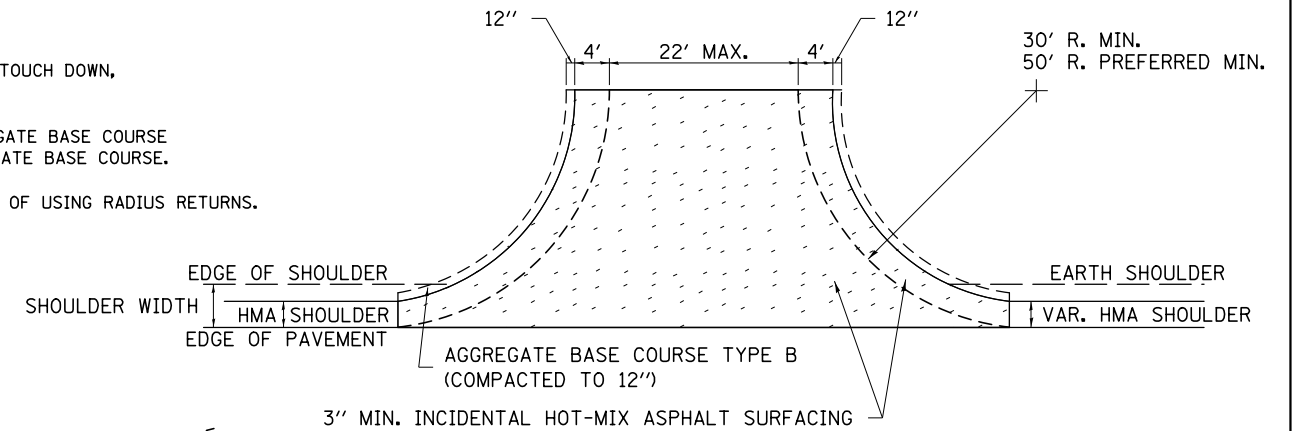
**SIDE ROAD RETURN/EARTH SHOULDER**



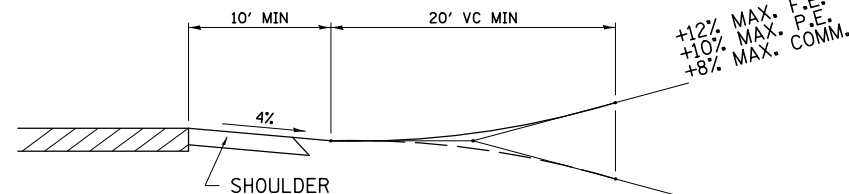
**PRIVATE ENTRANCE**

**NOTE**

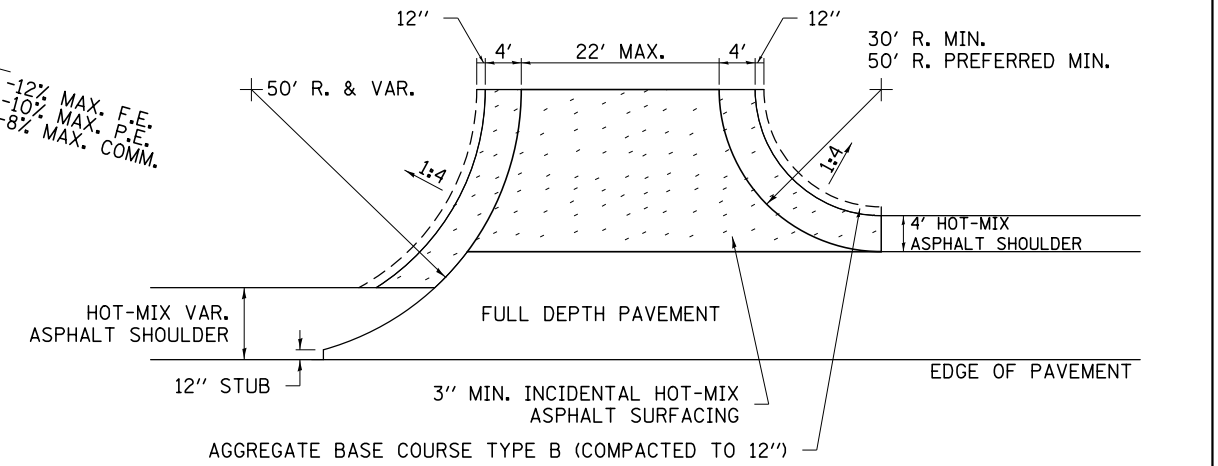
- ① TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ② ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- ③ ALL PE & CE TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
- ④ FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
- ⑤ EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE INCLUDED IN THE COST OF THE AGGREGATE BASE COURSE.
- ⑥ ON ENTRANCES THE CONTRACTOR HAS THE OPTION OF USING RADIUS RETURNS. USE RADII OF 20' TO 60'.



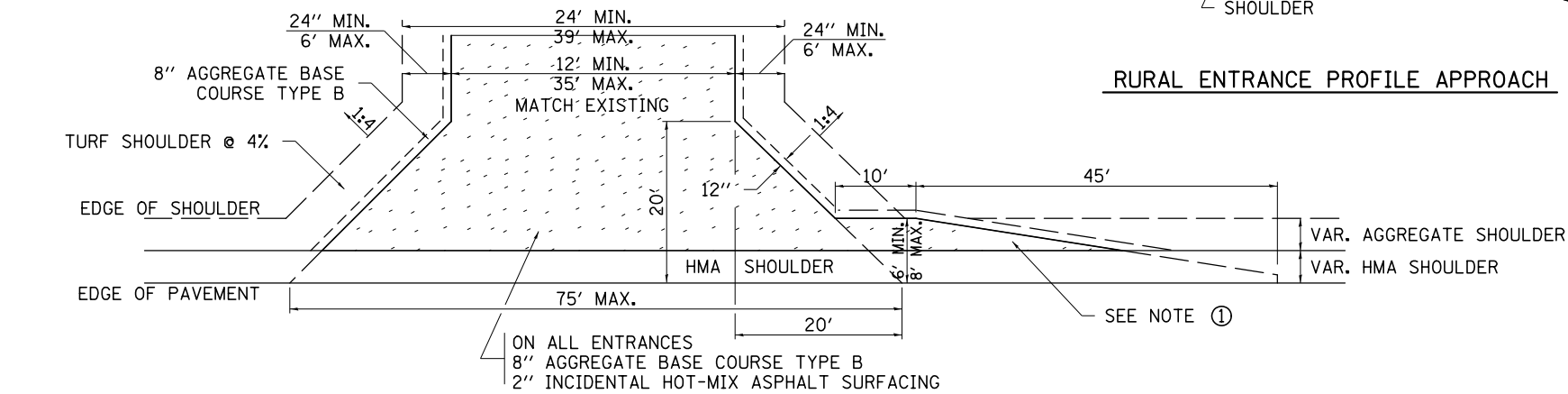
**SIDE ROAD RETURN/HMA SHOULDER**



**RURAL ENTRANCE PROFILE APPROACH**



**SIDE ROAD RETURN WITH RIGHT TURN LANE**

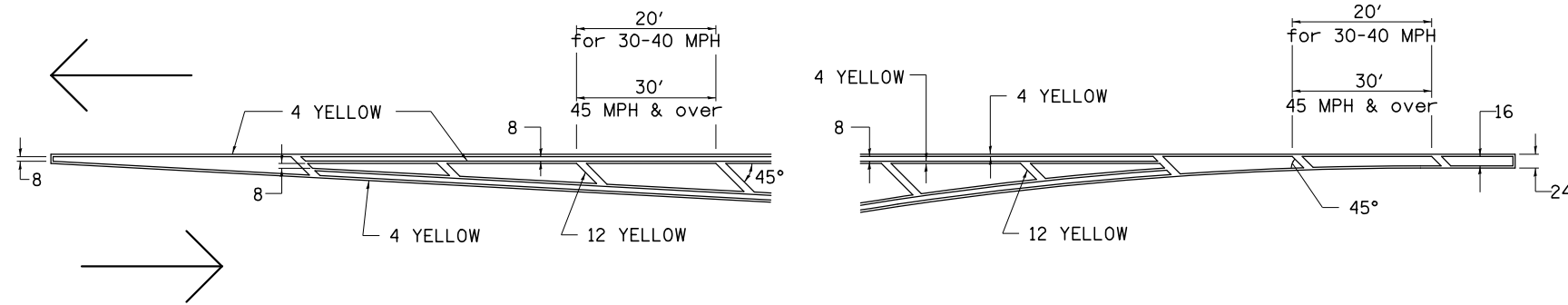


**COMMERCIAL ENTRANCE**

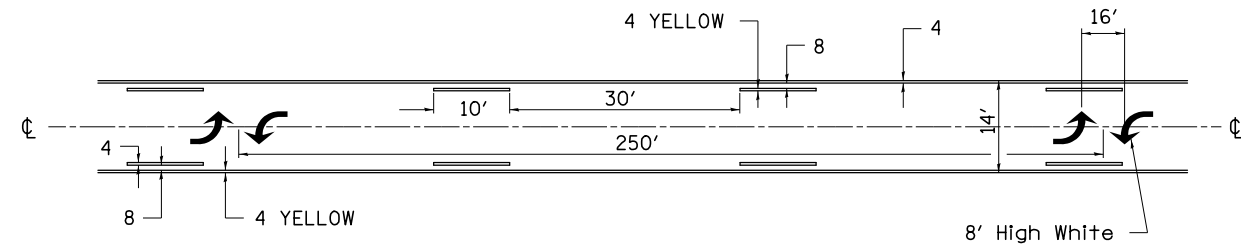
FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED - 12-07-10	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILEL*		DRAWN -	REVISED -					17	4BR-5 & 4BR-6	CARROLL	150	129
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -		CONTRACT NO. 64D83							
	PLOT DATE = *DATE*	DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

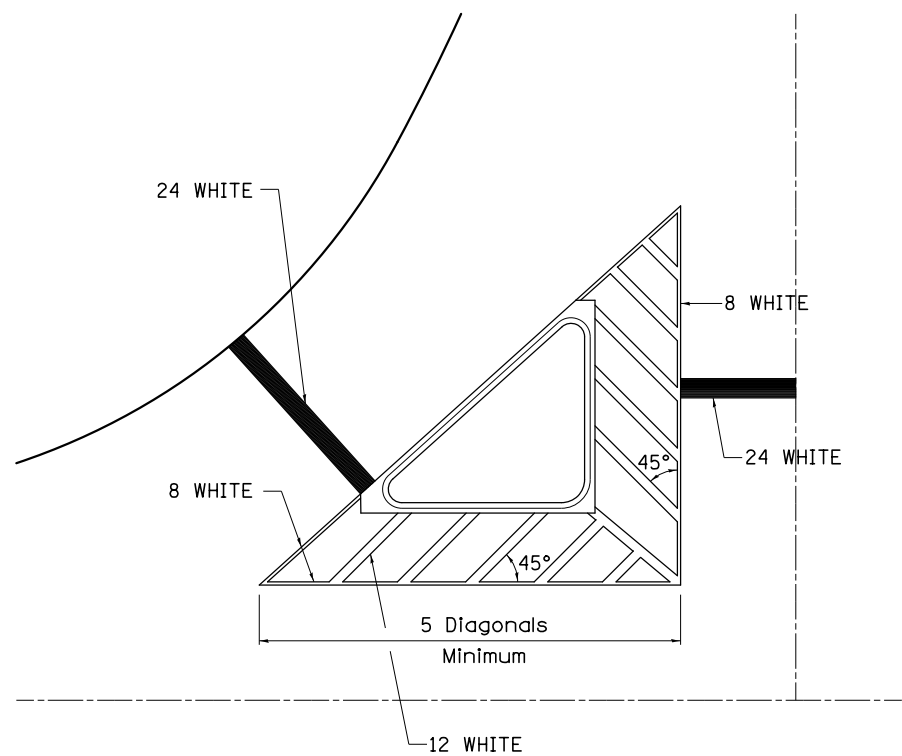


## MEDIAN PAVEMENT MARKING

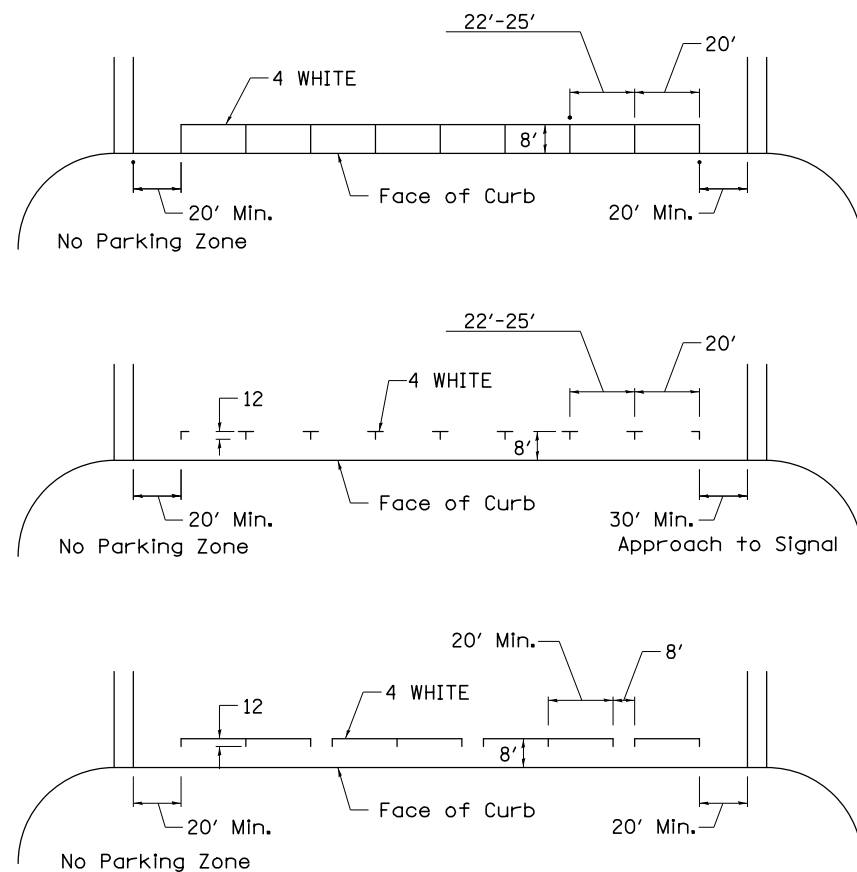


\*\* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH

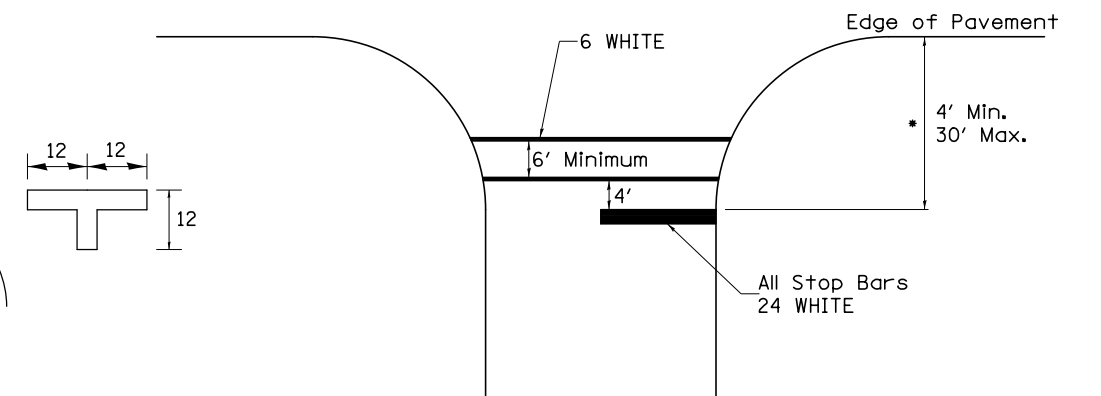


## TYPICAL PARKING SPACING



## STANDARD CROSSWALK MARKING

See Schedules for Locations

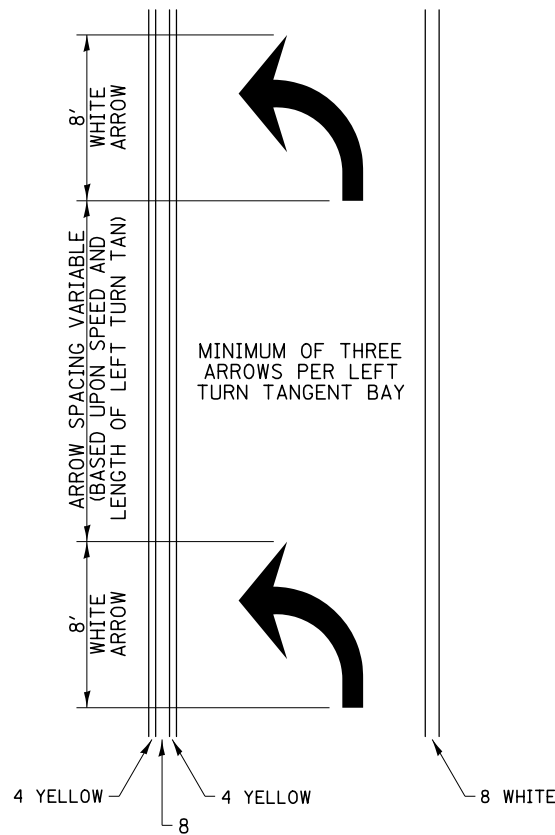


\* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME =	USER NAME = #USER*	DESIGNED -	REVISED - 3-05-12	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
#FILE#		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	17	4BR-5 & 4BR-6	CARROLL	150	130
		CHECKED -	REVISED -							CONTRACT NO. 64D83				
		DATE -	REVISED -							ILLINOIS FED. AID PROJECT				

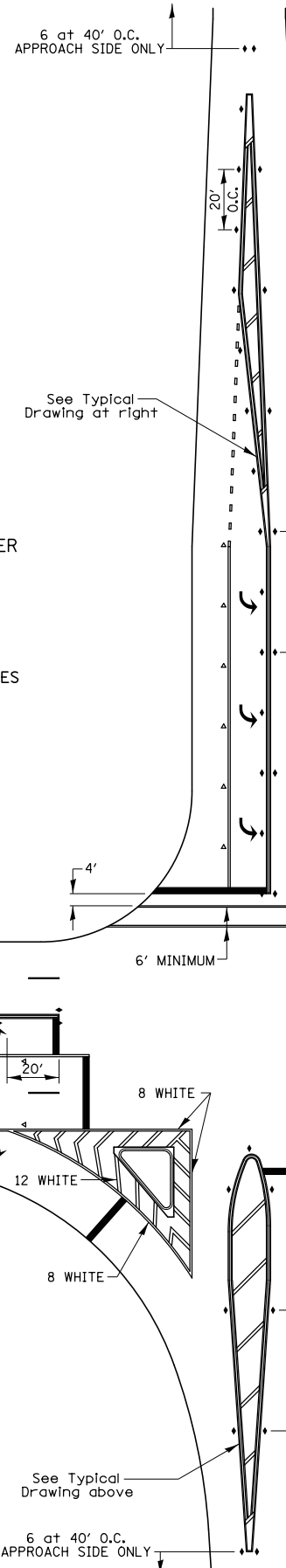
# TYPICAL PAVEMENT MARKINGS

## ARROW LAYOUT

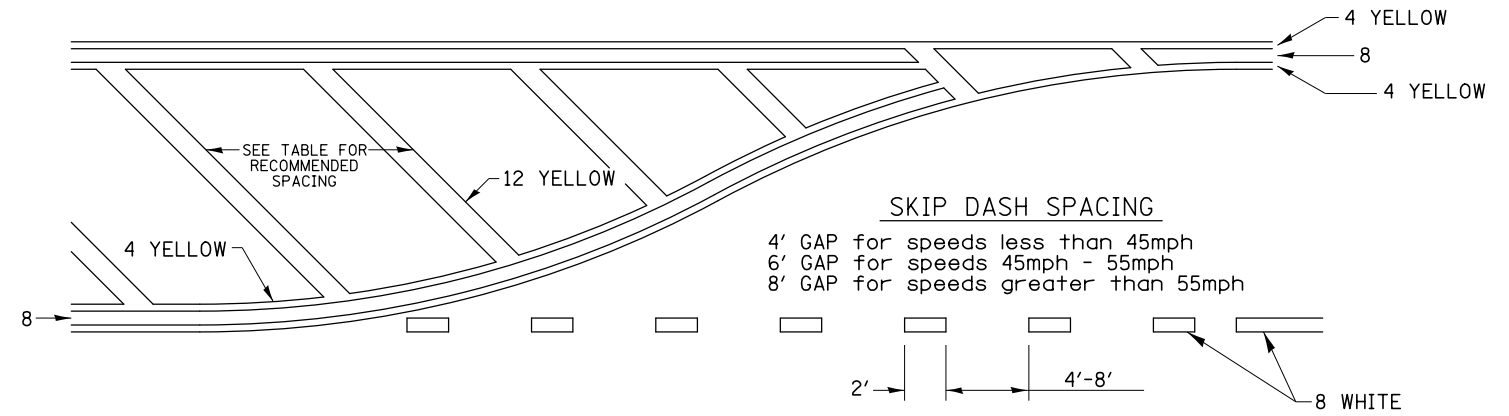


- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



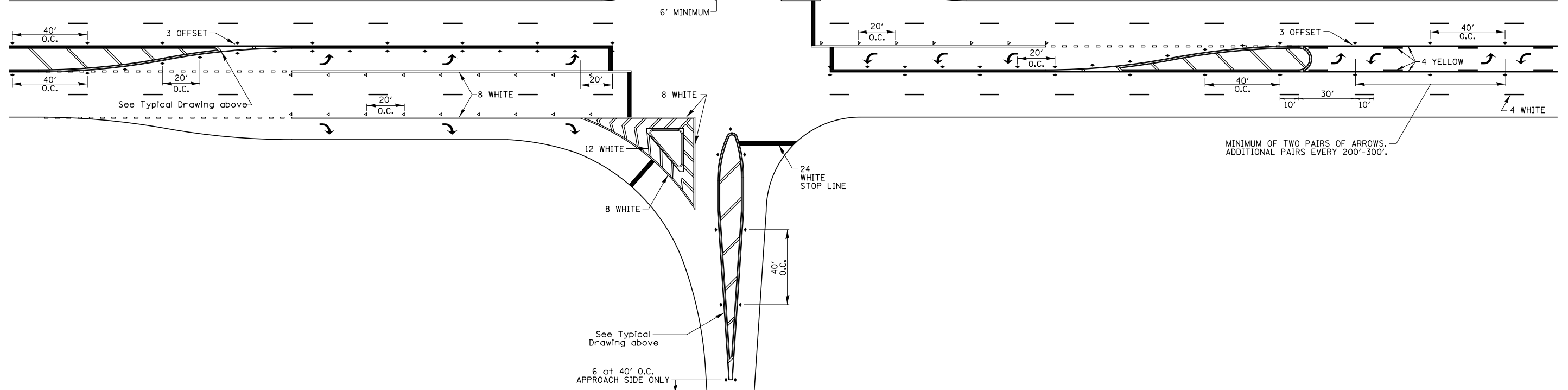
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



## RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED - 3-05-12
\$FILEL\$		DRAWN -	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
	PLOT DATE = \$DATE\$	DATE -	REVISED -

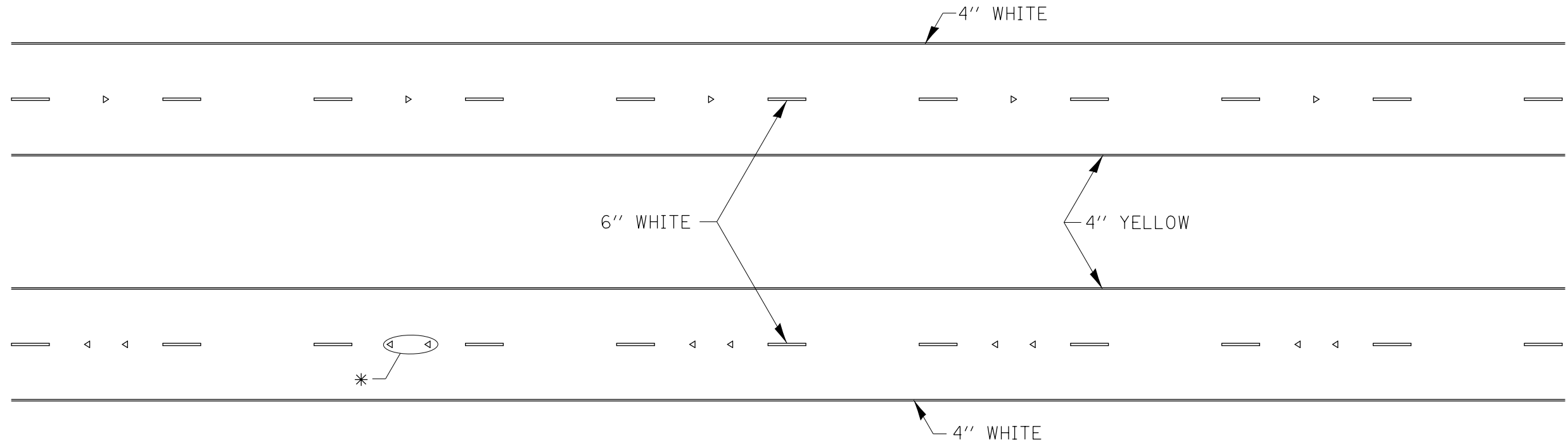
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET NO. OF SHEETS STA. TO STA.

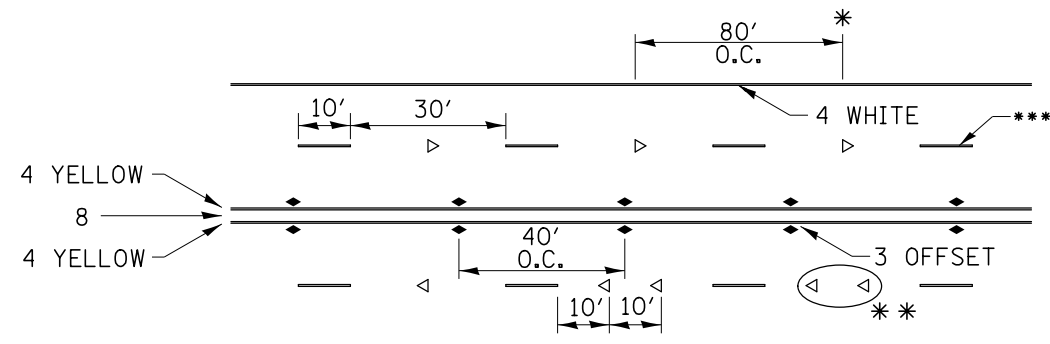
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	131
CONTRACT NO. 64D83				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

# TYPICAL PAVEMENT MARKINGS



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT  $\geq$  20,000.

## MULTI-LANE / DIVIDED



\* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

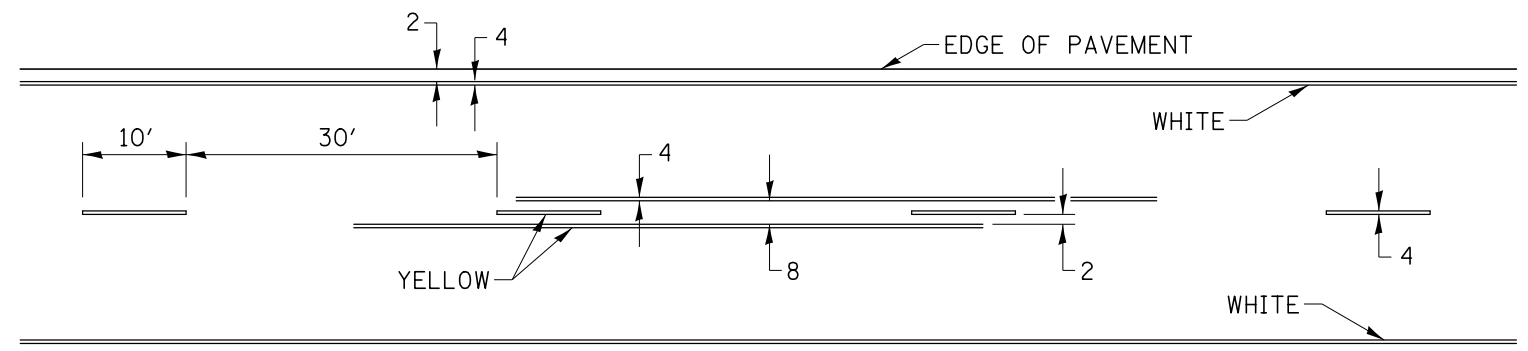
\*\* USE DOUBLE MARKERS WHEN ADT  $\geq$  20,000

\*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE SPEED LIMIT 40 MPH AND OVER USE 6" LINE

## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES

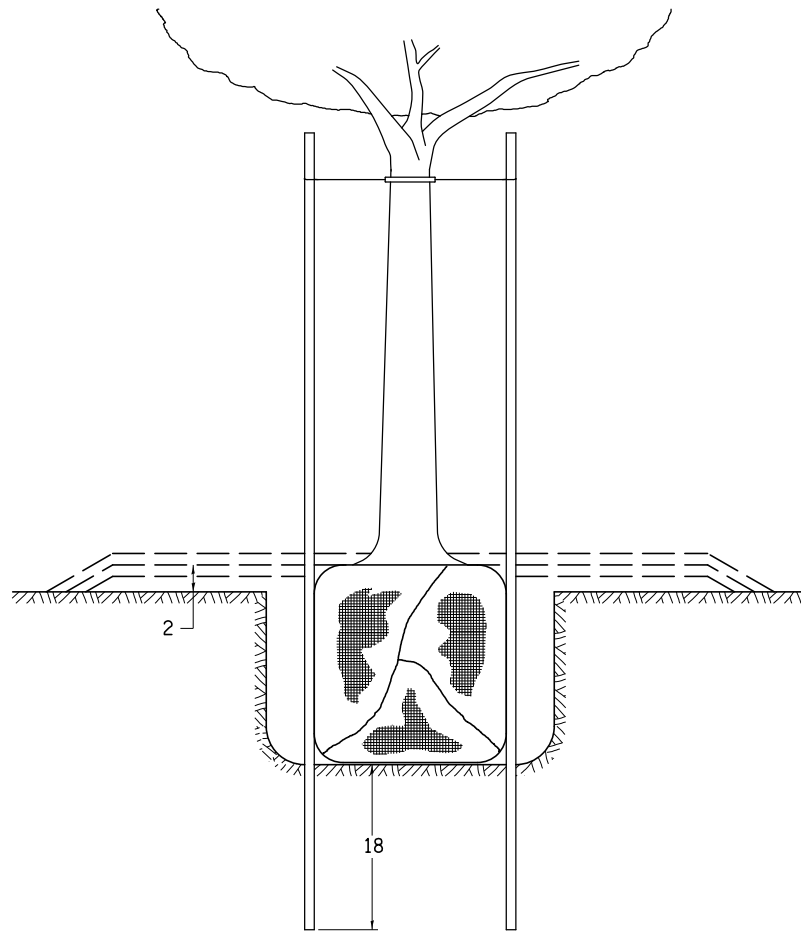


SYMBOLS

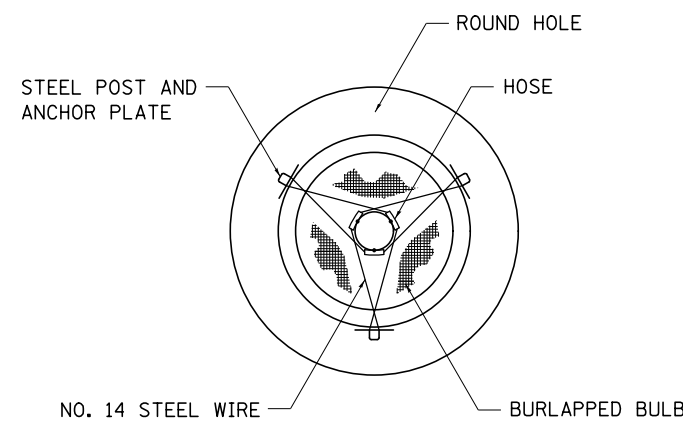
FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED - 11-28-12	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILEL*		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	17	4BR-5 & 4BR-6	CARROLL	150	132
		CHECKED -	REVISED -						CONTRACT NO. 64D83					
		DATE -	REVISED -						ILLINOIS FED. AID PROJECT					



# DETAILS OF PLANTING AND BRACING TREES

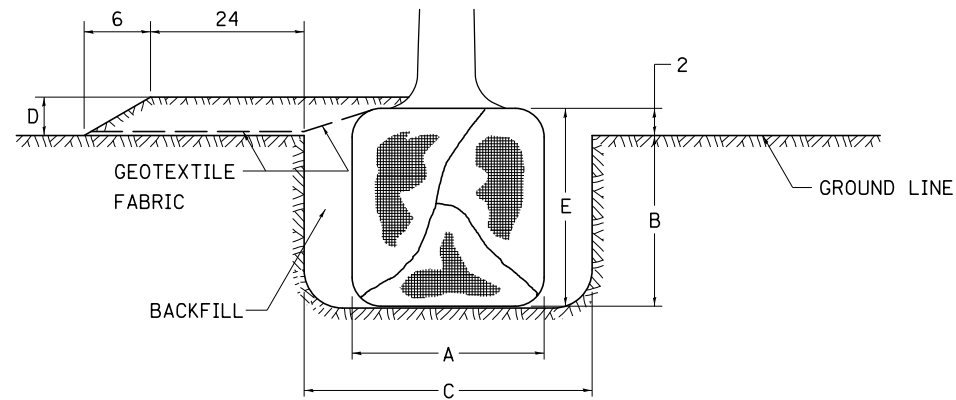


TREES SMALLER THAN 4 1/2 IN DIAMETER

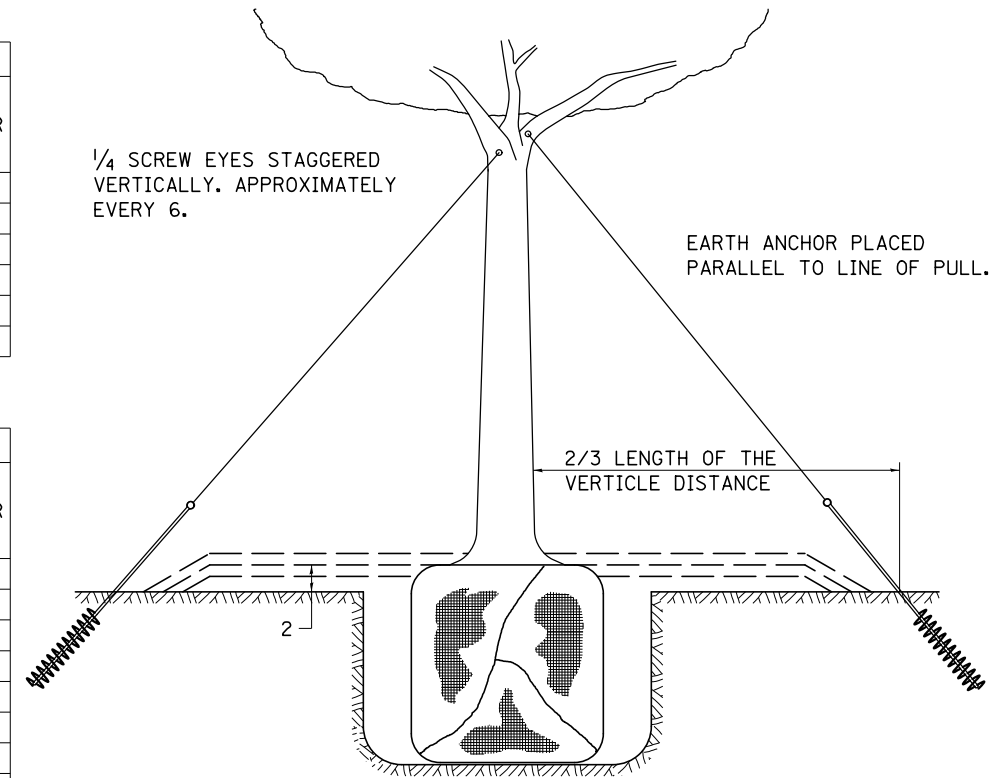


SMALL	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER CU. YDS.
5'-6'	16	10	30	4	12	0.54
5'-6' BB	16	10	30	4	12	0.54
6'-7' BB	18	12	30	4	14	0.54
7'-8' BB	20	11	30	4	13	0.54
8'-10' BB	24	14	36	4	16	0.61
10'-12' BB	26	15	36	4	17	0.61

LARGE	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER CU. YDS.
0-2	20	11	36	4	13	0.61
2-2 1/2 BB	24	14	48	4	16	0.78
2 1/2-3 BB	28	17	48	4	19	0.78
3-3 1/2 BB	32	17	60	4	19	0.96
3 1/2-4 BB	36	20	60	4	22	0.96
4-4 1/2 BB	40	22	72	4	24	1.16
4 1/2-5 BB	44	24	72	4	26	1.16
5-5 1/2 BB	48	27	84	4	29	1.38



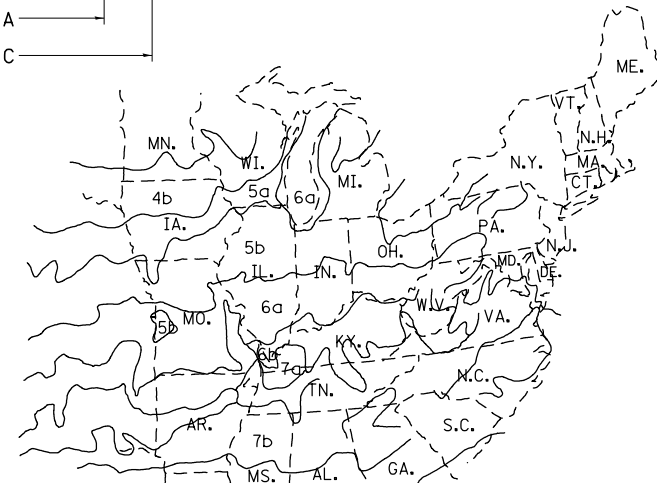
TREES OVER 4 1/2 IN DIAMETER



1/4 SCREW EYES STAGGERED VERTICALLY. APPROXIMATELY EVERY 6.

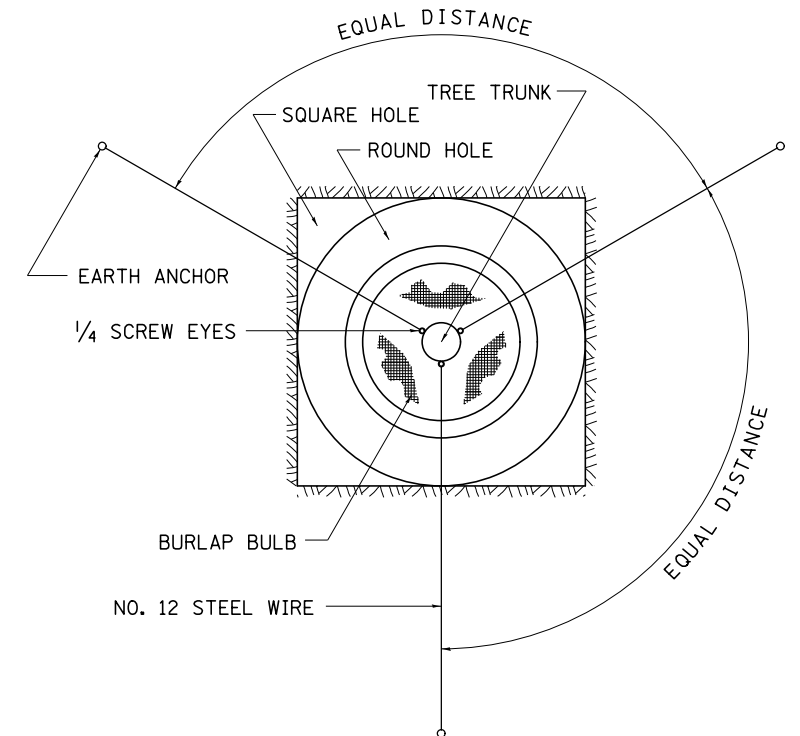
EARTH ANCHOR PLACED PARALLEL TO LINE OF PULL.

2/3 LENGTH OF THE VERTICAL DISTANCE



PLANT HARDINESS ZONE MAP

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE  
PUBLICATION NO. 814



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED - 10-18-11
*FILE#		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = *DATE*	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

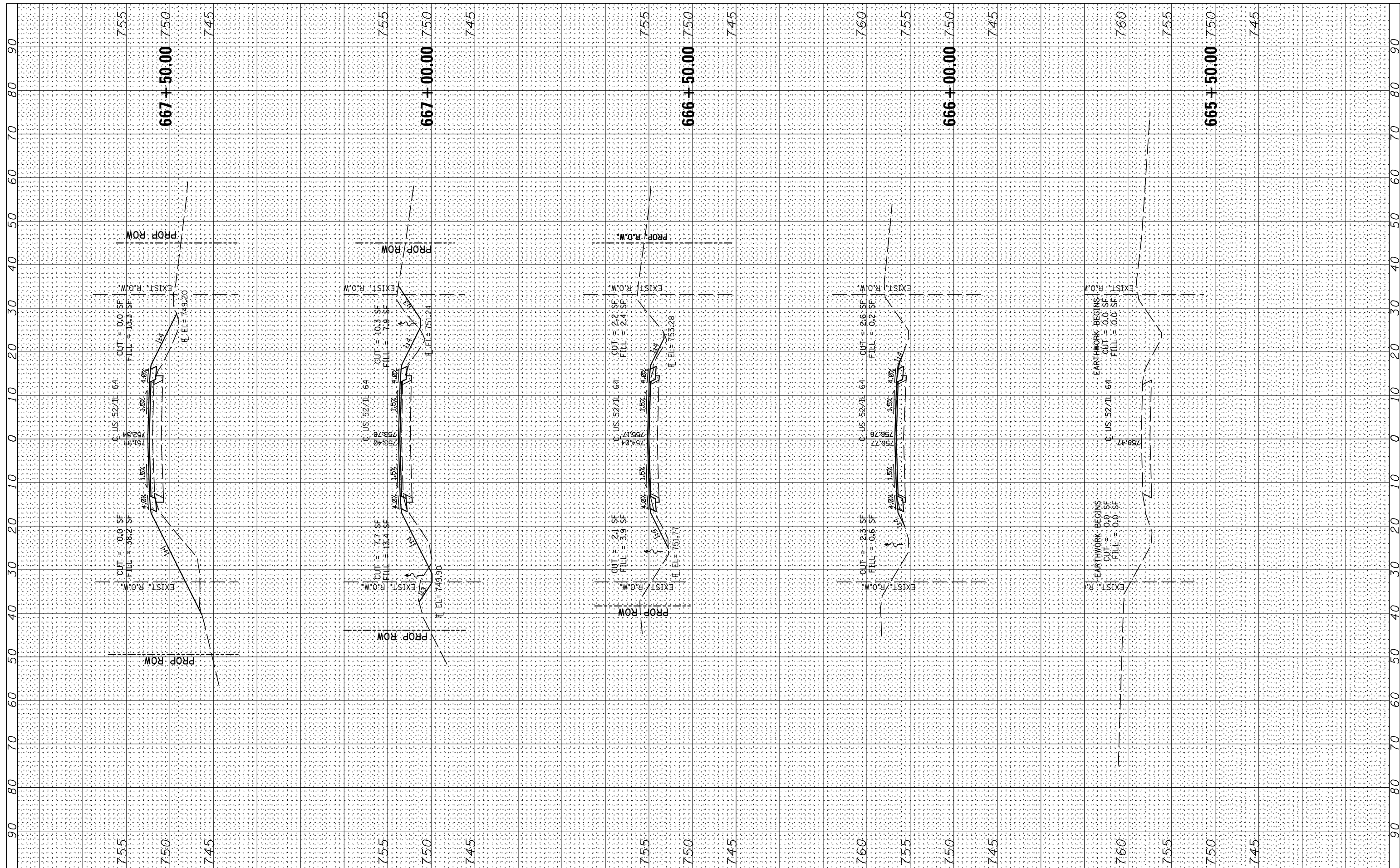
REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	145	133
CONTRACT NO. 64D83				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS
	CHECKED



FILE NAME =
*FILE#
XS SHEET VERTICAL

USER NAME = *USER*
PLOT SCALE = *SCALE*
PLOT DATE = *DATE*

DESIGNED - RAC	REVISED -
DRAWN - LCR	REVISED -
CHECKED - DAZ	REVISED -
DATE - 06-28-13	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ZROKA** Engineering  
Zroka Engineering, P.C.  
4216 North Heritage  
Chicago, IL 60613

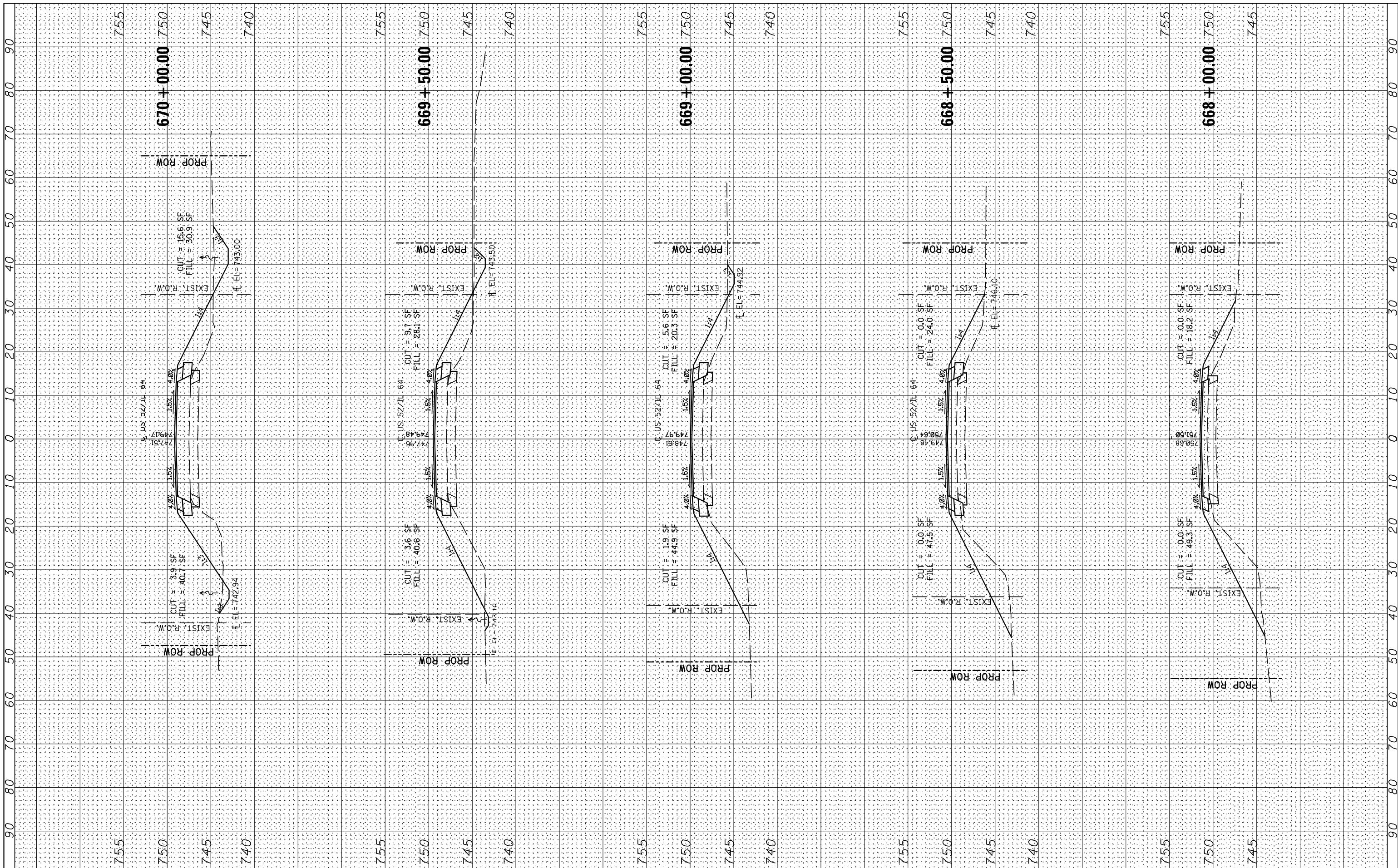
**CROSS SECTIONS  
US 52/IL 64**

SCALE: SHEET 1 OF 7 SHEETS STA. 665+50.00 TO STA. 667+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	134
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

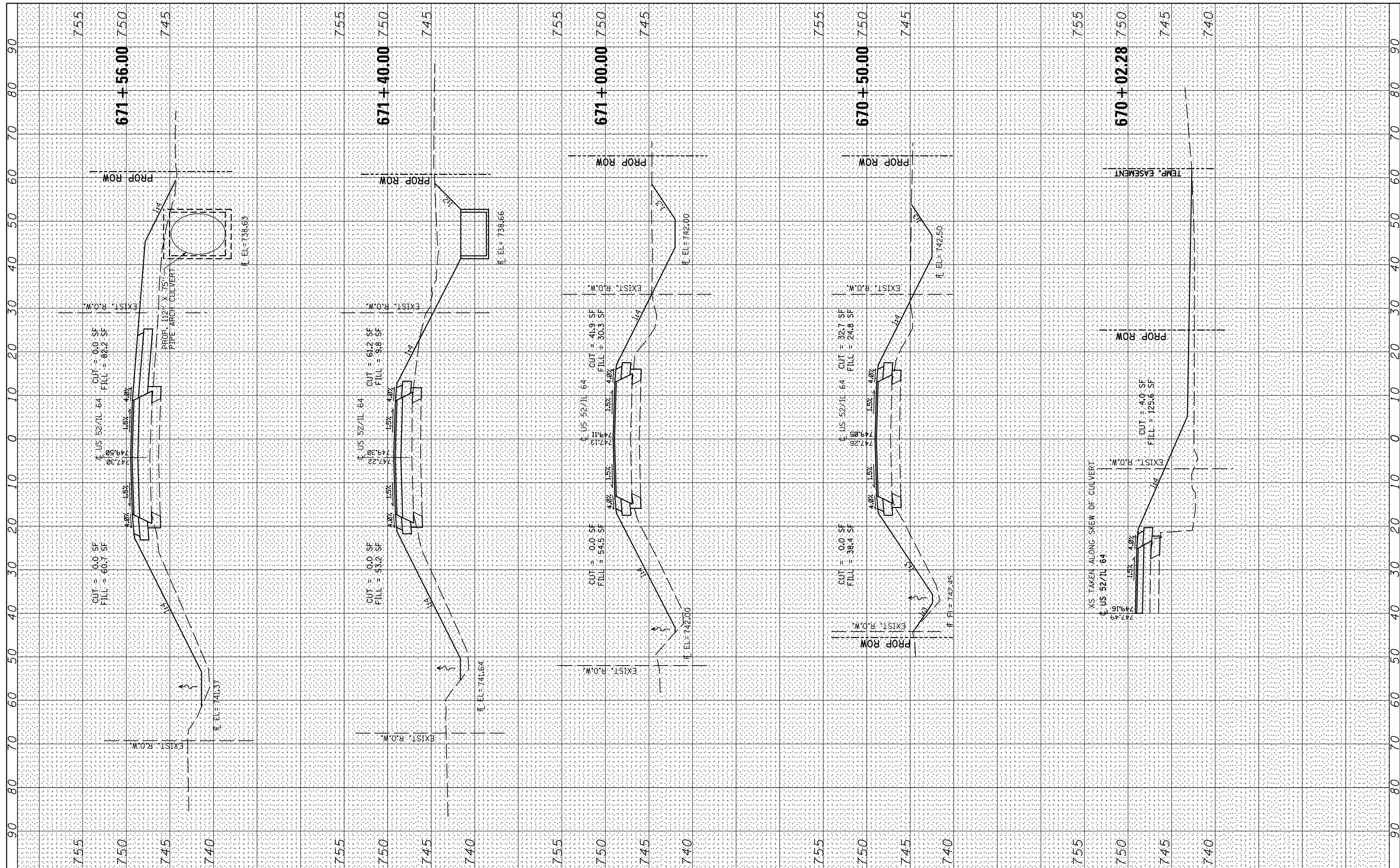
BY	DATE



FILE NAME =	USER NAME = *USER*	DESIGNED - RAC	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>  <b>ZROKA</b> <small>engineering</small> <small>Zroka Engineering, P.C.</small> <small>4216 North Heritage</small> <small>Chicago, IL 60613</small>	<b>CROSS SECTIONS</b> <b>US 52/IL 64</b>	F.A.P. R.T.E. 17	SECTION 4BR-5 & 4BR-6	COUNTY CARROLL	TOTAL SHEETS 150	SHEET NO. 135	
*FILEL#	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -			CONTRACT NO. 64D83					
XS.SHEET VERTICAL	PLOT DATE = *DATE*	CHECKED - DAZ	REVISED -			ILLINOIS FED. AID PROJECT					
		DATE - 06-28-13	REVISED -			SCALE: SHEET 2 OF 7 SHEETS STA. 668+00.00 TO STA. 670+00.00					

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

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



FILE NAME =  
 \*FILEL\*  
 XS.SHEET VERTICAL

USER NAME = \*USER\*  
 DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ZROKA**  
 Engineering  
 Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

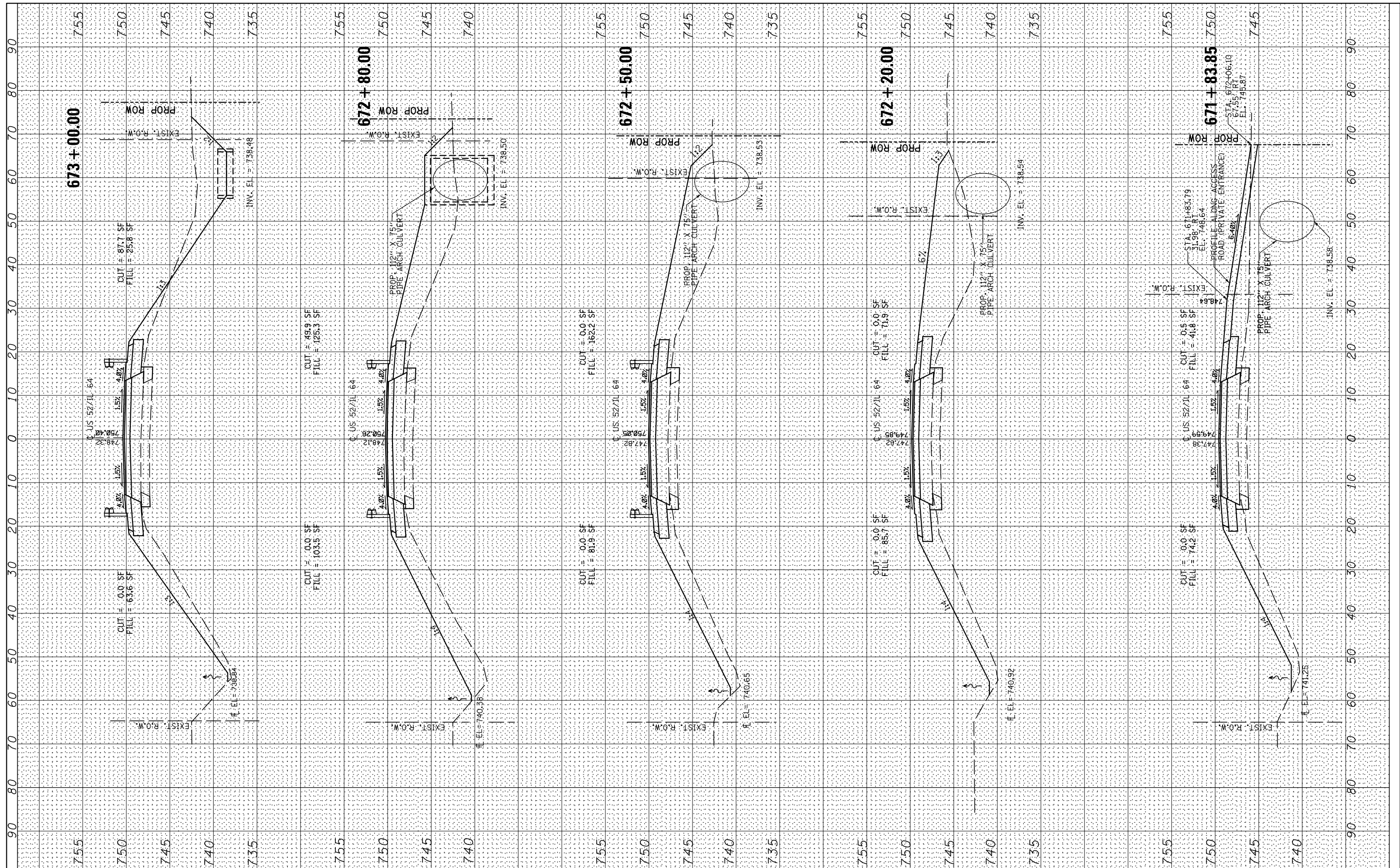
**CROSS SECTIONS  
 US 52/IL 64**

SCALE: SHEET 3 OF 7 SHEETS STA. 670+50.00 TO STA. 671+83.83

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	136
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	AREAS CHECKED



FILE NAME =  
 \*FILEL\*  
 XS SHEET VERTICAL

USER NAME = \*USER\*  
 DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**



Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

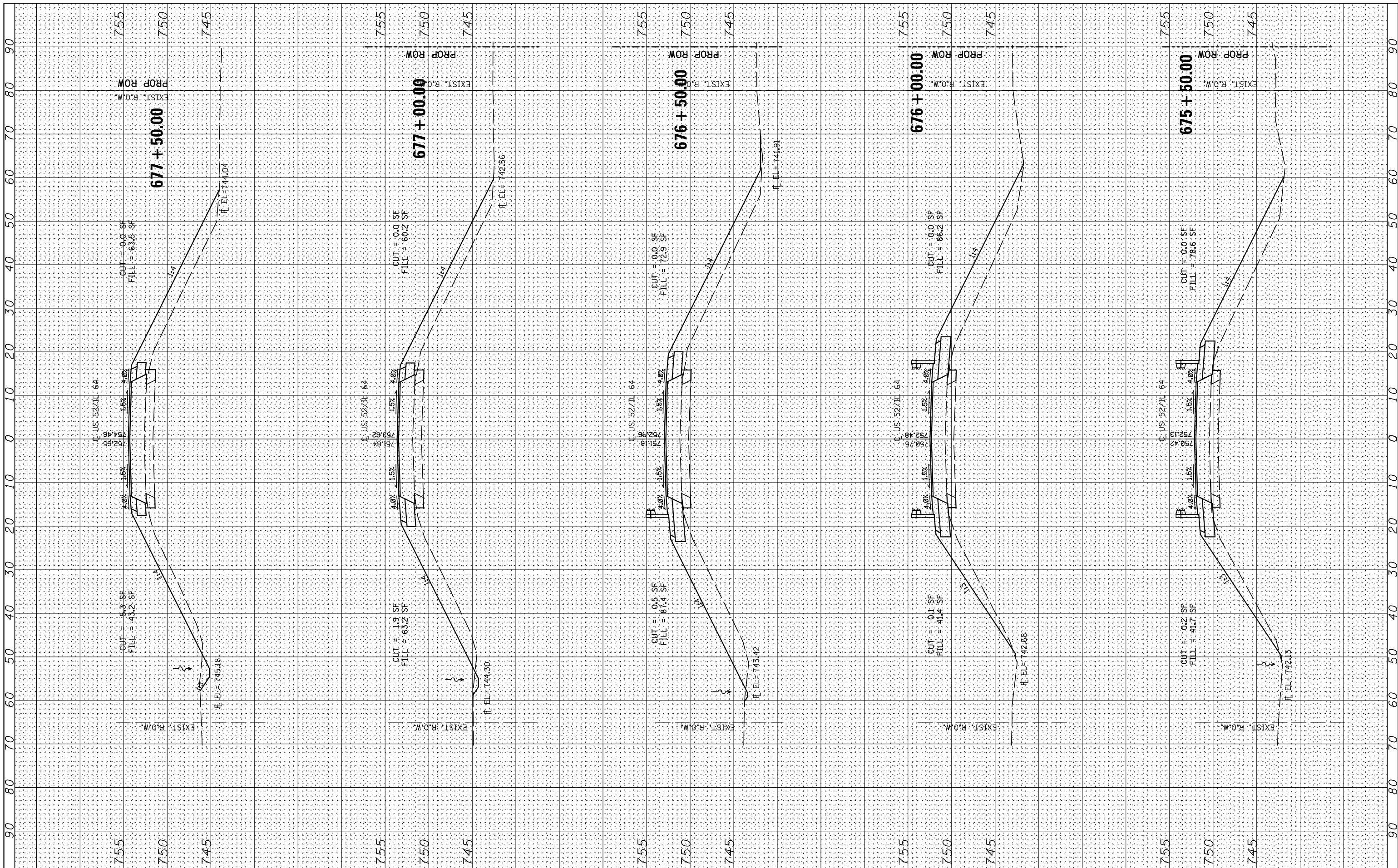
**CROSS SECTIONS  
 US 52/IL 64**

SCALE: SHEET 4 OF 7 SHEETS STA. 672+50.00 TO STA. 675+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	137
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE
FINAL SURVEY	SURVEYED
NO.	

BY	DATE
ORIGINAL SURVEY	SURVEYED
NO.	



FILE NAME =  
 #FILEL#  
 XS.SHEET VERTICAL

USER NAME =	#USER#
DESIGNED -	RAC
DRAWN -	LCR
CHECKED -	DAZ
DATE -	06-28-13

REVISED -	
REVISED -	
REVISED -	
REVISED -	

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

Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

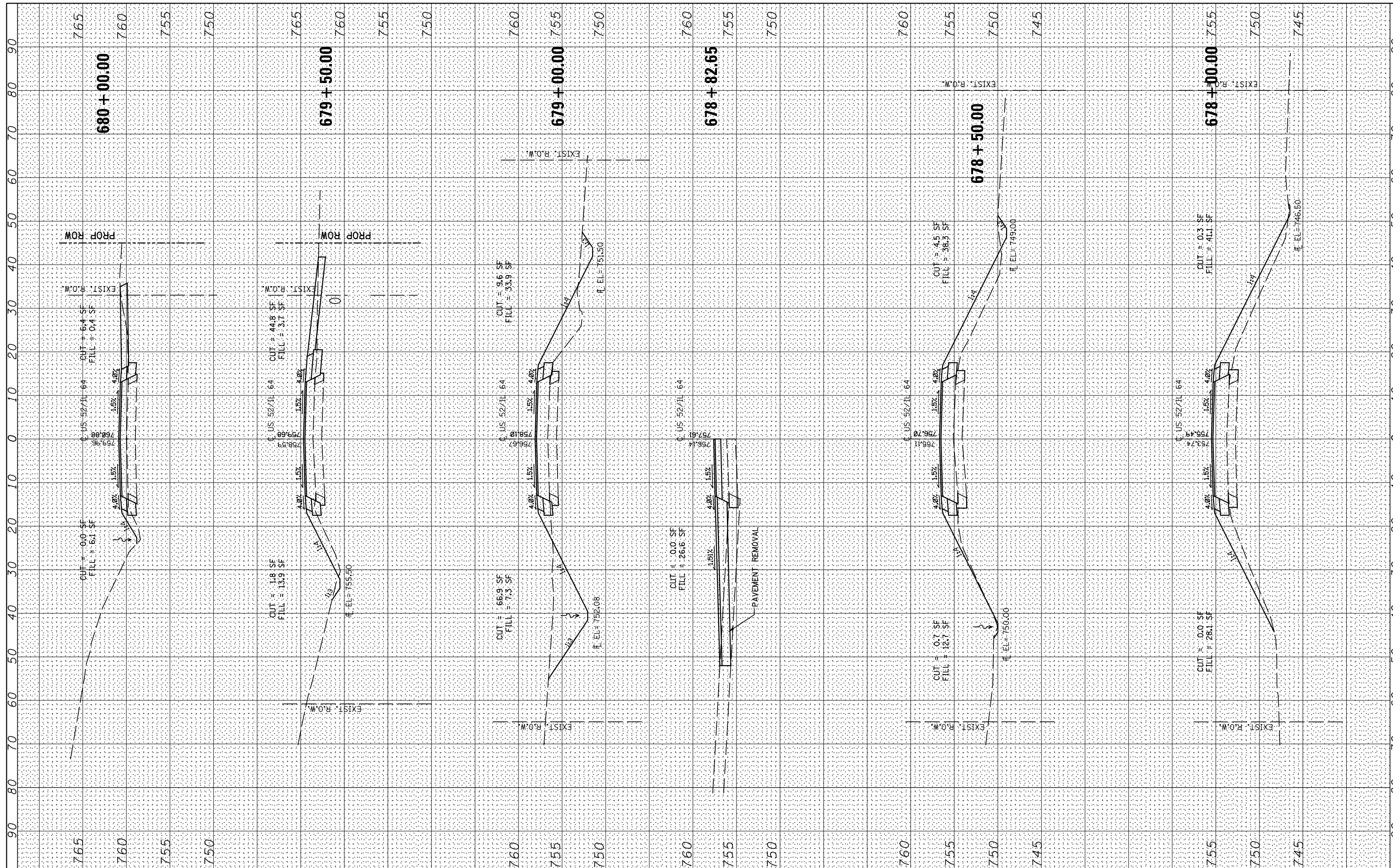
**CROSS SECTIONS**  
 US 52/IL 64

SCALE: SHEET 5 OF 7 SHEETS STA. 675+50.00 TO STA. 677+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	138
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	TEMPLATE
AREAS CHECKED	AREAS CHECKED

BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	TEMPLATE
AREAS CHECKED	AREAS CHECKED



FILE NAME =  
 \*FILEL\*  
 XS SHEET VERTICAL

USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = \*DATE\*

DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

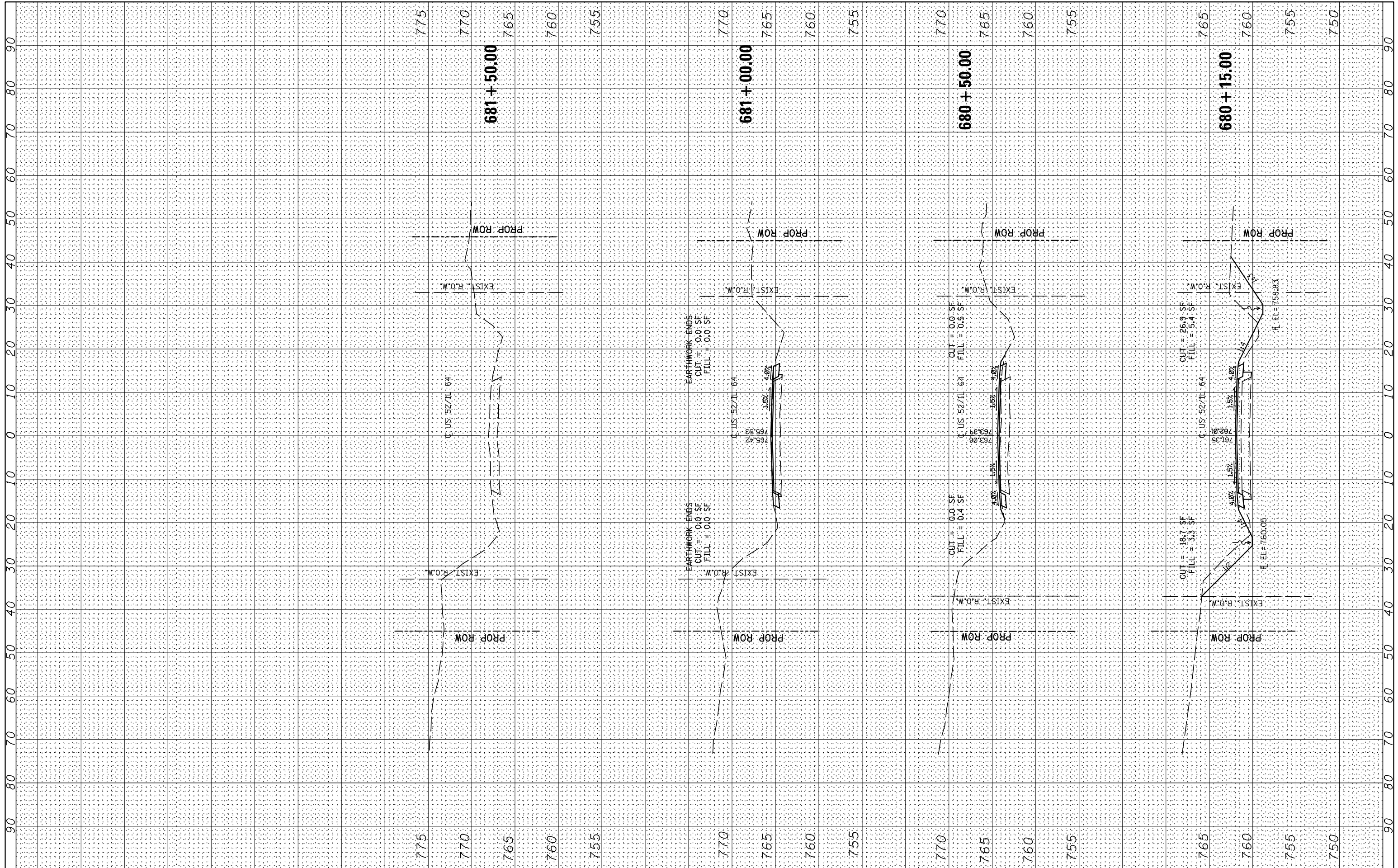
CROSS SECTIONS  
 US 52/L 64

SCALE: SHEET 6 OF 7 SHEETS STA. 678+00.00 TO STA. 680+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	139
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =  
#FILE#

USER NAME = #USER#  
DESIGNED - RAC  
DRAWN - LCR  
CHECKED - DAZ  
DATE - 06-28-13

REVISOR  
REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ZROKA**  
engineering  
Zraka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

**CROSS SECTIONS  
US 52/IL 64**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	140

CONTRACT NO. 64D83  
ILLINOIS FED. AID PROJECT

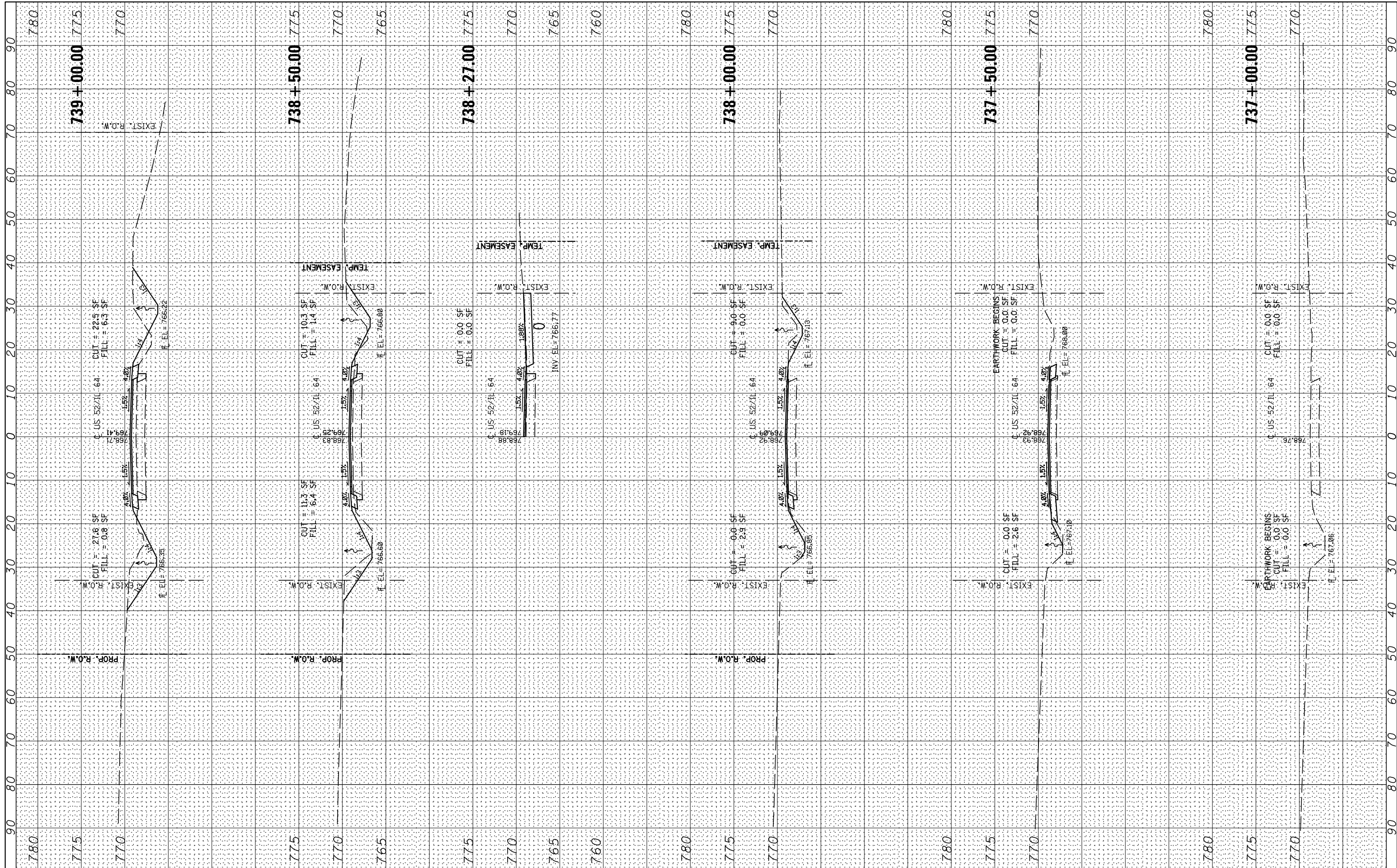
SCALE: SHEET 7 OF 7 SHEETS STA. 680+15.00 TO STA. 681+50.00

XS.SHEET VERTICAL



BY	DATE
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	TEMPLE
AREAS CHECKED	AREAS CHECKED

BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	TEMPLE
AREAS CHECKED	AREAS CHECKED



FILE NAME =  
 \*FILEL\*  
 XS.SHEET VERTICAL

USER NAME = *USER*	DESIGNED - RAC
DRAWN - LCR	REVISD -
CHECKED - DAZ	REVISD -
DATE - 06-28-13	REVISD -

REVISD -
REVISD -
REVISD -
REVISD -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**



Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

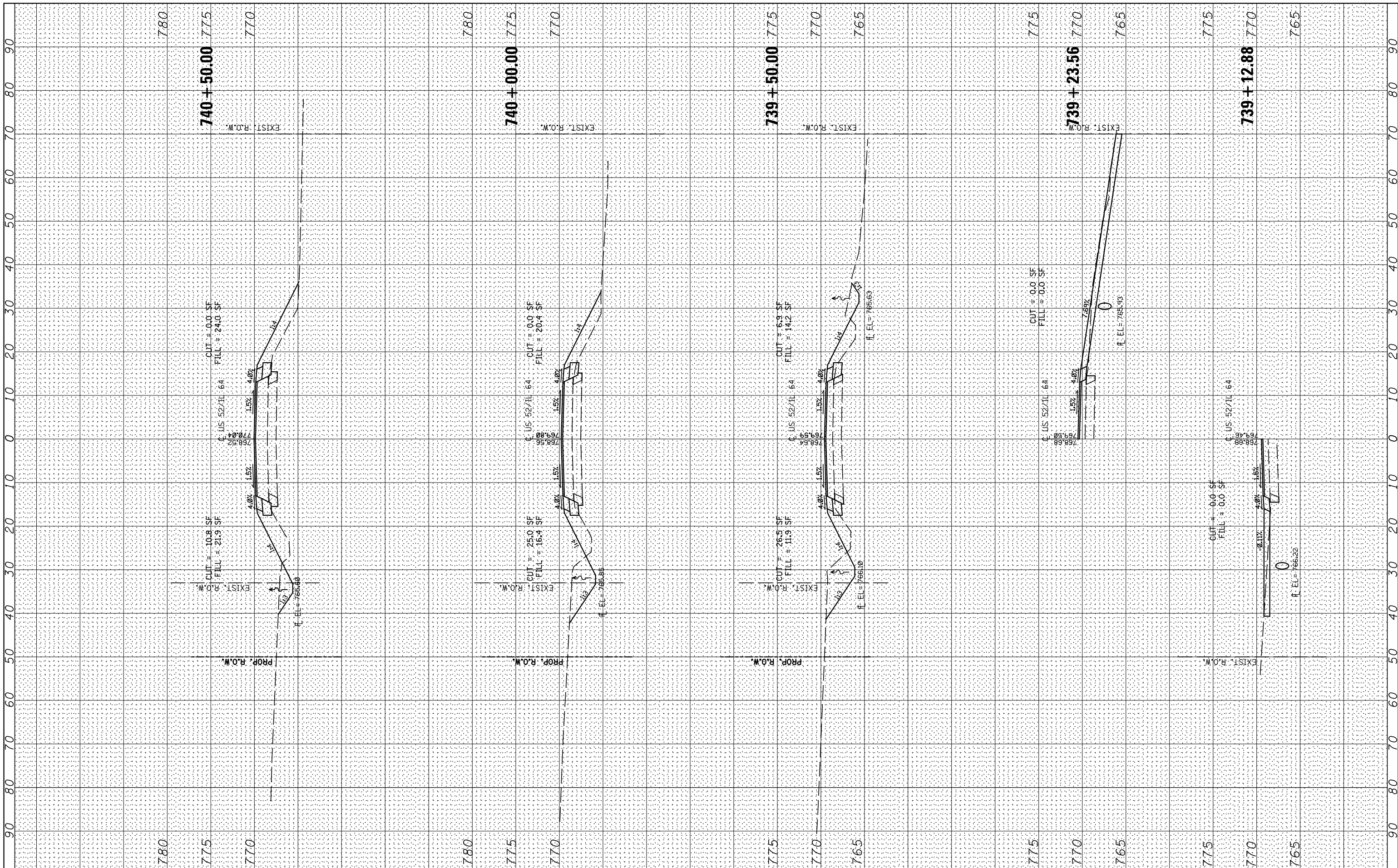
**CROSS SECTIONS  
 US 52/11 64**

SCALE: SHEET 1 OF 9 SHEETS STA. 737+00.00 TO STA. 739+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	141
			CONTRACT NO. 64D83	
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =  
 \*FILEL\*

USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = \*DATE\*

DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

CROSS SECTIONS  
 US 52/L 64

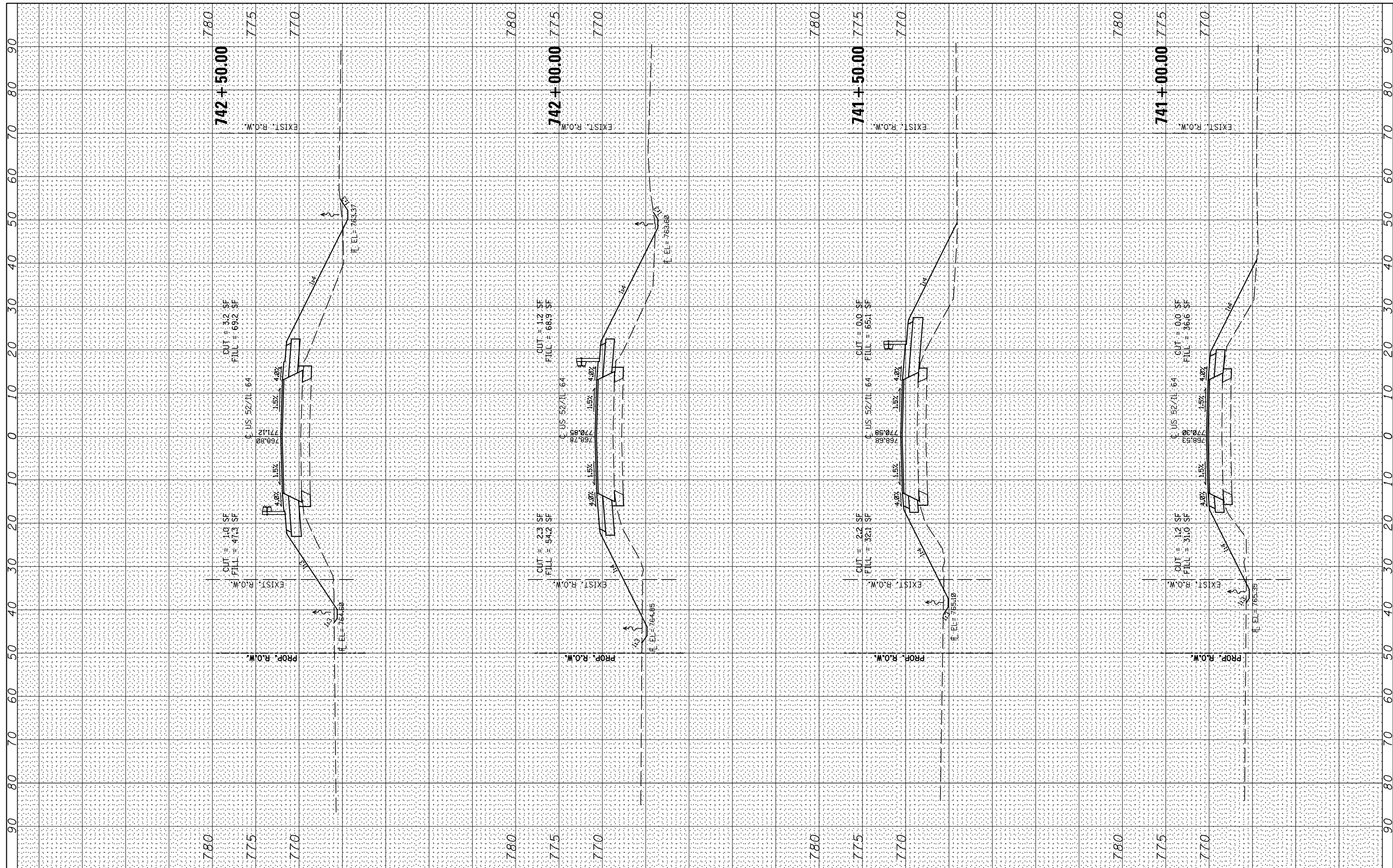
SCALE: SHEET 2 OF 9 SHEETS STA. 739+12.88 TO STA. 740+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	142
CONTRACT NO. 64D83				

ILLINOIS FED. AID PROJECT

BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE

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



FILE NAME =  
 #FILEL#

USER NAME = #USER#  
 DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISIONS  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

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



Zroka Engineering, P.C.  
 4216 North Hermitage  
 Chicago, IL 60613

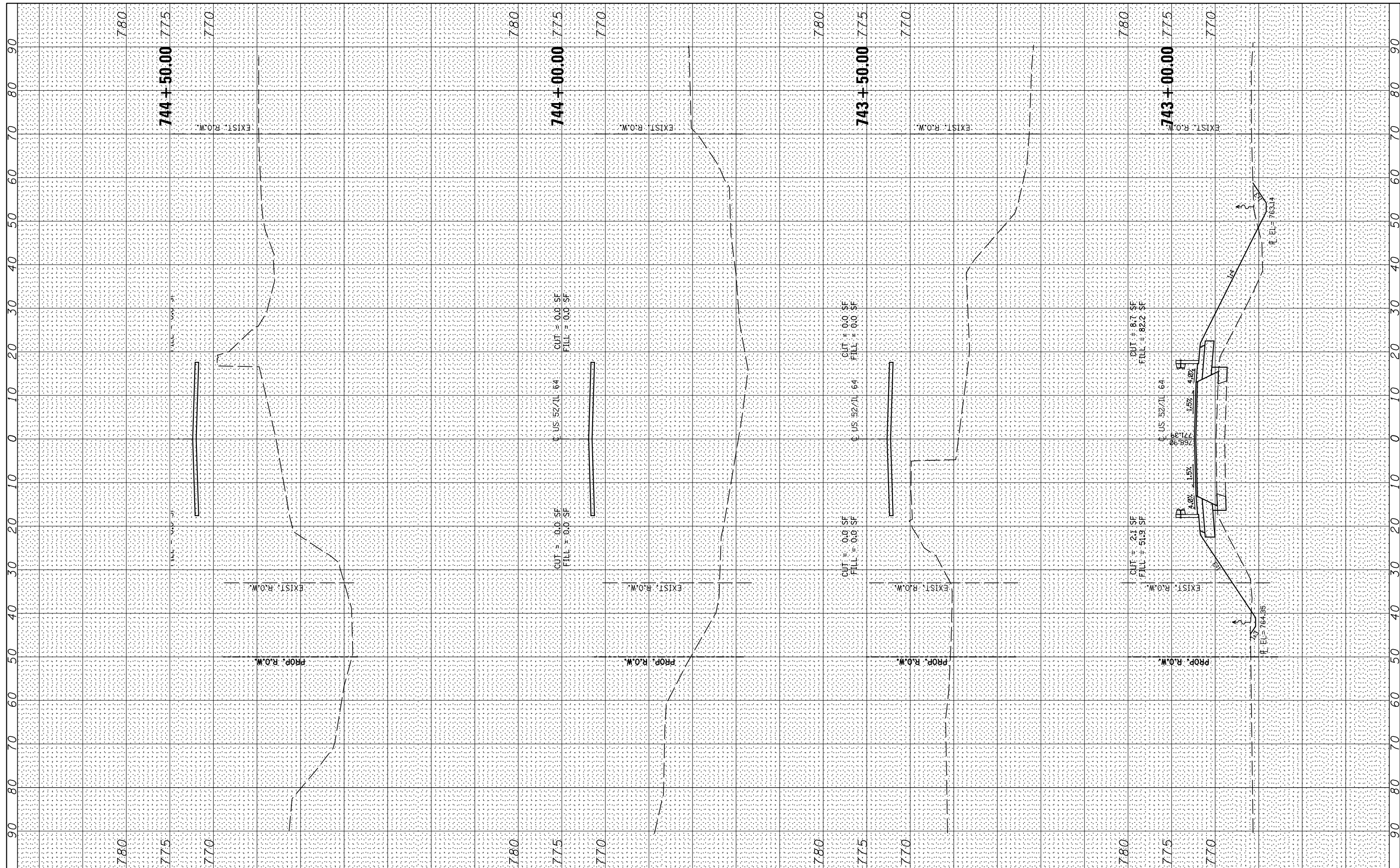
**CROSS SECTIONS**  
**US 52/L 64**

SCALE: SHEET 3 OF 9 SHEETS STA. 741+00.00 TO STA. 742+50.00

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	143
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS	CHECKED
	AREAS	CHECKED



FILE NAME =  
 #FILEL#  
 XS.SHEET VERTICAL

USER NAME = #USER#  
 DESIGNED - RAC  
 DRAWN - LCR  
 CHECKED - DAZ  
 DATE - 06-28-13

REVISIONS:  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**ZROKA**  
 engineering  
 Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

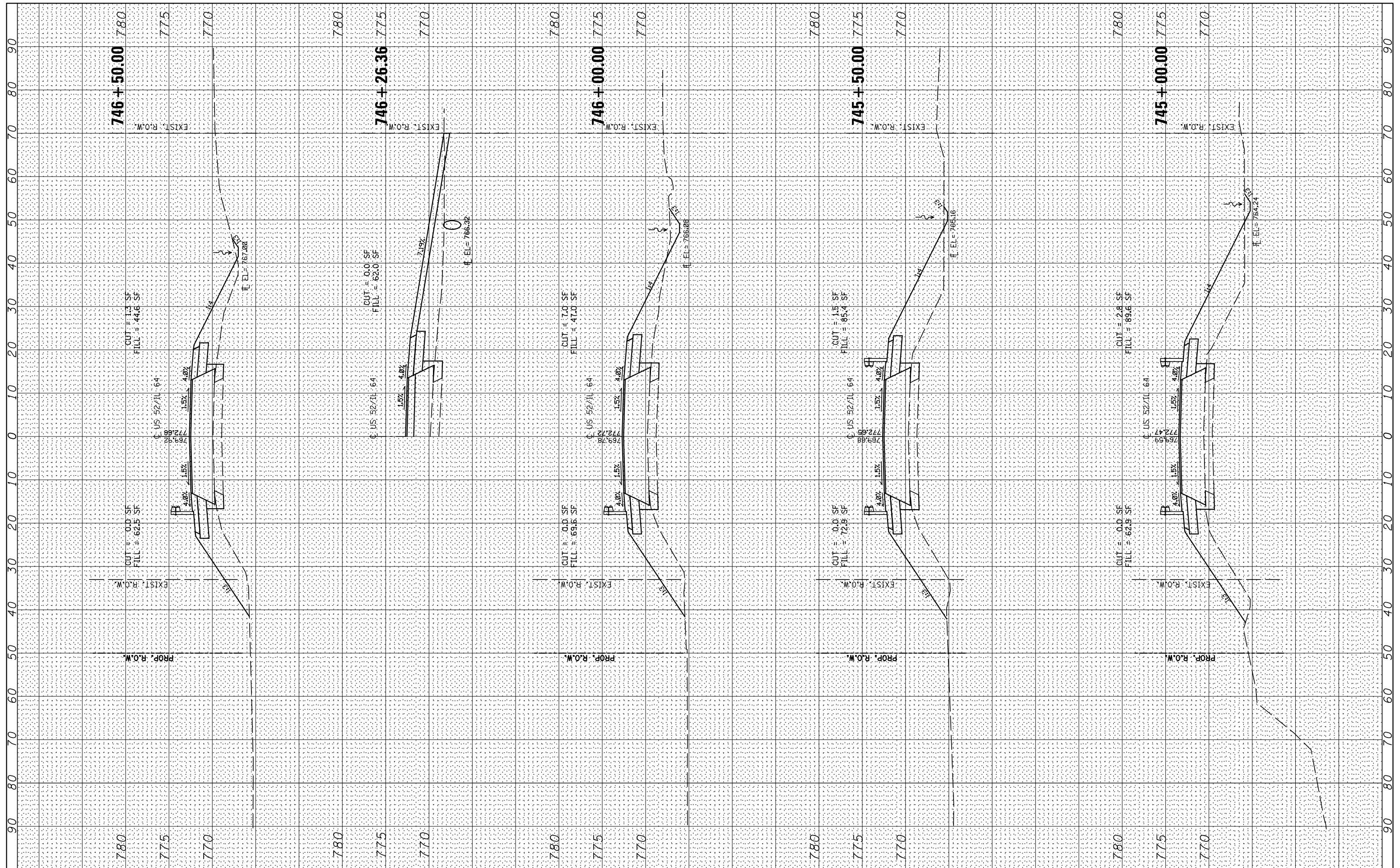
CROSS SECTIONS  
 US 52/L 64

SCALE: SHEET 4 OF 9 SHEETS STA. 743+00.00 TO STA. 744+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	144
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

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



FILE NAME =  
 \*FILEL\*  
 XS.SHEET VERTICAL

USER NAME = *USER*	DESIGNED - RAC	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = *DATE*	CHECKED - DAZ	REVISED -
	DATE - 06-28-13	REVISED -

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

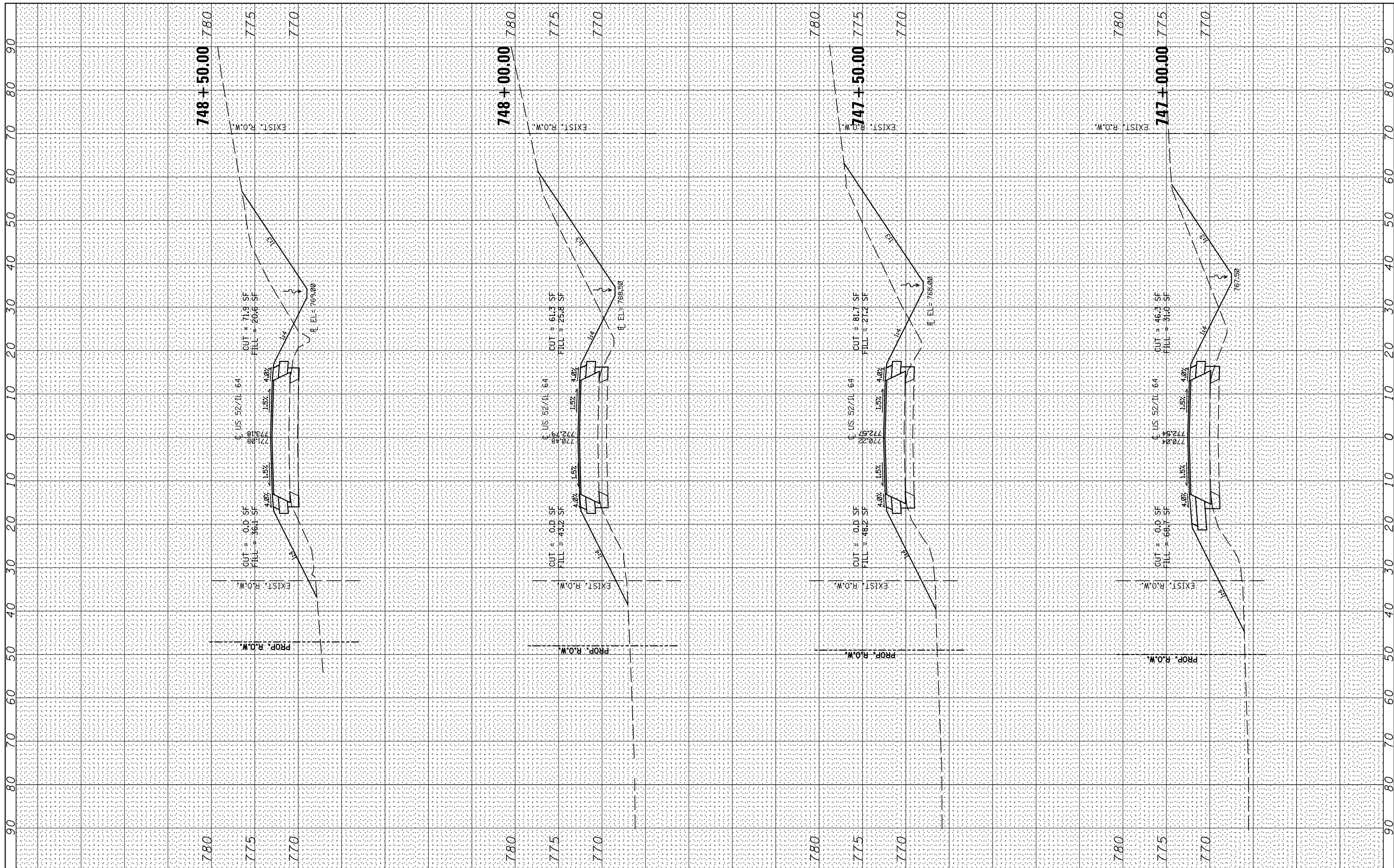
**ZROKA** Engineering  
 Zroka Engineering, P.C.  
 4216 North Hermitage  
 Chicago, IL 60613  
 SCALE: SHEET 5 OF 9 SHEETS STA. 745+00.00 TO STA. 746+50.00

**CROSS SECTIONS**  
**US 52/IL 64**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	145
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =  
 \*FILEL\*  
 XS.SHEET VERTICAL

USER NAME = *USER*	DESIGNED - RAC	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = *DATE*	CHECKED - DAZ	REVISED -
	DATE - 06-28-13	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

CROSS SECTIONS  
 US 52/IL 64

SCALE: SHEET 6 OF 9 SHEETS STA. 747+00.00 TO STA. 748+50.00

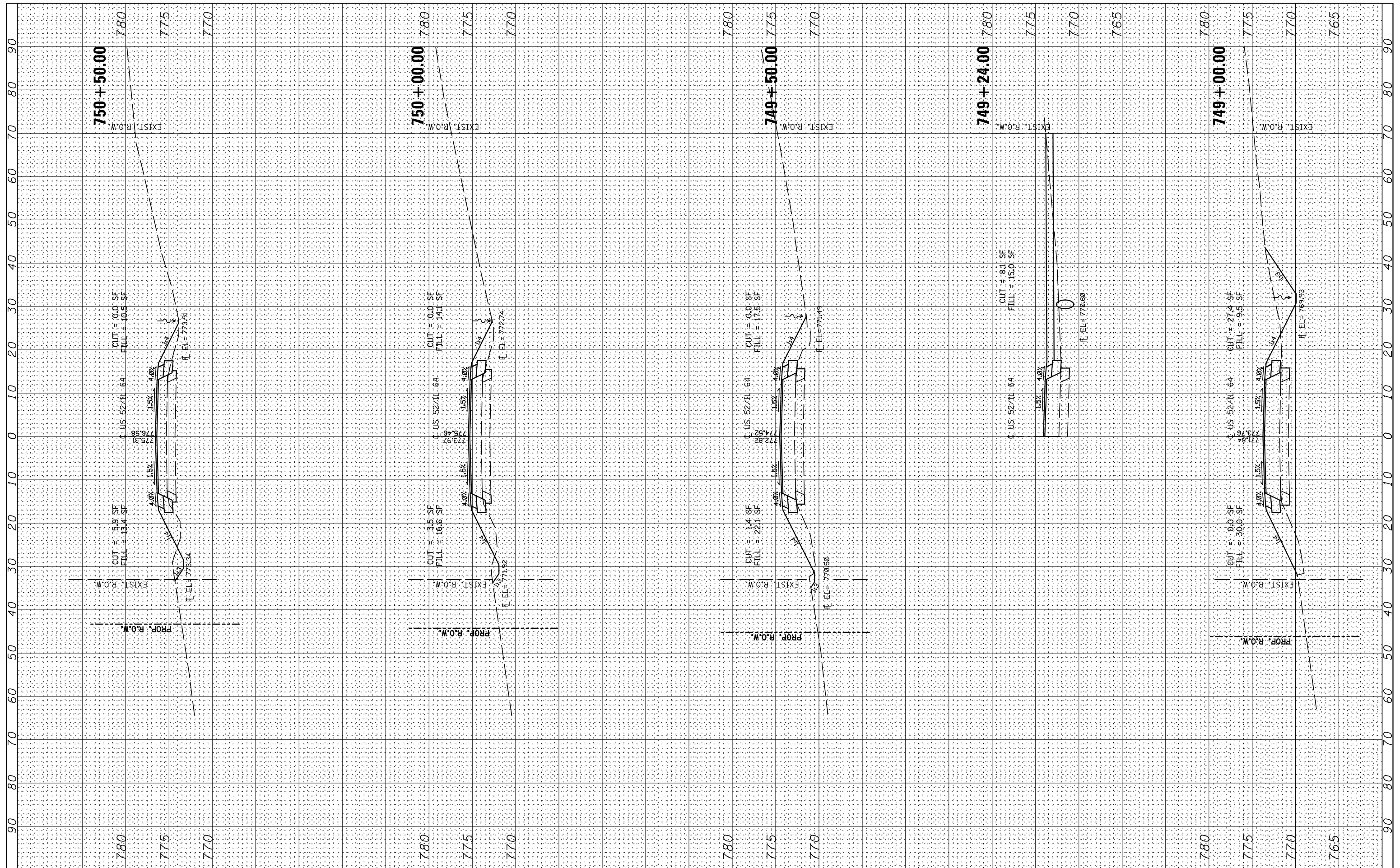
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	146
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS
	CHECKED



FILE NAME =  
 \*FILEL\*  
 XS.SHEET VERTICAL

USER NAME = *USER*	DESIGNED - RAC	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = *DATE*	CHECKED - DAZ	REVISED -
	DATE - 06-28-13	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

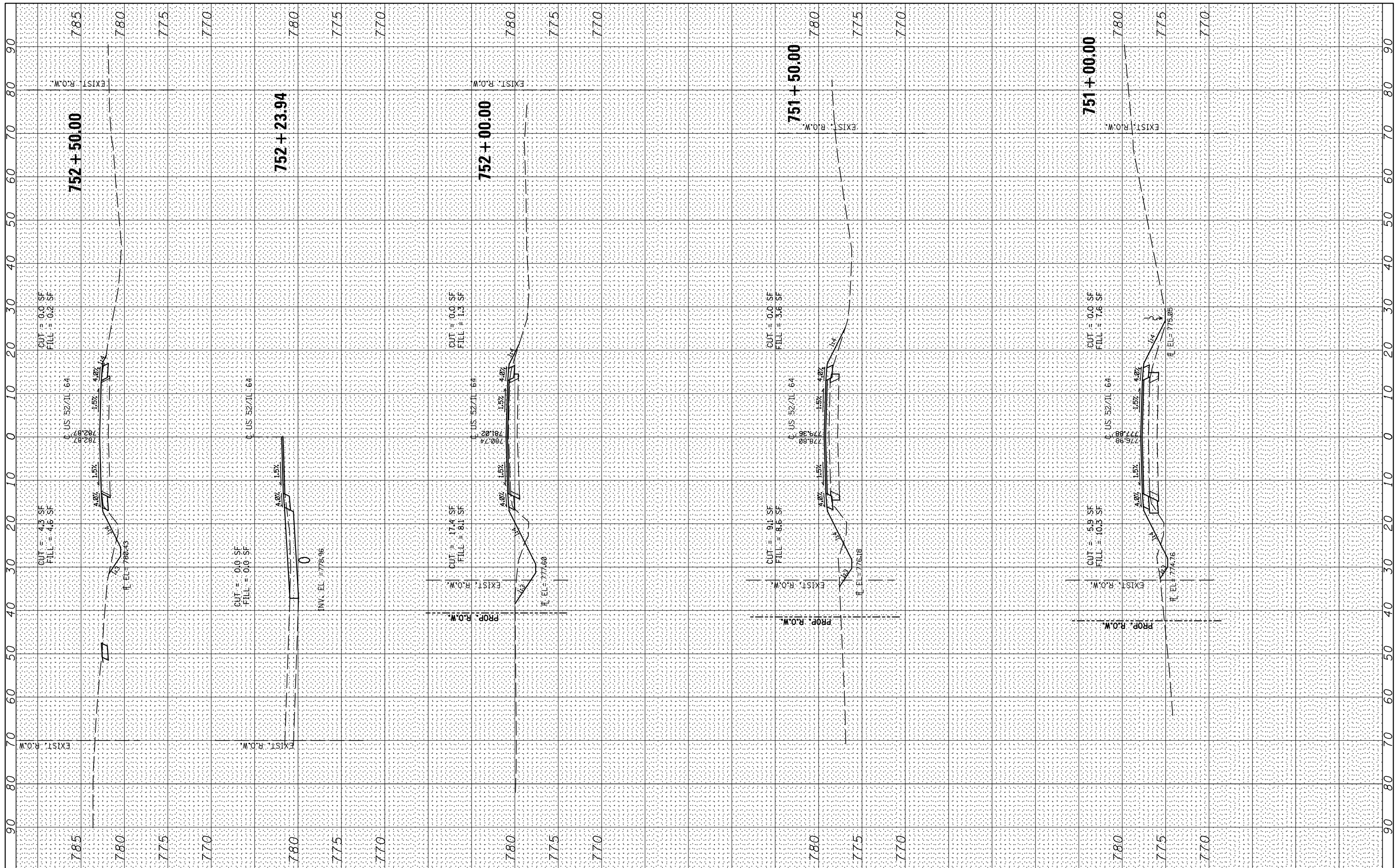
**ZROKA** engineering  
 Zroka Engineering, P.C.  
 4216 North Heritage  
 Chicago, IL 60613

**CROSS SECTIONS  
 US 52/IL 64**  
 SCALE: SHEET 7 OF 9 SHEETS  
 STA. 749+00.00 TO STA. 750+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	147
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
AREAS CHECKED	TEMPLATE
	AREAS CHECKED



FILE NAME =
*FILEL*
XS.SHEET VERTICAL

USER NAME = *USER*
DESIGNED - RAC
DRAWN - LCR
CHECKED - DAZ
DATE - 06-28-13
PLOT SCALE = *SCALE*
PLOT DATE = *DATE*

REVISED -
REVISED -
REVISED -
REVISED -

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



Zroka Engineering, P.C.  
4216 North Heritage  
Chicago, IL 60613

**CROSS SECTIONS**  
**US 52/111.64**

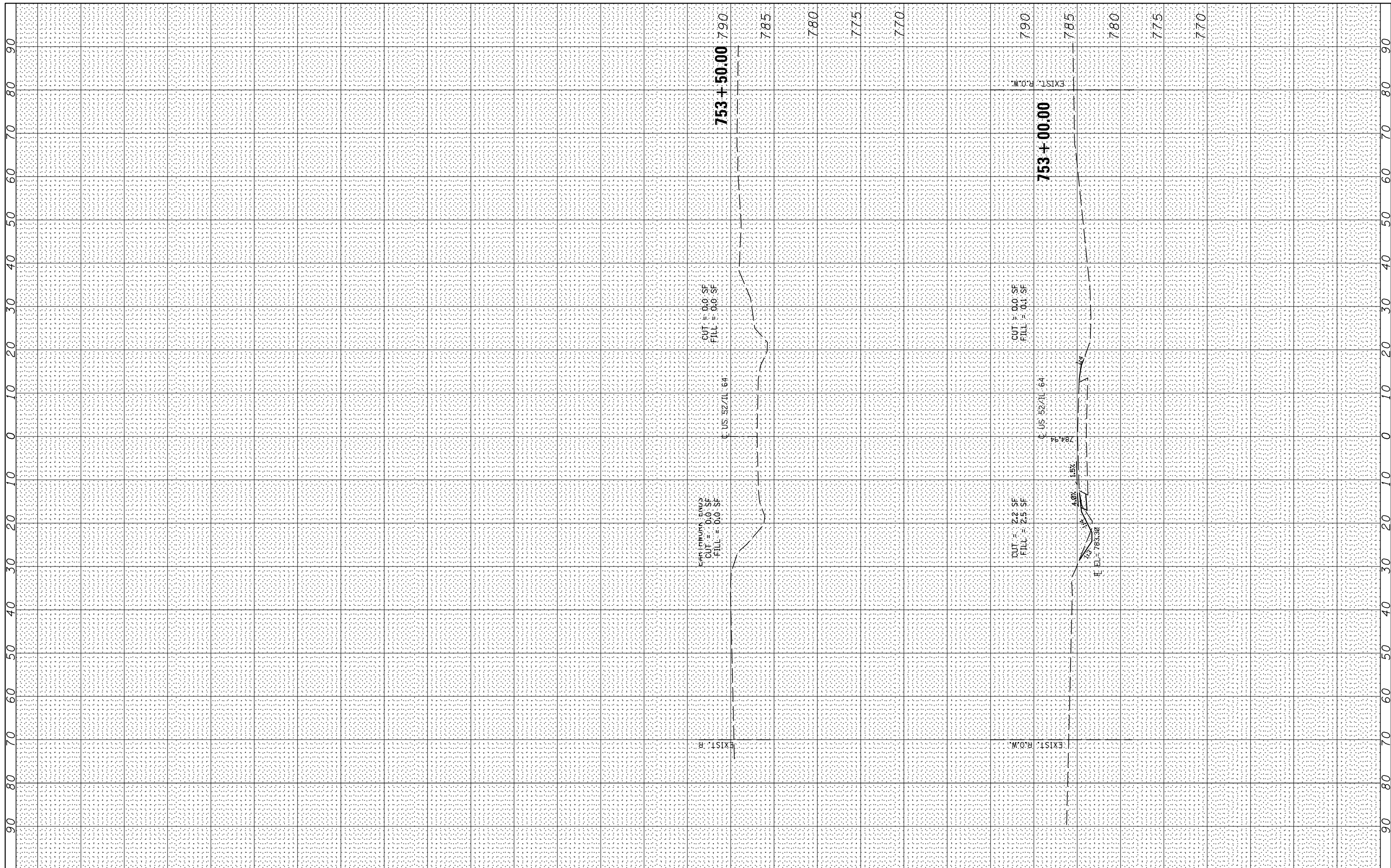
SCALE:	SHEET 8 OF 9 SHEETS	STA. 751+00.00 TO STA. 752+50.00
--------	---------------------	----------------------------------

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	148
CONTRACT NO. 64D83				



BY	DATE
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

BY	DATE
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



FILE NAME =  
#FILEL#

USER NAME = #USER#  
DESIGNED - RAC  
DRAWN - LCR  
CHECKED - DAZ  
DATE - 06-28-13

REVISIED -  
REVISIED -  
REVISIED -  
REVISIED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**



Zroka Engineering, P.C.  
4216 North Heritage  
Chicago, IL 60613

**CROSS SECTIONS  
US 52/L 64**

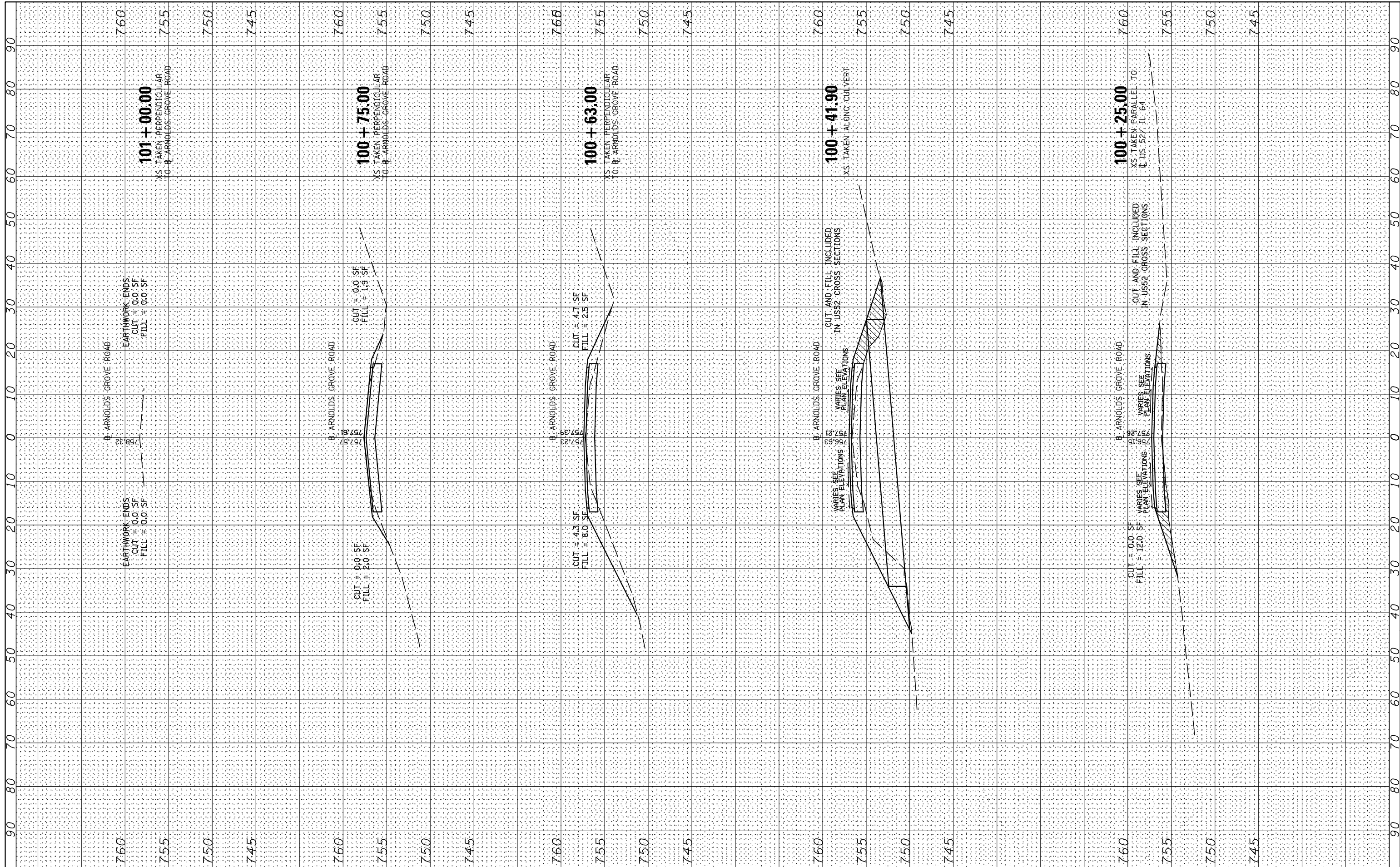
SCALE: SHEET 9 OF 9 SHEETS STA. 753+00.00 TO STA. 754+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	149
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				

XS.SHEET VERTICAL

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS
	CHECKED



FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*

PLOT SCALE = \*SCALE\*

PLOT DATE = \*DATE\*

DESIGNED - RAC

DRAWN - LCR

CHECKED - DAZ

DATE - 06-28-13

REVISED -

REVISED -

REVISED -

REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**



Zroka Engineering, P.C.  
4216 North Heritage  
Chicago, IL 60613

**CROSS SECTIONS  
ARNOLDS GROVE ROAD**

SCALE: SHEET 1 OF 7 SHEETS STA. 100+25.00 TO STA. 100+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	150
CONTRACT NO. 64D83				
ILLINOIS FED. AID PROJECT				