

Bar	Reinforcement Bars	No.	Size	Length
a	7	1/2	6'-0"	
b	7	1/2	8'-0"	
c	7	1/2	2'-0"	
d	7	1/2	5'-0"	
e	12	1/2	5'-0"	
Paint Bars Lbs. 150				

NOTES -
MATERIALS - Class "A" & Class "X" Concrete to be used throughout.
METHOD OF CONSTRUCTION - See Plan and Profile Sheets for location of Lateral Sewer connection and elevation of manhole at Semi-Elliptical Sewer. This work shall comply with Art 52 & 53 of the Standard Specifications for Road and Bridge Construction as amended to date. Details of Lateral Sewer opening to be built into manhole section. The Lateral Sewer Pipe Section of connection may be precast or cast in concrete. Detail indicates right hand connection. For left hand connection detail is opposite hand. The 24" pipe shall be Reinforced Concrete Culvert Pipe Class III as specified in Article 122.3 of the Specifications.
BILL OF MATERIAL - The Contract Unit Price shall include furnishing and placing of all materials required, including the Type I Form and L.S. 1 - 1/2 inch diameter material, 24" Reinforced Concrete Culvert Pipe, T Connections, Brick Subroads, and shall be paid for as each Lateral Sewer Connection.

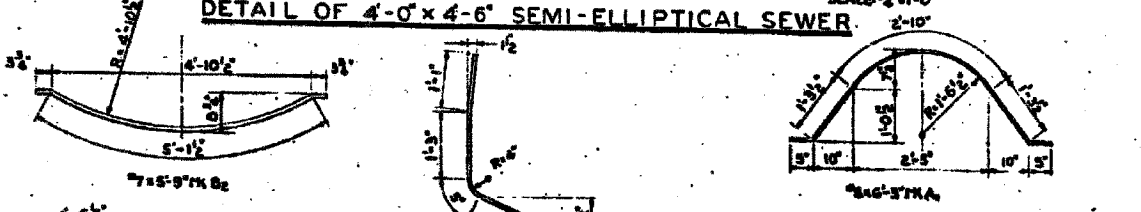
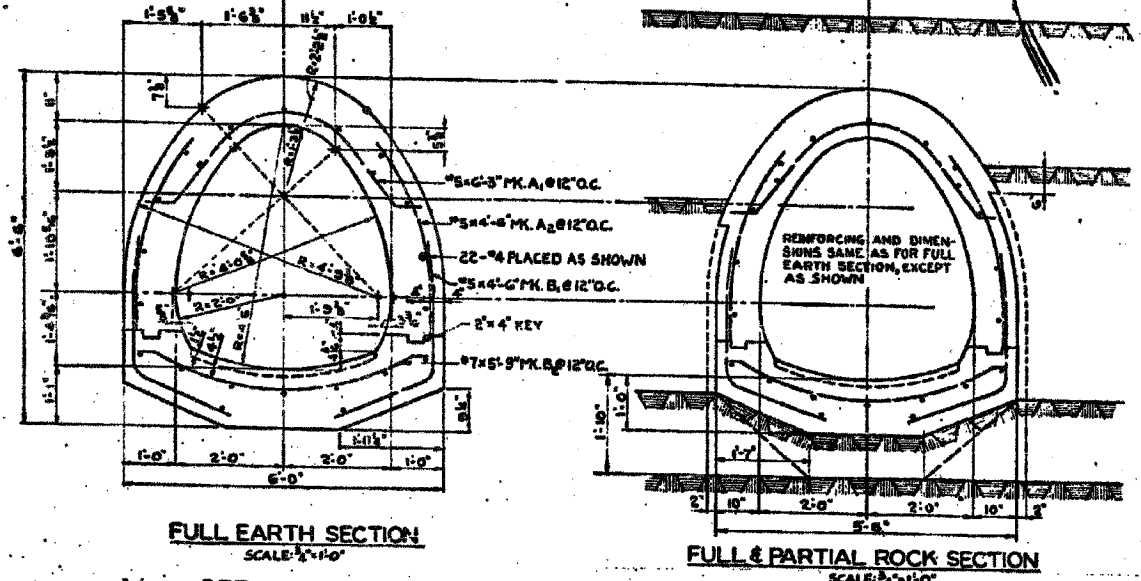
Class "A" Concrete	CuYds. 1
Class "X" Concrete	CuYds. 1
Reinforcement Bars	Lbs. 150

COUNTY OF COOK
DEPARTMENT OF HIGHWAYS
LATERAL SEWER CONNECTION
APPROVED: [Signature]
DATE: 7/7/05

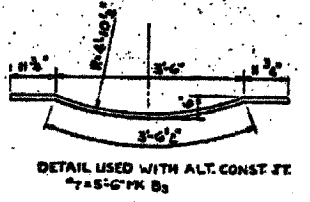
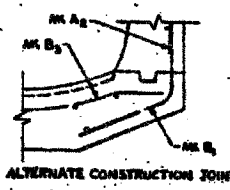
The items in the Bill of Material are listed for the Contractor's convenience in estimating the price bid per Each Lateral Sewer Connection. Any variance in quantities shall in no way affect the Lump Sum Bid as awarded.

IN CASE THE ROCK OCCURS ONLY AT OR NEAR THE CROWN SO AS TO EXPOSE THE OVERLIES EAST OR LOOSE ROCK FOR AN AREA OF OVER 9 SQ. FT. AT ANY ONE LOCATION, THE MATERIAL SHALL BE EXCAVATED TO ALLOW THE CONSTRUCTION OF A SECTION SEMI-ELLIPTICAL SEWER. THE COST OF THIS ADDITIONAL EXCAVATION & CONCRETE SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR LINEAL FOOT OF 4'-0" x 4'-6" SEMI-ELLIPTICAL SEWER.

WHEN THE SURFACE OF SOLID ROCK OCCURS LESS THAN 1'-10" BELOW THE INVERT GRADE, THE CONCRETE SHALL BE CARRIED DOWN TO SOLID ROCK. THE COST OF THIS ADDITIONAL EXCAVATION & CONCRETE SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR LINEAL FOOT OF 4'-0" x 4'-6" SEMI-ELLIPTICAL SEWER.



MATERIALS:
CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.
METHOD OF CONSTRUCTION:
SEE PLAN & PROFILE SHEET NO. FOR LOCATION, ELEVATIONS AND GRADES FOR SEWER. TRANSVERSE AND LONGITUDINAL REINFORCING SHALL BE CONTINUOUS. THIS WORK SHALL COMPLY WITH SECTIONS 52, 53 & 54 OF THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS. MINIMUM STEEL CLEARANCE SHALL BE 1" EXCEPT AS NOTED. MINIMUM LAP OF REINFORCEMENT BARS SHALL BE 32 DIAMETERS.
NOTE ON PAYMENT:
THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER L.F. OF 4'-0" x 4'-6" SEMI-ELLIPTICAL SEWER, WHICH PRICE SHALL INCLUDE ALL MATERIALS, INCLUDING EXCAVATION, DISTURBANCE OF SURPLUS MATERIALS, ALL TOOLS AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK AS OUTLINED IN THE PLAN.



COUNTY OF COOK
DEPARTMENT OF HIGHWAYS
LATERAL SEWER CONNECTION AND
4'-0" x 4'-6" SEMI-ELLIPTICAL SEWER
APPROVED: [Signature]
DATE: 7/7/05

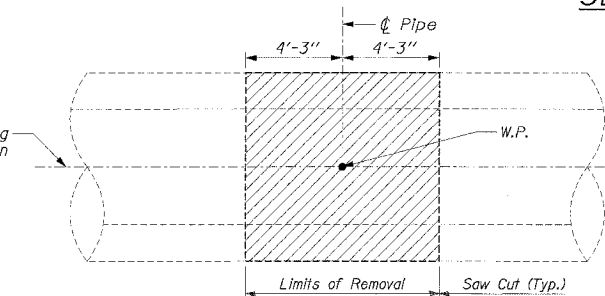
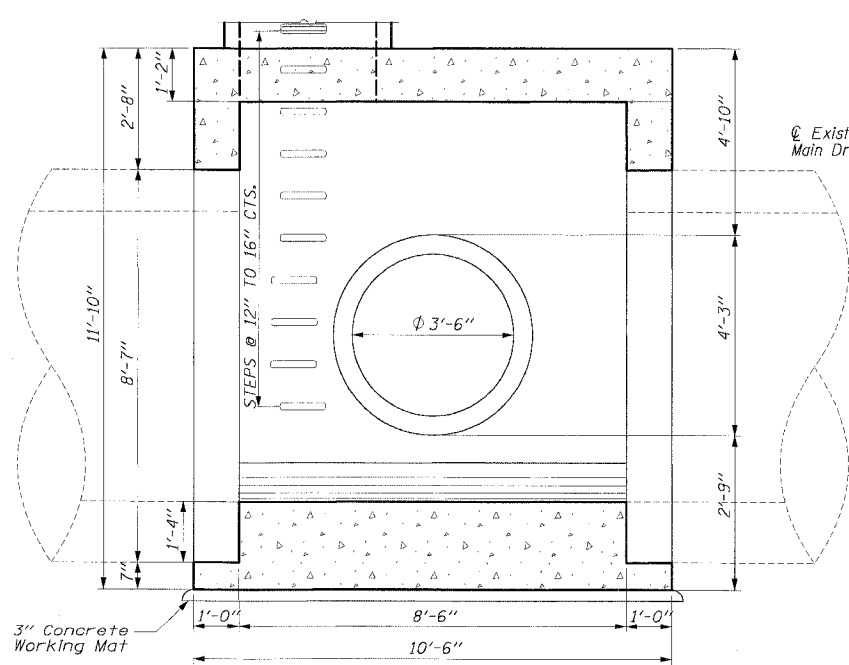
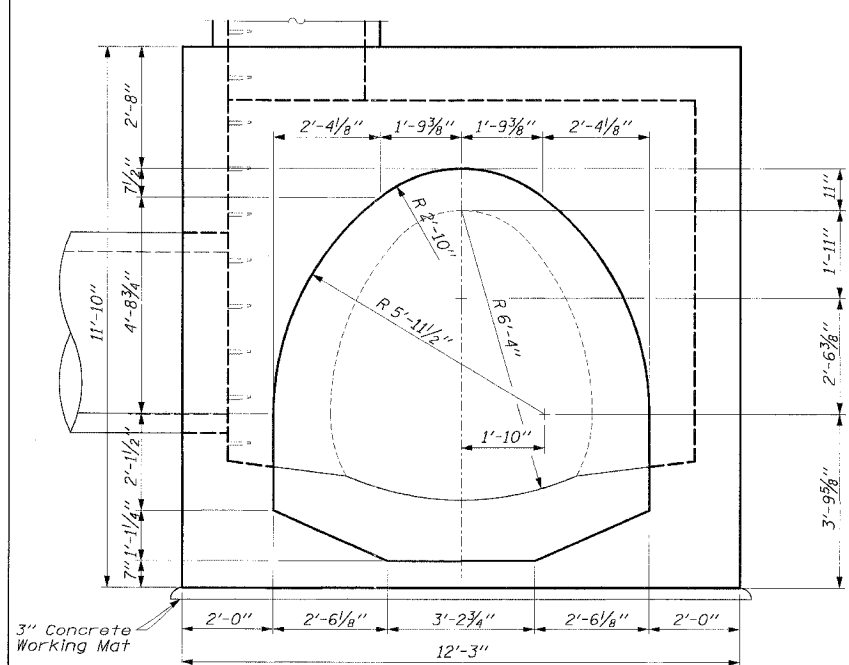
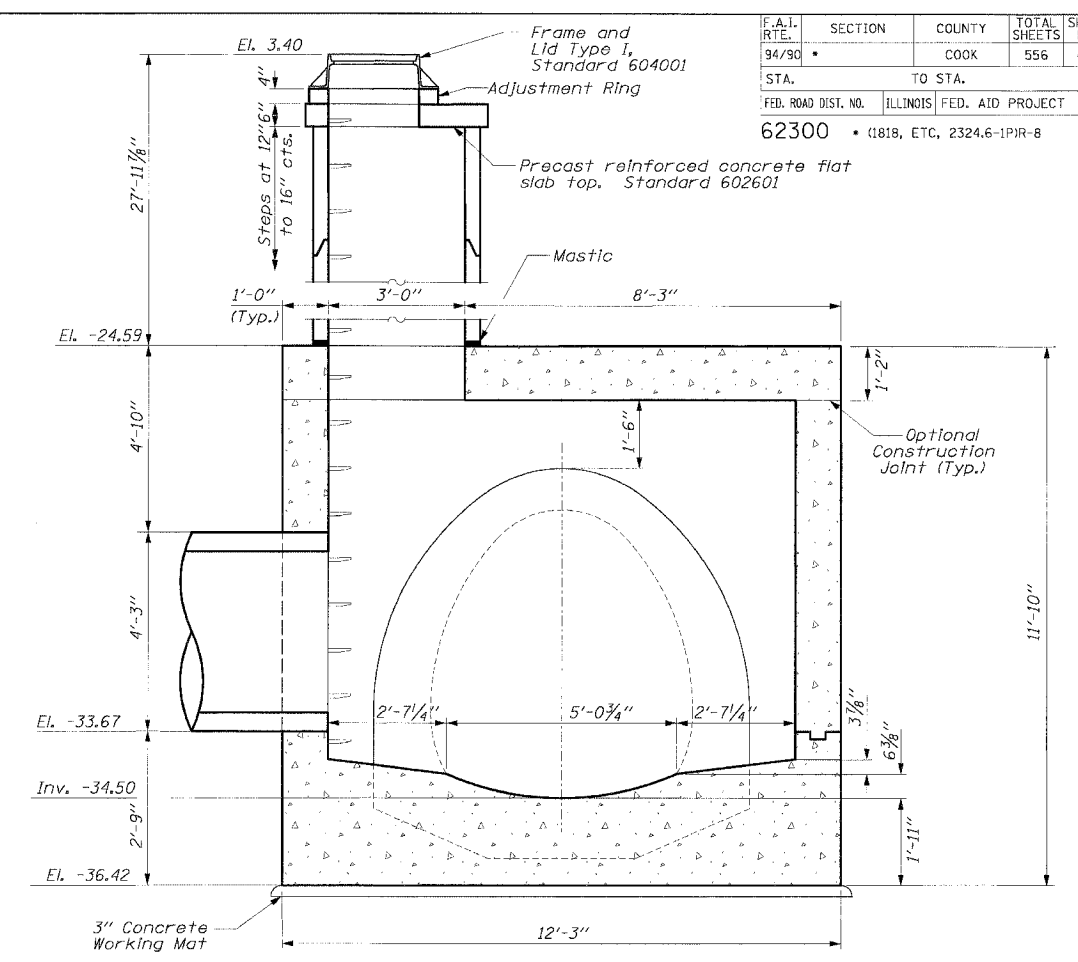
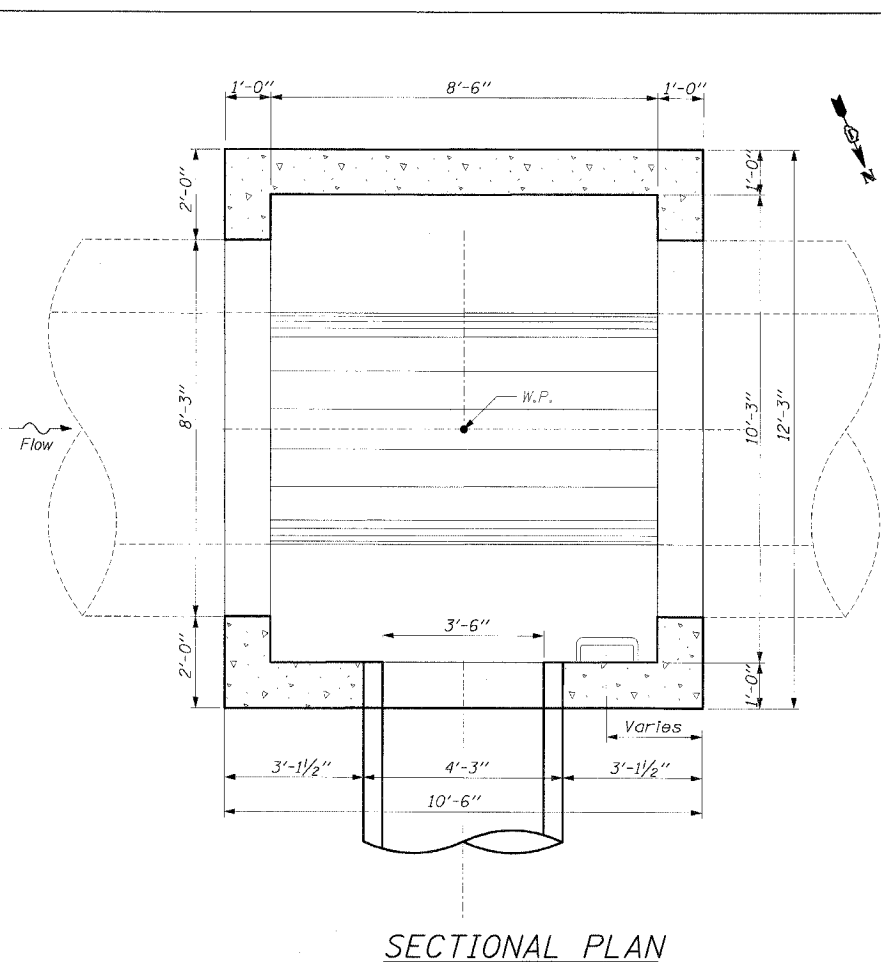
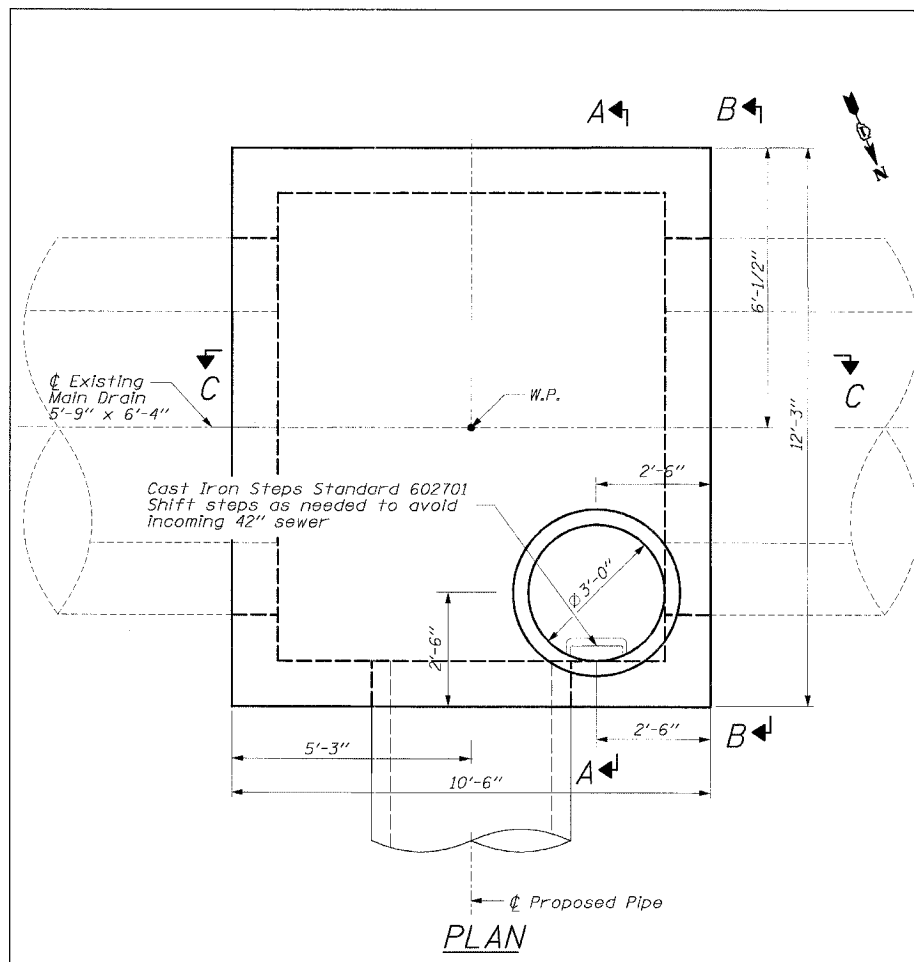
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER 4-01
DETAIL 5
SCALE: [Blank]
DATE: 7/7/05
DRAWN BY: JRW
CHECKED BY: EL

FOR INFORMATION ONLY

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EDKORP.COM

COPY: 1/10/05 9:55 AM 08/27/2005 0:15:54 PM 14815 CAD/DNA/PL/403828-517



BILL OF MATERIAL

ITEM	UNIT	TOTAL
* Concrete Structures	CU YD	25
* Reinforcement Bars	POUND	14,020
Junction Chamber No. 2	EACH	1
Braced Excavation	CU YD	348
Trench Backfill	CU YD	258

* For Information only. Cost included with pay item Junction Chamber No. 2.

- NOTES:**
- For additional information, see Standard Specifications.
 - For reinforcement details, see the following Sheets.
 - All pipe openings are based on wall C ASTM C76, coordinate openings with pipe supplier.
 - For Station and Offset, see "Drainage Schedules".
 - The maximum width of excavation is the width of the junction chamber plus 4 feet, and the maximum length is the length of the junction chamber plus 4 feet. Excavation outside the maximum dimensions specified will not be measured for payment.
 - The design of the braced excavation is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system.
 - Removal of any existing concrete is included with the pay item Junction Chamber No. 2.
 - Contractor to verify existing dimensions in field prior to ordering materials.

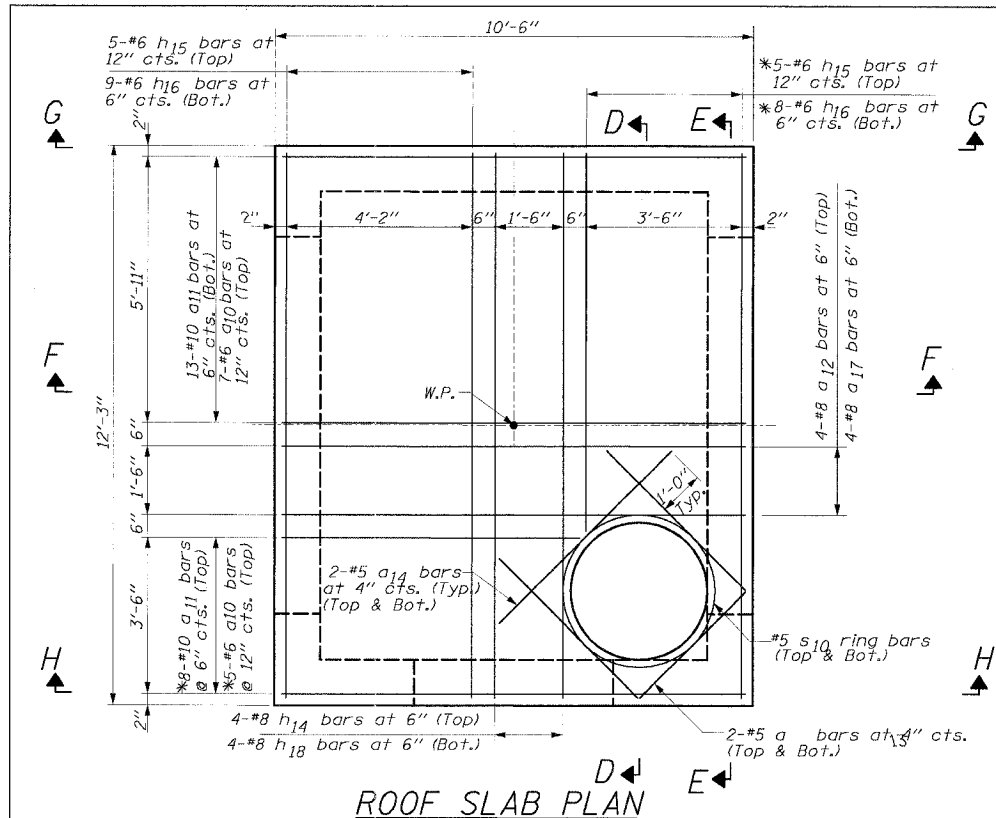
Edwards and Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

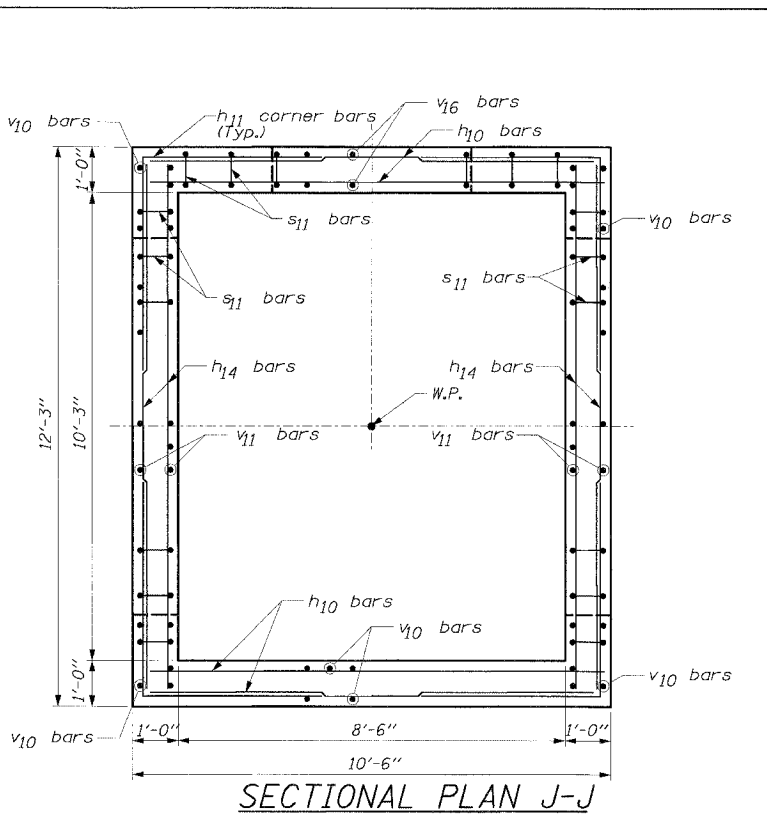
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER 7-01
GENERAL PLAN AND ELEVATION

SCALE: DRAWN BY: JRW
DATE: 7/7/05 CHECKED BY: EL

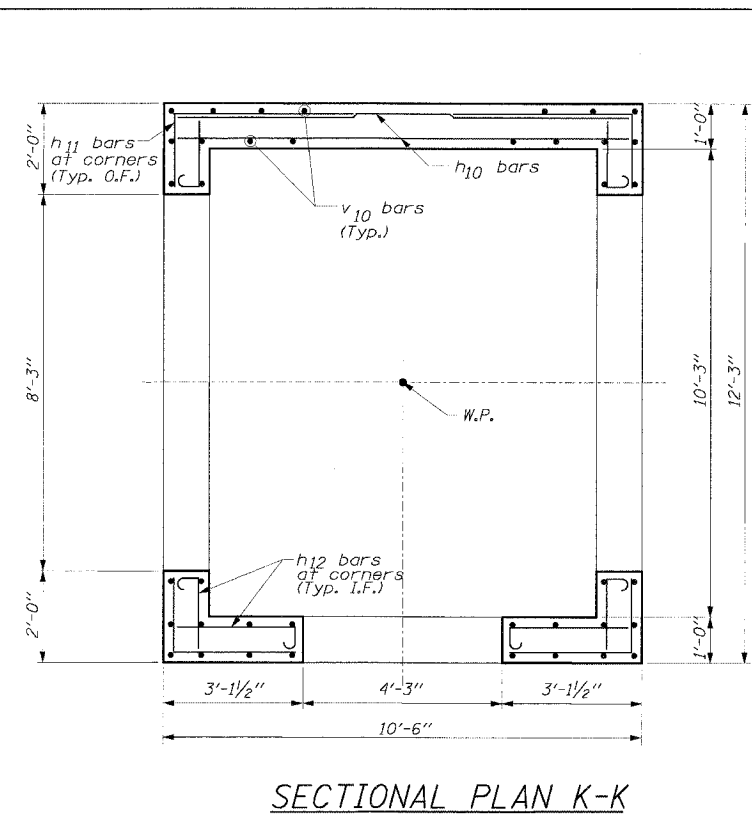
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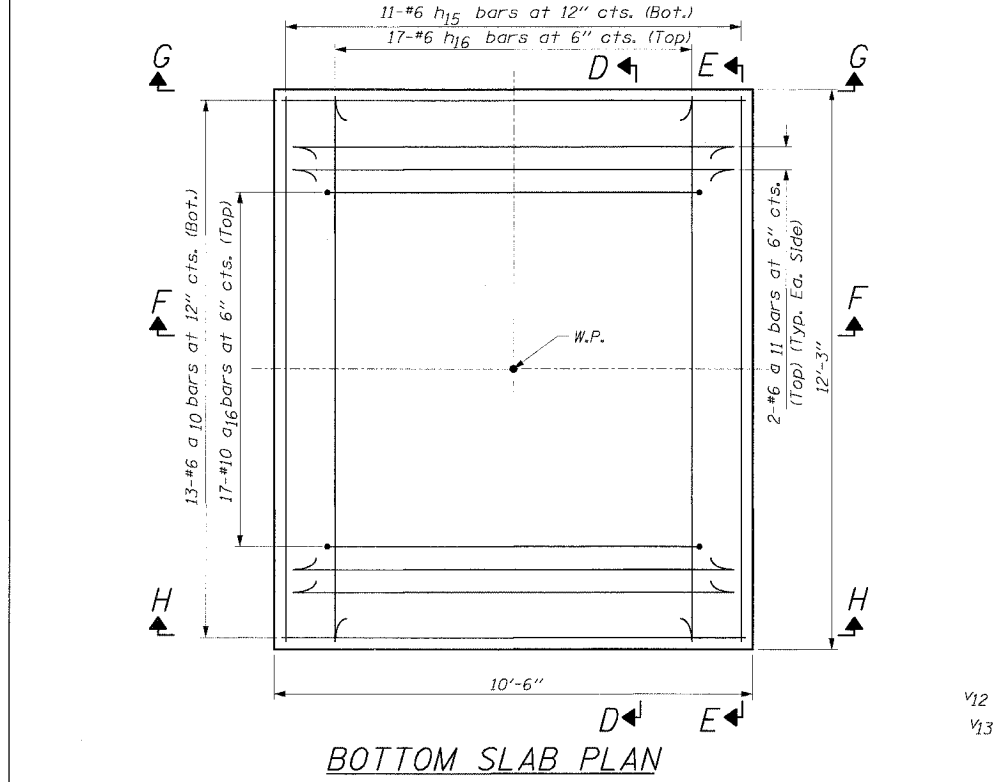
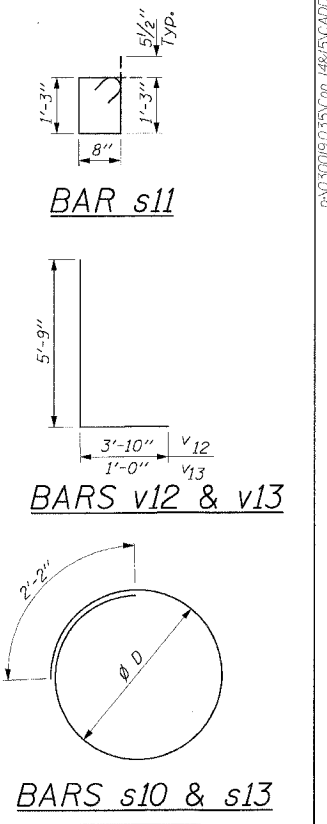
ROOF SLAB PLAN



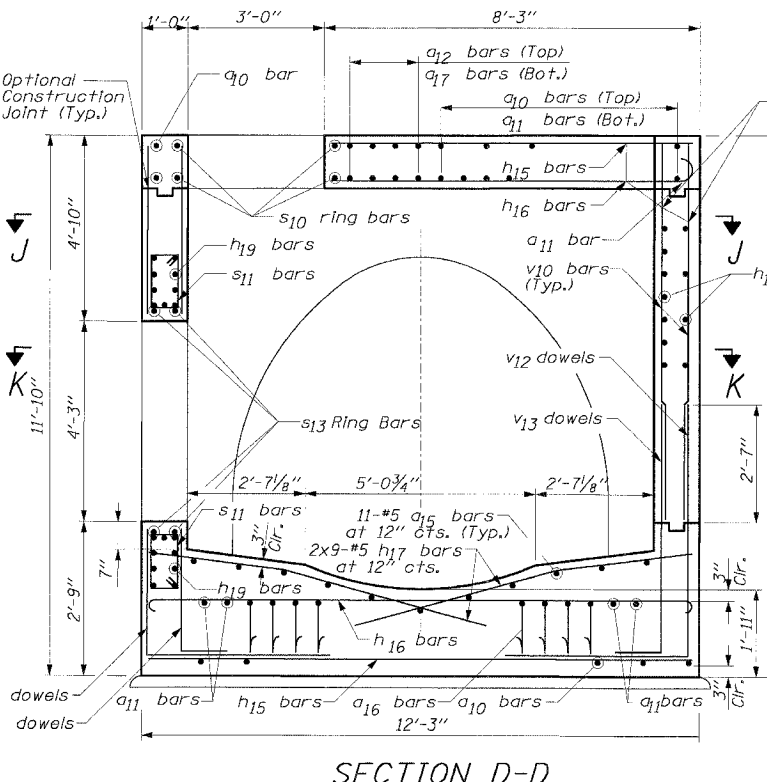
SECTIONAL PLAN J-J



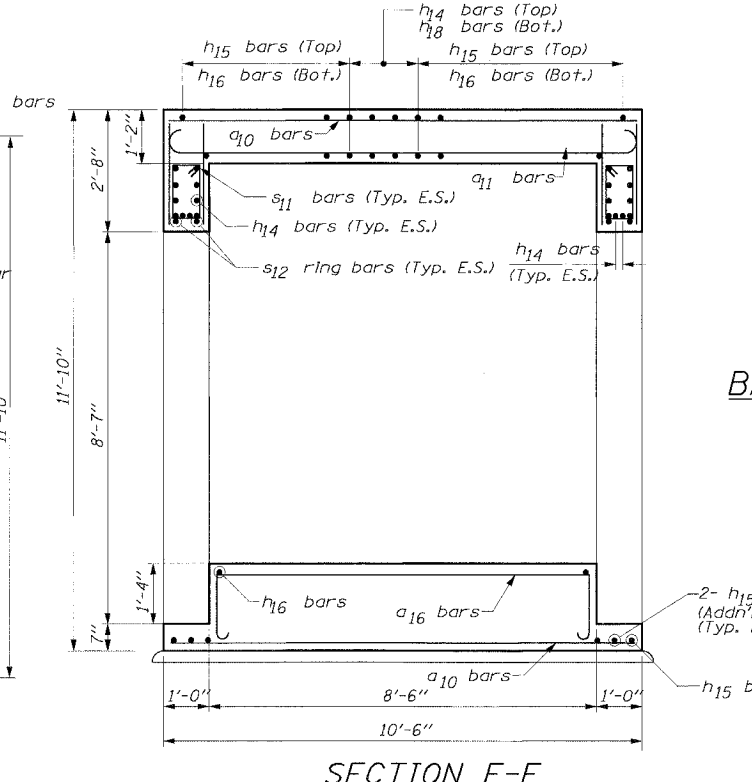
SECTIONAL PLAN K-K



BOTTOM SLAB PLAN



SECTION D-D



SECTION F-F

Bar	Ø D
s10	3'-4"
s13	5'-3"

Bar	a	b	c
a11	8"	10'-2"	6"
a17	11"	10'-2"	8"
h16	8"	11'-11"	6"
h18	11"	11'-11"	8"

BARS a11, a17, h16 & h18

NOTES:

- All dimensions and elevations shall be field verified prior to construction.
 - Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
 - Manhole Frame, Ladder Rungs, and any inserts installation shall be coordinated with Roadway Plans.
 - Concrete cover for reinforcement steel to be 2" unless otherwise noted.
 - All concrete edges shall be chamfered 1 inch.
 - All lap splices marked on the drawings are minimum.
 - Concrete Compressive Strength $f_c' = 3,500$ psi.
 - Steel Yield Strength = 60,000 psi.
 - Work this Sheet with other 2 Junction Chamber Sheets.
- * Cut bars to fit in field.
- E.F. - denotes Each Face
E.S. - denotes Each Side
I.F. - denotes Inside Face
O.F. - denotes Outside Face

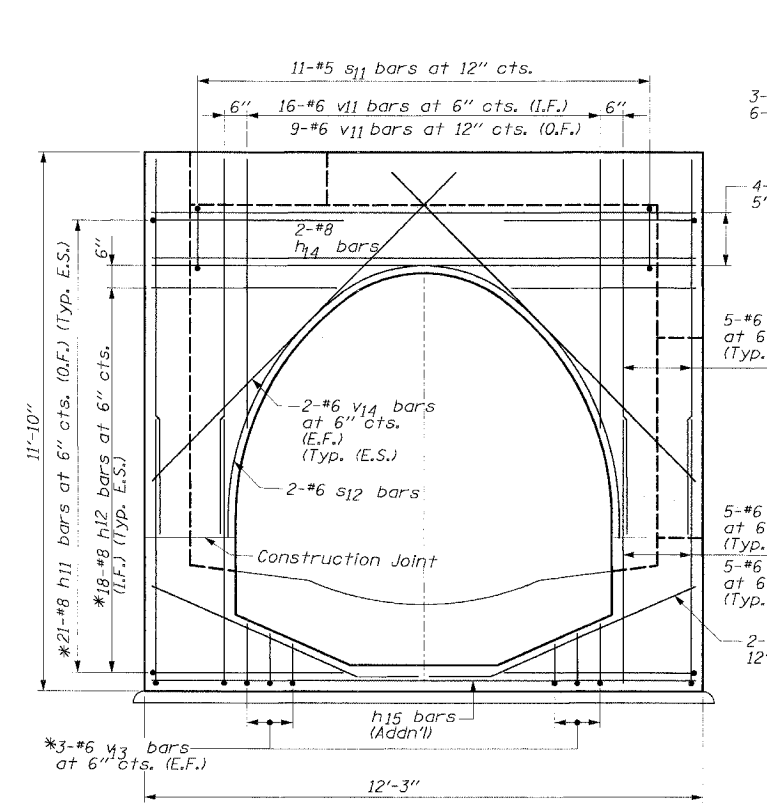
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER 7-01
DETAIL 1

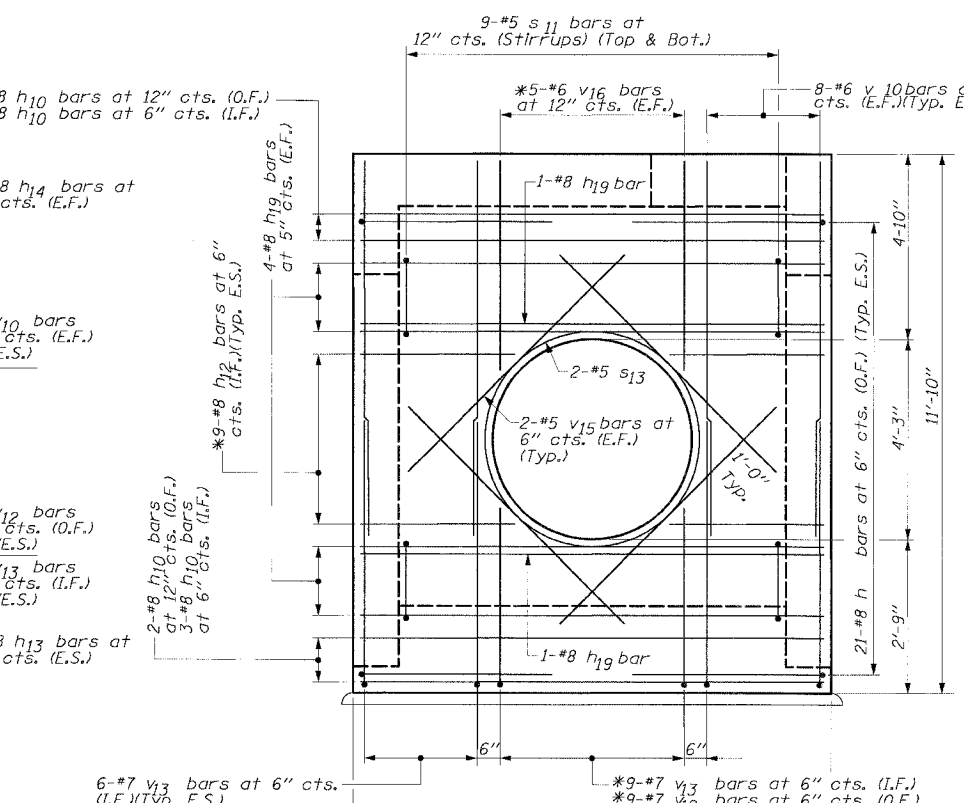
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BILL OF MATERIAL JUNCTION CHAMBER 7-01

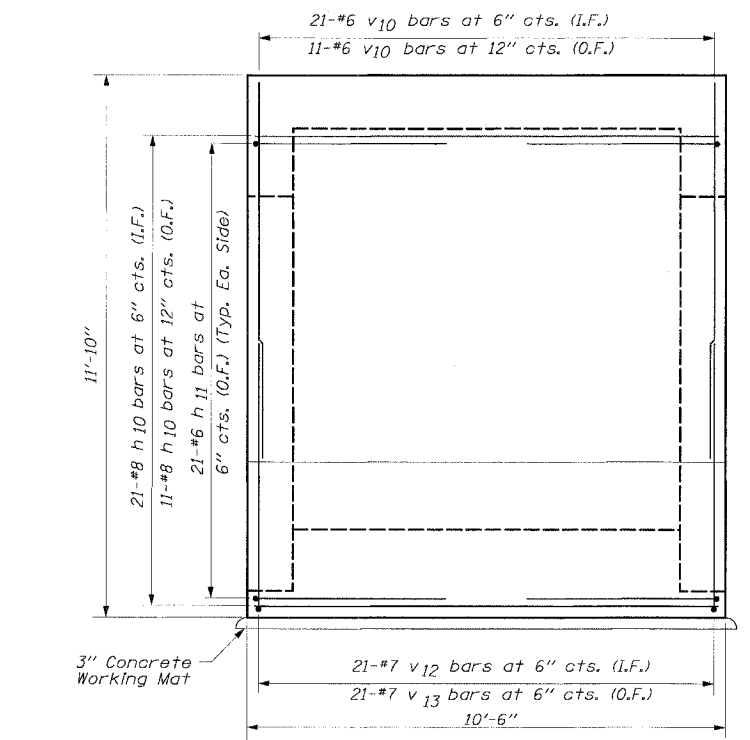
Bar	No.	Size	Length	Shape
a10	25	#6	10'-2"	—
a11	25	#10	11'-6"	—
a12	4	#8	10'-2"	—
a13	2	#5	3'-3"	—
a14	6	#5	5'-4"	—
a15	11	#5	8'-2"	—
a16	17	#10	12'-4"	—
a17	4	#8	12'-0"	—
h10	56	#8	10'-2"	—
h11	84	#8	9'-2"	L
h12	54	#8	6'-0"	—
h13	4	#8	6'-3"	—
h14	24	#8	11'-11"	—
h15	25	#6	11'-11"	—
h16	34	#6	13'-3"	—
h17	18	#5	7'-7"	—
h18	4	#8	13'-9"	—
h19	18	#8	10'-2"	—
s10	2	#5	12'-8"	○
s11	40	#5	4'-9"	—
s12	4	#6	16'-2"	—
s13	2	#5	18'-8"	○
v10	68	#6	8'-2"	—
v11	50	#6	5'-10"	—
v12	62	#7	9'-7"	L
v13	62	#7	6'-9"	L
v14	8	#6	9'-6"	—
v15	8	#5	7'-0"	—
v16	10	#6	4'-10"	—
Reinforcement Bars	Pound	14,020		
Concrete Structures	Cu. Yard	25		



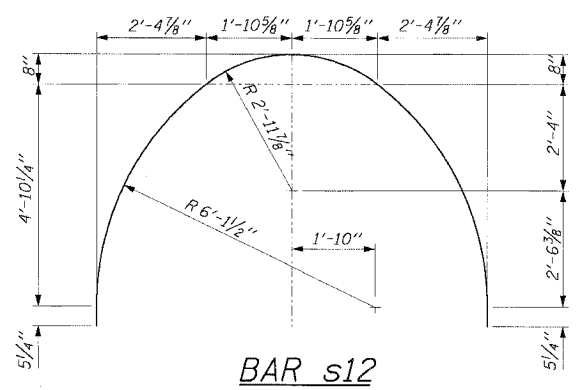
SECTION E-E
(Typical Both Faces)



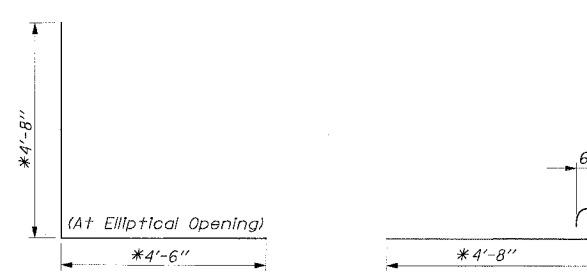
SECTION H-H



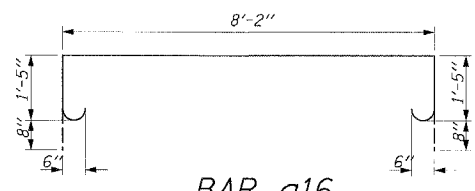
SECTION G-G



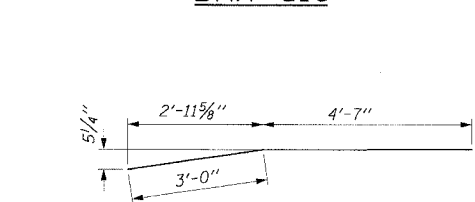
BAR s12



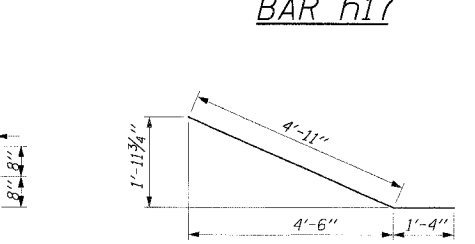
BAR h11



BAR a16



BAR h17



BAR h13

NOTES:

- All dimensions and elevations shall be field verified prior to construction.
 - Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
 - Manhole Frame, Ladder Rungs, and any inserts installation shall be coordinated with Roadway Plans.
 - Concrete cover for reinforcement steel to be 2" unless otherwise noted.
 - All concrete edges shall be chamfered 1 inch.
 - All lap splices marked on the drawings are minimum.
 - Concrete Compressive Strength $f_c' = 3,500$ psi.
 - Steel Yield Strength = 60,000 psi.
 - Work this Sheet with other Junction Chamber Sheets.
 - Quantities Included for information only. All quantities associated with the junction chamber are included with the pay item Junction Chamber No. 2 except for Braced Excavation and Trench Backfill which shall be paid for separately.
- * Cut bars to fit in field.
- E.F. - Denotes Each Face
E.S. - Denotes Each Side
I.F. - Denotes Inside Face
O.F. - Denotes Outside Face

REVISIONS	
NAME	DATE

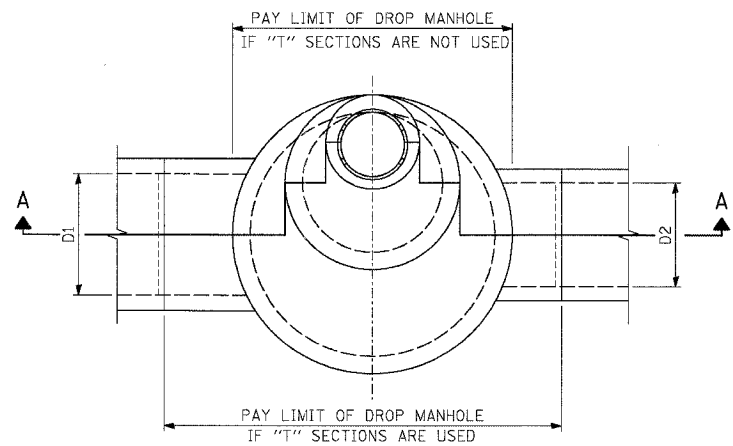
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER 7-01
DETAIL 2

SCALE: _____ DRAWN BY: JRW
DATE: 7/7/05 CHECKED BY: EL

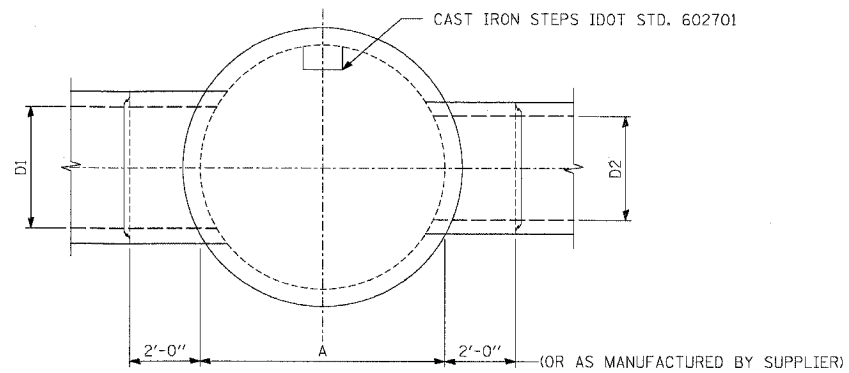
Edwards and Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

P:\030019\035 Con 14&15 CAD 40cu.40372e.SHT

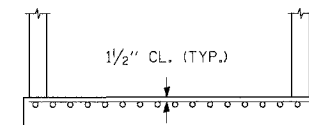
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	405
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	181B, ETC, 2324.6-1PR-8			



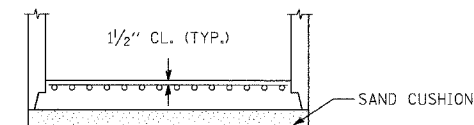
PLAN VIEW



SECTIONAL PLAN

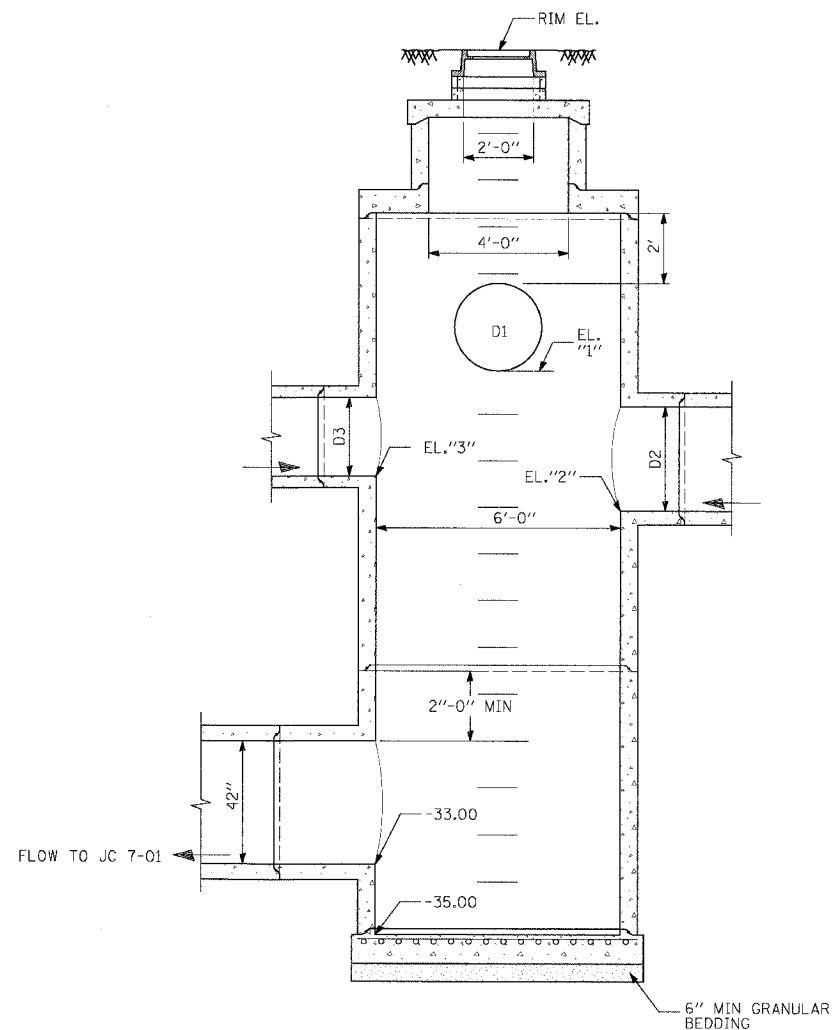


REINFORCED CAST-IN-PLACE CLASS X CONCRETE



PREFABRICATED REINFORCED CONCRETE SLAB WHEN THE PRECAST REINFORCED CONCRETE SECTIONS ALTERNATE IS USED WITH SAND CUSHION

ALTERNATE BOTTOM SLAB



SECTION A-A

DROP MANHOLE 6' DIA.

NOTES:

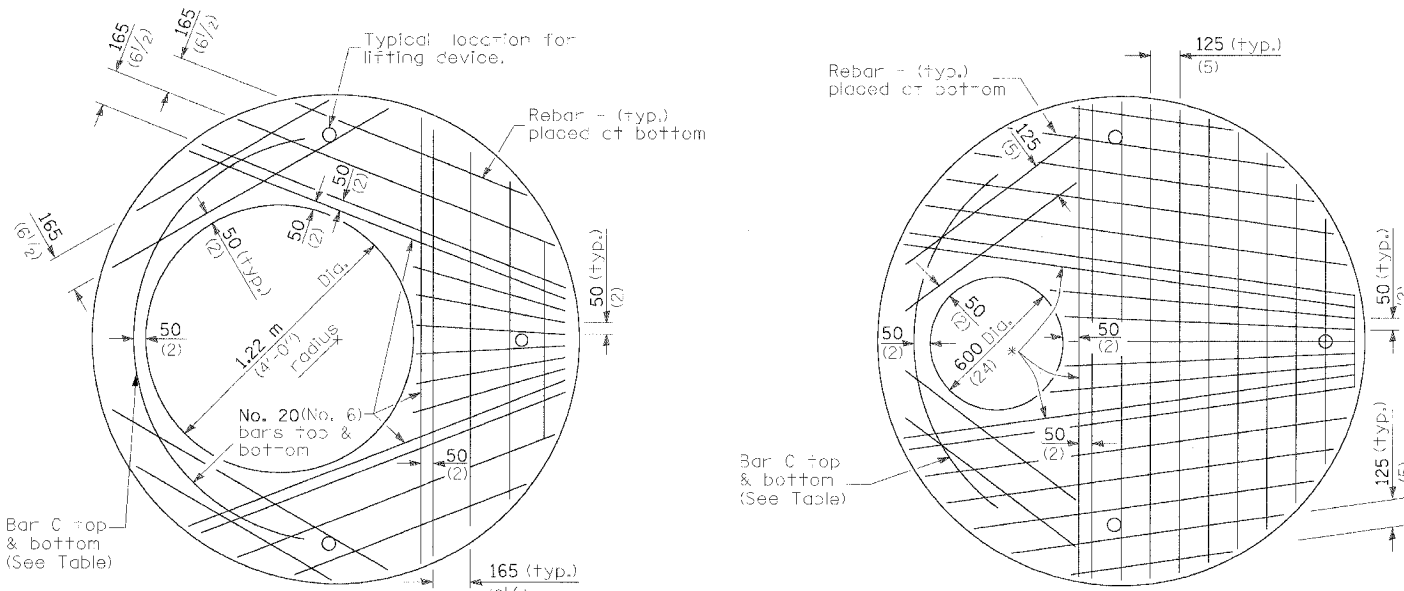
- 1) SEE DRAINAGE SCHEDULE FOR OTHER INVERT ELEVATIONS, PIPE DIAMETERS, AND RIM ELEVATION.
- 2) ALL DIMENSIONS ARE INSIDE DIMENSIONS.
- 3) UTILIZE PIPE "T" SECTIONS WHENEVER AVAILABLE.
- 4) PRESET PIPE OPENINGS IN PRECAST REINFORCED CONCRETE SECTIONS IF "T" SECTIONS AND SPECIAL FITTINGS ARE NOT AVAILABLE.
- 5) ROTATE FLAT SLAB AND MANHOLE RISER SO STEPS AVOID STORM SEWER OPENINGS.
- 6) CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS. STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.
- 7) JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.
- 8) LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.
- 9) ALL WORK SHALL BE AS PER AASHTO REQUIREMENTS. ASTM IS LISTED AS SUPPLEMENTARY.

Edwards AND Kelcey
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION DRAINAGE STRUCTURE DETAILS DROP MANHOLE (STRUCTURE 7-07)
NAME	DATE	
		SCALE: DATE: 7/7/05
		DRAWN BY: JRW CHECKED BY: EL

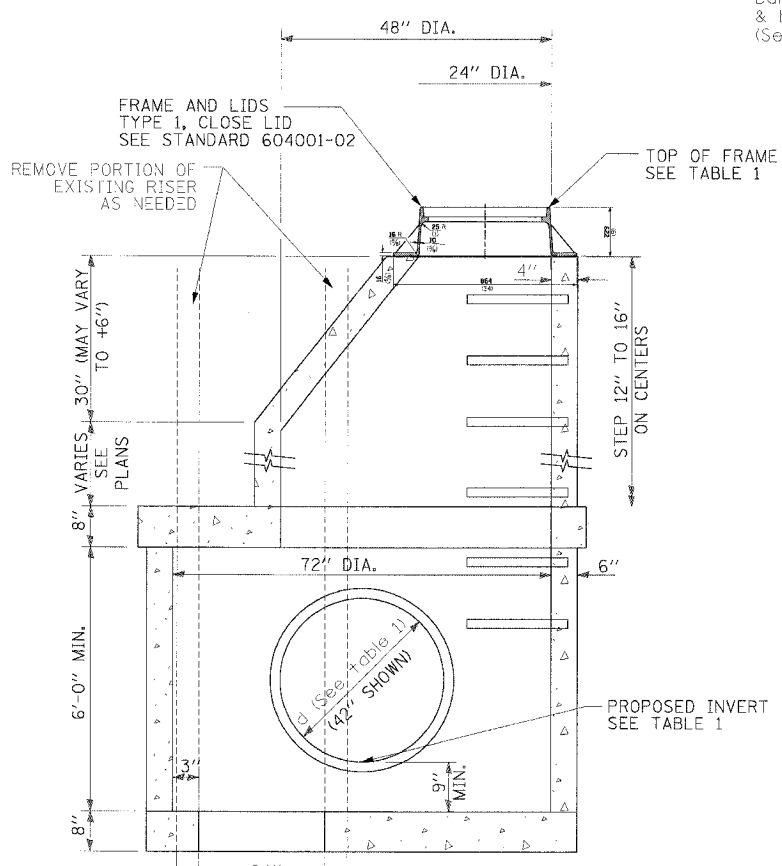
STR.	TF.	INVERT			DIAMETER (d)				
		WEST	EAST	OTHERS	WEST	EAST	OTHERS	OTHERS	
DMH 3-01	-6.11	-18.63	-17.97	-12.46(N)	-12.73(S)	36"	24"	24"	15"
DMH 5-01	-3.72	-14.39	-14.39	-10.1(N)		36"	30"	12"	
DMH 6-01	2.91	-14.39	-16.31			36"	42"		
DMH 8-01	-0.05	-13.32	-12.29			36"	27"		
DMH 9-01	1.5	-18.64	-18.64			36"	42"		

TABLE 1
SEE DRAINAGE SCHEDULE AND DU-SHEETS FOR MORE INFORMATION

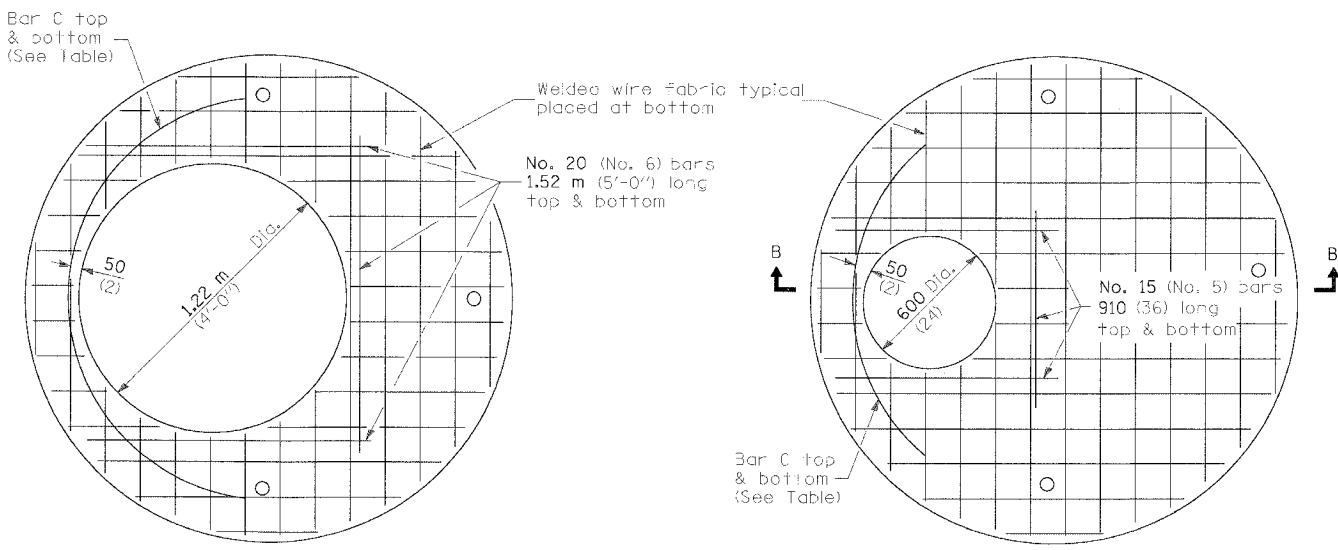


PLAN
Showing Rebar Reinforcement

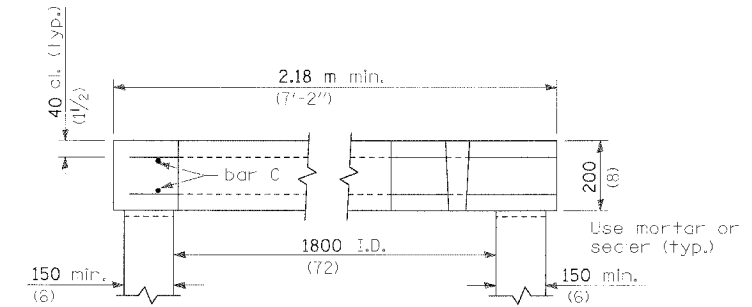
Diameter of opening	Thickness	Reinforcement "As" WWF Each direction	Bar Size	No. 15 (No. 4) Bar C	
				Length	Radius
600 (24)	200 (8)	2244 mm ² /m (0.06 sq. in./ft.)	No. 20 (No. 6)	1.83 m (6'-0")	965 (38)
0.91 m or 1.2 m (3'-0" or 4'-0")	200 (8)	1736 mm ² /m (0.82 sq. in./ft.)	No. 20 (No. 6)	2.74 m (9'-0")	965 (38)



ELEVATION



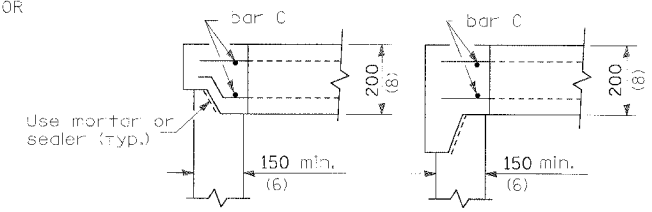
PLAN
Showing Welded Wire Fabric Reinforcement



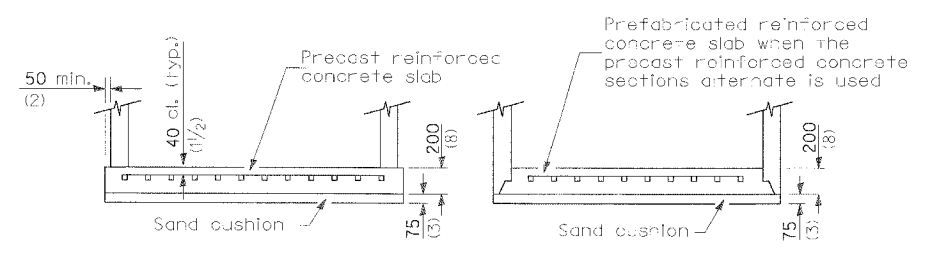
SECTION B-B

GENERAL NOTES

- Joint configuration and dimensions of flat slab top shall match and fit the riser joint detail.
- Lifting devices shall be approved by the Engineer.
- Bottom slabs shall be reinforced with a minimum of 975 mm²/m (0.46 sq. in./ft.) in both directions.
- See Standard 602701 for details of cast iron steps.
- All dimensions are in millimeters (inches) unless otherwise shown.



ALTERNATE JOINT CONFIGURATIONS



ALTERNATE BOTTOM SLABS

Edwards and Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
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FAX: (312) 251-3015
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION MAIN DRAIN DROP MANHOLE DETAILS
NAME	DATE	
		SCALE: NONE
		DATE: 7/7/05
		DRAWN BY: MJP
		CHECKED BY: PJM

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	407
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
	62300	(1818, ETC. 2324.6-1PJR-8		

DESIGN SPECIFICATIONS

2002 AASHTO
DESIGN LOADING
 Live Load = HS20-44
 Future Wearing Surface = 50 psf
 Traffic Surcharge = 250 psf
 Equivalent Fluid Soil Pressure = 50 pcf
 Earth Load = 120 pcf

DESIGN STRESSES
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

- NOTES:**
- For additional information, see Special Provisions.
 - For reinforcement details, see Sheets JC-3, JC-4, & JC-5.
 - Work point (W.P.) located at outside edge of existing drop manhole as shown. Mirror proposed Junction Chamber about line X-X when existing drop shaft is located north of existing access shaft. ϕ Junction Chamber is parallel to ϕ Main Drain.
 - For elevations a and b, rim elevations, invert elevations, pipe openings, and dimensions c, d, e, & f, see "Table of Junction Chamber Information" on Sheet JC-2.
 - Precast concrete rings shall conform to ASTM C76 for "Reinforced Concrete Culvert, Storm Drain and Sewer Pipe", Class II, Wall B. Standard lengths of rings are: 4'-0", 2'-8", 1'-4", 0'-8", and 0'-4" collar. Cost included with Junction Chamber. All reinforcement steel required for precast concrete rings shall be included with Junction Chamber.
 - The maximum width of excavation is the width of the junction chamber plus 2 feet either side, and the maximum length is the length of the junction chamber plus 2 feet either side. Excavation outside the maximum dimensions specified will not be measured for payment.
 - The design of the excavation for junction chambers and jacking/receiving pits is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois Licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system. Excavation shall be paid as "Braced Excavation", see Special Provisions and Drainage Plans and Schedule.
 - Work this sheet with Sheets JC-2, JC-3, JC-4, and JC-5.

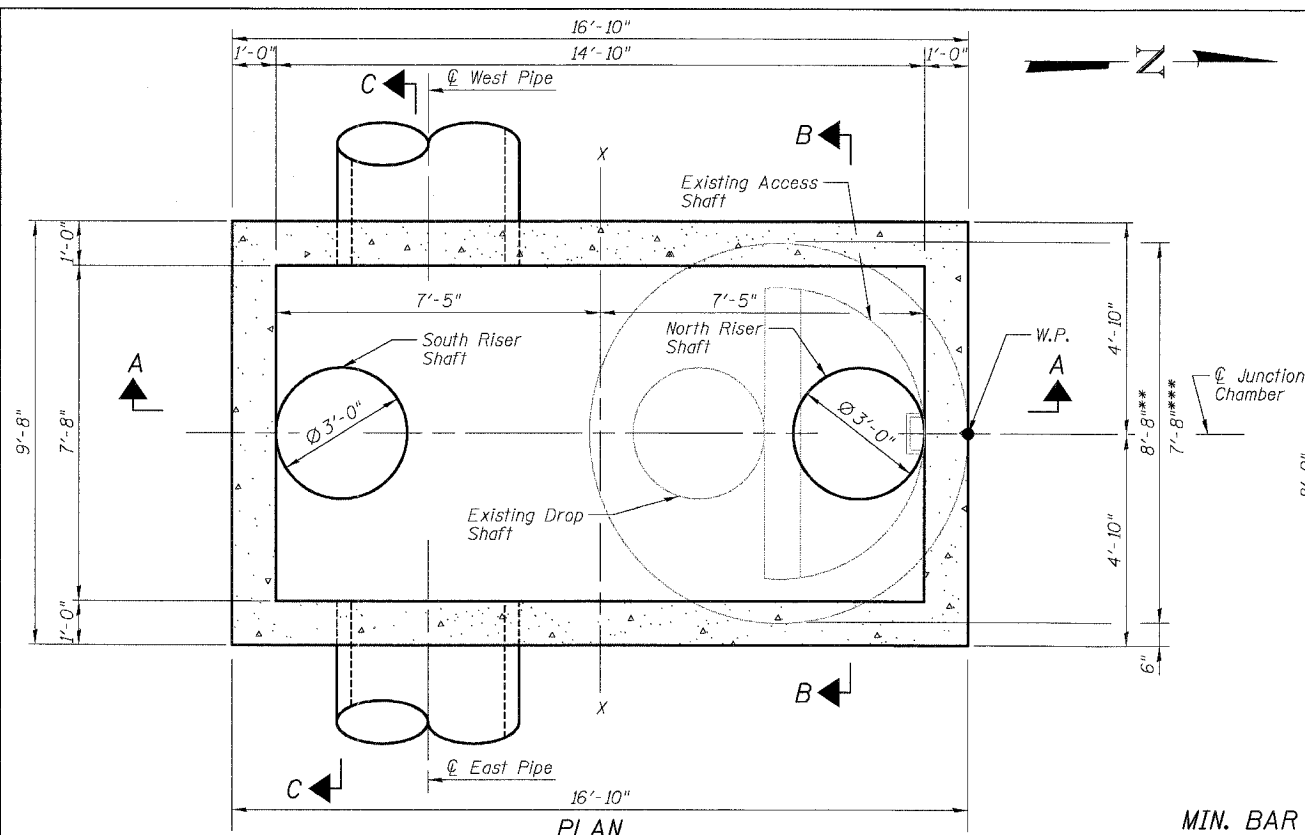
BILL OF MATERIAL

ITEM	UNIT	TOTAL
** Junction Chamber, No. 3	Each	1
*** Junction Chamber, No. 4	Each	1
** Junction Chamber, No. 5	Each	1
*** Junction Chamber, No. 6	Each	1
** Junction Chamber, No. 7	Each	1
** Junction Chamber, No. 8	Each	1
*** Junction Chamber, No. 9	Each	1
*** Junction Chamber, No. 10	Each	1
*** Junction Chamber, No. 11	Each	1
*** Junction Chamber, No. 12	Each	1
** Junction Chamber, No. 13	Each	1

SHEET JC-1 OF JC-22

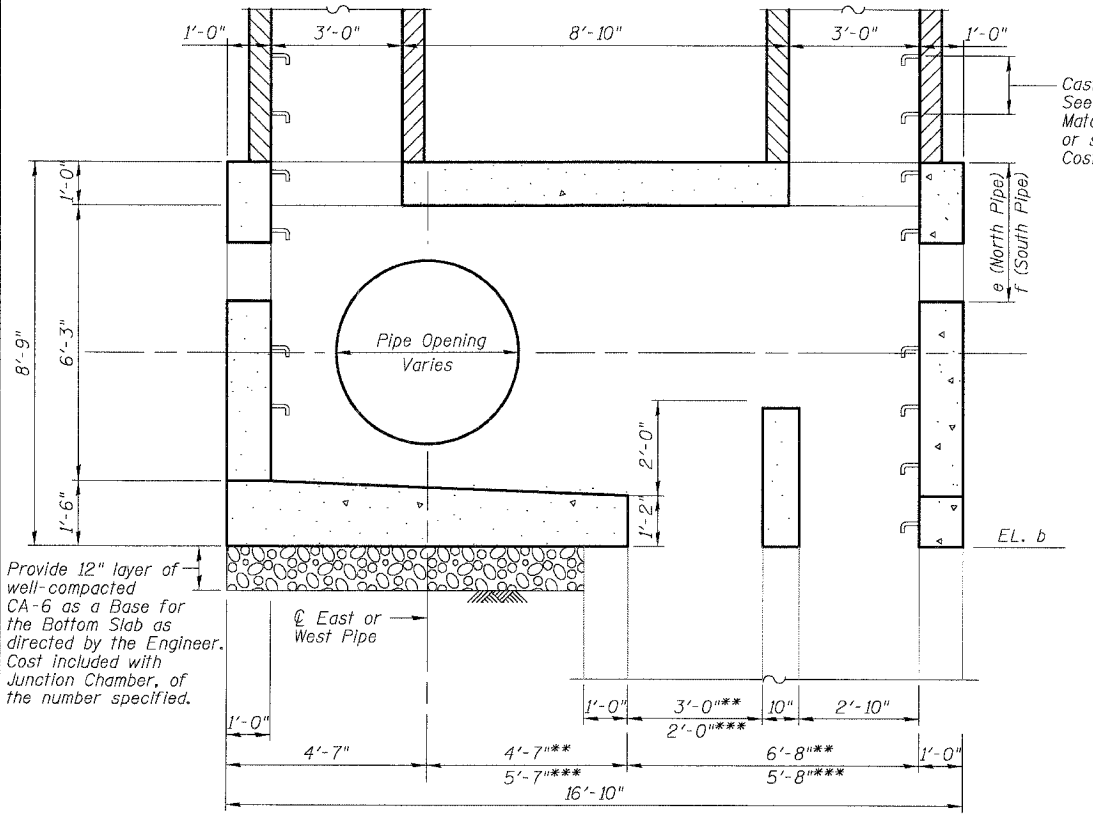
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 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBER, TYPE 2
 GENERAL PLAN AND ELEVATION

SCALE: N.T.S. DRAWN BY: DJM
 DATE: 07/07/05 CHECKED BY: BLU

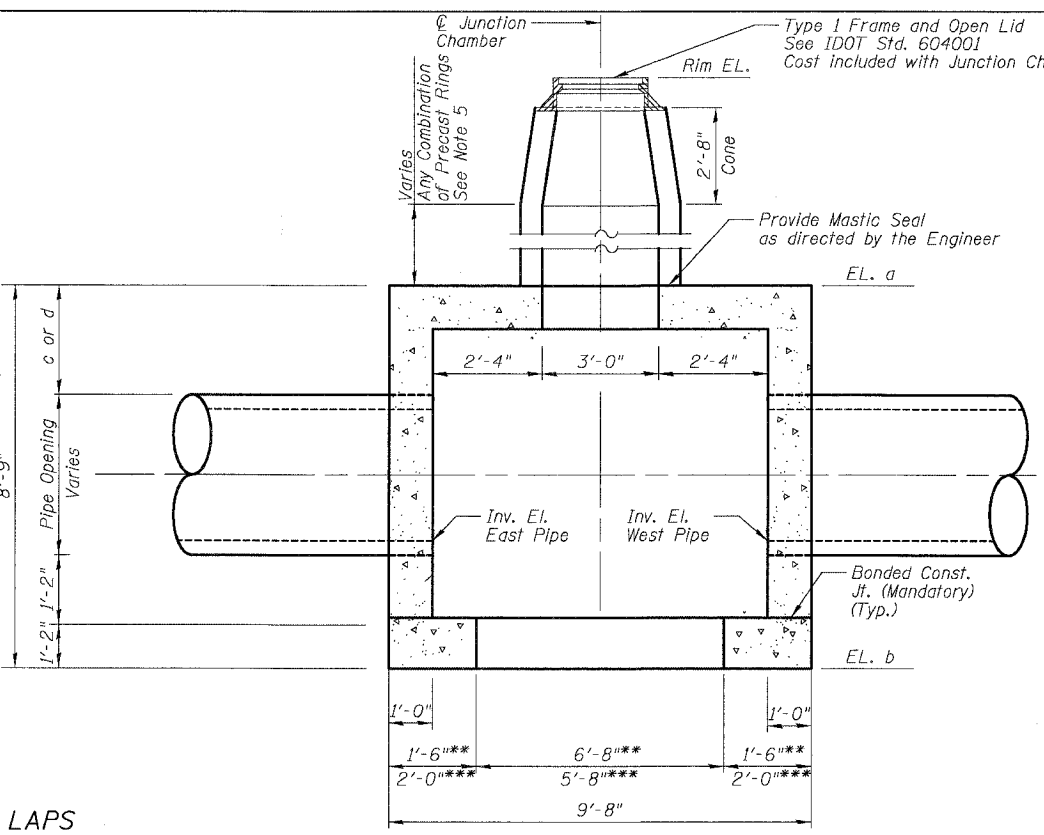


MIN. BAR LAPS

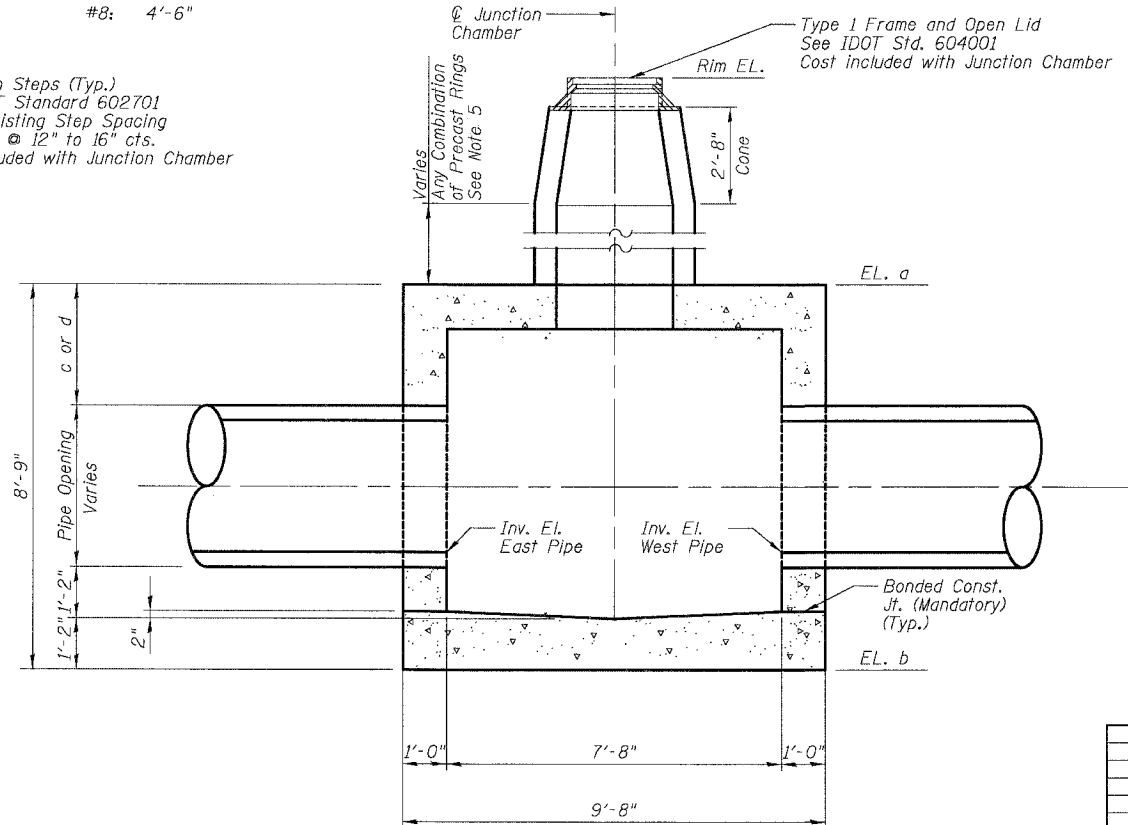
- #5: 2'-2"
- #6: 2'-7"
- #7: 3'-5"
- #8: 4'-6"



SECTION A-A



SECTION B-B

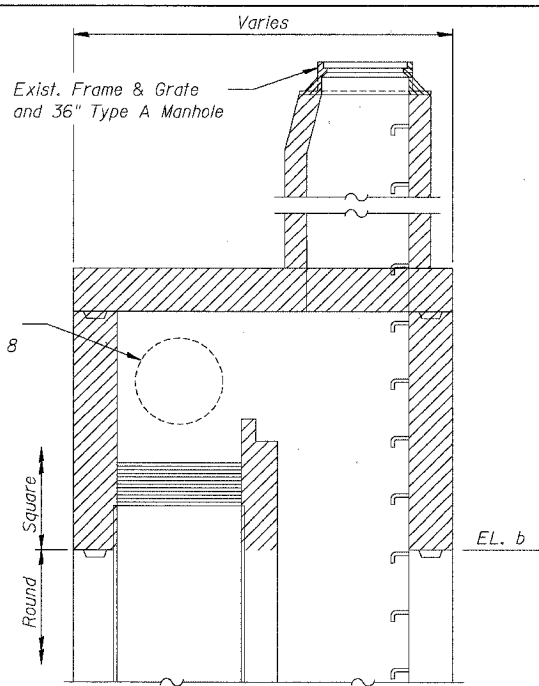
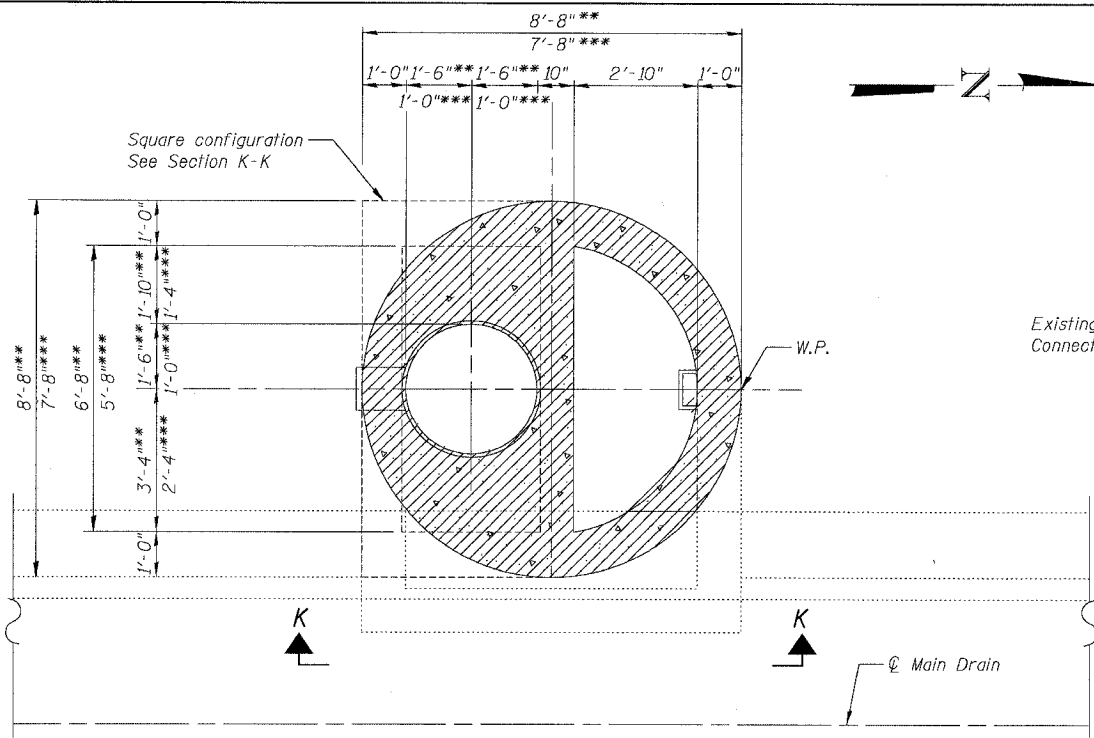


SECTION C-C

REVISIONS	
NAME	DATE

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6/28/2005 9:52:36 AM



LEGEND:
 Removal

REMOVAL PLAN
 Shown for South oriented Drop Shaft
 See As-Built plan info for other exist. information

JC T2 10-01	**
JC T2 11-01	***
JC T2 13-01	**
JC T2 14-01	***
JC T2 15-01	**
JC T2 17-01	**
JC T2 17-02	***
JC T2 22-01	***
JC T2 25-01	***
JC T2 26-01	***
JC T2 27-01	**

- NOTES:**
- Adjust elevations and dimensions provided in the table as necessary for the East and West pipe invert elevations set in the field.
 - Adjust North and South connecting pipes to fit inside openings provided in Junction Chamber.
 - For additional connections to the North and South riser shafts, see Drainage Plans.
 - For As-Built drawings of the existing drop manholes, See Sheets JC-6 thru JC-22.
 - Adjust station and offset provided in the table for the Work Point (W.P.) to match location of existing drop manhole found in the field.
 - Contractor shall take care during removal of the existing drop manhole not to damage the existing clay drop shaft. Any repairs to the drop shaft shall not be measured for payment and shall be as directed by the Engineer.
 - Removal of the existing drop manhole shall be included in the cost of the Junction Chamber and shall include the existing frame and lid, riser shafts, ladder rungs, concrete, reinforcement, and weir wall as shown. See Special Provisions.
 - See Drainage Plans for location and abandonment/maintaining of existing storm sewers in drop manholes.

TABLE OF JUNCTION CHAMBER INFORMATION

Junction Chamber No.	Structure No.	Work Point		Existing Drop Manhole		North Rim. EL.	South Rim. EL.	EL. a	EL. b	West Pipe Connection			East Pipe Connection			North Pipe Connection			South Pipe Connection										
		Station	Offset	No.	Type					Pipe φ	Pipe Opening	Inv. El.	c	Pipe φ	Pipe Opening	Inv. El.	d	Pipe φ	Pipe Opening	Inv. El.	e	g	Pipe φ	Pipe Opening	Inv. El.	f	j		
3	JC T2 10-01	2423+23	-2.0	-	B36S	4.62	4.62	-4.32	-13.07	36"	44"	-10.40	2'-9"	24"	30"	-10.40	3'-10"	-	-	-	-	-	-	-	-	-	-	-	
4	JC T2 11-01	2429+82	-4.0	-	B24S	2.47	2.31	-4.95	-13.70	42"	51"	-10.99	2'-2"	42"	51"	-10.99	2'-2"	-	-	-	-	-	-	-	-	-	-	-	
5	JC T2 13-01	2437+54	-8.0	-	B36S	-1.24	-1.28	-5.14	-13.89	-	-	-	-	42"	51"	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	JC T2 14-01	2445+54	-16.0	-	B24S	1.55	1.63	-5.39	-14.14	36"	44"	-10.45	2'-9"	30"	37"	-11.51	3'-4"	-	-	-	-	12"	16"	-9.55	4'-4"	2'-0"	-	-	
7	JC T2 15-01	2450+62	-8.0	-	B36S	-2.09	-2.10	-6.06	-14.81	36"	44"	-12.14	2'-9"	30"	37"	-12.14	3'-4"	12"	16"	-9.02	2'-2"	2'-0"	15"	20"	-9.02	2'-2"	2'-0"	-	
8	JC T2 17-01	2460+76	-8.0	-	B36S	-1.97	-2.01	-4.68	-13.43	36"	44"	-10.76	2'-9"	30"	37"	-10.76	3'-4"	12"	16"	-7.91	2'-5"	2'-0"	15"	20"	-8.44	3'-0"	2'-0"	-	
9	JC T2 17-02	2465+33	-7.0	-	B24S	2.01	1.94	-3.70	-12.45	36"	44"	-9.78	2'-9"	27"	34"	-9.78	3'-7"	-	-	-	-	2'-0"	12"	16"	-8.04	3'-6"	2'-0"	-	
10	JC T2 22-01	2494+18	-5.0	-	B24S	6.58	6.72	0.96	-7.80	-	-	-	-	30"	37"	-5.17	3'-4"	12"	16"	-2.61	2'-9"	2'-0"	12"	16"	-2.61	2'-9"	2'-0"	-	
11	JC T2 25-01	2510+45	-6.0	-	B24N	6.40	6.23	-1.62	-10.37	-	-	-	-	30"	37"	-7.74	3'-4"	12"	16"	0.09	2'-6"	2'-0"	-	-	-	-	-	-	
12	JC T2 26-01	2517+50	-7.0	-	B24S	9.04	9.12	1.84	-6.91	-	-	-	-	24"	30"	-4.33	3'-11"	12"	16"	-1.29	2'-4"	2'-0"	-	-	-	-	-	-	-
13	JC T2 27-01	2522+92	-5.0	-	B36S	1.80	1.99	0.16	-8.59	-	-	-	-	30"	37"	-5.96	3'-4"	12"	16"	-4.81	4'-2"	2'-0"	-	-	-	-	-	-	-

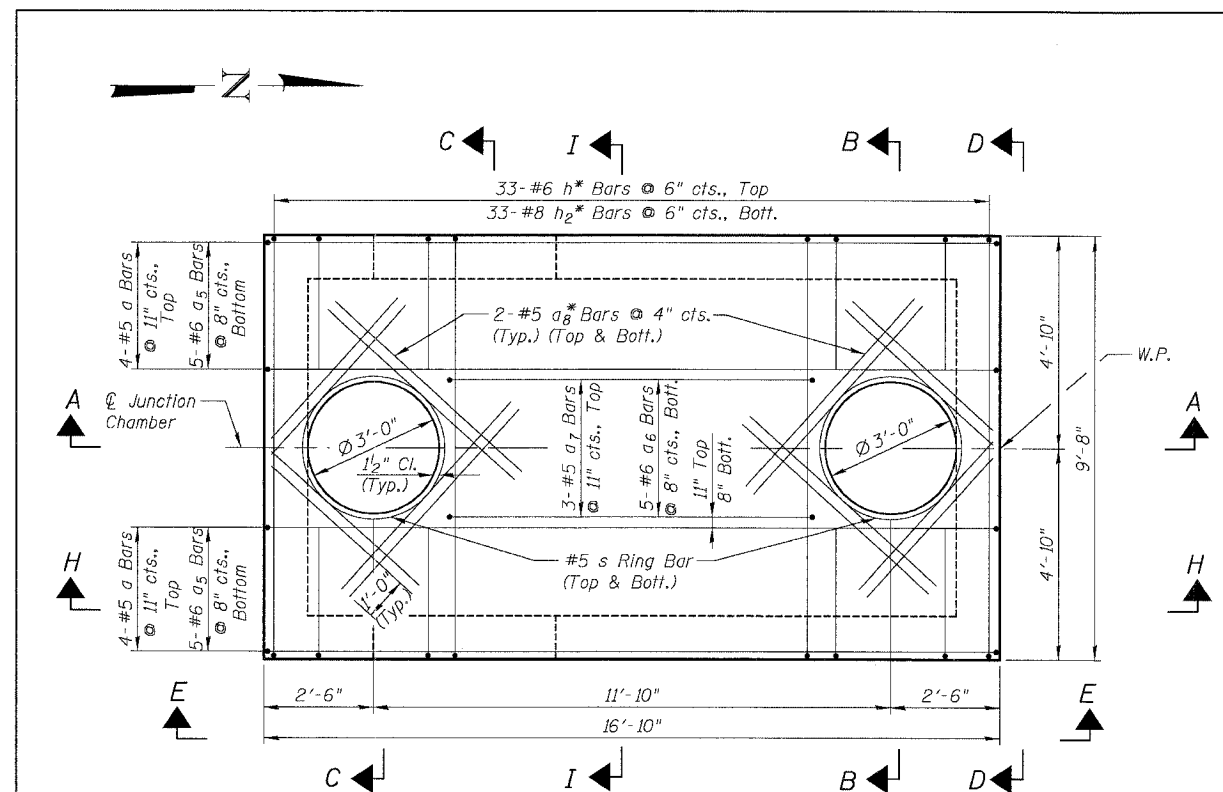
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REVISIONS	
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ADDENDUM 2	9/16/05

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 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBER, TYPE 2
 REMOVAL PLAN

SCALE: N.T.S. DRAWN BY: DJM
 DATE: 07/07/05 CHECKED BY: BLU

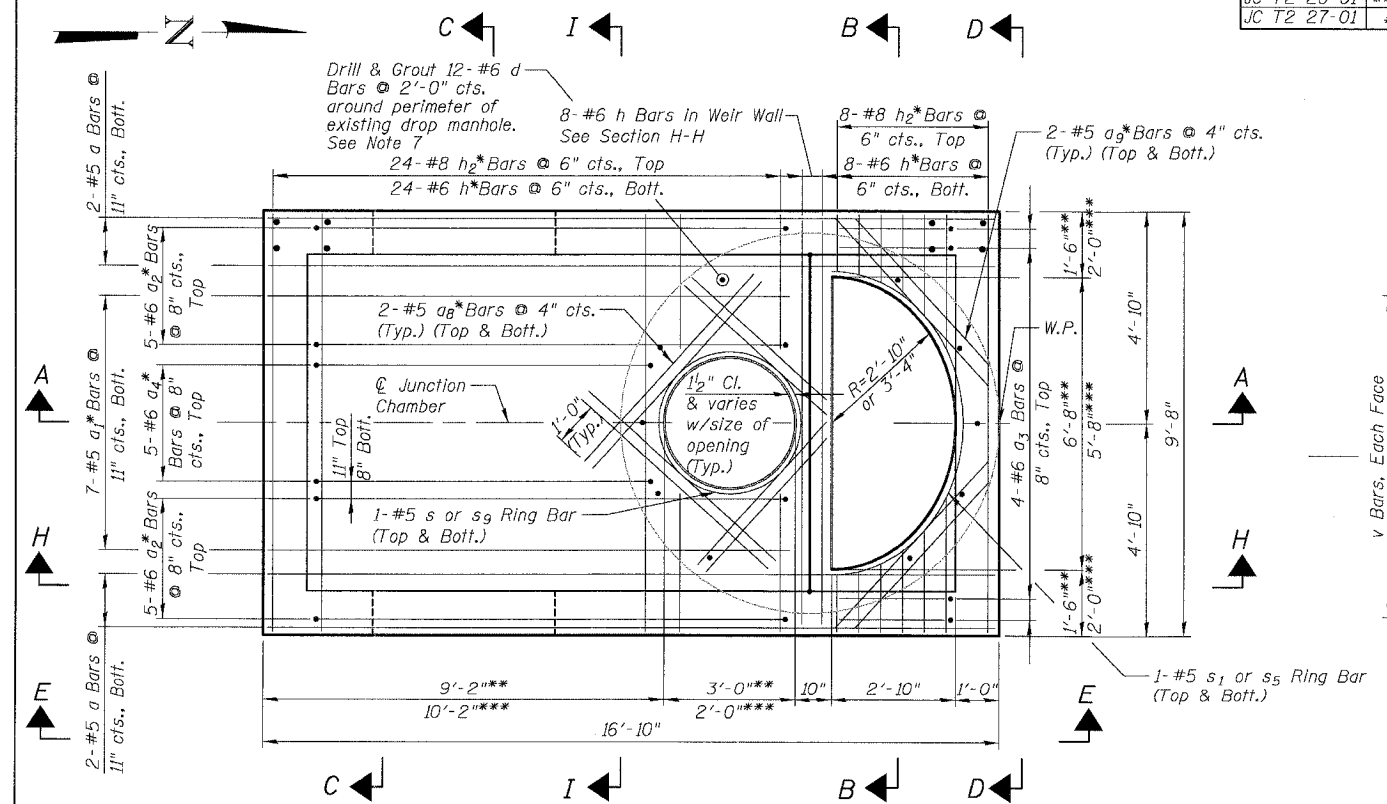
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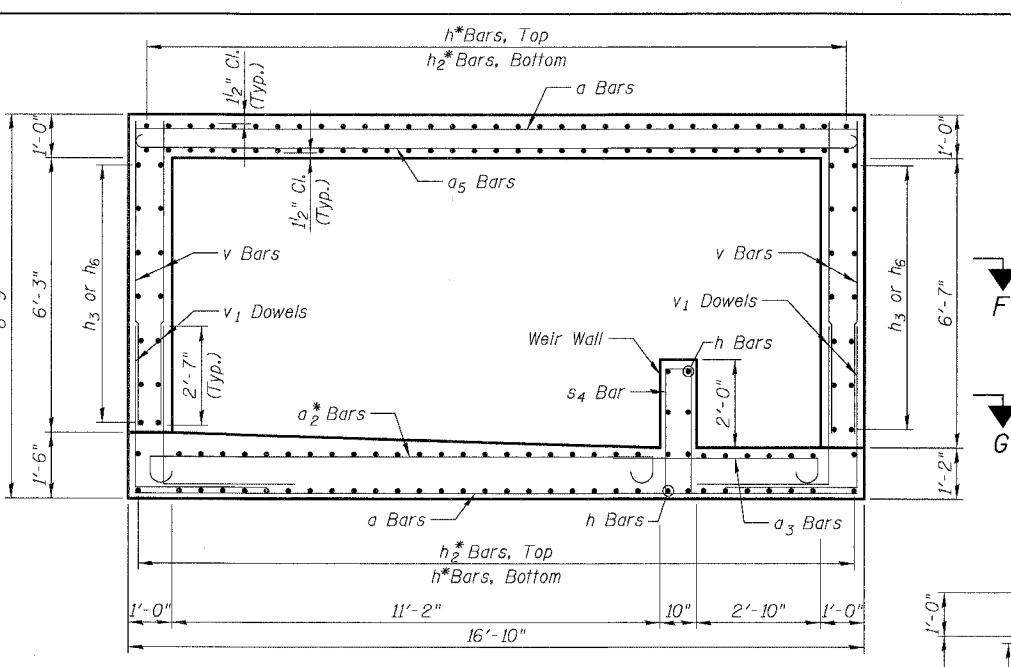
TOP SLAB PLAN

Adjust openings in top slab for final location of frame and grate required due to roadway barrier location. Adjust reinforcement as required for position of openings.

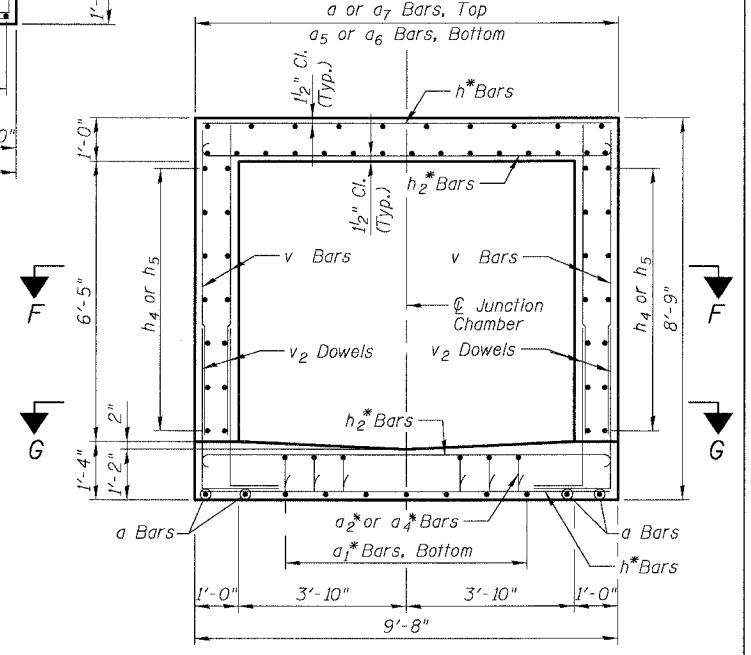
JC T2 10-01	**
JC T2 11-01	***
JC T2 13-01	**
JC T2 14-01	***
JC T2 15-01	**
JC T2 17-01	**
JC T2 17-02	***
JC T2 22-01	***
JC T2 25-01	***
JC T2 26-01	***
JC T2 27-01	**



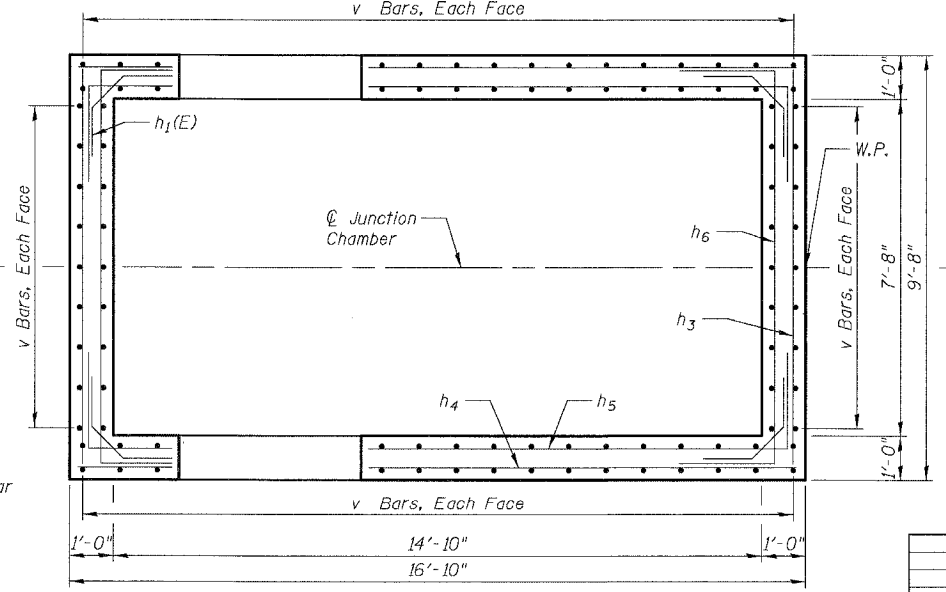
BOTTOM SLAB PLAN



SECTION H-H



SECTION I-I



SECTIONAL PLAN F-F

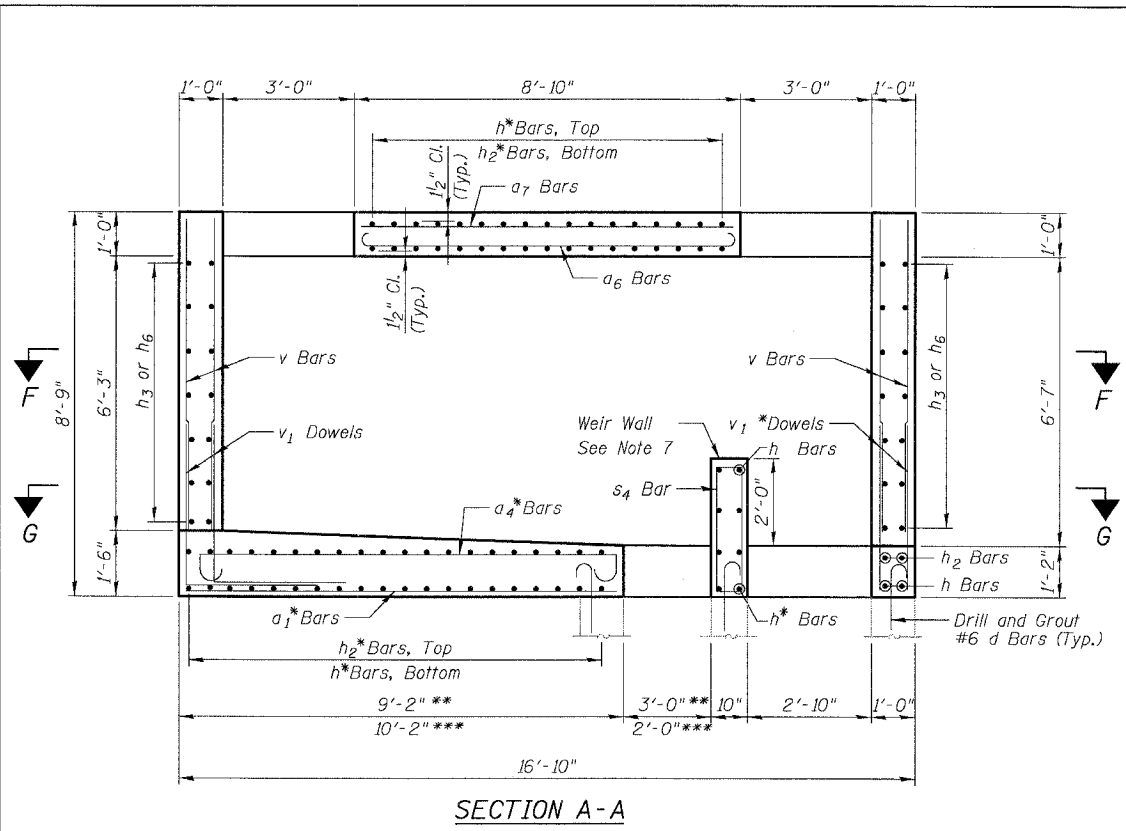
NOTES:

- See Sheet JC-4 for Sections A-A, B-B, C-C, D-D and Sectional Plan G-G. See Sheet JC-5 for Section E-E and Bill of Bars.
- All dimensions and elevations shall be field verified prior to construction.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs and any inserts installation shall be coordinated with Drainage Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.
- All lap splices marked on the drawings are minimum.
- Epoxy Grout #6 d bars in drilled holes with a min. depth of 9" in accordance with Art. 584 of the Std. Specs. Drill holes a min. of 4" from edge of existing concrete. Orient hook to fill.

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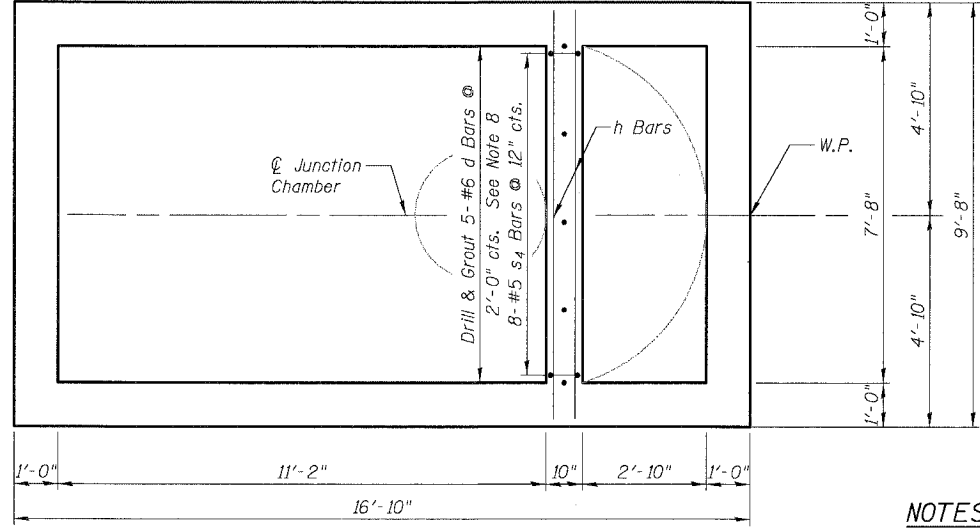
REVISIONS	NAME	DATE

SHEET JC-3 OF JC-22
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER, TYPE 2
REINFORCEMENT DETAILS 1
SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU



SECTION A-A

JC T2 10-01	**
JC T2 11-01	***
JC T2 13-01	**
JC T2 14-01	***
JC T2 15-01	**
JC T2 17-01	**
JC T2 17-02	***
JC T2 22-01	***
JC T2 25-01	***
JC T2 26-01	***
JC T2 27-01	**



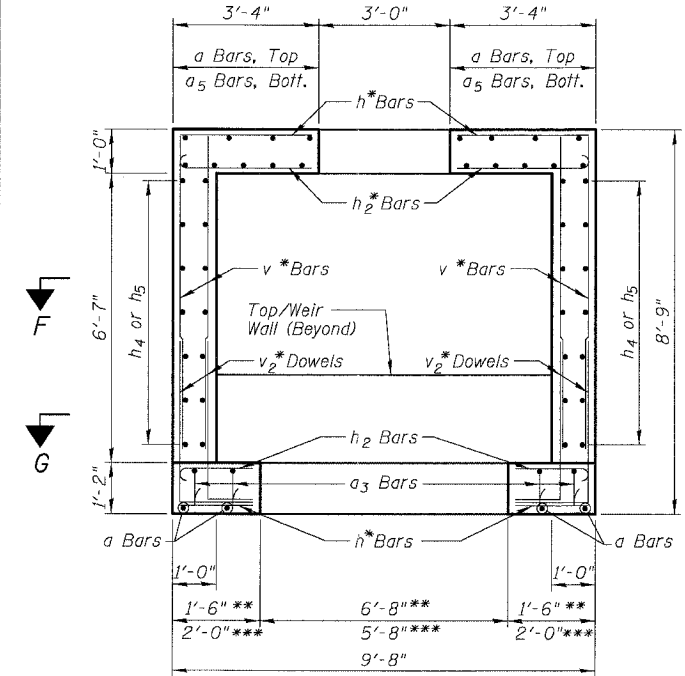
SECTIONAL PLAN G-G

See Sectional Plan F-F on Sheet JC-3 for Reinforcement not shown

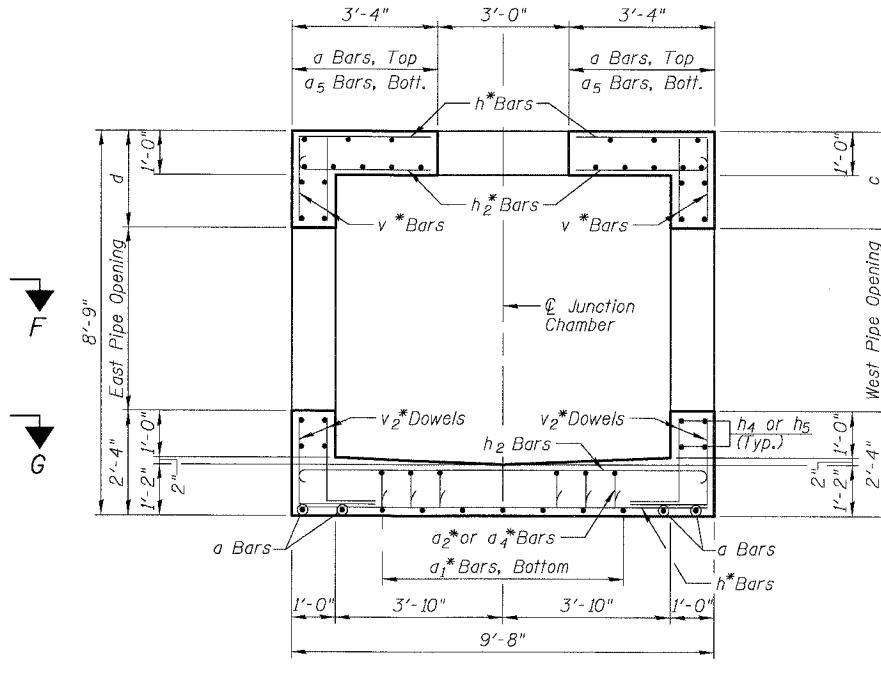
NOTES:

- All dimensions and elevations shall be field verified prior to construction.
- For Pipe Openings and dimensions c, d, e, f, g, and j, see "Table of Junction Chamber Information" on Sheet JC-2.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs and any inserts installation shall be coordinated with Roadway Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.
- All lap splices marked on the drawings are minimum.
- Provide 1" Galvanized Rod and Formed notch to match existing removed from weir wall. Cost included with Junction Chamber of the number specified.
- Epoxy Grout #6 d bars in drilled holes with a min. depth of 9" in accordance with Art. 584 of the Std. Specs. Drill holes a min. of 4" from edge of existing concrete. Orient hook to fit.

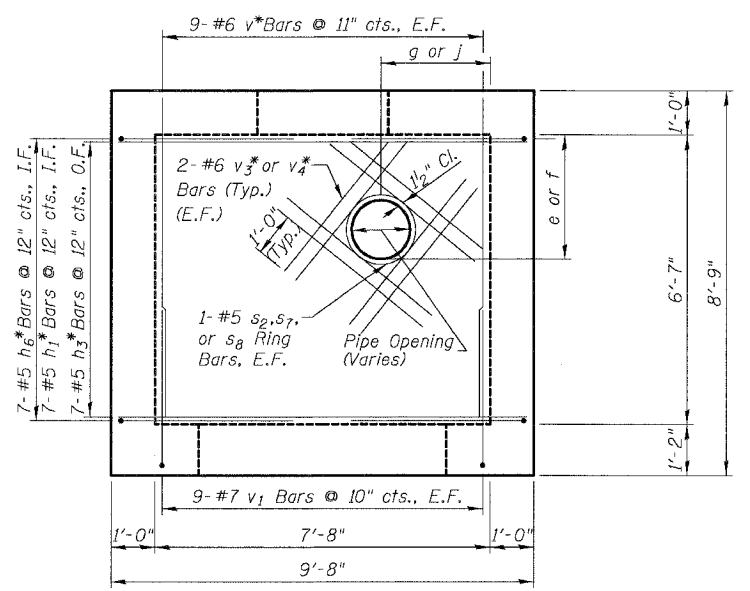
* - Cut bars to fit in field.
E.F. - denotes Each Face
E.S. - denotes Each Side
I.F. - denotes Inside Face
O.F. - denotes Outside Face



SECTION B-B



SECTION C-C



SECTION D-D

(Opposite Wall Typical)

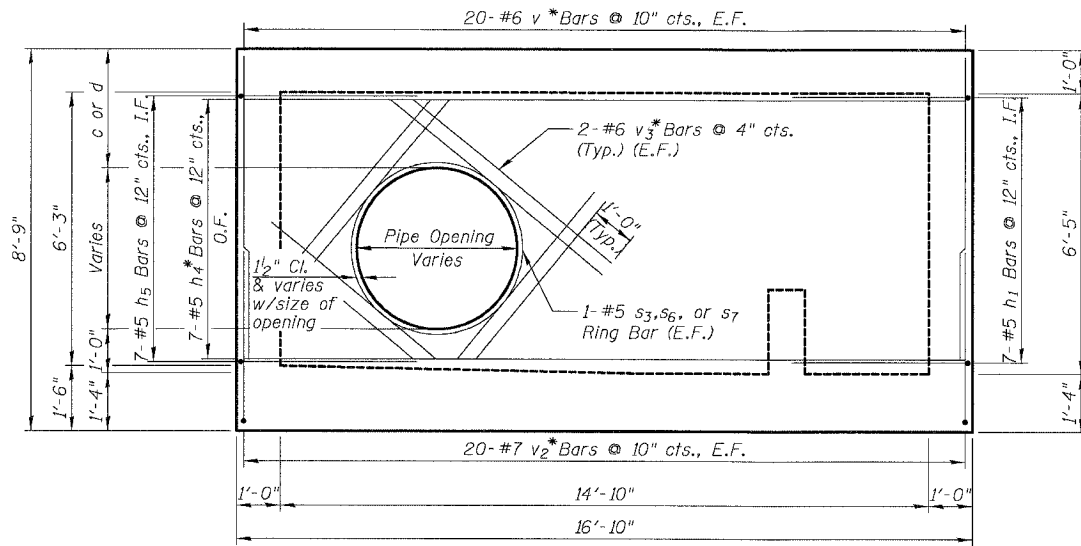
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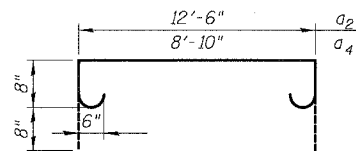
SHEET JC-4 OF JC-22

ILLINOIS DEPARTMENT OF TRANSPORTATION
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31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER, TYPE 2
REINFORCEMENT DETAILS 2

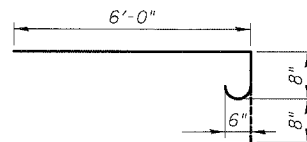
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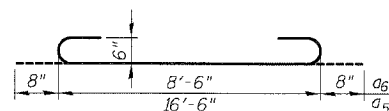
SECTION E-E
(Opposite Wall Typical)



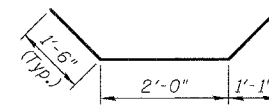
BARS a₂ and a₄



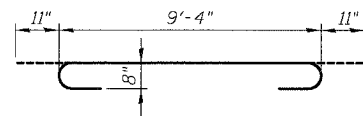
BAR a₃



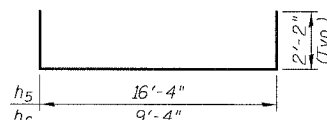
BARS a₅ and a₆



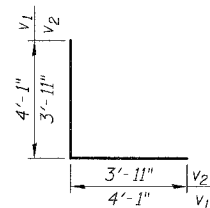
BAR h₁



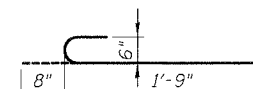
BAR h₂



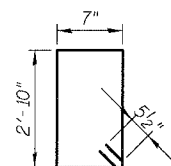
BARS h₅ and h₆



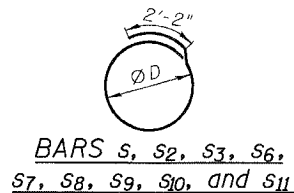
BARS v₁ and v₂



BAR d

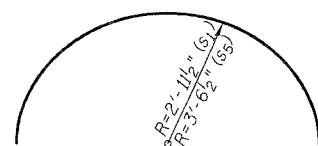


BAR s₄



BARS s₁, s₂, s₃, s₆, s₇, s₈, s₉, s₁₀, and s₁₁

Pipe Sizes	Opening Size	φ	Bar
-	36"	39"	s ₁
15"	20"	23"	s ₂
30"	37"	40"	s ₃
36"	44"	47"	s ₆
42"	51"	54"	s ₇
12"	16"	19"	s ₈
-	24"	27"	s ₉
24"	30"	33"	s ₁₀
27"	34"	37"	s ₁₁



BARS s₁ and s₅

NOTES:

- For Pipe Openings and dimensions c and d, see "Table of Junction Chamber Information" on Sheet JC-2.
- All dimensions and elevations shall be field verified prior to construction.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs and any inserts installation shall be coordinated with Drainage Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.
- v₃ Bars are for pipes 27"φ or larger. v₄ Bars are for 12"φ, 15"φ and 24"φ pipes.
- Any annular space left between the pipes and the Junction Chamber walls shall be filled with an approved non-shrink grout as directed by the Engineer.
- All lap splices marked on the drawings are minimum.
- Cut bars in field to fit pipe openings as necessary.
- The Concrete Structures and Reinforcement Bars quantities shown are for estimating purposes only. Quantity for concrete is calculated based on 3' φ Drop Shaft but without subtracting volume removed due to pipe openings in walls.

JUNCTION CHAMBER BAR SCHEDULE

Bar	No.	Size	Length	Shape
a	12	#5	16'-6"	—
a ₁	7	#5	9'-10"	—
a ₂	10	#6	15'-2"	U
a ₃	4	#6	7'-4"	U
a ₄	5	#6	11'-6"	U
a ₅	10	#6	17'-10"	U
a ₆	5	#6	9'-10"	U
a ₇	3	#5	8'-6"	—
a ₈	48	#5	5'-11"	—
a ₉	8	#5	6'-0"	—
d	17	#6	2'-5"	U
h	73	#6	9'-4"	—
h ₁	28	#5	5'-0"	U
h ₂	65	#8	11'-2"	U
h ₃	14	#5	9'-4"	—
h ₄	14	#5	16'-4"	—
h ₅	14	#5	20'-8"	U
h ₆	14	#5	13'-8"	U
s	52	#5	12'-4"	O
s ₁	14	#5	9'-3"	O
s ₂	4	#5	7'-0"	O
s ₃	12	#5	11'-7"	O
s ₄	8	#5	7'-9"	O
s ₅	8	#5	11'-2"	O
s ₆	10	#5	13'-4"	O
s ₇	6	#5	15'-3"	O
s ₈	18	#5	6'-1"	O
s ₉	14	#5	8'-2"	O
s ₁₀	4	#5	9'-9"	O
s ₁₁	2	#5	10'-9"	O
v	116	#6	7'-0"	—
v ₁	36	#7	8'-2"	L
v ₂	80	#7	7'-10"	L
v ₃	240	#6	8'-0"	—
v ₄	208	#6	4'-3"	—
Concrete Structures			Cu. Yd.	24.3
Reinforcement Bars			Pound	9,330

① Bars indicated are for all Junction Chambers. Use Bar at appropriate opening. Weight of Reinforcement Bars indicated is for JC T2 17-01.

- * - Cut bars to fit in field.
- E.F. - denotes Each Face
- E.S. - denotes Each Side
- I.F. - denotes Inside Face
- O.F. - denotes Outside Face

REVISIONS	
NAME	DATE

SHEET JC-5 OF JC-22
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER, TYPE 2
REINFORCEMENT DETAILS 3
SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU

**40276
DR #11**

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

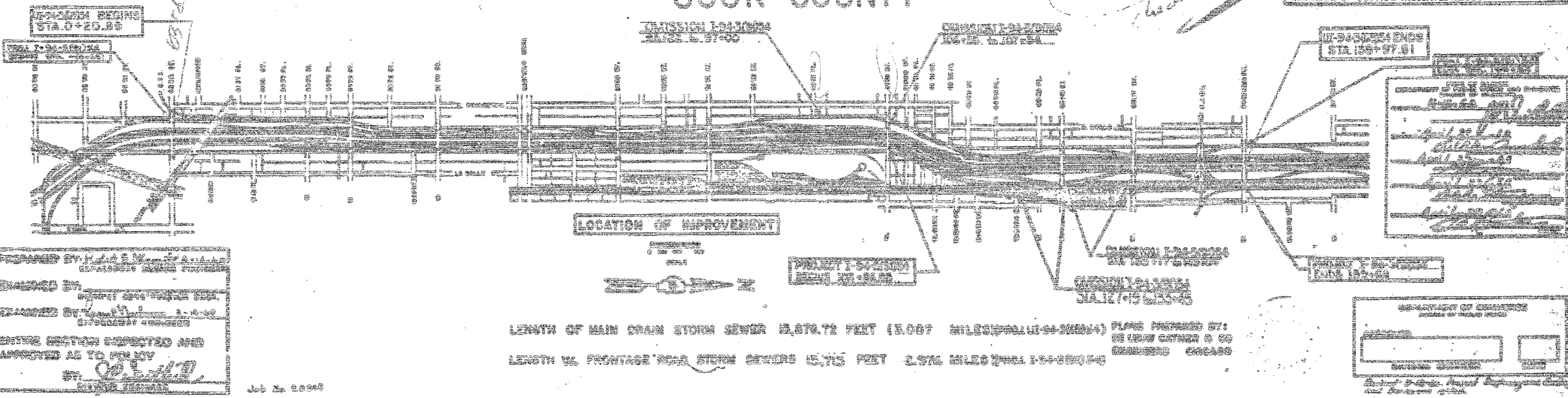
F.A.I. ROUTE 94 SEC. 2022-932T
F.A.I. ROUTE 94 SEC. 2022-933T
MAIN DRAIN & FRONTAGE ROAD SEWERS

SOUTH EXPRESSWAY

PROJECT UI-94-3(69)54 &
PROJECT I-94-3(91)54
COOK COUNTY



DESCRIPTION OF PROJECT
SECTION 2022-932T
THE PROJECT CONSISTS OF THE CONSTRUCTION OF A MAIN DRAIN COLLECTOR SEWER IN TUNNEL OF THE SIZE INDICATED ON THE PLANS AND THE CONSTRUCTION OF MANHOLES ALONG THE SOUTH EXPRESSWAY FROM 63rd STREET TO PERSHING ROAD AS SHOWN ON THE PLANS.
SECTION 2022-933T
THE CONSTRUCTION OF FRONTAGE ROAD SEWERS ALONG THE EAST AND WEST SIDES OF THE SOUTH EXPRESSWAY, AND ALL OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE PROJECT AS SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIAL PROVISIONS.
SEE SHEET NO.2 FOR GENERAL NOTES & INDEX OF SHEETS.
SEE SHEET NO.3 FOR SUMMARY OF QUANTITIES.



Consultant's final plans checked F.V. 7/5/05

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	412
STA. 62300		TO STA. 62300		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		*1818, ETC, 2324.6-1P/R-8		

PREPARED BY: H. J. ...
CHECKED BY: ...
DATE: 1-12-55
ENGINE SECTION DESIGNED AND APPROVED AS TO HIS JOB BY: ...

REVISIONS	NAME	DATE

FOR INFORMATION ONLY

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05
DRAWN BY: BDC
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	413
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		(1818, ETC. 2324.6-IPR-8		

GENERAL NOTES

CONTRACTOR AND SUB-CONTRACTOR ARE WARNED THAT NO OTHER CHARACTER LIVE REMAINS MAY BE DESTROYED OR INTERFERED IN ANY MANNER. PROVISIONS IN THIS PLAN ARE APPLICABLE TO THE BUREAU OF SANITARY, CITY OF CHICAGO.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL REMOVE AND MAINTAIN TEMPORARY DRAINAGE AND CONNECTIONS FOR ALL DRAINAGE OR SEWER, OR EACH BASIN. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL OTHER WATER WHICH WILL BE RECEIVED FROM DRAINAGE AND SEWER AND MAINTAIN THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMP-OUT PLANT, IF NECESSARY, AND A TEMPORARY DRAINAGE AND CONNECTIONS AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH THE SEWERS ARE MADE AND IN SERVICE AND ACCEPTED BY THE BUREAU OF SANITARY. THE WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IF THE PLACEMENT OF MANHOLES OR CONNECTIONS NECESSITATE REMOVAL OF ANY EXISTING TEMPORARY REMOVAL AND REPLACEMENT OF ANY LIGHT POLE, OR REPAIRING OF EXISTING UTILITIES, THE WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES, OR CONNECTIONS.

THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND SHALL USE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE AND INJURY THEREOF. THE COST OF THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

ALL WORK INVOLVING A PRIVATE UTILITY WILL BE PERFORMED BY THE PARTY INVOLVED. WORK INVOLVING THE CITY OF CHICAGO, BUREAU OF WATER WILL BE PERFORMED BY BUREAU FORCES. COORDINATION OF ALL UTILITIES WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE BOARD OF SUPERVISORS UTILITIES MEETING AND AT A PRE-CONSTRUCTION CONFERENCE.

INVERT ELEVATIONS SHOWN FOR SEWERS ARE FOR THE DOWN STREAM END AT THE INSIDE WALL OF THE STRUCTURE, UNLESS OTHERWISE NOTED.

WHERE THE INVERT ELEVATION OF A SEWER IS NOT SHOWN THE PIPE SHALL BE LAID ON A GRADE OF 0.5 PER CENT.

A SECTION ON 4 FT. OR 6 FT. OF WIDTH SEWER HAS BEEN MADE AT EACH TYPE 1 MANHOLE, AND A SECTION ON 4 FT. AND 10 FT. OF SEMI-ELLIPTICAL SEWER HAS BEEN MADE RESPECTIVELY AT EACH TYPE 2 & 3 OR TYPE 4 MANHOLE, AND A SECTION ON 4 FT. AT EACH TYPE 3 MANHOLE AND A SECTION OF CONSTRUCTED LEGS HAS BEEN MADE AT EACH CONNECTION AND AT EACH TYPE 2 MANHOLE.

LARGER CURVES SHALL BE FOLLOWED IN ALL MANHOLES.

MAIN DRAIN SEWER NOTES

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH INCH OF THE MAIN DRAIN SEWER. THE QUANTITY WILL BE SHOWN BY THE PLAN AND THE QUANTITY IS TO BE ESTIMATED QUANTITY BASED ON ALL AVAILABLE INFORMATION AT THE OFFICE OF THE ILLINOIS DIVISION OF HIGHWAYS.

THE CONTRACTOR WILL NOT BE PERMITTED TO BREAK UP ROCK BY CLASTING BETWEEN STATIONS 81+00 TO 82+00. THE MAXIMUM SIZE OF ROCKS SHALL BE LIMITED TO 4 INCHES. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY BRICKS, SANDING AND SUPPORTS TO MAINTAIN EXISTING 18" DIAM. SEMI-ELLIPTICAL SEWERS ON EASTFIELD BLVD. AT STATION 81+00. SEE SPECIAL PROVISIONS.

- MAN MANHOLES:**
- 23 24" MANHOLE WITH EXISTING COVERS TO REMAIN. EXISTING COVERS TO REMAIN EXCEPT WHERE SHOWN OTHERWISE.
 - 24 EXISTING FROM COVER TO PROPOSED TOP OF MANHOLE SHALL BE BACKFILLED WITH TRENCH BACKFILL.
 - 25 PLACE 3" WOOD MARKERS ON TOP OF MANHOLE AND EXTEND 3 FEET ABOVE EXISTING GRASS. THE EXTERIOR PARTING OF MARKER IS TO BE PAINTED YELLOW, WITH THE LETTERS "H.M." AND THE STATION OF MANHOLE SUPERIMPOSED IN BLACK PAINT.
 - 26 THE COST OF THE 3" WOOD MARKERS, TRENCH BACKFILL AND BACKFILL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLE.

FRONTAGE ROAD SEWER NOTES

ALL SEWERS IN CITY STREETS AND FRONTAGE ROADS, 30" DIAMETER AND SMALLER SHALL BE OF VITRIFIED CLAY PIPE, CONFORMING TO A.S.T.M. SPECIFICATION C900-77. ALL SEWERS LARGER THAN 30" DIAMETER SHALL BE OF ENHANCED CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

MANHOLES OF STONE OR CAST IRON ON THE PLAN WILL BE ACCEPTED AS CALLED FOR IN THE SPECIAL PROVISIONS. MANHOLES OF PLASTER, BRICK OR GLASS SHALL NOT BE ACCEPTED. ALL MANHOLES SHALL BE DRAINED TO THE STREETS OR TO OTHER EXISTING DRAINAGE AND SEWER SYSTEMS.

PROPOSED STOPS FOR FUTURE CONNECTIONS SHALL BE SEALS WITH A STOPPER. THE COST OF THE STOPPER WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONNECTION. THE STOPPER SHALL BE ACCEPTED.

TYPE "C" COVER MANHOLE SHALL HAVE UNIMPAIRED COVER. THE COVER SHALL BE TYPE "C" COVER MANHOLE.

CONNECTIONS TO EXISTING SEWERS AT STREETS ON THE PLAN SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION SHALL BE ALLOWED.

IF CONNECTIONS TO EXISTING SEWERS ARE NOT SHOWN ON THE PLAN, THE CONTRACTOR SHALL CONTACT THE BUREAU OF SANITARY AND STREET SEWERS TO BE DETERMINED WHETHER THE CONNECTIONS WOULD BE TO THE EXISTING SEWERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK AND PERMIT SHALL BE OBTAINED BY THE OWNER FOR A LEGAL FRONT OF THE SEWER.

WHERE A CONNECTION IS MADE TO AN EXISTING SEWER AT STREETS OR LAWS OR FRONTAGE ROADS, THE EXISTING PIPE SHALL BE OPENED AND EXPOSED WITH A 4" CONNECTION PITTING. THE GENERAL OF EXISTING PIPE AND CONNECTIONS TO EXISTING SEWERS SHALL BE ACCEPTED. THE WORK AND PERMIT SHALL BE INCLUDED IN THE UNIT PRICE FOR EXISTING SEWER.

(CONTINUED)

REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL BE REQUIRED WHEN SEWERS ARE TO BE REPOSED UNDER CONSTRUCTION, AND IMMEDIATELY SUBJECT TO TRAFFIC. WILL BE PAID FOR RESPECTIVELY AS PAVEMENT REPAIRMENT-ENTIRE OR PAVEMENT GENERAL AND REPLACEMENT, SPECIAL (10")

REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK SHALL BE REQUIRED WHEN SEWERS ARE TO BE REPOSED UNDER CONSTRUCTION, AND IMMEDIATELY SUBJECT TO TRAFFIC. WILL BE PAID FOR RESPECTIVELY AS:

- a) SIDEWALK GENERAL AND
- b) PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH AT LOCATIONS SHOWN ON PLANS WHERE SIDEWALK WILL BE REMOVED ON SUBSEQUENT CONTRACTS.
- OR c) PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH AT LOCATIONS SHOWN ON PLANS.

REMOVAL AND REPLACEMENT OF EXISTING CURBS OR CURB & GUTTER SHALL BE REQUIRED WHEN SEWERS ARE TO BE REPOSED UNDER CONSTRUCTION, AND IMMEDIATELY SUBJECT TO TRAFFIC. WILL BE PAID FOR RESPECTIVELY AS:

- a) CURB GENERAL AND
- b) CONCRETE CURB TYPE R AT LOCATIONS SHOWN ON PLANS WHERE CURB WILL BE REMOVED ON SUBSEQUENT CONTRACTS
- OR c) CONCRETE CURB TYPE R AND GUTTER TYPE 2 AT LOCATIONS SHOWN ON PLANS.

Standard 2x4x4 signs shall be erected at locations as directed by the Engineer.

INDEX OF SHEETS

SHEET NO.	TITLE
1	GENERAL NOTES & ORDER OF SHEETS
2	SUMMARY OF QUANTITIES
3	TYPICAL SECTION
4-5	EXISTING UTILITIES
6-7	REINFORCING-SPECIAL MANHOLE TYPE 2 - 8'x8' @ 18'-0"
8	REINFORCING-SPECIAL MANHOLE TYPE 3 - 8'x8' @ 18'-0"
9	REINFORCING-SPECIAL MANHOLE TYPE 4 - 8'x8' @ 18'-0"
10-11	SPECIAL MANHOLE TYPE 2
12	SPECIAL MANHOLE TYPE 3
13	SPECIAL MANHOLE TYPE 4
14	REINFORCING-SPECIAL MANHOLE TYPE 2 - 8'x8' @ 18'-0"
15	REINFORCING-SPECIAL MANHOLE TYPE 3 - 8'x8' @ 18'-0"
16	REINFORCING-SPECIAL MANHOLE TYPE 4 - 8'x8' @ 18'-0"
17	SPECIAL MANHOLE TYPE 2
18	SPECIAL MANHOLE TYPE 3
19	SPECIAL MANHOLE TYPE 4
20	SPECIAL MANHOLE TYPE 2
21	SPECIAL MANHOLE TYPE 3
22	SPECIAL MANHOLE TYPE 4
23	SEMI-ELLIPTICAL SEWER - 3'-0" @ 8'-0"
24	SEMI-ELLIPTICAL SEWER - 3'-0" @ 8'-0"
25	SEMI-ELLIPTICAL SEWER - 3'-0" @ 8'-0"
26	SEMI-ELLIPTICAL SEWER - 3'-0" @ 8'-0"
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100	SEMI-ELLIPTICAL SEWER - 3'-0" @ 8'-0"

ILLINOIS DIVISION OF HIGHWAYS
SOUTH EXPRESSWAY
GENERAL NOTES
INDEX OF SHEETS

SHEET JC-7 OF JC-22

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

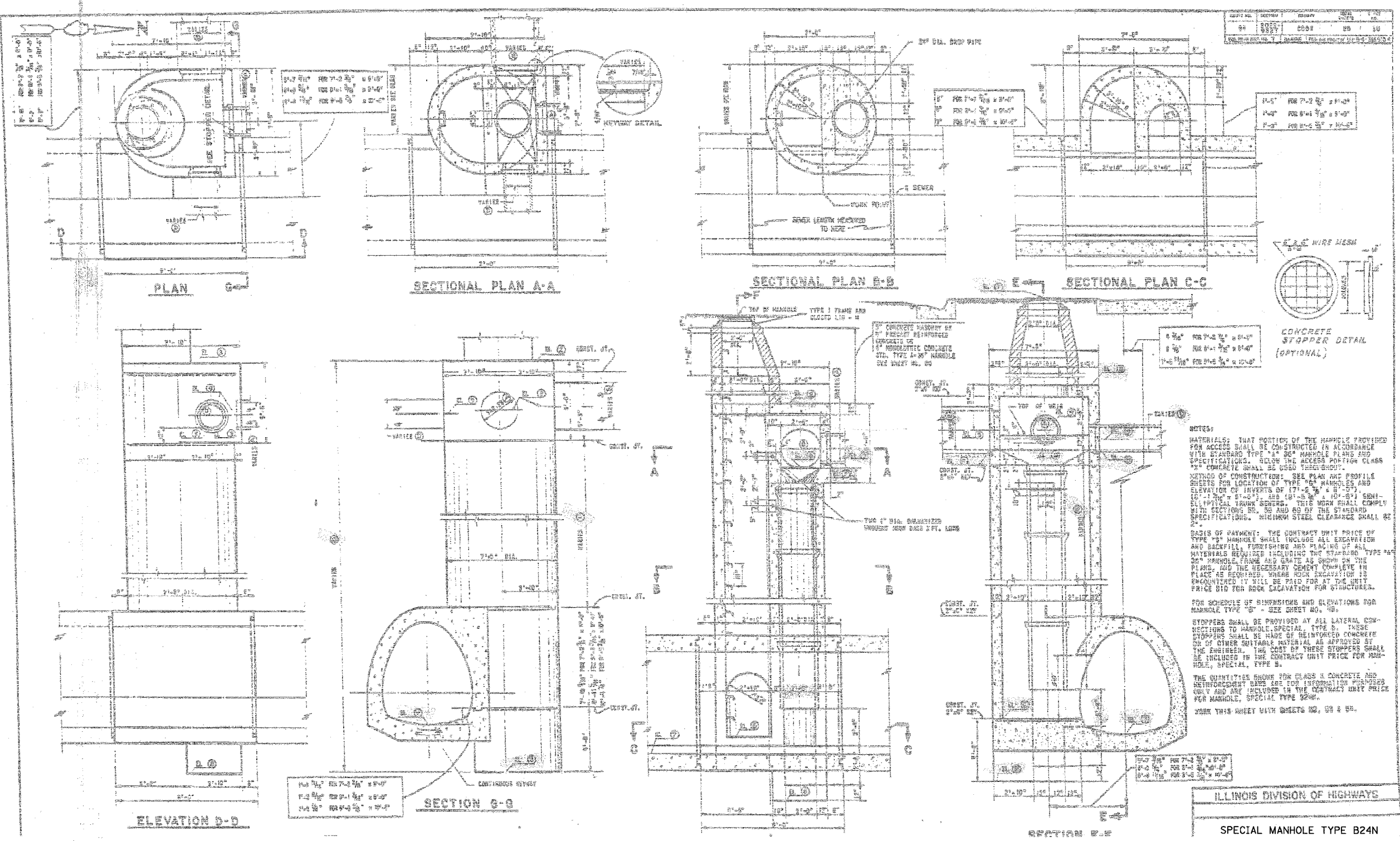
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DATE: 07/07/05

DRAWN BY: BDC
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6/24/2005 5:40:20 AM



NOTES:

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" 30" MANHOLE PLANS AND SPECIFICATIONS. BELOW THE ACCESS PORTION CLASS "A" CONCRETE SHALL BE USED THROUGHOUT.

METHOD OF CONSTRUCTION: SEE PLAN AND PROFILE SHEETS FOR LOCATION OF TYPE "B" MANHOLES AND ELEVATION OF INVERTS OF (7'-6" & 8'-0"), (8'-1" & 8'-6") AND (8'-6" & 8'-11") SEMI-ELLIPTICAL TRUNK SEWERS. THIS WORK SHALL COMPLY WITH SECTIONS 80, 80 AND 80 OF THE STANDARD SPECIFICATIONS. MINIMUM STEEL CLEARANCE SHALL BE 2".

BASIS OF PAYMENT: THE CONTRACT UNIT PRICE OF TYPE "B" MANHOLE SHALL INCLUDE ALL EXCAVATION AND BACKFILL, FORMWORK AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "B" 30" MANHOLE FRAME AND GRATE AS SHOWN ON THE PLAN, AND THE NECESSARY CEMENT CONCRETE IN PLACE AS REQUIRED, WHERE ROCK EXCAVATION IS ENCOUNTERED IT WILL BE PAID FOR AT THE UNIT PRICE B18 FOR ROCK EXCAVATION FOR STRUCTURES.

FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" - SEE SHEET NO. 80.

STOPPERS SHALL BE PROVIDED AT ALL LATERAL CONNECTIONS TO MANHOLE, SPECIAL, TYPE B. THESE STOPPERS SHALL BE MADE OF REINFORCED CONCRETE OR OF OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER. THE COST OF THESE STOPPERS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE B.

THE QUANTITIES SHOWN FOR CLASS A CONCRETE AND REINFORCEMENT SHALL BE FOR INFORMATION PURPOSES ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE PER MANHOLE, SPECIAL TYPE B24N.

JOIN THIS SHEET WITH SHEETS 80, 80 & 80.

ILLINOIS DIVISION OF HIGHWAYS
SPECIAL MANHOLE TYPE B24N

SHEET JC- 9 OF JC-22

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05

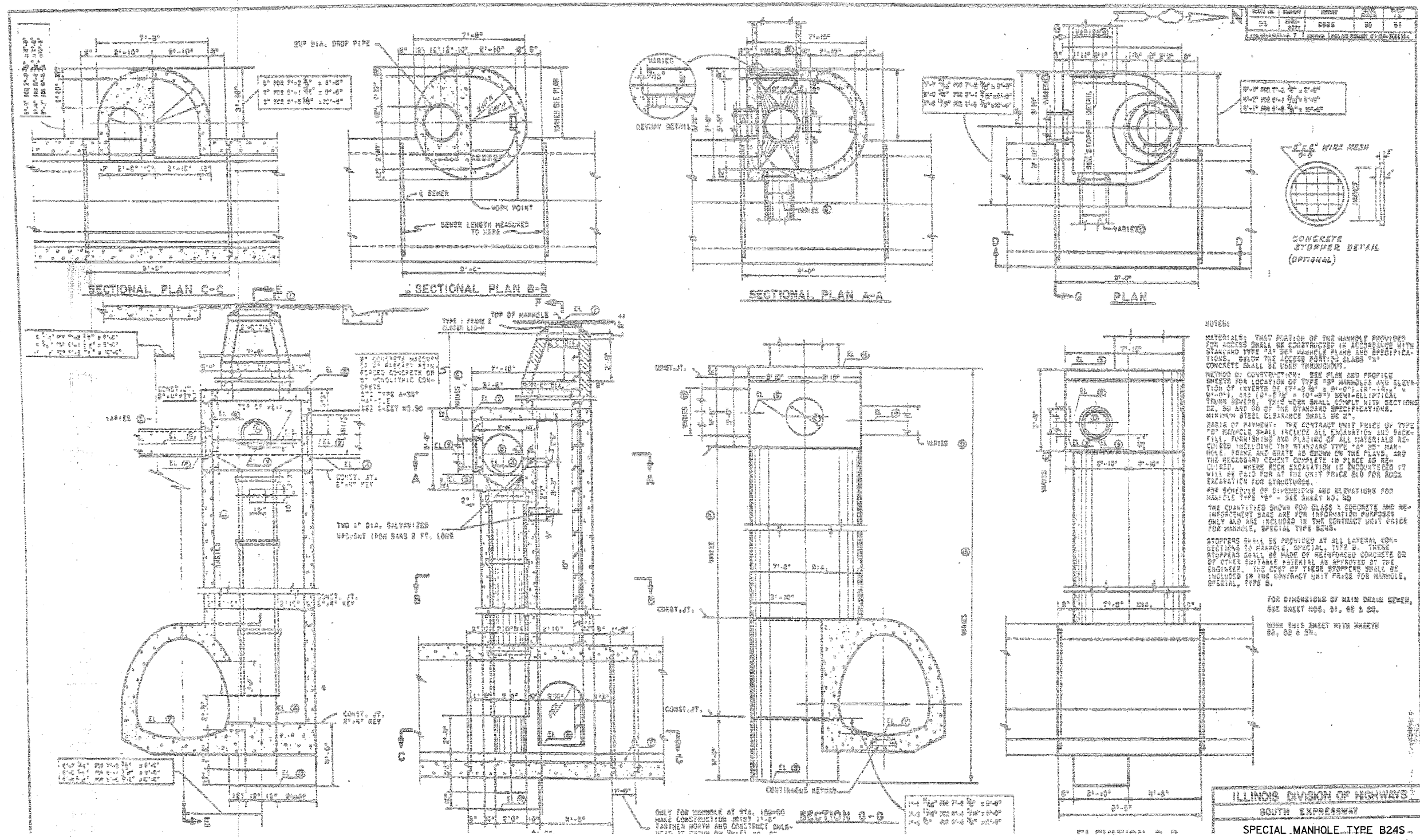
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	416
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1PIR-8			



NOTES

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" MANHOLE PLANS AND SPECIFICATIONS. SHALL BE CONSTRUCTED WITH CLASS "A" CONCRETE SHALL BE USED THROUGHOUT.

METHOD OF CONSTRUCTION: SEE PLAN AND PROFILE SHEETS FOR LOCATION OF TYPE "B" MANHOLES AND ELEVATION OF INVERTS OF 24" DIA. MAIN DRAIN SEWER. THE WORK SHALL COMPLY WITH SECTION 22, 23 AND 24 OF THE STANDARD SPECIFICATIONS. MINIMUM STEEL CLEARANCE SHALL BE 2".

SCALE OF PAYMENT: THE CONTRACT UNIT PRICE OF TYPE "B" MANHOLE SHALL INCLUDE ALL EXCAVATION AND BACKFILL, FINISHING AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "A" MANHOLE, BENCH AND GRATE AS SHOWN ON THE PLAN, AND THE NECESSARY CURB COMPLETE IN PLACE AS REQUIRED. WHERE ROCK EXCAVATION IS ENCOUNTERED IT WILL BE PAID FOR AT THE UNIT PRICE SET FOR ROCK EXCAVATION FOR STRUCTURES.

FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" - SEE SHEET NO. 22.

THE QUANTITIES SHOWN FOR CLASS "A" CONCRETE AND REINFORCEMENT BARS ARE FOR INFORMATION PURPOSES ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE "B".

STOPPAGE SHALL BE PROVIDED AT ALL LATERAL CONNECTIONS TO MANHOLE, SPECIAL, TYPE "B". THESE STOPPAGES SHALL BE MADE OF REINFORCED CONCRETE OR OF OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER. THE COST OF THESE STOPPAGES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE "B".

FOR DIMENSIONS OF MAIN DRAIN SEWER, SEE SHEET NOS. 21, 22 & 23.

WORK THIS SHEET WITH SHEETS 22, 23 & 24.

ILLINOIS DIVISION OF HIGHWAYS
SOUTH EXPRESSWAY
SPECIAL MANHOLE TYPE B24S

SHEET JC-10 OF JC-22

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

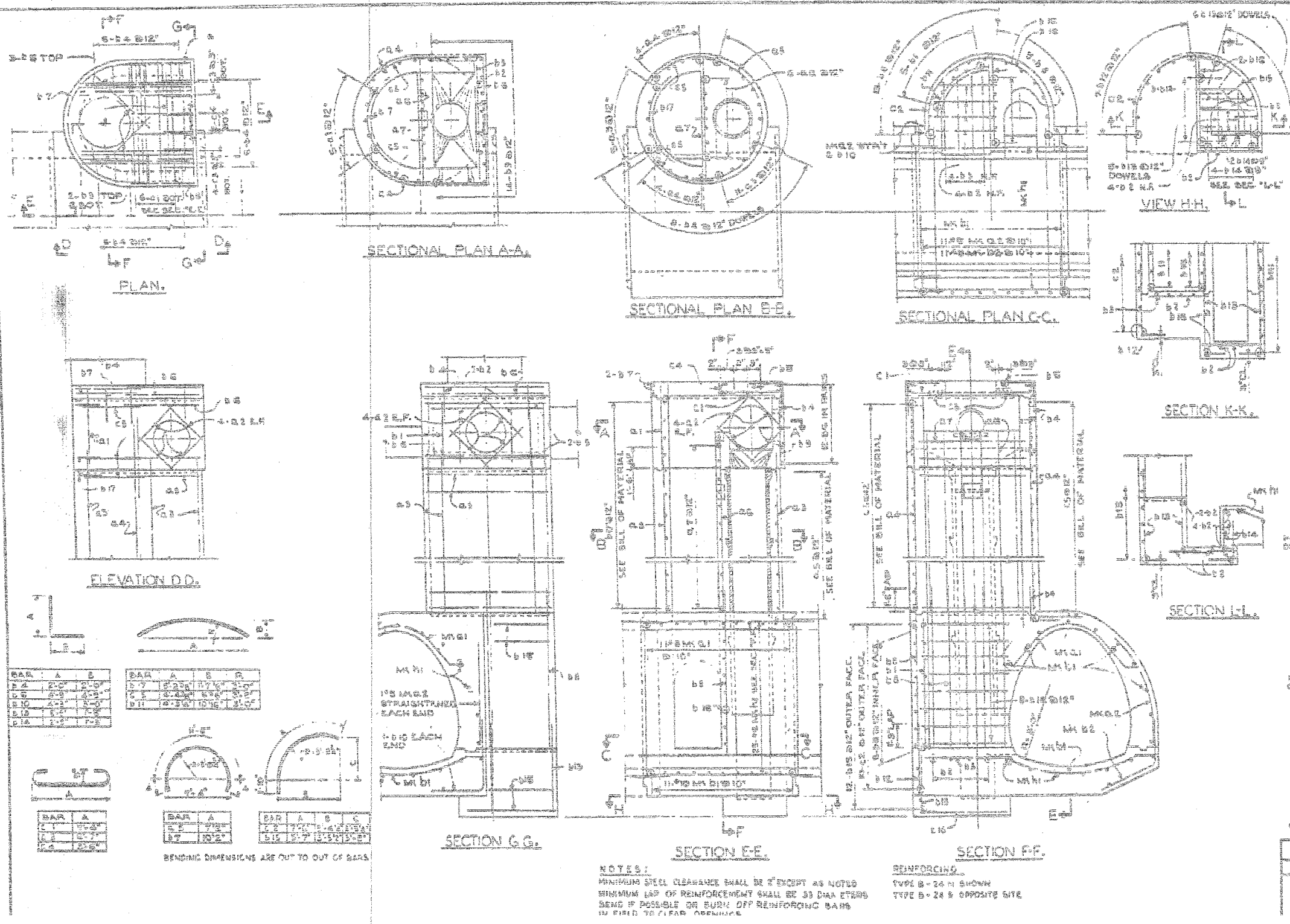
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	417
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*1818, ETC, 2324.6-1P1R-8			



ITEM NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	REINFORCING BARS	100	LB	1.50	150.00
2	CONCRETE	10	CU YD	100.00	1000.00
3	MANHOLE RINGS	1	EA	50.00	50.00
4	COVER	1	EA	20.00	20.00
5	LABOR	100	HR	15.00	1500.00
6	EQUIPMENT	10	HR	20.00	200.00
7	PERMITS	1	EA	100.00	100.00
8	TESTING	1	EA	50.00	50.00
9	PAINT	10	GA	10.00	100.00
10	TRUCK	10	HR	10.00	100.00
11	WATER	10	CU YD	1.00	10.00
12	WASTE	10	CU YD	1.00	10.00
13	SALES TAX				15.00
14	TOTAL				3385.00

ILLINOIS DIVISION OF HIGHWAYS
SOUTH EXPRESSWAY
REINFORCING
SPECIAL MANHOLE TYPE "B" 24
MAIN DRAIN

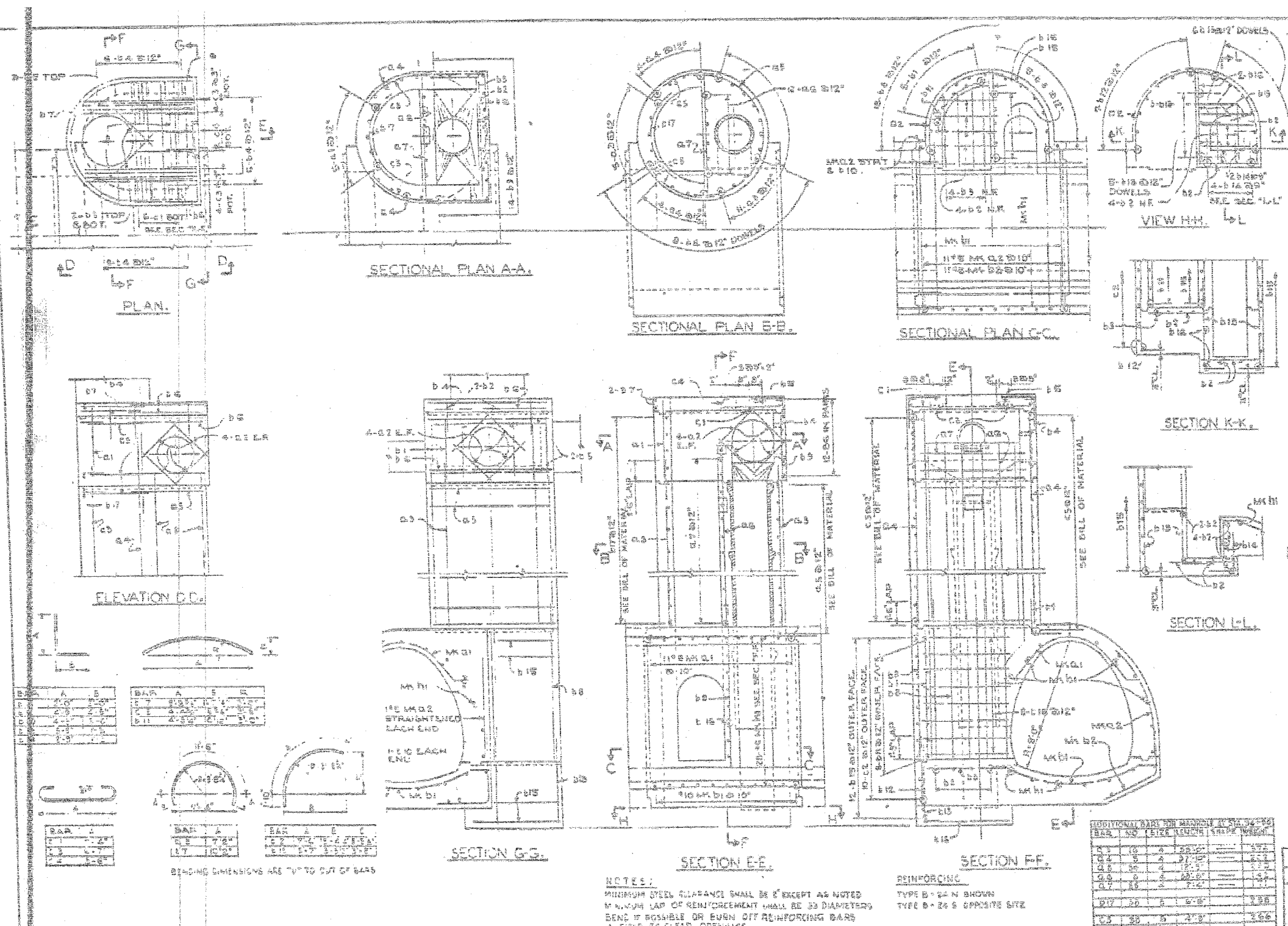
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 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
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REVISIONS	DATE

SHEET JC-11 OF JC-22
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS
 SCALE: NTS
 DATE: 07/07/05
 DRAWN BY: BDC
 CHECKED BY: BLU

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 6/24/2005
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ITEM NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	18" DIA. 3" THICK CONCRETE MANHOLE	1	EA	150.00	150.00
2	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
3	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
4	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
5	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
6	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
7	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
8	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
9	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00
10	4" DIA. 18" LONG STEEL MANHOLE RINGS	2	EA	40.00	80.00

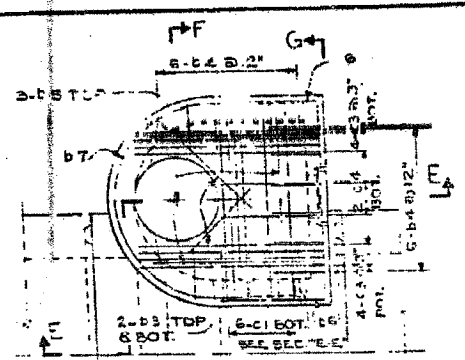
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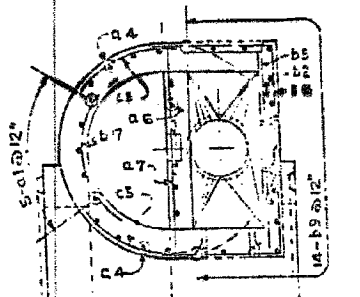
SHEET JC-12 OF JC-22
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

REVISIONS	DATE

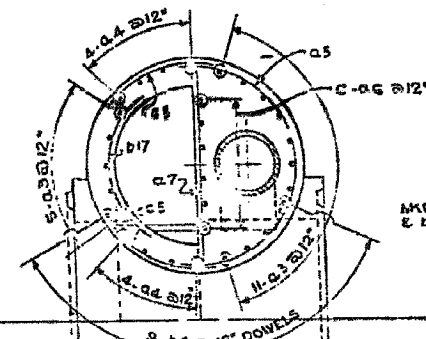
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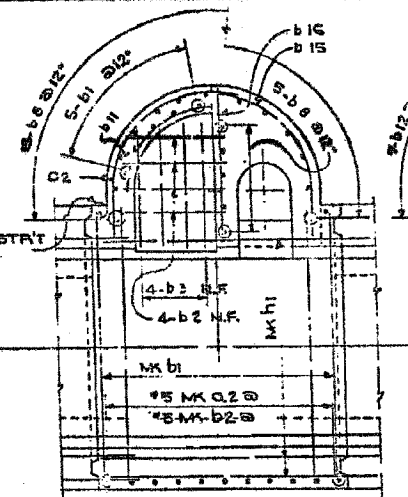
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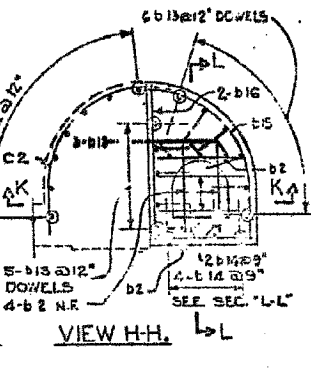
SECTIONAL PLAN A-A.



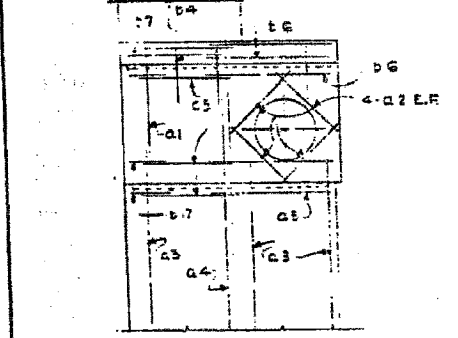
SECTIONAL PLAN B-B.



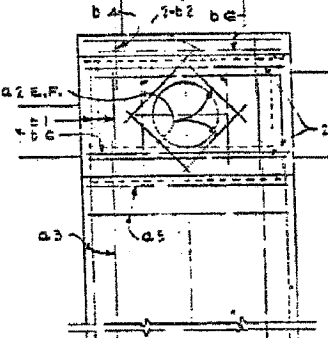
SECTIONAL PLAN C-C.



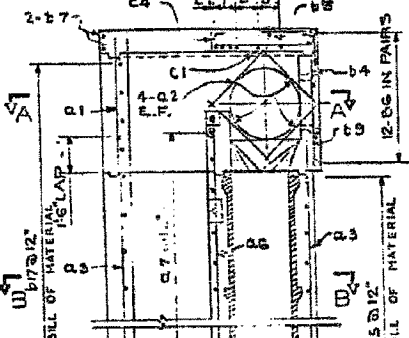
VIEW H-H.



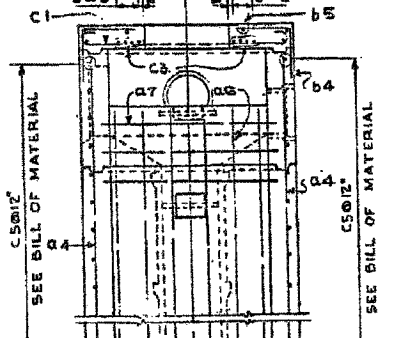
ELEVATION D-D.



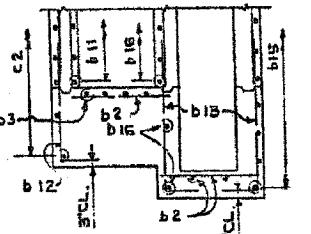
SECTION G-G.



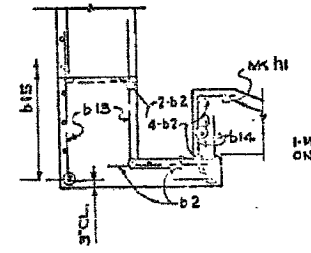
SECTION E-E.



SECTION F-F.



SECTION K-K.



SECTION L-L.

F.A.I. SECTION COUNTY TOTAL SHEET NO.	94/90	COOK	90	54
STA. TO STA.				

BILL OF MATERIAL					
BARS TYPICAL OF ALL TYPE B MANHOLES					
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT	QTY
B1	5	7'		40	
B2	14	4'		26	
B3	29	4'		113	
B5	5	4'		26	
B6	12	4'		18	
B7	6	11'		25	
B8	12	4'		17	
B9	14	4'		29	
B10	2	7'-3"		3	
B11	6	4'-4"		25	
B12	7	4'-2"		27	
B13	7	4'-2"		102	
B14	14	4'		29	
B15	6	5'-0"		53	
B16	10	5'		57	

BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT	QTY
C1	6	6'		78	
C2	10	6'		135	
C3	6	6'		93	
C4	2	6'		11	

ADDITIONAL BARS FOR MANHOLE AT STATION: III+20 & 18'

B3	16	4'		240	
B4	8	4'		135	
B5	30	4'		130	
B6	6	4'		94	
B7	31	4'		113	

TOTAL WEIGHT REINFORCING: 56,146.5
 TOTAL VOL. CLASS X CONCRETE: 82.0

D17	35	5'		176	
C9	35	6'		182	

ADDITIONAL BARS FOR MANHOLE AT STATION: III+37+33

B3	16	4'		240	
B4	8	4'		135	
B5	30	4'		130	
B6	6	4'		94	
B7	31	4'		113	

TOTAL WEIGHT REINFORCING: 56,507.8
 TOTAL VOL. CLASS X CONCRETE: 81.0

D17	35	5'		297	
C5	35	6'		249	

ADDITIONAL BARS FOR MANHOLE AT STATION: III+48+18

B3	16	4'		273	
B4	8	4'		151	
B5	25	4'		213	
B6	6	4'		104	
B7	26	4'		127	

TOTAL WEIGHT REINFORCING: 58,466.6
 TOTAL VOL. CLASS X CONCRETE: 83.5

D17	29	5'		196	
C5	29	6'		203	

ILLINOIS DIVISION OF HIGHWAYS
 SOUTH EXPRESSWAY
 REINFORCING
 SPECIAL MANHOLE TYPE "B" 24
 MAIN DRAIN

BAR	A	B
B1	7'-4"	4'-8"
B2	4'-9"	4'-8"
B3	4'-3"	3'-0"
B4	4'-2"	4'-8"

BAR	A	B	C
C1	7'-2"	6'-4"	3'-4"
C2	7'-2"	6'-4"	3'-4"
C3	7'-2"	6'-4"	3'-4"

BENDING DIMENSIONS ARE OUT TO OUT OF BARS

NOTES:
 MINIMUM STEEL CLEARANCE SHALL BE 2" EXCEPT AS NOTED
 MINIMUM LAP OF REINFORCEMENT SHALL BE 33 DIAMETERS
 REINFORCING BARS SHALL BE BENT OR TURN OFF REINFORCING BARS

REINFORCING
 TYPE S-24 N SHOWN
 TYPE B-24 S OPPOSITE SIDE

BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
B1	5	7'-0"		40
B2	14	4'-0"		26
B3	29	4'-0"		113
B4	8	4'-0"		135
B5	30	4'-0"		130
B6	6	4'-0"		94
B7	31	4'-0"		113
B8	12	4'-0"		18
B9	14	4'-0"		29
B10	2	7'-3"		3
B11	6	4'-4"		25
B12	7	4'-2"		27
B13	7	4'-2"		102
B14	14	4'-0"		29
B15	6	5'-0"		53
B16	10	5'-0"		57

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REVISIONS	NAME	DATE

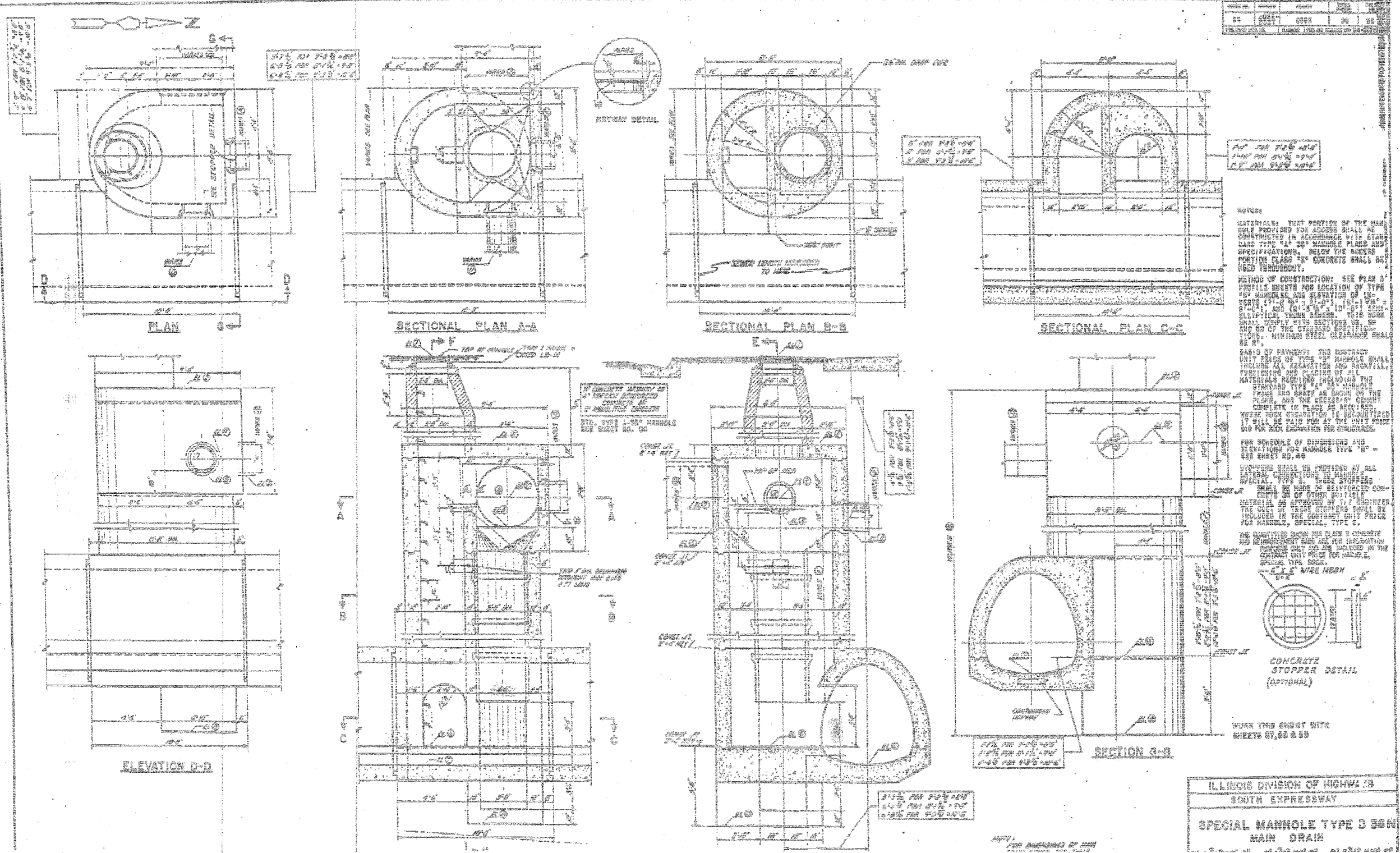
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS

SCALE: NTS DATE: 07/07/05 DRAWN BY: BDC CHECKED BY: BLU

SHEET JC-13 OF JC-22

6/21/2005 4:51:22 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	420
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*1818, ETC, 2324.6-1PR-8			



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NAME	DATE

SHEET JC-14 OF JC-22

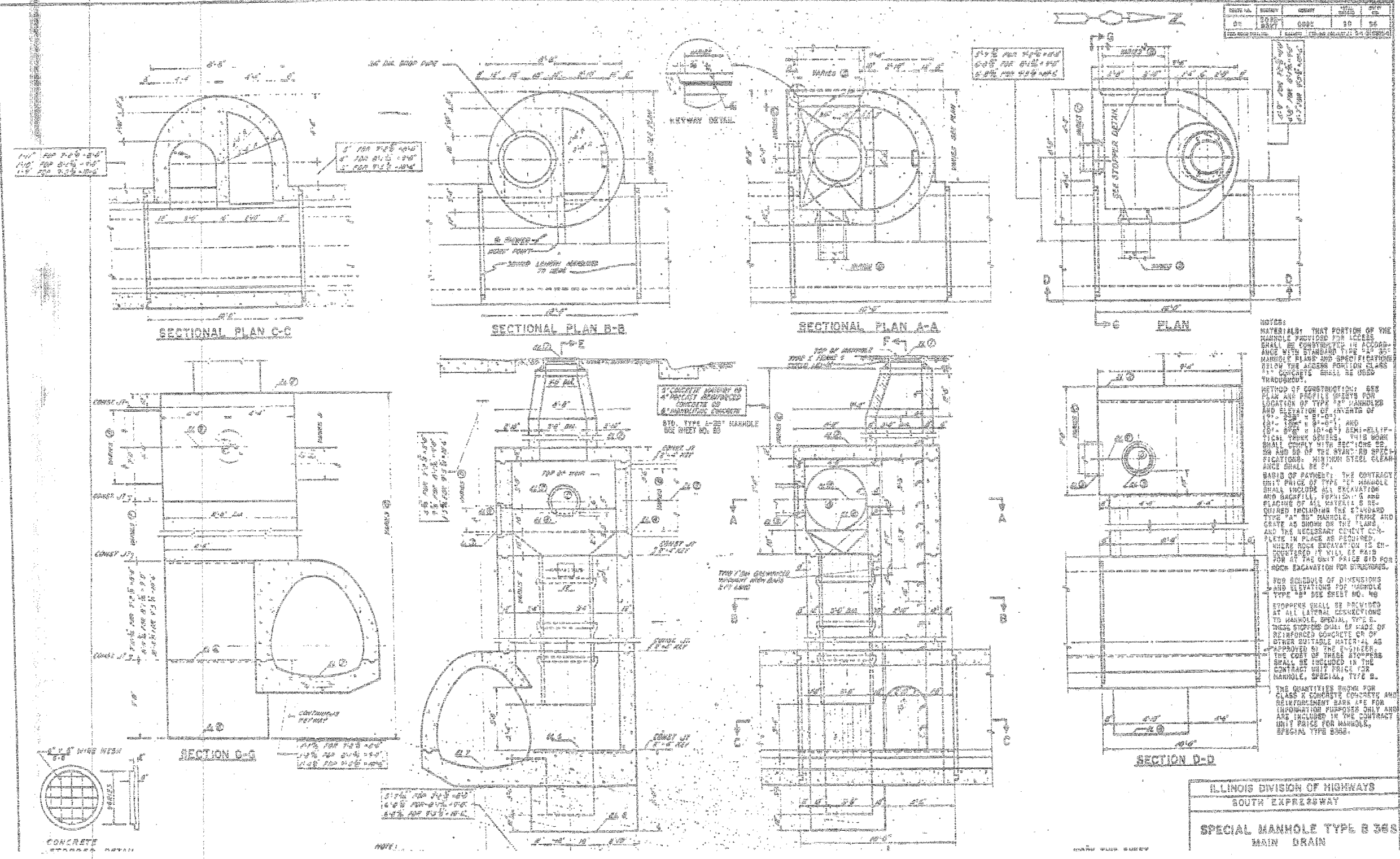
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	421
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		(1B1B, ETC. 2324.6-1P1R-8		



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REVISIONS	
NAME	DATE

SHEET JC-15 OF JC-22

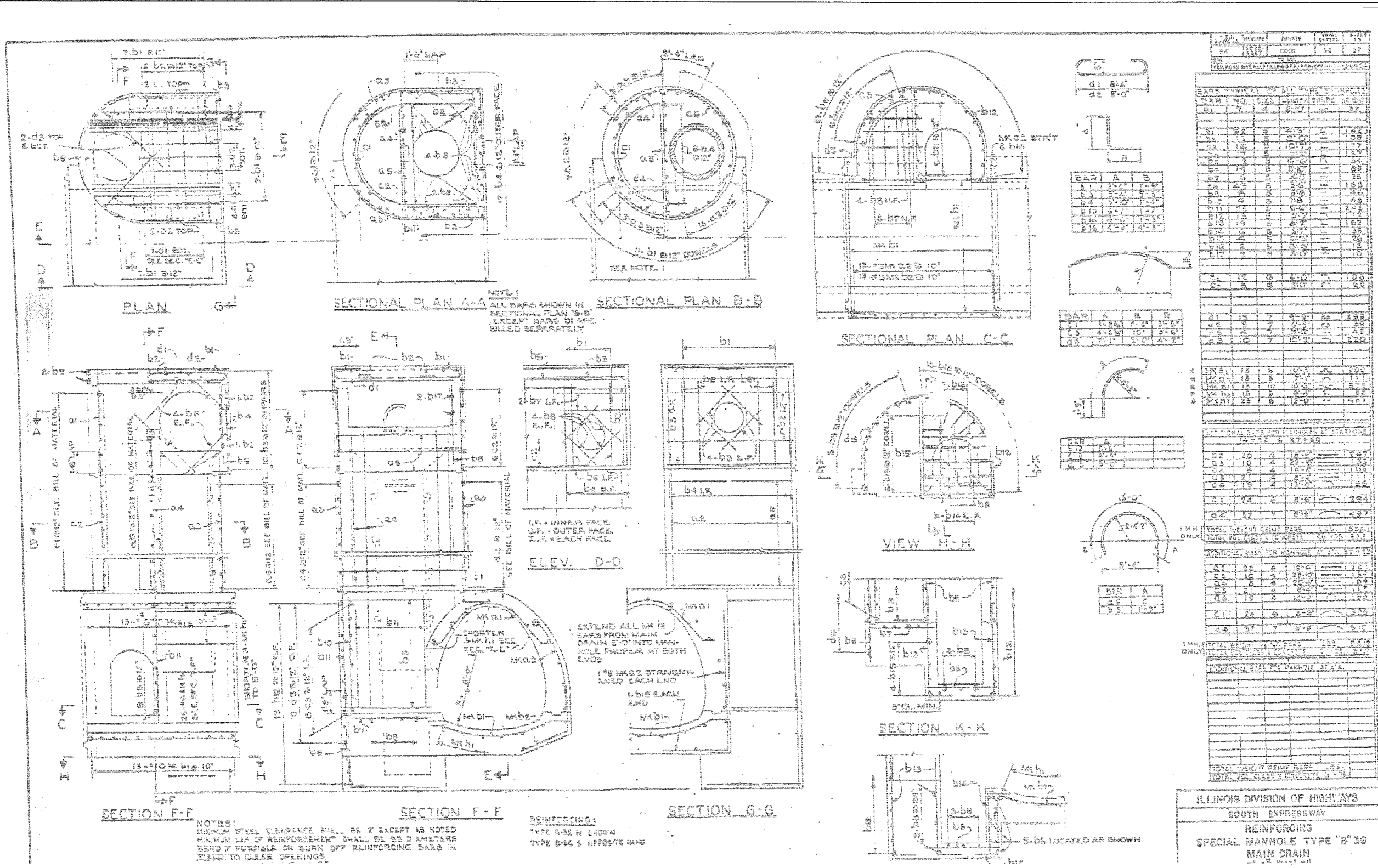
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05

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11/660/000/CAN/STRUCTURES/66014/JC0421 9/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	422
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*1818, ETC, 2324.6-1P1R-8			



ILLINOIS DIVISION OF HIGHWAYS
SOUTH EXPRESSWAY
REINFORCING
SPECIAL MANHOLE TYPE "B" 36
MAIN DRAIN

SHEET JC-16 OF JC-22

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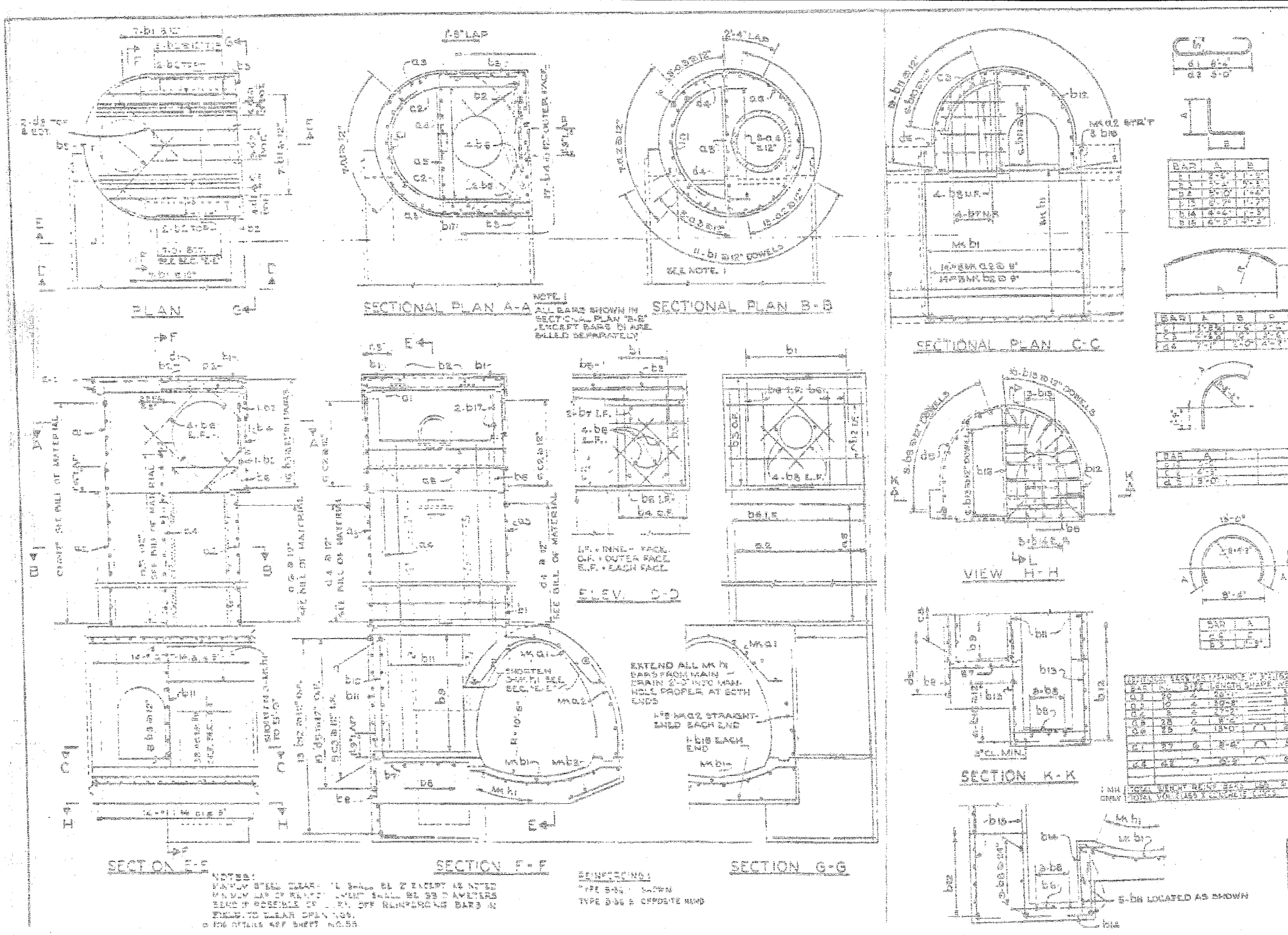
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05

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NO.	DESCRIPTION	QTY.	UNIT	REMARKS
1	CONCRETE	1.00	CU YD	
2	STEEL	1.00	TON	
3	REINFORCING	1.00	TON	
4	FORMWORK	1.00	SQ YD	
5	PAINT	1.00	GA	
6	LABOR	1.00	HOUR	
7	TRUCK	1.00	HOUR	
8	WATER	1.00	CU YD	
9	CEMENT	1.00	TON	
10	ADDITIONAL	1.00	TON	
11	ADDITIONAL	1.00	TON	
12	ADDITIONAL	1.00	TON	
13	ADDITIONAL	1.00	TON	
14	ADDITIONAL	1.00	TON	
15	ADDITIONAL	1.00	TON	
16	ADDITIONAL	1.00	TON	
17	ADDITIONAL	1.00	TON	
18	ADDITIONAL	1.00	TON	
19	ADDITIONAL	1.00	TON	
20	ADDITIONAL	1.00	TON	

ILLINOIS DIVISION OF HIGHWAYS
 SOUTH EXPRESSWAY
 REINFORCING
 SPECIAL MANHOLE TYPE "B" 36
 MAIN DR.
 8'-5" X 10'

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS

SCALE: NTS
 DATE: 07/07/05
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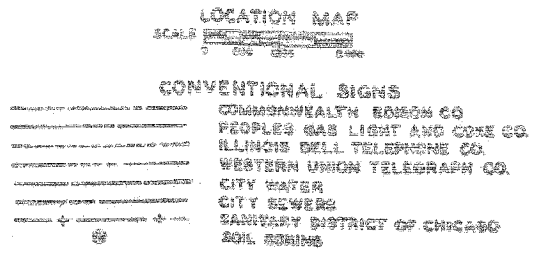
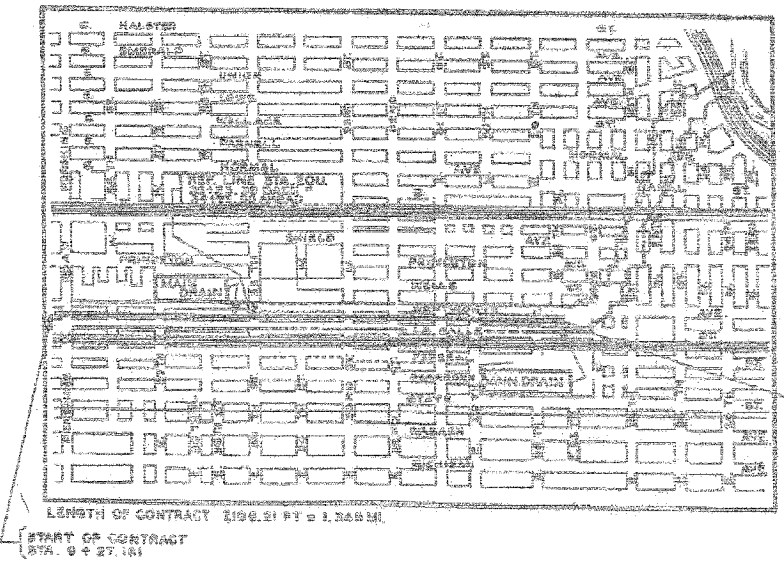
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	426
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*1818, ETC, 2324.6-1PIR-8		

STATE OF ILLINOIS
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SOUTH ROUTE SUPERHIGHWAY
PLANS FOR
MAIN DRAIN
SECTION S-2324.8- ID
W. PERSHING ROAD TO W. 26TH PLACE
F.A.I. ROUTE NO. 94 PROJECT UI-1-94 3(8752)

SHEET NO.	GENERAL PLANS	PAGE NO.
C-1	TITLE SHEET	1
C-2	PLAN AND PROFILE PERSHING ROAD TO 27TH STREET	2
C-3	PLAN AND PROFILE 27TH STREET TO 28TH STREET	3
C-4	PLAN AND PROFILE 28TH STREET TO 29TH STREET	4
C-5	PLAN AND PROFILE 29TH STREET TO 30TH STREET	5
C-6	PLAN AND PROFILE 30TH STREET TO 31ST STREET	6
C-7	PLAN AND PROFILE 31ST STREET TO 26TH PLACE	7
C-8	MANHOLE DETAILS	8
C-9	TYPICAL CROSS SECTION - MISCELLANEOUS DETAILS	9
STRUCTURAL PLANS		
S-1	KEY PLAN	10
S-2	SOIL BORING DATA S.O.-52, S.O.-53, S.O.-54, S.O.-55, S.O.-56, S.O.-57	11
S-3	SOIL BORING DATA S.O.-58, S.O.-59, S.O.-60, S.O.-61, S.O.-62, S.O.-63	12
S-4	SOIL BORING DATA L-51, L-52, L-53, L-54, L-55, L-56, L-57, L-58, L-59, L-60, L-61, L-62, L-63, L-64, L-65, L-66, L-67, L-68, L-69, L-70, L-71, L-72, L-73, L-74, L-75, L-76, L-77, L-78, L-79, L-80, L-81, L-82, L-83, L-84, L-85, L-86, L-87, L-88, L-89, L-90, L-91, L-92, L-93, L-94, L-95, L-96, L-97, L-98, L-99, L-100	13
S-5	SOIL BORING DATA L-51, L-52, L-53, L-54, L-55, L-56, L-57, L-58, L-59, L-60, L-61, L-62, L-63, L-64, L-65, L-66, L-67, L-68, L-69, L-70, L-71, L-72, L-73, L-74, L-75, L-76, L-77, L-78, L-79, L-80, L-81, L-82, L-83, L-84, L-85, L-86, L-87, L-88, L-89, L-90, L-91, L-92, L-93, L-94, L-95, L-96, L-97, L-98, L-99, L-100	14
S-6	SOIL BORING DATA L-51, L-52, L-53, L-54, L-55, L-56, L-57, L-58, L-59, L-60, L-61, L-62, L-63, L-64, L-65, L-66, L-67, L-68, L-69, L-70, L-71, L-72, L-73, L-74, L-75, L-76, L-77, L-78, L-79, L-80, L-81, L-82, L-83, L-84, L-85, L-86, L-87, L-88, L-89, L-90, L-91, L-92, L-93, L-94, L-95, L-96, L-97, L-98, L-99, L-100	15
S-7	SOIL BORING DATA L-51, L-52, L-53, L-54, L-55, L-56, L-57, L-58, L-59, L-60, L-61, L-62, L-63, L-64, L-65, L-66, L-67, L-68, L-69, L-70, L-71, L-72, L-73, L-74, L-75, L-76, L-77, L-78, L-79, L-80, L-81, L-82, L-83, L-84, L-85, L-86, L-87, L-88, L-89, L-90, L-91, L-92, L-93, L-94, L-95, L-96, L-97, L-98, L-99, L-100	16
S-8	SOIL BORING DATA S.O.-1, S.O.-2, S.O.-3, S.O.-4, S.O.-5, S.O.-6, S.O.-7, S.O.-8, S.O.-9, S.O.-10, S.O.-11, S.O.-12, S.O.-13, S.O.-14, S.O.-15, S.O.-16, S.O.-17, S.O.-18, S.O.-19, S.O.-20, S.O.-21, S.O.-22, S.O.-23, S.O.-24, S.O.-25, S.O.-26, S.O.-27, S.O.-28, S.O.-29, S.O.-30, S.O.-31, S.O.-32, S.O.-33, S.O.-34, S.O.-35, S.O.-36, S.O.-37, S.O.-38, S.O.-39, S.O.-40, S.O.-41, S.O.-42, S.O.-43, S.O.-44, S.O.-45, S.O.-46, S.O.-47, S.O.-48, S.O.-49, S.O.-50, S.O.-51, S.O.-52, S.O.-53, S.O.-54, S.O.-55, S.O.-56, S.O.-57, S.O.-58, S.O.-59, S.O.-60, S.O.-61, S.O.-62, S.O.-63, S.O.-64, S.O.-65, S.O.-66, S.O.-67, S.O.-68, S.O.-69, S.O.-70, S.O.-71, S.O.-72, S.O.-73, S.O.-74, S.O.-75, S.O.-76, S.O.-77, S.O.-78, S.O.-79, S.O.-80, S.O.-81, S.O.-82, S.O.-83, S.O.-84, S.O.-85, S.O.-86, S.O.-87, S.O.-88, S.O.-89, S.O.-90, S.O.-91, S.O.-92, S.O.-93, S.O.-94, S.O.-95, S.O.-96, S.O.-97, S.O.-98, S.O.-99, S.O.-100	17
S-9	TYPICAL CROSS SECTIONS	18
S-10	PARTIAL ROCK SECTIONS	19
S-11	MANHOLE REINFORCEMENT	20
S-12	BULKHEAD DETAILS	21

ITEM NO.	UNIT	QUANTITY	DESCRIPTION
1	LN. FT.	7,198.21	MAIN DRAIN, 8.48 X 10.5 SECTION
2	EACH	5	MANHOLES
3	LB.	1,800,000	REINFORCEMENT BARS
4	CU. YDS.	9,400	ROCK EXCAVATION
5	CU. YDS.	200	ADDITIONAL EARTH EXCAVATION IN TUNNEL
6	CU. YDS.	200	ADDITIONAL CONCRETE IN TUNNEL



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DATE MARCH 1991

APPROVED *[Signature]*
CHIEF ENGINEER AND SUPERVISOR OF HIGHWAYS

APPROVED *[Signature]*
APPROVING CHIEF ENGINEER

APPROVED *[Signature]*
CHIEF ENGINEER

APPROVED *[Signature]*
COMMISSIONER

THE DEPARTMENT OF
PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

APPROVED *[Signature]*
CHIEF HIGHWAY ENGINEER

APPROVED *[Signature]*
CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED *[Signature]*
COMMISSIONER

SHEET 2-1 OF 21 SHEETS

SHEET JC-20 OF JC-22

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

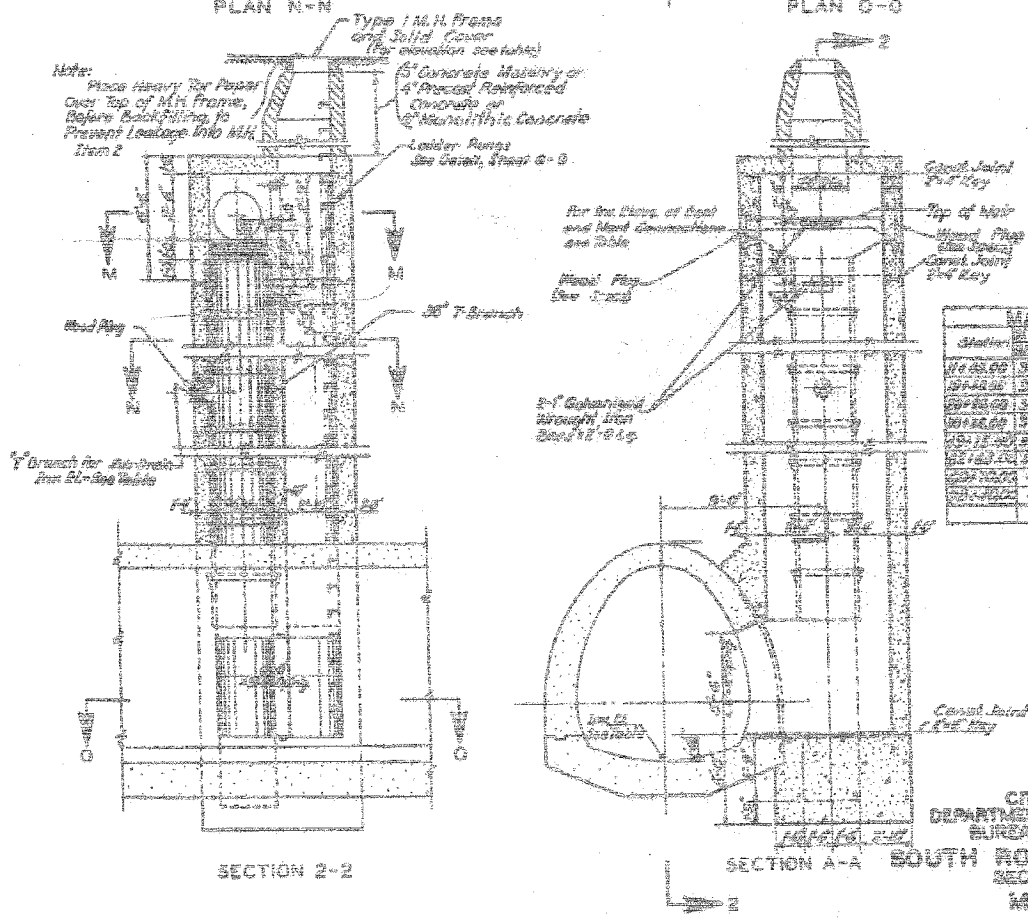
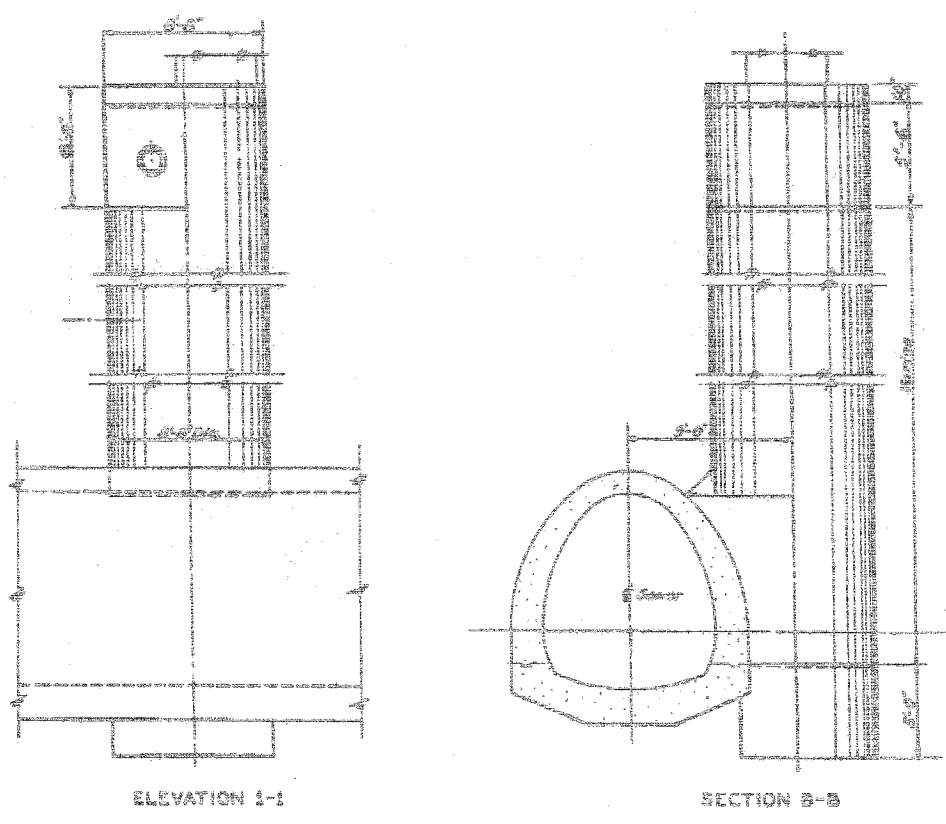
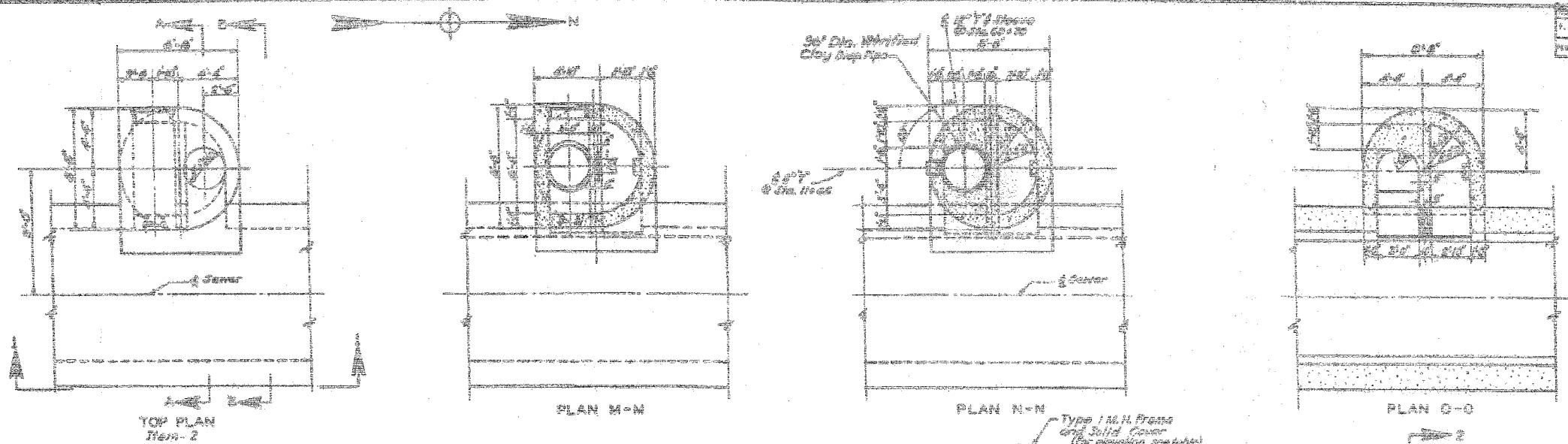
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	427
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*1818, ETC, 2324.6-1PR-8		



Station	Elevation	Distance	Notes
16+00.00	-4.14		
16+10.00	-4.33		
16+20.00	-4.52		
16+30.00	-4.72		
16+40.00	-4.91		
16+50.00	-5.10		
16+60.00	-5.29		
16+70.00	-5.48		
16+80.00	-5.67		
16+90.00	-5.86		
17+00.00	-6.05		

Station	Elevation
16+00.00	-4.14
16+10.00	-4.33
16+20.00	-4.52
16+30.00	-4.72
16+40.00	-4.91
16+50.00	-5.10
16+60.00	-5.29
16+70.00	-5.48
16+80.00	-5.67
16+90.00	-5.86
17+00.00	-6.05

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 8-2324.6-10
MAIN DRAIN
MANHOLE DETAILS

Drawn By: *[Signature]*
Checked By: *[Signature]*
Approved By: *[Signature]*

Note:
Continuation to 34" x 18" sewer as shown
For Type I M.H. Frame see Sheet 6-7
For location of Manholes see sheets 6-5 to 6-7 incl.
For Reinforcement Details see Sheet 6-11

SCALE 1/4" = 1'-0"
MARCH 1991
SHEET NO. 0-5 OF 51 SHEETS

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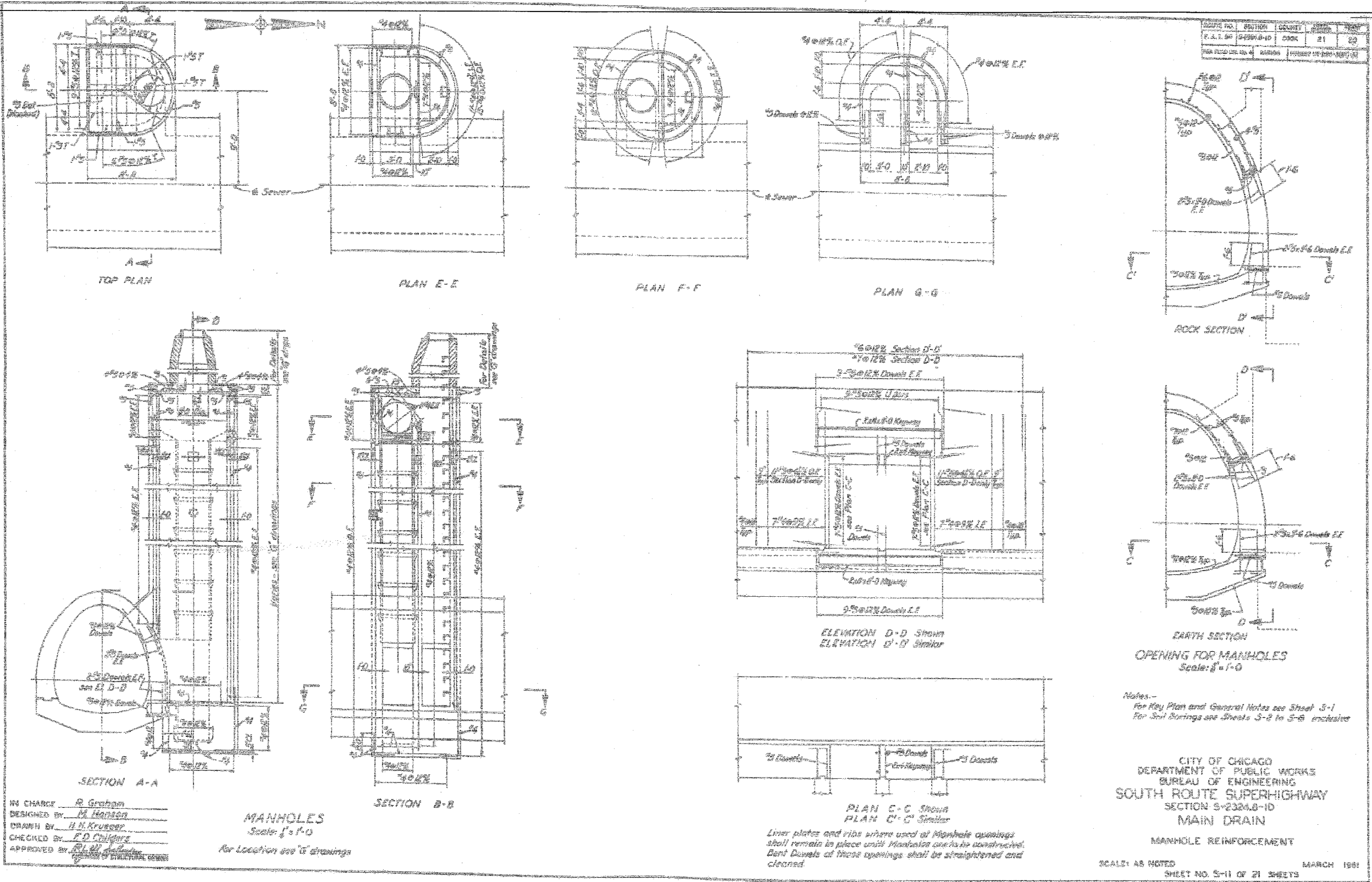
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05
DRAWN BY: BDC
CHECKED BY: BLU

6/24/2005 9:45:08 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	428
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*11818, ETC, 2324.6-1PIR-8		



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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FOR INFORMATION ONLY

SHEET JC-22 OF JC-22

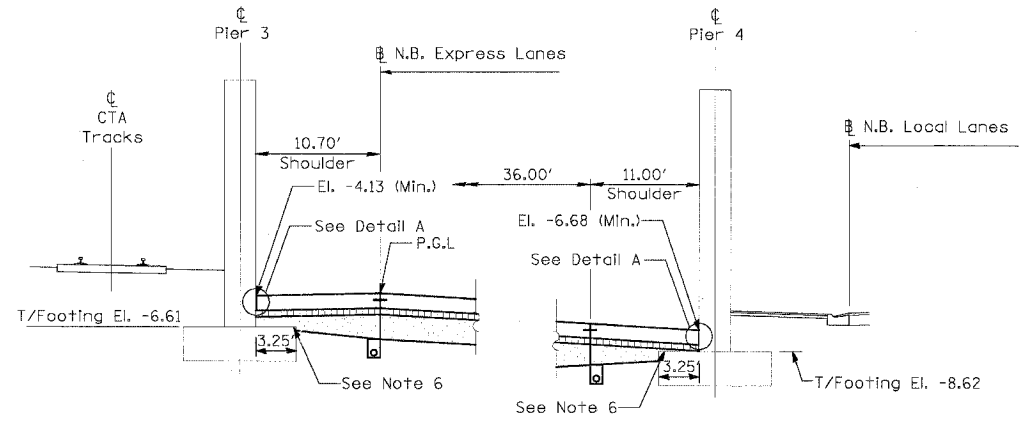
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

SCALE: NTS
DATE: 07/07/05

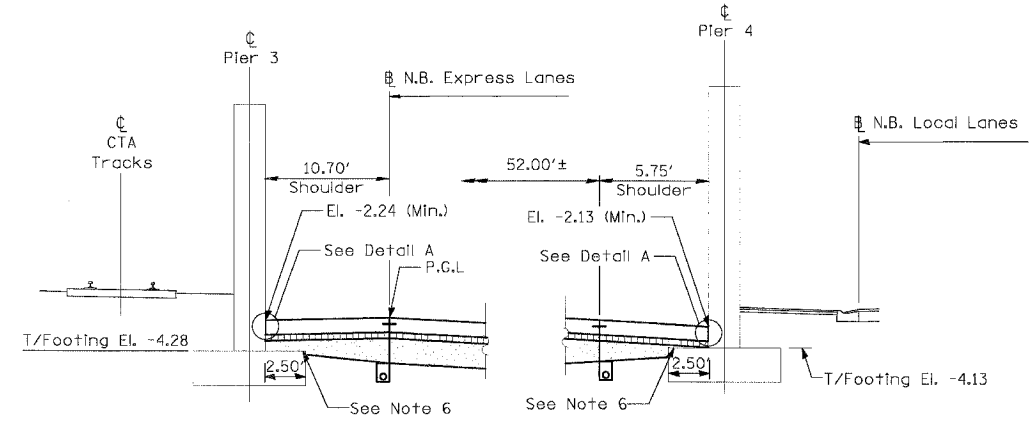
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CHECKED BY: BLU

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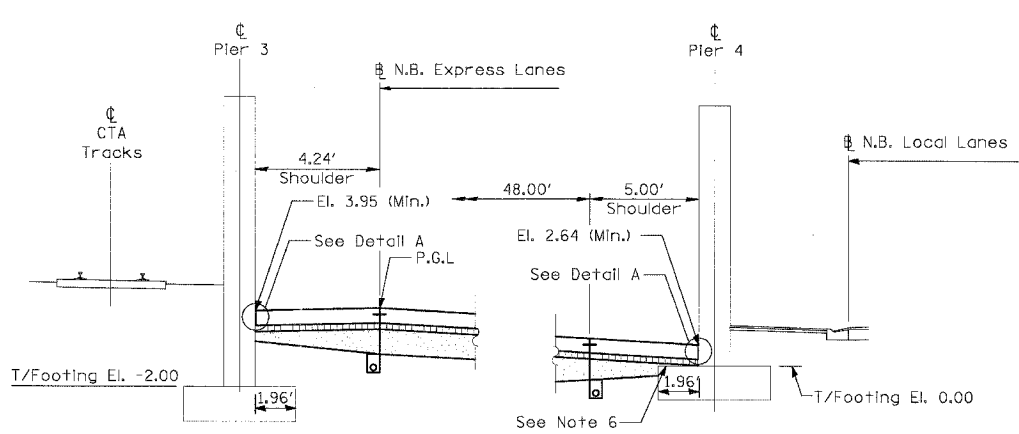
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	429
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-IPR-8			



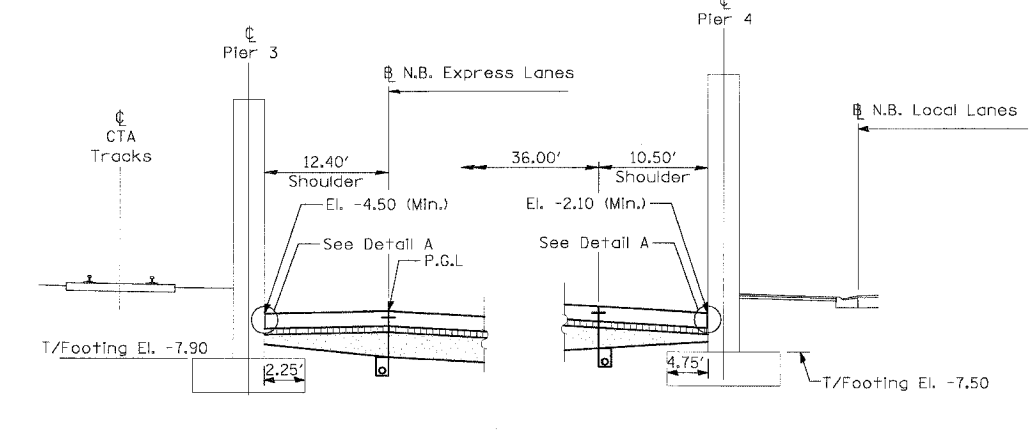
SHOULDER DETAIL AT 47th STREET (S.N. 016-1156)



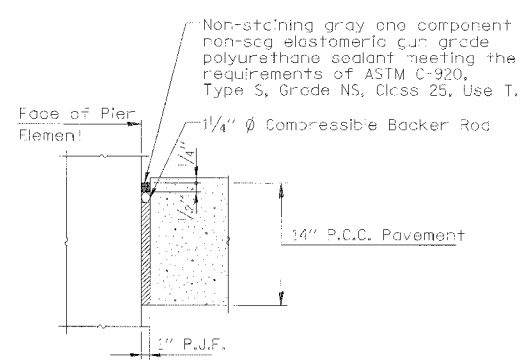
SHOULDER DETAIL AT 51st STREET (S.N. 016-1157)



SHOULDER DETAIL AT 63rd STREET

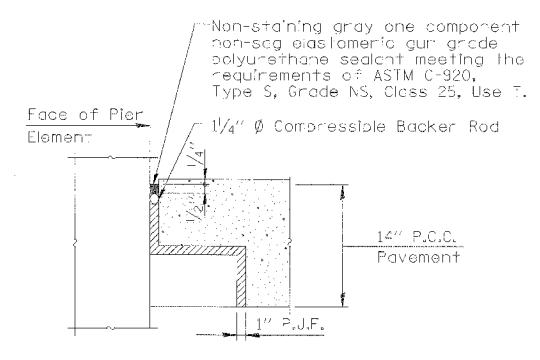


SHOULDER DETAIL AT 67th STREET (S.N. 016-1147)



DETAIL A

Cost of P.J.F., Backer Rod and sealing compound included with PCC Shoulder



DETAIL B

Cost of P.J.F., Backer Rod and sealing compound included with PCC Shoulder

Notes:

1. See Typical Sections for Composition of Exist. & Prop. Pavement.
2. All views looking North.
3. Contractor shall use caution during pavement removal and excavation operations around existing overhead bridge foundations.
4. Top of Rock El. at Root Street is approx. El. -12.0
5. All dimensions at right angles to Expressway.
6. Provide 10mil polyethylene bond breaker and pour shoulder pavement directly on pier footing.

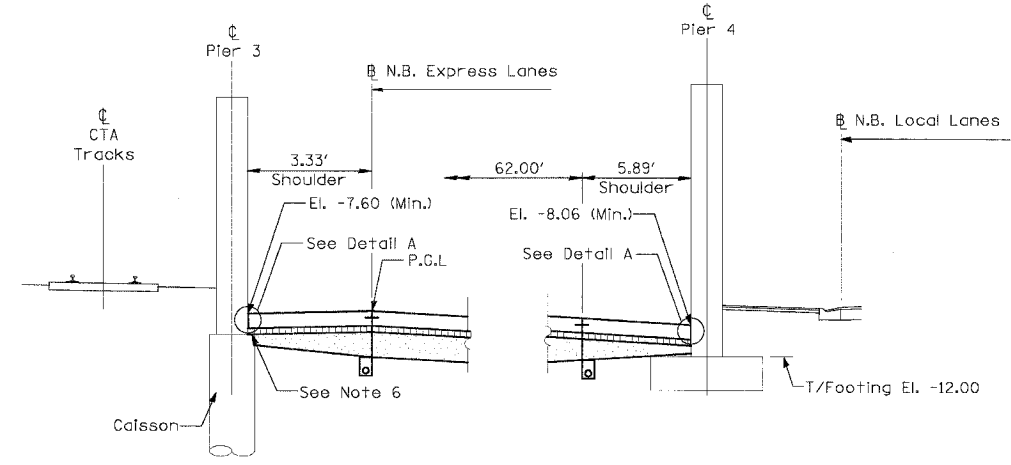
REVISIONS	
NAME	DATE

SHEET SDET-1 OF SDET-4
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES
 SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: MJP
 CHECKED BY: TAI

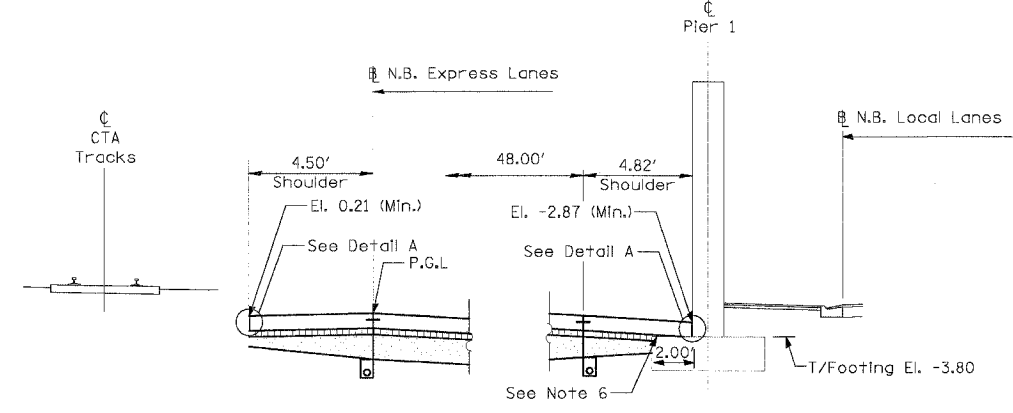
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

05/27/2005 08:06:30 PM

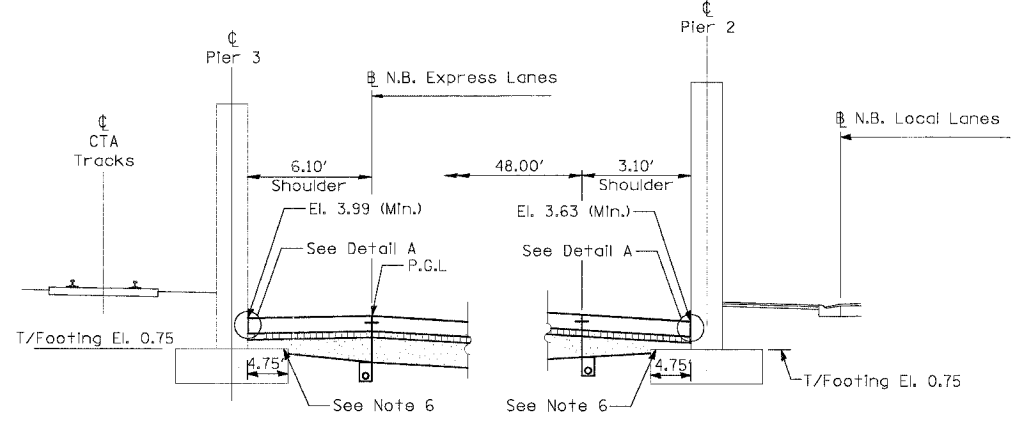
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	430
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1P)R-8			



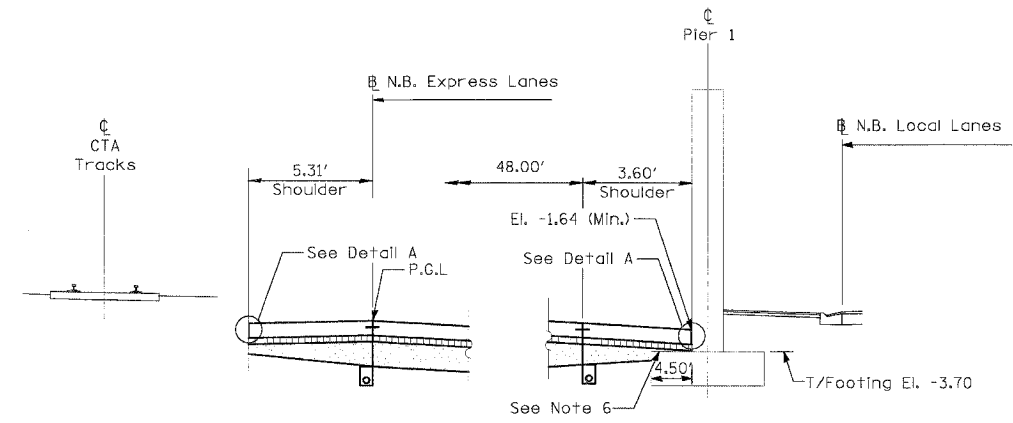
SHOULDER DETAIL AT 69th STREET (S.N. 016-0189)



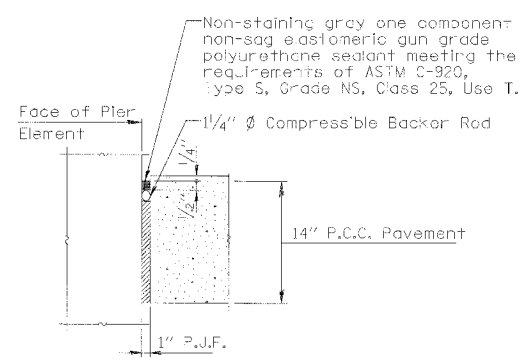
SHOULDER DETAIL AT WENTWORTH AVENUE



SHOULDER DETAIL AT CONRAIL RAILROAD

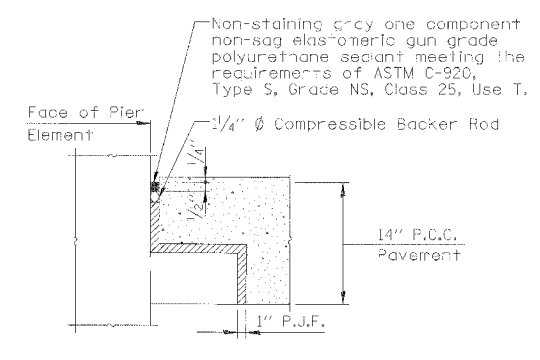


SHOULDER DETAIL AT ROCK ISLAND RAILROAD



DETAIL A

Cost of P.J.F., Backer Rod and sealing compound included with P.C.C. Shoulder



DETAIL B

Cost of P.J.F., Backer Rod and sealing compound included with P.C.C. Shoulder

Notes:

1. See Typical Sections for Composition of Exist. & Prop. Pavement.
2. All views looking North.
3. Contractor shall use caution during pavement removal and excavation operations around existing overhead bridge foundations.
4. Top of Rock El. at Root Street is approx. El. -12.0
5. All dimensions at right angles to Expressway.
6. Provide 10ml polyethylene bond breaker and pour shoulder pavement directly on pier footing.

SHEET SDET-2 OF SDET-4

REVISIONS	
NAME	DATE

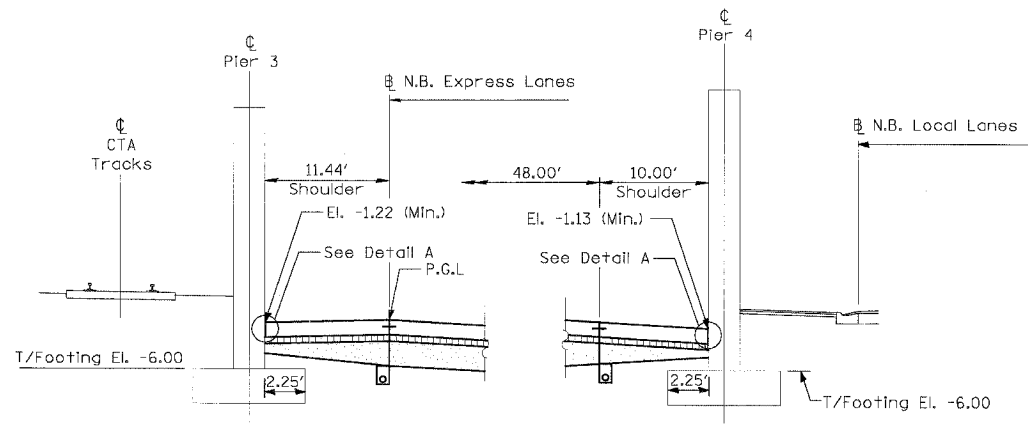
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES

SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: MJP
 CHECKED BY: TAI

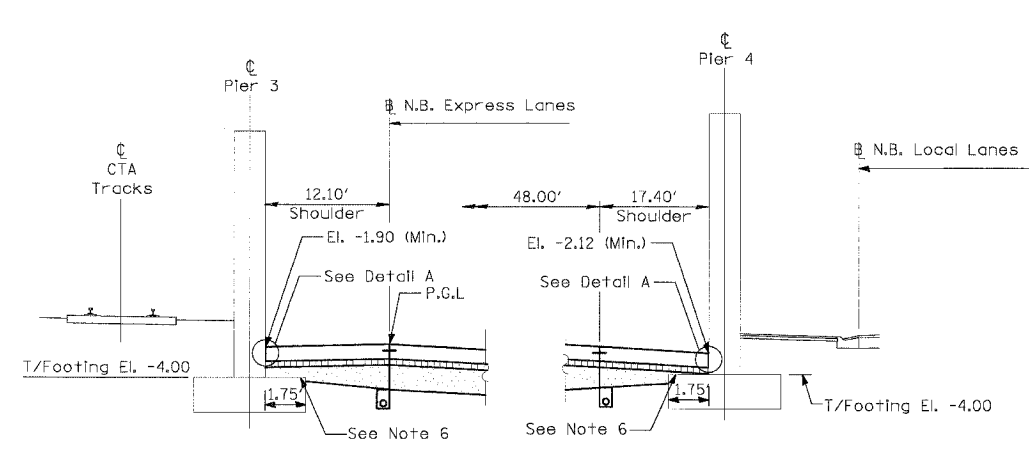
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

06/27/2005 08:06:51 PM

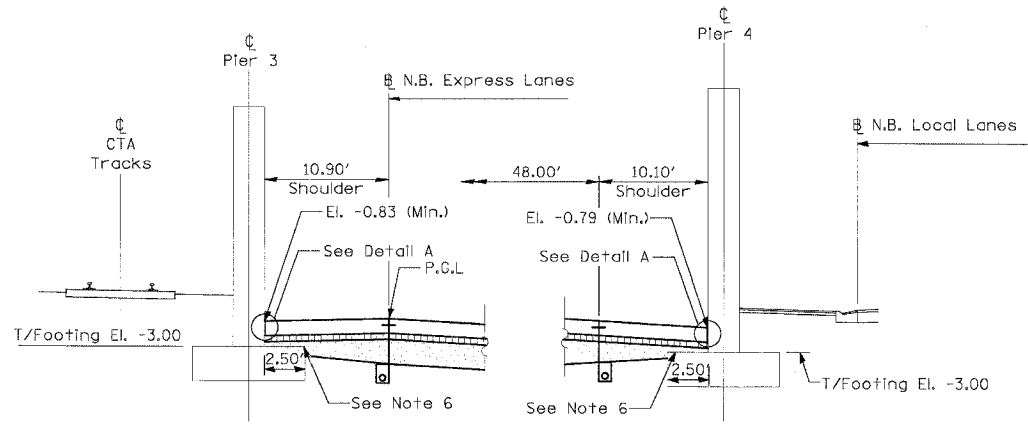
F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	COOK	556	431
STA. TO STA.		ILLINOIS FED. AID PROJECT	
62300		• (1818, ETC. 2324.6-1P/R-8	



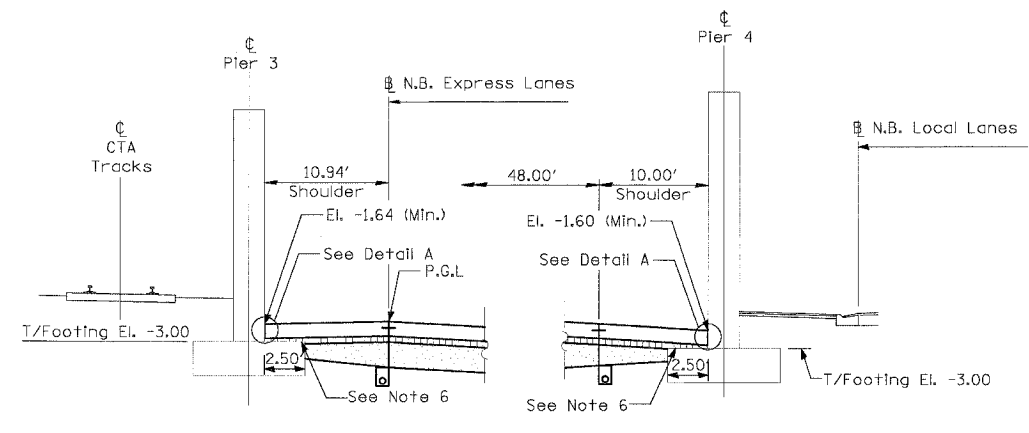
SHOULDER DETAIL AT 57th STREET (S.N. 016-1151)



SHOULDER DETAIL AT 59th STREET (S.N. 016-1150)

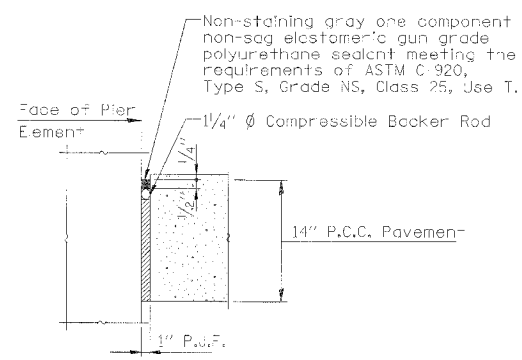


SHOULDER DETAIL AT 55th STREET (NORTH) (S.N. 016-1153)



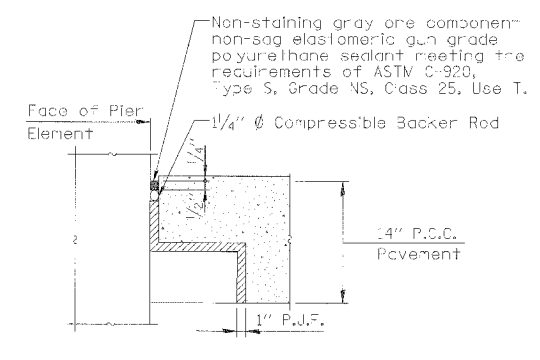
SHOULDER DETAIL AT 55th STREET (SOUTH) (S.N. 016-1152)

- Notes:
1. See Typical Sections for Composition of Exist. & Prop. Pavement.
 2. All views looking North.
 3. Contractor shall use caution during pavement removal and excavation operations around existing overhead bridge foundations.
 4. Top of Rock El. at Root Street is approx. El. -12.0
 5. All dimensions at right angles to Expressway.
 6. Provide 10ml polyethylene bond breaker and pour shoulder pavement directly on pier footing.



DETAIL A

Cost of P.J.F., Backer Rod and sealing compound included with PCC Shoulder



DETAIL B

Cost of P.J.F., Backer Rod and sealing compound included with PCC Shoulder

Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000 FAX: (312) 251-3015 WEB: WWW.EKCORP.COM

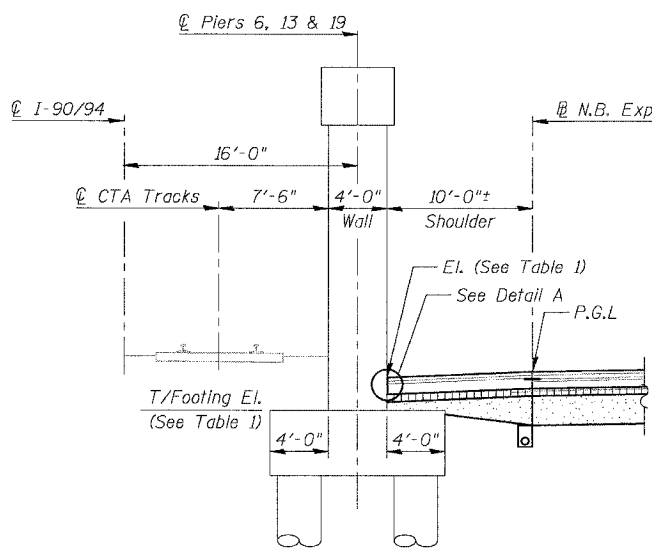
REVISIONS		NAME	DATE
NO.	DESCRIPTION		

SHEET SDET-3 OF SDET-4

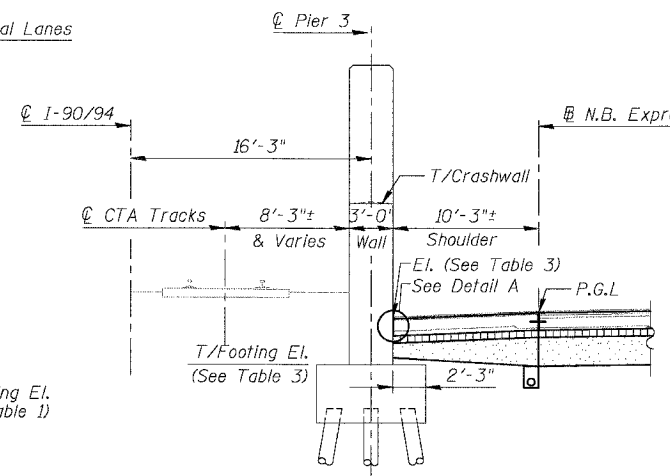
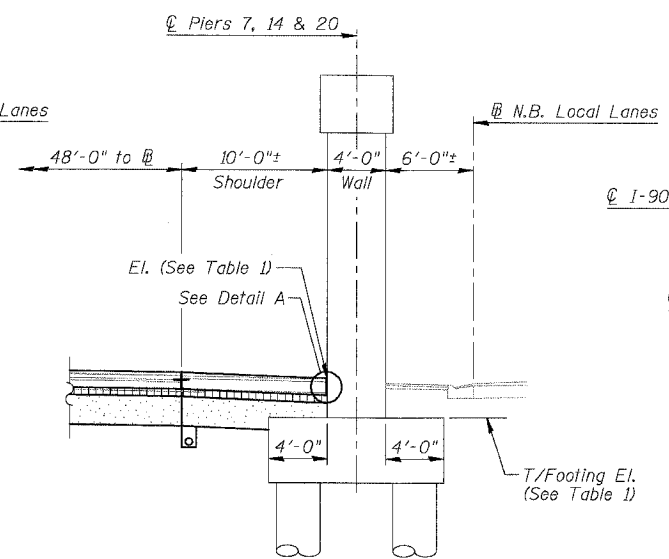
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES

SCALE: NONE DRAWN BY: MJP
 DATE: 7/7/05 CHECKED BY: TAI

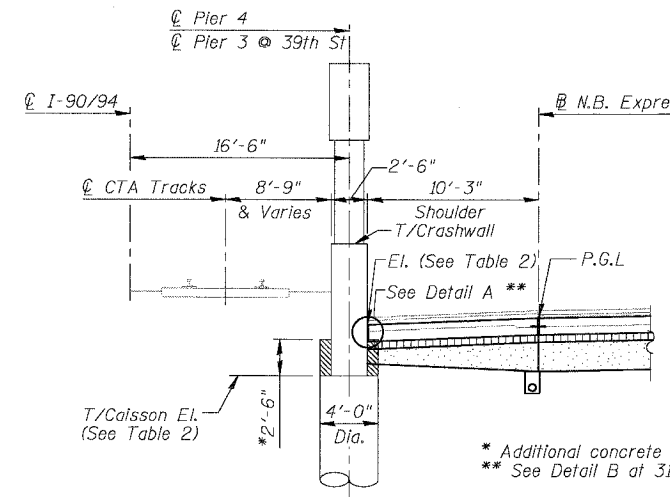
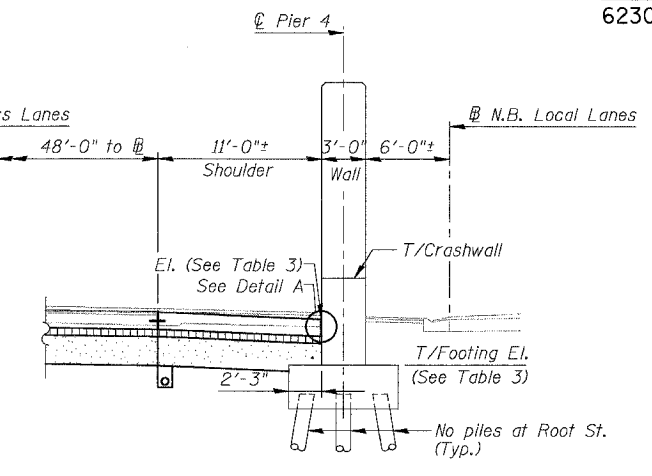
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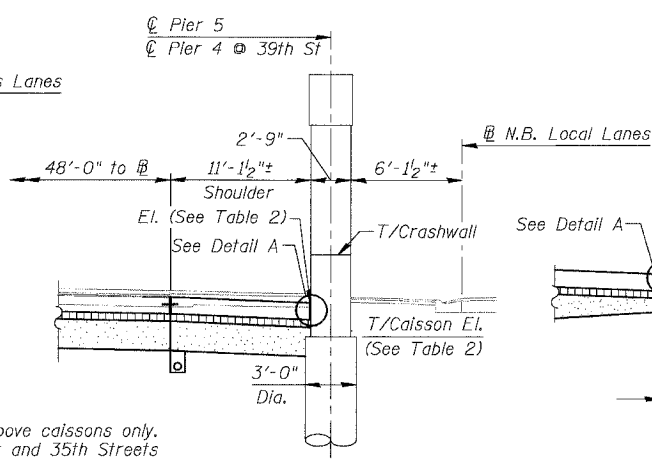
SHOULDER DETAIL AT OVERHEAD RAILROAD
Near 40th Street (S.N.'s 016-0138, 0139 & 0140)



SHOULDER DETAIL AT 43rd STREET (S.N. 016-1155)
Root Street (S.N. 016-1154) Similar as noted



SHOULDER DETAIL AT OVERHEAD BRIDGES
For 31st Street (S.N. 016-1159)
33rd Street (S.N. 016-1158)
35th Street (S.N. 016-1160)
39th Street (S.N. 016-0398) (Similar as noted)



DETAIL AT 39th STREET
For Piers 3 & 4

TABLE 1

PIER	T/FOOTING EL.	T/SHOULDER EL.	
		MAX.	MIN.
6	-1.43	1.24	1.08
7	-1.37	1.24	1.08
13	-0.39	1.79	1.60
14	-0.57	1.92	1.79
19	-1.67	0.69	0.44
20	-2.66	0.21	-0.13

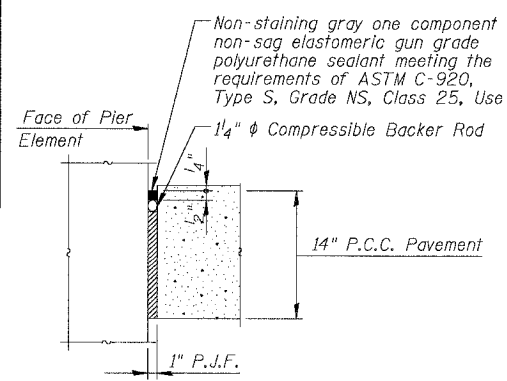
TABLE 2

LOCATION	PIER	T/CAISSON EL.	T/SHOULDER EL.	
			MAX.	MIN.
31st St.	4	-7.71	-4.24	-4.50
	5	-6.44	-4.25	-4.54
33rd St.	4	-6.26	-2.20	-2.34
	5	-5.36	-2.21	-2.30
35th St.	4	-4.71	-0.79	-1.25
	5	-3.89	-0.79	-1.30
39th St.	3	-11.30	-5.23	-5.74
	4	-11.30	-5.26	-5.78

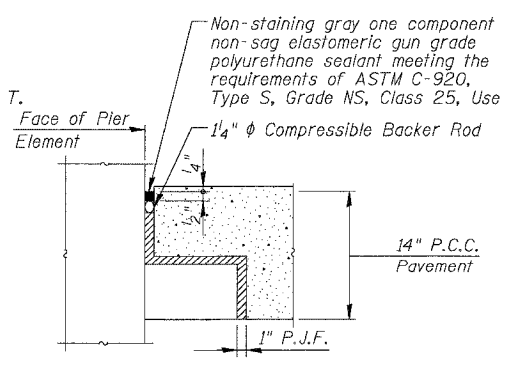
TABLE 3

LOCATION	PIER	T/FOOTING EL.	T/SHOULDER EL.	
			MAX.	MIN.
Root St.	3	-9.5	-2.7	-3.5
	4	-8.0	-2.7	-3.5
43rd St.	3	-7.0	-3.4	-3.9
	4	-7.0	-3.4	-3.9

- LEGEND**
- Concrete Pavement
 - Stabilized Sub-base
 - Sub-base Granular material



DETAIL A
Cost of P.J.F., Backer Rod and sealant included with PCC Shoulder



DETAIL B
Cost of P.J.F., Backer Rod and sealant included with PCC Shoulder

- Notes:
- See Typical Sections for Composition of Exst. & Prop. Pavement.
 - All views looking North.
 - Contractor shall use caution during pavement removal and excavation operations around existing overhead bridge foundations.
 - Top of Rock El. at Root Street is approx. El. -12.0
 - All dimensions at right angles to Expressway.
 - Provide 10 mil polyethylene bond breaker and pour shoulder pavement directly on pier footing.

REVISIONS

NAME	DATE

SHEET SD2T-4 OF SD2T-4

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
PAVEMENT DETAILS AT
CROSS STREET BRIDGES

SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312 228 0100
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7:4650/04/01/INSTR/STRUCTURES/660-A/Pavement_details.dgn 9/07/04 AM 6/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	433
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		(1818, ETC., 2324.6-1PR-8)		

Benchmark: BM No. 3540

"□" Cut on the Southwest corner of traffic control box at the Northeast corner of 39th and LaSalle Streets. El. 12.33

Existing Structure: The existing structure was built in 1962 under Section S-2323.2-4B and is identified as S.N. 016-2625. The structure is a 12'-0" clear span by 14'-0" clear height double barrel reinforced concrete box culvert. It conveys sanitary and storm water under the Dan Ryan Expressway for the MWRDGC. The length of culvert under the expressway is 325'-0" and the culvert transitions horizontally, vertically and in cross section to connect to an existing circular brick sewer under the centerline of 39th Street. The top slab of the culvert is the expressway pavement and consists of a minimum of 1'-3" of reinforced concrete with an approximately 5" thick overlay (either concrete or bituminous). The centerline of the culvert has no skew relative to the Dan Ryan baselines. There are 20'-6" long approach slabs on each side of the culvert over the top of the traffic lanes. Barrier wall is attached to the top slab and separates the express and local lanes of the expressway and the expressway from the CTA tracks. The barrier is supported by PCC shoulders outside the limits of the culvert. The culvert will be rehabilitated utilizing stage construction. Portions of the top slab and all components of the culvert below grade shall be re-used.

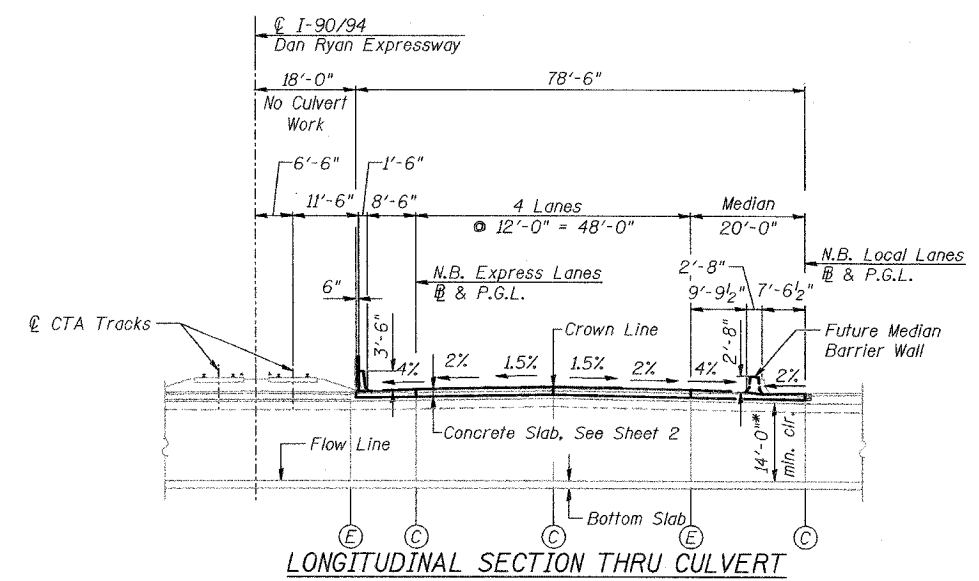
All elevations are based on the Chicago City Datum (C.C.D.)

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All construction joints shall be bonded.



TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Bridge Approach Pavement	Sq. Yd.	456
Bituminous Surface Removal, 5"	Sq. Yd.	143
Bituminous Surface Removal (Variable Depth)	Sq. Yd.	82
Approach Slab Removal	Sq. Yd.	219
Concrete Superstructure	Cu. Yd.	112.2
Bridge Deck Grooving	Sq. Yd.	218
Protective Coat	Sq. Yd.	265
Reinforcement Bars, Epoxy Coated	Pound	23,450
Bar Splicers	Each	257
Concrete Slab Hydro-Demolition	Sq. Yd.	237
CTA Fence	Foot	87
Video Taping of MWRD Culvert	Foot	245
Temporary CTA Ballast Retention	L. Sum	!

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44 & ALT.

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

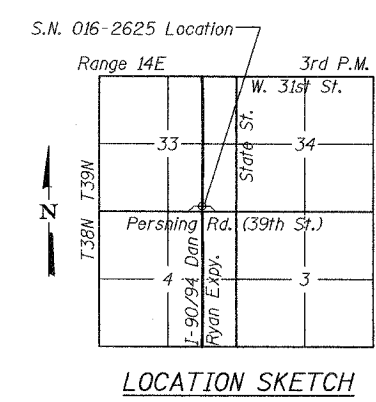
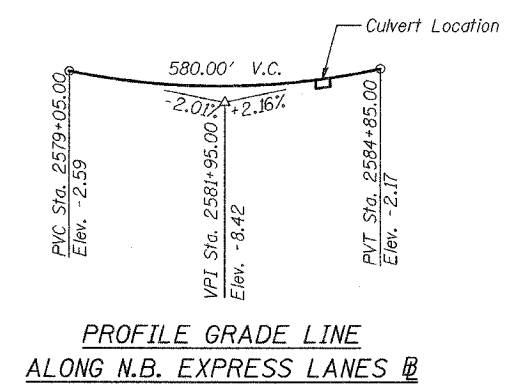
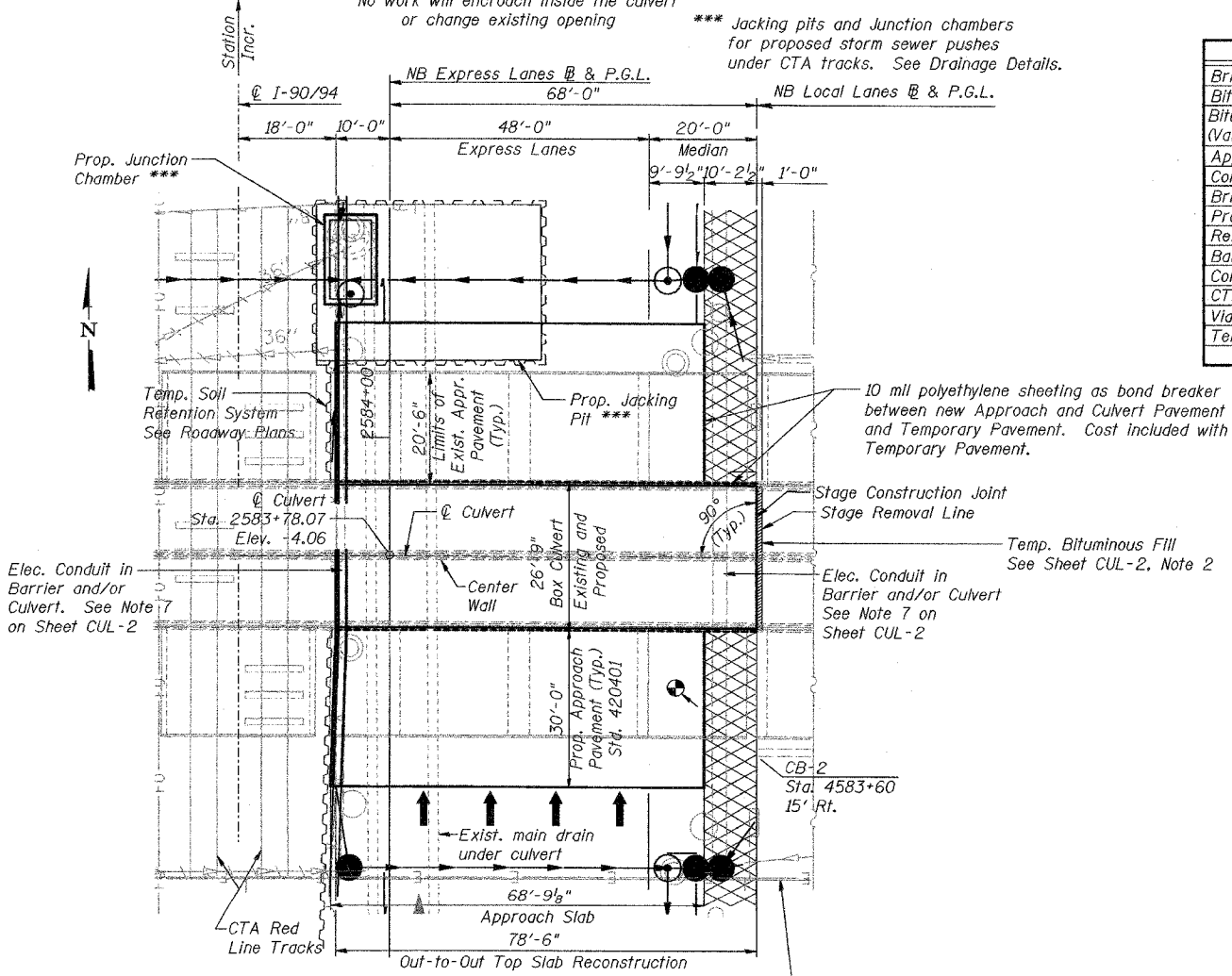
New:
 f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 Existing:
 f'c = 3,500 psi
 fy = 40,000 psi (Reinforcement)

LEGEND

- CB-2 = Soil Boring Location
- = Exist. Catch basin
- ⊙ = Exist. Manhole
- = Exist. Inlet
- = Exist. Storm sewer
- = Exist. Underdrain
- = Prop. Catch basin
- ⊙ = Prop. Manhole
- = Prop. Storm sewer
- = Prop. Underdrain
- ▨ = Temporary Pavement
- ▩ = Temporary Bituminous Fill

ABBREVIATIONS

- MWRDGC = Metropolitan Water Reclamation or MWRD District of Greater Chicago
- CTA = Chicago Transit Authority
- E = Expansion Joint
- C = Construction Joint
- P.G.L. = Profile Grade Line
- NB = Northbound
- SB = Southbound



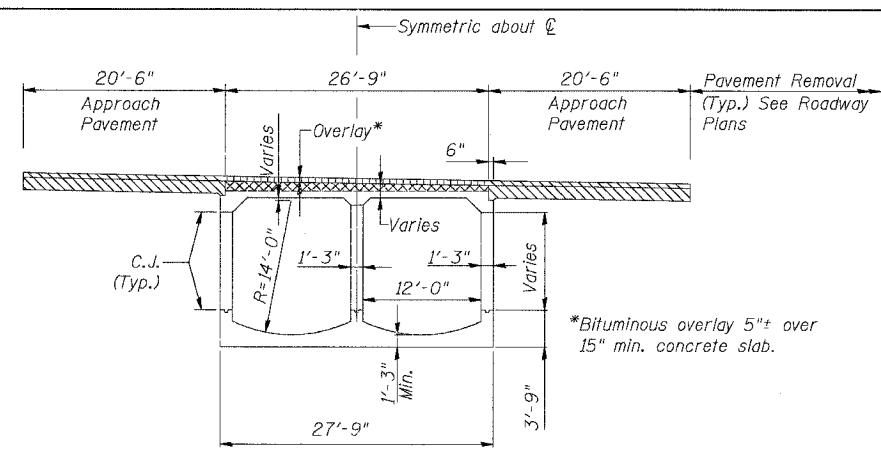
APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 Brian L. Umbright
 ENGINEER OF BRIDGES AND STRUCTURES
 Date: July 7, 2005
 License
 Expires: November 30, 2006

REVISIONS	NAME	DATE
1	ADDENDUM 1	8/12/05

SHEET CUL-1 OF CUL-14
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 MWRD CULVERT, N. OF 39TH ST.,
 COOK COUNTY, S.N. 016-2625
 GENERAL PLAN
 SCALE: N.T.S. DRAWN BY: DJM
 DATE: 07/07/05 CHECKED BY: BLU

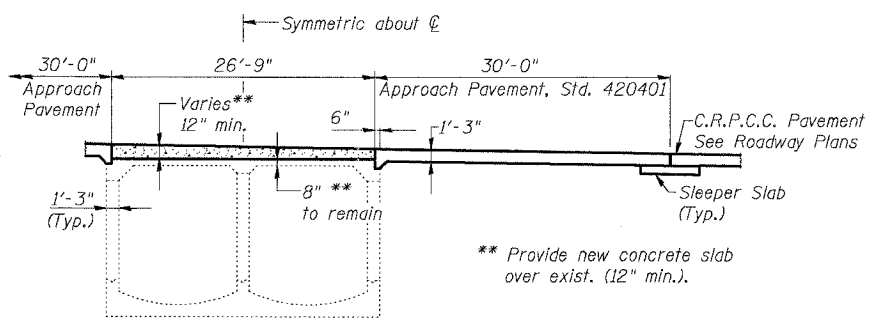
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	434
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*1818, ETC, 2324.6-1P1R-8		



EXISTING SECTION THRU CULVERT

Exist. vertical, diagonal, and partially embedded horizontal reinforcement bars to be cleaned, straightened and incorporated into new concrete slab. Horizontal reinforcement bars that are not partially embedded in exist. slab shall be removed.

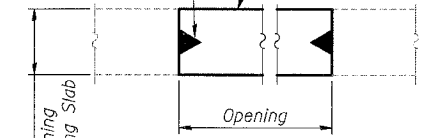


PROPOSED SECTION THRU CULVERT

ANTICIPATED SEQUENCE OF CONSTRUCTION:

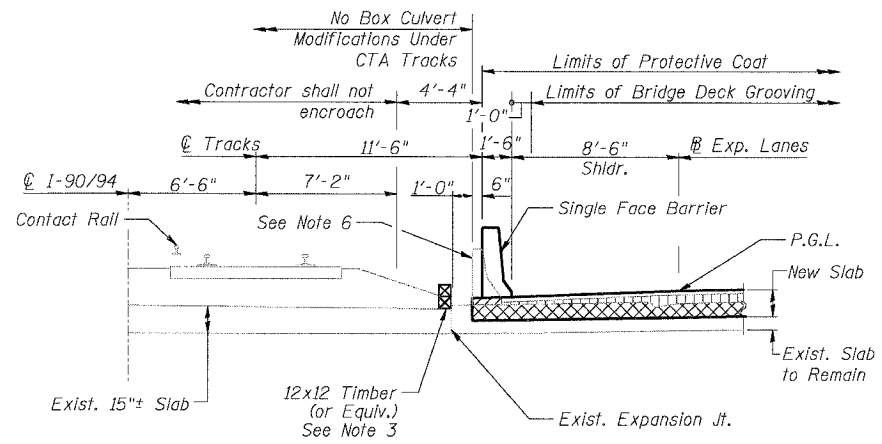
1. Televis existing culvert per Special Provisions.
2. Remove existing single face barrier along CTA and double face barrier between express and local lanes. Provide temporary concrete barrier and CTA ballast support as necessary.
3. Core drill full-depth through existing top slab to determine exact location of bottom of top slab before full-depth saw cutting.
4. Remove existing bituminous overlay to level of top reinforcement by scarification methods.
5. Remove remaining portion of top slab and reinforcement by hydro-demolition methods. The Contractor shall exercise care during the partial removal of the top slab of the culvert to ensure the remaining slab's integrity will not be detrimentally impacted. The Contractor shall repair any damage to the remaining slab caused by his operations as directed by the Engineer at no additional cost to the Department. The depth of removal varies from 7" to 11" and shall be determined in the field by the Engineer to ensure that a minimum of 8" of existing slab remains and a minimum of 12" of new concrete can be poured.
6. Repair unsound areas of remaining slab with partial or full depth repair methods and plug full-depth cores.
7. Construct new top slab and barrier along CTA.
8. Re-televis culvert and repair any damage per Special Provisions.
9. Approach slabs can be removed and replaced as necessary to coincide with top slab and adjacent pavement reconstruction. Provide CTA ballast support as required.
10. Any full-depth holes or patches shall be provided with water seals to prevent sewage from accumulating between the existing and proposed slab during future storm events. Cost included with Concrete Superstructure.

Extrudable polyurethane swelling waterstop around perimeter of opening
Utilize Shrinkage Compensated Concrete for any full depth patches



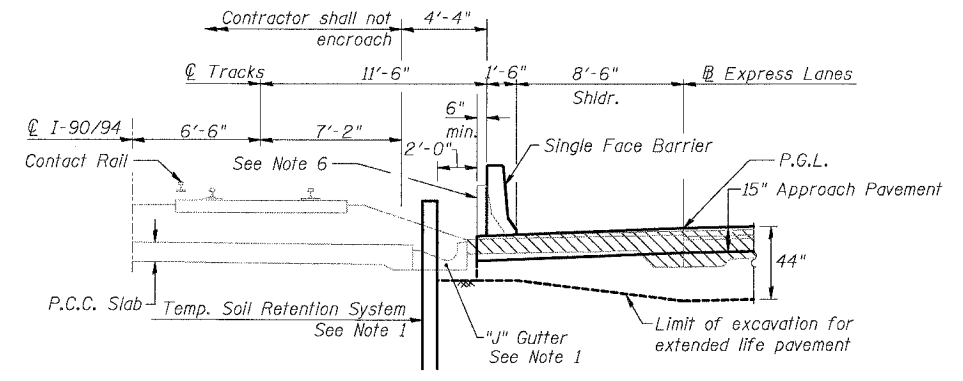
WATER SEAL DETAIL

Utilize Sika Swell S-2 by Sika Corporation or approved equal. Cast included with Concrete Superstructure.



SECTION AT CTA (CULVERT SLAB)

See Note 4



SECTION AT CTA (APPROACH PAVEMENT)

See Note 4

NOTES

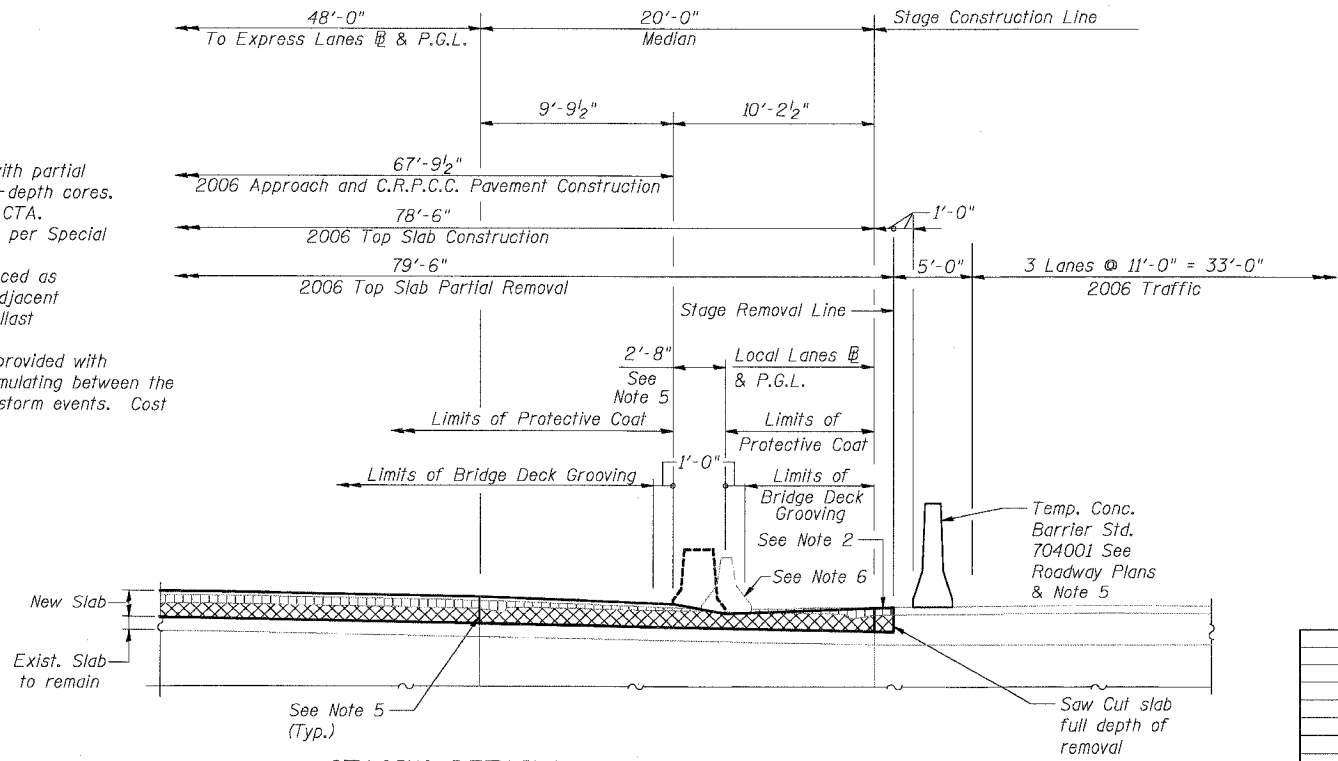
1. See Roadway Plans and Special Provisions for details and limits on either side of culvert. Do not damage PCC slab to remain under CTA tracks when installing or removing system.
2. Provide temporary pavement as a water seal to be removed by others. Provide polyethylene sheeting as indicated on Sheet CUL-1.
3. Temporary CTA Ballast Retention, see Special Provisions. Coordinate with requirements indicated in Roadway Plans and CTA Coordination Special Provision.
4. Exist. and prop. fence attached to CTA barrier not shown for clarity.
5. Future median barrier (by others) and approximate location of TCB after completion of contract. Adjust location of TCB to provide level base or provide temp. pavement to level base as directed by Engineer. Cost included with Relocate Temporary Concrete Barrier. Any temp. pavement placed on new pavement shall be separated with 10 mil polyethylene sheeting as bond breaker..
6. Existing CTA Barrier across culvert and approach slab shall be removed under item "CTA Barrier Removal". Existing median barrier between express and local lanes across culvert and approach shall be removed under the item "Concrete Barrier Removal". See Roadway Plans. Existing barriers anchored to culvert slab. Contractor shall use care when removing to damage culvert.
7. Contractor shall remove any abandoned lighting conduit exposed by removal operations as required. Cost included in the various removal items. Coordinate with IDOT Contract 62583 as required for timing of removals.

LEGEND

- Concrete Slab Hydro-Demolition
- Bituminous Surface Removal, 5" (Variable depth on shoulders)
- Approach Slab Removal

ABBREVIATIONS

C.J. = Construction Joint



STAGING DETAILS @ EXPRESS/LOCAL LANES MEDIAN

See Longitudinal Section for Dimensions not shown

REVISIONS	NAME	DATE

SHEET CUL-2 OF CUL-14

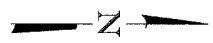
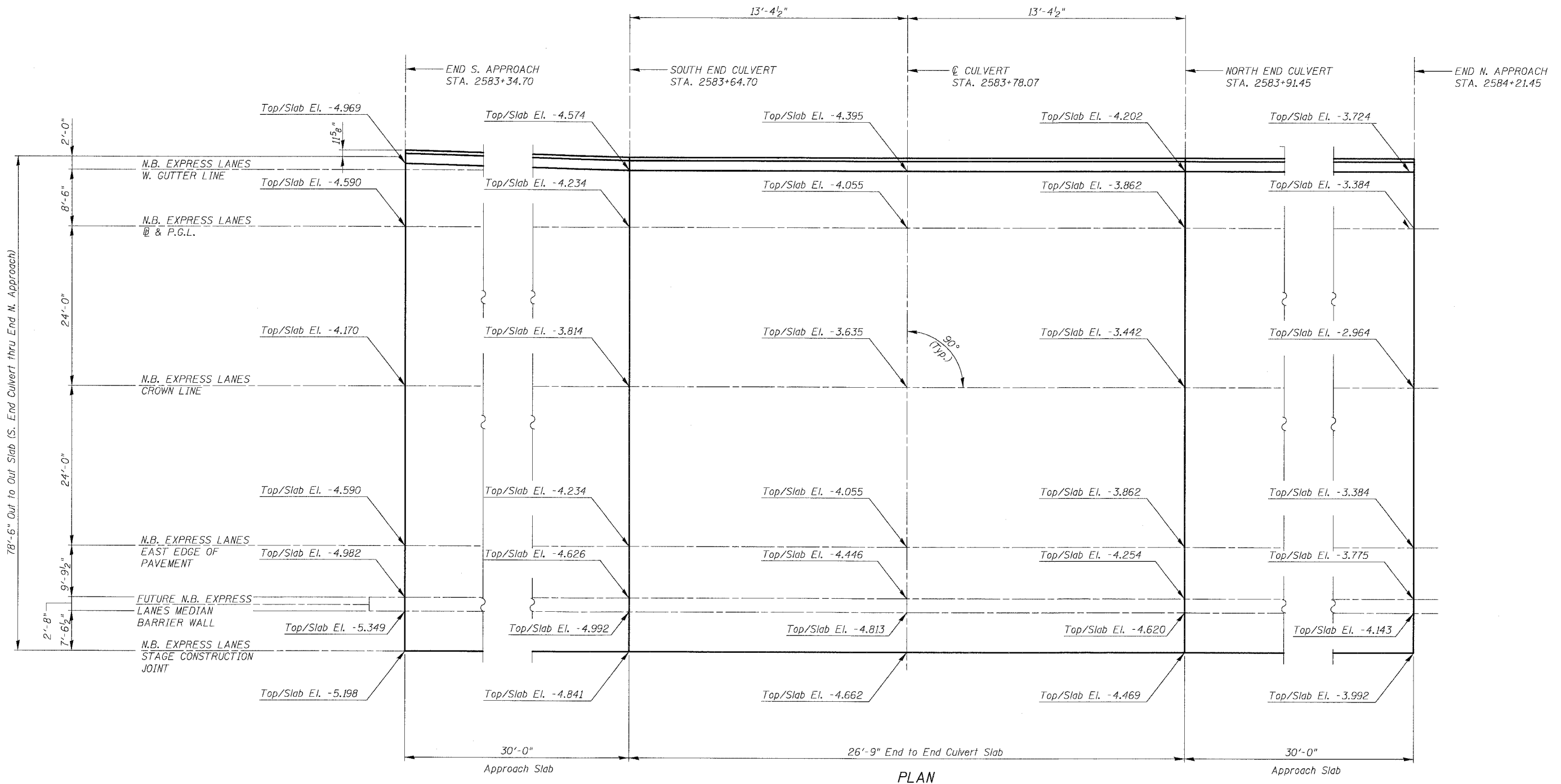
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
MISC. DETAILS

SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU

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6/24/2005 9:09:53 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	435
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*1818, ETC, 2324.6-1P1R-8		



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REVISIONS	
NAME	DATE

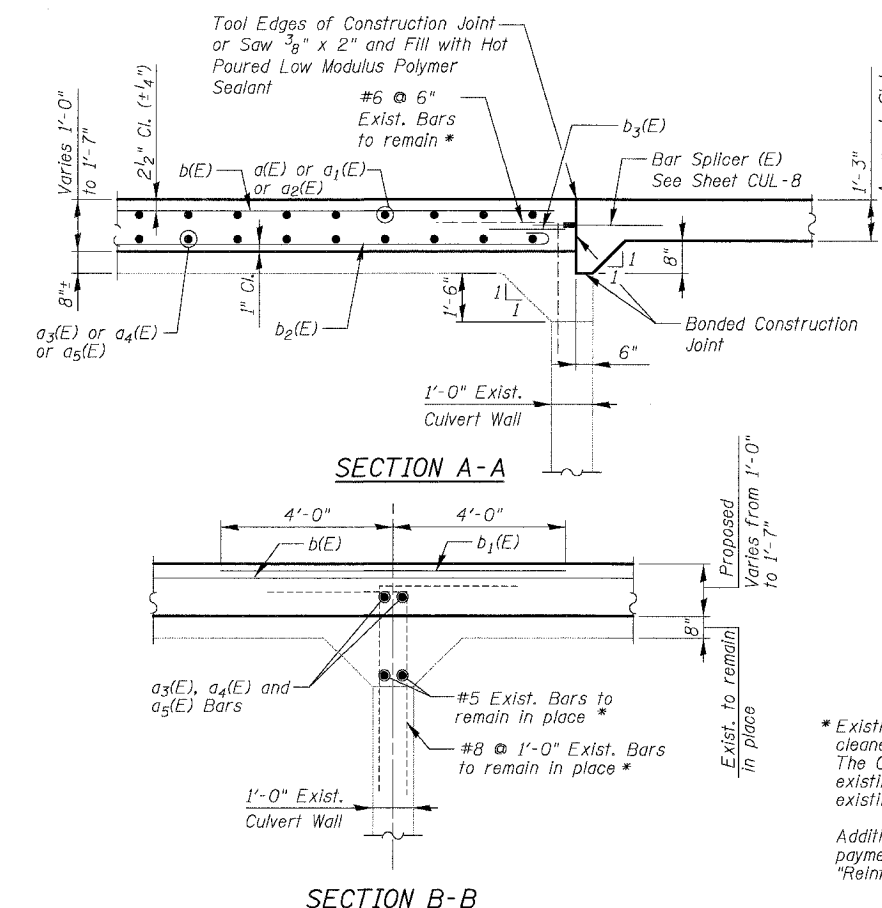
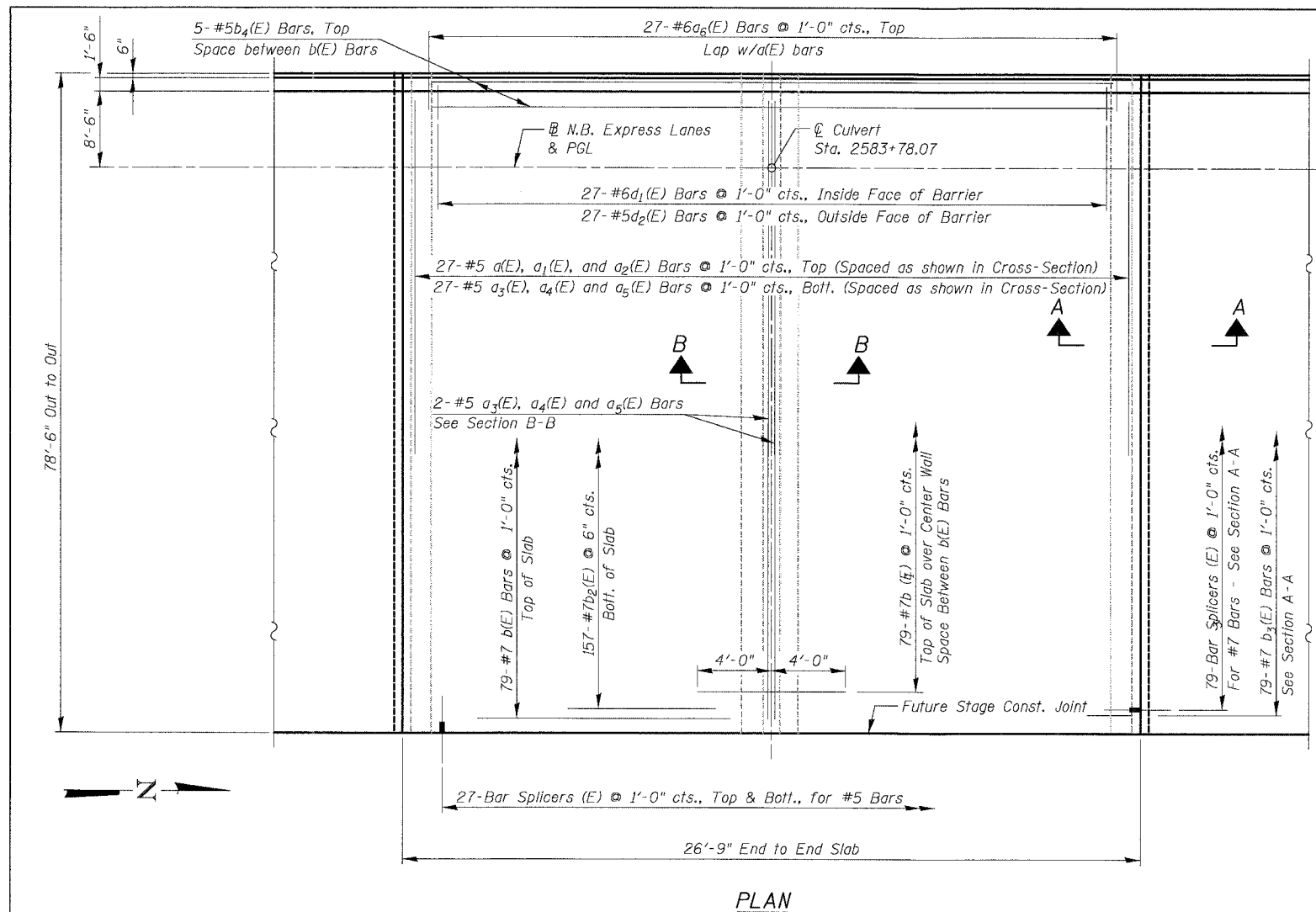
SHEET CUL-3 OF CUL-14

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
TOP SLAB ELEVATIONS

SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU

66000000\Culvert\A660_A660\Culvert_0801.dgn 9/24/2005 9:02:27 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	436
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1P1R-8			



* Existing Reinforcement Bars shown are to be cleaned and incorporated into new construction. The Contractor also has the option to cut the existing bars and use new bars anchored to the existing concrete pier per approval of the Engineer.

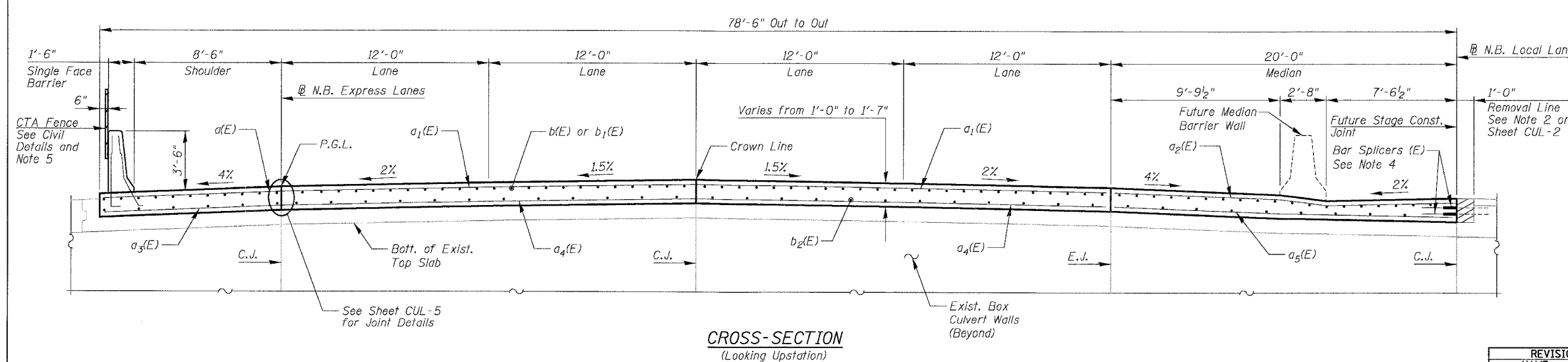
Additional reinforcement shall not be measured for payment but shall be included in the cost of "Reinforcement Bars, Epoxy Coated".

NOTES

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. See Sheet CUL-5 for Top Slab Details and Bill of Material.
3. See Sheet CUL-8 for Bar Splicer Details.
4. Contractor shall provide bar splicers as shown here and on Sheet CUL-6. Install Stage I portion and provide Stage II portion to the Engineer. Plug threaded coupler with plastic nipple or H.S. Bolt for protection. Cost included with "Bar Splicers".
5. Provide terminal posts and fence "expansion" joint at end of Approach Pavement. Space fence posts to miss barrier joints.

ABBREVIATIONS

- E.J. = Expansion Joint
- C.J. = Construction Joint



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REVISIONS	
NAME	DATE

SHEET CUL-4 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
TOP SLAB PLAN
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

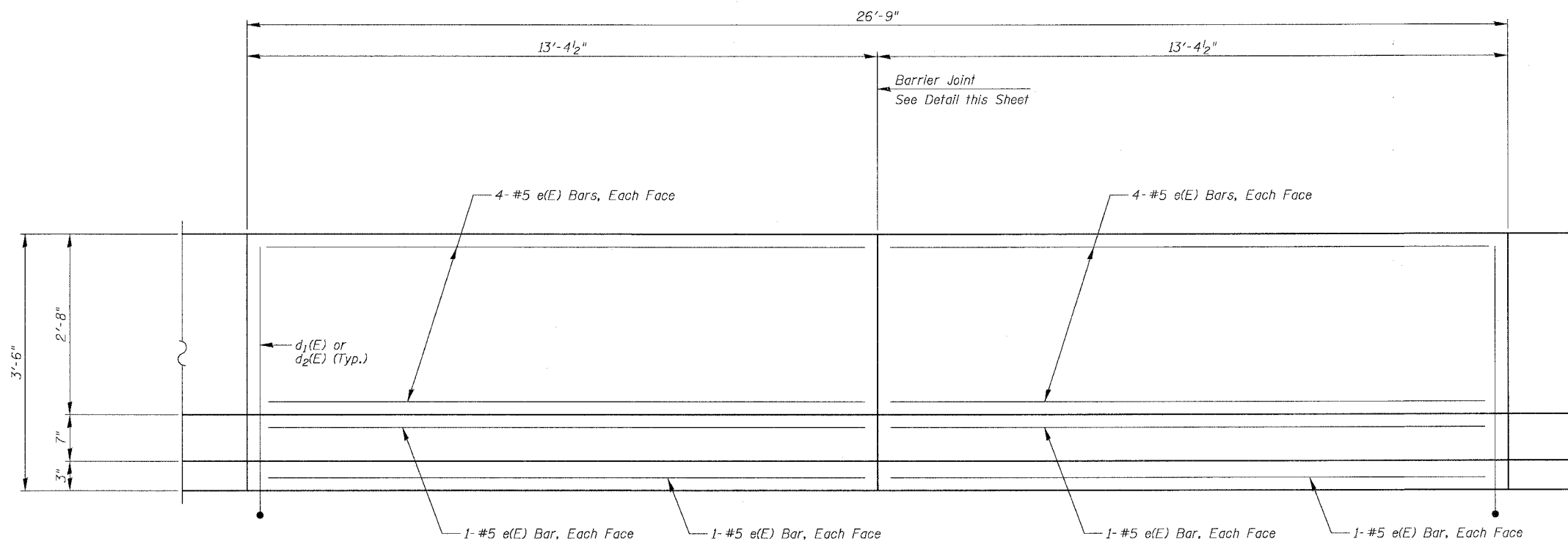
6/24/2005 9:43:01 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	437
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*181B, ETC, 2324.6-1P1R-8			

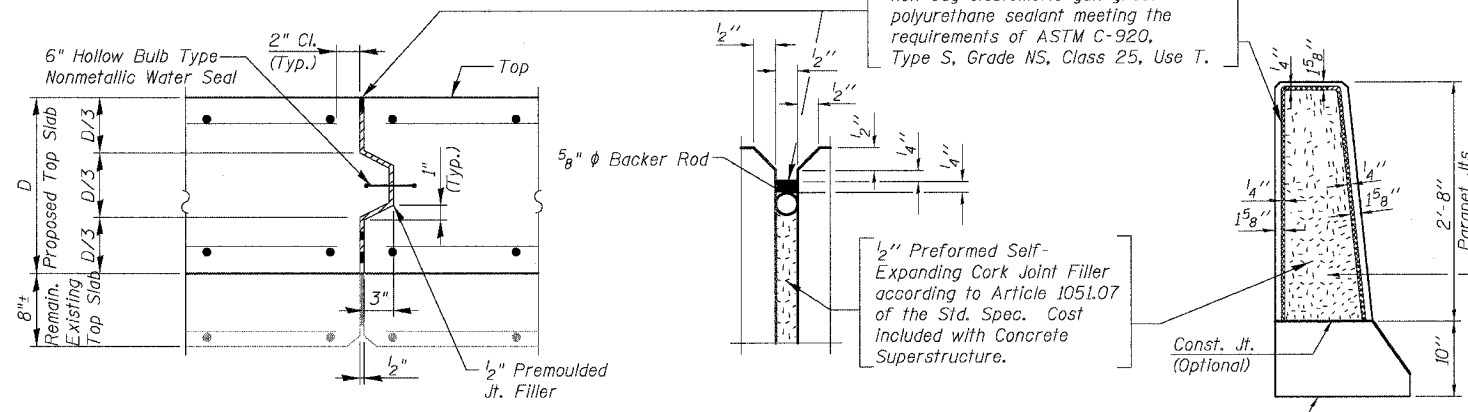
**TOP SLAB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	27	#5	10'-2"	—
a ₁ (E)	27	#5	23'-8"	—
a ₂ (E)	27	#5	21'-10"	—
a ₃ (E)	29	#5	10'-2"	—
a ₄ (E)	29	#5	23'-8"	—
a ₅ (E)	29	#5	19'-8"	—
a ₆ (E)	27	#6	4'-6"	—
b(E)	79	#7	26'-5"	—
b ₁ (E)	79	#7	8'-0"	—
b ₂ (E)	157	#7	28'-1"	—
b ₃ (E)	79	#7	4'-0"	—
b ₄ (E)	5	#5	26'-5"	—
d ₁ (E)	27	#6	5'-7"	L
d ₂ (E)	27	#5	5'-9"	L
e(E)	24	#5	13'-0"	—
Concrete Superstructure			Cu. Yd.	104.1
Bridge Deck Grooving			Sq. Yd.	812
Protective Coat			Sq. Yd.	235
Reinforcement Bars, Epoxy Coated			Pound	19,260
Bar Splicers			Each	133
CTA Fence			Foot	27

Reinforcement bars designated (E) shall be epoxy coated.
CTA Fence not shown for clarity. See Roadway Plans for Fence details.
Cost of water seal, P.J.F. and Sealant included in the cost of Concrete Superstructure.

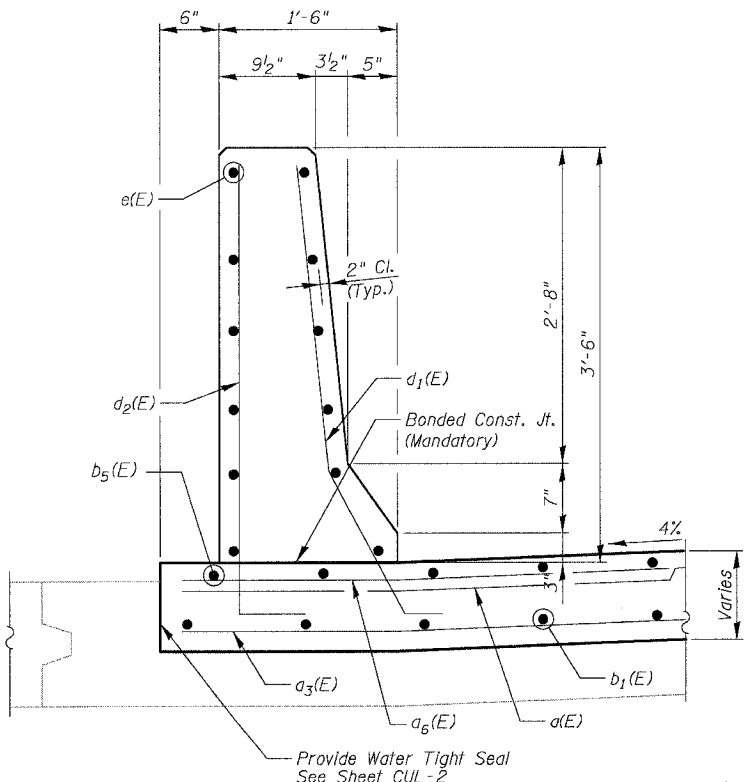
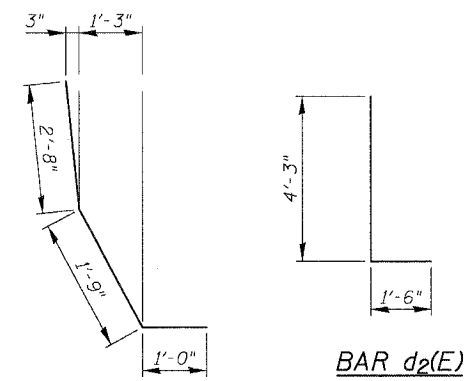


INSIDE ELEVATION OF SINGLE FACE BARRIER

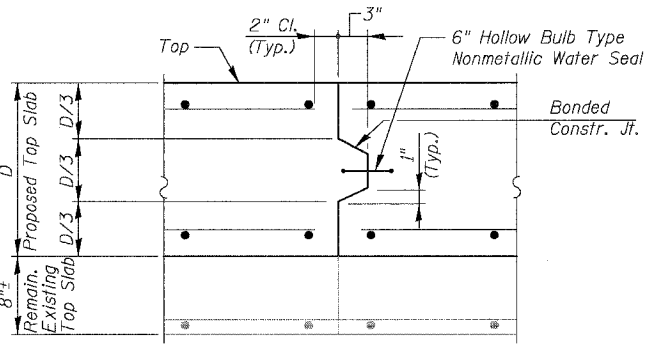


CULVERT EXPANSION JOINT
Do not seal until after grooving operations

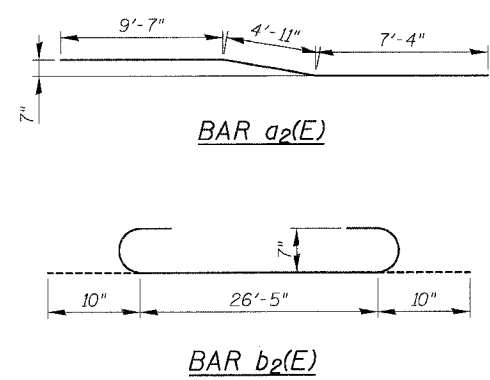
BARRIER JOINT DETAILS



SECTION THRU SINGLE FACE BARRIER



CULVERT CONSTRUCTION JOINT

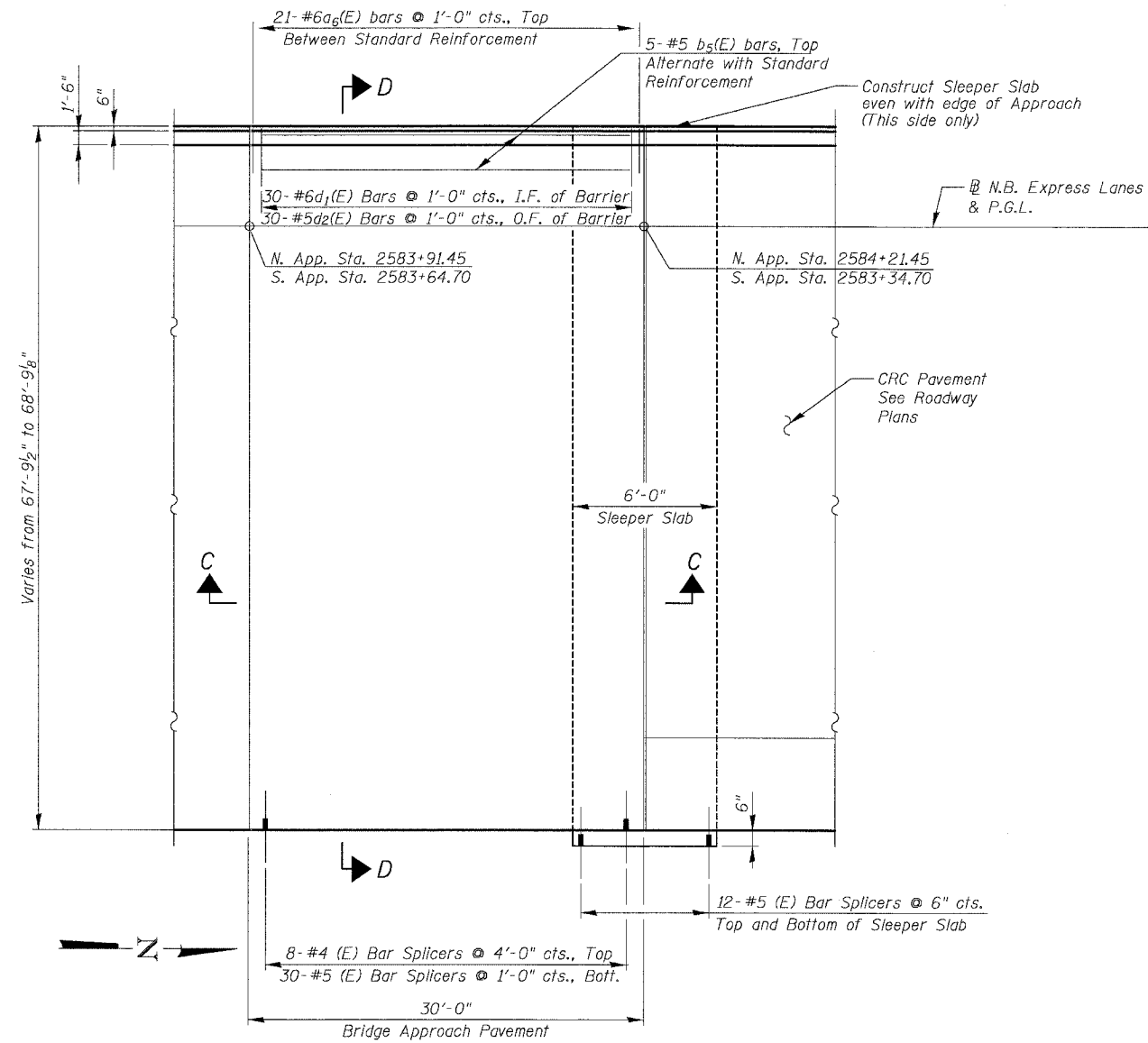


REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

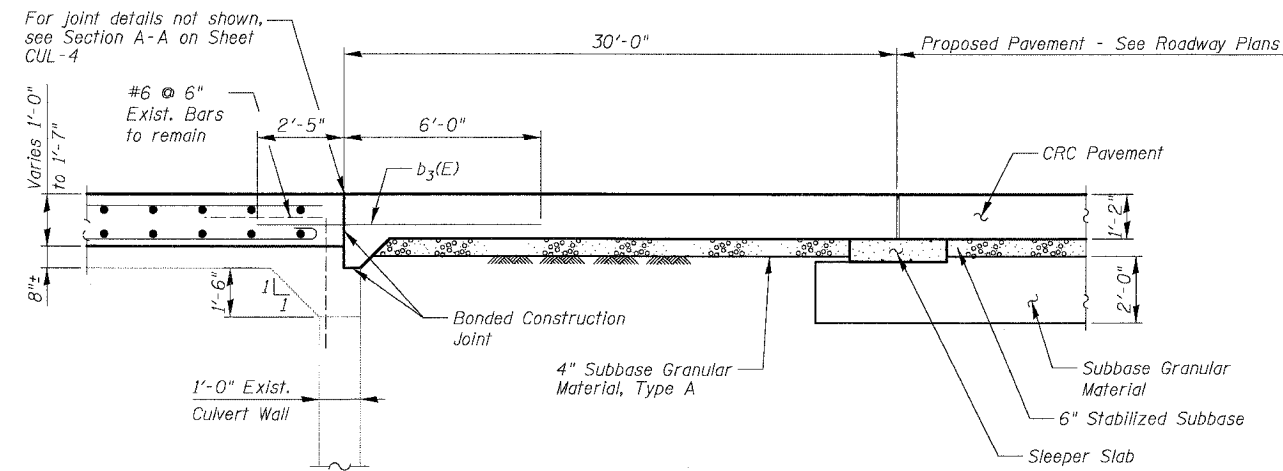
SHEET CUL-5 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
TOP SLAB DETAILS
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	438
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*11818, ETC, 2324.6-1P1R-8			



PARTIAL PLAN
North Approach Shown
South Approach Similar

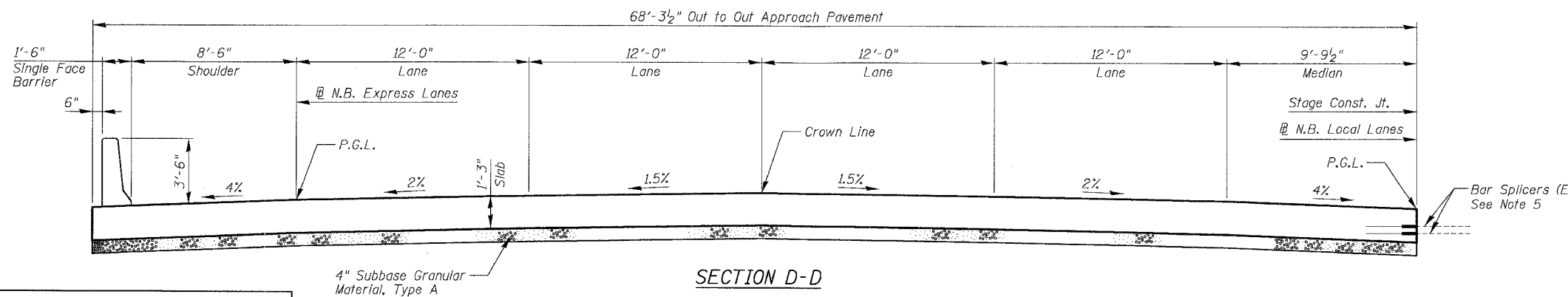


SECTION C-C

NOTES:

1. See IDOT Standard 420401 for typical approach pavement reinforcing and details
2. Reinforcement Bars designated (E) shall be epoxy coated.
3. See Sheet CUL-7 for CTA Barrier Details.
4. See Sheet CUL-7 for Bill of Materials.
5. Contractor shall provide bar splicers as shown here and on Sheet CUL-4. Install Stage I portion and provide Stage II to the Engineer. Plug threaded coupler with plastic nipple or H.S. Bolt for protection. Cost included with "Bar Splicers".

I.F. = Inside Face
O.F. = Outside Face



SECTION D-D

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REVISIONS	DATE

SHEET CUL-6 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
APPROACH SLAB DETAILS 1
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

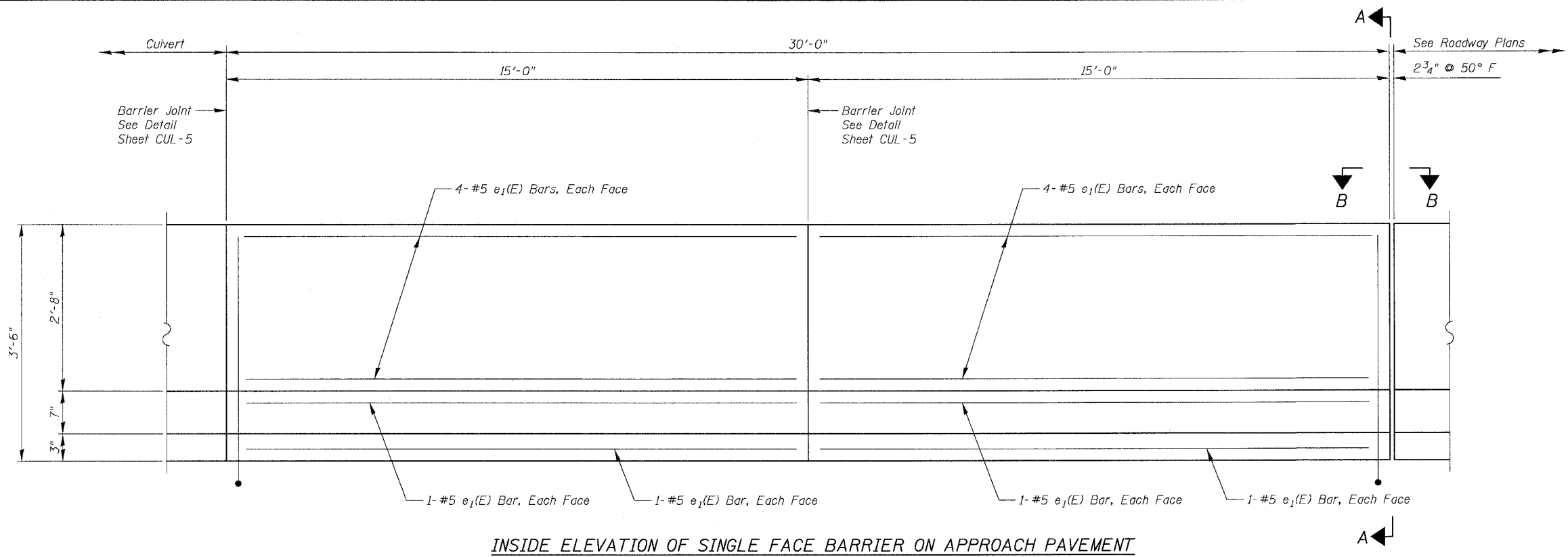
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	439
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		*0818, ETC, 2324.6-1P1R-8		

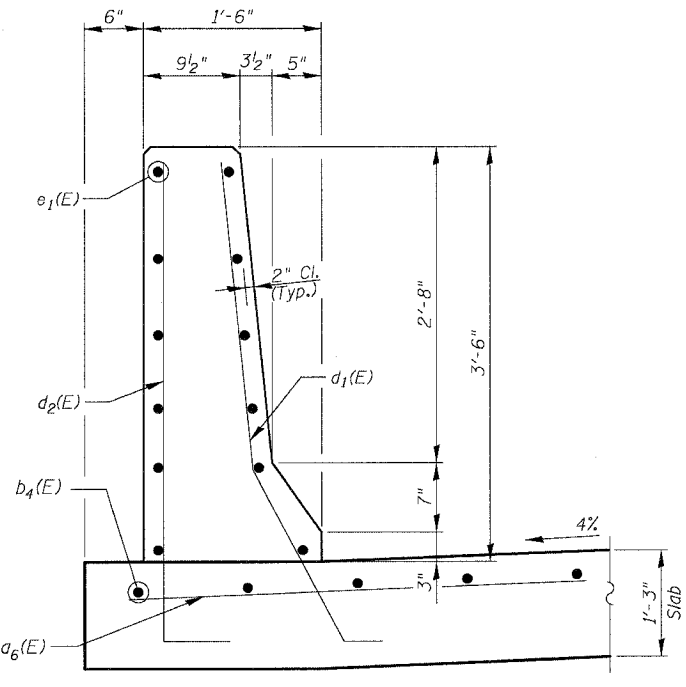
**APPROACH PAVEMENT
BILL OF MATERIAL
TOTAL FOR 2 APPROACH SLABS**

Bar	No.	Size	Length	Shape
$a_6(E)$	42	#6	4'-6"	—
$b_5(E)$	10	#5	29'-6"	—
$d_1(E)$	60	#6	5'-7"	L
$d_2(E)$	60	#5	5'-9"	L
$e(E)$	48	#5	14'-8"	—
Bridge Approach Pavement			Sq. Yd.	456
Concrete Superstructure			Cu. Yd.	8.1
Protective Coat			Sq. Yd.	30
Reinforcement Bars, Epoxy Coated			Pound	2,190
Bar Splicers			Each	124
CTA Fence			Foot	60

See IDOT Standard 420401 for typical approach pavement reinforcing and details. Additional reinforcement bars, bar splicers, and concrete for single face barrier not shown on Std. 420401 shall be paid for as Reinforcement Bars, Epoxy Coated, Bar Splicers, and Concrete Superstructure. Reinforcement bars designated (E) shall be epoxy coated. CTA Fence not shown for clarity. See Roadway Plans for fence details. See Sheet CUL-4 for treatment of Approach Slab/Culvert Slab joint. Apply Protective Coat to top and inside face of single face barrier.

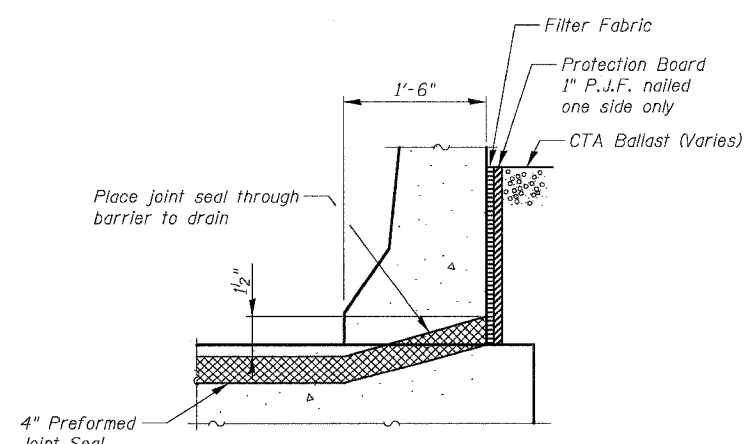


INSIDE ELEVATION OF SINGLE FACE BARRIER ON APPROACH PAVEMENT

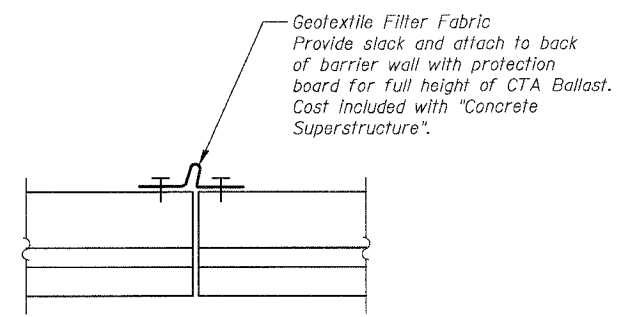


SECTION THRU SINGLE FACE BARRIER

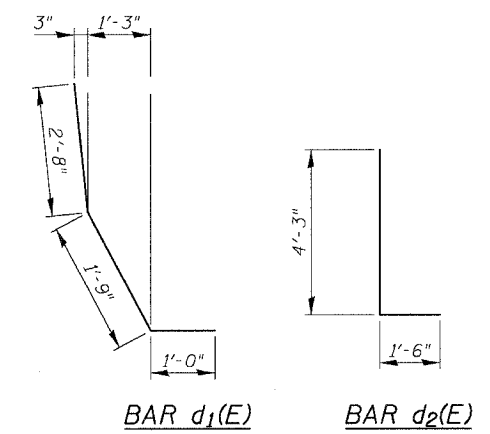
Note: Standard Approach Pavement reinforcement not shown for clarity



SECTION A-A



VIEW B-B



BAR $d_1(E)$

BAR $d_2(E)$

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REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

SHEET CUL-7 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
APPROACH SLAB DETAILS 2
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

8/17/2005 8:36:04 AM

NOTES

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

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

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

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

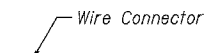
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



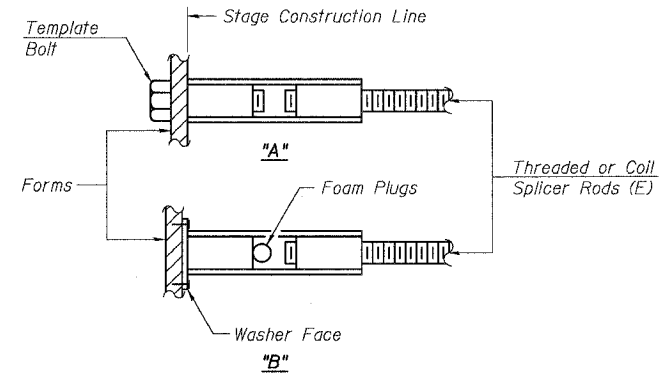
**** ONE PIECE**



WELDED SECTIONS

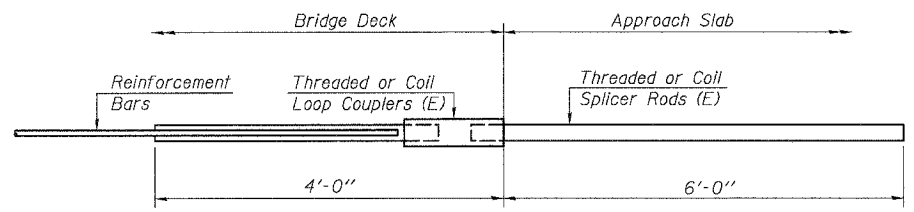
BAR SPLICER ASSEMBLY ALTERNATIVES

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



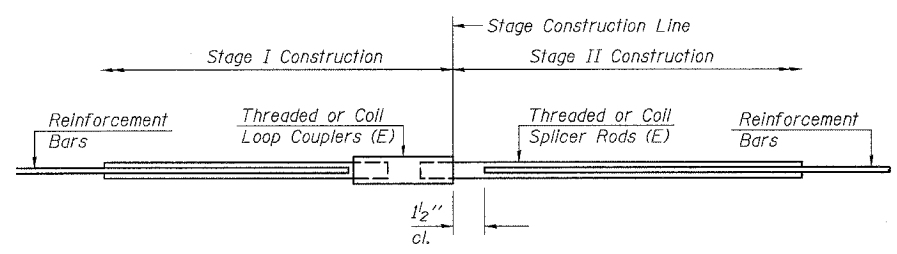
INSTALLATION AND SETTING METHODS

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



FOR CULVERT SLAB

Bar Splicer for #7 bar
Min. Capacity = 45.1 kips - tension
Min. Pull-out Strength = 18.0 kips-tension
No. Required = 79



STANDARD

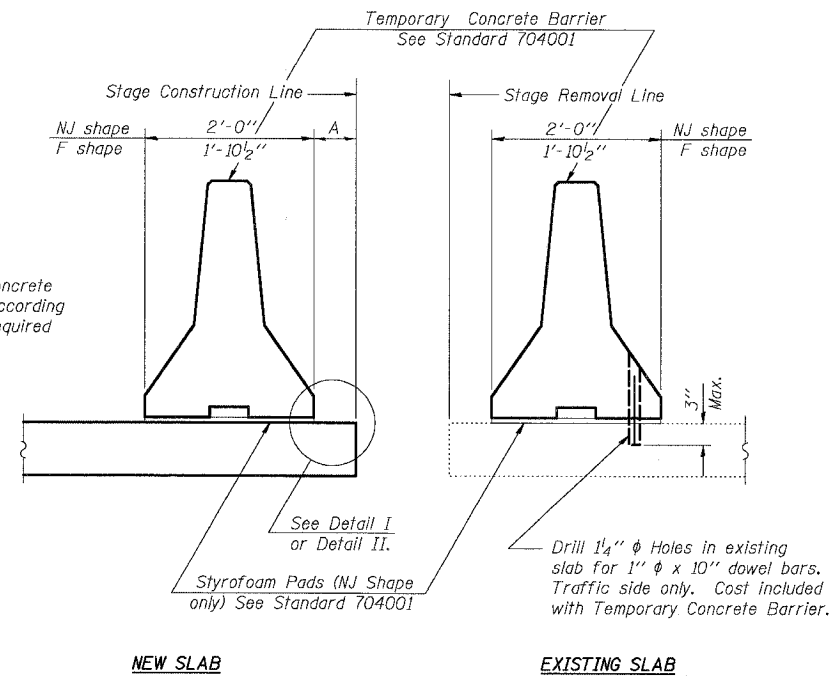
Bar Size	No. Assemblies Required	Location
#5	54	Culvert Slab
#4	16	Approach Slab
#5	60	Approach Slab
#5	48	Approach Sleeper Slab

REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

8/11/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	441
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*1818, ETC, 2324.6-1P1R-8			

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



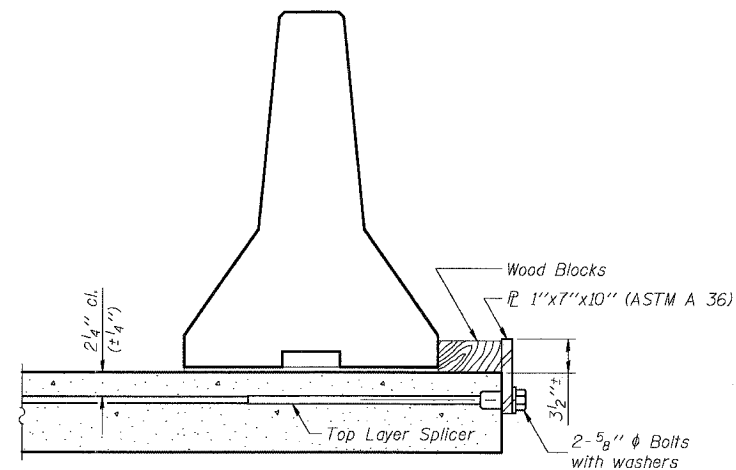
SECTIONS THRU SLAB

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

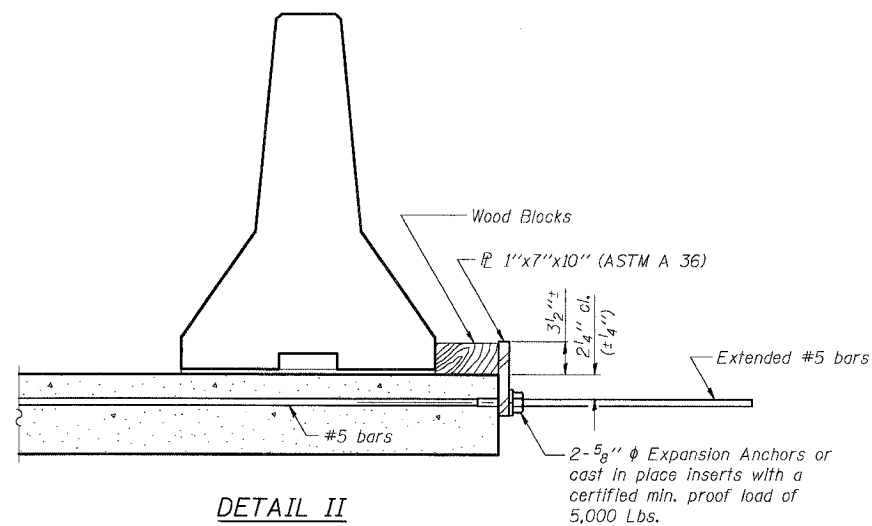
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.



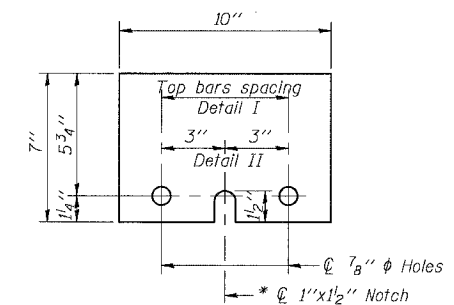
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1" x 7" x 10"

* Required only with Detail II

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R-27 9-01-03

SHEET CUL-9 OF CUL-14

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, S.N. 016-2625
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION

SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

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Everest Engineering Company
STRUCTURE BORING LOG

Page 1 of 1
Date 6/3/03

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	442
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1P1R-8			

ROUTE FAI 90/94 DESCRIPTION DAN RYAN EXPRESSWAY
SECT. 31ST STREET TO 47TH STREET STRUCT. NO. _____ DRILLED BY PATRICK DRILLING INC.
COUNTY COOK LOCATION CULVERT S. _____, TWP. 39 N, RNG. 14 E

Boring No.	D	B	Qu	W	Surface Water Elev.	D	B	Qu	W
Station	E	L	tsf	%	Groundwater Elev.:	E	L	tsf	%
Offset	P	O			when drilling	P	O		
Surface Elev.	T	W			at Completion	T	W		
	H	S			after _____ Hrs.	H	S		
CB-2									
45833+60 (NB LOCAL)									
15.0ft RT. OF NB LOCAL									
-2.80 ft									
ASPHALT PAVEMENT					END OF BORING				
CONCRETE									
-3.05									
-4.30									
Very Dense to Loose, Brown SANDY LOAM trace- gravel		50/5"		3					
FILL									
-7.30									
Medium Stiff to Hard, Gray SILTY CLAY trace- sand and gravel		16	3.7	17					
		4	B						
		5							
		1	0.9	22					
		2	B						
		3							
		1	1.0	21					
		2	B						
		2							
		1	0.7	23					
		2	B						
		2							
		1	0.8	22					
		2	B						
		2							
		1	0.8	22					
		2	B						
		3							
		3	5.0	13					
		4	B						
		8							
		5	13.2	11					
		8	S						
		13							
		5	4.5+	10					
		19	S						
		14							
-27.80									

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

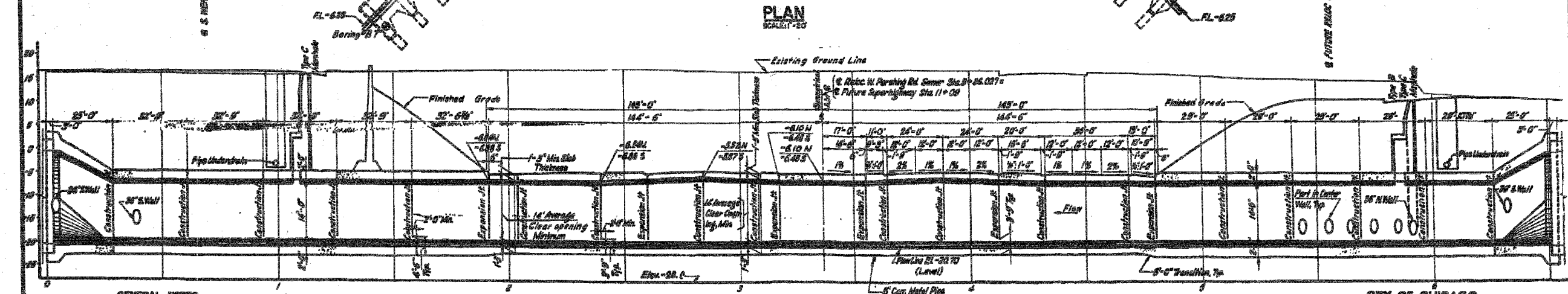
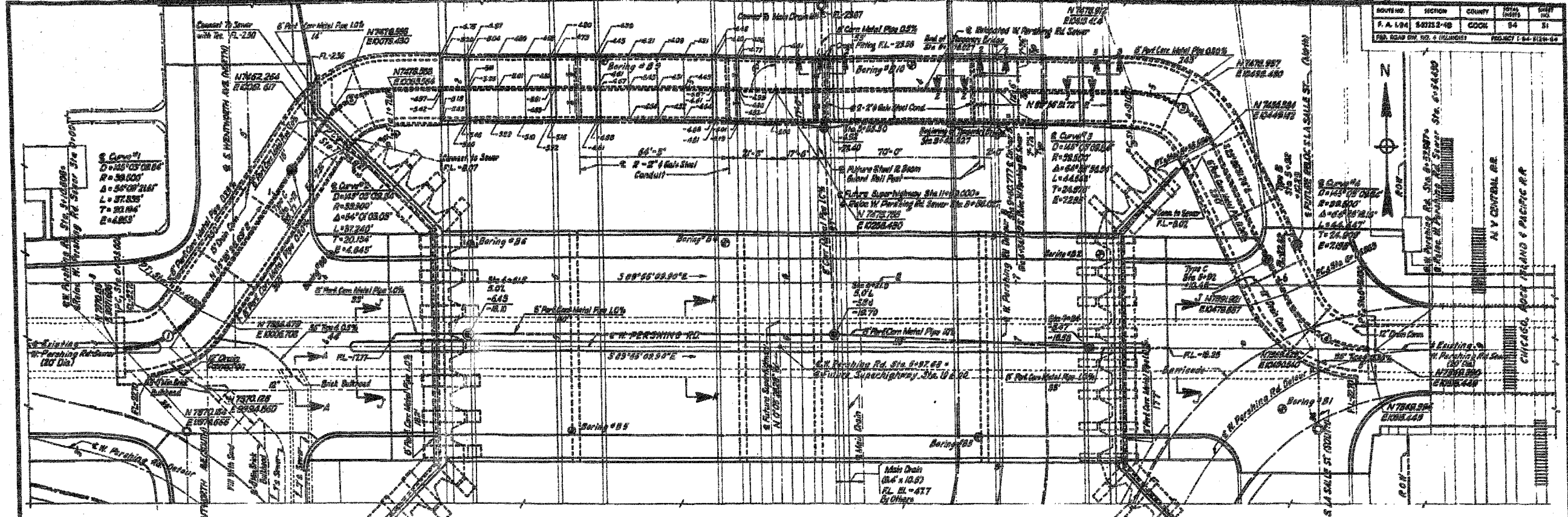
BORING CB-2

BOWMAN, BARRETT & ASSOCIATES INC.
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REVISIONS	NAME	DATE

SHEET CUL-10 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
SOIL BORINGS
SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU

94353 AM
6/24/2005



GENERAL NOTES:
 Design Specifications: AASHTO 1987 Modified; AASHTO 1983 Modified; State of Illinois, Division of Highways 1985.
 Design Load Loading: AASHTO HS20-44 or Alternate designated in RPM 20-4, Sec 4c; and Chicago Transit Authority, April 23, 1982.

NOTES:
 1. Sewer for slab Sta. 1+81.00 to 1+81.10 will be located on the left.
 2. See Station Total Backsight and Shift & C.

R2. For Soil Boring Data, see sheet 5/6 5-4.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY

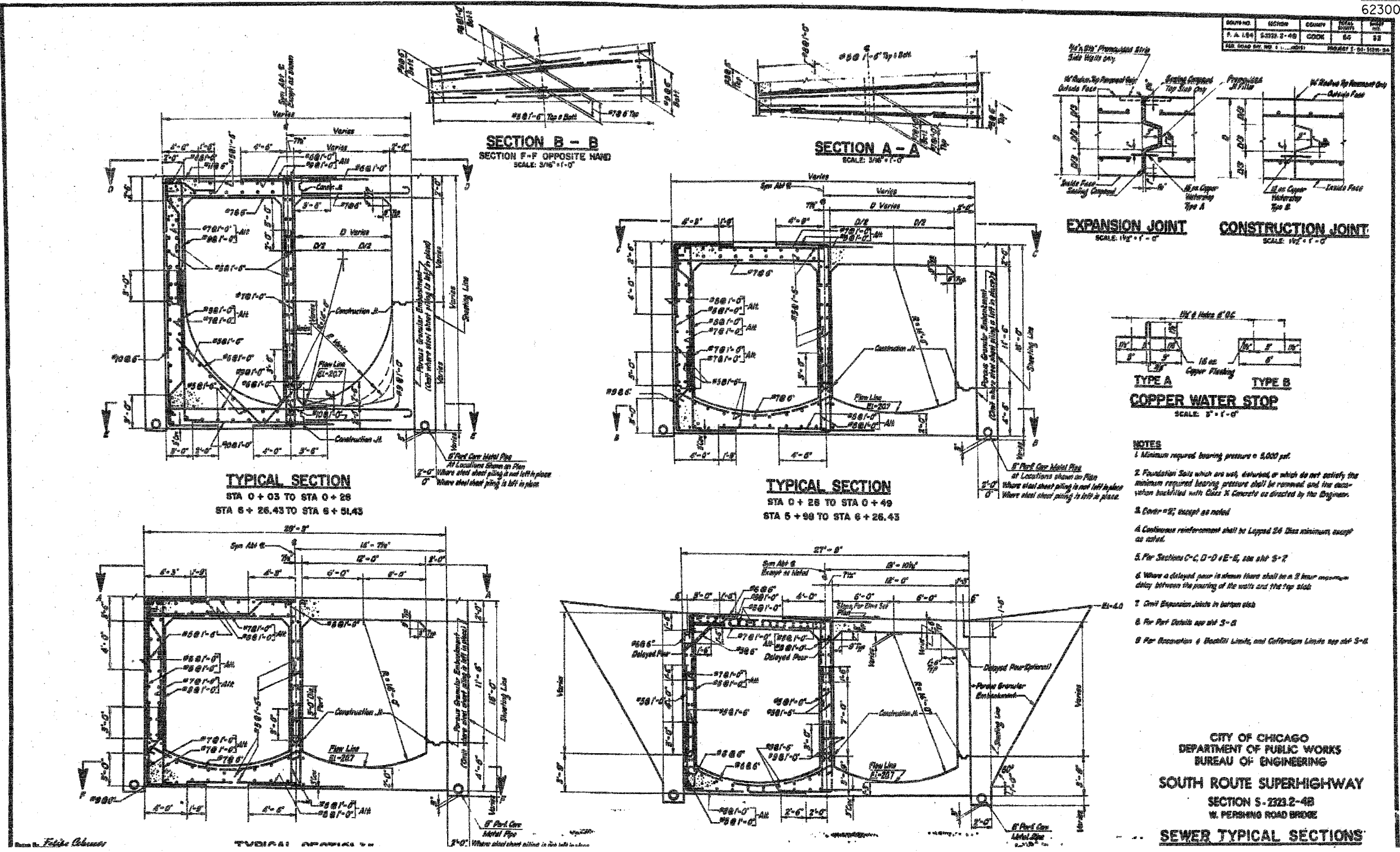
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 MWRD CULVERT, N. OF 39TH ST.,
 COOK COUNTY, S.N. 016-2625
 EXISTING PLAN AND ELEVATION
 SCALE: NTS DRAWN BY: BDC
 DATE: 07/07/05 CHECKED BY: BLU

93-453-AM
 6/24/2005



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CONSULTING ENGINEERS
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FOR INFORMATION ONLY

REVISIONS	DATE
NAME	

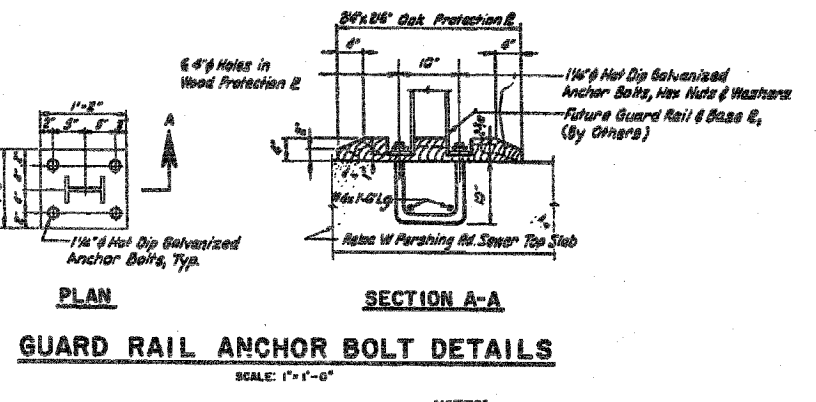
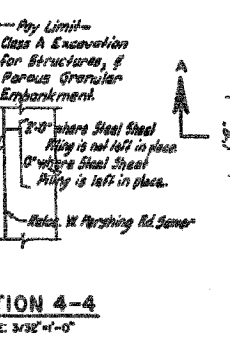
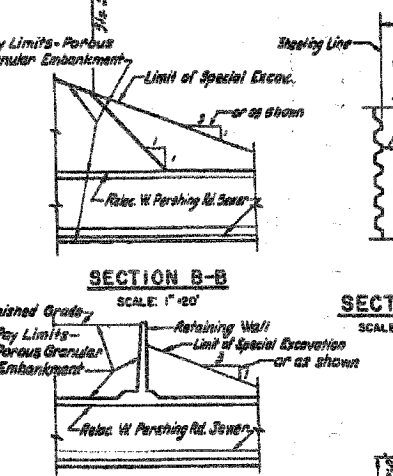
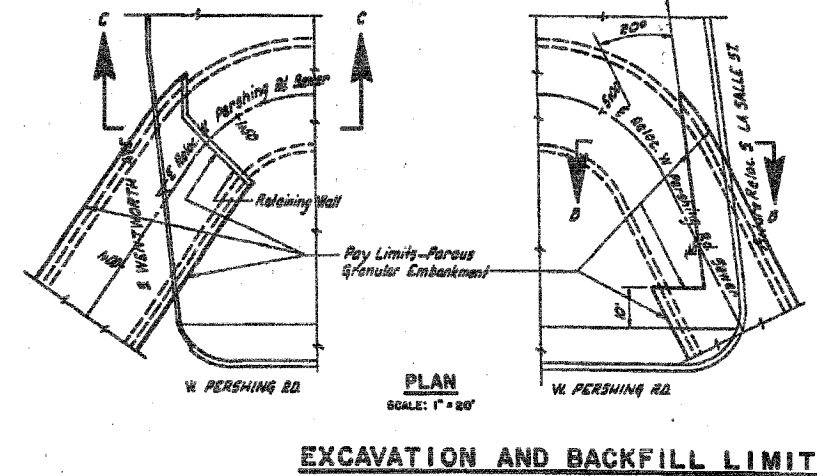
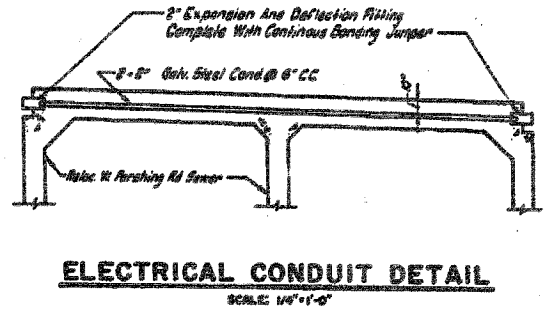
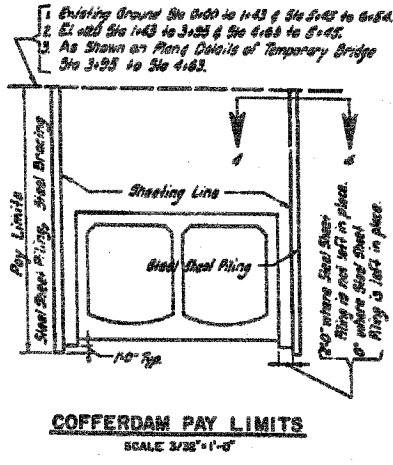
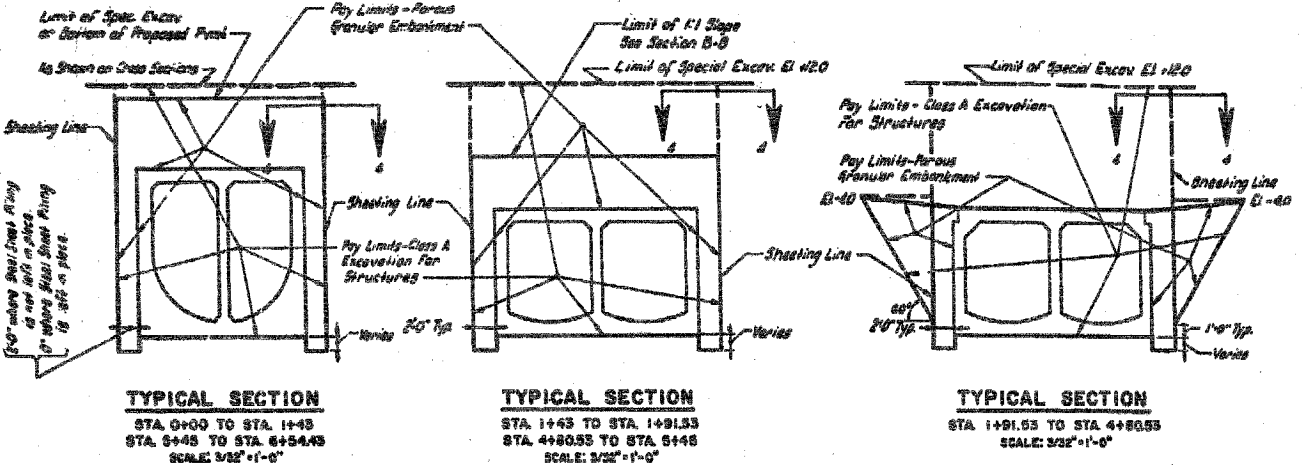
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
EXISTING TYPICAL SECTIONS

SCALE: NTS
DATE: 07/07/05

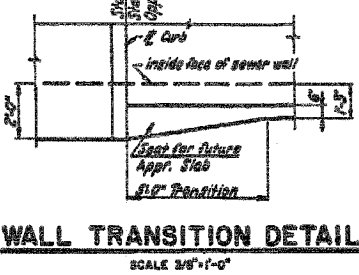
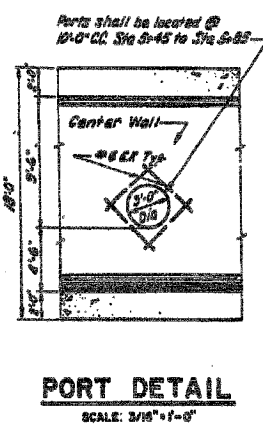
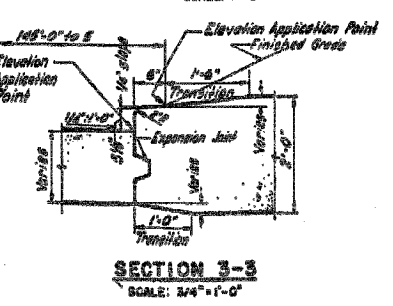
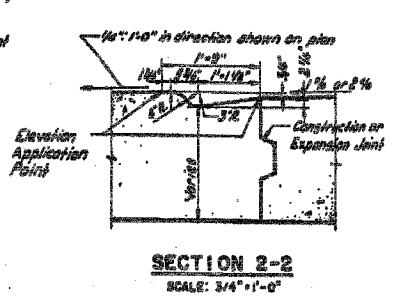
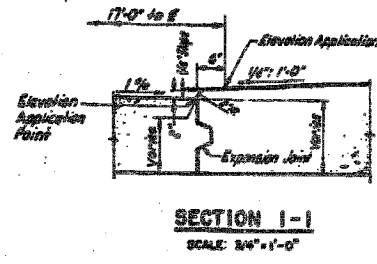
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CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	445
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	*1818, ETC, 2324.6-1P1R-8			

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 94	5-2322-4B	COOK	54	54
FED. ROAD DIST. NO. 2 (ILLINOIS)		PROJECT I. 94. 312W-24		



- NOTES:**
1. For Location of Sections 1-1, 2-2, 3-3, see sheet 5-5.
 2. For Details of Construction & Expansion Joints, see sheet 5-6.
 3. For Location of Electrical Conduit & Guard Rail Anchor Bolts, see sheet 5-8.



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 5-2322-4B
W PERSHING ROAD BRIDGE
SEWER MISCELLANEOUS
DETAILS

SHEET CUL-13 OF CUL-14

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
EXISTING GENERAL DETAILS

SCALE: NTS
DATE: 07/07/05

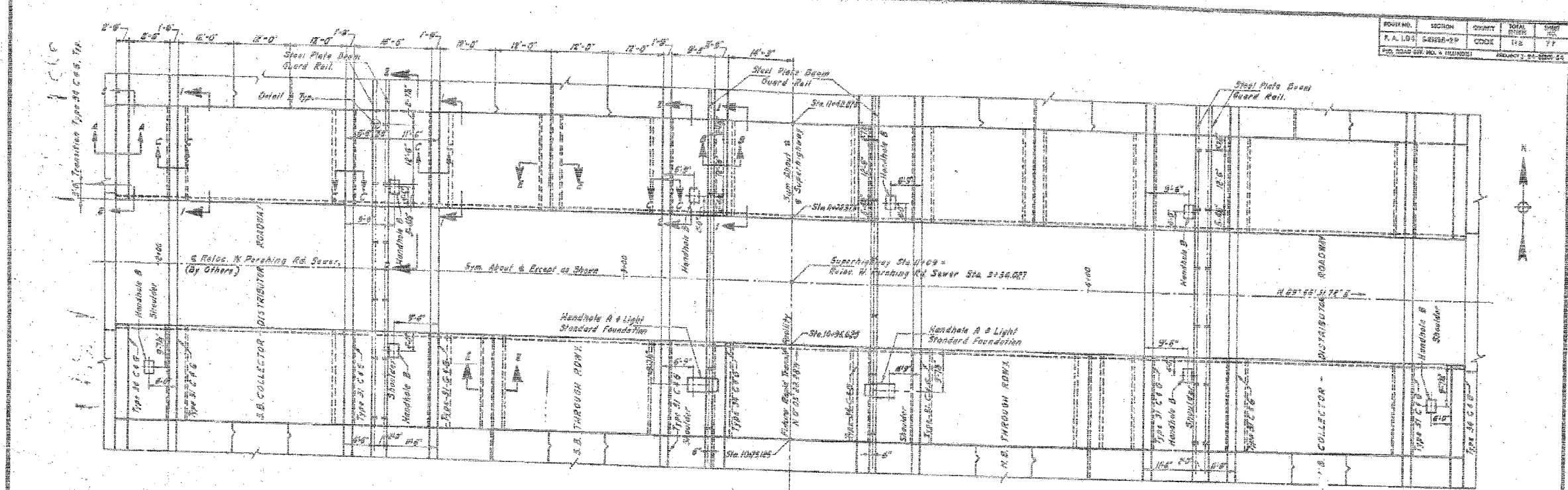
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CHECKED BY: BLU

FOR INFORMATION ONLY

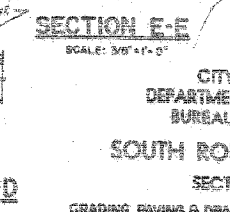
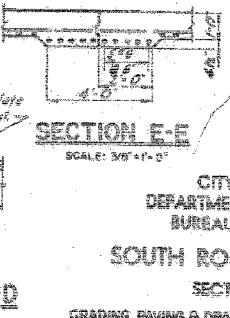
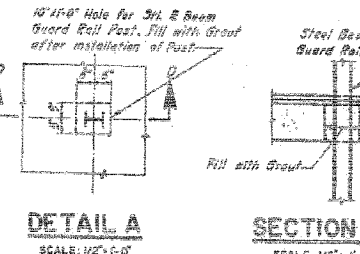
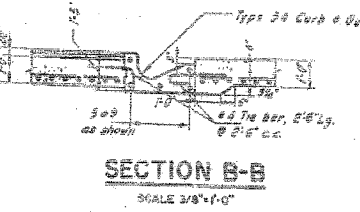
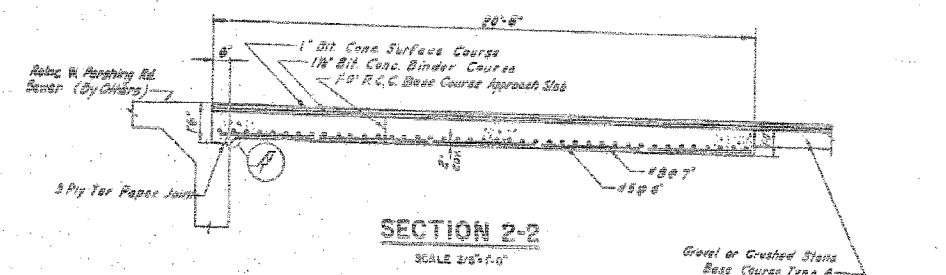
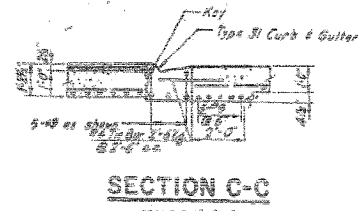
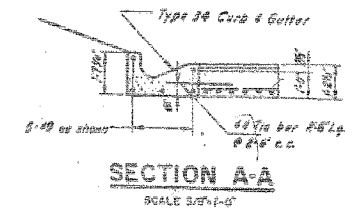
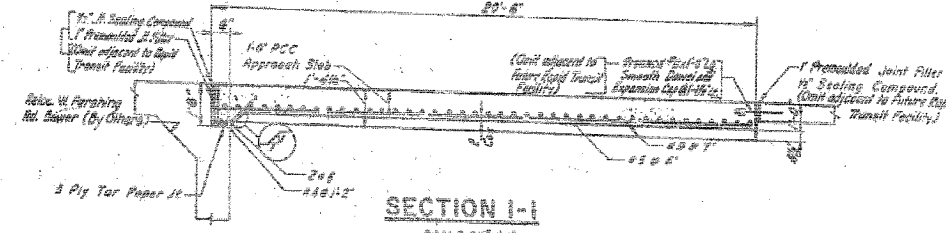
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	446
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62300		*1818, ETC, 2324.6-1P1R-8		



APPROACH SLAB PLAN
SCALE 1"=10'



- NOTES**
1. Reinforcement bar cover = 2" except as noted.
 2. For Details of Type B1 & Type B4 Curb & Gutter, see Sheet 6-18.
 3. For Details of Construction Joint, see Sheet 6-6.
 4. For Details of Handhole A & B, and Light Standard Foundation, see Sheet 6-6.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 5 - 2323.6-2P
GRADING, PAVING & DRAINAGE, W. PERSHING RD. TO W. 36TH ST.
APPROACH SLAB
GOODRICH & ORSA, INC.
CONSULTING ENGINEERS, CHICAGO, ILL.
SCALE AS NOTED
SEPTEMBER 1964
SHEET NO. 6-77 OF 116 SHEETS

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CONSULTING ENGINEERS
Chicago, Illinois
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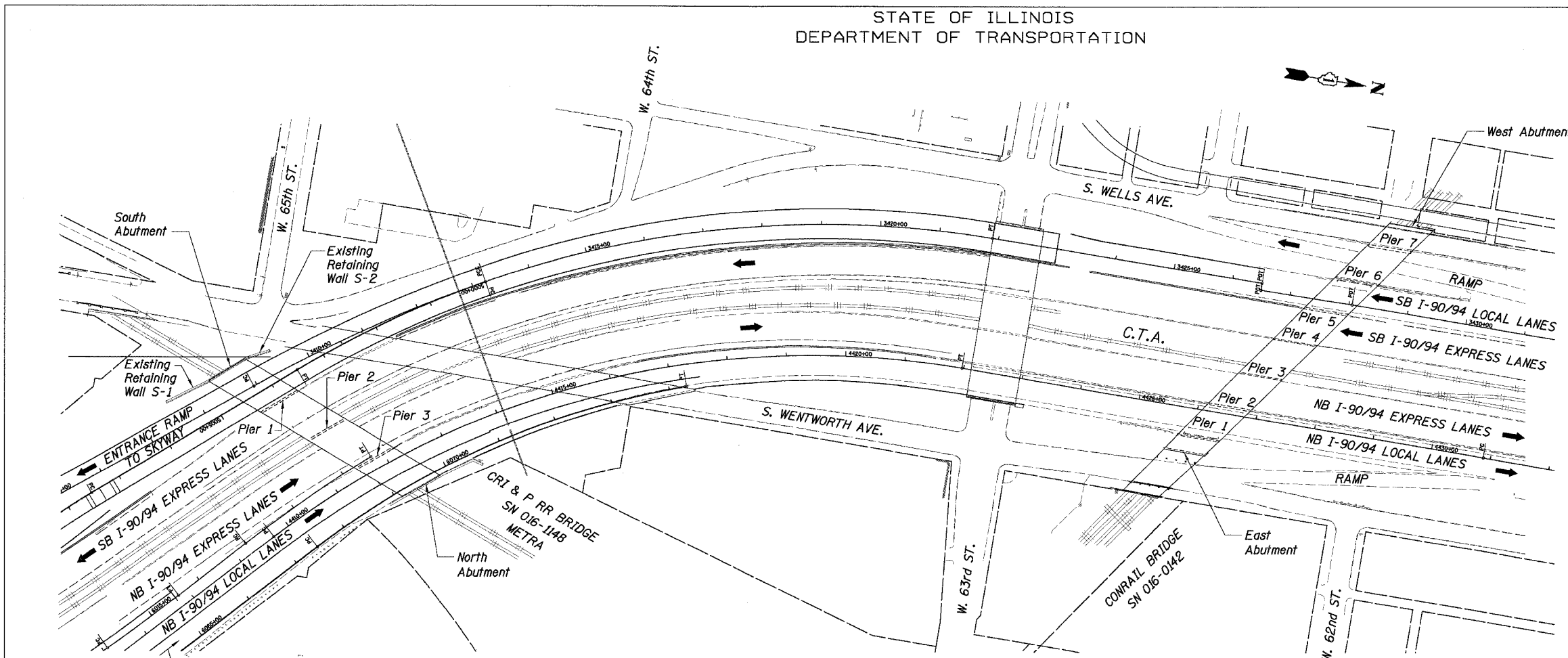
REVISIONS	
NAME	DATE

SHEET CUL-14 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
EXISTING APPROACH SLAB DETAILS
SCALE: NTS
DATE: 07/07/05
DRAWN BY: BDC
CHECKED BY: BLU

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	447
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-1PIR-8 62300				



PLAN

Item	Unit	Quantity
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	1,219
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	44
Epoxy Crack Sealing	LF	275
Railroad Protective Liability Insurance	LS	0.2
Protective Coat	Sq Yd	140

S1	General Plan
S2	Pier 2 - Plan and Elevation (SN 016-1148)
S3	Pier 3 - Plan and Elevation (SN 016-1148)
S4	Pier 2 - Plan and Elevation (SN 016-0142)
S5	Piers 3 & 4 - Plan and Elevation (SN 016-0142)

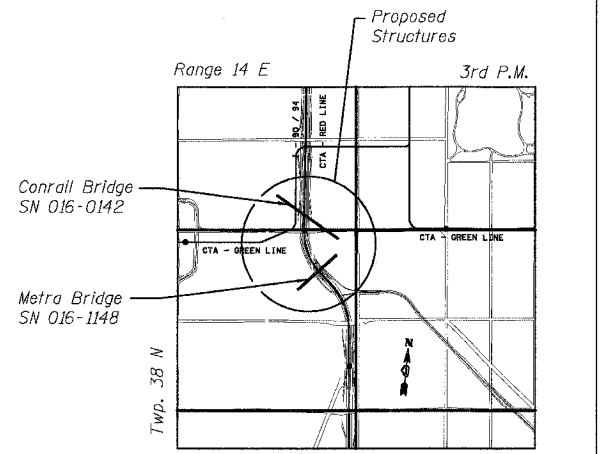
DESIGN SPECIFICATIONS
2002 AASHTO, Standard Specifications for Highway Bridges

DESIGN STRESSES
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

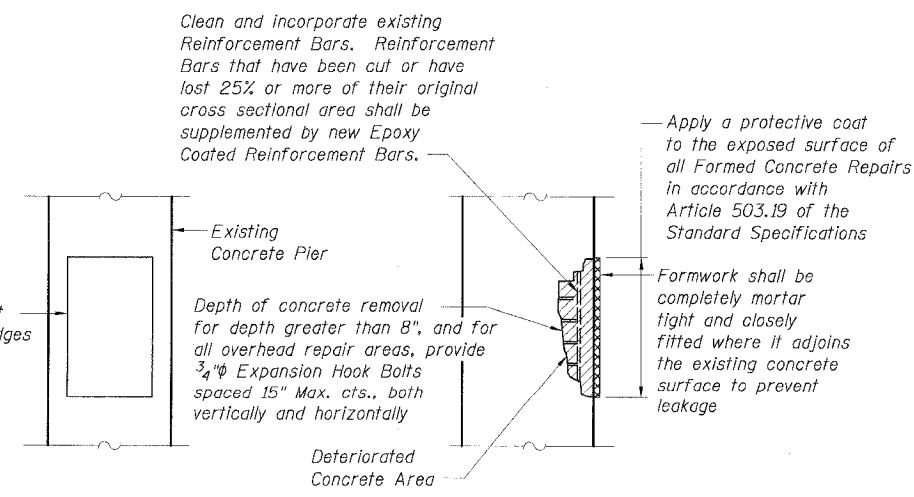
- SUBSTRUCTURE REPAIR WORK ITEMS**
- Metra Railroad Bridge (SN 016-1148)
 - Pier 2 Repairs (North and South Face)
 - Pier 3 Repairs (South Face)
 - Conrail Railroad Bridge (SN 016-0142)
 - Pier 2 Repairs (West Face)
 - Pier 3 Repairs (East and West Face)
 - Pier 4 Repairs (East Face)

GENERAL NOTES:

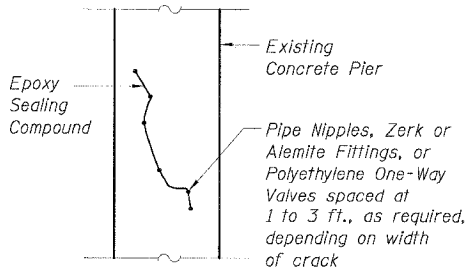
- Pier Repair Locations and Quantities are estimated. The necessary adjustments based on current field conditions will be made at time of construction. However, such variations shall not be cause for additional compensation for a change in the Scope of Work; however, the Contractor will be paid for the quantity actually furnished at the Unit Price bid for the Work.
- Delaminated and spalled areas of concrete shall be repaired by utilizing formed concrete repair and described in the Specifications as Formed Concrete Repair.
- Cracks shall be repaired by utilizing the Epoxy Crack Sealing and described in Section 590 of the Standard Specifications as Epoxy Crack Sealing.
- The approximate location of the downspout is shown in the Elevation. If repairs are to be made near the attachments of the downspout, the downspout shall be detached before making the repairs. The Contractor shall reattach the downspout. The cost of the detachment and reattachment of the downspouts to the Piers shall be incidental to the Formed Concrete Repair.
- Existing rustication shall be maintained and re-established in new repair areas.
- The Contractor shall provide Railroad Protective Liability Insurance in accordance with Articles 107.11 and 107.12 of the Standard Specifications for all Railroad Highway Crossings and the Chicago Transit Authority (CTA). The CTA has additional requirements as shown in the "CTA Coordination" provision as shown in the Contract Special Provisions.



LOCATION SKETCH



FORMED CONCRETE REPAIR DETAIL



EPOXY CRACK SEALING DETAIL

NAME	DATE

Sheet S1 of 5

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)

**GENERAL PLAN
SUBSTRUCTURE REPAIRS
METRA BRIDGE (SN 016-1148) AND
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY**

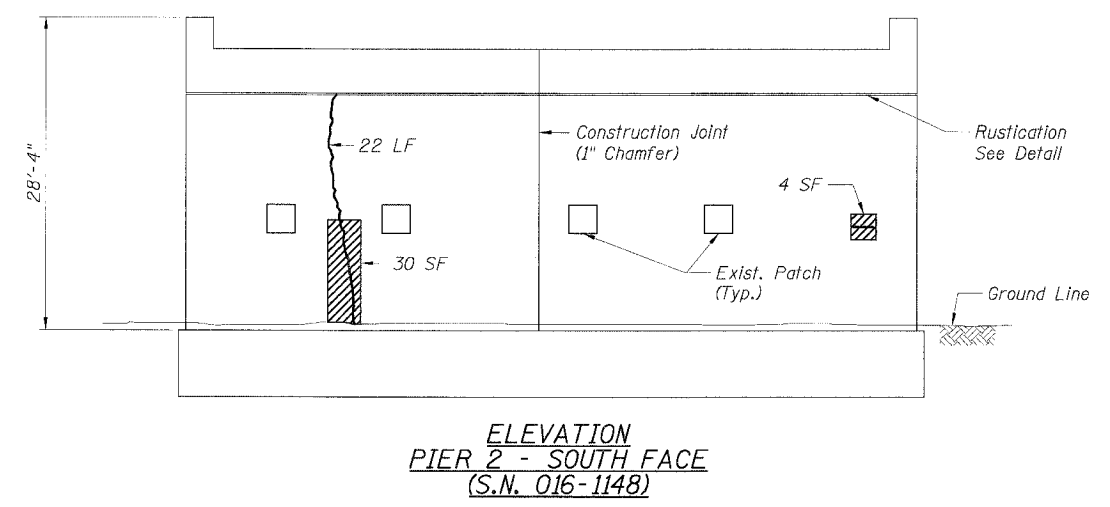
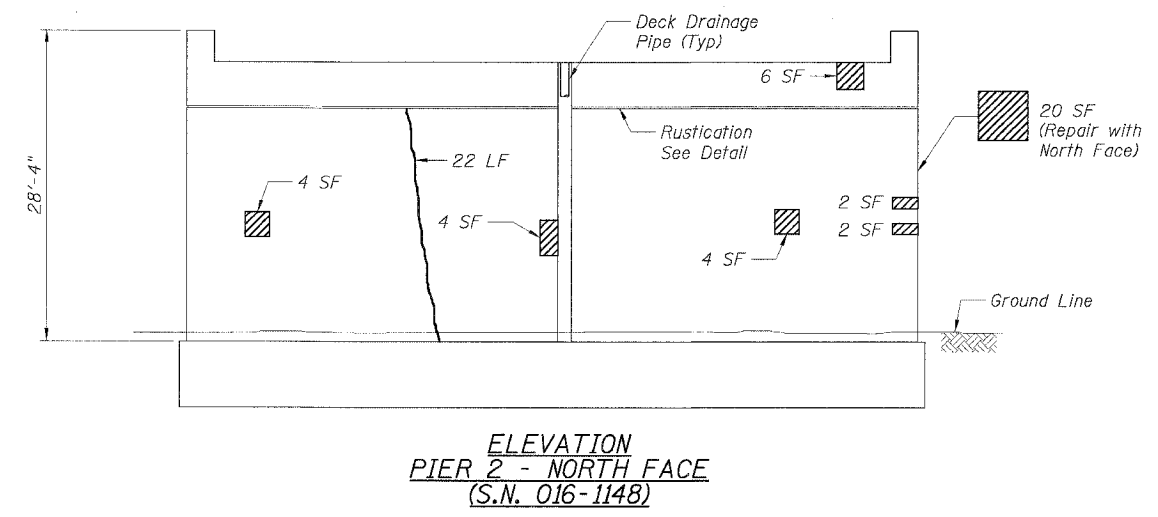
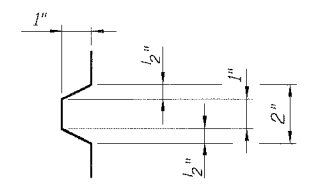
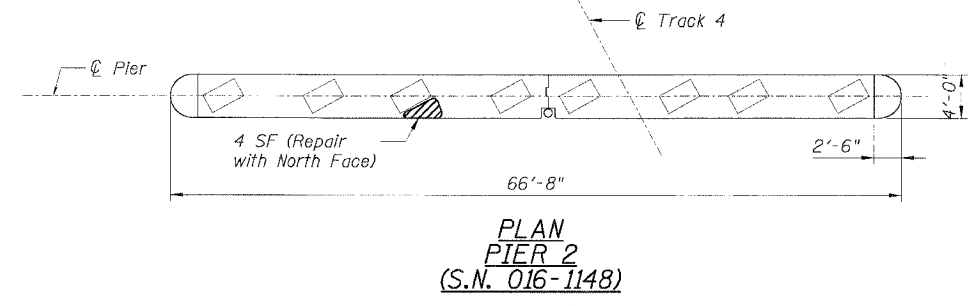
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DATE: JULY 7, 2005

DRAWN BY: CHD
CHECKED BY: MJP

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.:	SECTION	COUNTY	TOTAL SHEET SHEETS:	NO.
90/94		COOK	556	448
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
1818, ETC, 2324.6-1PR-8				62300



LEGEND

- Area of Formed Concrete Repair (Depth Equal to or Less than 5")
- Area of Formed Concrete Repair (Depth Greater than 5")
- Epoxy Crack Sealing

BILL OF MATERIAL			
Item	Unit	Quantity	
		Pier 2	
		North Face	South Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	46	30
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft		4
Epoxy Crack Sealing	LF	22	22

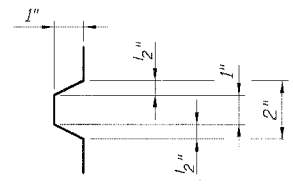
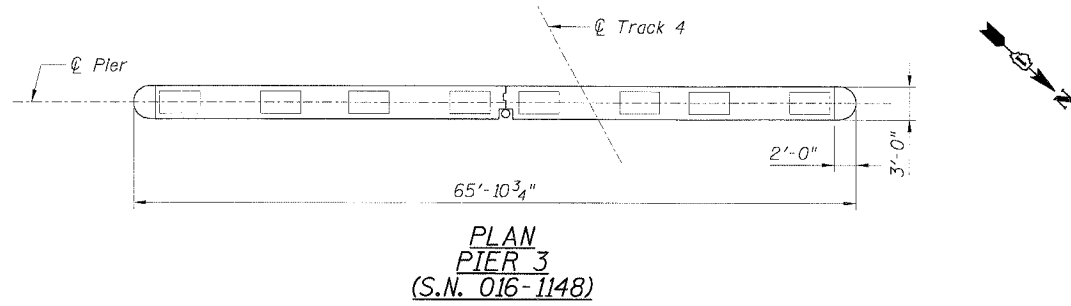
REVISIONS	
NAME	DATE

Sheet S2 of 5
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**PIER 2 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
METRA BRIDGE (SN 016-1148)
COOK COUNTY**
SCALE: None
DATE: JULY 7, 2005
DRAWN BY: CHD
CHECKED BY: MJP

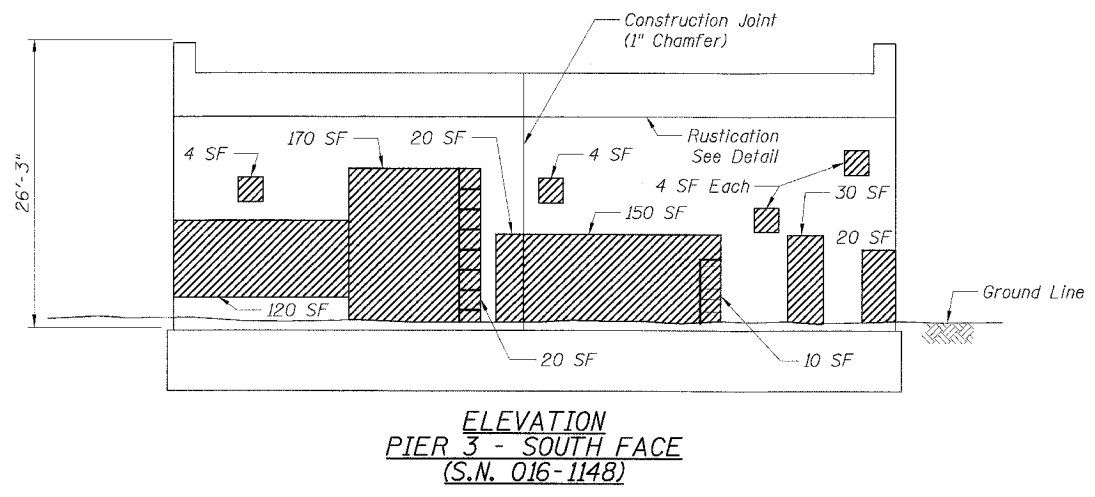
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	556	449
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* (181B, ETC, 2324.6-1PIR-8			62300	



DETAIL OF
RUSTICATION



LEGEND

- Area of Formed Concrete Repair (Depth Equal to or Less than 5")
- Area of Formed Concrete Repair (Depth Greater than 5")
- Epoxy Crack Sealing

BILL OF MATERIAL		
Item	Unit	Quantity Pier 3 South Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	496
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	30
Epoxy Crack Sealing	LF	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)

**PIER 3 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
METRA BRIDGE (SN 016-1148)
COOK COUNTY**

SCALE: None
DATE: JULY 7, 2005

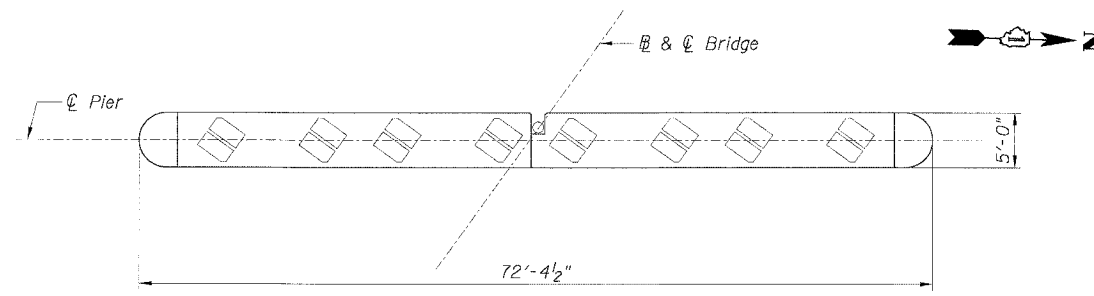
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CTE | AECOM

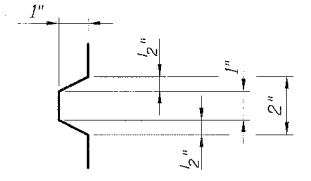
CTE
260 East Broadview Drive, Suite 600, Chicago, Illinois 60608-5776
T 312.358.0200 F 312.358.1053 www.cteaecom.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

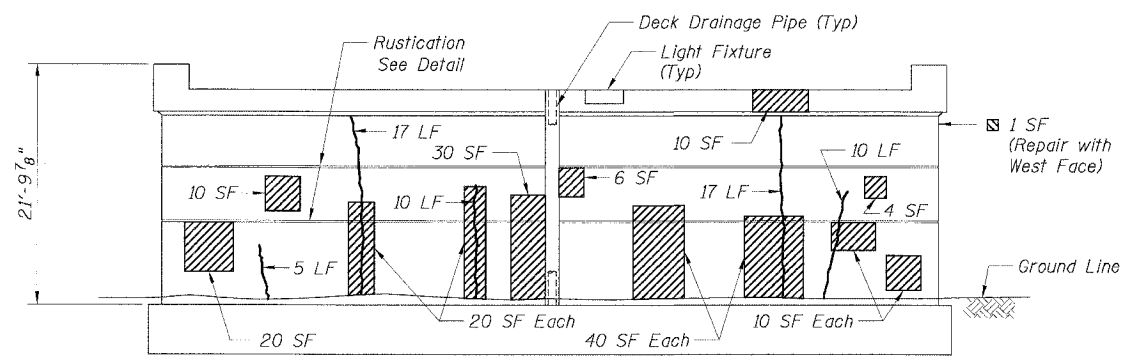
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	450
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
(1818, ETC, 2324.6-1PIR-8		62300		



PLAN
PIER 2
(S.N. 016-0142)



DETAIL OF
RUSTICATION



ELEVATION
PIER 2 - WEST FACE
(S.N. 016-0142)

LEGEND

- Area of Formed Concrete Repair (Depth Equal to or Less Than 5")
- Area of Formed Concrete Repair (Depth Greater Than 5")
- Epoxy Crack Sealing

BILL OF MATERIAL		
Item	Unit	Quantity
		Pier 2 West Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	221
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	
Epoxy Crack Sealing	LF	59

REVISIONS	
NAME	DATE

Sheet S4 of 5

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)

**PIER 2 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY**

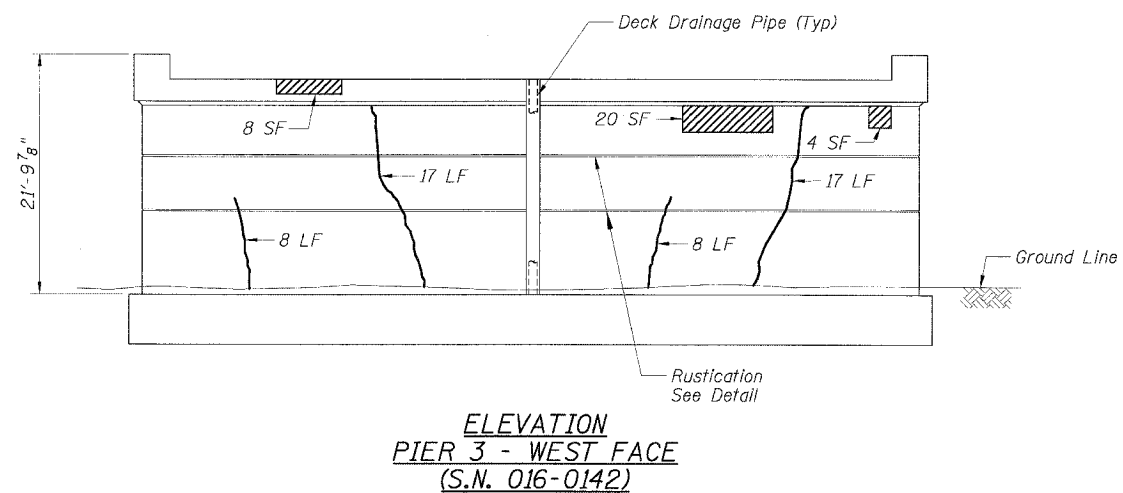
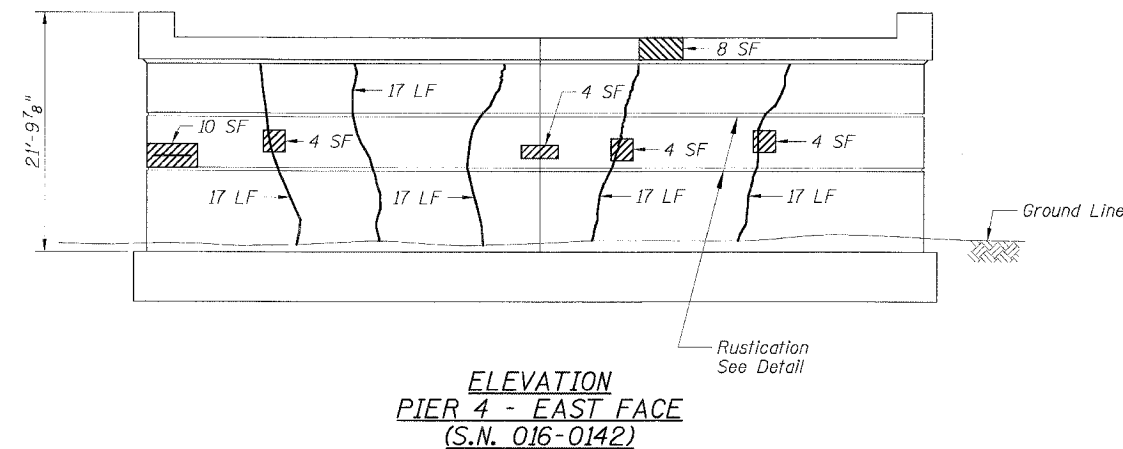
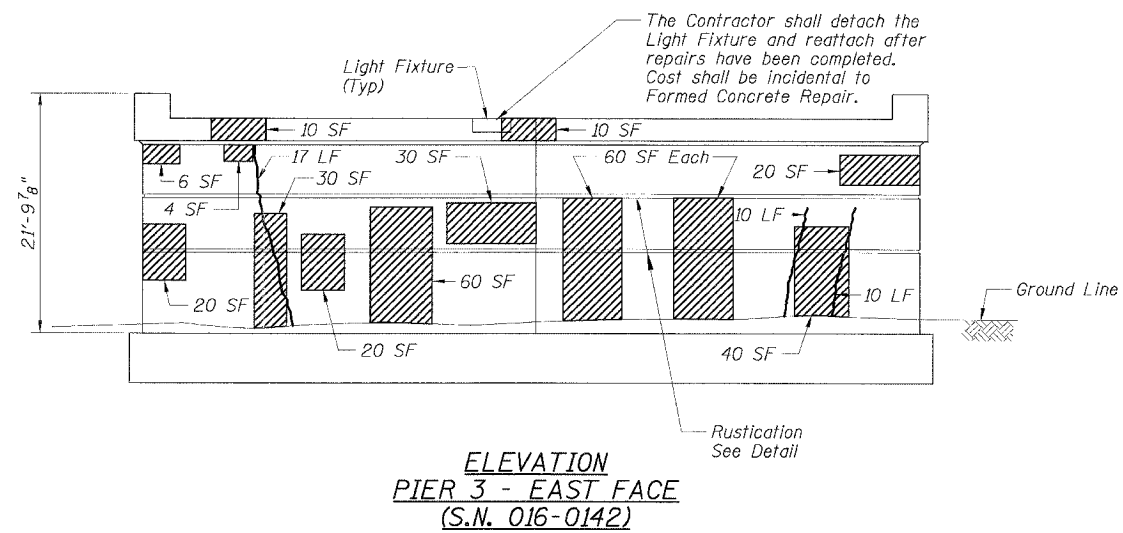
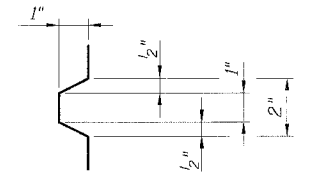
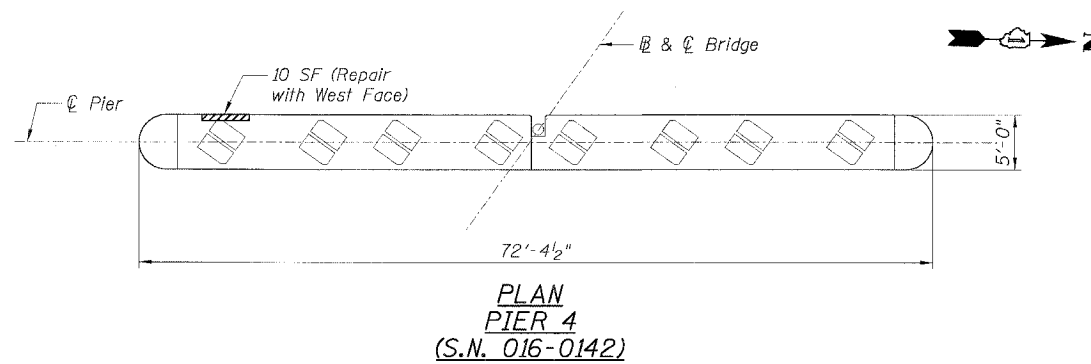
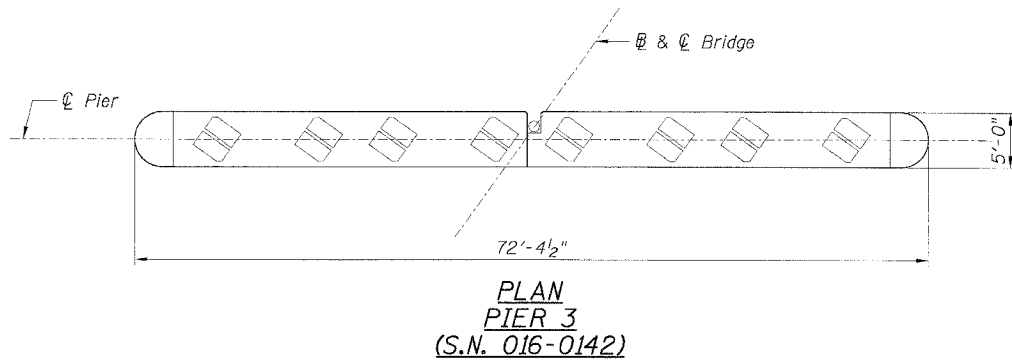
SCALE: None
DATE: JULY 7, 2005

DRAWN BY: CHD
CHECKED BY: MJP

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	451
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-1PIR-8 62300				



LEGEND

- Area of Formed Concrete (Depth Equal to or Less than 5")
- Area of Formed Concrete Repair (Depth Greater than 5")
- Epoxy Crack Sealing

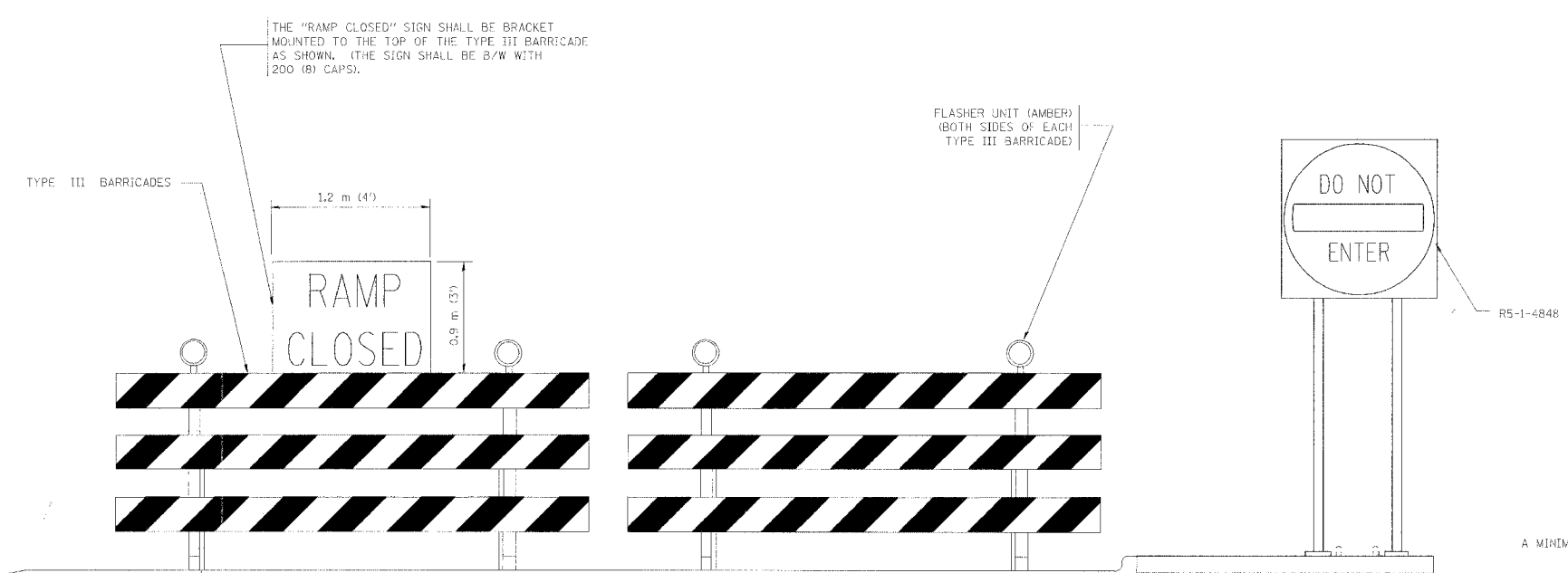
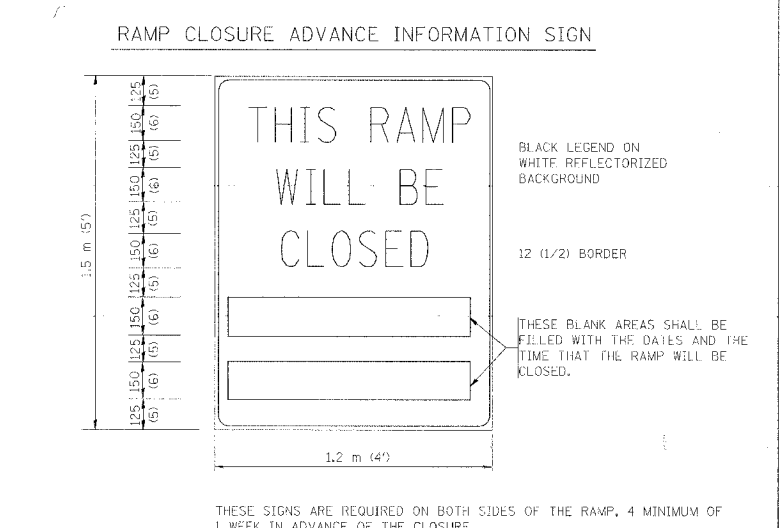
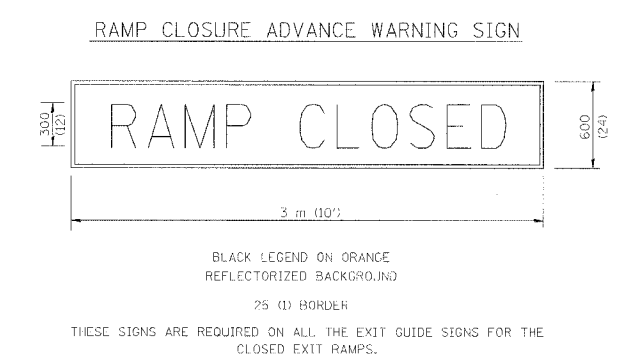
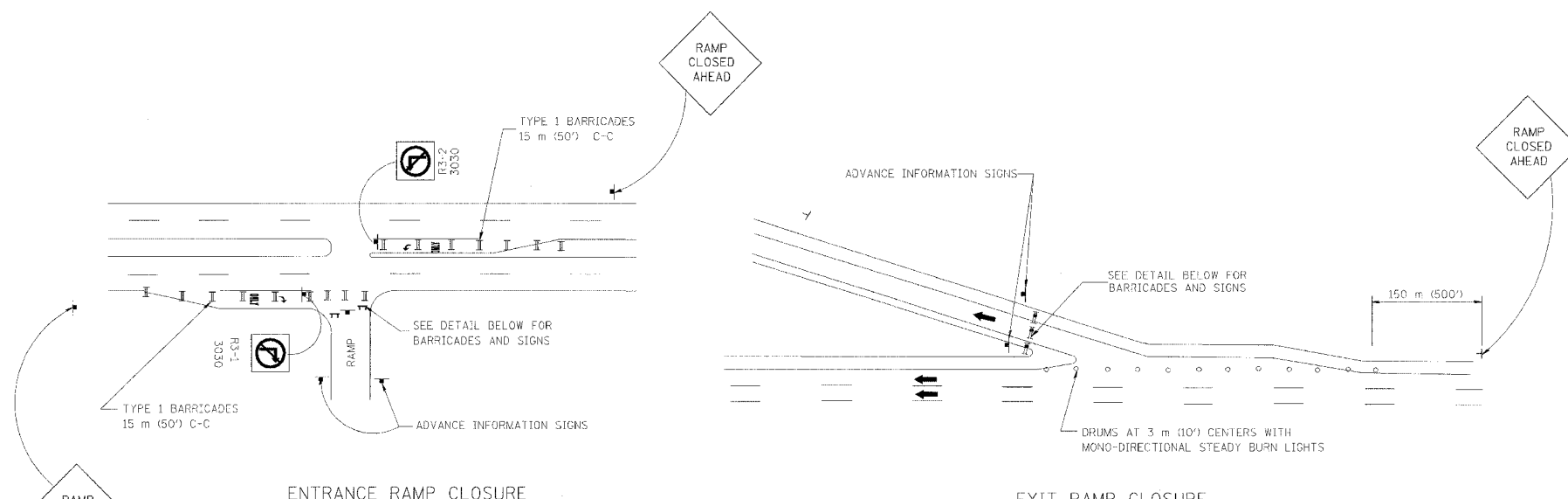
BILL OF MATERIAL				
Item	Unit	Quantity		
		Pier 3		Pier 4
		East Face	West Face	East Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	370	32	24
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft			10
Epoxy Crack Sealing	LF	37	50	85

REVISIONS	
NAME	DATE

Sheet S5 of 5
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
PIERS 3 & 4 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: MJM

F:\P\40468\SI\trac\NE&K_Dwg\c\tr\52-300\04_LBr\Ige\Repa\sn016-0142-300.sfr 2/2/05 PM 6/21/2005

F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	452
STA.		TO STA.		
TOL. ROAD DIST. NO. 7		ILLINOIS		TEL. AND PROJECT



THE "RAMP CLOSED" SIGN SHALL BE BRACKET MOUNTED TO THE TOP OF THE TYPE III BARRICADE AS SHOWN. (THE SIGN SHALL BE B/W WITH 200 (8) CAPS).

FLASHER UNIT (AMBER) (BOTH SIDES OF EACH TYPE III BARRICADE)

A MINIMUM OF 28" IN HEIGHT.

- GENERAL NOTES:
1. CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 4. FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
 5. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 6. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
 7. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

- NOTES:
1. CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERRECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS.
 4. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

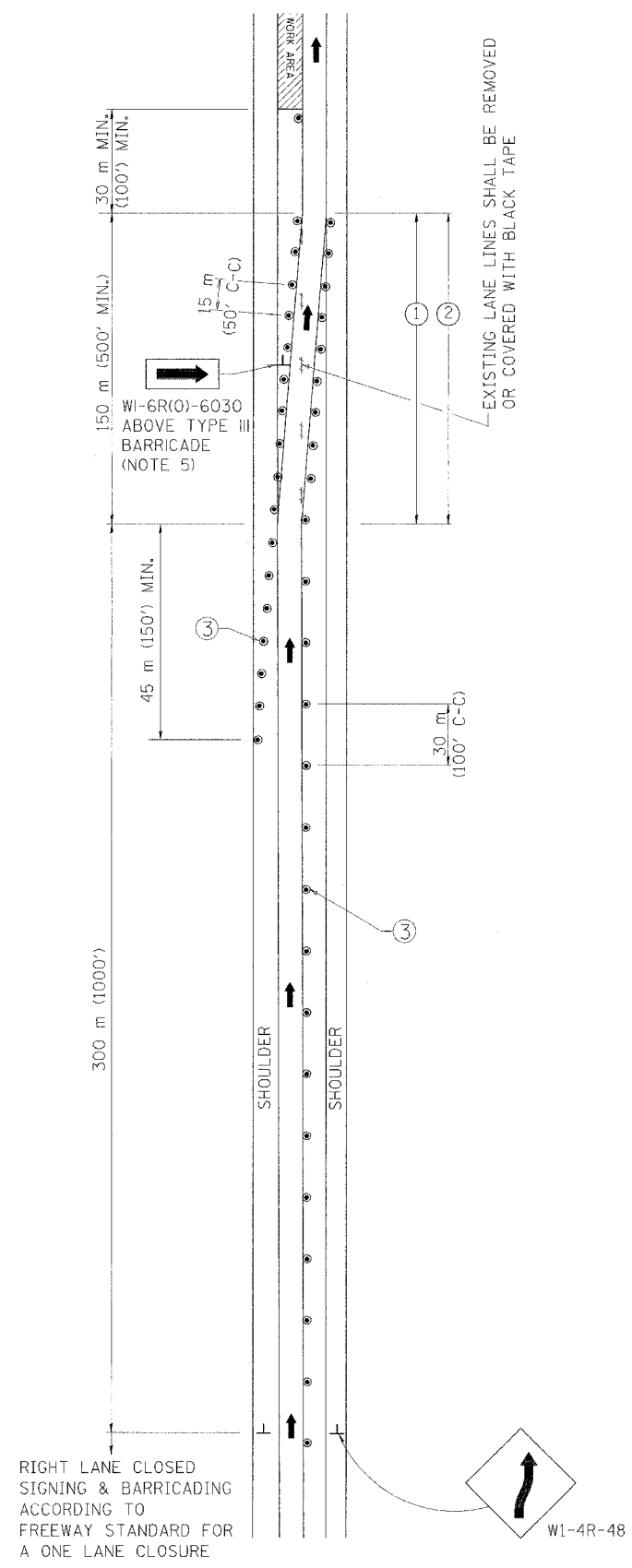
SCALE: NONE
DATE: 01/03/2003

DRAWN BY: TC-8
CHECKED BY: TC-8
REVISION DATE: 12/30/02

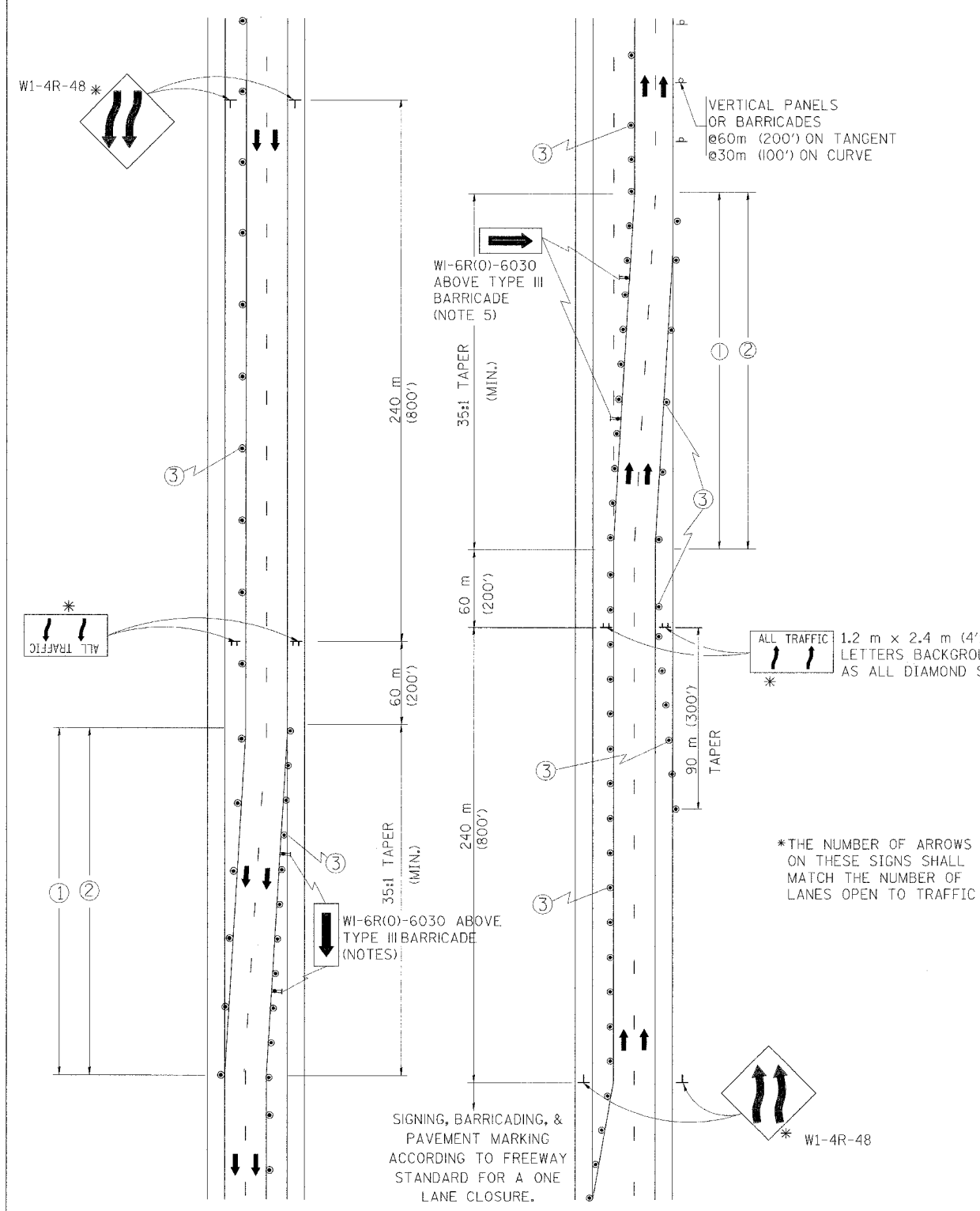
REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			55	43
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SINGLE LANE WEAVE



MULTI-LANE WEAVE



- GENERAL NOTES**
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
 - CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 90 m (300') ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 3 M-9 M (10'-30') SKIP DASH, WHITE.
 - PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 15 m (50') C-C SPACING IN TAPERS AND 30 m (100') C-C SPACING IN TANGENTS.
 - ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
 - IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

- SYMBOLS**
- DIRECTION OF TRAFFIC
 - WORK AREA
 - SIGN ON PORTABLE OR PERMANENT SUPPORT
 - DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

*THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC

RIGHT LANE CLOSED SIGNING & BARRICADING ACCORDING TO FREEWAY STANDARD FOR A ONE LANE CLOSURE

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SINGLE & MULTI-LANE WEAVE

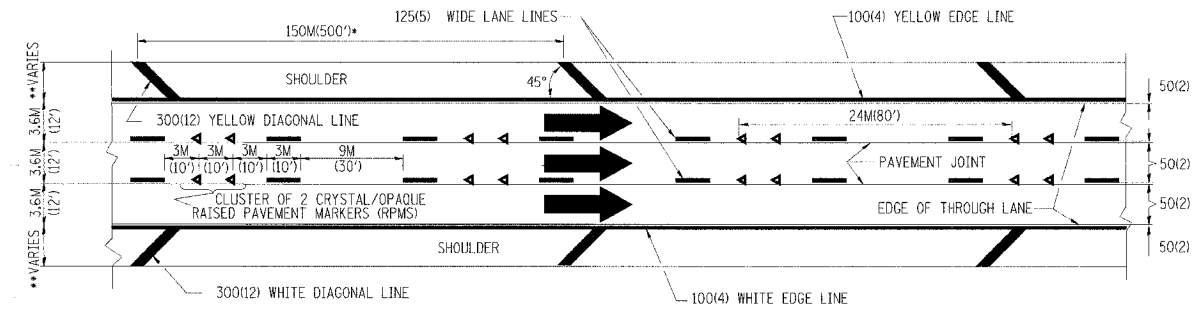
REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/96
JAF	4/03

SCALE: NONE
 DATE: 05/12/2003
 DRAWN BY R.H.
 CHECKED BY TC-9

Revised sheet 4/12/05

F. A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			454	556
STA.	TO STA.			
FED. ROAD DIST. NO. 7	BLINDS	FED. AID PROJECT		

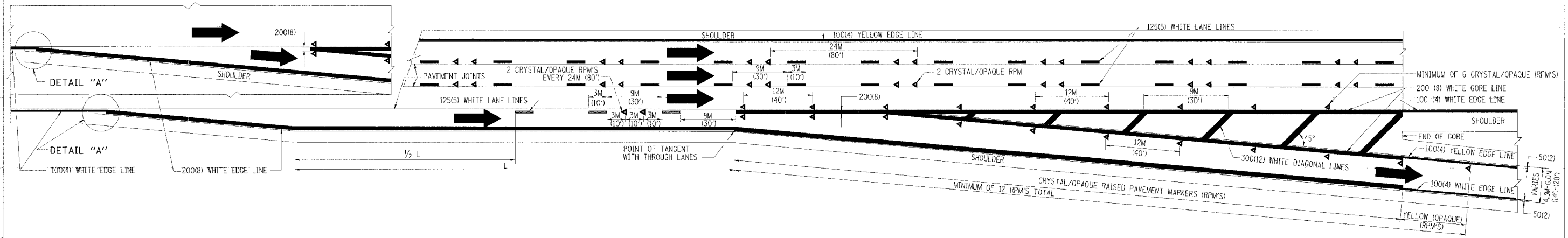
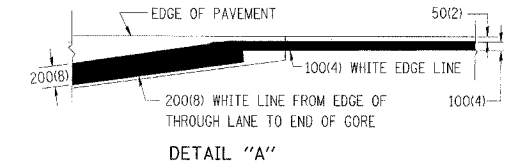
- THE DIAGONAL LINES SHALL BE SPACED AT 12M (40') C-C ACROSS ALL STRUCTURES WHICH ARE 150M (500') OR LESS IN LENGTH
- THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 1.8M (6') OR LESS IN WIDTH



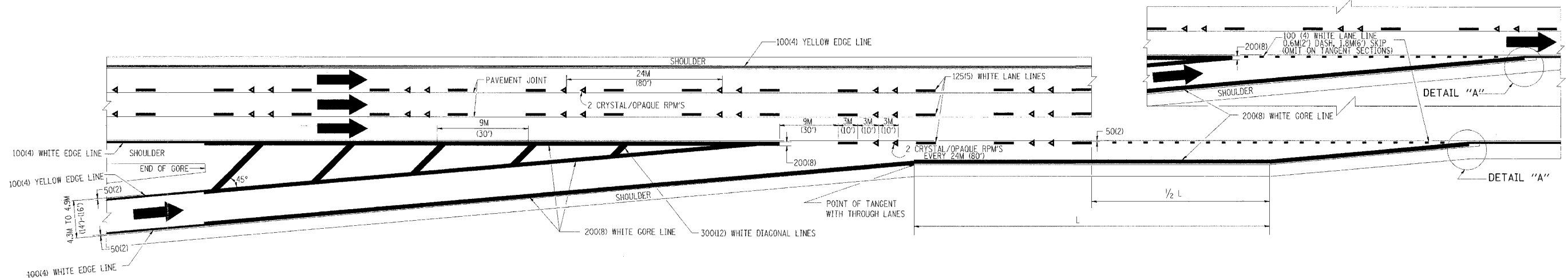
TYPICAL EDGE LINES & LANE LINES

NOTES:

1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES
3. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED ON PCC PAVEMENT.



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AH	3/96
DWS	7/96

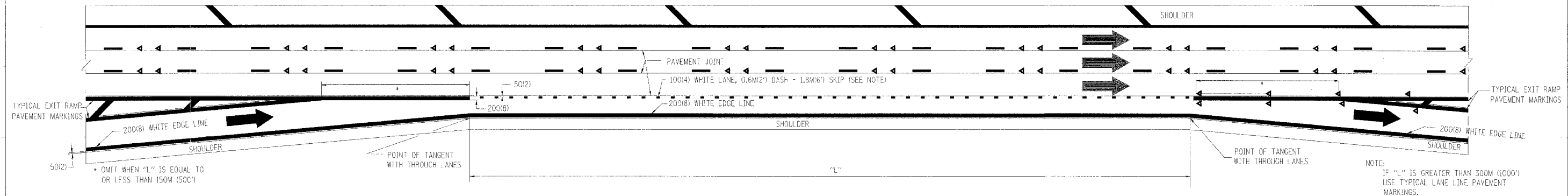
ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

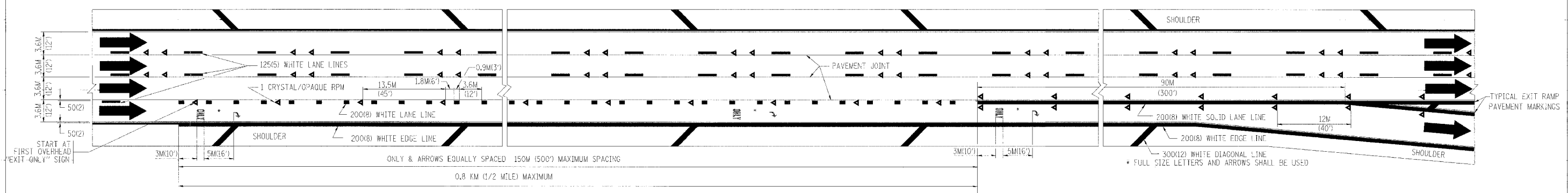
SCALE: NONE DRAWN BY C.A.D.D.
 DATE: **DATE** CHECKED BY

•DATE-TIME•
 •DGN-SPEC•
 VI-TC12

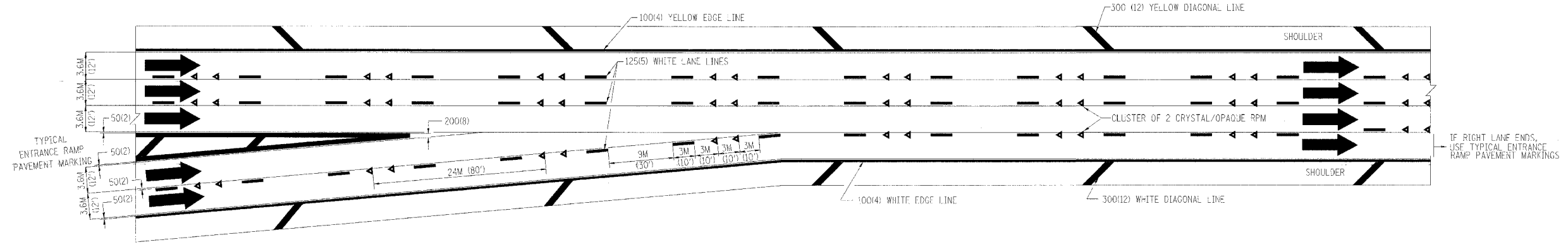
P.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	455
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

DATE-TIME
DGN-SPEC
VI-TCLZ

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91

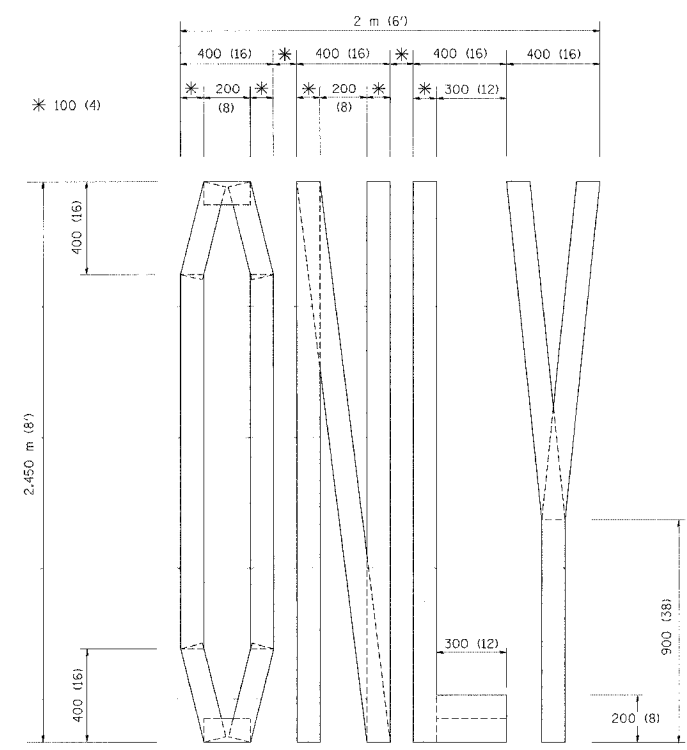
ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

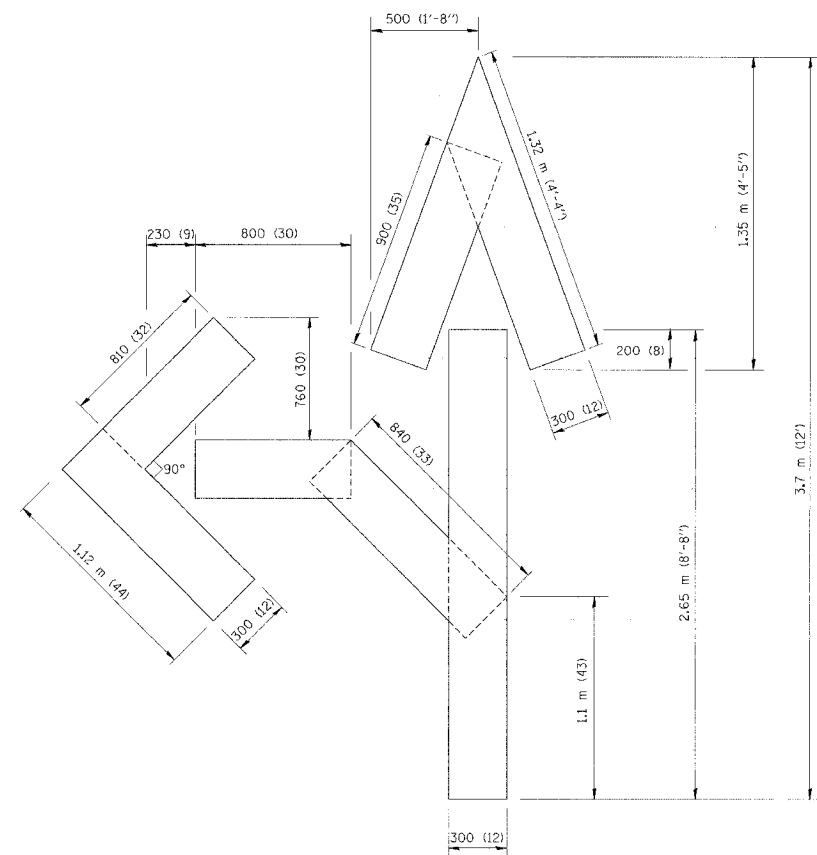
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DATE: **DATE**

DRAWN BY C.A.D.D.
CHECKED BY

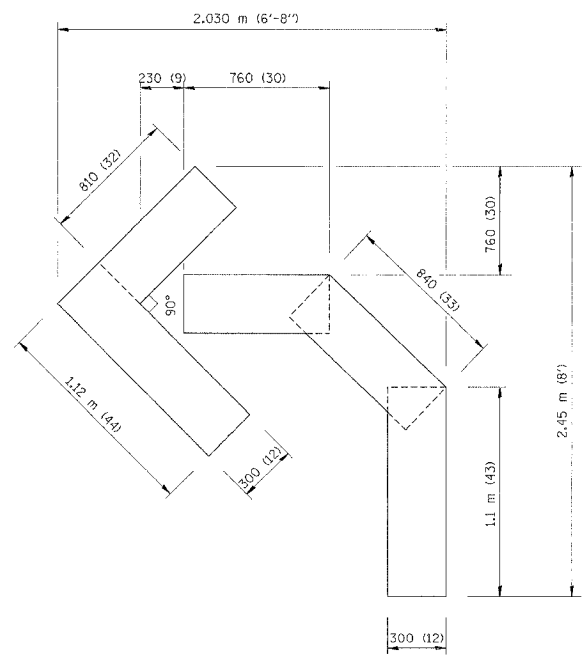
F. A. REL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
			556	456
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



QUANTITY
 100 (4) LINE = 19.7 m (64.1 ft.)
 1.97 sq. m (21.1 sq. ft.)



QUANTITY
 100 (4) LINE = 25.3 m (82.5 ft.)
 2.53 sq. m (27.5 sq. ft.)



QUANTITY
 100 (4) LINE = 13.9 m (45.5 ft.)
 1.39 sq. m (15.2 sq. ft.)

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

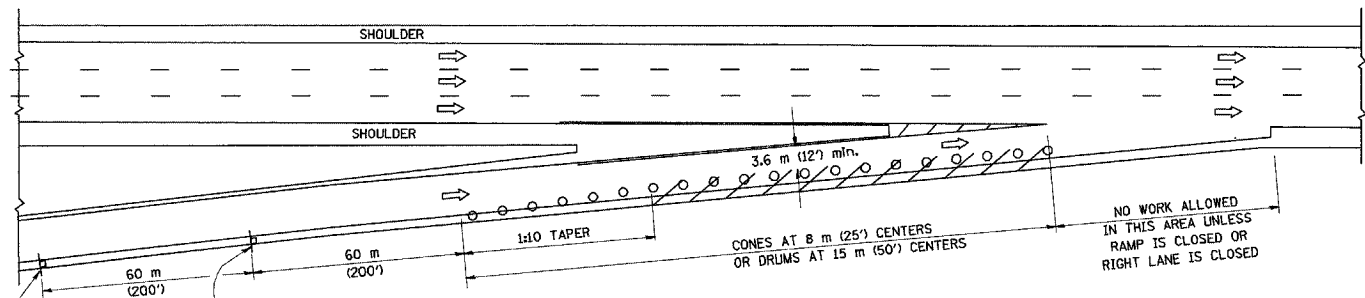
PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

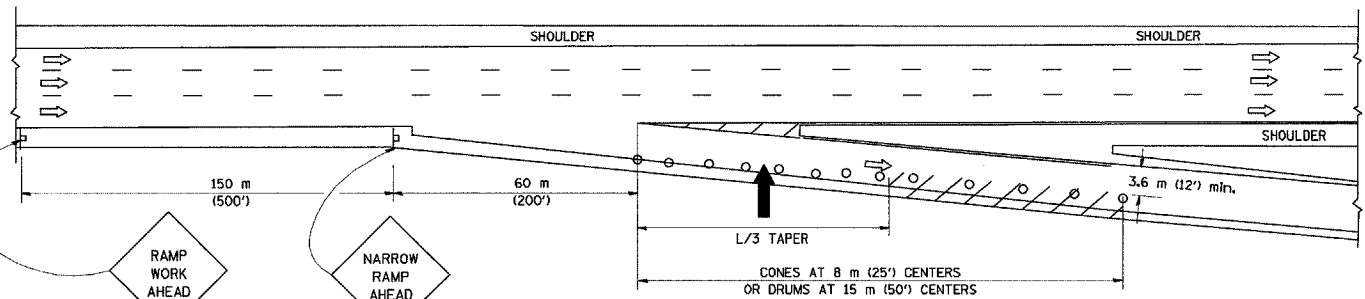
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 DATE \$\$DATE\$\$

DRAWN BY CADD
 CHECKED BY

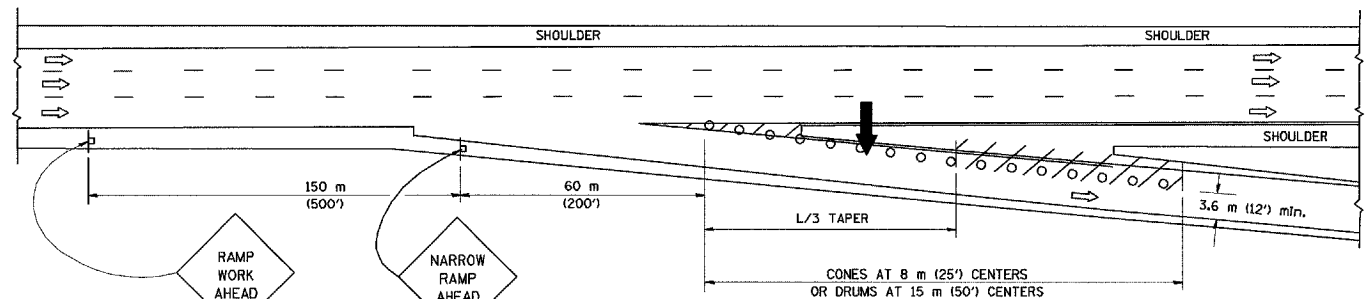
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

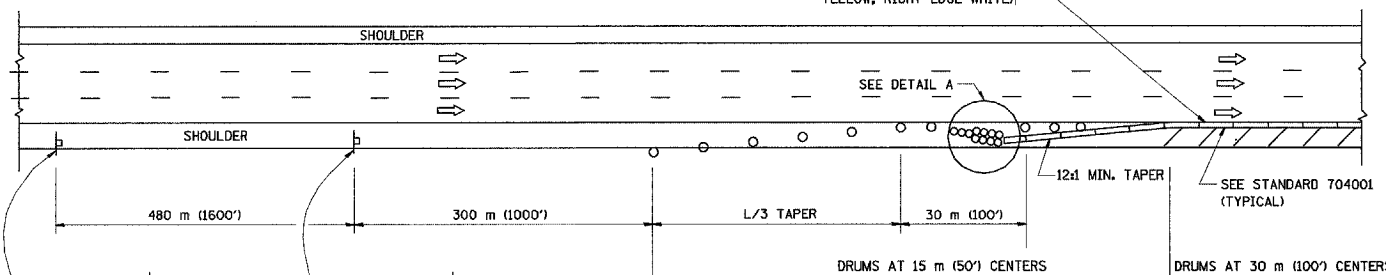
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

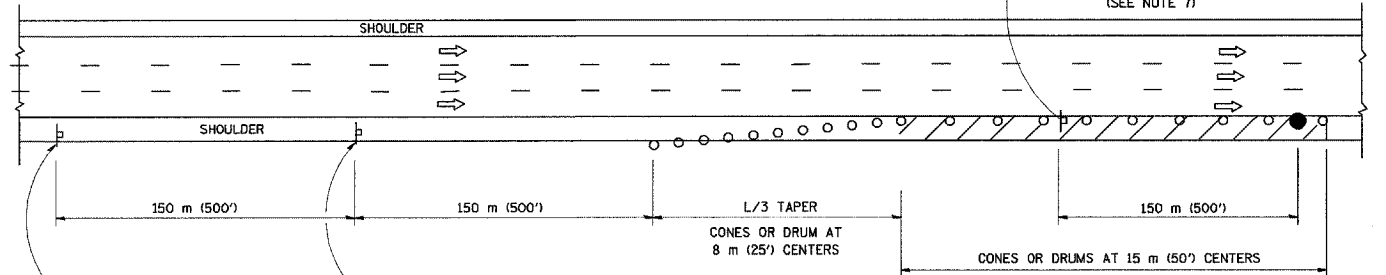
SPEED LIMIT	FORMULAS
80 km/h (45 mph)	METRIC ENGLISH
OR GREATER:	L=0.6S(W/S) L=(W)S
W = WIDTH OF OFFSET IN METERS (FEET)	
S = NORMAL POSTED SPEED KM/H (MPH)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	457
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS OUTSIDE THE CLEAR ZONE OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03

**TRAFFIC CONTROL DETAILS
FOR FREEWAY
SHOULDER CLOSURES
PARTIAL RAMP CLOSURES**

SCALE: NONE
DATE: 05/06/2003

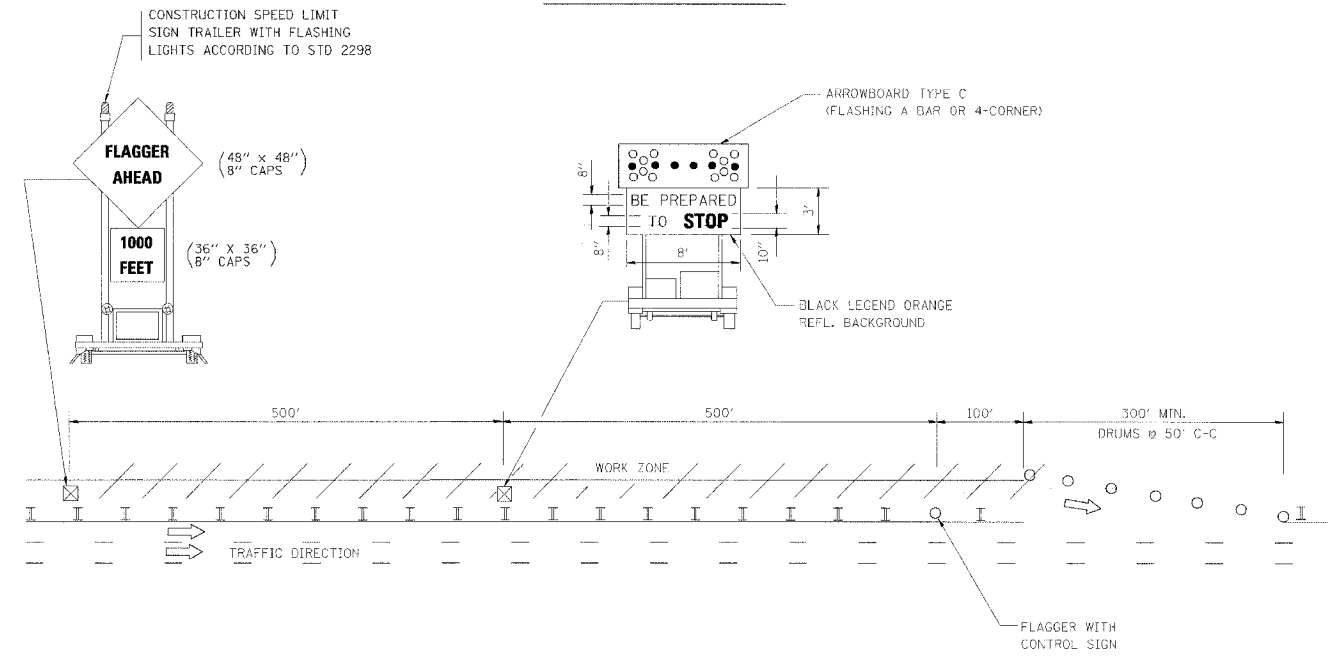
DRAWN BY: DWS
DESIGNED BY: DWS
CHECKED BY: TC-17
REVISION DATE: 04/24/03

Revised sheet 8/12/05

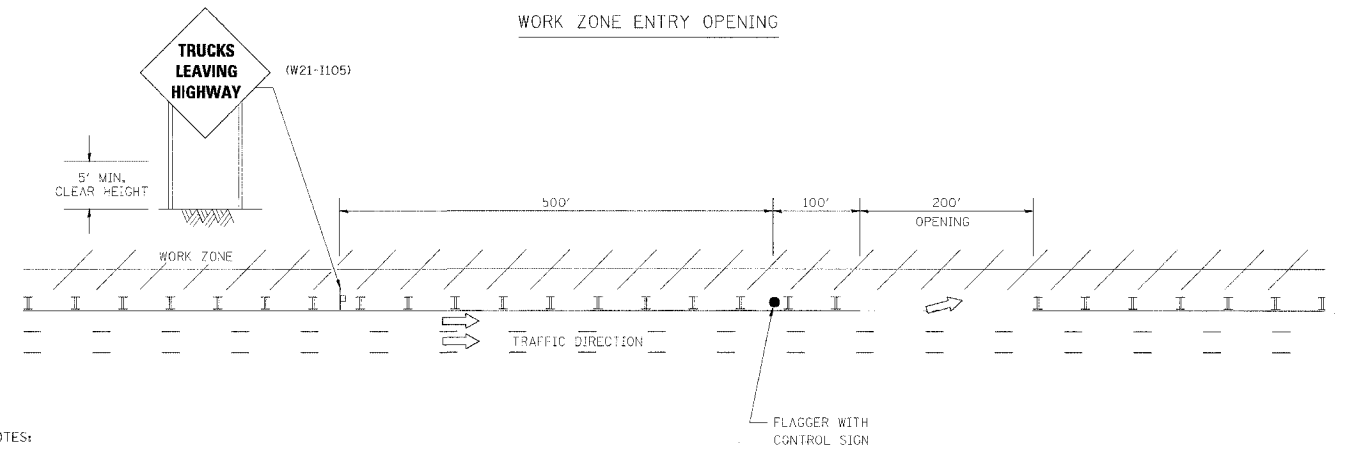
STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	458
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Nighttime Flagging Operations; The flag station shall be lighted with additional lights other than streetlights. The flagger control sign and the flagger vest shall be reflectorized. In addition, the flagger shall have a flashlight and lighted wand.
4. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
5. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

REVISIONS	
NAME	DATE

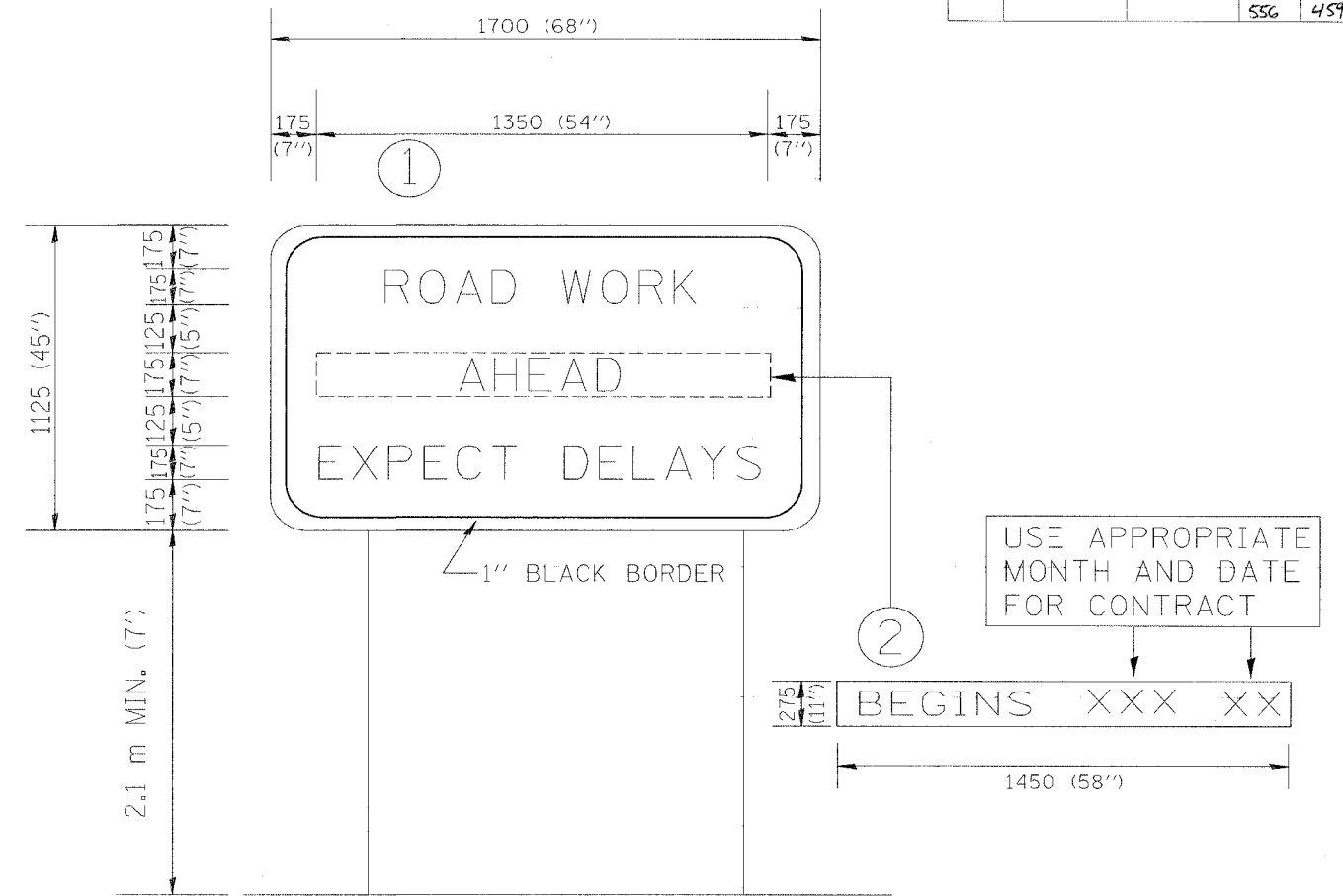
ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE
DATE: **DATE**

DRAWN BY: CADD
CHECKED BY: TC-18

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	459



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 2.3 SQ. M. (25.70 SQ. FT.)

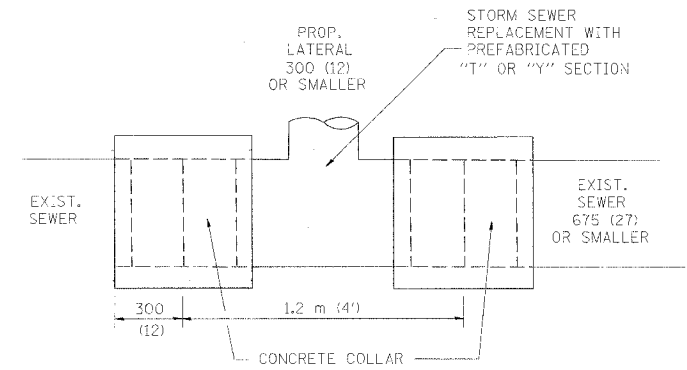
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TEMPORARY INFORMATION SIGNING
NAME	DATE	
R. MIRS	9-15-97	
R. MIRS	12-11-97	
T. RAMMACHER	2-2-99	

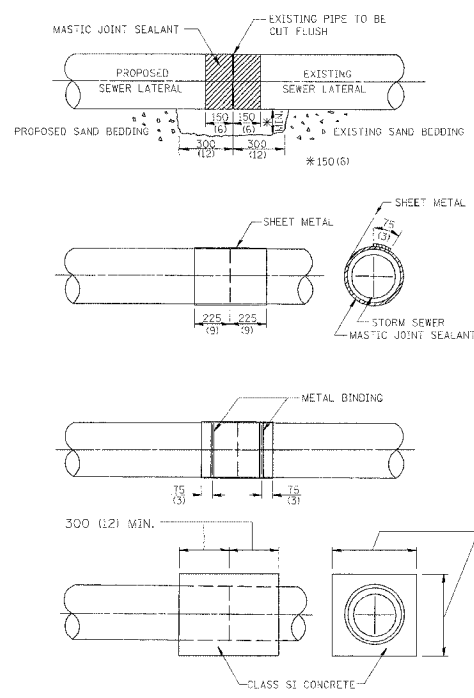
DRAWN BY: BUR. OF DESIGN
CHECKED BY:

***DATE**

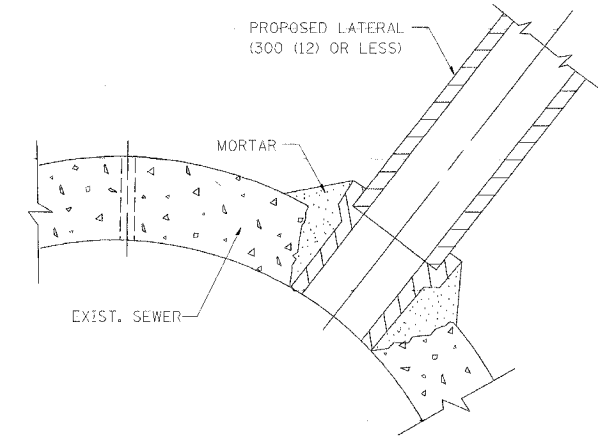
P. A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	460
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



DETAIL "A"
LATERAL CONNECTION TO EXISTING SEWER
OF 675 (27) OR SMALLER



DETAIL "B"
CLASS SI CONCRETE COLLAR



DETAIL "C"
PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 750 (30) OR LARGER

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 x 150 (12 x 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 450 (18) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 75 (3) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT Oozes OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
 - II CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER SEE DETAIL "C".
- IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

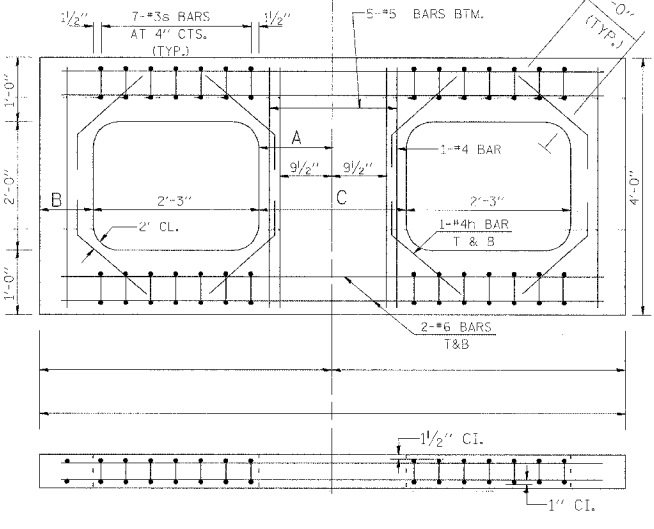
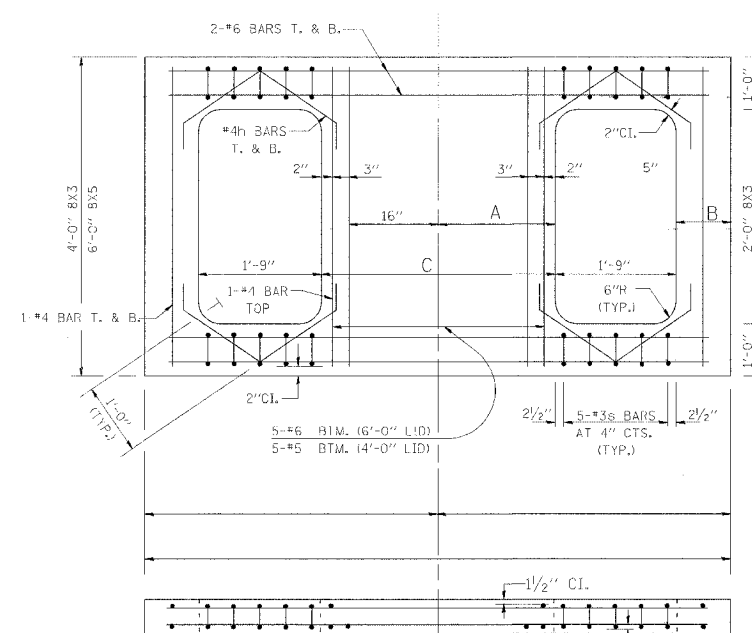
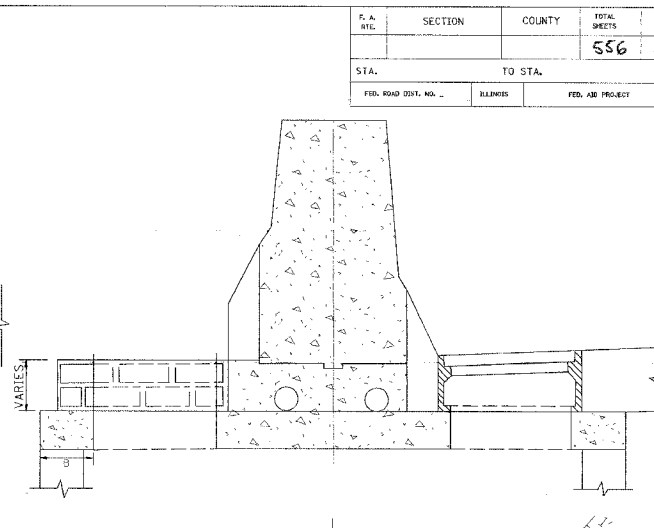
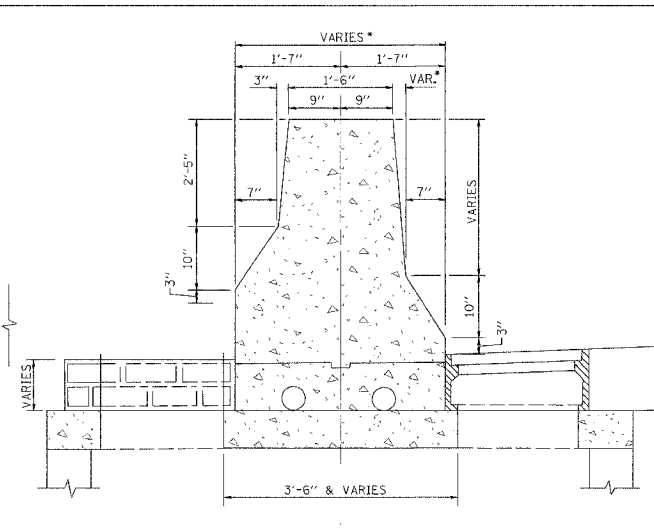
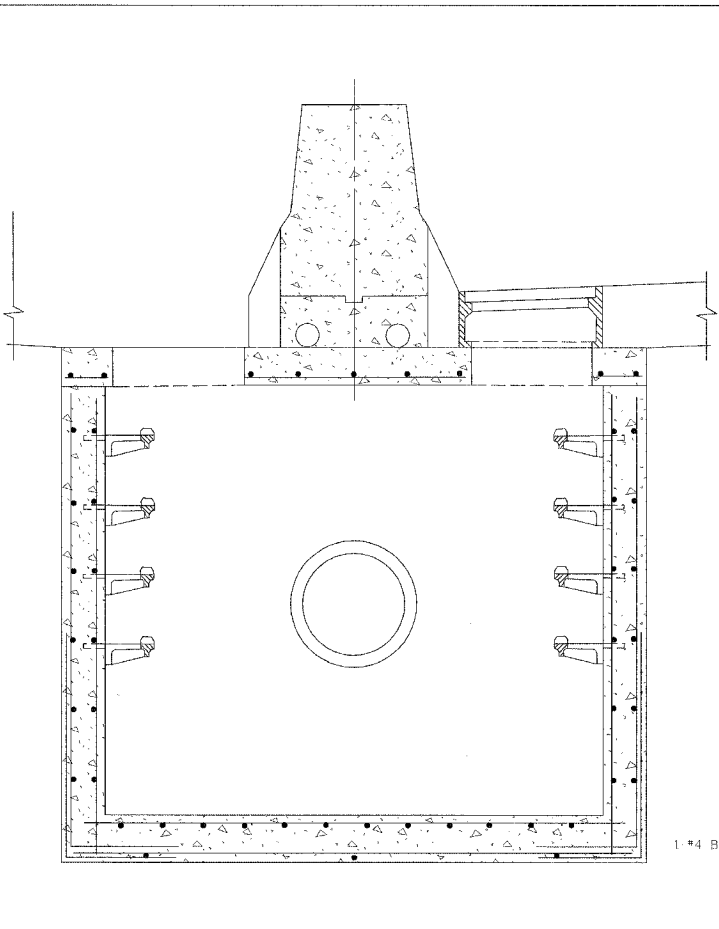
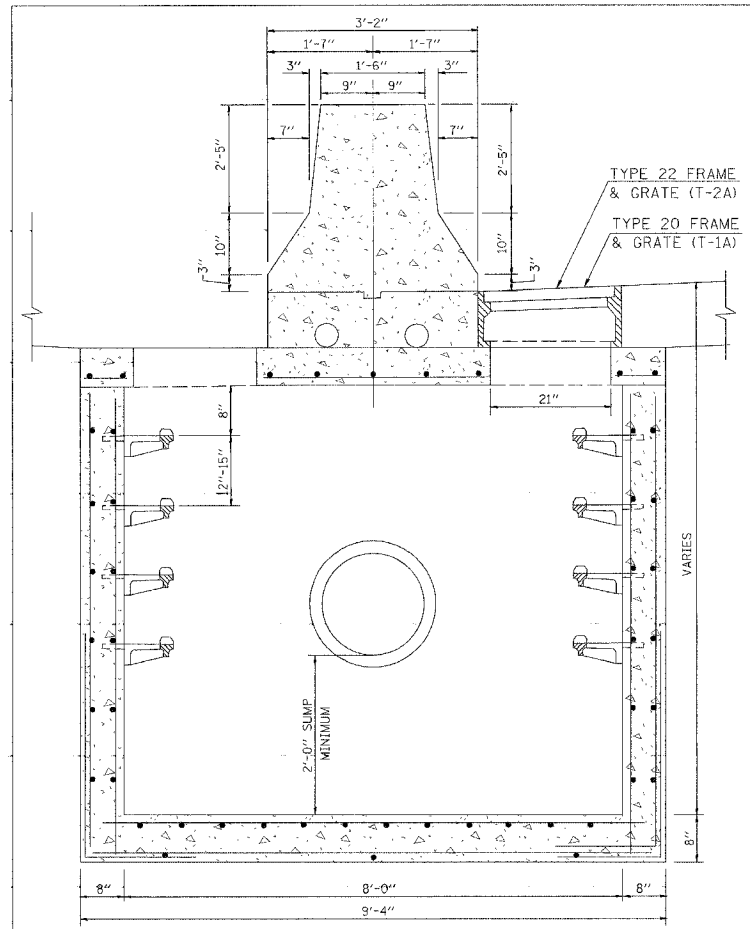
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ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER

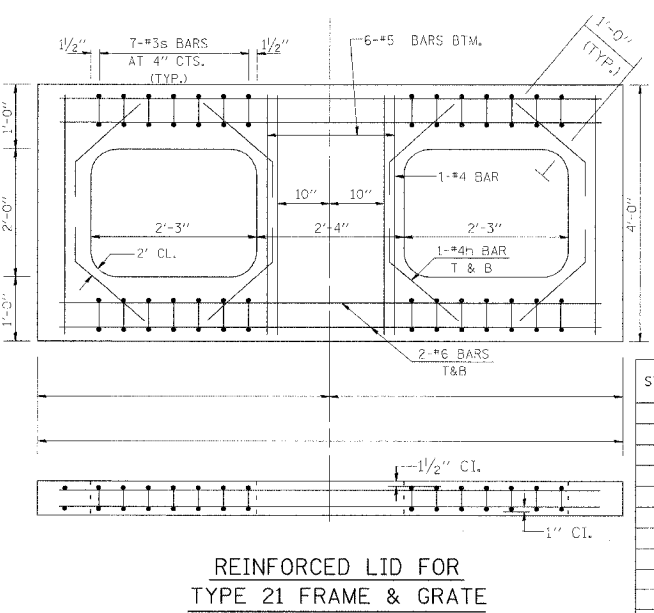
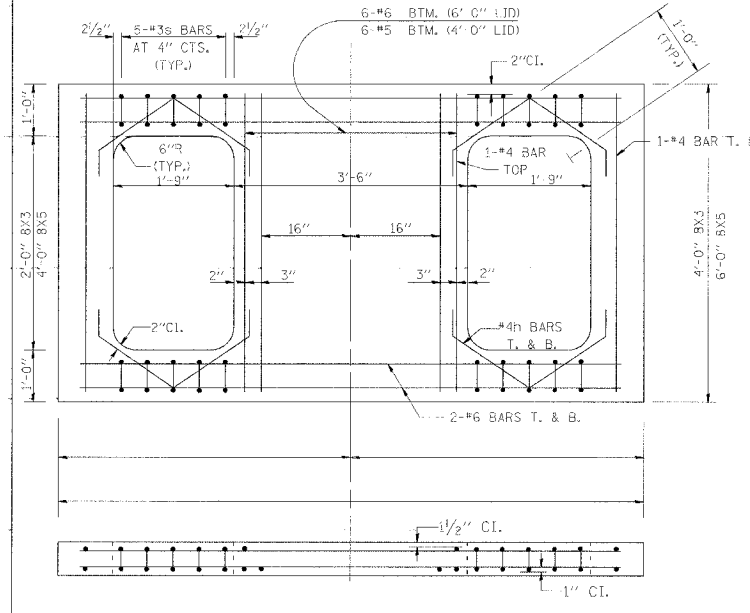
REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

SCALE: NONE
DATE **DATE**

DRAWN BY CADD
CHECKED BY



A PGL (FT)	DIM. A	DIM. B	DIM. C
1	1'-3 1/4"	1'-4 3/4"	
2	1'-4 1/2"	1'-3 1/2"	
3	2'-5 3/4"	1'-2 1/4"	
4	1'-2"	1'-1"	
5	2'-8 1/4"	0'-11 3/4"	
6	2'-9 1/2"	0'-10 1/2"	



**REINFORCED LID FOR
TYPE 20 & 22 FRAME & GRATE**

**REINFORCED LID FOR
TYPE 21 FRAME & GRATE**

NOTE:
DRAINAGE STRUCTURES SHALL CONFORM TO I.D.O.T. STANDARD 2364 EXCEPT AS NOTED IN THIS DETAIL.

STA. AND OFFSET	TYPE OF LID	A PGL	DIM. A	DIM. B	DIM. C	STA. AND OFFSET	TYPE OF LID	A PGL	DIM. A	DIM. B	DIM. C

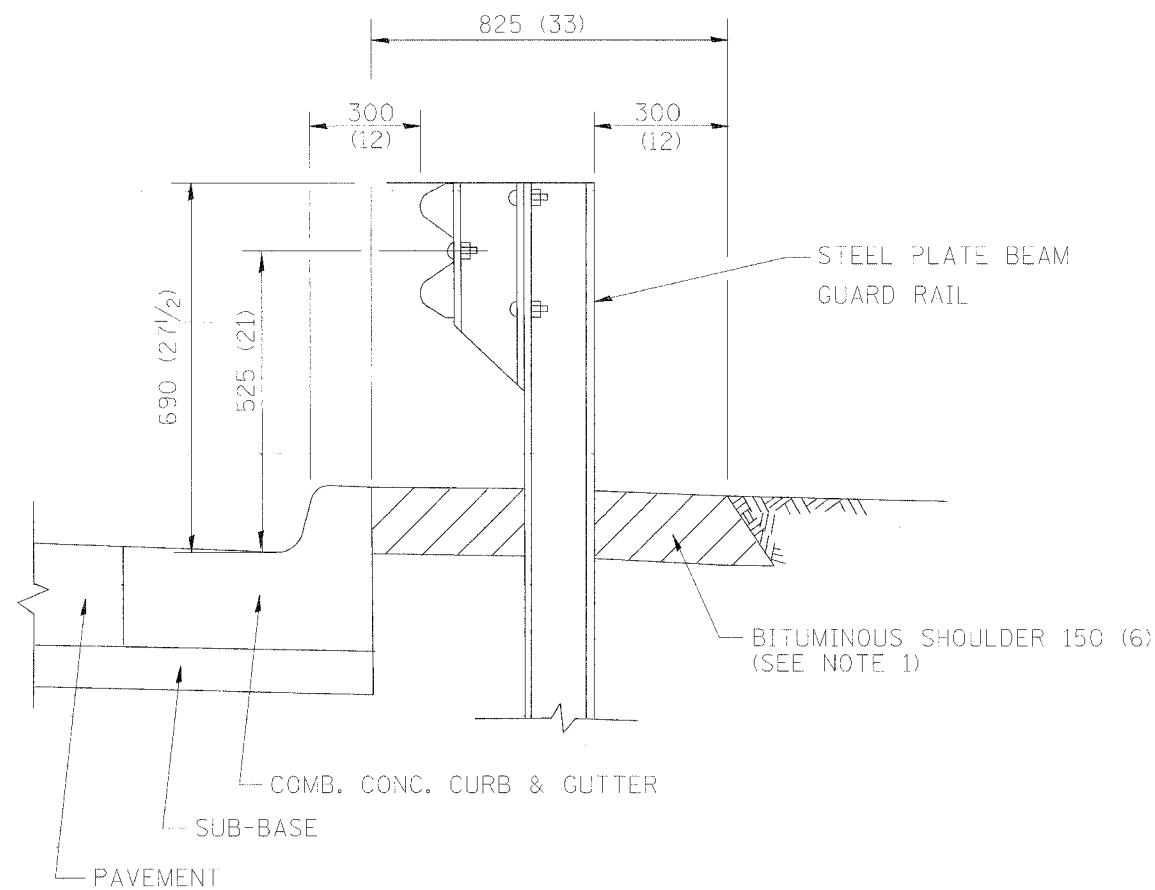
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAINAGE STRUCTURES
TYPE 1A, 2A AND 3A
TYPE 1A (SPECIAL), 2A (SPECIAL)
AND 3A (SPECIAL)

SCALE: NONE
DATE: **DATE**
DRAWN BY: JKM
CHECKED BY:

DATE-TIME
DGN-SPEC

F. & S. SHE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			556	462
STA.		TO STA.		
FED. ROAD DIST. NO.	ILEADIS	FED. AID PROJECT		

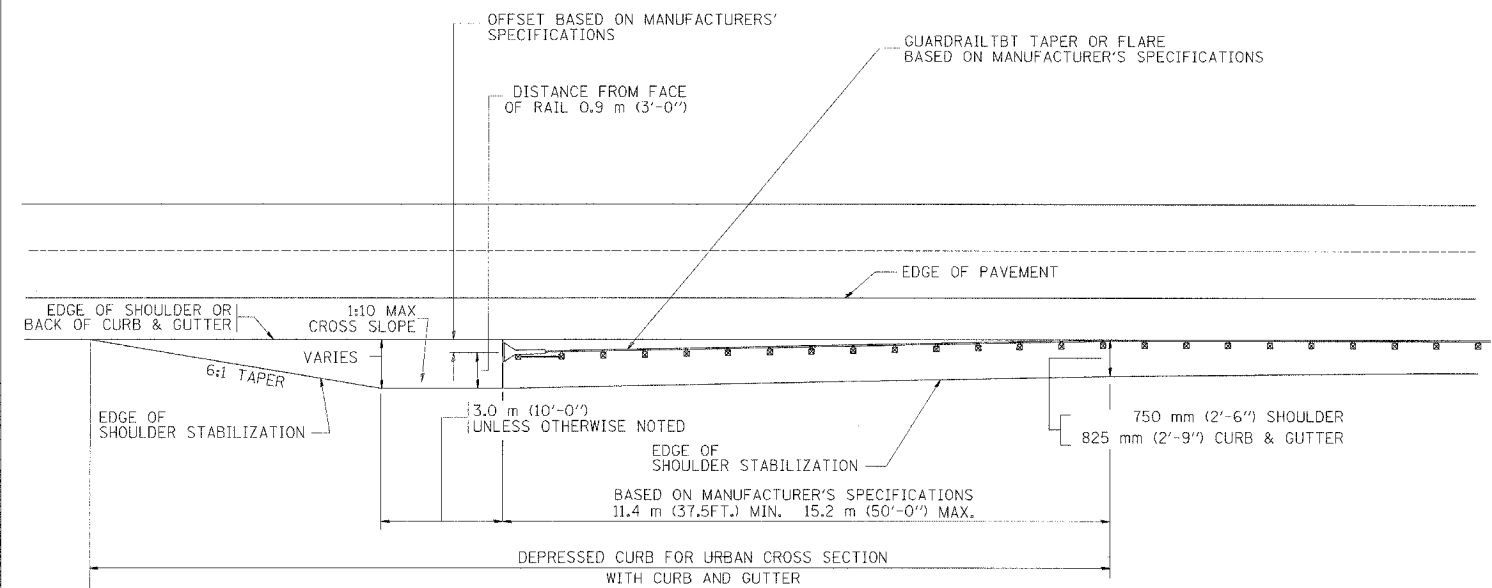


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: BITUMINOUS SHOULDER 150 (6) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER m^2 (sq. yd.) AS "BITUMINOUS SHOULDER 150 (6)."

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
[FOR ROADWAY SPEED 60 kmh (35 MPH) TO 70 kmh (45 MPH)]



STABILIZATION AT TBT TY. 1 SPL.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

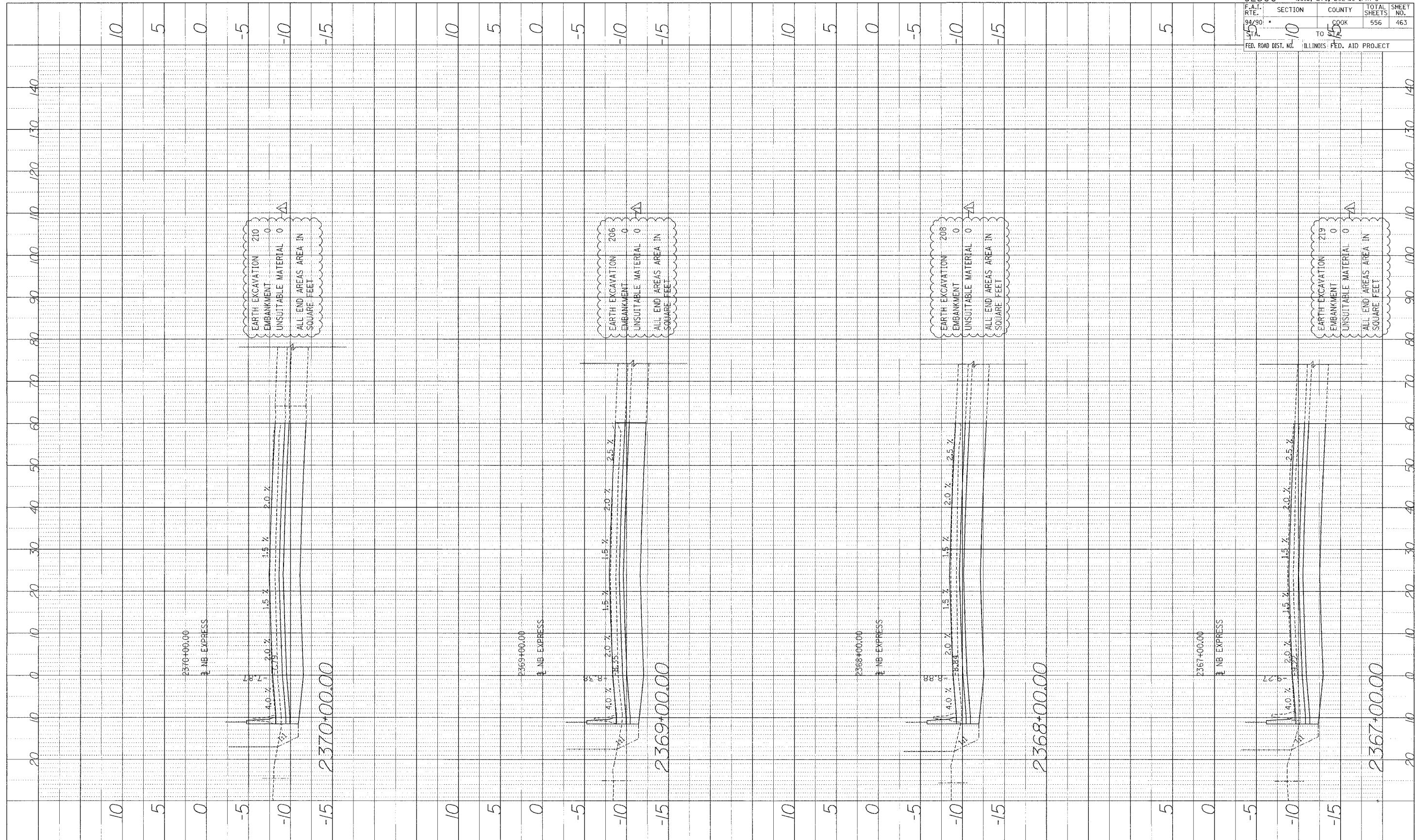
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR
STEEL PLATE BEAM GUARD RAIL
ADJACENT TO CURB AND GUTTER
STABILIZATION AT TBT TY 1 SPL.

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00

SCALE: NONE
DATE: **DATE**

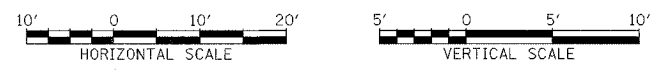
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CHECKED BY:

PROFILE SHEET NO. 31 DATE
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 CHECKED BY: []
 DATE: []



62300 • (1818, ETC, 2324.6-IPR-8			
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS
94/90	10	COOK	556
STA.	TO	STA.	SHEET NO.
	10	140	463
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

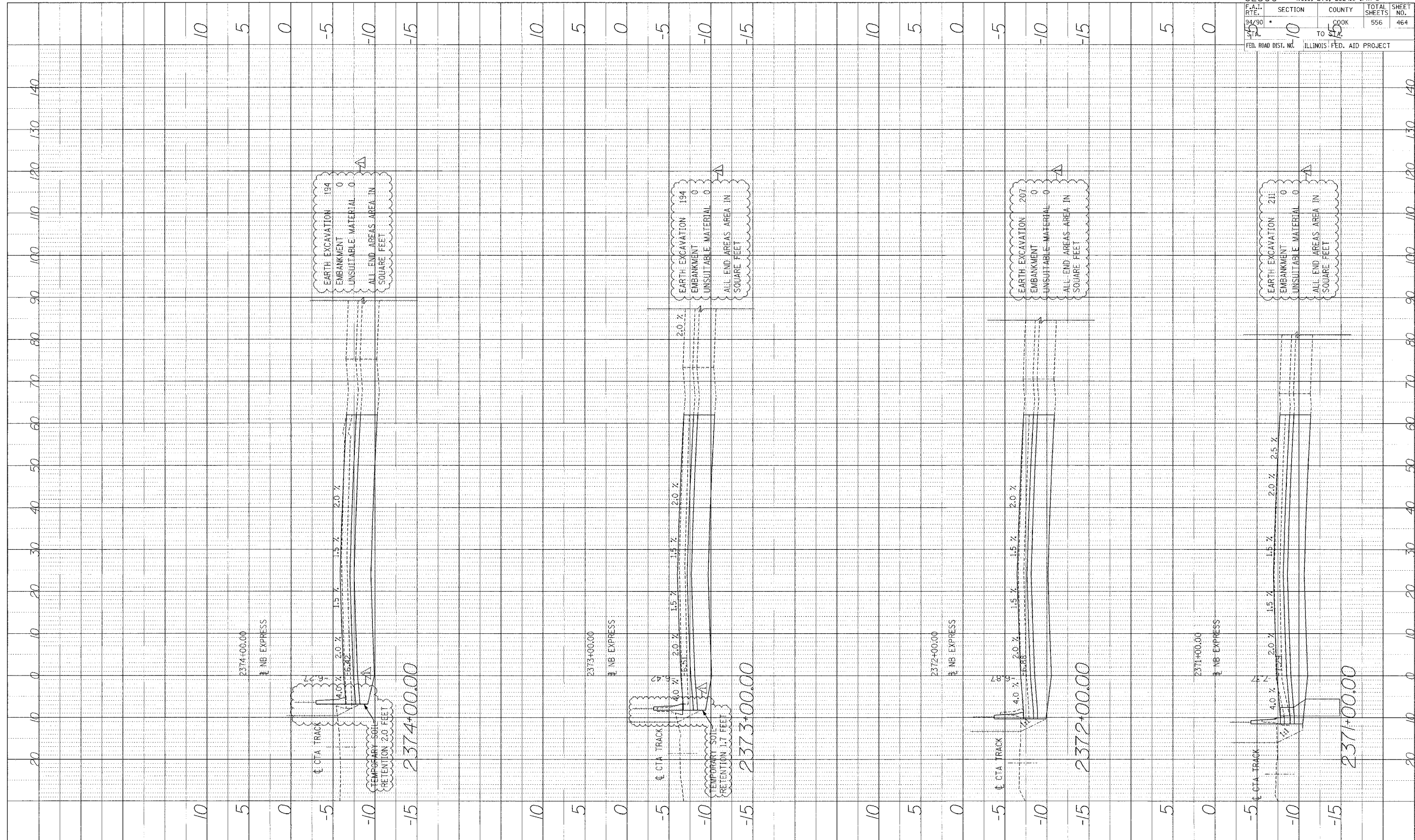


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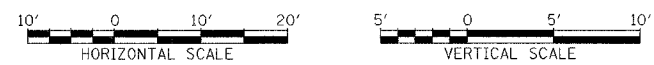
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 DRAWING NO. 107-1
 DATE 08/11/00
 BY [Signature]
 CHECKED [Signature]
 IN CHARGE [Signature]
 NO. 03-01-11-1-107-1

62300 • (1818, ETC. 2324.6-1PIR-8)
 F.A.R.T.E. 99/90 SECTION COUNTY TOTAL SHEETS SHEET NO.
 TO COOK 556 464
 ILLINOIS FED. AID PROJECT



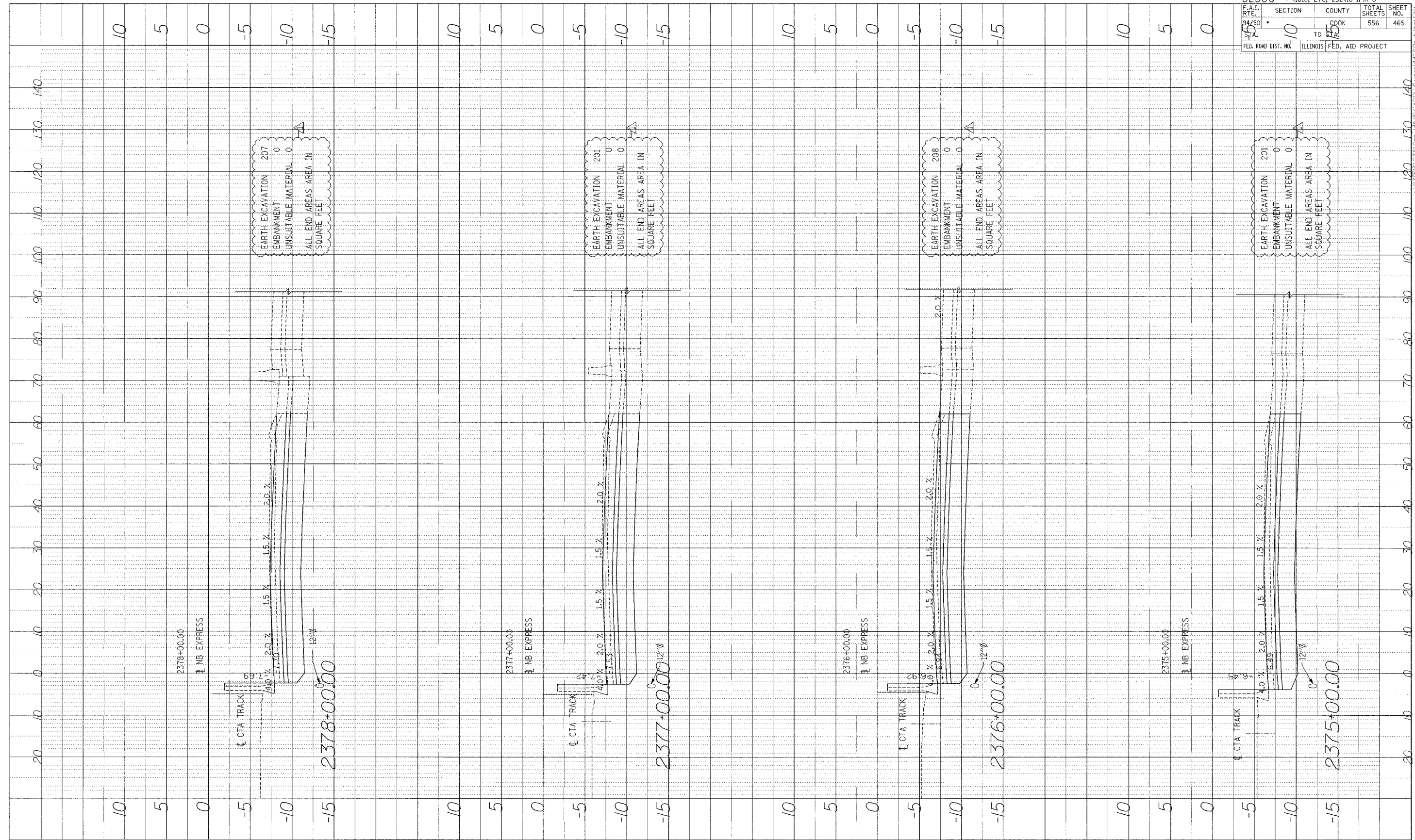
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

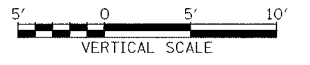
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PROFILE SUBMITTED BY DATE
 DRAWN BY
 CHECKED BY
 NO. OF SHEETS TOTAL SHEETS
 NO. OF SHEETS THIS SHEET



62300 • (1818, ETC, 2324.6-1P)R-8	
F.A.I. RT. NO. 94/90	SECTION TO
COUNTY COOK	TOTAL SHEETS 556
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT

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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

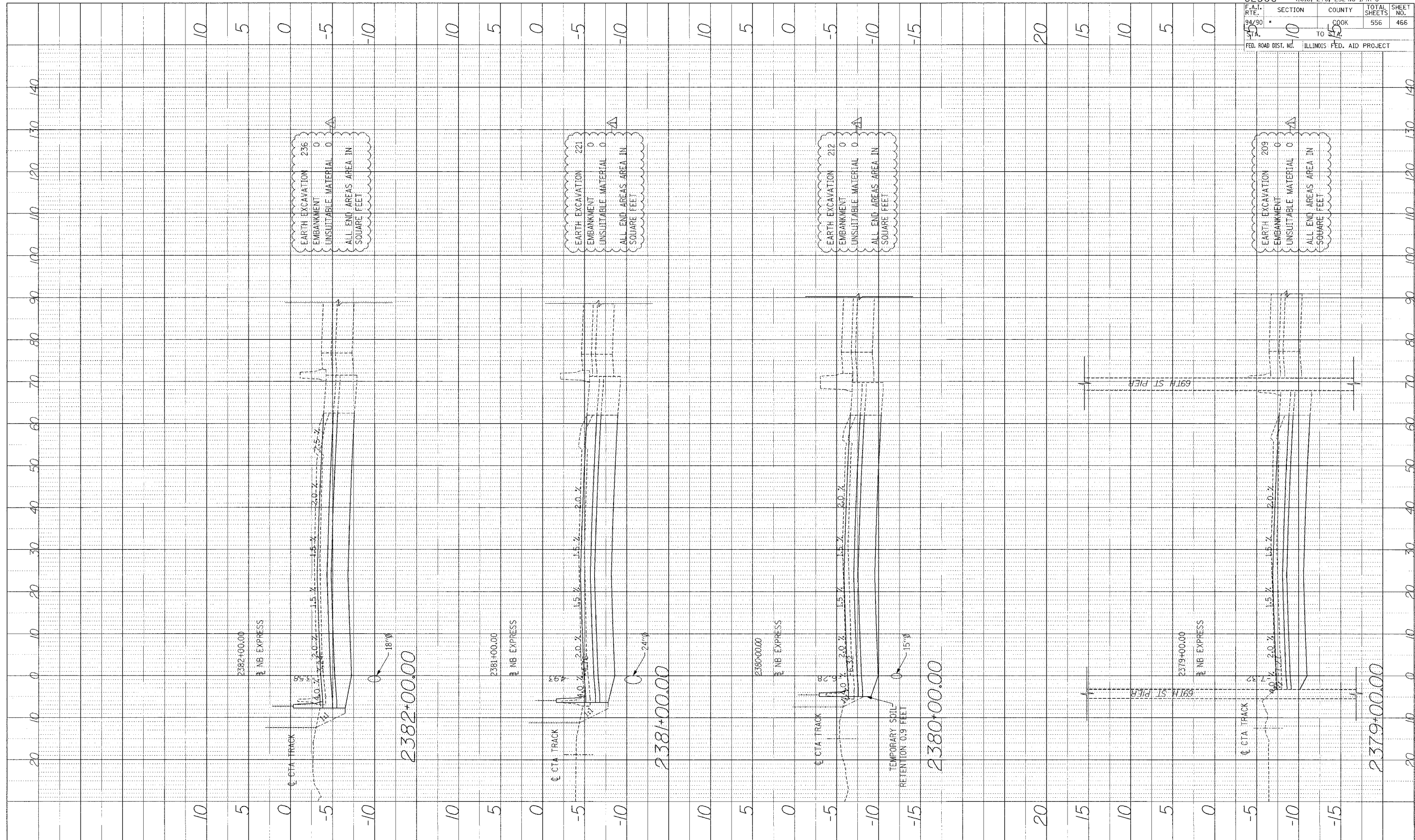


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 NO. E BOOK ERECTED BY
 NO. S BOOK BUILT BY
 NO. STRUCTURE NOTATION CHYD

62300 • (1818, ETC, 2324.6-1PR-8
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 99/90 TO 556 466
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



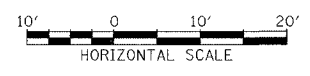
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 UNSUITABLE MATERIAL 0
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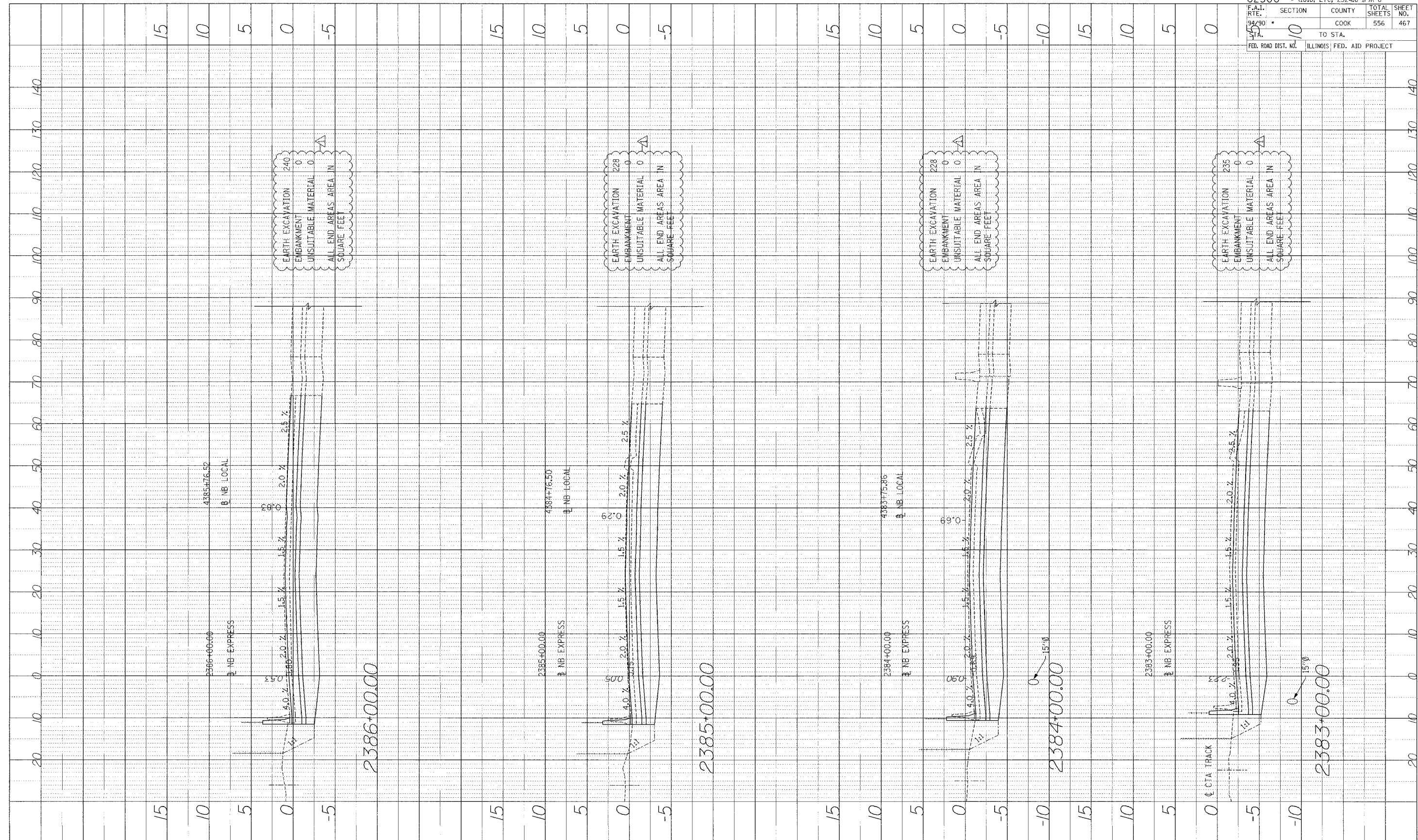
Edwards AND Kelcey
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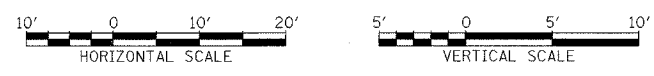
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PROFILE SURVISED BY DATE
 PLANNED BY
 NOTE BOOK NO. DRAWING NO.
 STRUCTURE NO. 1-NB-CPD



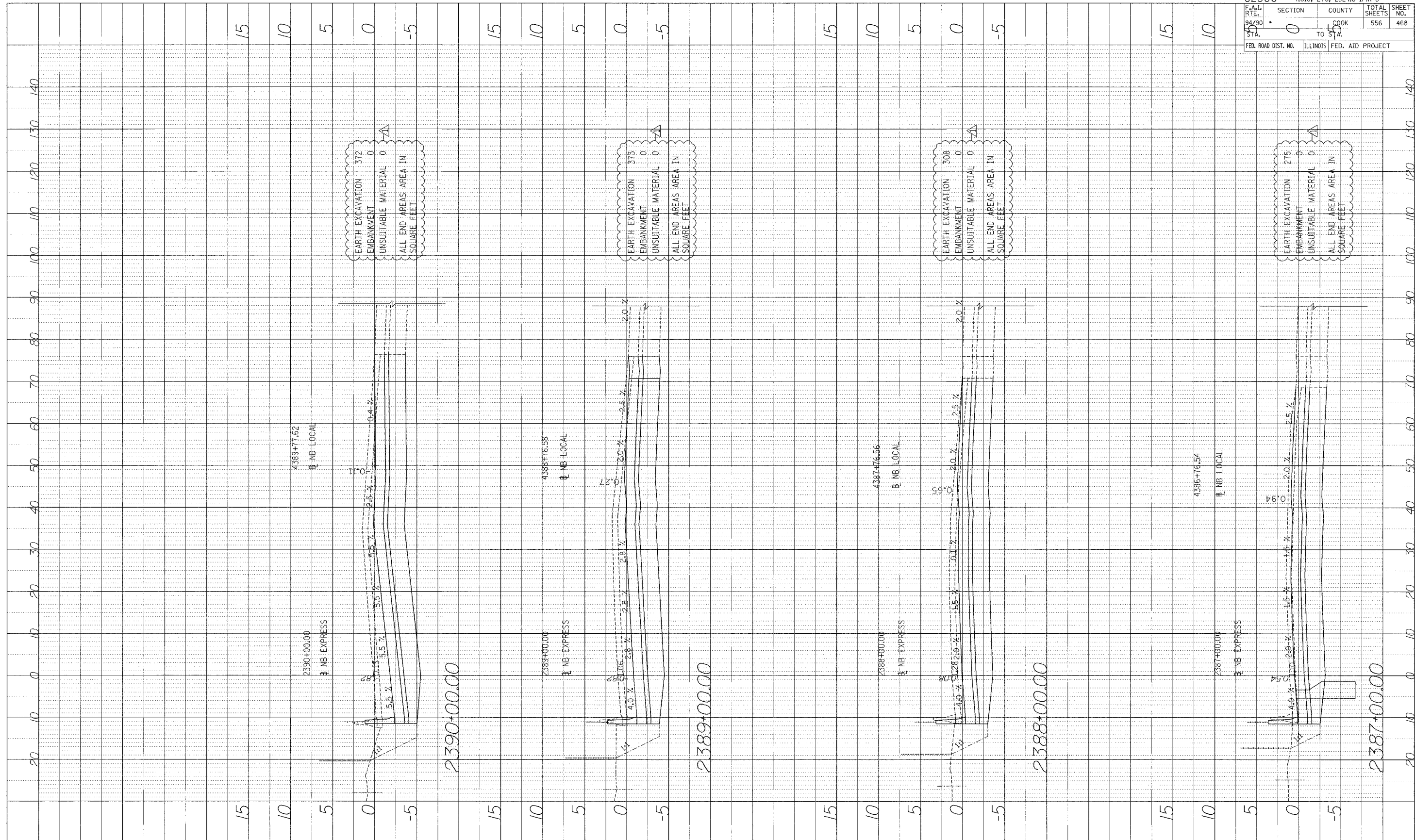
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

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F.A.I. R.T.E. 94/90	SECTION 0
STA. 44	TO STA. 54
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
COUNTY COOK	TOTAL SHEETS 556
	SHEET NO. 468

Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.ECKCORP.COM

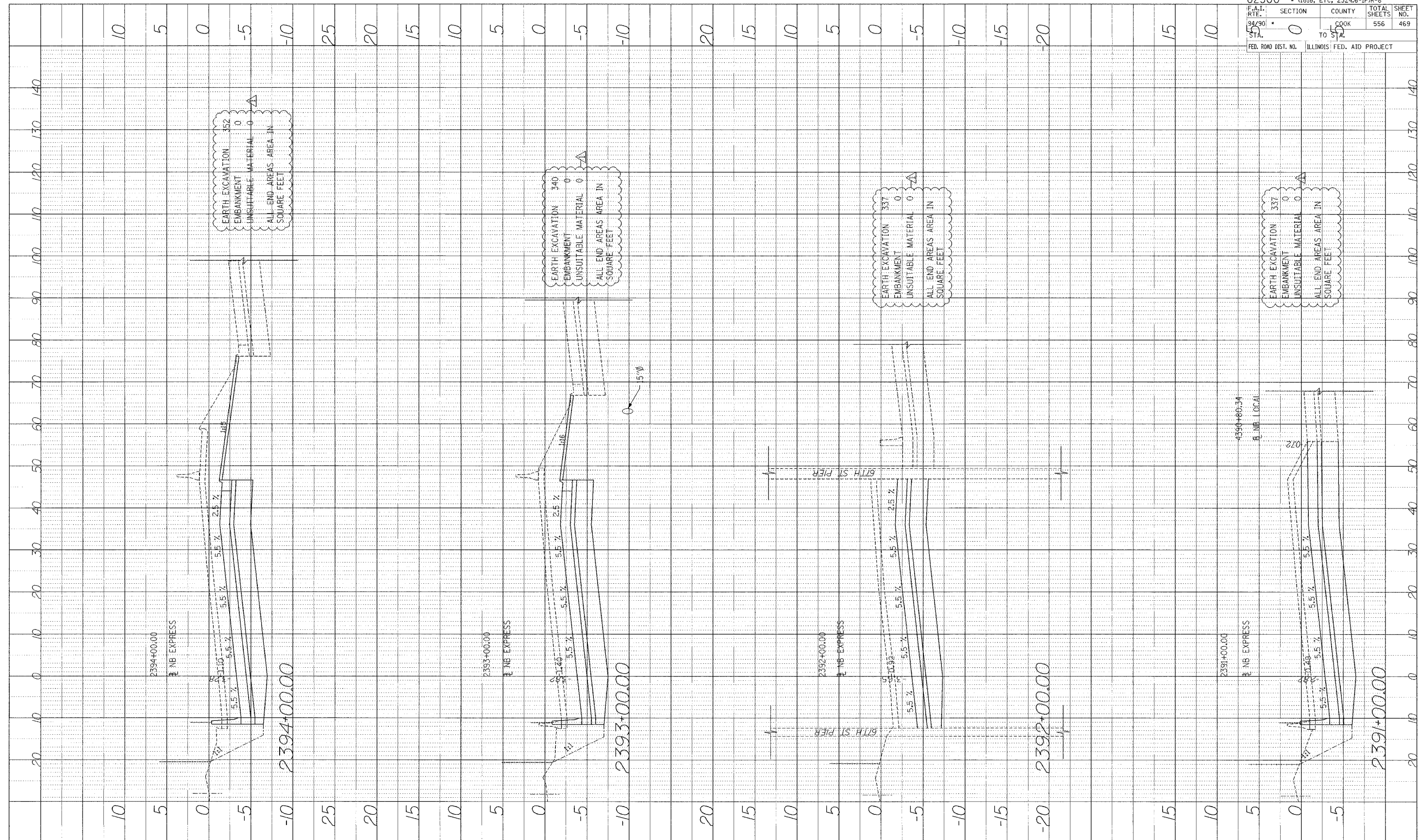


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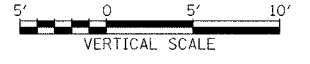
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 PLANNED BY: PROJECT NO.:
 CHECKED BY: SHEET NO.:
 DRAWN BY: TOTAL SHEETS: 469
 DATE: 9/24/90 COUNTY: COOK
 PROJECT: ILLINOIS FED. AID PROJECT

62300 • (1818, ETC, 2324.6-IP1R-8)
 F.A.I. SECTION COUNTY TOTAL SHEETS SHEET NO.
 94/90 0 0 COOK 556 469
 STA. TO STA. 55 TO 56
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



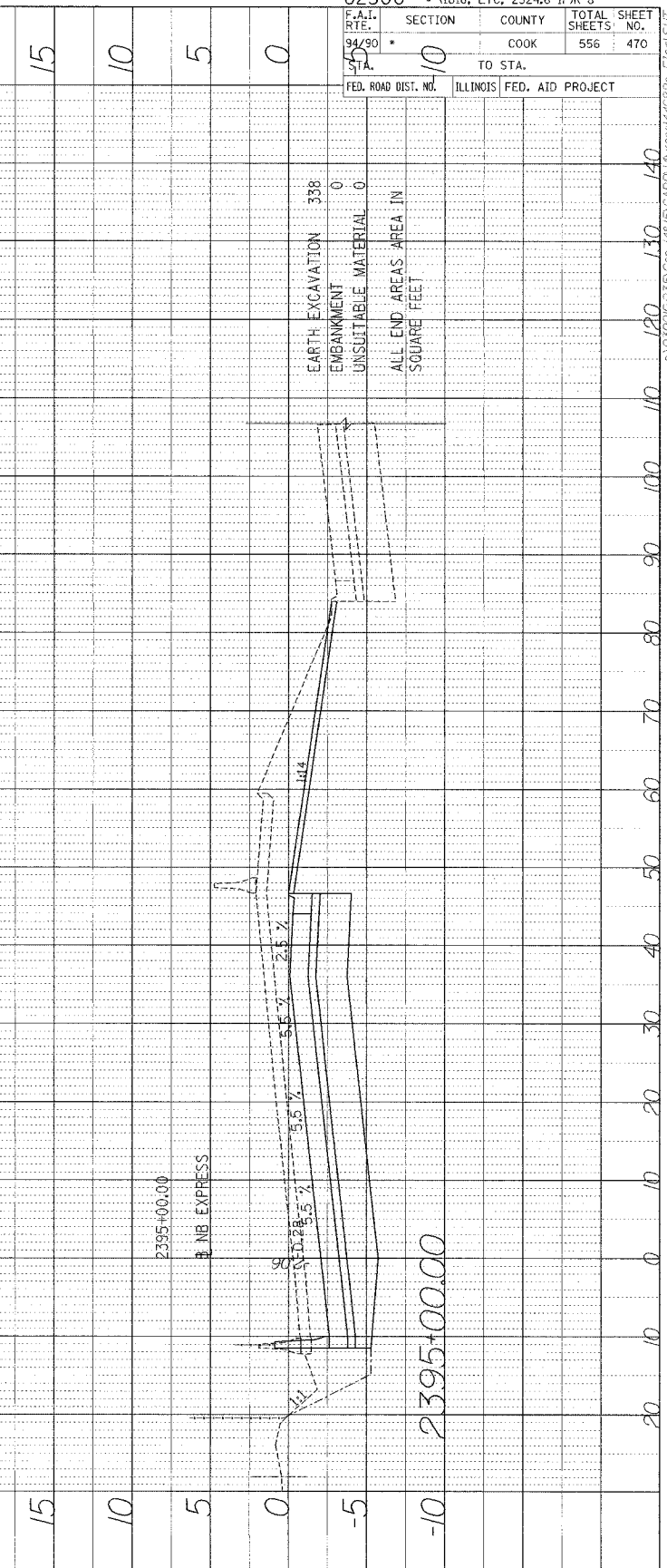
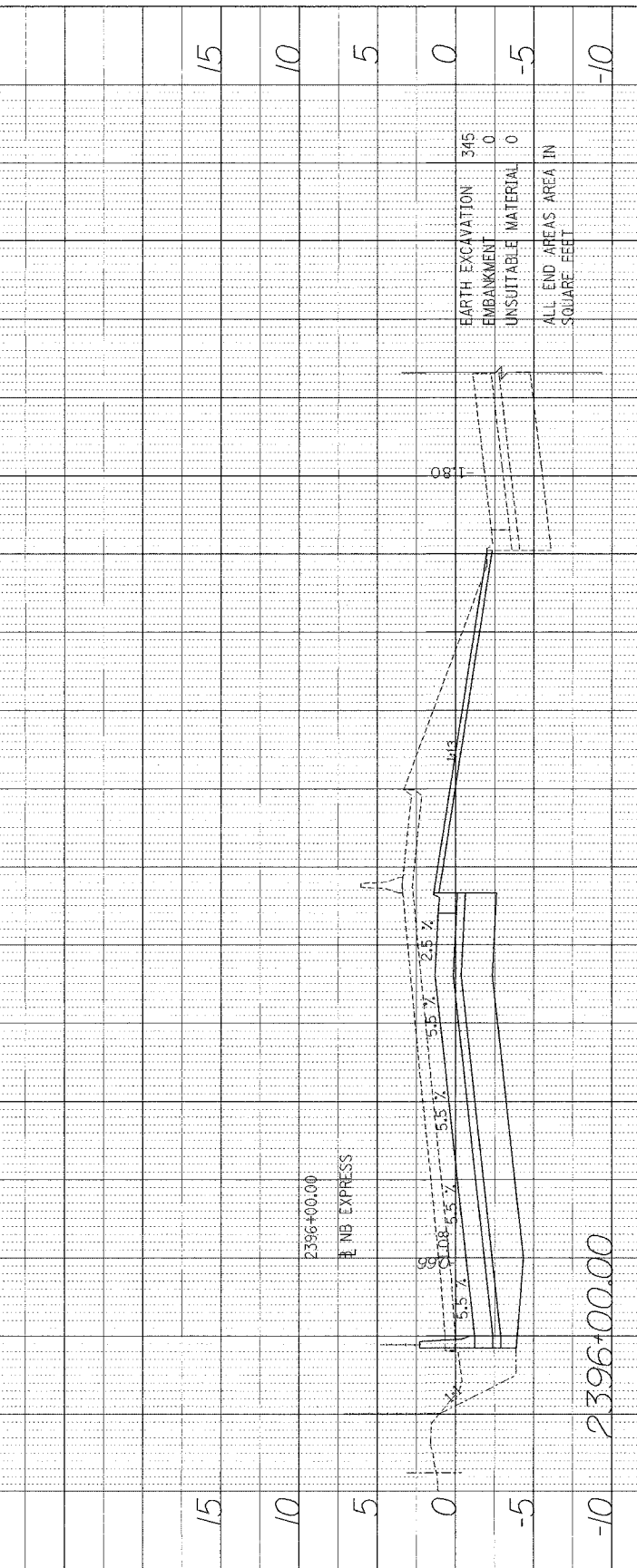
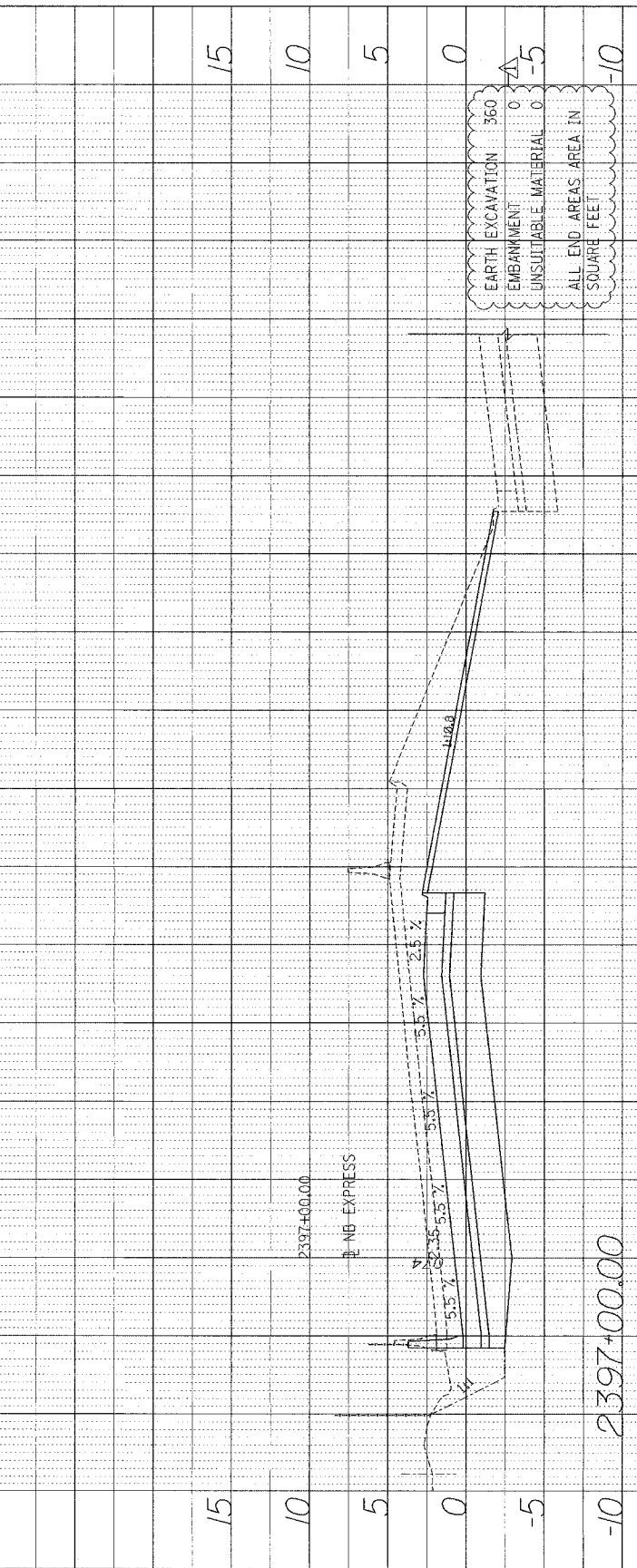
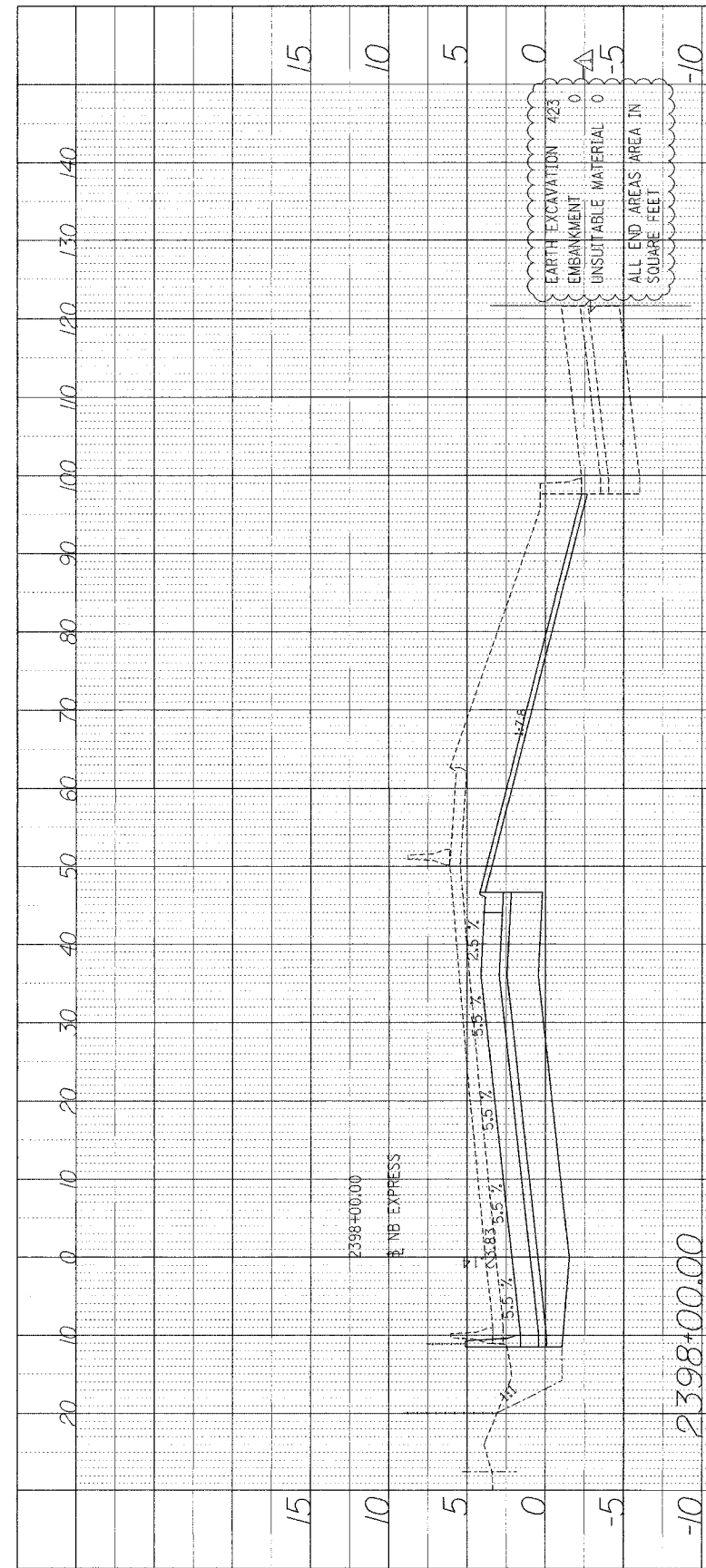
Edwards AND Kelcey
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 FAX: (312) 251-3015
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PROFILE
 DRAWN BY: _____ DATE: _____
 CHECKED BY: _____
 NOTE BOOK NO. _____
 REFERENCE DRAWING NO. _____



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F.A.I. RT. NO. 34/90	SECTION 10
COUNTY COOK	TOTAL SHEETS 470
TO STA. 10	SHEET NO. 470
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

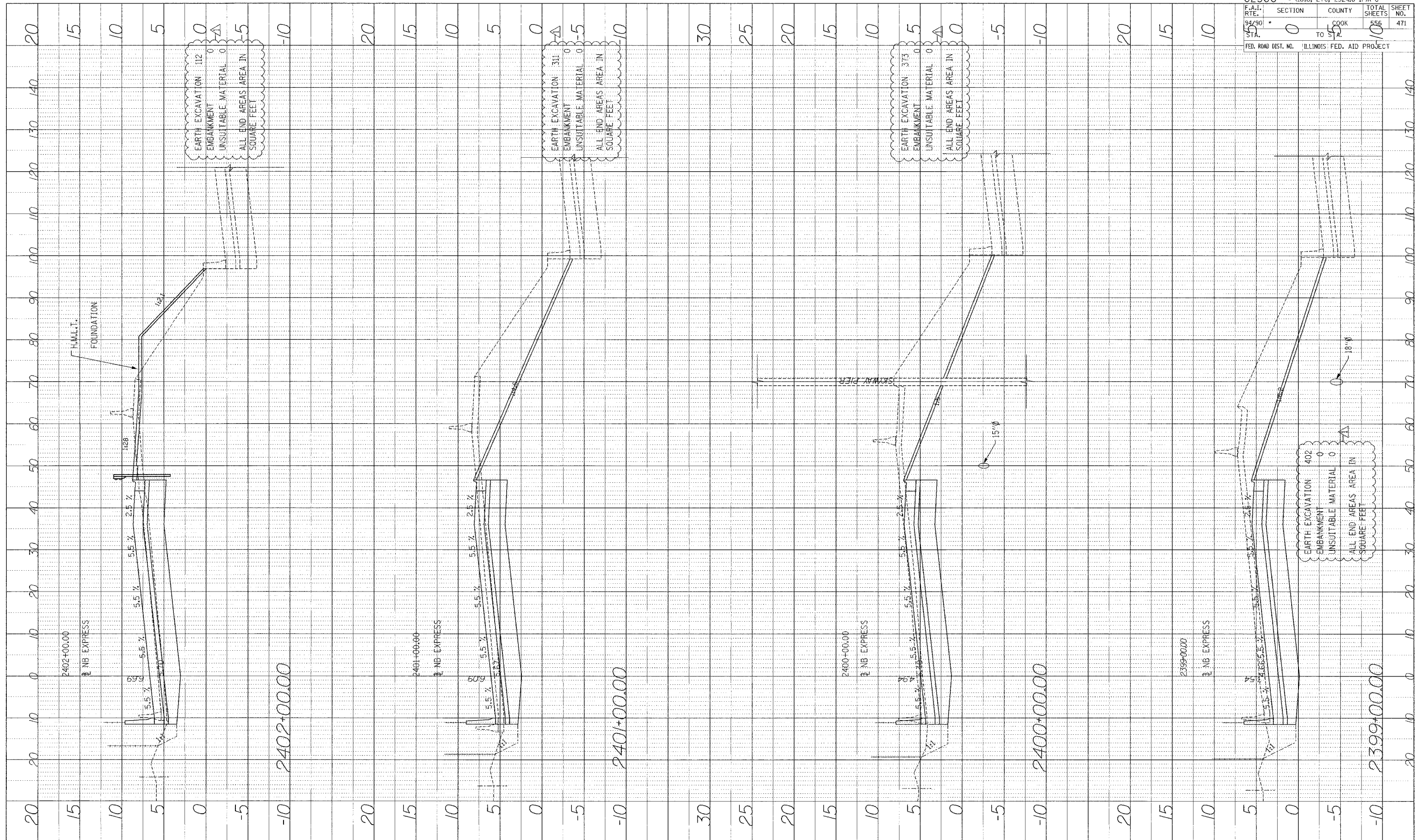
Edwards AND Kelcey
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 PHONE: (312) 251-3000
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 WEB: WWW.EDCORP.COM



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PROFILE SUBMITTED BY DATE
 PLOTTED BY
 NOTE BOOK NO. INCHES
 STRUCTURE NOTATING CHRD.



62300 • (1818, ETC, 2324.6-1P1R-8	
F.A.I. RTE. 94/90	SECTION 0
STA. 45	COUNTY COOK
	TOTAL SHEETS 556
	SHEET NO. 471
FED. ROAD DIST. NO. 'ILLINOIS' FED. AID PROJECT	

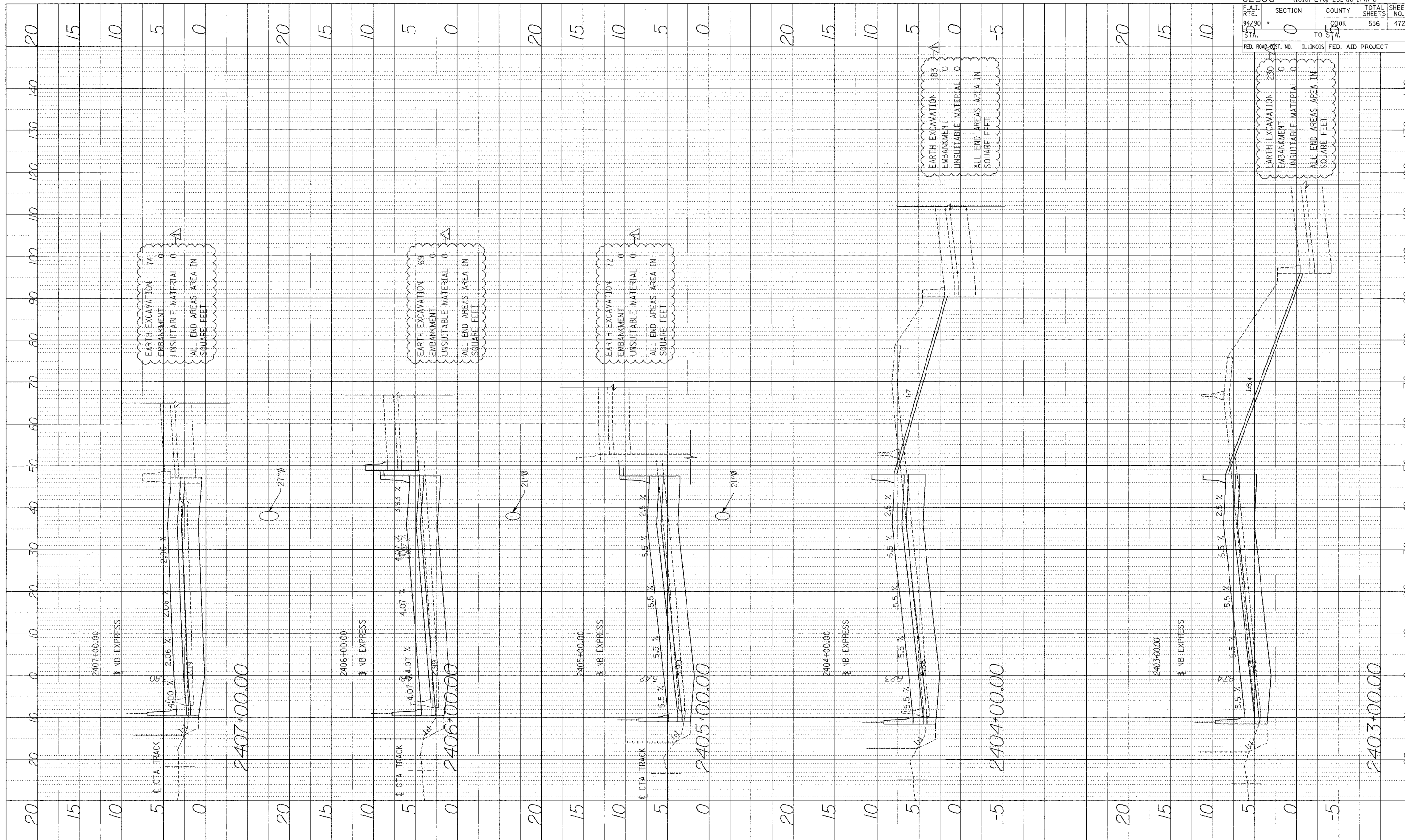
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



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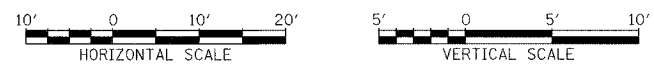
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 PLANNED BY
 NO. E. BOOK BY NOTES
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62300		• (1818, ETC, 2324.6-IPR-8	
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
94/30	0	COOK	556
DATA	TO STA.	ILLINOIS	FED. AID PROJECT

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 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

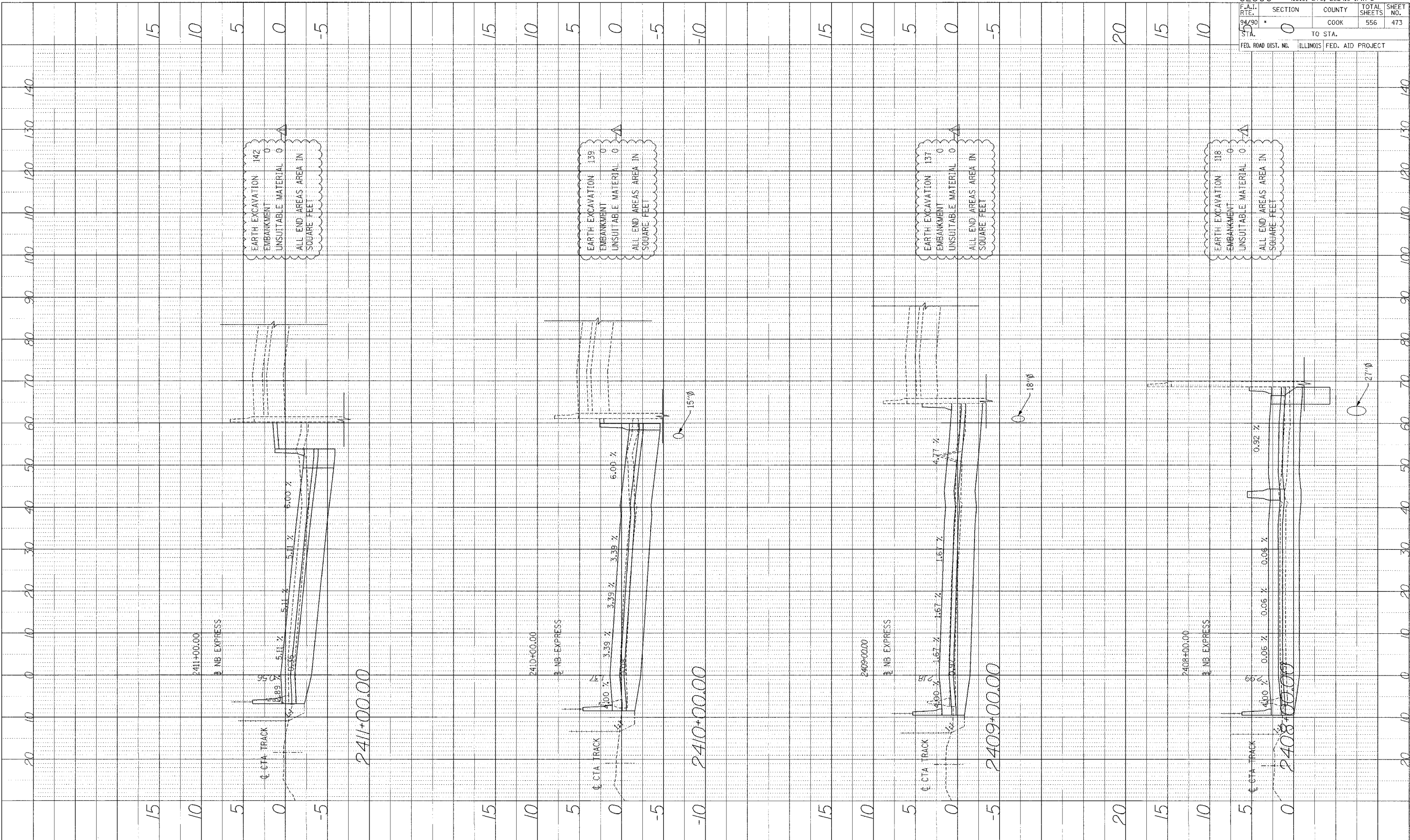


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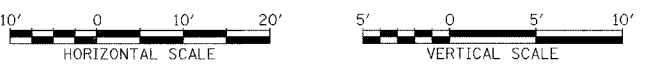
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F.A.I. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/30	0	COOK	556	473
STATE				
TO STA.		ILLINOIS FED. AID PROJECT		

PROJECT	BY	DATE
EXPANDED CITY OF CHICAGO METRORAIL STATIONARY STRUCTURE NO. _____		



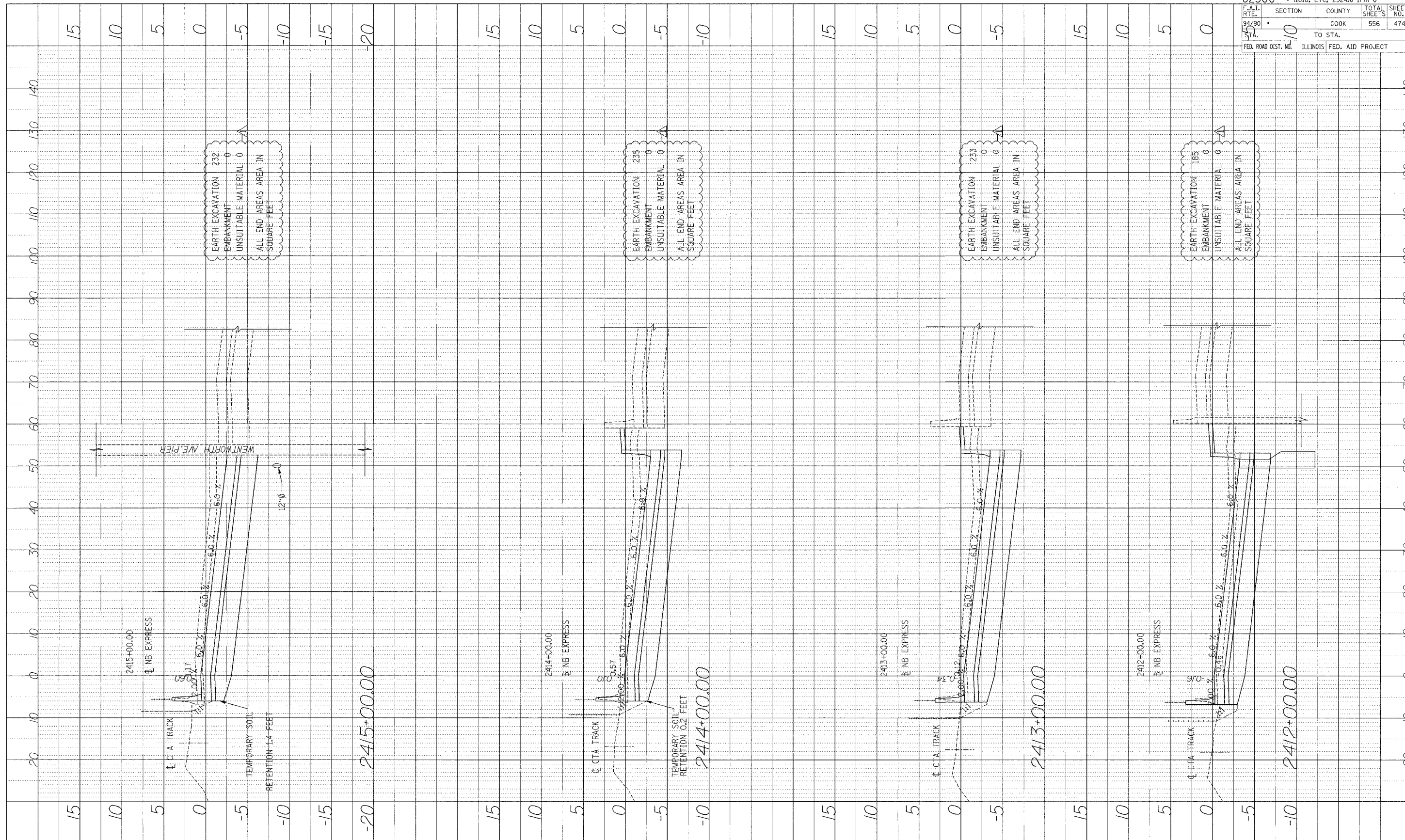
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



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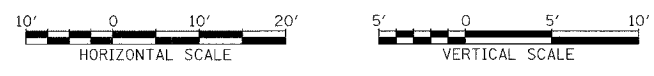
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PROFILE	REVISED	BY	DATE
NOTE BOOK	BY		
NO.			



62300	• (1818, ETC, 2324.6-1PR-8			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	10	COOK	556	474
TO STA.	ILLINOIS FED. AID PROJECT			
FED. ROAD DIST. NO.				

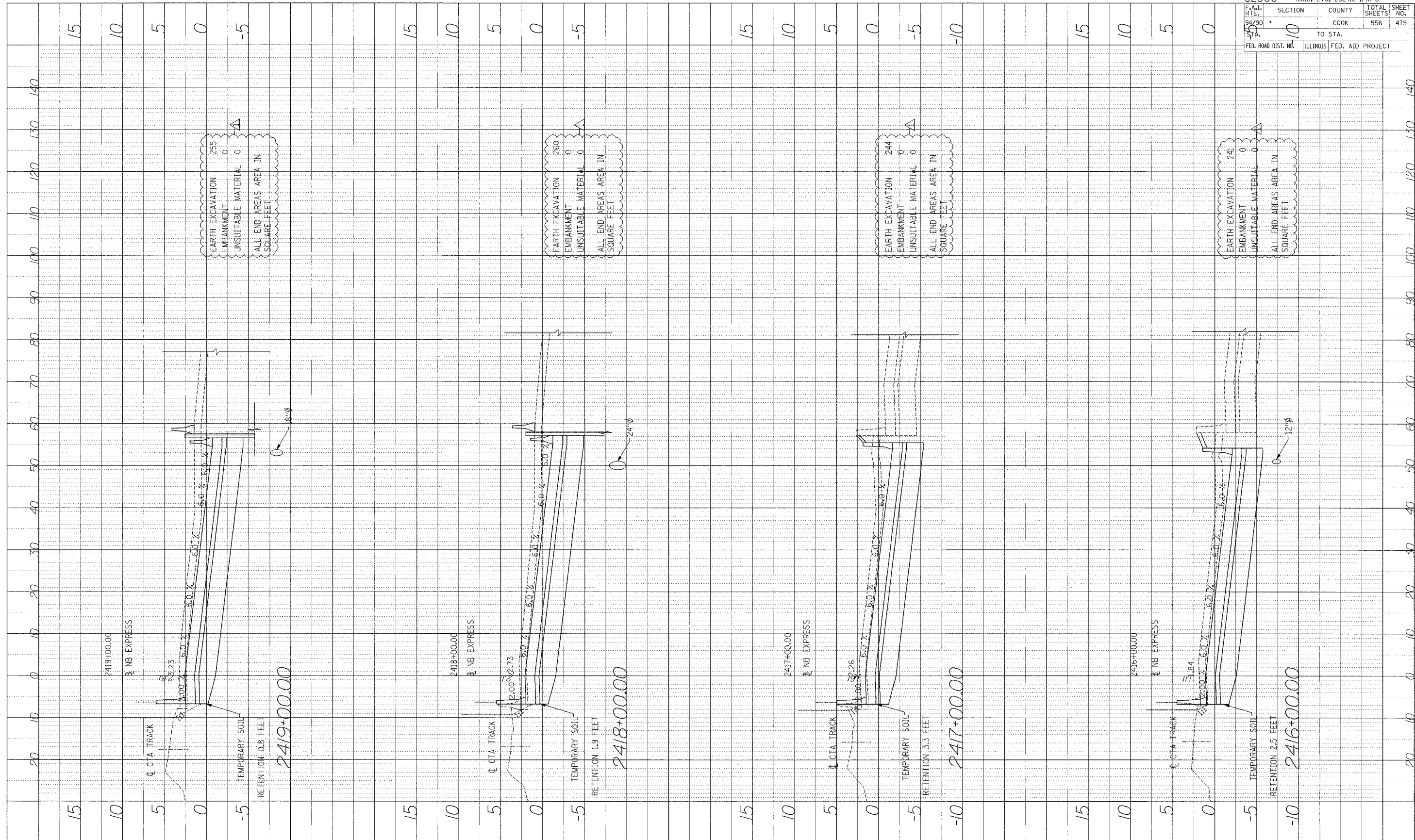
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
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 4/15/00 10:50 AM

PROJECT: SUBMITTED BY: DATE:
 NOTE BOOK: REVISIONS: DRAWING NO.:
 NO.: STRUCTURE: NOTES: OTHER:



62300 • (1818, ETC, 2324.6-IPR-8	
F.A.I. R.T.E. 99/90	SECTION 10
TO STA. 10	COUNTY COOK
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
TOTAL SHEETS 556	SHEET NO. 475

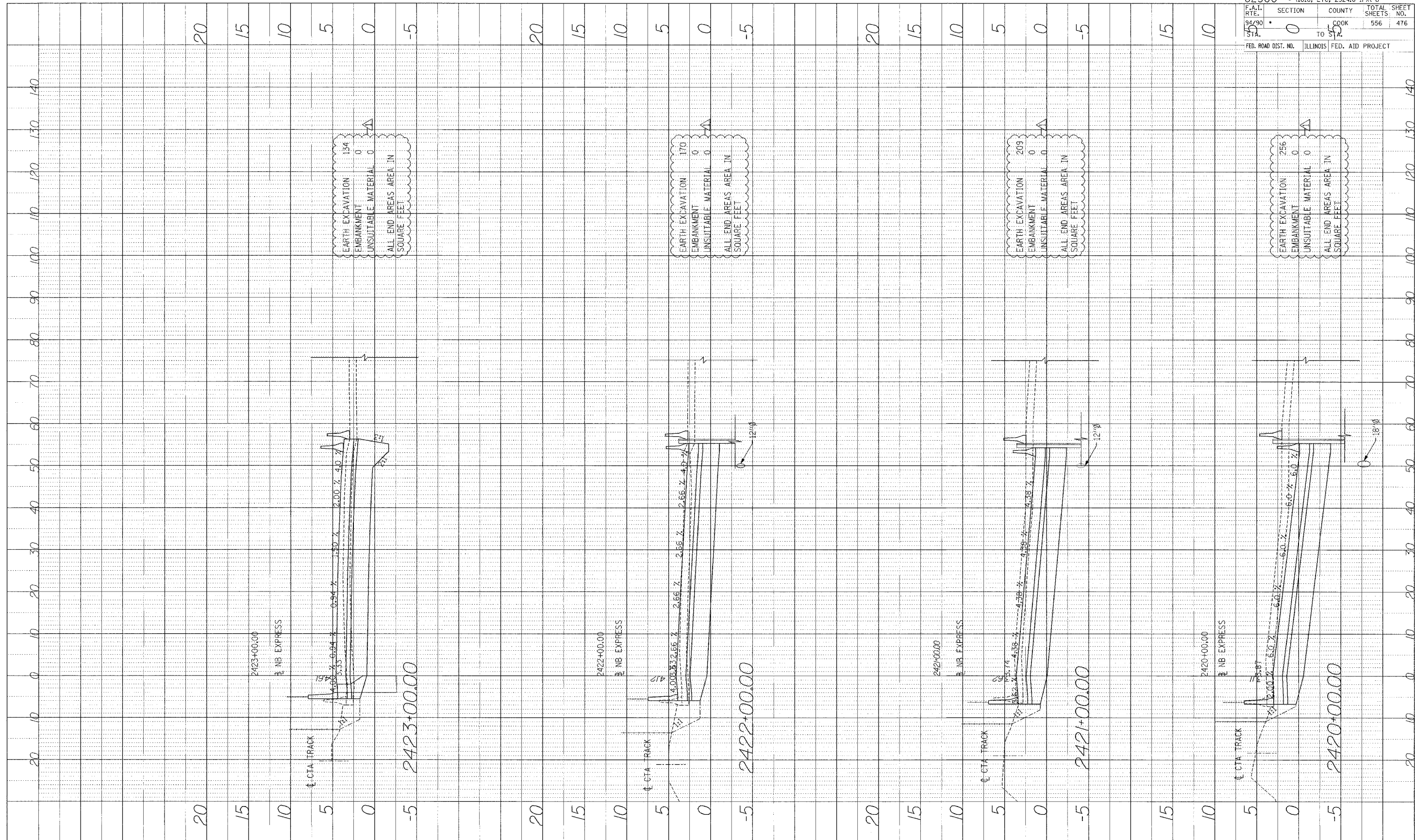
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



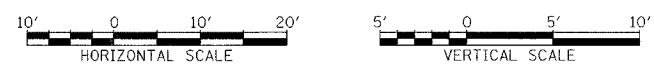
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PROF. I.E. DESIGNED BY: DATE:
 NO. F. BOOK NO. CHECKED BY: DATE:
 NO. STRUCTURE NOTATION: C/P/D



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 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

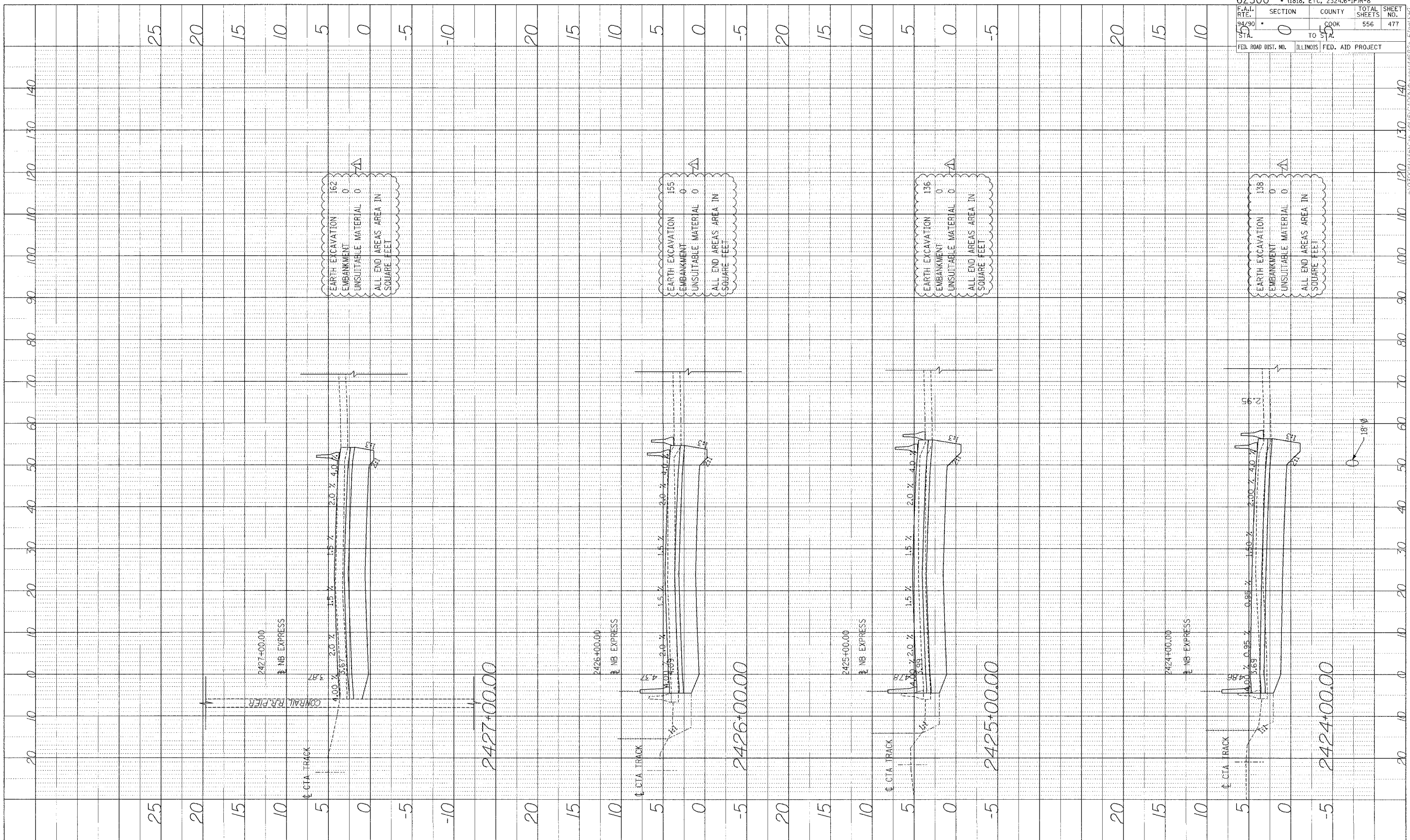


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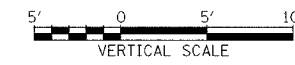
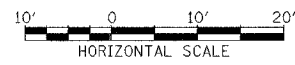
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STA. 54	TO 55	SHEETS 476	
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT	

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PROFILE BOOK NO. _____ DATE _____
 PROJECT NO. _____ BY _____
 TITLE _____
 DRAWN BY _____
 CHECKED BY _____
 DATE _____



Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

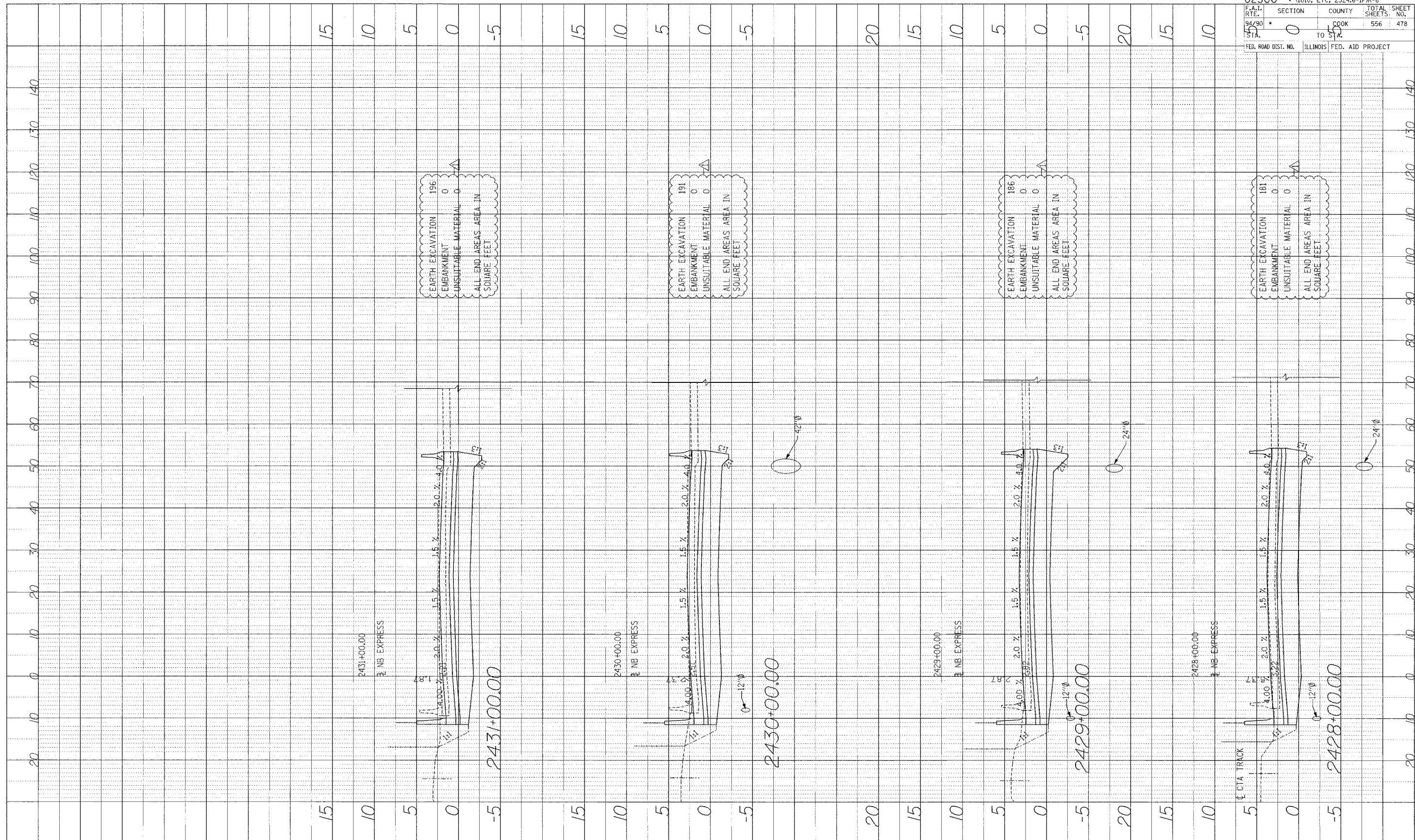


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62300 • (1818, ETC, 2324.6-1P)R-8	
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STA. 15	COUNTY COOK
	TOTAL SHEETS 556
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ILLINOIS FED. AID PROJECT	

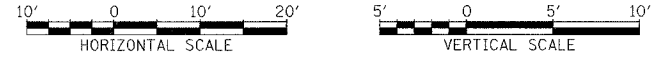
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PROFILE NUMBERED BY DATE
 NOTED BY DATE
 NO. STRUC. LIP. NOTATION OTHER



62300 • (1818, ETC, 2324.6-1PR-8
 F.A.I. SECTION COUNTY TOTAL SHEET
 RTE. 0 0 COOK 556 478
 STA. 50 TO STA. 55
 ILLINOIS FED. AID PROJECT

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

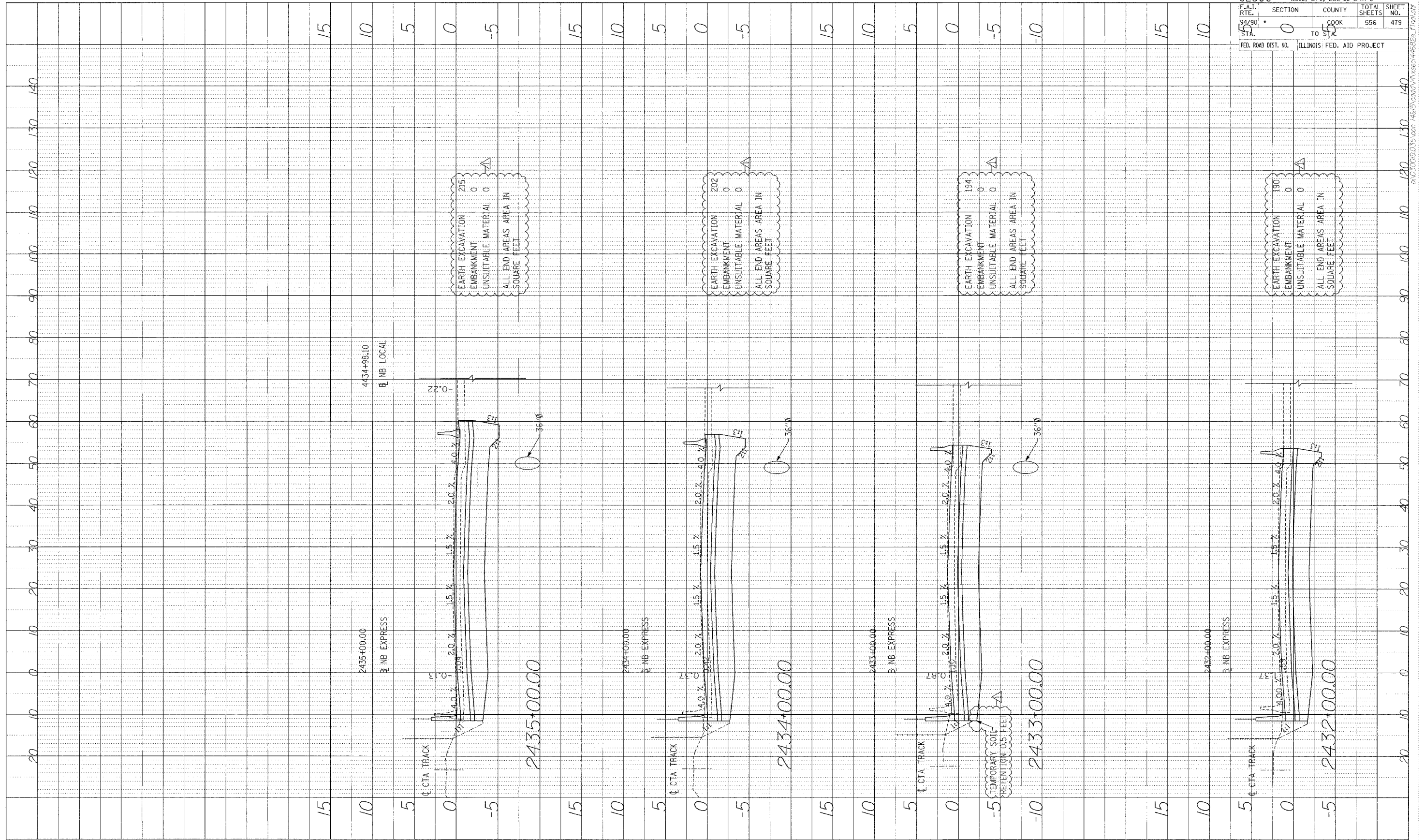


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PROJECT: ILE SUBURBS
 DRAWN BY:
 NO. 2 BOOK: ILE SUBURBS
 NO. 1: STRIKER NOTATION: CP10

F.A.I. RTE. 59	SECTION 0	COUNTY COOK	TOTAL SHEETS 556	SHEET NO. 479
FED. ROAD DIST. NO. 111			ILLINOIS FED. AID PROJECT	



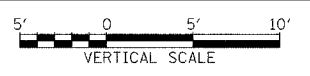
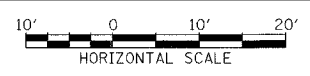
EARTH EXCAVATION 215
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 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

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 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 194
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

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 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

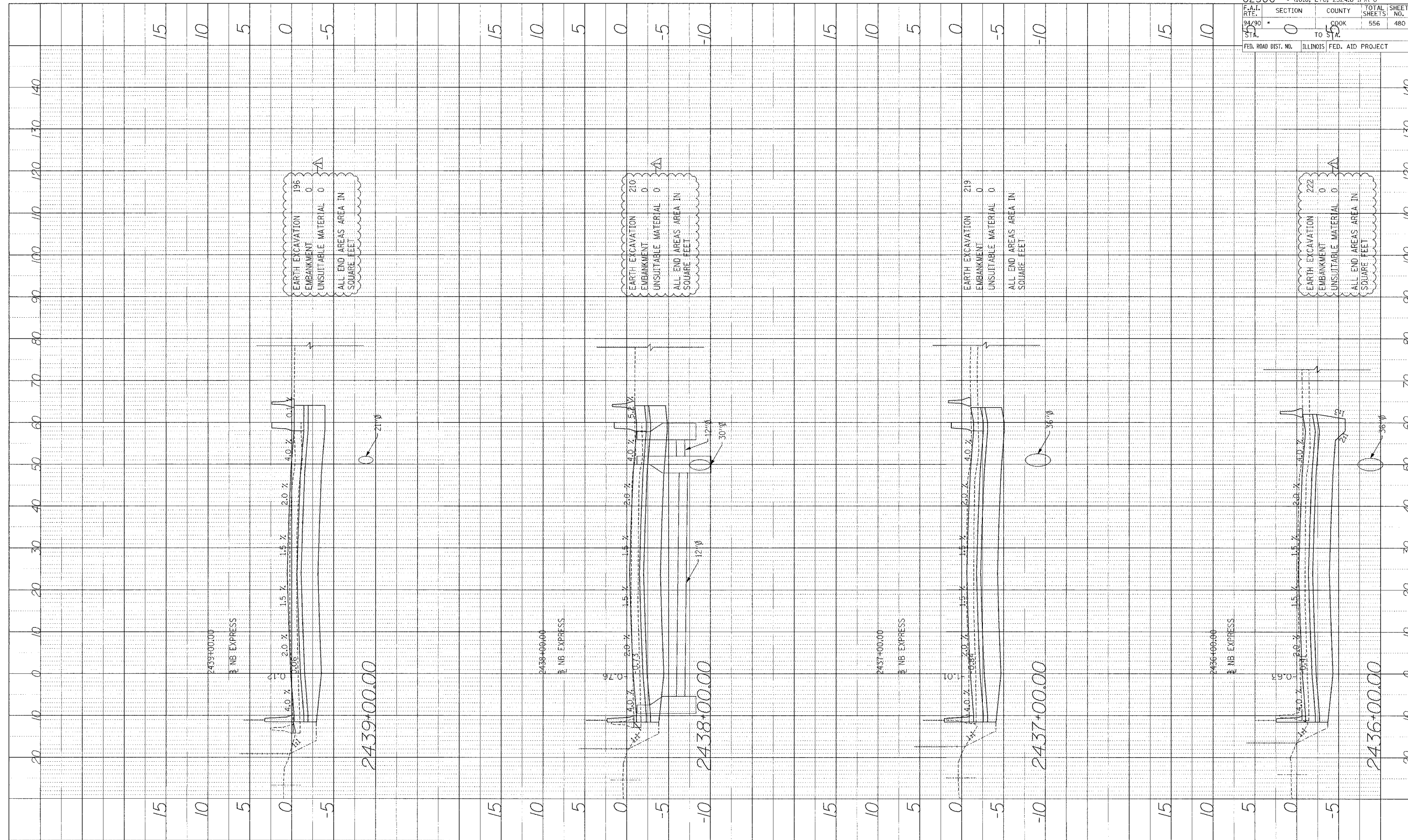
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

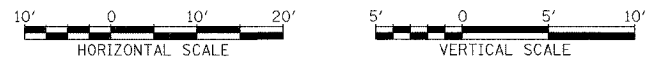
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PROFILE
 DRAWN BY: _____ DATE: _____
 CHECKED BY: _____
 NOTE BOOK NO.: _____
 STRUCTURE MATERIAL: _____



62300 • (1818, ETC. 2324.6-1P)R-8	
F.A.I. R.T.E. 94/90	SECTION 0
STA. 15	COUNTY COOK
	TOTAL SHEETS 556
	SHEET NO. 480
ILLINOIS FED. AID PROJECT	

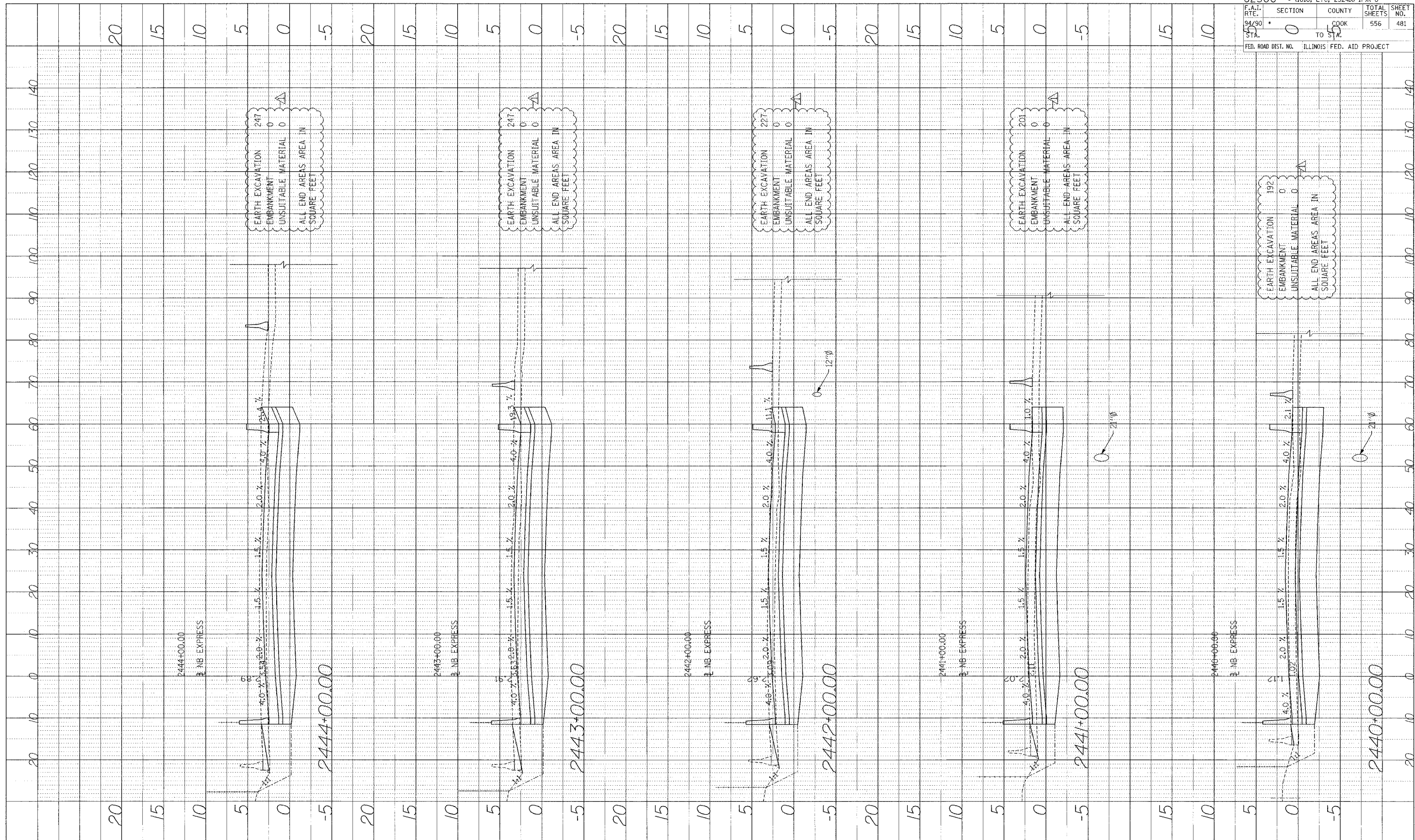
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

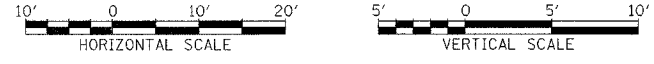
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 PLOTTED BY: _____
 CHECKED BY: _____
 DATE: _____
 STRUCTURE NO. _____



F.A.I. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	0	COOK	556	481
STA. 45	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

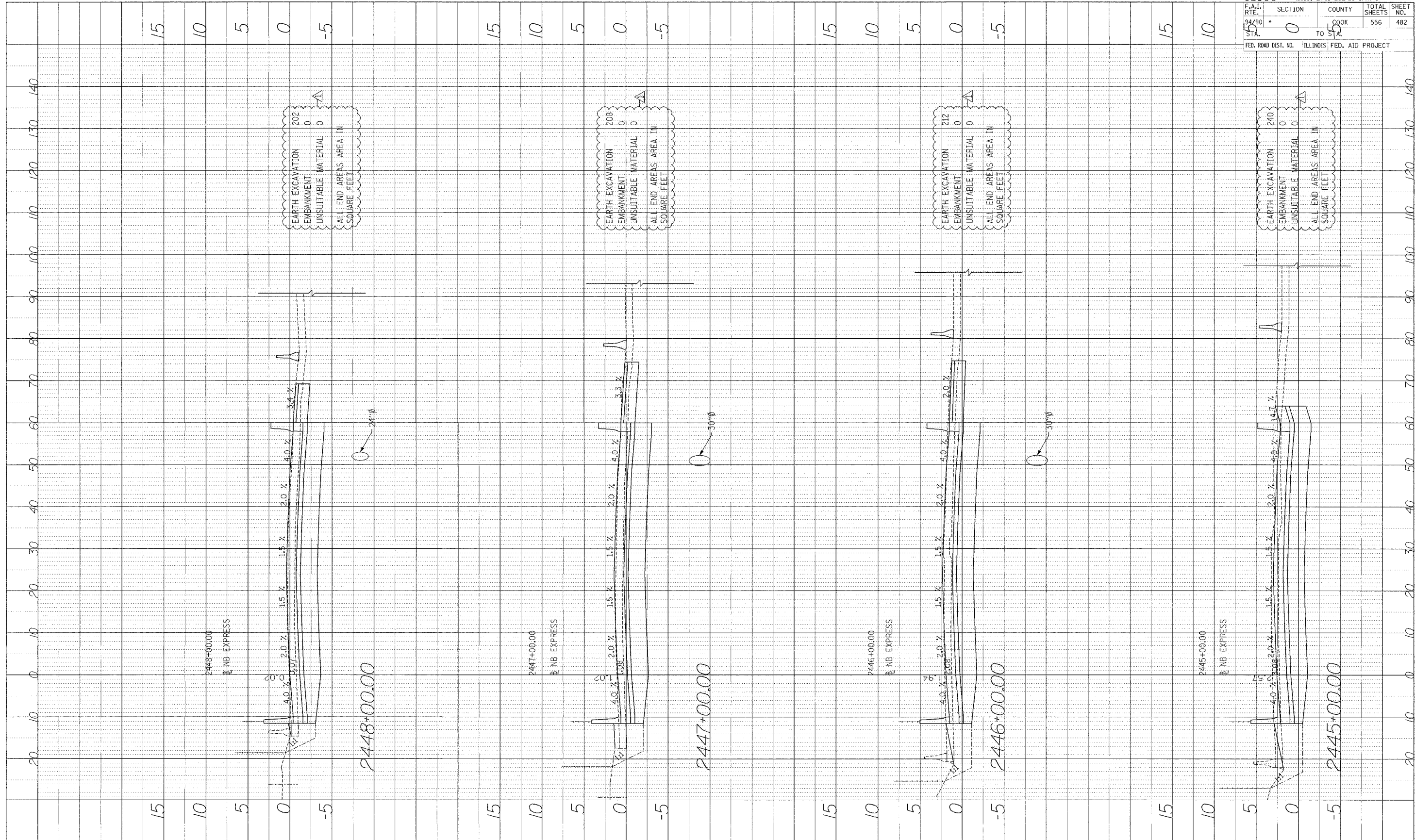
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-5000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

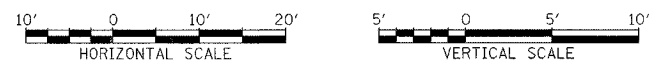
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PROFILE SUBMITTED BY DATE
 DRAWN BY
 CHECKED BY
 NOTE BOOK NO. DATE
 STRUCTURE NO. DATE



62300		• (1818, ETC, 2324.6-IPR-8	
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
94/90	0	COOK	556
STA.	TO STA.		SHEET NO.
			482
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	

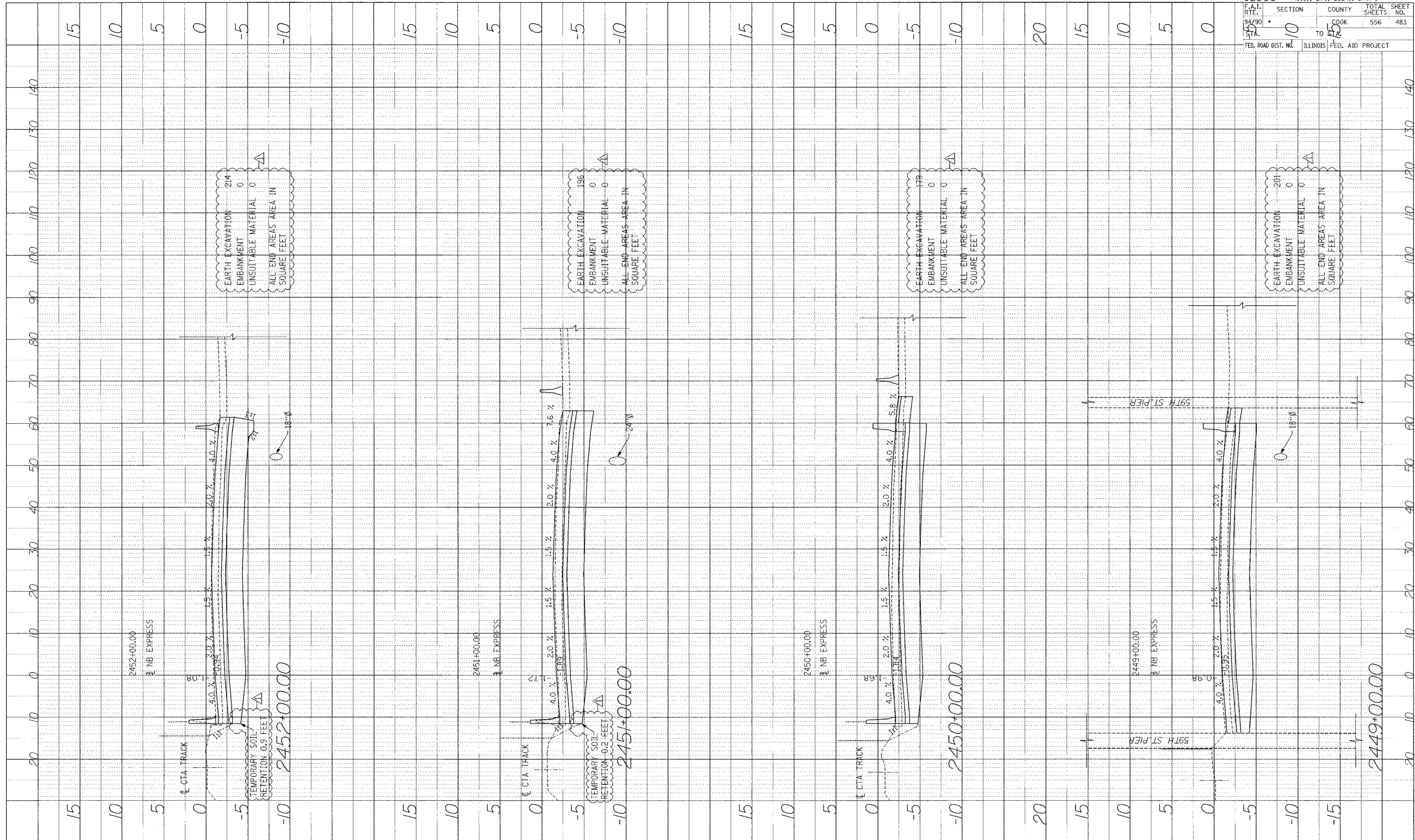
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

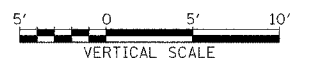
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PROFILE: Proposed
 DATE: 8/1
 NOTE BOOK: 100-100-100
 NO.: 100-100-100



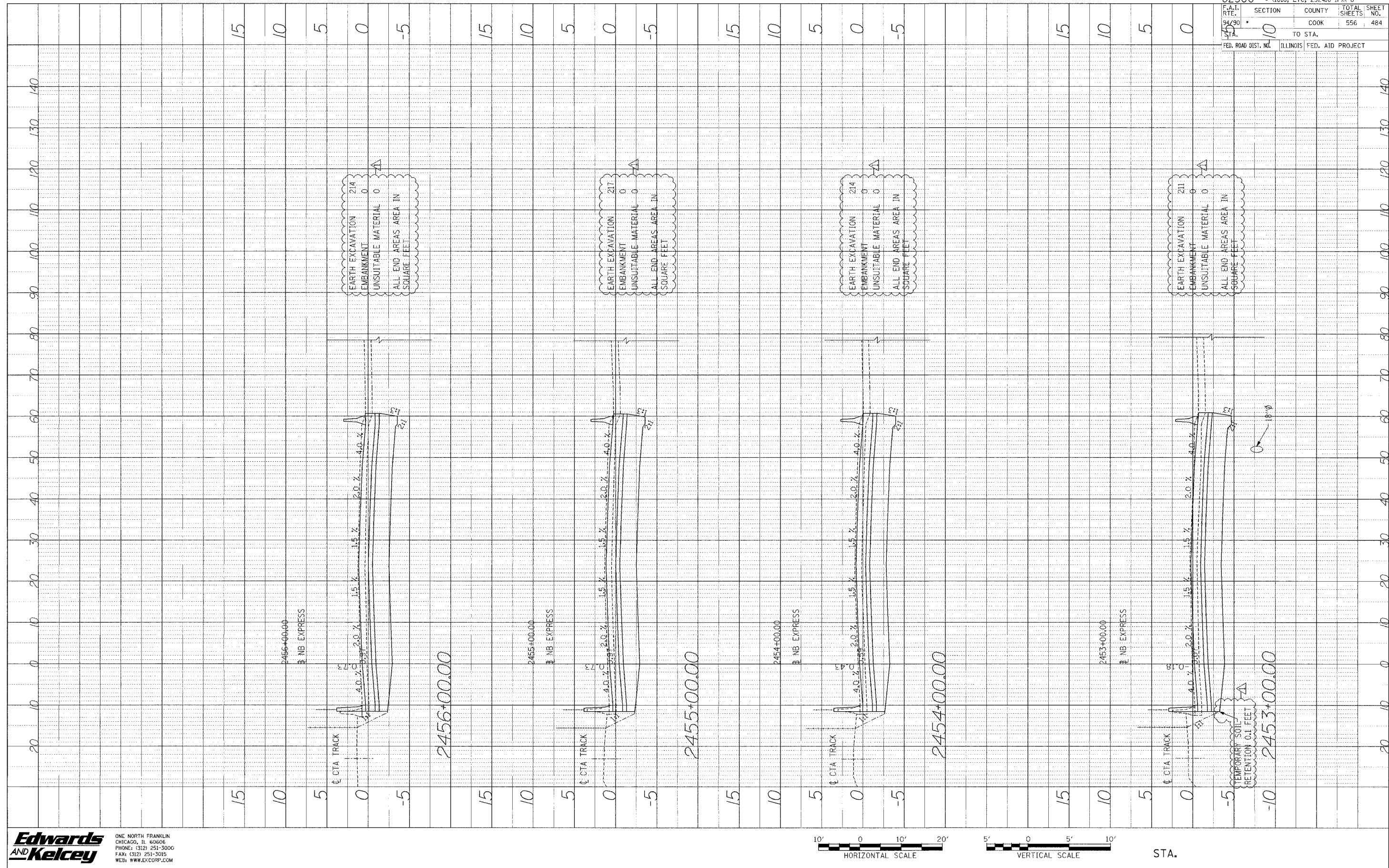
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F.A.I. RTE. 94/90	SECTION 10
TO STA. 10	COUNTY COOK
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
TOTAL SHEETS: 556	SHEET NO.: 483

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



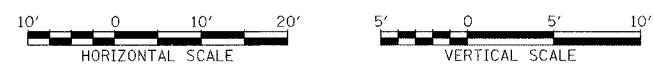
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PROFILE SUBMITTED BY DATE
 REVISIONS
 NOTE BOOK NO. CHECKED BY
 NO. STRUCTURE NO. DATE



62300 • (1818, ETC, 2324.6-IPR-8	
F.A.I. RTE. 94/90	SECTION 10
COUNTY COOK	TOTAL SHEETS 484
TO STA. 10	FED. AID PROJECT

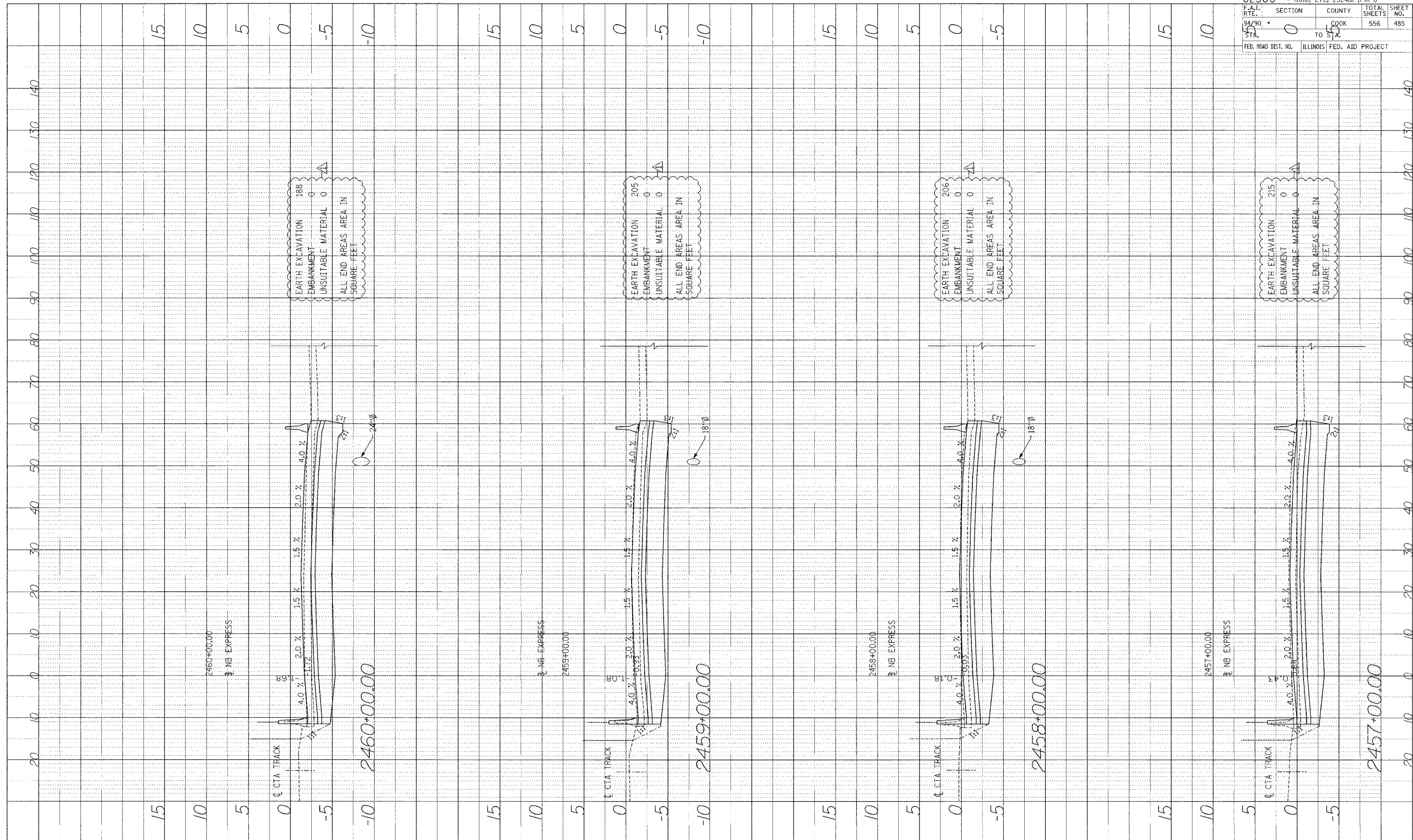
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EDCORP.COM



STA.

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PROFILE REVISIONS BY DATE
 NOTE BOOK NO. DATE REVISION
 NO. STRUCTURE NOTATION OTHER



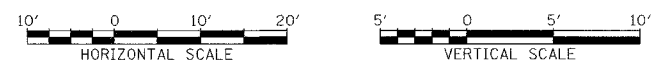
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 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

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 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 206
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 215
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

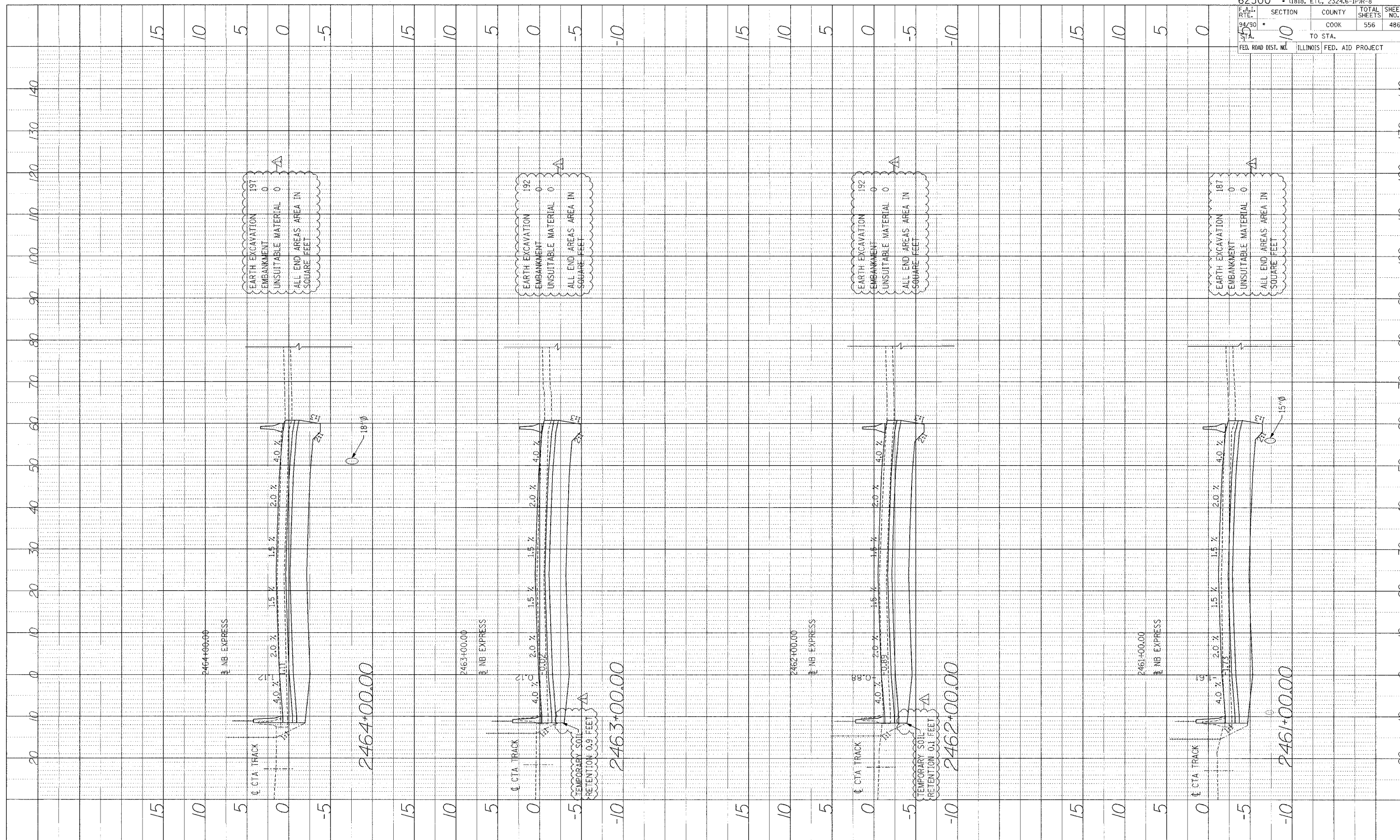


STA.

62300 • (1818, ETC, 2324.6-1)PR-8		TOTAL SHEETS 556		SHEET NO. 485	
F.A.I. RTE. 94/90	SECTION 0	COUNTY COOK			
STA. 15	TO STA. 15				
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT			

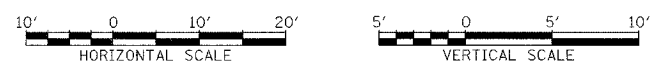
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PROFILE SUBMITTED BY DATE
 PLANTED BY
 NOTE BOOK NO. REVISIONS
 NO. STRUCTURE NO. DATE



62300 • (1818, ETC, 2324.6-IPR-8	
F.A.I. R.T.E. 94/90	SECTION COUNTY TOTAL SHEETS SHEET NO.
55	COOK 556 486
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
	TO STA. 140

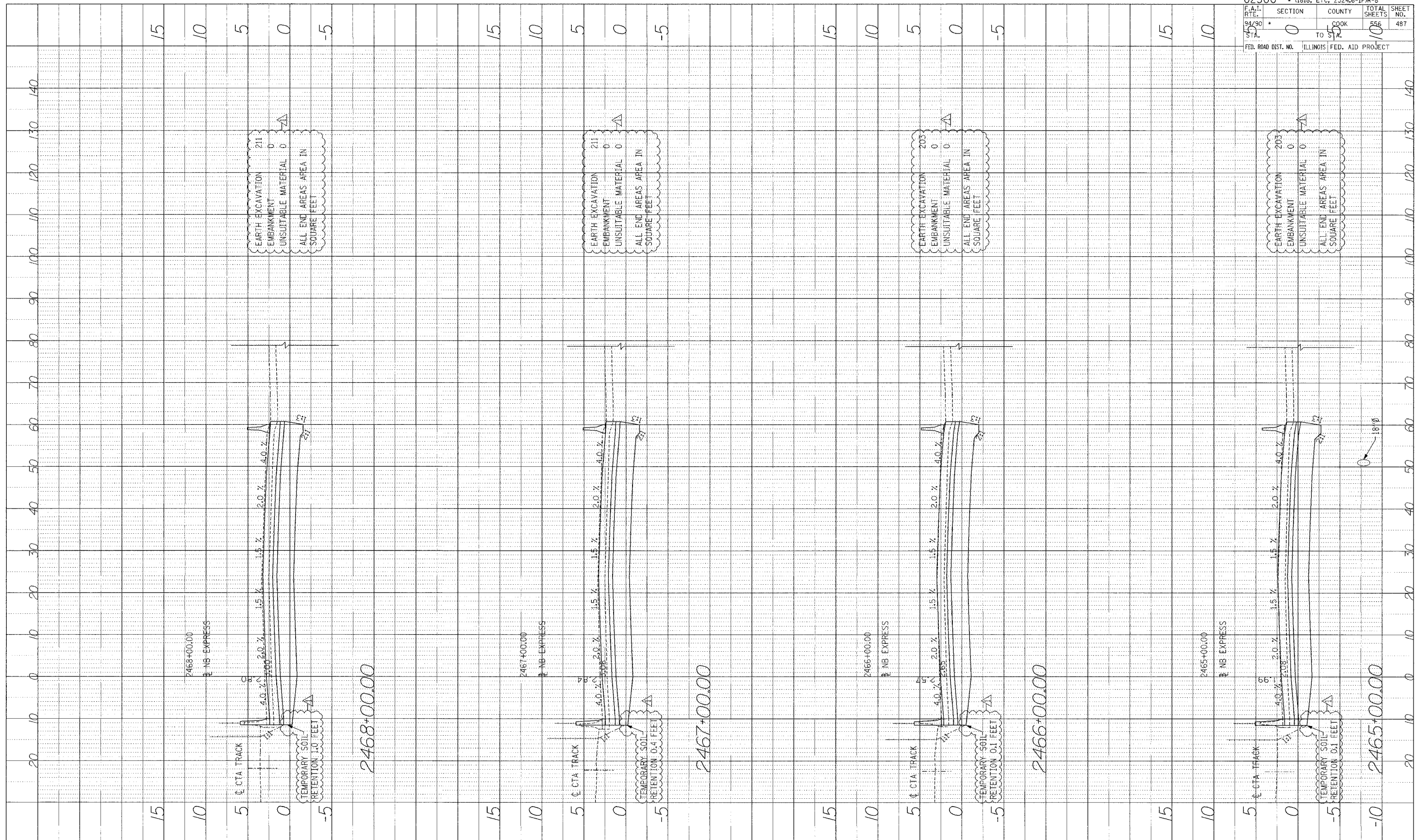
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

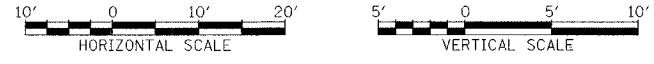
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PROFILE SUBMITTED BY _____ DATE _____
 CALCULATED BY _____ DATE _____
 NOTE BOOK NO. _____
 NO. _____ STRUCTURE NOTATION CHED _____



62300 • (1818, ETC, 2324, 6-IPR-8)	
F.A.I. RTE. 94/90	SECTION 0
STA. 55	COUNTY COOK
	TOTAL SHEETS 556
	SHEET NO. 487
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT

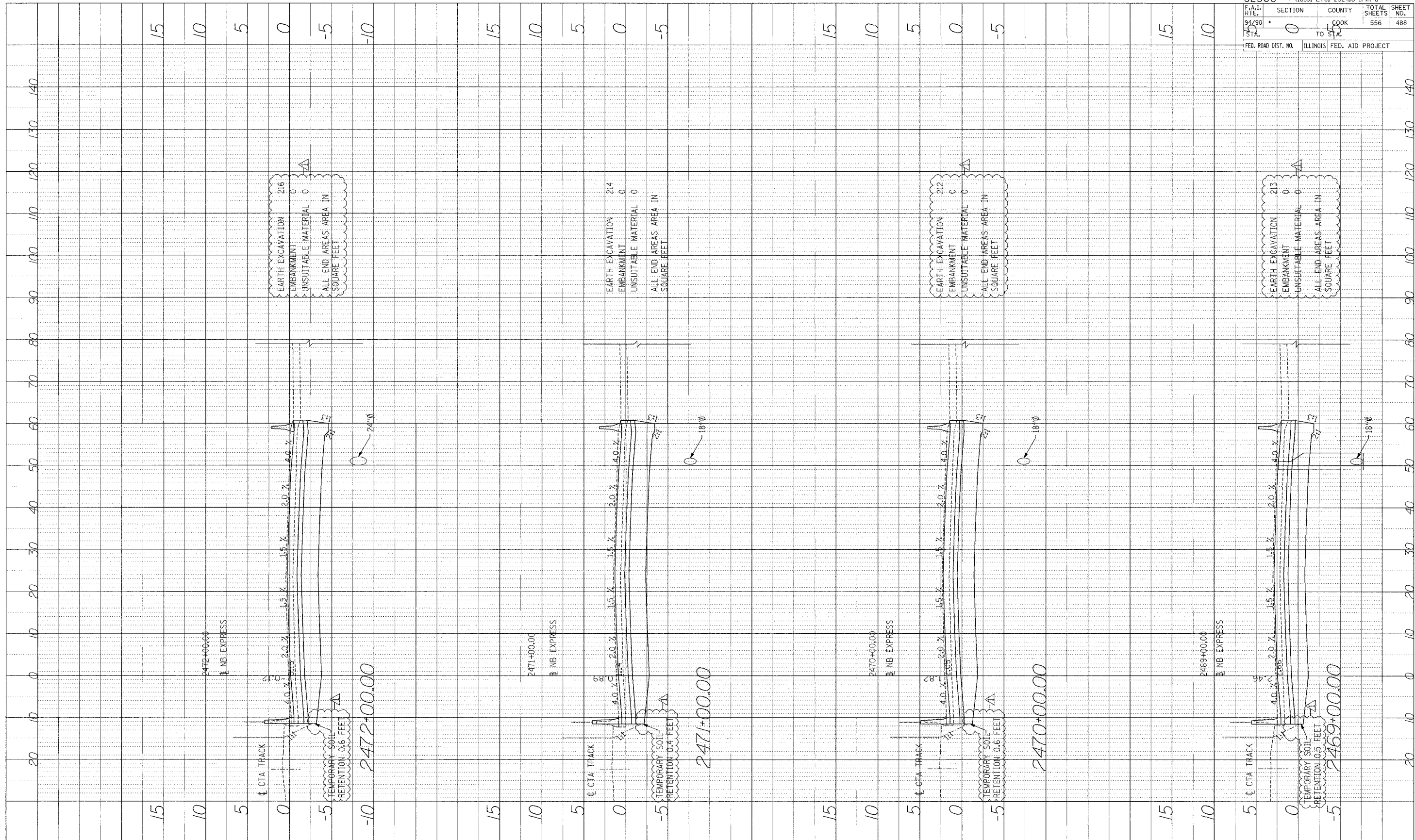
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

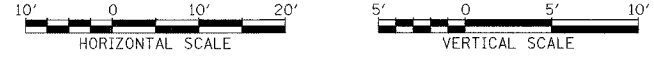
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PROFILE SURVEYED BY: DATE: _____
 PLOTTED BY: _____
 NOTE BOOK NO. _____
 STRUCTURE INTERFERENCE OFFICE NO. _____



62300 • (1818, ETC, 2324.6-1PR-8)
 F.A.I. SECTION COUNTY TOTAL SHEETS SHEET NO.
 94/90 * 0 COOK 556 488
 STA. TO STA.
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

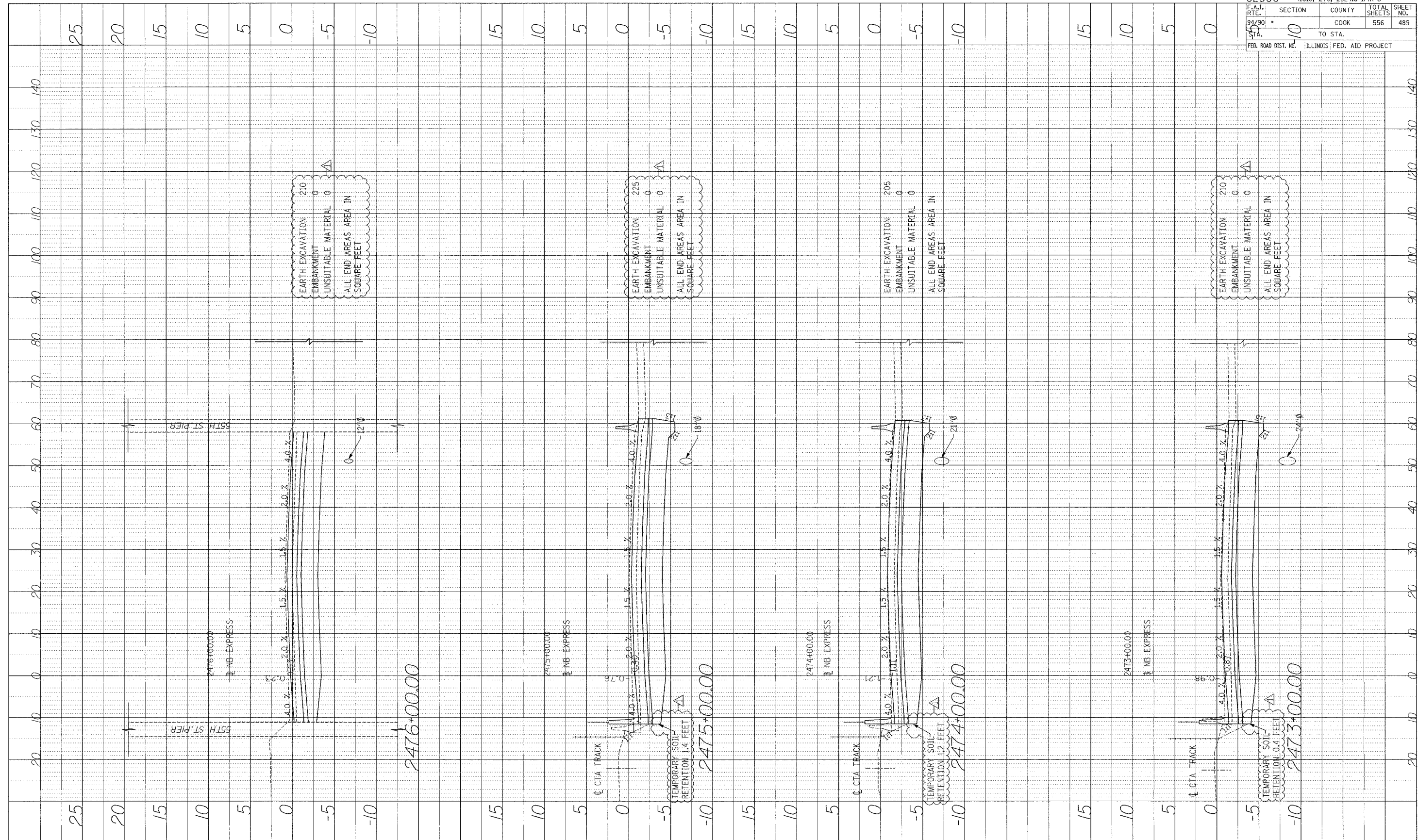
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3100
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



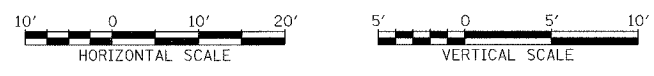
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PROFILE SHEET NO. DATE
 DRAWN BY
 CHECKED BY
 DATE
 NO. OF SHEETS
 STRUCTURE NO. (IF ANY)



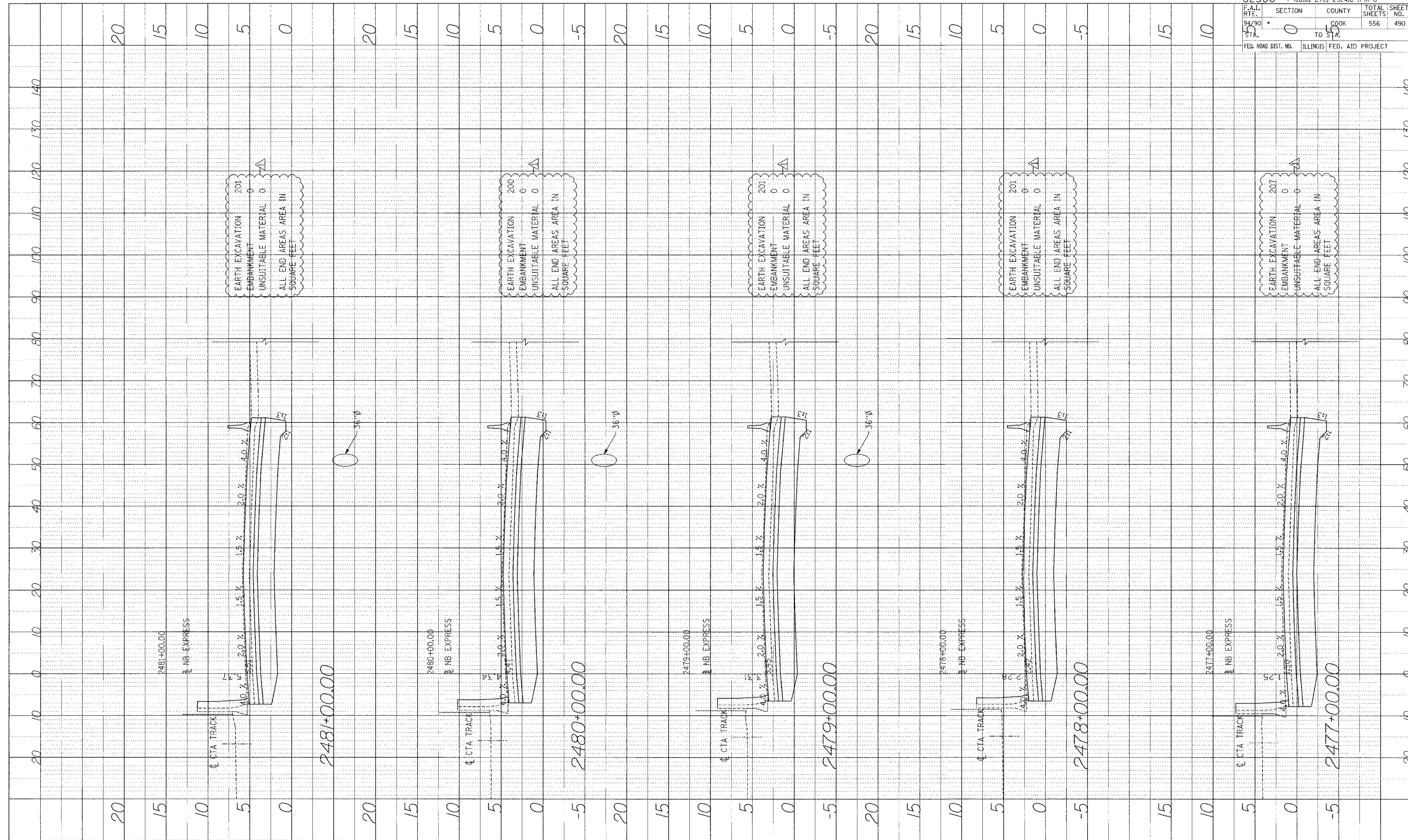
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

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PROFILE NUMBER: _____ BY: _____ DATE: _____
 DRAWING CHECKED: _____
 NOTE BOOK: _____
 NO. _____



EARTH EXCAVATION 201
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 200
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

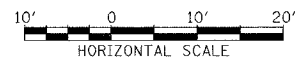
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 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 201
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 201
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET

62300 • (1818, ETC. 2324.6-1)PR-8	
F.A.I. R.T.E. 94/90	SECTION 0
COOK COUNTY	TOTAL SHEETS: 556
TO STA. 55	SHEET NO. 490
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

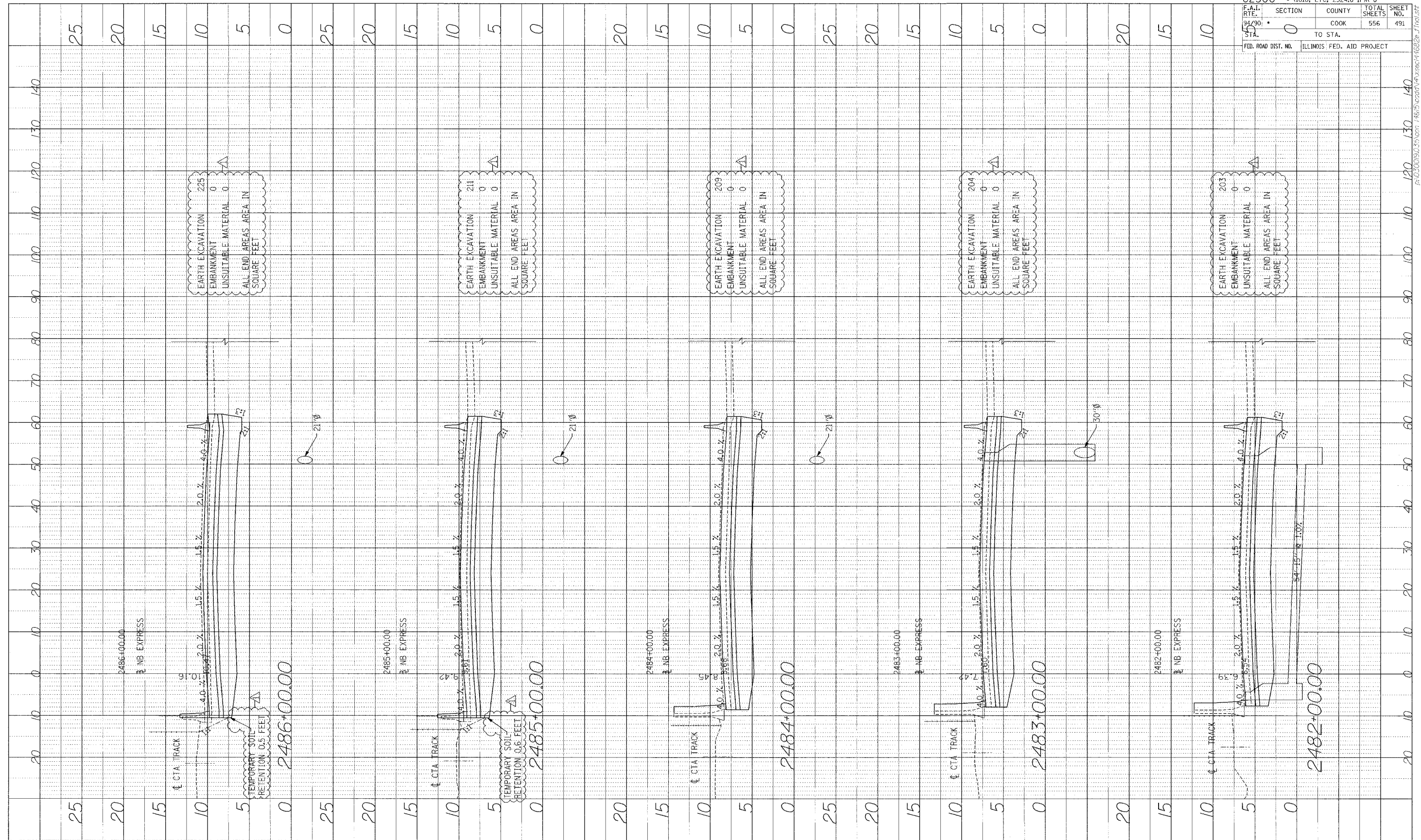
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

P:\03005035\Con H&S\ADDVA\Axe044682E_Trial.dwg

PROFILE NUMBER: _____ BY: _____ DATE: _____
 GRADES OBTAINED FROM: _____
 NOTE BOOK NO.: _____
 STRUCTURE INDICATIVE OF: _____



62300 • (1818, ETC, 2324.6-1)PR-8	
F.A.I. RTE. 94/90	SECTION 0
COOK	COUNTY 556
ILLINOIS FED. AID PROJECT	TOTAL SHEETS 491
FED. ROAD DIST. NO.	SHEET NO. 491

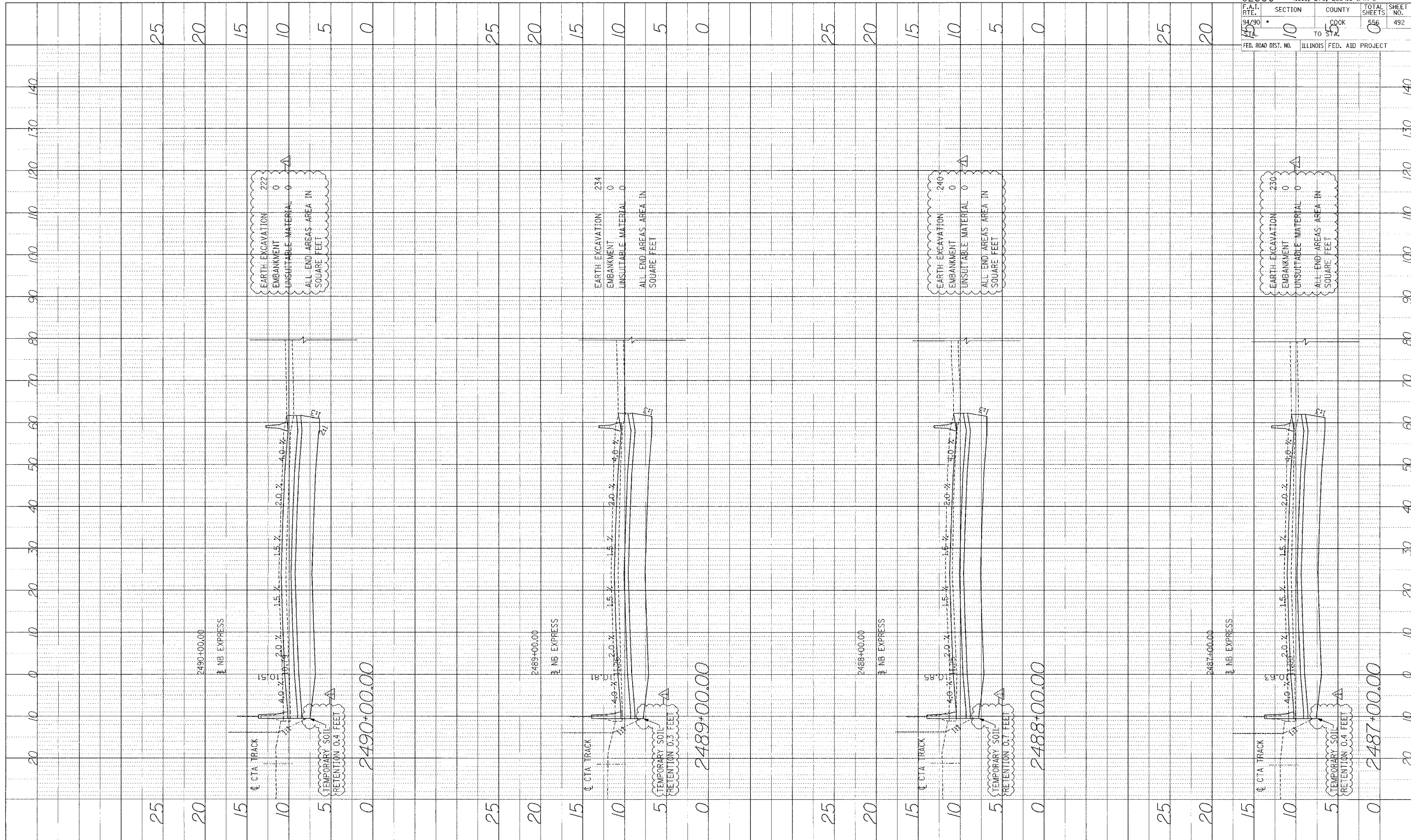
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



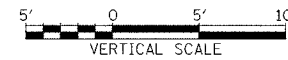
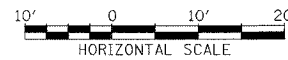
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PROFILE SURVEY
 PLOTTED
 NOTE BOOK
 NO.



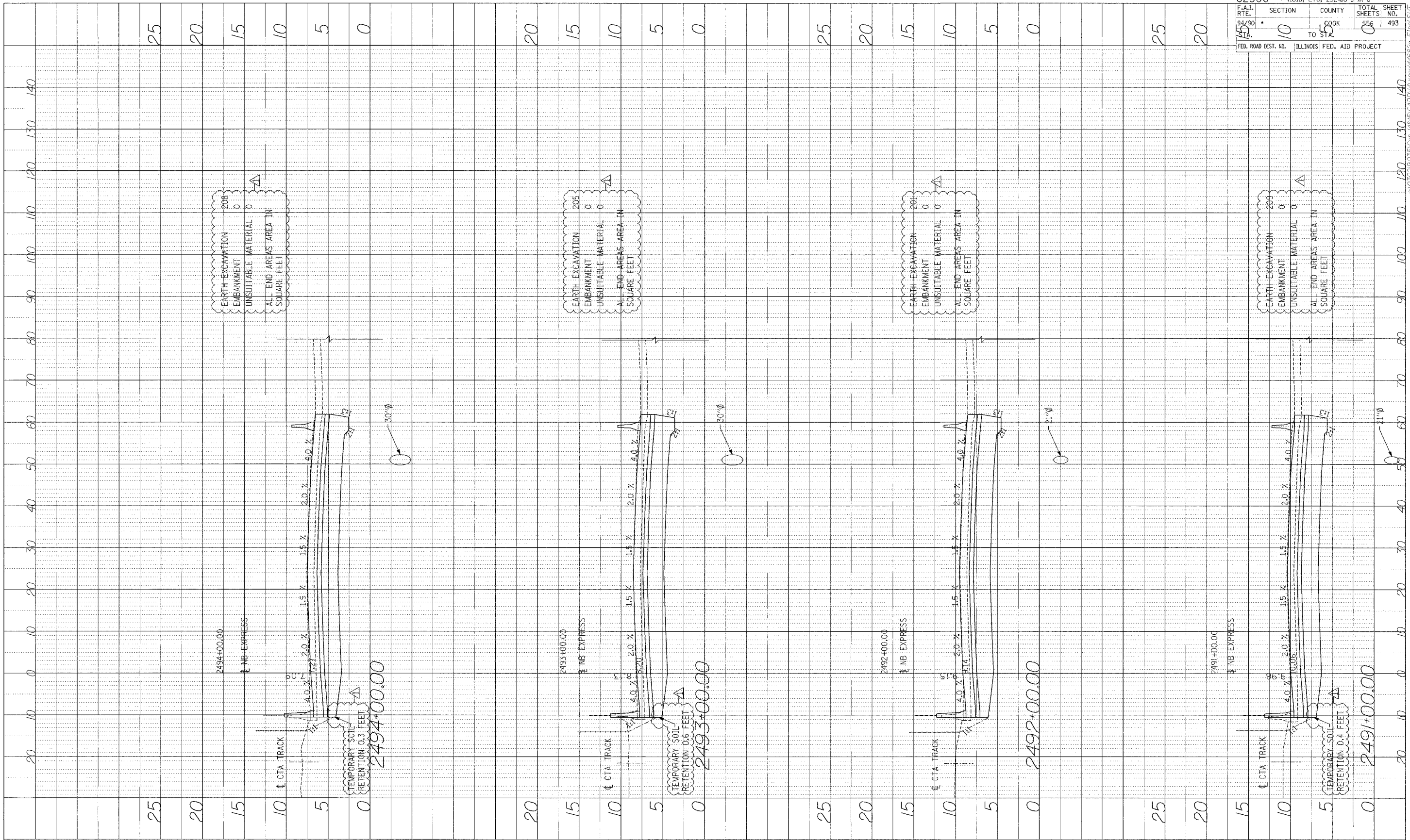
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-1000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

62300 • (1818, ETC, 2324,6-IPR-8)
 F.A.I. SECTION COUNTY TOTAL SHEETS SHEET NO.
 94/90 10 COOK 556 492
 15 TO STA. 5
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

PROFILE NUMBER: _____ BY: _____ DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 NOTE NO. _____
 STRUCTURE: _____



62300 • (1818, ETC, 2324.6-1)PR-8	
F.A.I. RTE. NO. 94/90	SECTION 10
TO STA. 55	COUNTY COOK
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
TOTAL SHEETS 556	SHEET NO. 493

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

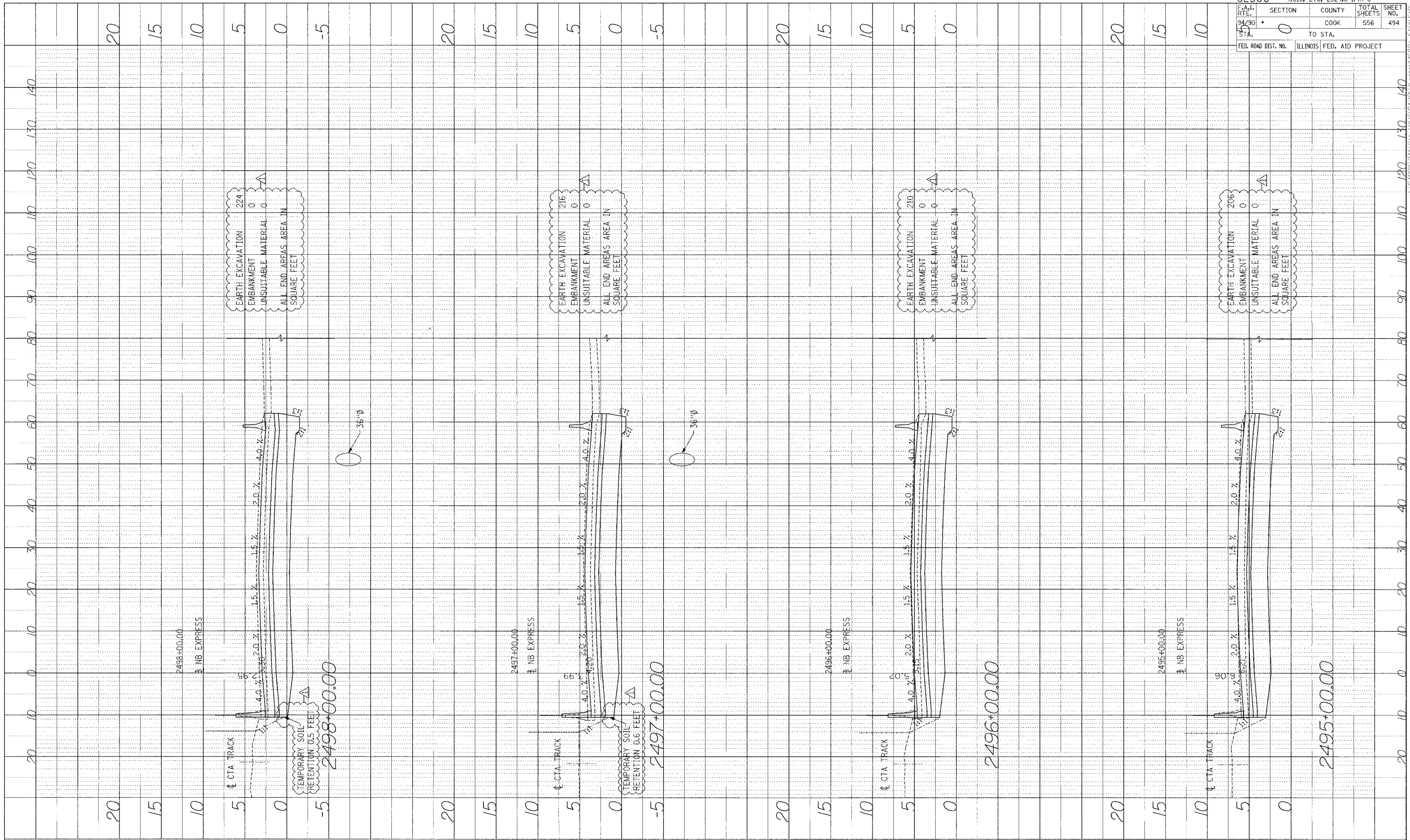


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62300		• (1818, ETC, 2324.6-1P)R-8	
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
94/90	0	COOK	556
CTA			494
	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

PROFILE SURVEYED BY DATE
 OFFICIAL CHECKER
 NO. BY DATE



EARTH EXCAVATION	224
EMBANKMENT	0
UNSUITABLE MATERIAL	0
ALL END AREAS AREA IN SQUARE FEET	0

EARTH EXCAVATION	216
EMBANKMENT	0
UNSUITABLE MATERIAL	0
ALL END AREAS AREA IN SQUARE FEET	0

EARTH EXCAVATION	210
EMBANKMENT	0
UNSUITABLE MATERIAL	0
ALL END AREAS AREA IN SQUARE FEET	0

EARTH EXCAVATION	206
EMBANKMENT	0
UNSUITABLE MATERIAL	0
ALL END AREAS AREA IN SQUARE FEET	0

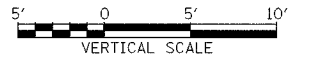
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TEMPORARY SOIL RETENTION 0.6 FEET
 2497+00.00

2496+00.00

2495+00.00

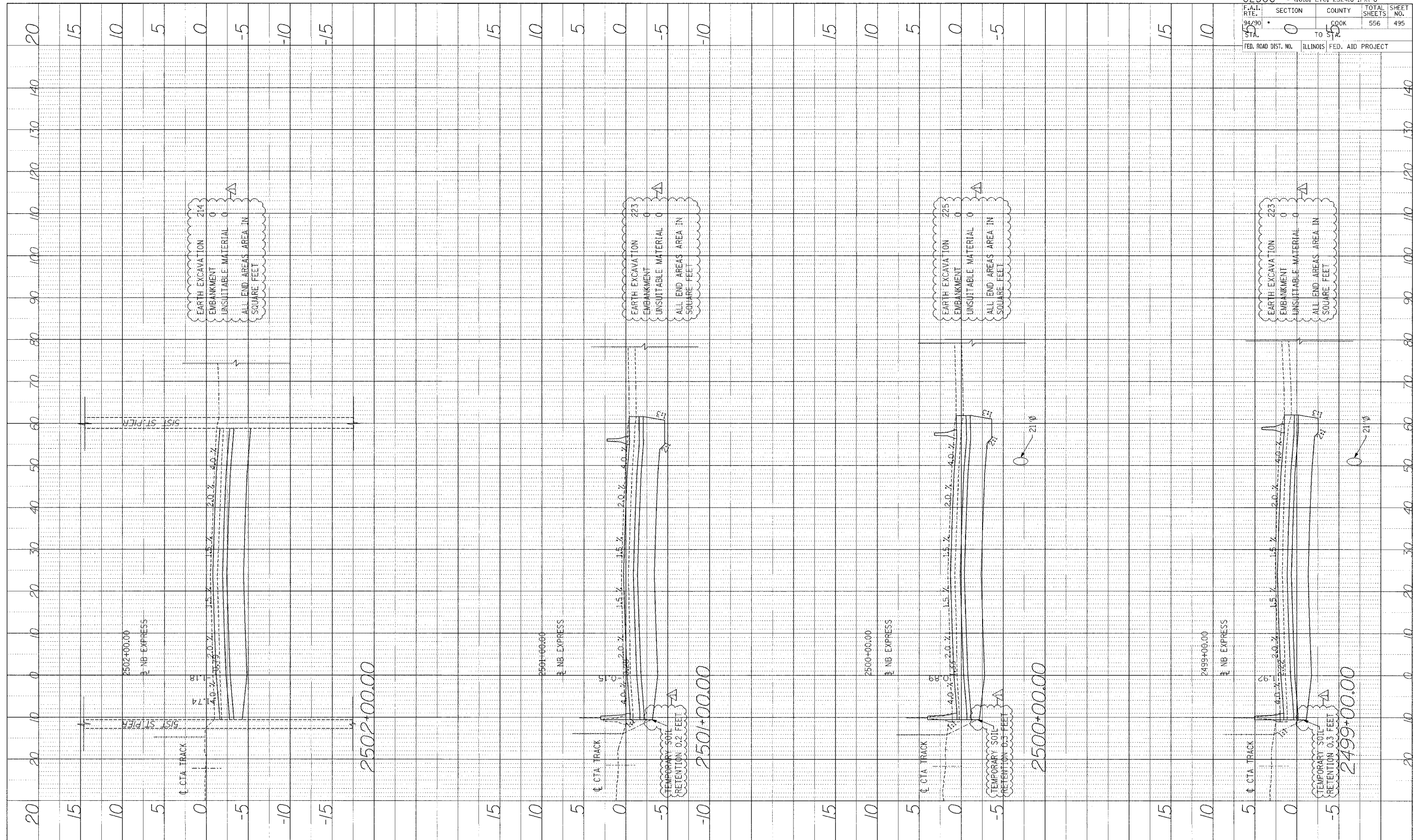
Edwards and Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

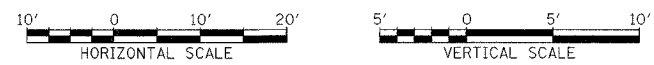
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PROFILE DESIGNED BY DATE
 NOTED BY
 NO. OF BOOKS BY
 NO. OF SHEETS BY
 NO. OF STRUCTURE RETAINING WALLS



62300	(1818, ETC, 2324.6-1PR-8)
F.A.I. R.T.E. STA. 94+90	SECTION 0 TO 5+0
COUNTY COOK	TOTAL SHEETS 556
FED. ROAD DIST. NO. ILLINOIS	SHEET NO. 495
FED. AID PROJECT	

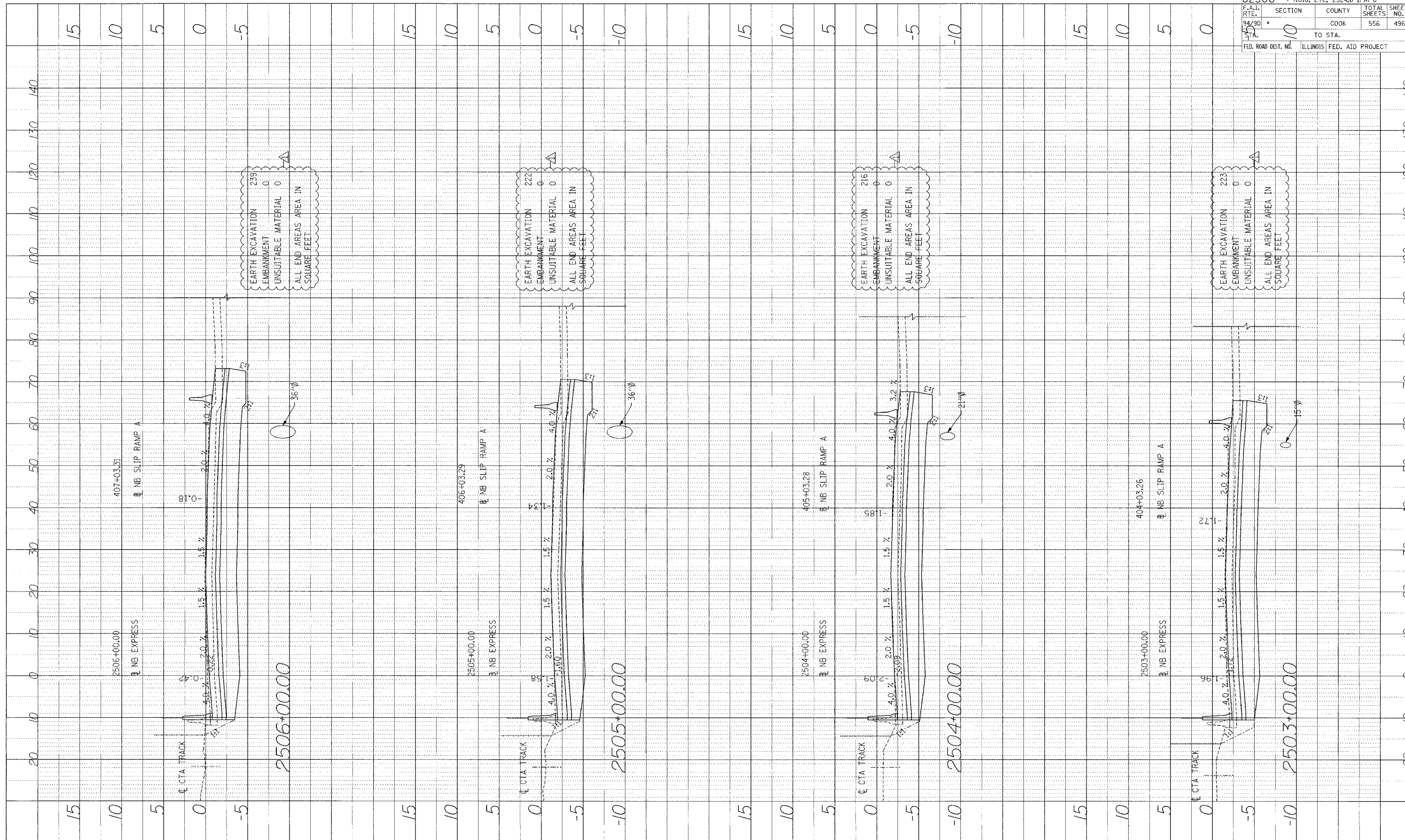
Edwards AND Kelcey
 ONE NORTH FRANKLIN CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

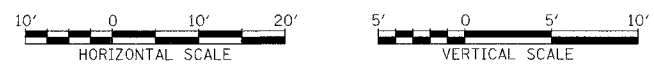
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PROFILE NUMBERED BY DATE
 FACILITY PROJECT
 NOTE BOOK BAL NUMBER
 NO. STRUCTURE RETAINING CURB



62300	(1818, ETC, 2324,6-IPR-8
F.A.I. RTE. 94/30	SECTION 10
COUNTY COOK	TOTAL SHEETS 556
TO STA.	SHEET NO. 496
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

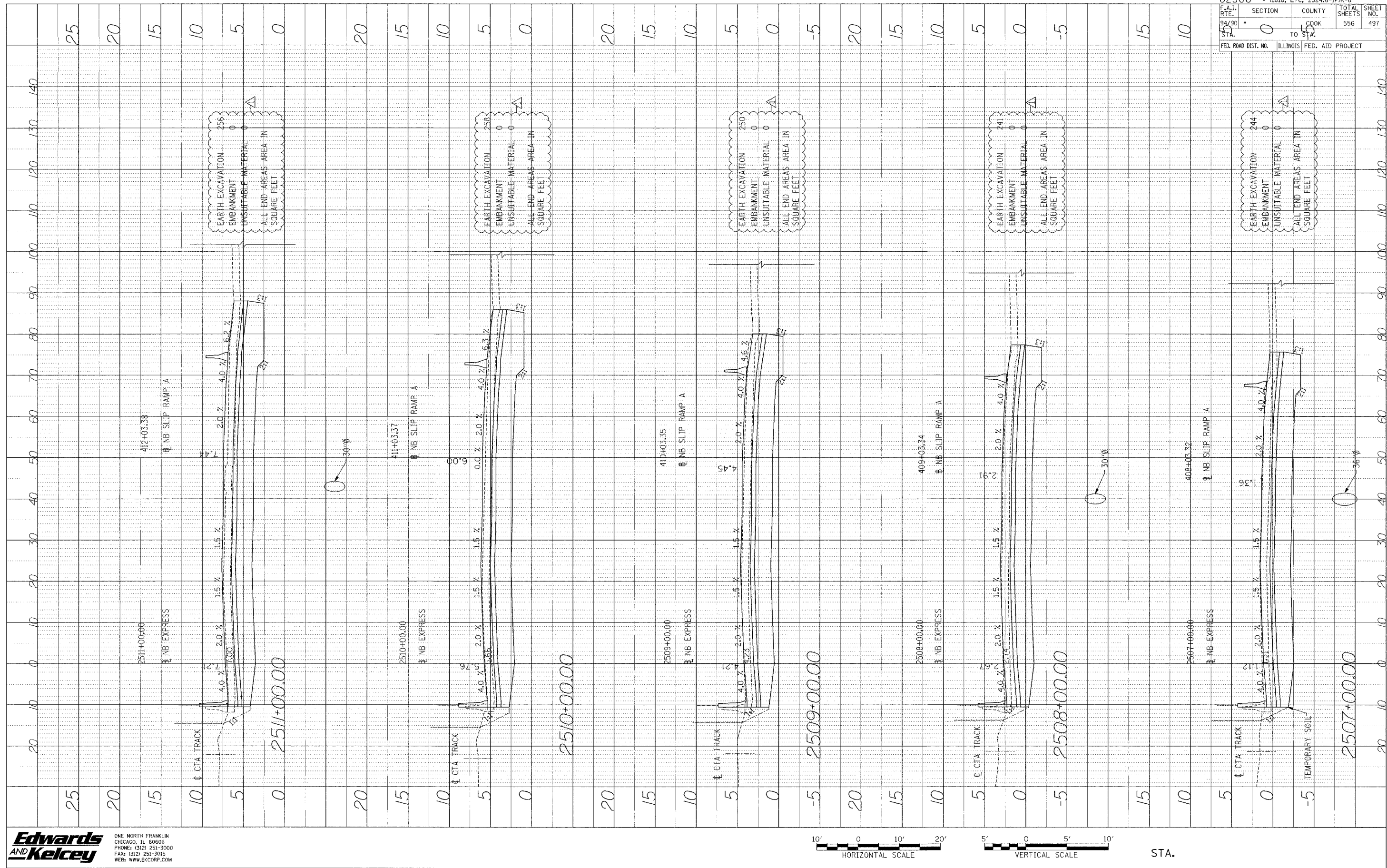
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

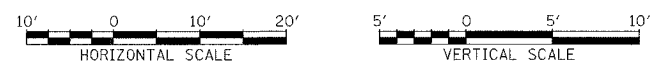
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PROFILE SURVEY BY: DATE:
 ACTE BODY: P. OLITO
 NO. : 10110
 STRUCTURE: NB EXPRESS
 NO. : 10110



62300 • (1818, ETC, 2324, 6-1PR-8)		TOTAL SHEETS		SHEET NO.	
F.A.I. R.T.E.	SECTION	COUNTY	556	497	
94/90	0	COOK			
STA.	TO STA.	FED. AID PROJECT			

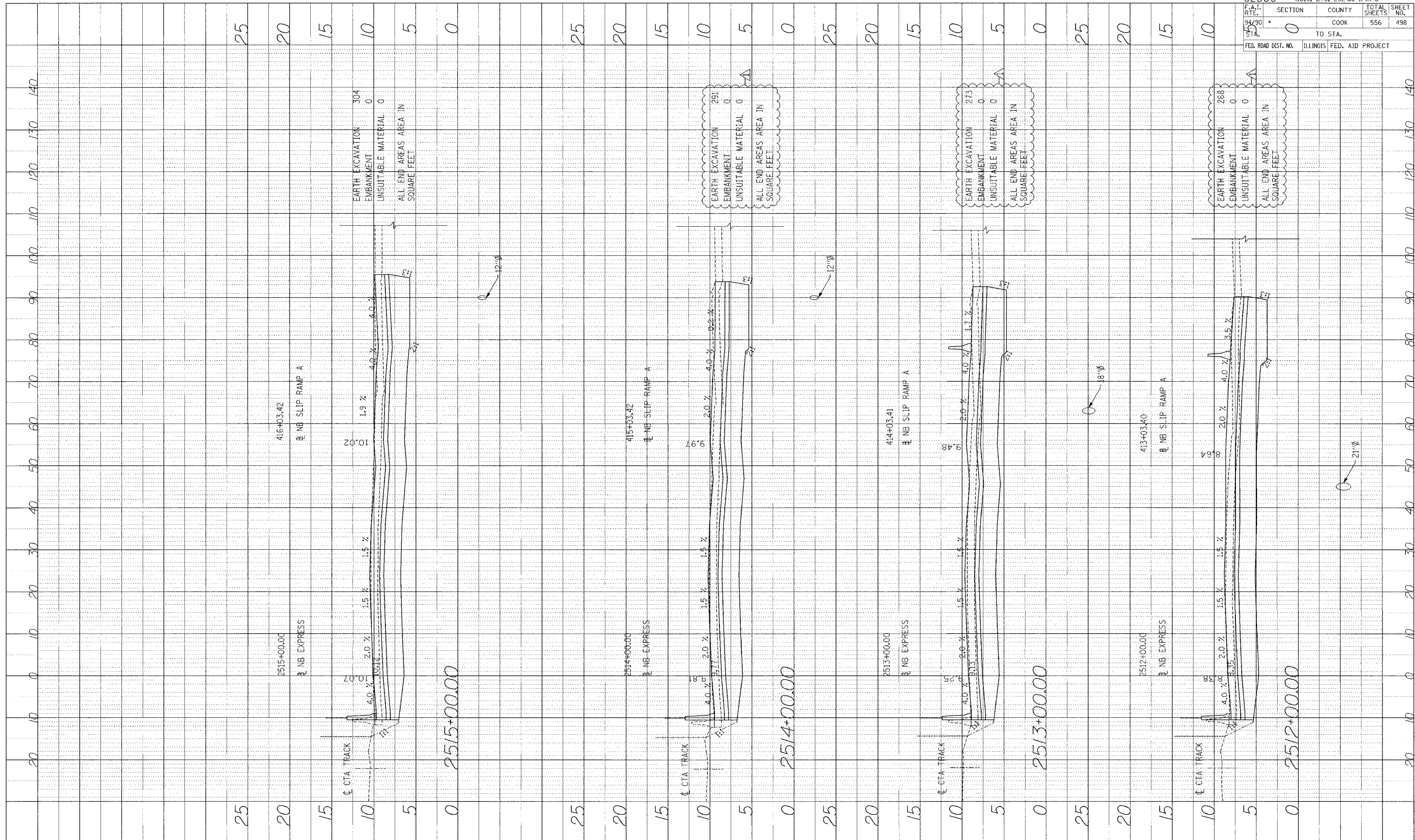
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EDKORP.COM



STA.

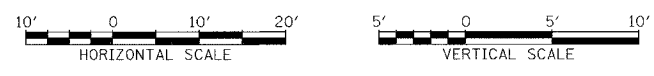
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PROFILE REVISIONS
 DATE: _____ BY: _____
 NOTE BOOK PLOTTED APPROVED
 NO. _____ S.A. MULLU
 STRUCTURE NO. 7518 CHD



62300 • (1818, ETC, 2324.6-IPR-8	
F.A.I. R.T.E. NO.	SECTION
94/90	0
COUNTY	COOK
TOTAL SHEETS	556
SHEET NO.	498
TO STA.	
FED. ROAD DIST. NO.	ILLINOIS
FED. AID PROJECT	

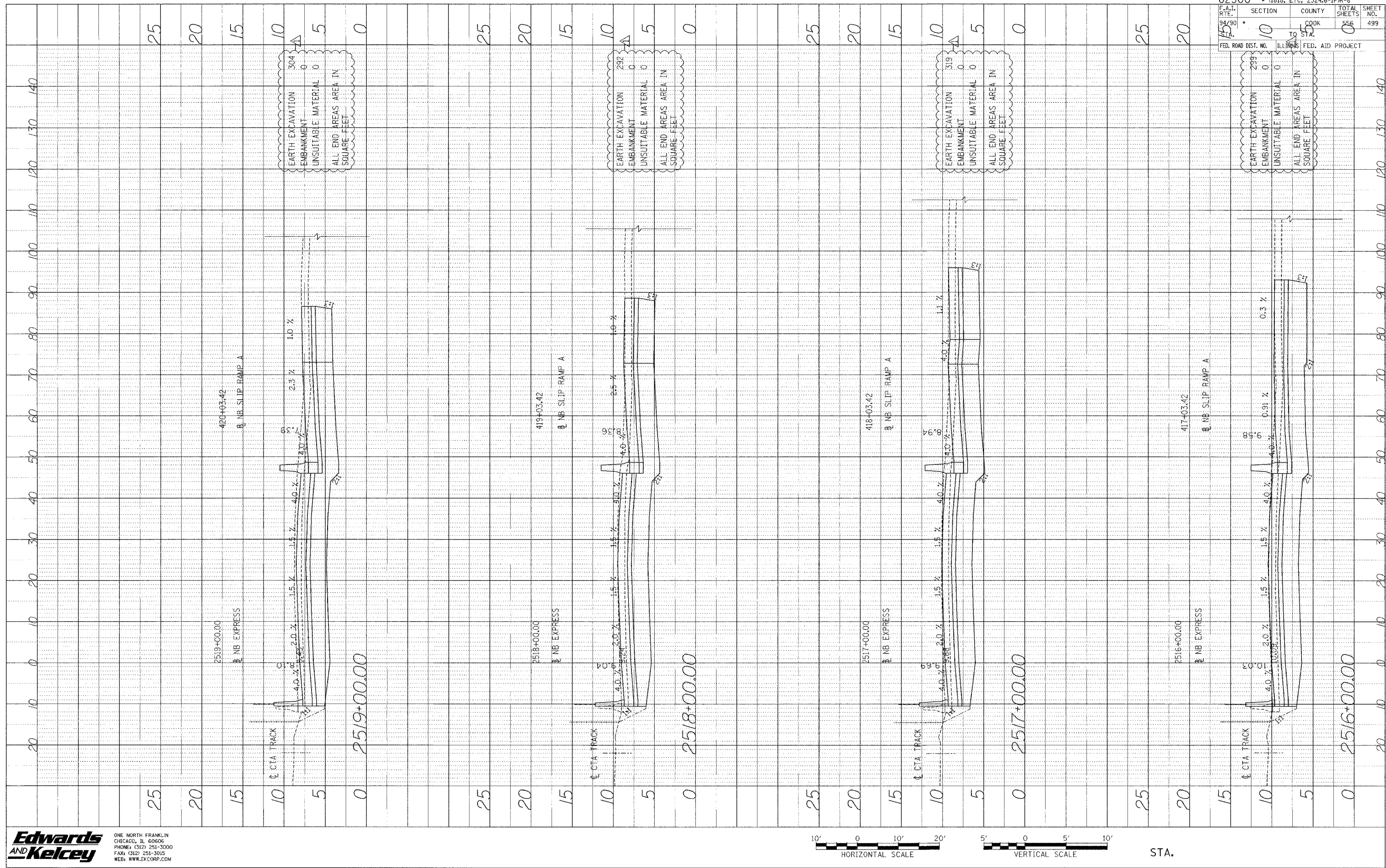
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



STA.

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PROFILE SUBMITTED BY: _____ DATE: _____
 PLOTTED BY: _____
 NOTE BOOK NO. _____
 STRUCTURE NO. _____



EARTH EXCAVATION 304
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET 0

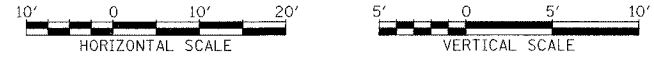
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 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET 0

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 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET 0

EARTH EXCAVATION 295
 EMBANKMENT 0
 UNSUITABLE MATERIAL 0
 ALL END AREAS AREA IN SQUARE FEET 0

62300 • (1818, ETC. 2324.6-IPR-8)
 F.A.I. SECTION COUNTY TOTAL SHEETS SHEET NO.
 RTE. 10 COOK 556 499
 94/90 STA. TO STA.
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

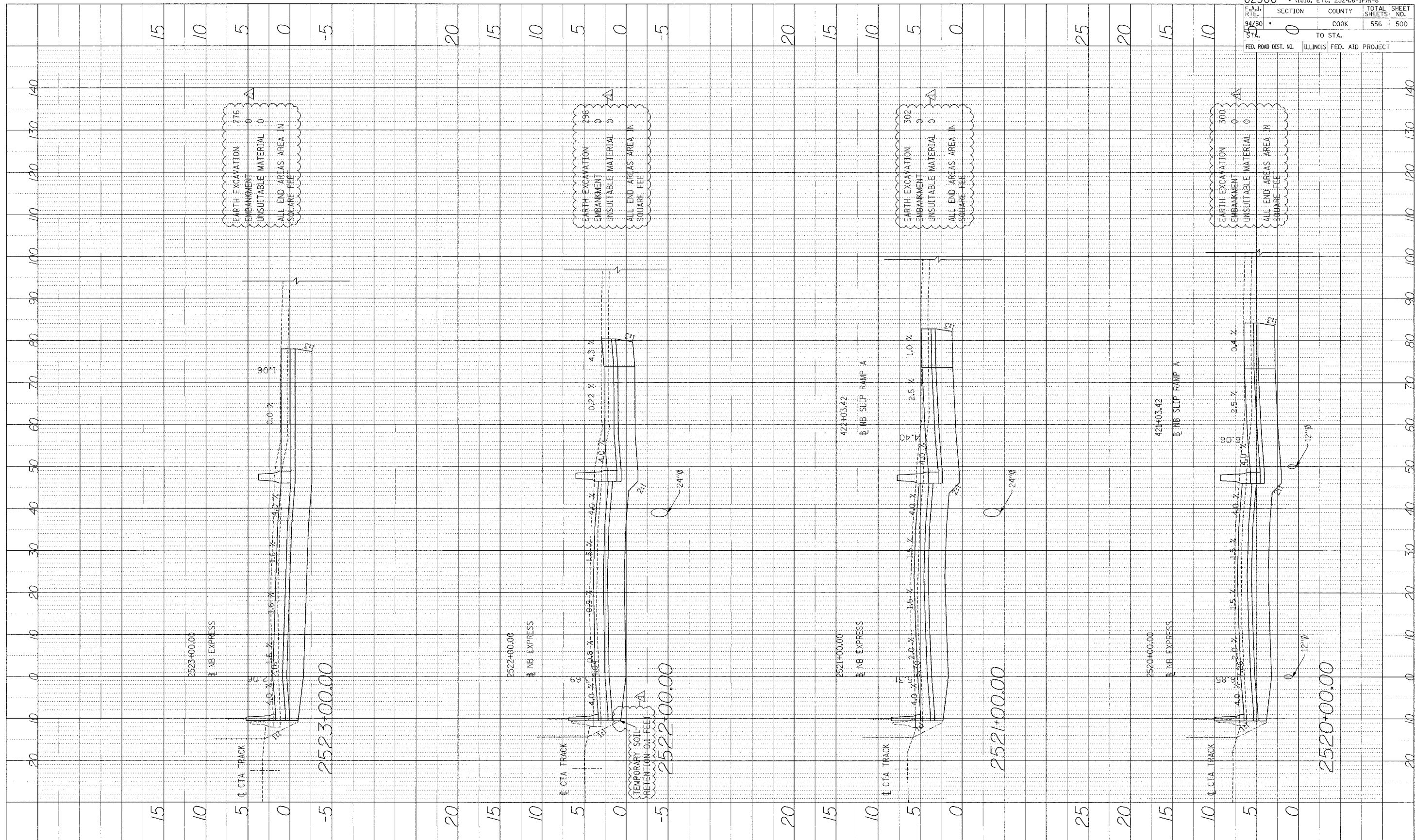
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PROFILE SUBMITTED BY DATE
 PLOTTED BY
 NOTE BOOK SERIAL NO. DATE
 NO. STRUCTURE NO. CHG



62300 • (1818, ETC, 2324.6-IPR-8	
F.A.I. RTE. 94/90 STA. 45	SECTION 0
COUNTY COOK	TOTAL SHEETS 556
TO STA. 50	SHEET NO. 500
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT

Edwards AND Kelcey
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