

| 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                   | 12                 | 1/2 | 5'-0" |        |
| Paint Bars Lbs. 150 |                    |     |       |        |

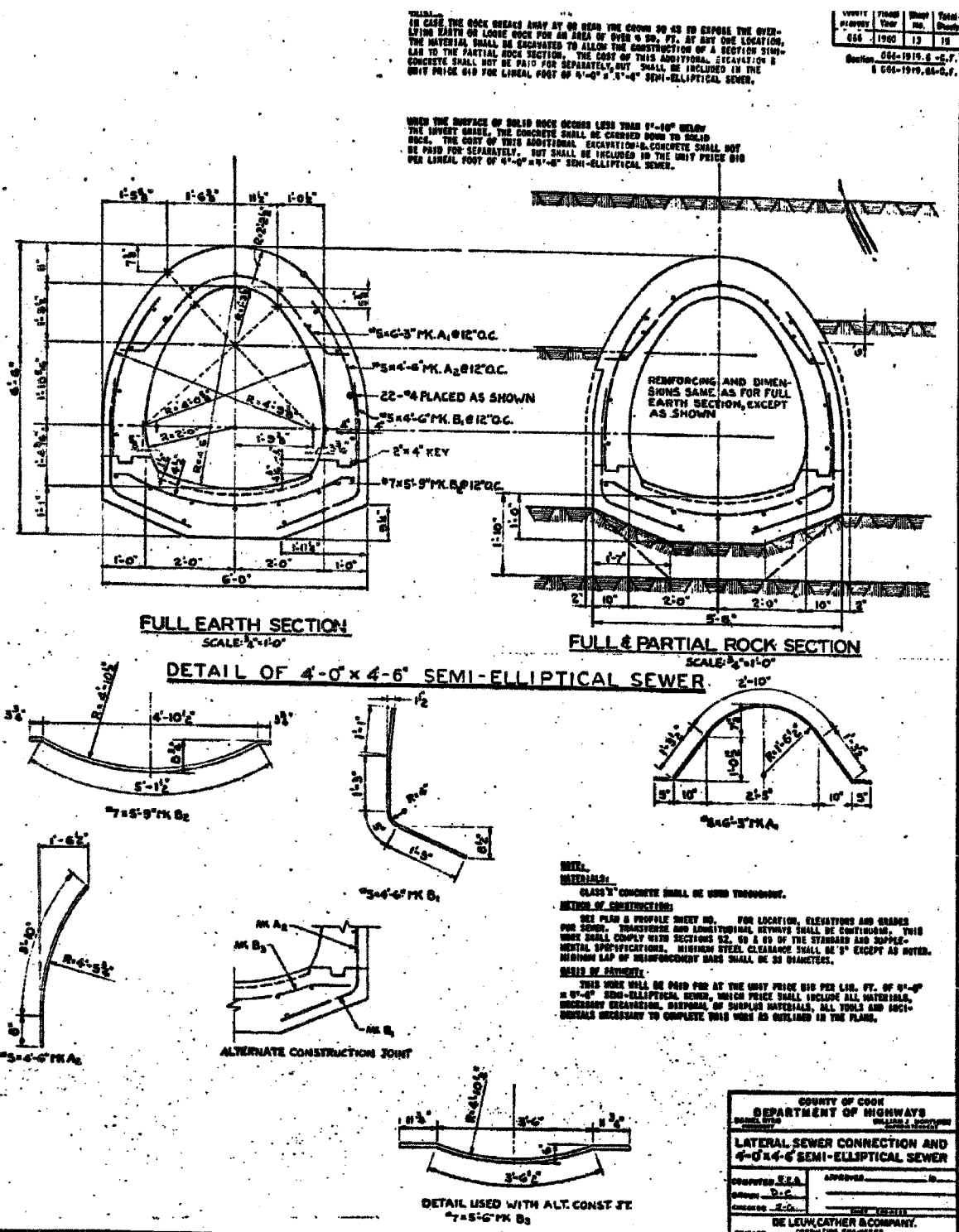
**NOTES -**  
**MATERIALS** - Class "A" & Class "X" Concrete to be used throughout.  
**METHOD OF CONSTRUCTION** - See Plan and Profile Sheets for location of Lateral Sewer connection and elevation of manhole at Semi-Elliptical Sewer. This work shall comply with Art 52 & 53 of the Standard Specifications 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 123.3 of the Specifications.  
**BILL OF MATERIAL** - The Contract Unit Price shall include furnishing and placing of all materials required, including the Type I frame and L.S. - 1" Thick Reinforced Concrete, 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. 8 |
| Reinforcement Bars | Lbs. 150 |

COUNTY OF COOK  
 DEPARTMENT OF HIGHWAYS  
 LATERAL SEWER CONNECTION  
 DRAWN BY: J.R.W.  
 CHECKED BY: E.L.

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

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



**NOTES -**  
 IN CASE THE ROCK OCCURS ONLY AT OR NEAR THE CROWN SO AS TO EXPOSE THE OVERLAPPING SURFACE OF 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-CONCRETE. 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.  
**DETAIL OF JOINT:**  
 THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER LIN. FT. 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.

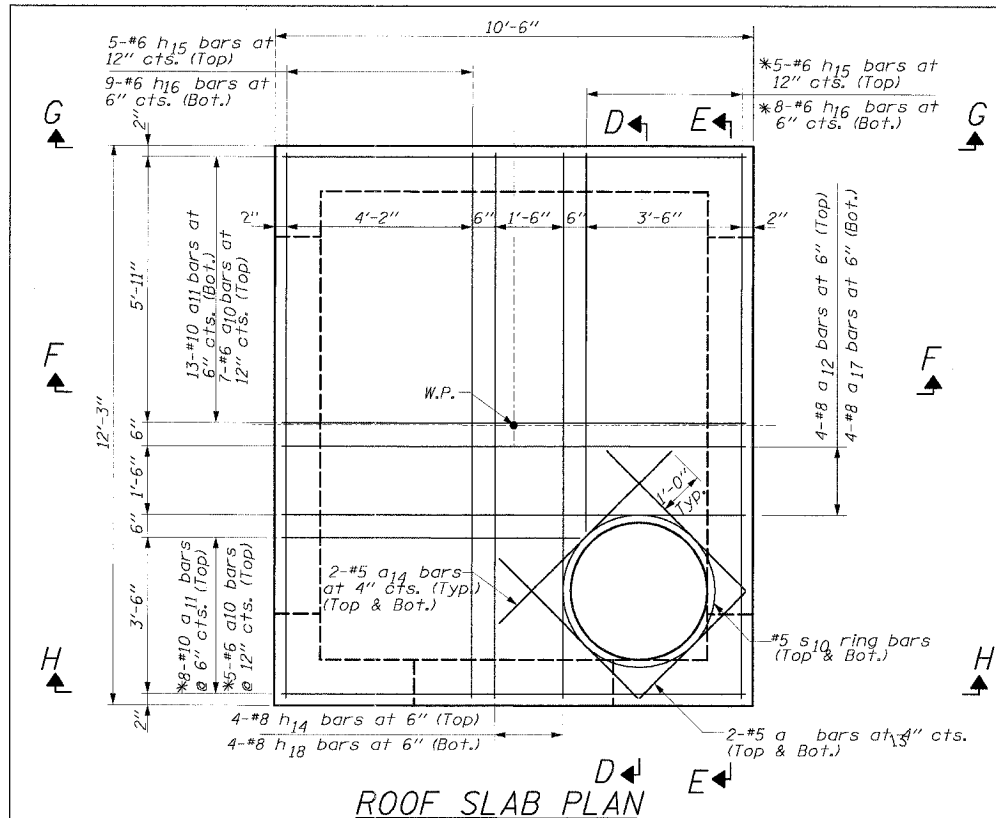
COUNTY OF COOK  
 DEPARTMENT OF HIGHWAYS  
 LATERAL SEWER CONNECTION AND  
 4'-0" x 4'-6" SEMI-ELLIPTICAL SEWER  
 DRAWN BY: J.R.W.  
 CHECKED BY: E.L.

FOR INFORMATION ONLY

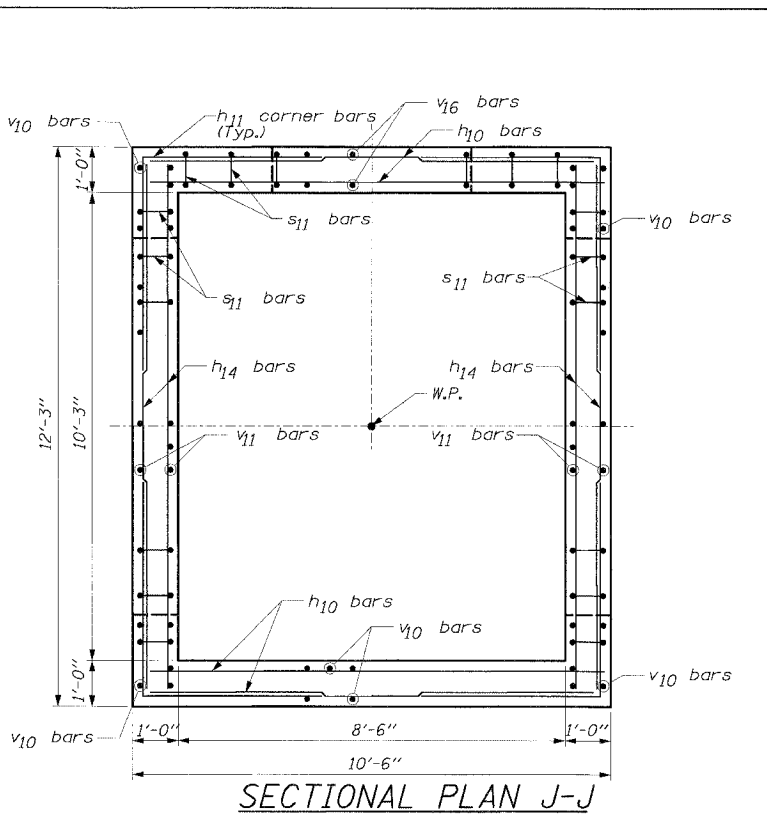
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 JUNCTION CHAMBER 4-01  
 DETAIL 5  
 SCALE:  
 DATE: 7/7/05  
 DRAWN BY: J.R.W.  
 CHECKED BY: E.L.

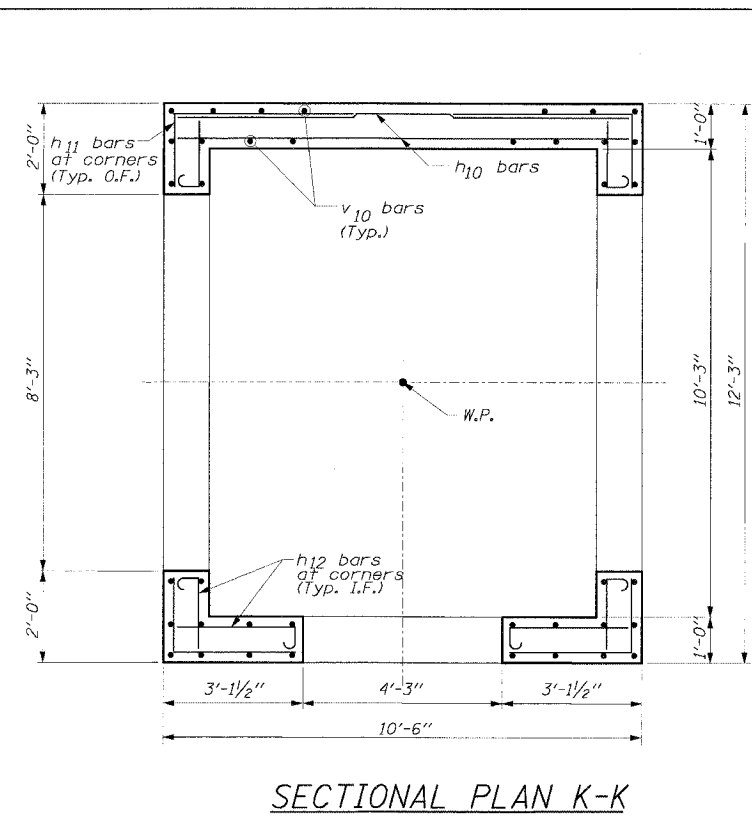




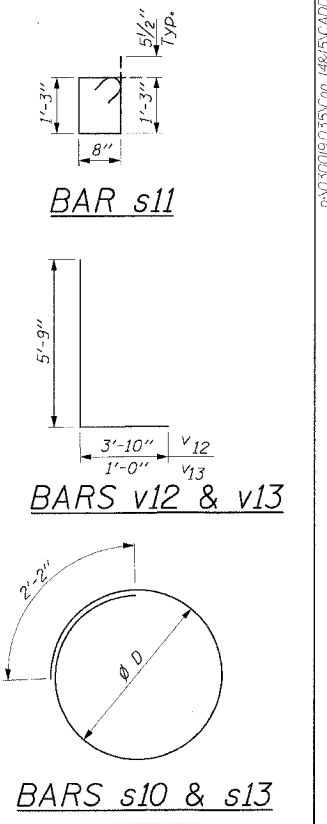
ROOF SLAB PLAN



SECTIONAL PLAN J-J



SECTIONAL PLAN K-K

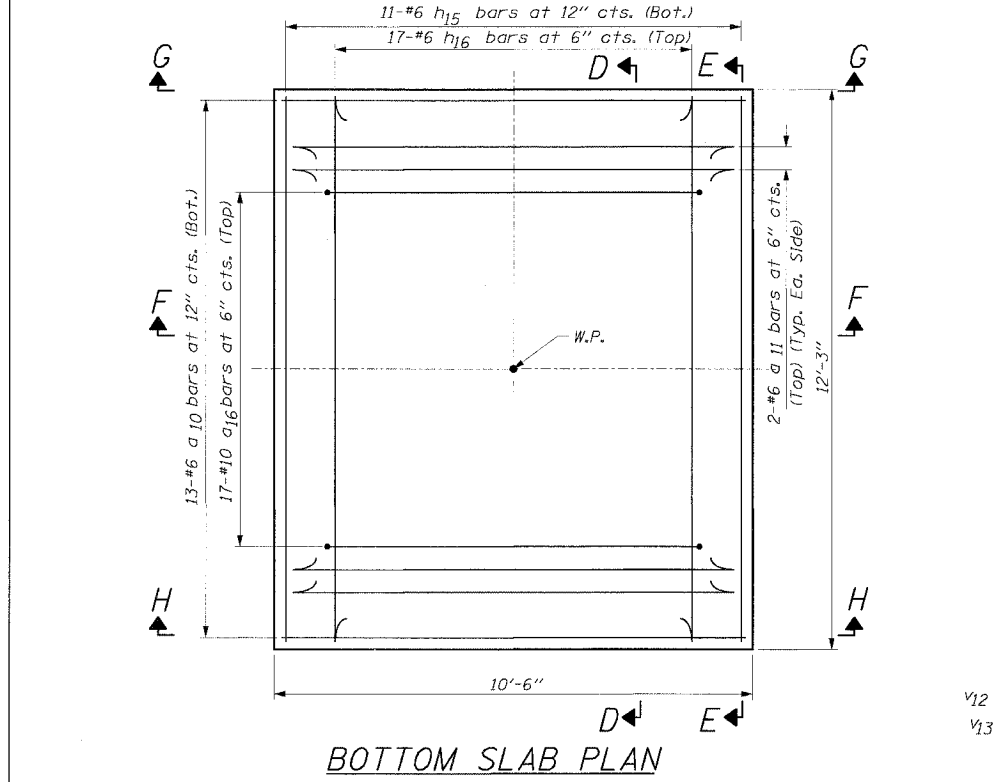


BAR s11

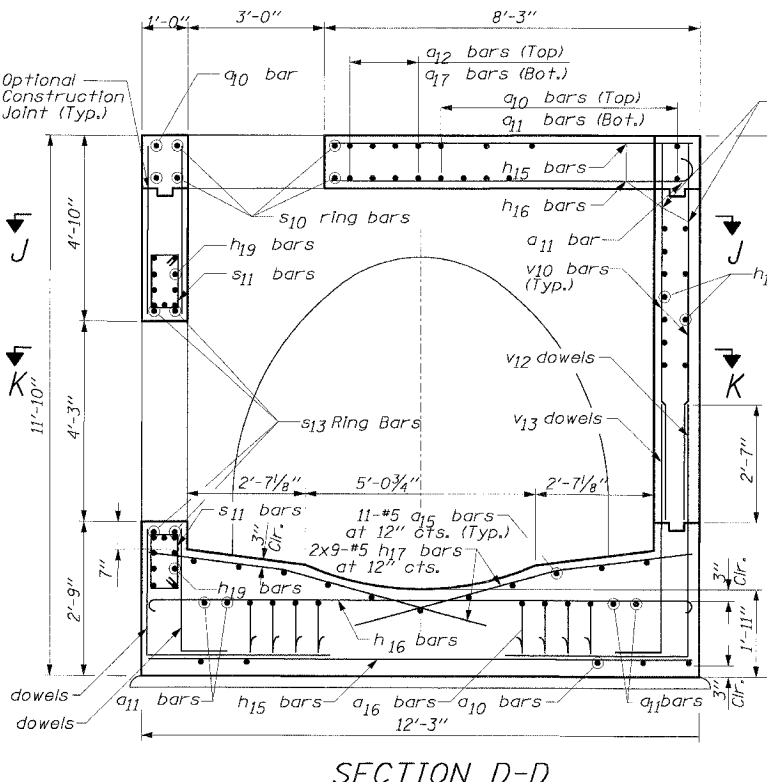
BARS v12 & v13

BARS s10 & s13

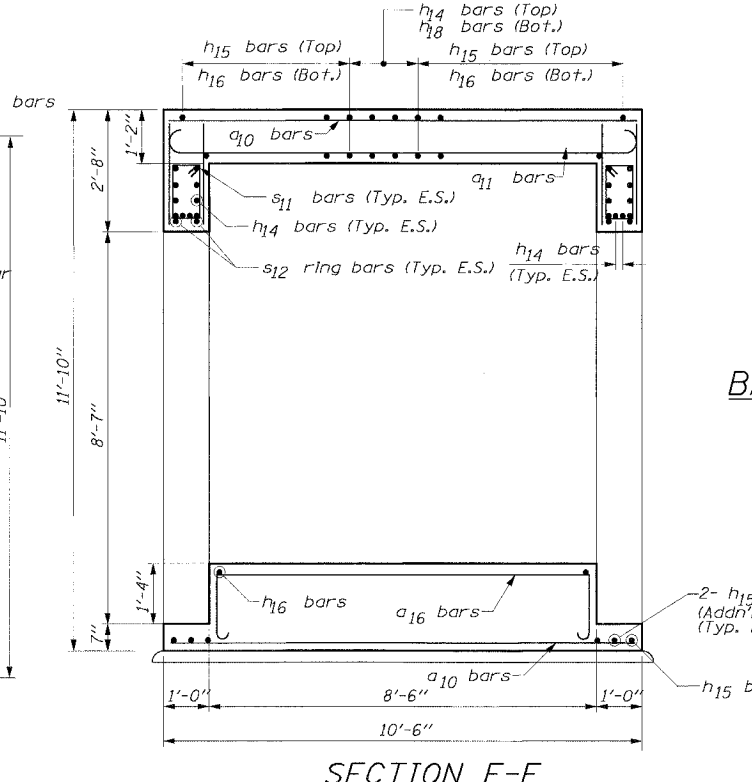
| Bar | Ø D   |
|-----|-------|
| s10 | 3'-4" |
| s13 | 5'-3" |



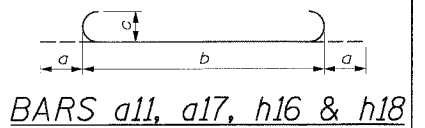
BOTTOM SLAB PLAN



SECTION D-D



SECTION F-F



BARS a11, a17, h16 & h18

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

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

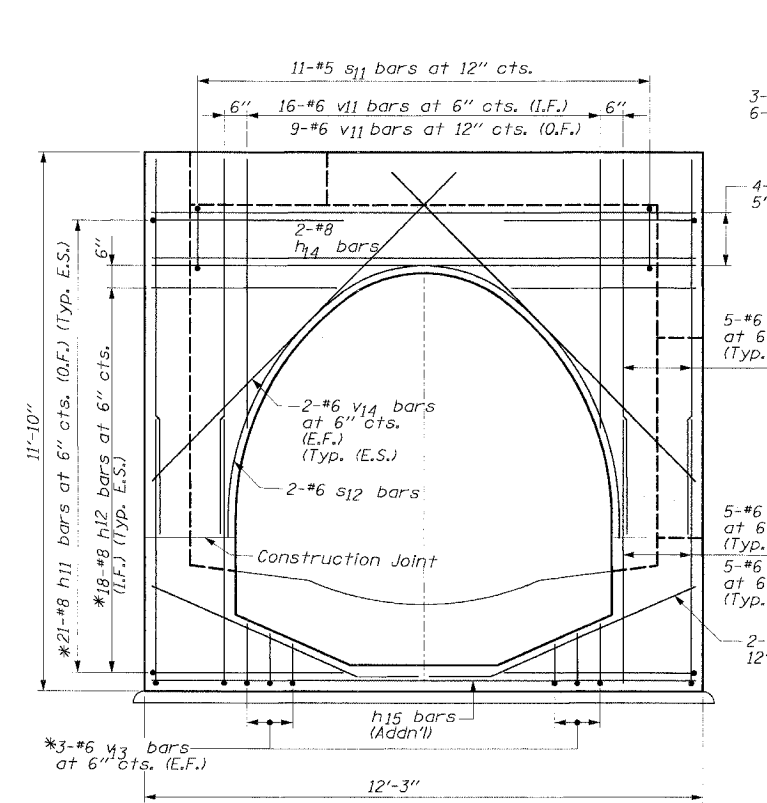
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| NAME      | DATE |
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBER 7-01  
DETAIL 1

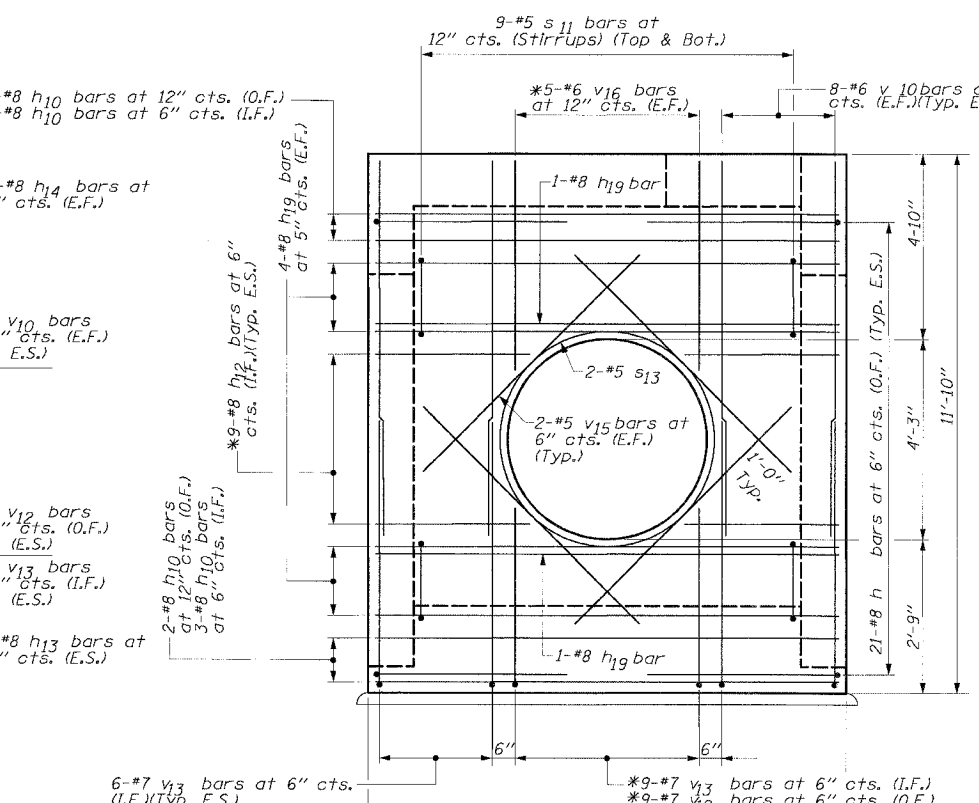
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### BILL OF MATERIAL JUNCTION CHAMBER 7-01

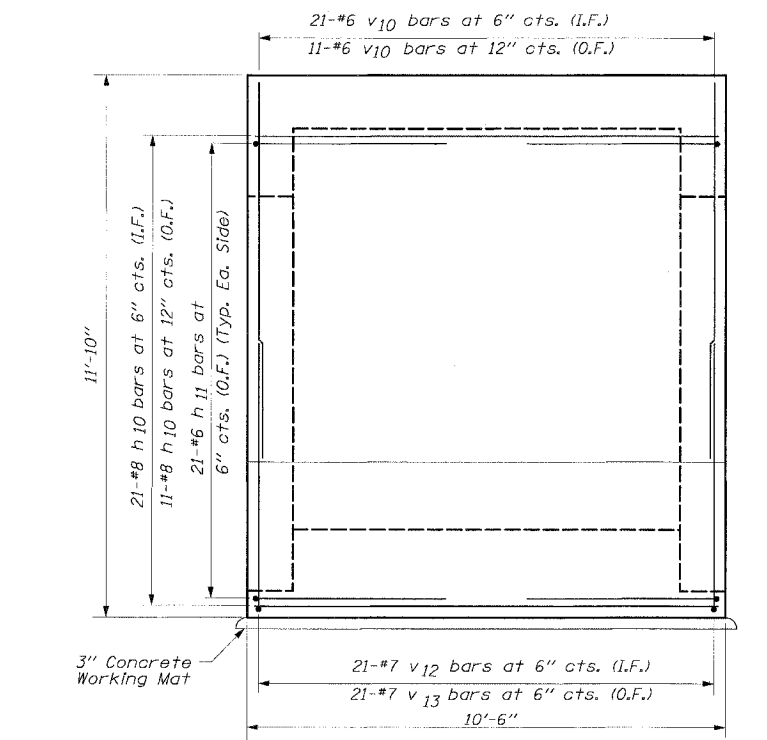
| Bar                 | No. | Size | Length   | Shape  |
|---------------------|-----|------|----------|--------|
| a10                 | 25  | #6   | 10'-2"   | —      |
| a11                 | 25  | #10  | 11'-6"   | —      |
| a12                 | 4   | #8   | 10'-2"   | —      |
| a13                 | 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     |



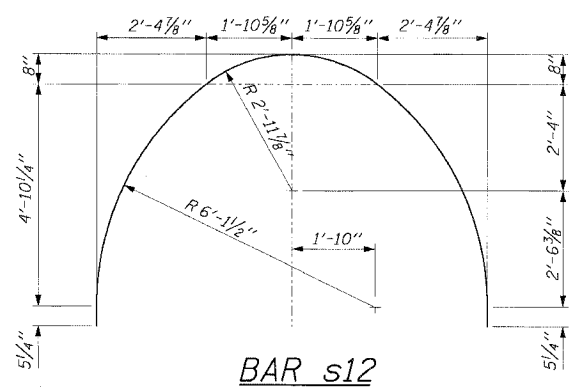
**SECTION E-E**  
(Typical Both Faces)



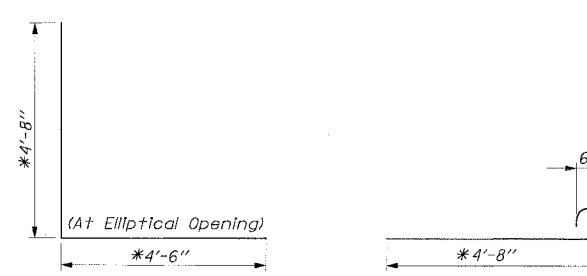
**SECTION H-H**



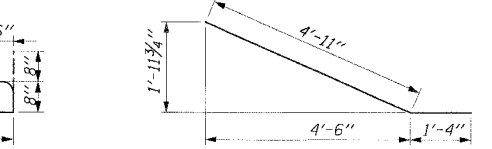
**SECTION G-G**



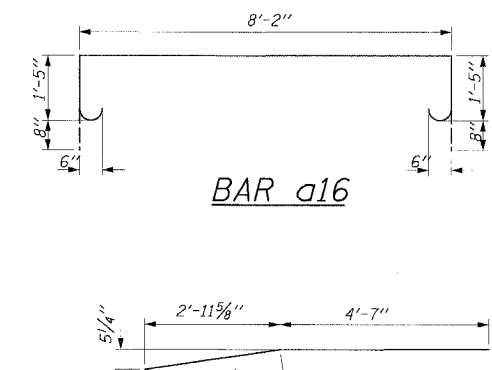
**BAR s12**



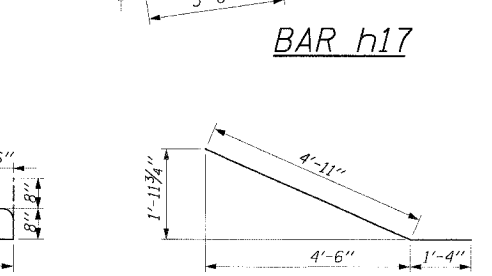
**BAR h11**



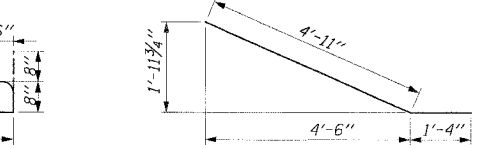
**BAR h12**



**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

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| NAME      | DATE |
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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 CHAMBER 7-01  
DETAIL 2

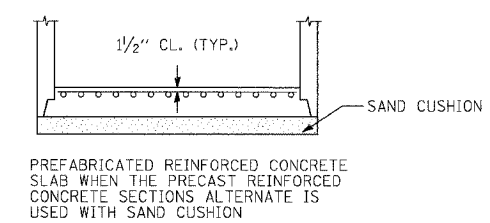
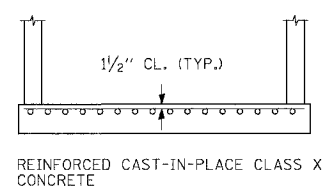
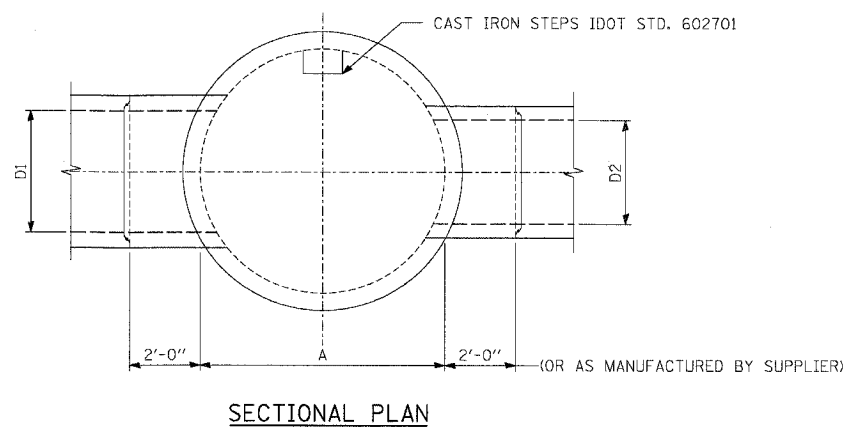
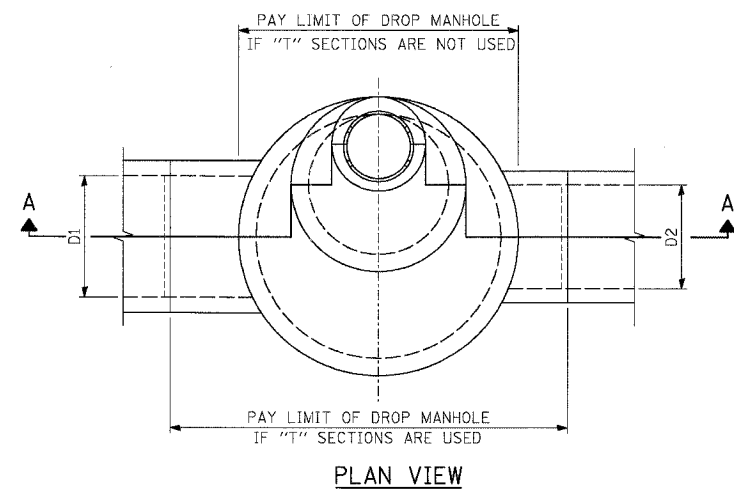
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**Edwards and Kelcey**  
ONE NORTH FRANKLIN  
CHICAGO, IL 60606  
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FAX: (312) 251-3015  
WEB: WWW.EKCORP.COM

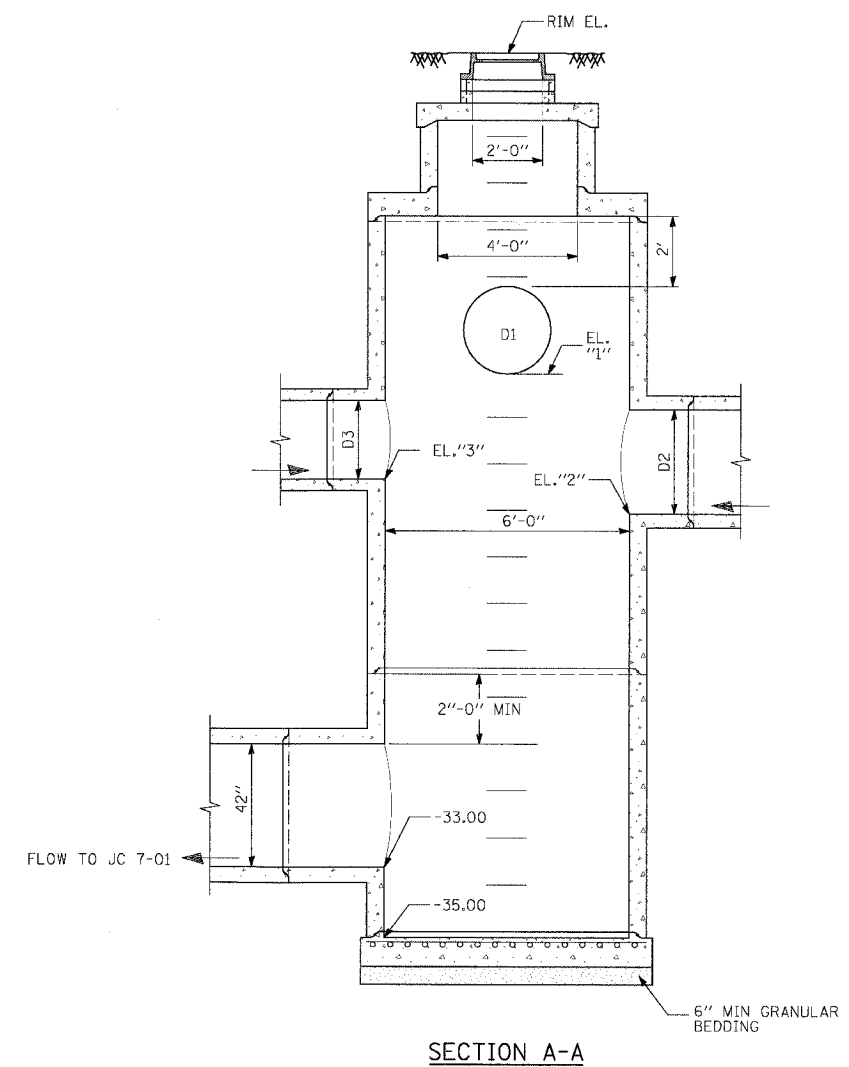
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| F.A.I. RTE.         | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94/90               |                           | COOK   | 556          | 405       |
| STA.                | TO STA.                   |        |           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



ALTERNATE BOTTOM SLAB



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

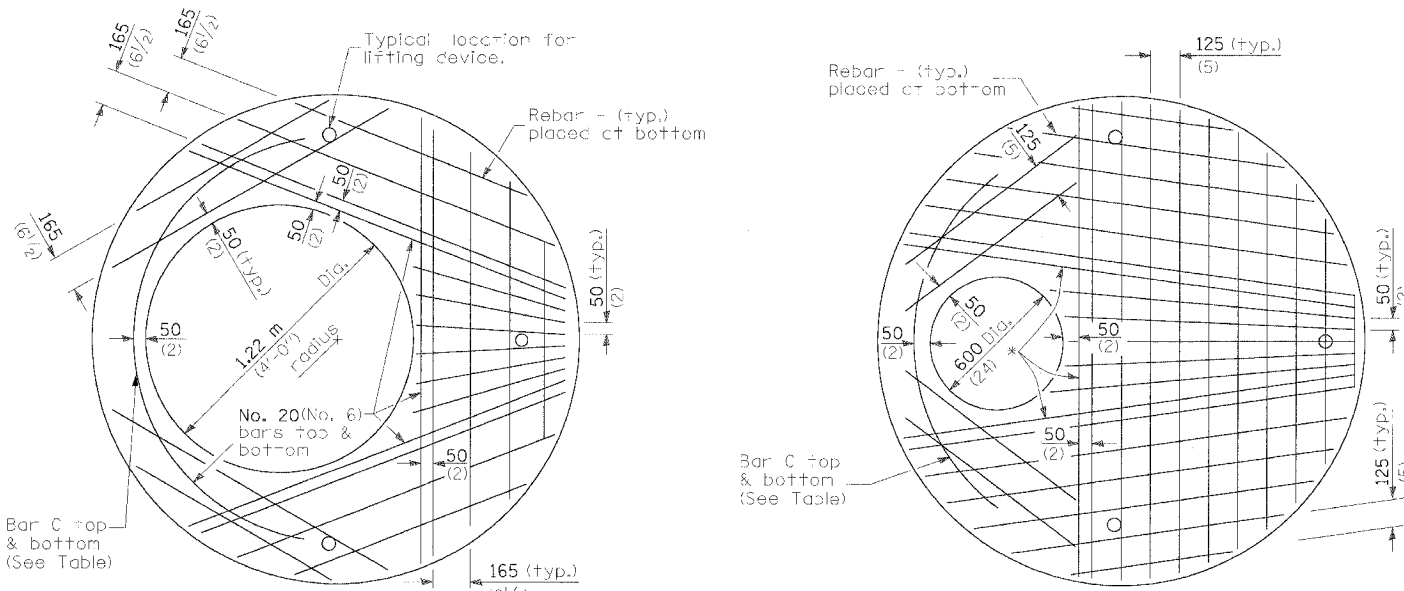
| REVISIONS |      | ILLINOIS DEPARTMENT OF TRANSPORTATION<br>F.A.I. 94/90 (DAN RYAN EXPRESSWAY)<br>31ST STREET TO 71ST STREET<br>NB EXPRESS LANE RECONSTRUCTION<br>DRAINAGE STRUCTURE DETAILS<br>DROP MANHOLE (STRUCTURE 7-07) |
|-----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NAME      | DATE |                                                                                                                                                                                                            |
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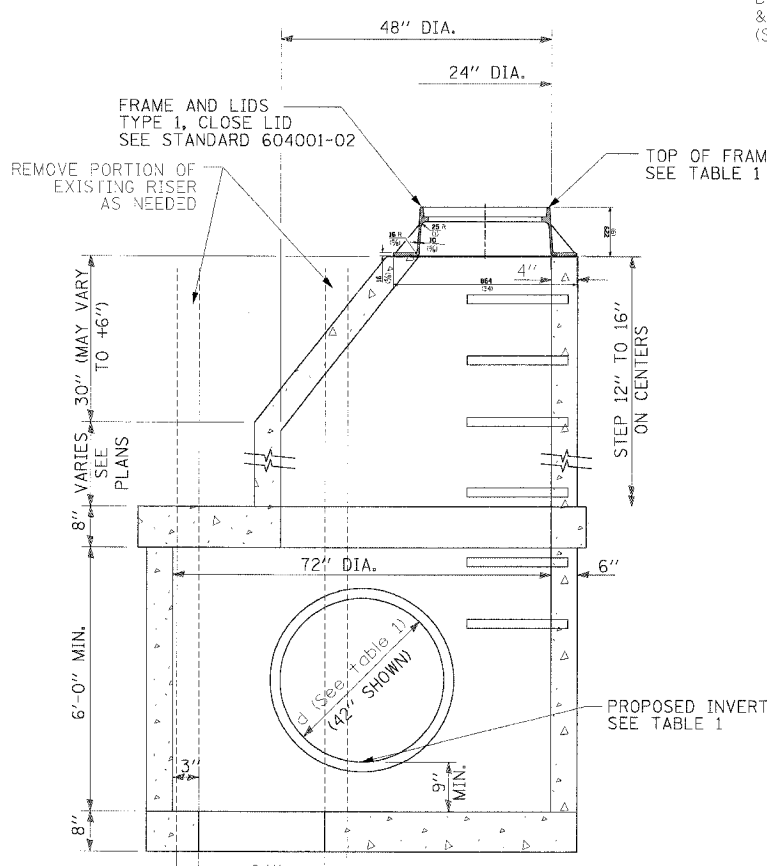
| STR.     | TF.   | INVERT |        |           | DIAMETER (d) |      |        |        |     |
|----------|-------|--------|--------|-----------|--------------|------|--------|--------|-----|
|          |       | WEST   | EAST   | OTHERS    | WEST         | EAST | OTHERS | OTHERS |     |
| DMH 3-01 | -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

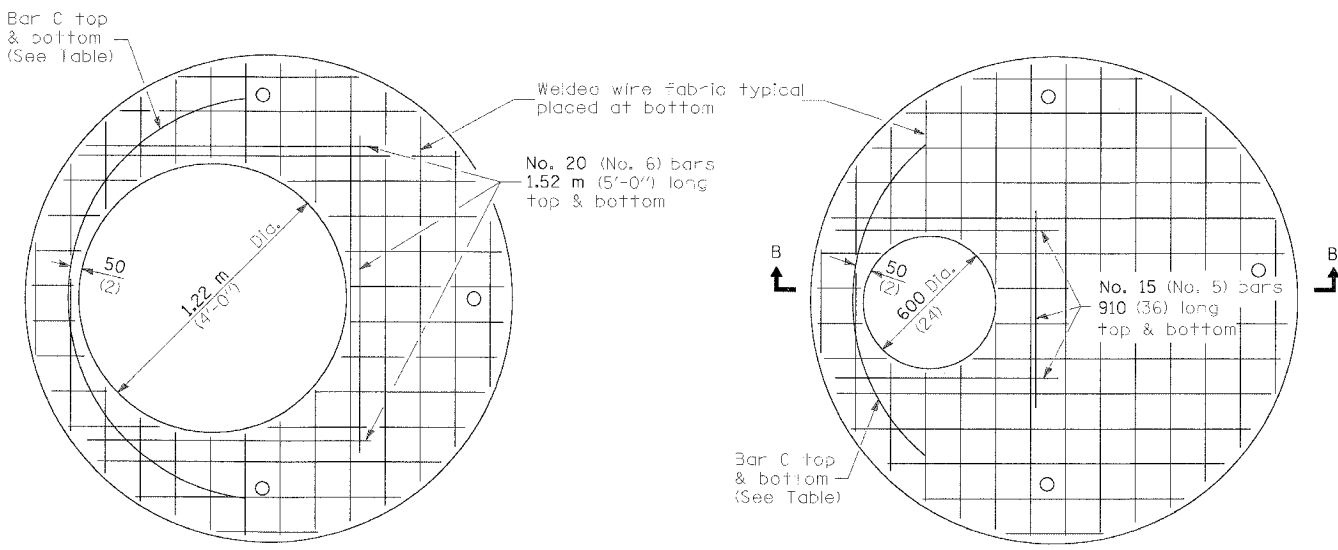


**PLAN**  
Showing Rebar Reinforcement

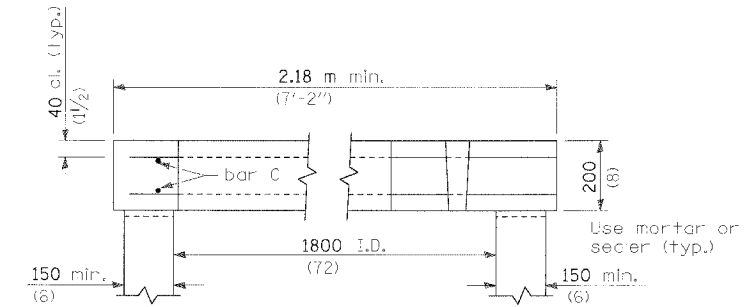
| Diameter of opening              | Thickness | Reinforcement "As" WWF Each direction      | Bar Size       | No. 15 (No. 4) Bar C |          |
|----------------------------------|-----------|--------------------------------------------|----------------|----------------------|----------|
|                                  |           |                                            |                | Length               | Radius   |
| 600 (24)                         | 200 (8)   | 2244 mm <sup>2</sup> /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 <sup>2</sup> /m (0.82 sq. in./ft.) | No. 20 (No. 6) | 2.74 m (9'-0")       | 965 (38) |



**ELEVATION**



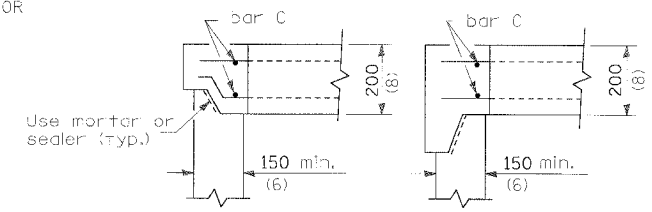
**PLAN**  
Showing Welded Wire Fabric Reinforcement



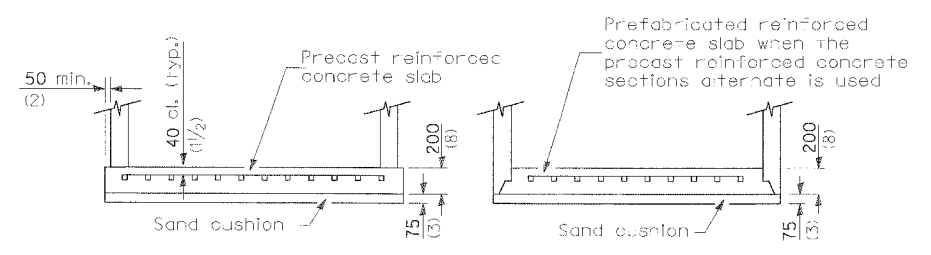
**SECTION B-B**

**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 mm<sup>2</sup>/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  
PHONE: (312) 251-3000  
FAX: (312) 251-3015  
WEB: WWW.EKCORP.COM

| REVISIONS |      | ILLINOIS DEPARTMENT OF TRANSPORTATION<br>F.A.I. 94/90 (DAN RYAN EXPRESSWAY)<br>31ST STREET TO 71ST STREET<br>NB EXPRESS LANE RECONSTRUCTION<br>MAIN DRAIN DROP MANHOLE DETAILS |
|-----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NAME      | DATE |                                                                                                                                                                                |
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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

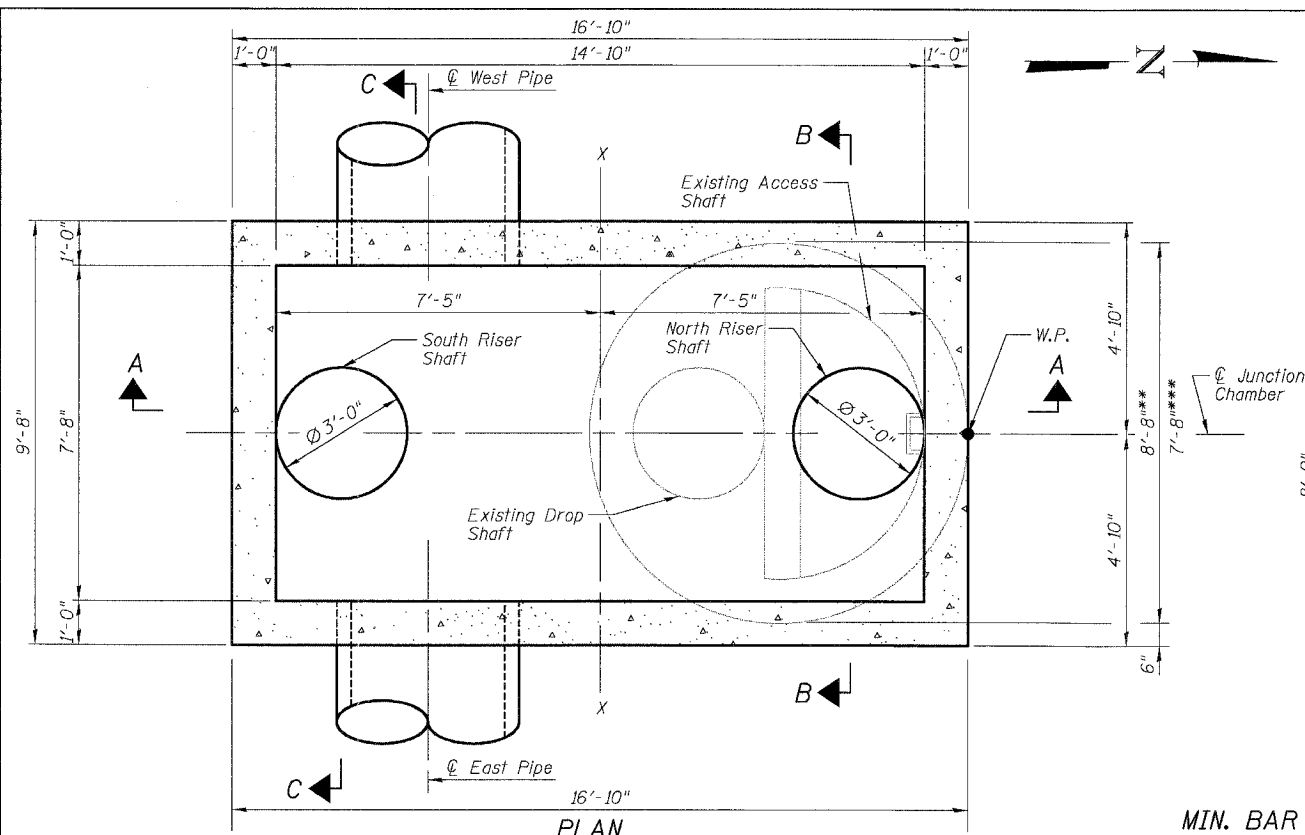
**DESIGN LOADING**

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**

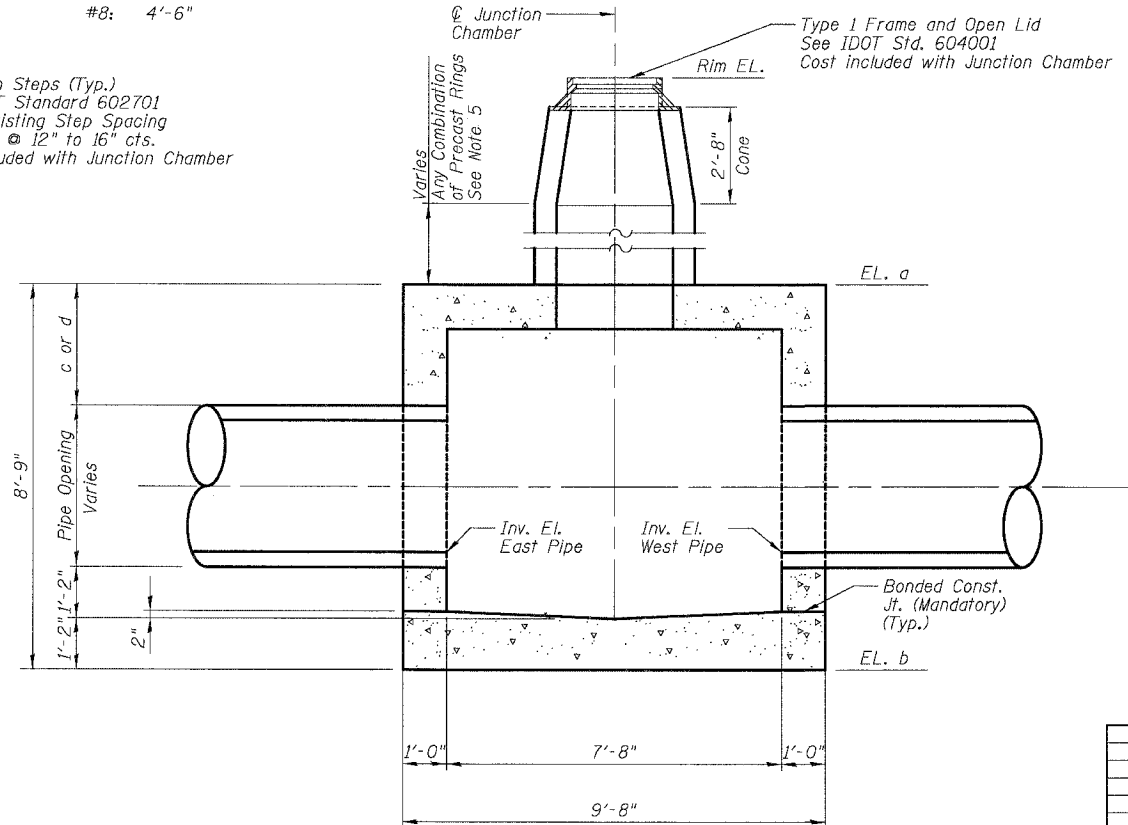
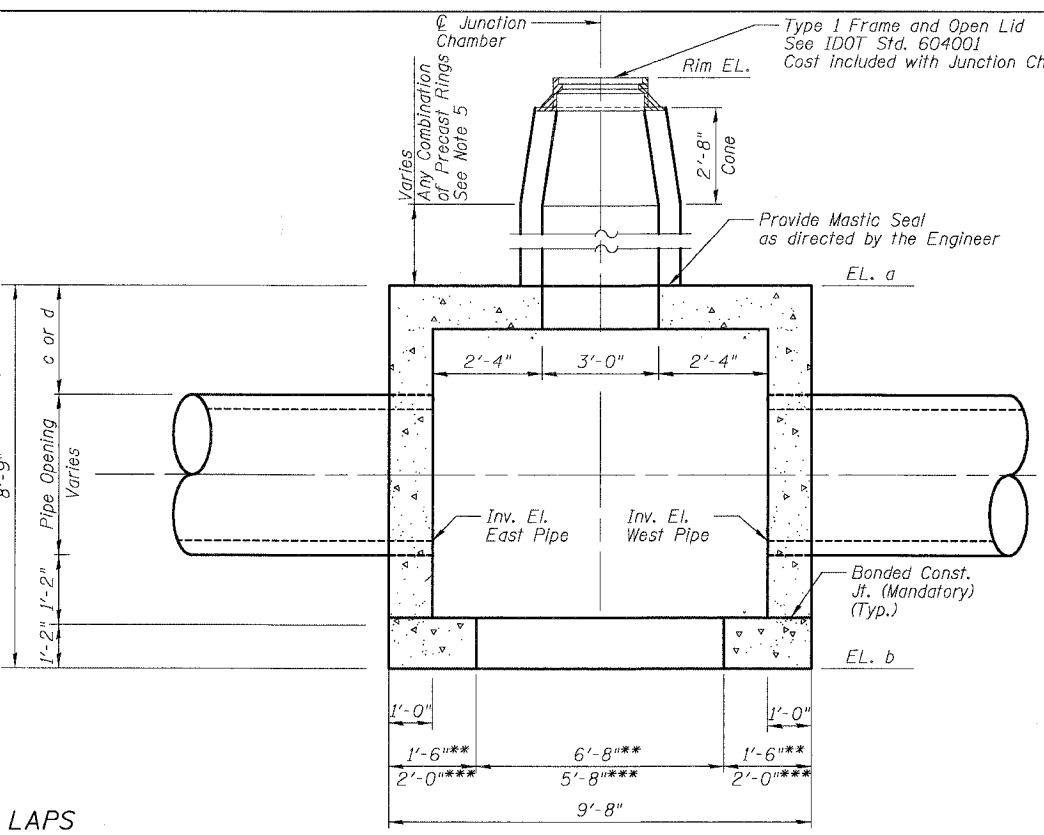
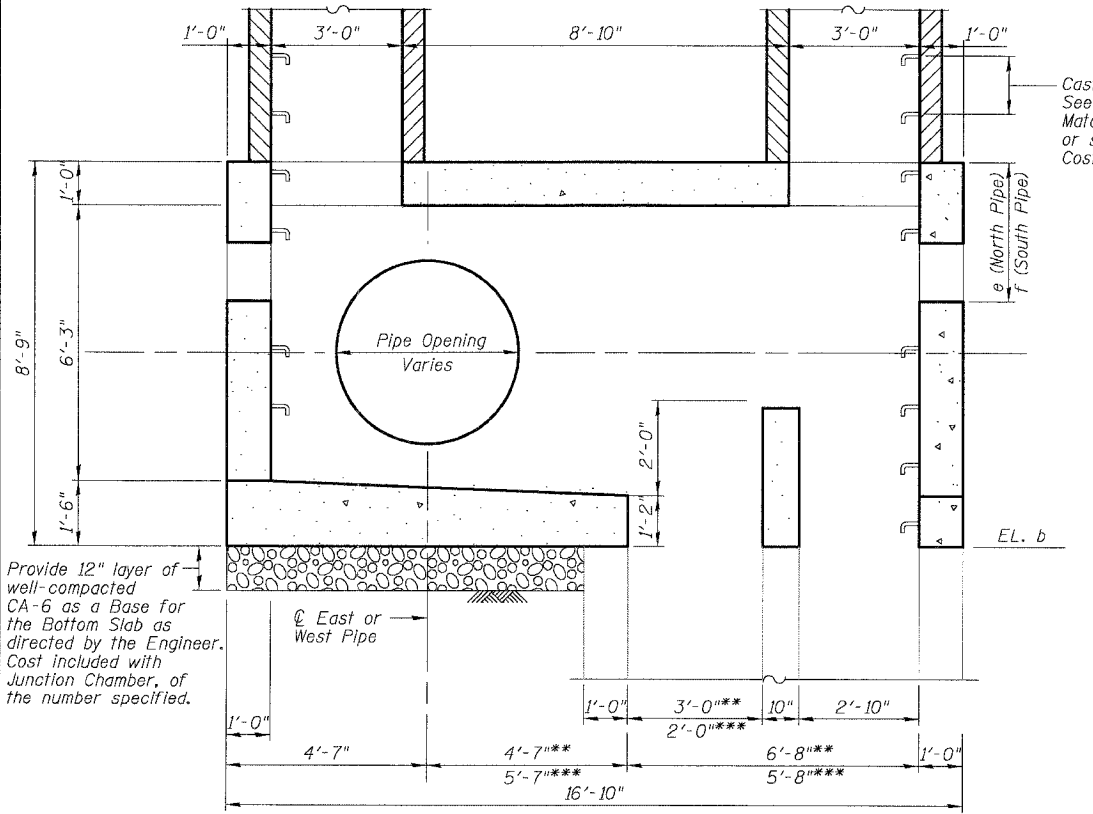
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

- 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.  $\phi$  Junction Chamber is parallel to  $\phi$  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.



**MIN. BAR LAPS**

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



**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

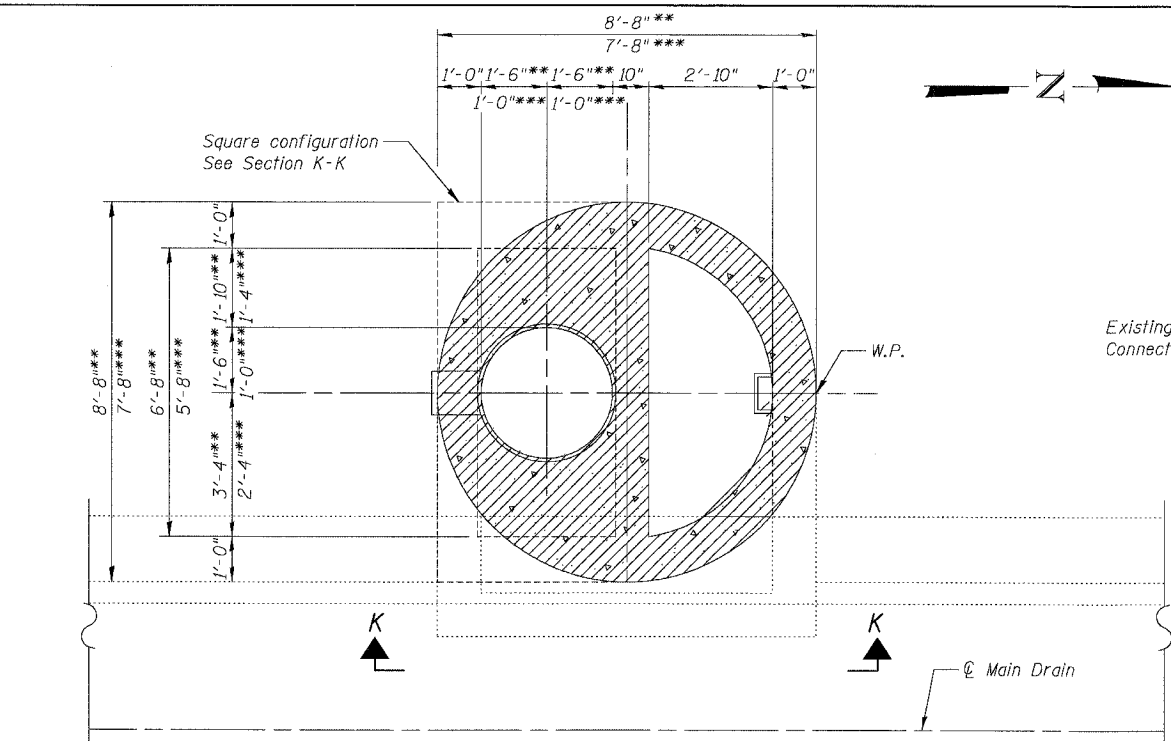
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 JUNCTION CHAMBER, TYPE 2  
 GENERAL PLAN AND ELEVATION

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

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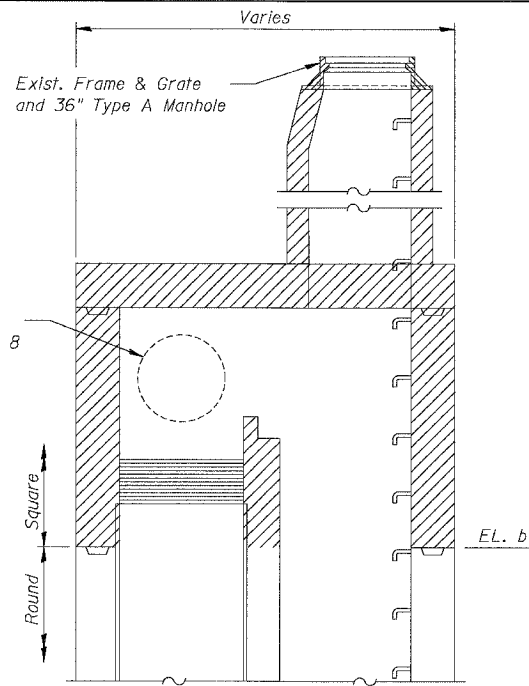
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**REMOVAL PLAN**

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 | **  |



**SECTION K-K**

**LEGEND:**

Removal

**NOTES:**

1. Adjust elevations and dimensions provided in the table as necessary for the East and West pipe invert elevations set in the field.
2. Adjust North and South connecting pipes to fit inside openings provided in Junction Chamber.
3. For additional connections to the North and South riser shafts, see Drainage Plans.
4. For As-Built drawings of the existing drop manholes, See Sheets JC-6 thru JC-22.
5. 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.
6. 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.
7. 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.
8. See Drainage Plans for location and abandonment/maintaining of existing storm sewers in drop manholes.

**TABLE OF JUNCTION CHAMBER INFORMATION**

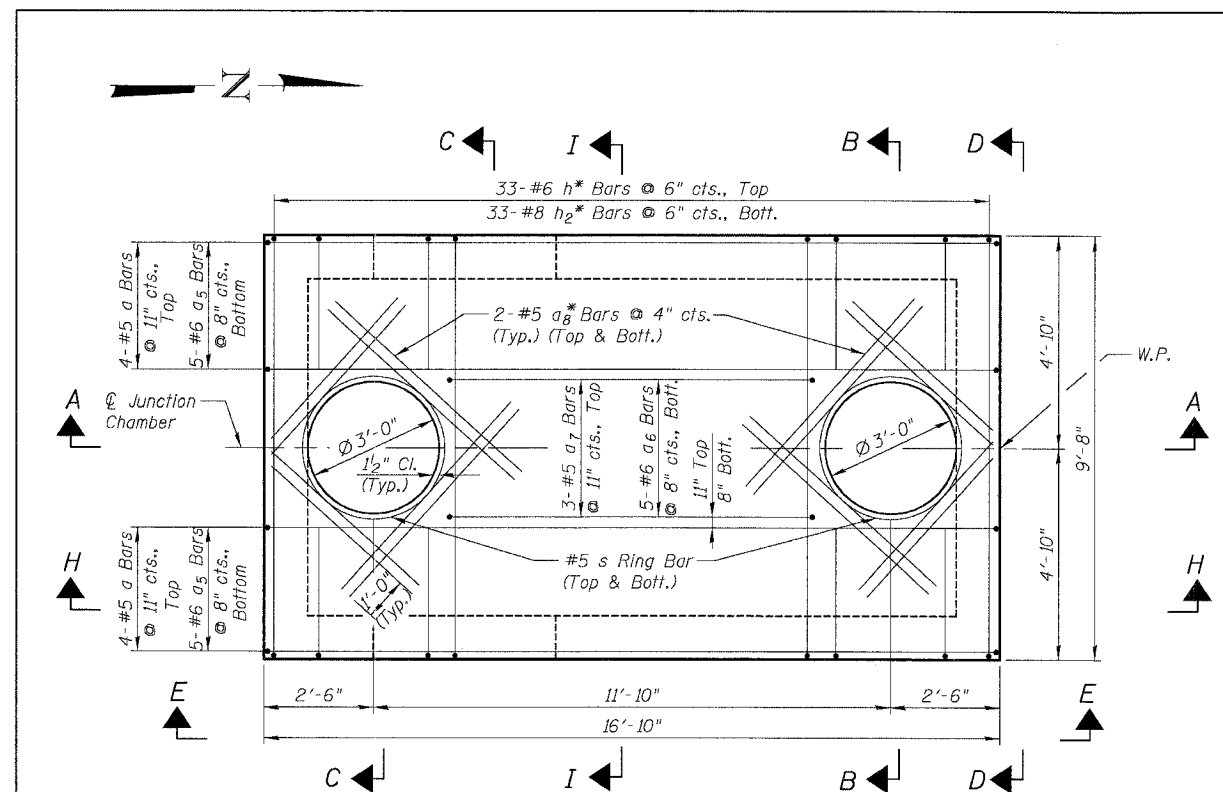
| Junction Chamber No. | Structure No. | Work Point |        | Existing Drop Manhole |      | North Rim. EL. | South Rim. EL. | EL. a | EL. b  | West Pipe Connection |              |          |       | East Pipe Connection |              |          |        | North Pipe Connection |              |          |       | 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"          | -11.18   | 2'-2"  | -                     | -            | -        | -     | -                     | -      | -            | -        | -     | -     | - |   |
| 6                    | JC T2 14-01   | 2445+54    | -16.0  | -                     | B24S | 1.55           | 1.63           | -4.37 | -13.12 | 36"                  | 44"          | -10.45   | 2'-9" | 30"                  | 37"          | -10.45   | 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"  | -                     | -            | -        | -     | 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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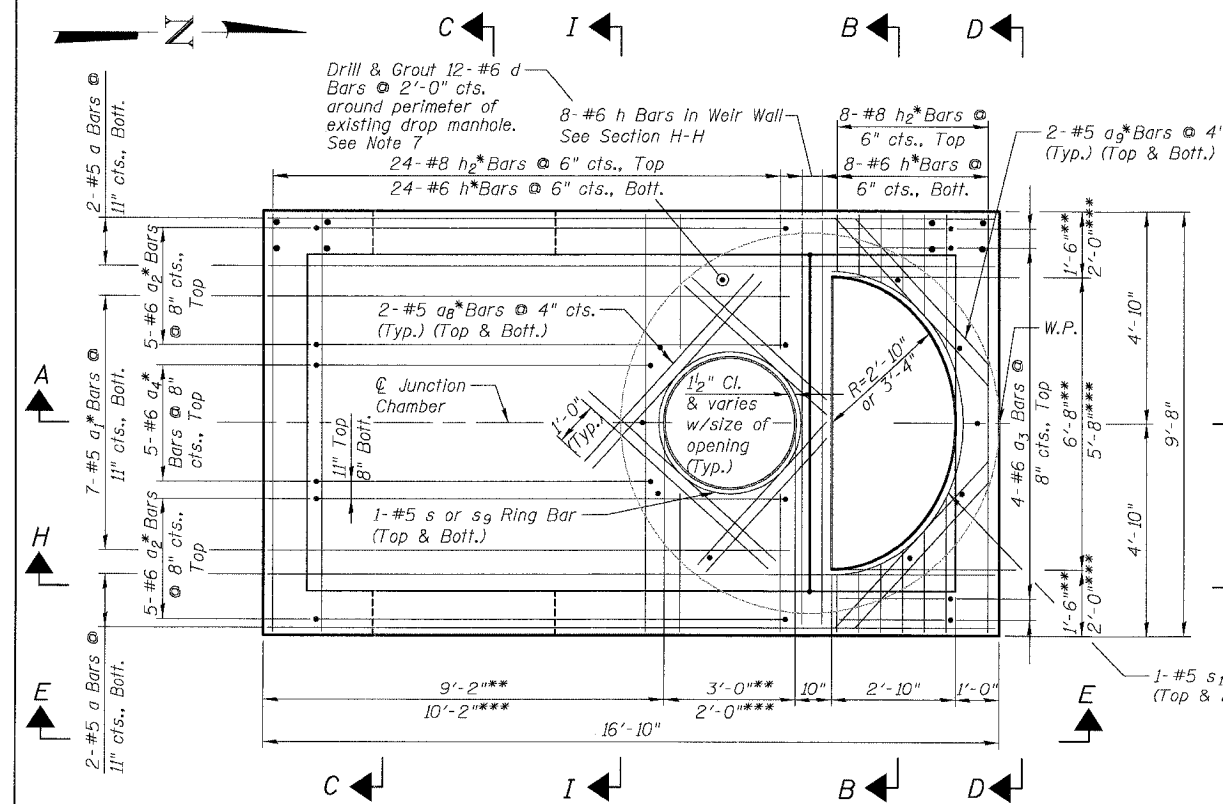
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31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBER, TYPE 2  
REMOVAL PLAN

SCALE: N.T.S.  
DATE: 07/07/05  
DRAWN BY: DJM  
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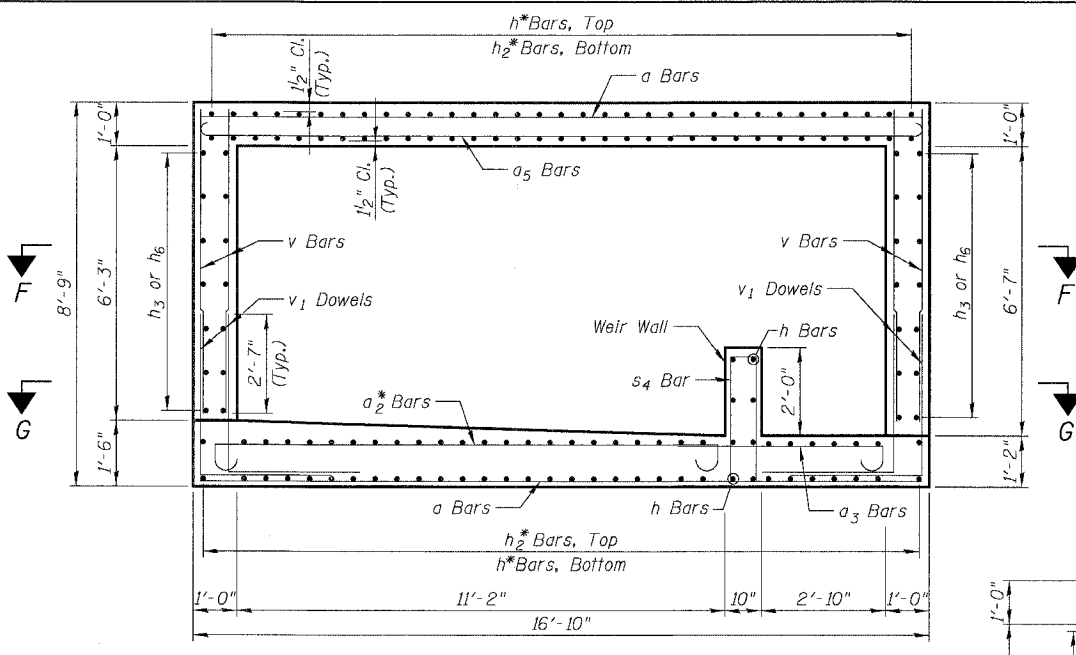
**TOP SLAB PLAN**

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.

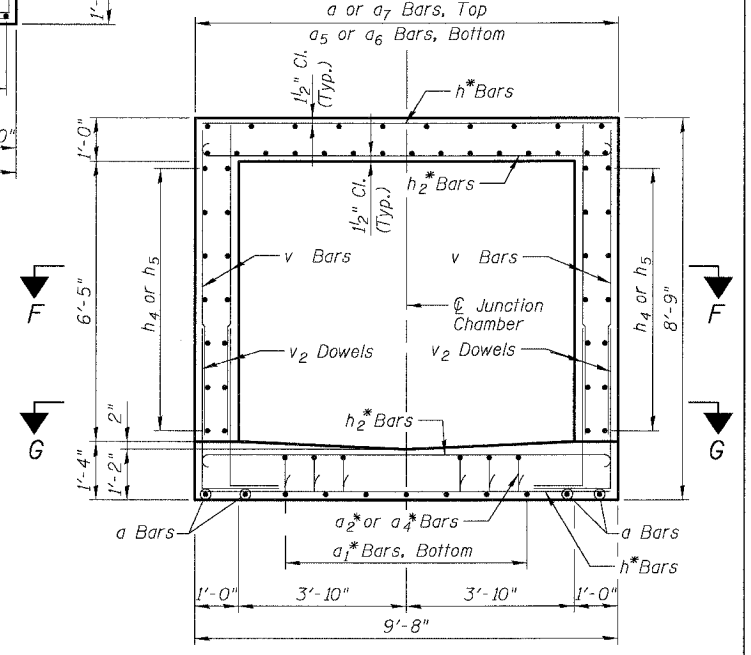


**BOTTOM SLAB PLAN**

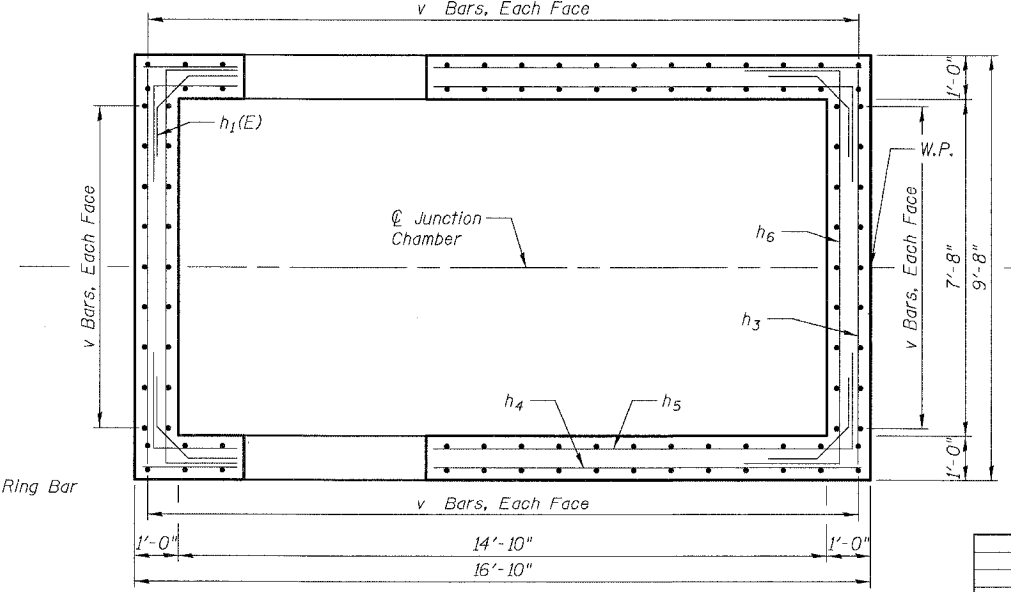
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| JC T2 10-01 | **  |
| JC T2 11-01 | *** |
| JC T2 13-01 | **  |
| JC T2 14-01 | *** |
| JC T2 15-01 | **  |
| JC T2 17-01 | **  |
| JC T2 17-02 | *** |
| JC T2 22-01 | *** |
| JC T2 25-01 | *** |
| JC T2 26-01 | *** |
| JC T2 27-01 | **  |



**SECTION H-H**



**SECTION I-I**



**SECTIONAL PLAN F-F**

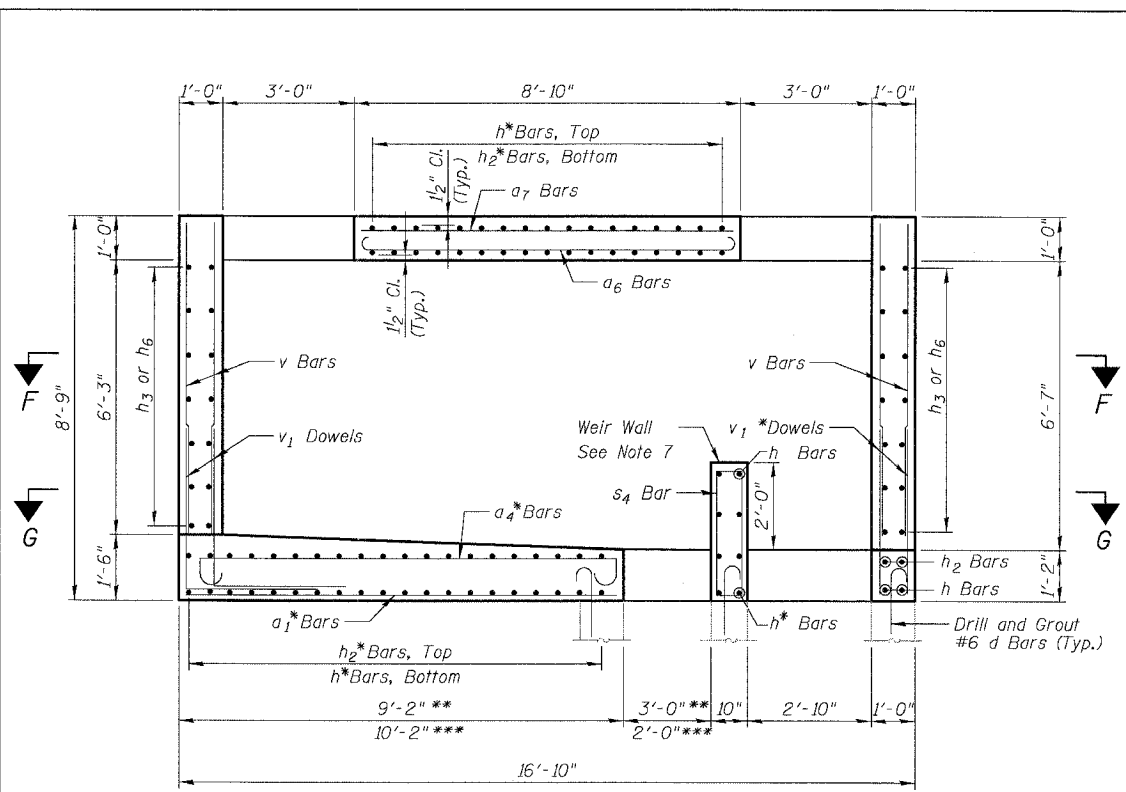
**NOTES:**

1. 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.
2. All dimensions and elevations shall be field verified prior to construction.
3. Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
4. Manhole Frame, Ladder Rungs and any inserts installation shall be coordinated with Drainage Plans.
5. Concrete cover for reinforcement steel to be 2" unless otherwise noted.
6. All lap splices marked on the drawings are minimum.
7. 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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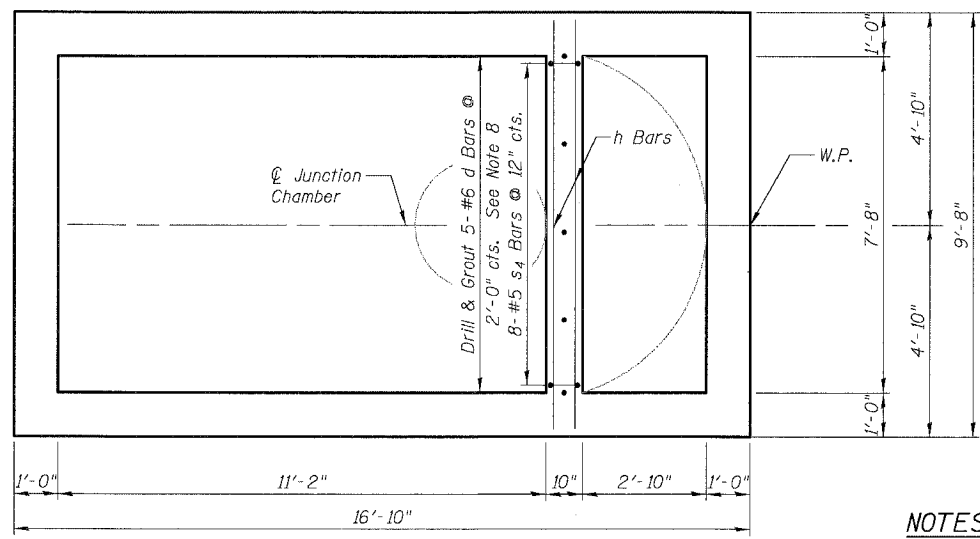
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SHEET JC-3 OF JC-22  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
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31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBER, TYPE 2  
REINFORCEMENT DETAILS 1  
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SECTION 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 | **  |



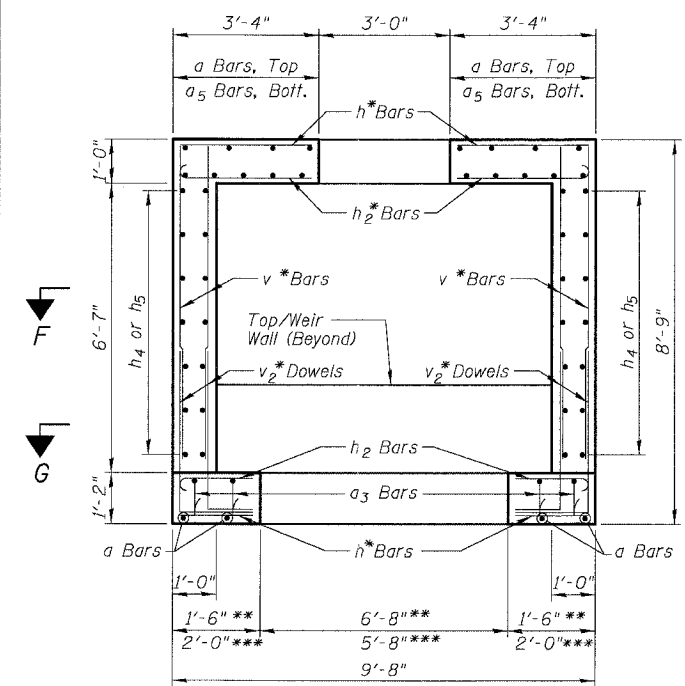
SECTIONAL PLAN G-G

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

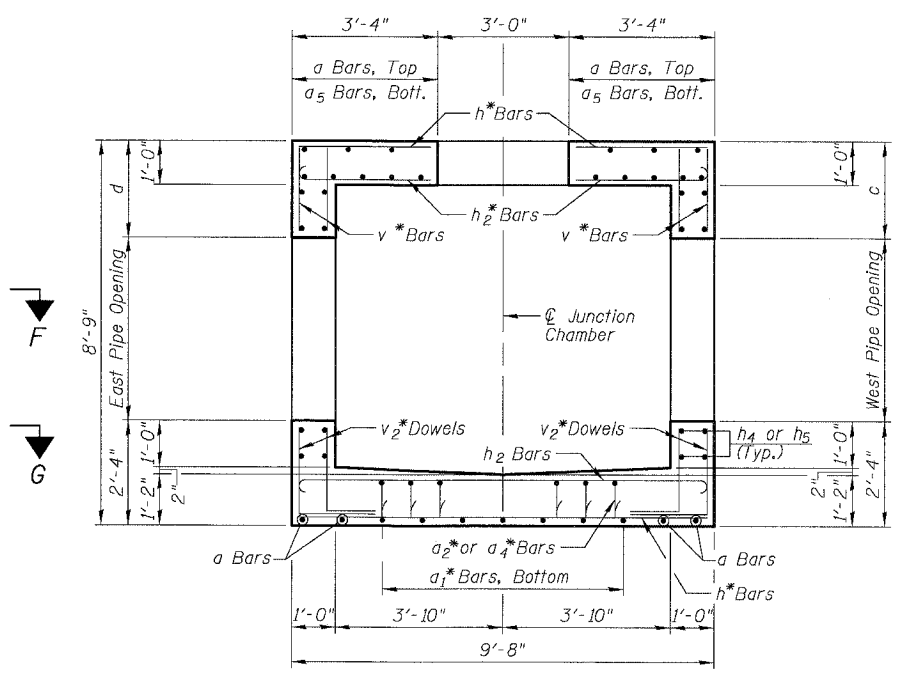
NOTES:

- 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.

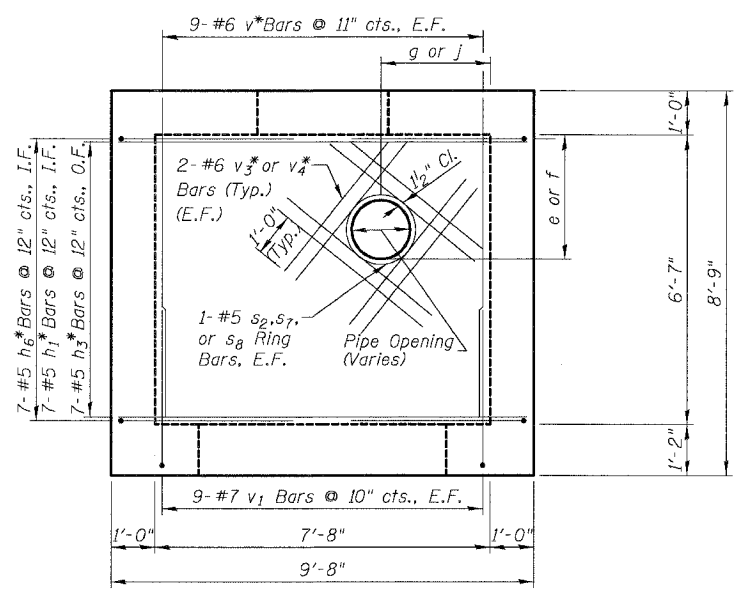
\* - Cut bars to fit in field.  
E.F. - denotes Each Face  
E.S. - denotes Each Side  
I.F. - denotes Inside Face  
O.F. - denotes Outside Face



SECTION B-B



SECTION C-C



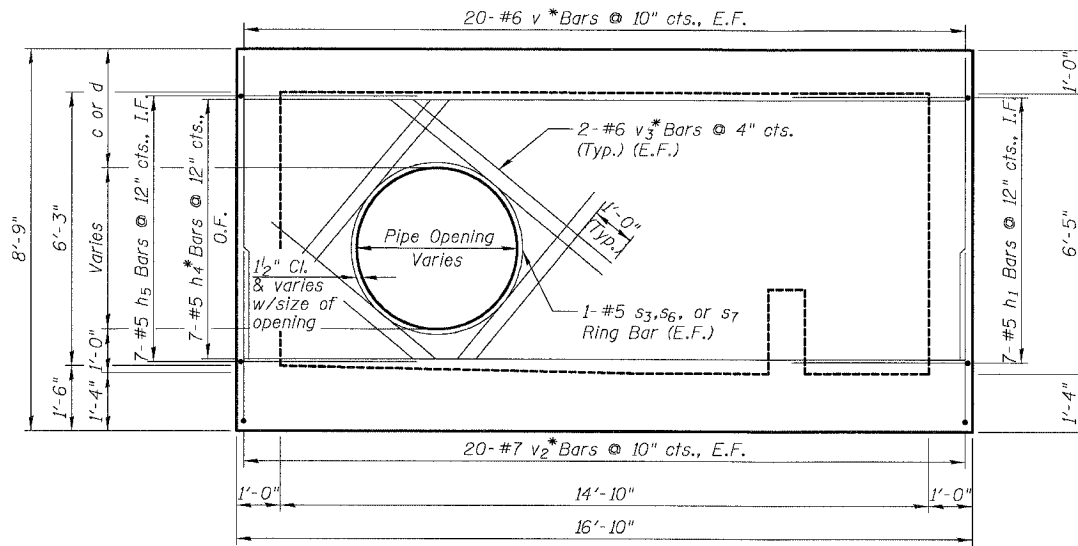
SECTION D-D  
(Opposite Wall Typical)

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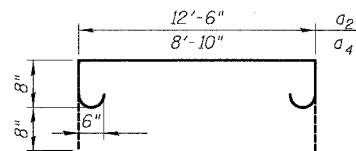
SHEET JC-4 OF JC-22  
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JUNCTION CHAMBER, TYPE 2  
REINFORCEMENT DETAILS 2  
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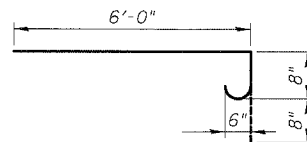
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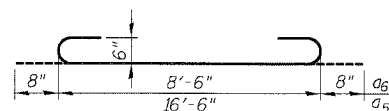
**SECTION E-E**  
(Opposite Wall Typical)



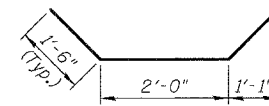
**BARS a<sub>2</sub> and a<sub>4</sub>**



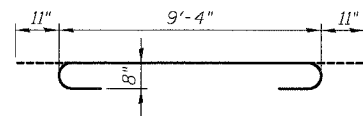
**BAR a<sub>3</sub>**



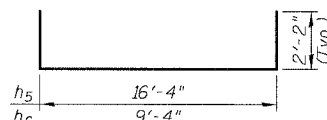
**BARS a<sub>5</sub> and a<sub>6</sub>**



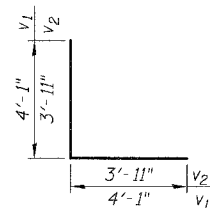
**BAR h<sub>1</sub>**



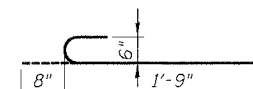
**BAR h<sub>2</sub>**



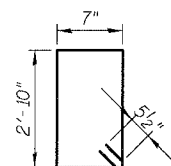
**BARS h<sub>5</sub> and h<sub>6</sub>**



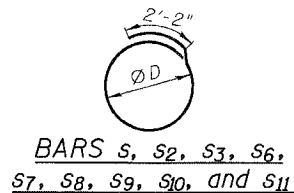
**BARS v<sub>1</sub> and v<sub>2</sub>**



**BAR d**

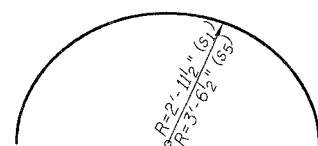


**BAR s<sub>4</sub>**



**BARS s<sub>1</sub>, s<sub>2</sub>, s<sub>3</sub>, s<sub>6</sub>, s<sub>7</sub>, s<sub>8</sub>, s<sub>9</sub>, s<sub>10</sub>, and s<sub>11</sub>**

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



**BARS s<sub>1</sub> and s<sub>5</sub>**

**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.
- v<sub>3</sub> Bars are for pipes 27"φ or larger. v<sub>4</sub> 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 <sub>1</sub>      | 7   | #5   | 9'-10"  | —     |
| a <sub>2</sub>      | 10  | #6   | 15'-2"  | ⌋     |
| a <sub>3</sub>      | 4   | #6   | 7'-4"   | ⌋     |
| a <sub>4</sub>      | 5   | #6   | 11'-6"  | ⌋     |
| a <sub>5</sub>      | 10  | #6   | 17'-10" | ⌋     |
| a <sub>6</sub>      | 5   | #6   | 9'-10"  | ⌋     |
| a <sub>7</sub>      | 3   | #5   | 8'-6"   | —     |
| a <sub>8</sub>      | 48  | #5   | 5'-11"  | —     |
| a <sub>9</sub>      | 8   | #5   | 6'-0"   | —     |
| d                   | 17  | #6   | 2'-5"   | ⌋     |
| h                   | 73  | #6   | 9'-4"   | —     |
| h <sub>1</sub>      | 28  | #5   | 5'-0"   | ⌋     |
| h <sub>2</sub>      | 65  | #8   | 11'-2"  | ⌋     |
| h <sub>3</sub>      | 14  | #5   | 9'-4"   | —     |
| h <sub>4</sub>      | 14  | #5   | 16'-4"  | —     |
| h <sub>5</sub>      | 14  | #5   | 20'-8"  | ⌋     |
| h <sub>6</sub>      | 14  | #5   | 13'-8"  | ⌋     |
| s                   | 52  | #5   | 12'-4"  | ○     |
| s <sub>1</sub>      | 14  | #5   | 9'-3"   | ○     |
| s <sub>2</sub>      | 4   | #5   | 7'-0"   | ○     |
| s <sub>3</sub>      | 12  | #5   | 11'-7"  | ○     |
| s <sub>4</sub>      | 8   | #5   | 7'-9"   | ○     |
| s <sub>5</sub>      | 8   | #5   | 11'-2"  | ○     |
| s <sub>6</sub>      | 10  | #5   | 13'-4"  | ○     |
| s <sub>7</sub>      | 6   | #5   | 15'-3"  | ○     |
| s <sub>8</sub>      | 18  | #5   | 6'-1"   | ○     |
| s <sub>9</sub>      | 14  | #5   | 8'-2"   | ○     |
| s <sub>10</sub>     | 4   | #5   | 9'-9"   | ○     |
| s <sub>11</sub>     | 2   | #5   | 10'-9"  | ○     |
| v                   | 116 | #6   | 7'-0"   | —     |
| v <sub>1</sub>      | 36  | #7   | 8'-2"   | ⌋     |
| v <sub>2</sub>      | 80  | #7   | 7'-10"  | ⌋     |
| v <sub>3</sub>      | 240 | #6   | 8'-0"   | —     |
| v <sub>4</sub>      | 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 | DATE |
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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



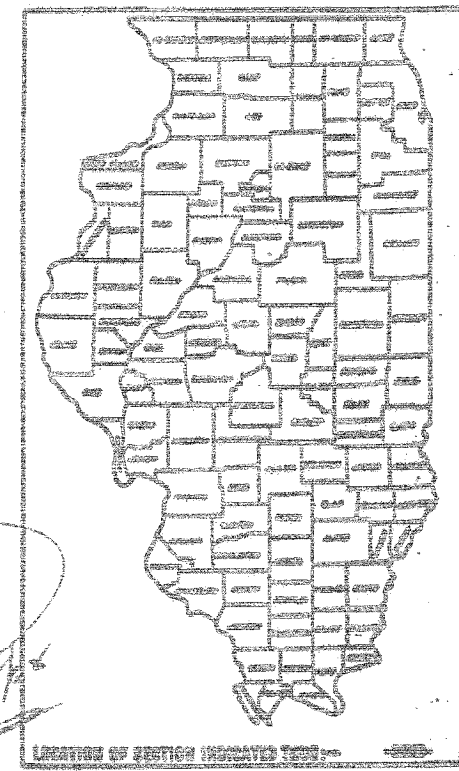
**40276  
DR #11**

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**

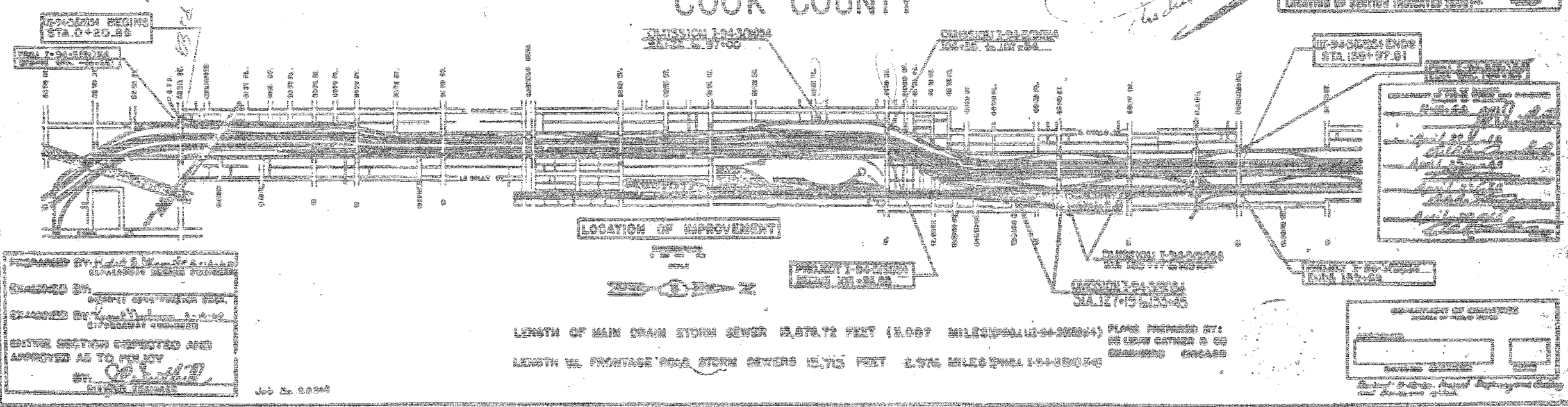
PROJECT UI-94-3(69)54 &  
PROJECT I-94-3(91)54  
COOK COUNTY



**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*

PREPARED BY: H. J. ...  
CHECKED BY: ...  
DATE: 1-12-05

APPROVED BY: ...  
DATE: ...

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

FOR INFORMATION ONLY

| REVISIONS | NAME | DATE |
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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          | 412       |

STA. TO STA.  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT  
62300 \*1818, ETC, 2324.6-1P/R-8

94002 AM 6/24/2005

|                     |                           |                  |              |           |
|---------------------|---------------------------|------------------|--------------|-----------|
| 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. 2324.6-1PIR-8 |                  |              |           |

**GENERAL NOTES**

CONTRACTOR AND SUB-CONTRACTOR ARE WARNED THAT NO SUCH MATTERS LIVE REMAINS MAY BE DESTROYED OR INTERFERED IN ANY MANNER WHATSOEVER IS MADE FOR ITS PROTECTABLE BY THE BUREAU OF SANITARY, CITY OF CHICAGO.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL MAINTAIN AND KEEP IN PLACE TEMPORARY FACILITIES FOR ALL STORM OR SEWER DRAINING, REVISIONS, OR OTHER BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED AT THESE DRAINING AND SEWER AND MAINTAIN THEM AS EFFICIENT THROUGHOUT THE PROJECT. IF NECESSARY, AND A TEMPORARY DRAINAGE PLAN IS REQUIRED, HE SHALL PROVIDE THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING FACILITIES FROM THESE TEMPORARY FACILITIES. DRAINAGE FACILITIES SHALL BE MAINTAINED THROUGHOUT THE PROJECT AND SHALL BE IN SERVICE AND ACCEPTED BY THE BUREAU OF SANITARY. THE BUREAU SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IF THE PLACEMENT OF MANHOLES OR CONNECTIONS NECESSARILY REQUIRES ANY TRENCH, TEMPORARY REMOVAL AND REPLACEMENT OF ANY LIGHT POLE, OR RESTRICTION OF EXISTING UTILITIES, THE WORK SHALL 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 INTERFERENCE 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 UTILITY 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 MAINTAINED AT THE BUREAU OF SANITARY UTILITIES DIVISION AND AT A FIELD OFFICE, AS NECESSARY.

VERTICAL 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 24 INCH PER CENT.

A DESCRIPTION OF 8 FT. OR 6 FT. OF STORM SEWER HAS BEEN MADE AT EACH TYPE MANHOLE, AND A DESCRIPTION OF 8 FT. AND 10 FT. OF SEMI-ELLIPTICAL STORM SEWER HAS BEEN MADE RESPECTIVELY AT EACH TYPE B OR C MANHOLE, AND A DESCRIPTION OF 6 FT. AND 8 FT. OF STORM SEWER HAS BEEN MADE AT EACH TYPE D MANHOLE AND A DESCRIPTION OF 8 FT. OR 6 FT. OF STORM SEWER HAS BEEN MADE AT EACH CONNECTION AND AT EACH TYPE "W" MANHOLE.

LAGGED CURBS SHALL BE FOLLOWED IN ALL MANHOLES.

**MAIN DRAIN SEWER NOTES**

PAVEMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH FOOTING FOR EACH TYPE MANHOLE ACTUALLY ENCOUNTERED WITHIN THE AREA ENCOMPASSED BY THE POINT LIGHT AS SHOWN ON THE DETAIL SHEETS FOR SEMI-ELLIPTICAL STORM SEWER IN TUNNEL. THE QUANTITY AS SHOWN ON THE SUMMARY OF QUANTITIES IS AN ESTIMATED QUANTITY BASED ON ALL AVAILABLE INFORMATION AT THE OFFICE OF THE ILLINOIS DIVISION OF HIGHWAYS.

THE CONTRACTOR SHALL NOT BE PERMITTED TO BREAK UP ROCK BY CLASTING BETWEEN STATIONS 51+00 TO 51+20. SUCH SHALL BE DONE BY MECHANICAL MEANS. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY EXHAUST, BRACING AND SUPPORT TO MAINTAIN EXISTING 18" DIA. SEMI-ELLIPTICAL SEWER ON EASTFIELD BLVD. AT THE POINT LIGHT & CONNECTION. SEE SPECIAL PROVISIONS.

**MANHOLE MANHOLES:**

- 01 24" MANHOLE SHALL EXISTING GRADING TO PREVENT FLOODING MATERIAL FROM EXTERIOR SEWER.
- 02 EXISTENCE FROM SEWER TO PREVIOUS TOP OF MANHOLE SHALL BE GRAFFIATED WITH TRIPLE SCREENING.
- 03 PLACE 3" X 3" WOOD MARKERS ON TOP OF A MANHOLE AND EXTEND 3 FEET ABOVE EXISTING GRADE. THE EXTENDED PORTION OF MARKER IS TO BE PAINTED YELLOW, WITH THE LETTERS "M.H." AND THE STATION OF MANHOLE SUPERIMPOSED IN BLACK PAINT.
- 04 THE COST OF THE 3" X 3" WOOD MARKERS, TRIPLE SCREENING AND PAINT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLE.

**FRONTAGE ROAD SEWER NOTES**

ALL SEWERS IN CITY STREETS AND FRONTAGE ROADS, 24" DIAMETER AND SMALLER SHALL BE OF VITRIFIED CLAY PIPE, CONFORMING TO A.S.T.M. SPECIFICATION C900-97. ALL SEWERS LARGER THAN 24" DIAMETER SHALL BE OF ENLARGED CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

MANHOLES OF 24" DIA. OR LARGER FOR USE ON THE PLANS WILL BE CONSIDERED AS COVERED PER THE SPECIAL PROVISIONS "PAVEMENT FINISHING GRADE & SPALL" AND PERMIT WILL BE MADE FOR FINISHING GRADES NOTED & SHOWN "E" OR "C" ON PLANS OR EXISTING GRADE AND NOTED "E" OR "C".

REPAIRS MADE FOR FUTURE CONNECTIONS SHALL BE MADE WITH A STOPPER. THE COST OF THE STOPPER WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION SHALL BE ALLOWED.

TYPE "W" COVER MANHOLE SHALL HAVE CONCRETE COVER. THIS MANHOLE IS TYPE "W" COVER MANHOLE.

CONNECTIONS TO EXISTING MANHOLES AS SHOWN ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

IF CONNECTIONS BETWEEN MANHOLES OR SEWERS ARE MADE TO EXISTING MANHOLES AND CONNECTIONS ARE MADE TO EXISTING SEWERS THIS WORK IS CONSIDERED WITHIN THE CONTRACT. WORK TO BE DONE AT THE POINT LIGHT AND PERMIT SHALL BE INCLUDED IN THE UNIT PRICE FOR MANHOLE, FROM THE POINT LIGHT.

WHERE A CONNECTION IS MADE TO AN EXISTING SEWER AT POINT LIGHT OR SEWER AT POINT LIGHT CONNECTIONS SHALL BE MADE TO EXISTING SEWER AT POINT LIGHT. THE GENERAL OF EXISTING PIPE AND CONNECTIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND PERMIT SHALL BE INCLUDED IN THE UNIT PRICE FOR SEWER, FROM THE POINT LIGHT.

**(CONTINUED)**

REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL BE REQUIRED WHEN SEWERS ARE TO BE PLACED UNDER CONSTRUCTION, AND INCIDENTALLY SUBJECT TO TRAFFIC, WILL BE PAID FOR RESPECTIVELY AS PAVEMENT REPAIRMENT-ENTIRE OR PAVEMENT REPAIRMENT-REPLACEMENT, SPECIAL (1818)

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

- 01 SIDEWALK REMOVAL AND REPLACEMENT WITH CONCRETE SIDEWALK 6 INCH AT LOCATION SHOWN ON PLANS WHERE SIDEWALK WILL BE REMOVED OR SUBSEQUENT CONTRACTS.
- 02 SIDEWALK REMOVAL AND REPLACEMENT WITH CONCRETE SIDEWALK 6 INCH AT LOCATION SHOWN ON PLANS.

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

- 01 CURB REMOVAL AND REPLACEMENT WITH CONCRETE CURB TYPE R AT LOCATION SHOWN ON PLANS WHERE CURB WILL BE REMOVED OR SUBSEQUENT CONTRACTS.
- 02 CURB REMOVAL AND REPLACEMENT WITH CONCRETE CURB TYPE R AT LOCATION SHOWN ON PLANS.

Standard 24" x 24" signs shall be erected at locations as directed by the Engineer.

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| 114       | SEMI-ELLIPTICAL SEWER - 94'-0" x 95'-0"                      |
| 115       | SEMI-ELLIPTICAL SEWER - 95'-0" x 96'-0"                      |
| 116       | SEMI-ELLIPTICAL SEWER - 96'-0" x 97'-0"                      |
| 117       | SEMI-ELLIPTICAL SEWER - 97'-0" x 98'-0"                      |
| 118       | SEMI-ELLIPTICAL SEWER - 98'-0" x 99'-0"                      |
| 119       | SEMI-ELLIPTICAL SEWER - 99'-0" x 100'-0"                     |

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SHEET JC-7 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

**ILLINOIS DIVISION OF HIGHWAYS**  
SOUTH EXPRESSWAY  
GENERAL NOTES  
INDEX OF SHEETS

### SCHEDULE OF DIMENSIONS & ELEVATIONS FOR TYPE B & C MANHOLE

| P.I. STATION ON SEWER | MANHOLE STATION & OF CONSTRUCTION SOUTH EXPRESSWAY | TYPE MANHOLE | SIZE OF MAIN DRAIN | NUMBER OF PIPES ENTERING JUNCTION CHAMBER | DIMENSIONS        |                               |        |         |        |                  |       |       |       |   | ELEVATIONS |       |       |        |        |        |        |        |        |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|----------------------------------------------------|--------------|--------------------|-------------------------------------------|-------------------|-------------------------------|--------|---------|--------|------------------|-------|-------|-------|---|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                       |                                                    |              |                    |                                           | SIZE OF DROP PIPE | PIPE SIZE AT JUNCTION CHAMBER |        |         |        | DISTANCES (FEET) |       |       |       |   |            |       |       |        |        |        |        |        |        |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       |                                                    |              |                    |                                           |                   | A NORTH                       | B WEST | C SOUTH | D EAST | E                | F     | G     | H     | I | J          | K     | L     | M      | N      | O      | P      | Q      | R      | S      | T | U | V |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8+20.00               | 8+30                                               | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               |                               | 30"    |         | 24"    |                  | 20.20 | 20.20 | 27.00 |   |            | -2.30 | -2.00 | -      | -3.50  | -4.30  | -22.20 | -22.20 | -20.20 | -8.50  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14+22.00              | 14+32                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               |                               | 30"    | 24"     | 30"    |                  | 22.00 | 17.10 | 28.00 |   |            | -1.20 | -2.30 | -2.30  | -3.30  | -2.30  | -22.00 | -27.10 | -31.00 | -7.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22+55.00              | 22+60                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               | 24"                           | 18"    |         | 24"    |                  | 25.00 | 20.00 | 27.00 |   |            | -1.20 | -2.00 | -7.30  | -7.00  | -7.30  | -22.00 | -29.00 | -30.00 | -9.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27+07.10              | 27+00                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 30"               |                               | 30"    | 30"     | 24"    |                  | 21.70 | 18.70 | 25.00 |   |            | -2.70 | -2.70 | -10.00 | -10.70 | -10.70 | -27.00 | -28.70 | -30.00 | -9.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32+04.10              | 32+00                                              | 0            | 7'-2 3/4" x 8'-0"  | 0                                         |                   |                               |        |         |        |                  |       |       |       |   |            |       |       |        |        |        |        |        |        |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 37+74.05              | 37+75                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 30"               |                               | 20"    | 18"     | 30"    |                  | 23.00 | 18.00 | 27.00 |   |            | -2.07 | -0.27 | -3.00  | -5.00  | -10.00 | -22.00 | -29.00 | -35.10 | -8.77  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42+32.05              | 42+32                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               |                               | 30"    | 10"     | 30"    |                  | 27.00 | 21.00 | 30.00 |   |            | +0.80 | -2.00 | -7.30  | -8.00  | -8.00  | -22.00 | -26.07 | -32.00 | -8.70  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50+25.00              | 50+27                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               | 24"                           | 20"    |         | 30"    |                  | 27.00 | 21.00 | 30.00 |   |            | -1.00 | -1.10 | -3.00  | -3.00  | -3.00  | -22.10 | -25.00 | -29.10 | -7.40  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55+12.00              | 55+13                                              | 8245         | 7'-2 3/4" x 8'-0"  | 0                                         | 24"               |                               | 30"    | 10"     | 30"    |                  | 29.00 | 23.00 | 30.00 |   |            | +1.00 | -2.07 | -3.00  | -7.17  | -7.17  | -22.00 | -29.00 | -33.00 | -5.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 59+00.00              | 59+00                                              | 0            | 8'-1 3/4" x 8'-0"  | 0                                         |                   |                               |        |         |        |                  |       |       |       |   |            |       |       |        |        |        |        |        |        |        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65+54.50              | 65+55                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 30"               | 18"                           | 30"    |         | 30"    |                  | 35.00 | 19.10 | 40.10 |   |            | -0.00 | -0.47 | -3.00  | -10.40 | -10.40 | -22.00 | -31.00 | -35.00 | -8.07  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 71+00.75              | 71+20                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 24"               |                               | 24"    | 10"     | 24"    |                  | 30.17 | 23.00 | 41.00 |   |            | -0.00 | -3.00 | -7.10  | -7.00  | -7.00  | -22.00 | -29.10 | -33.00 | -8.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75+00.00              | 76+00                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 24"               |                               | 24"    | 10"     | 24"    |                  | 30.00 | 23.00 | 41.00 |   |            | +1.10 | -3.00 | -7.00  | -7.00  | -7.00  | -22.00 | -29.00 | -33.00 | -8.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 81+00.00              | 81+00                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 24"               |                               | 20"    | 10"     | 30"    |                  | 28.00 | 21.00 | 30.00 |   |            | -2.00 | -3.00 | -3.00  | -10.00 | -10.00 | -22.00 | -29.00 | -33.00 | -8.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 87+00.00              | 87+00                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 24"               | 18"                           | 30"    |         | 30"    |                  | 34.00 | 20.00 | 45.00 |   |            | -0.00 | -0.00 | -4.00  | -6.00  | -6.00  | -22.00 | -33.00 | -35.00 | -9.77  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 94+00.00              | 94+00                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 30"               |                               | 24"    | 10"     | 10"    |                  | 40.00 | 35.00 | 51.00 |   |            | +0.00 | +5.00 | +1.00  | +1.00  | +1.00  | -22.00 | -33.00 | -38.00 | +2.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 99+20.00              | 99+00                                              | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 30"               |                               | 24"    | 10"     | 24"    |                  | 33.00 | 23.00 | 40.00 |   |            | +1.07 | -0.00 | -4.70  | -5.00  | -5.00  | -22.00 | -33.00 | -37.00 | +1.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105+17.00             | 105+25                                             | 8245         | 8'-1 3/4" x 8'-0"  | 0                                         | 30"               |                               | 24"    | 10"     | 24"    |                  | 33.00 | 17.70 | 40.00 |   |            | -2.00 | -3.00 | -14.70 | -15.00 | -15.00 | -22.00 | -33.00 | -37.00 | -12.00 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 111+01.00             | 111+20                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 24"               |                               | 24"    | 20"     | 18"    |                  | 30.00 | 21.07 | 41.00 |   |            | +1.00 | -0.00 | -10.00 | -10.00 | -10.00 | -22.00 | -33.00 | -37.00 | -8.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 117+00.01             | 117+72                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 26"               |                               | 18"    | 36"     | 36"    |                  | 24.00 | 27.00 | 46.00 |   |            | +7.00 | -0.00 | -4.70  | -4.00  | -4.70  | -22.00 | -29.00 | -35.00 | -3.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125+01.01             | 125+70                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 24"               |                               | 30"    |         | 16"    |                  | 23.00 | 22.70 | 40.07 |   |            | +2.00 | +1.00 | -      | -5.00  | -2.00  | -22.00 | -29.00 | -35.00 | -2.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 122+50.01             | 122+00                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 25"               |                               | 26"    | 16"     | 18"    |                  | 27.10 | 19.00 | 41.07 |   |            | -1.00 | -0.00 | -12.00 | -12.00 | -12.00 | -22.00 | -29.00 | -35.00 | -11.00 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 127+20.01             | 127+00                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 24"               |                               | 24"    | 10"     | 18"    |                  | 25.00 | 26.00 | 45.70 |   |            | -0.00 | -4.00 | -0.10  | -0.70  | -2.40  | -22.00 | -29.00 | -35.00 | -7.70  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 133+50.01             | 132+18                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 24"               | 18"                           | 20"    |         | 20"    |                  | 26.07 | 23.00 | 40.00 |   |            | -2.40 | -0.00 | -3.00  | -10.00 | -10.00 | -22.00 | -29.00 | -35.00 | -8.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135+50.01             | 135+47                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 26"               |                               | 30"    |         | 30"    |                  | 28.00 | 20.00 | 45.00 |   |            | -2.10 | -7.27 | -      | -12.27 | -12.27 | -22.00 | -29.00 | -35.00 | -10.77 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 138+11.01             | 132+20                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 30"               |                               | 30"    | 20"     | 24"    |                  | 27.40 | 24.00 | 47.00 |   |            | +3.00 | -3.70 | -0.00  | -4.70  | -0.00  | -22.00 | -29.00 | -35.00 | -7.00  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 138+01.01             | 138+00                                             | 8245         | 8'-5 3/4" x 10'-6" | 0                                         | 24"               |                               | 30"    | 15"     | 30"    |                  | 29.00 | 21.00 | 40.07 |   |            | -0.10 | -0.00 | -13.00 | -12.00 | -13.00 | -22.00 | -29.00 | -35.00 | -12.00 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |

SHEET JC- 8 OF JC-22

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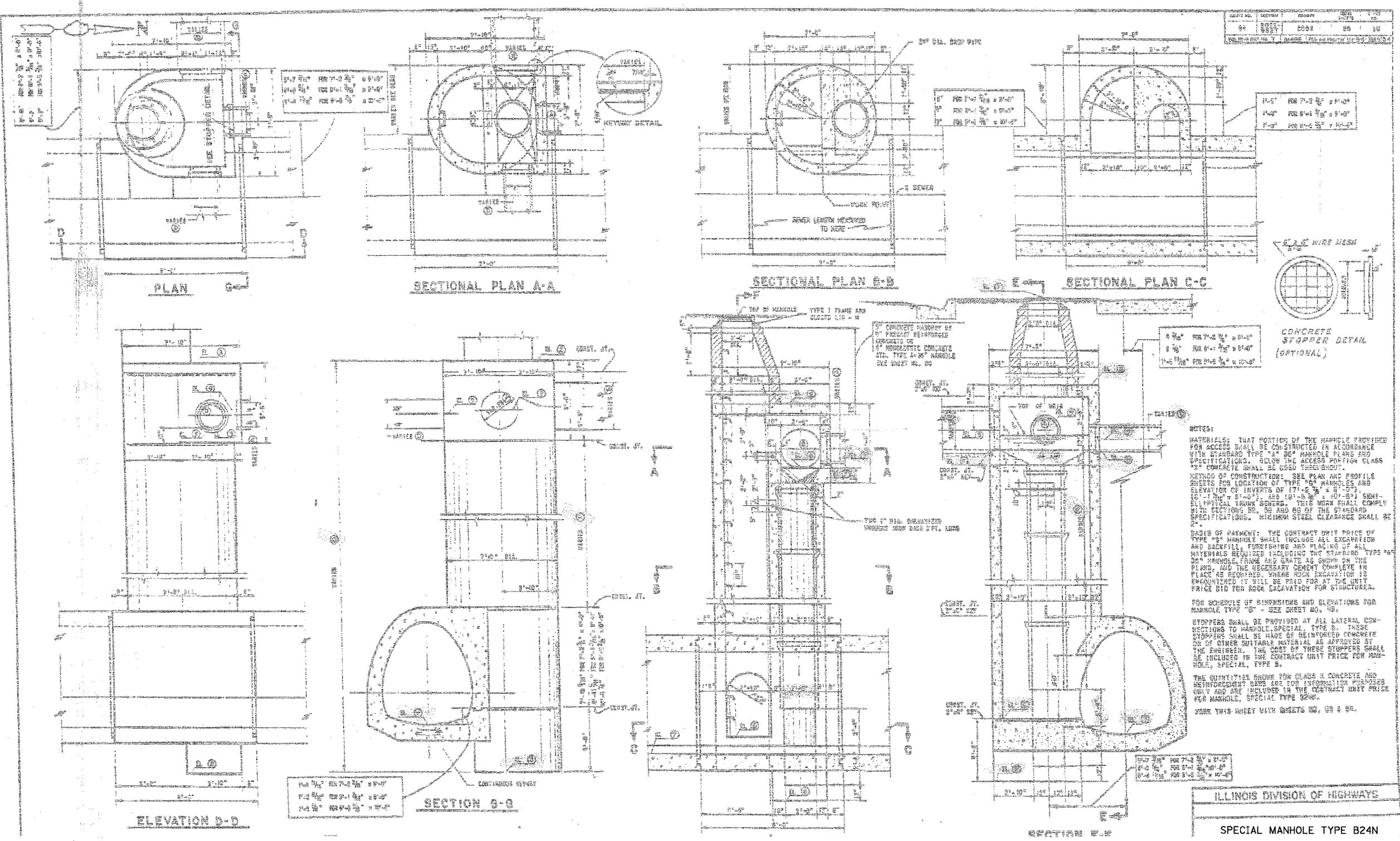
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBERS  
EXISTING DROP MANHOLE PLANS

SCALE: NTS  
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| F.A.I.              | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94/90               |                           | COOK   | 556          | 415       |
| STA.                | TO STA.                   |        |              |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |        |              |           |
| 62300               | •(S18, ETC, 2324.6-1P1R-B |        |              |           |



**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'-2") AND (8'-5" & 10'-5") SLOPE-ELLIPSYDICAL 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

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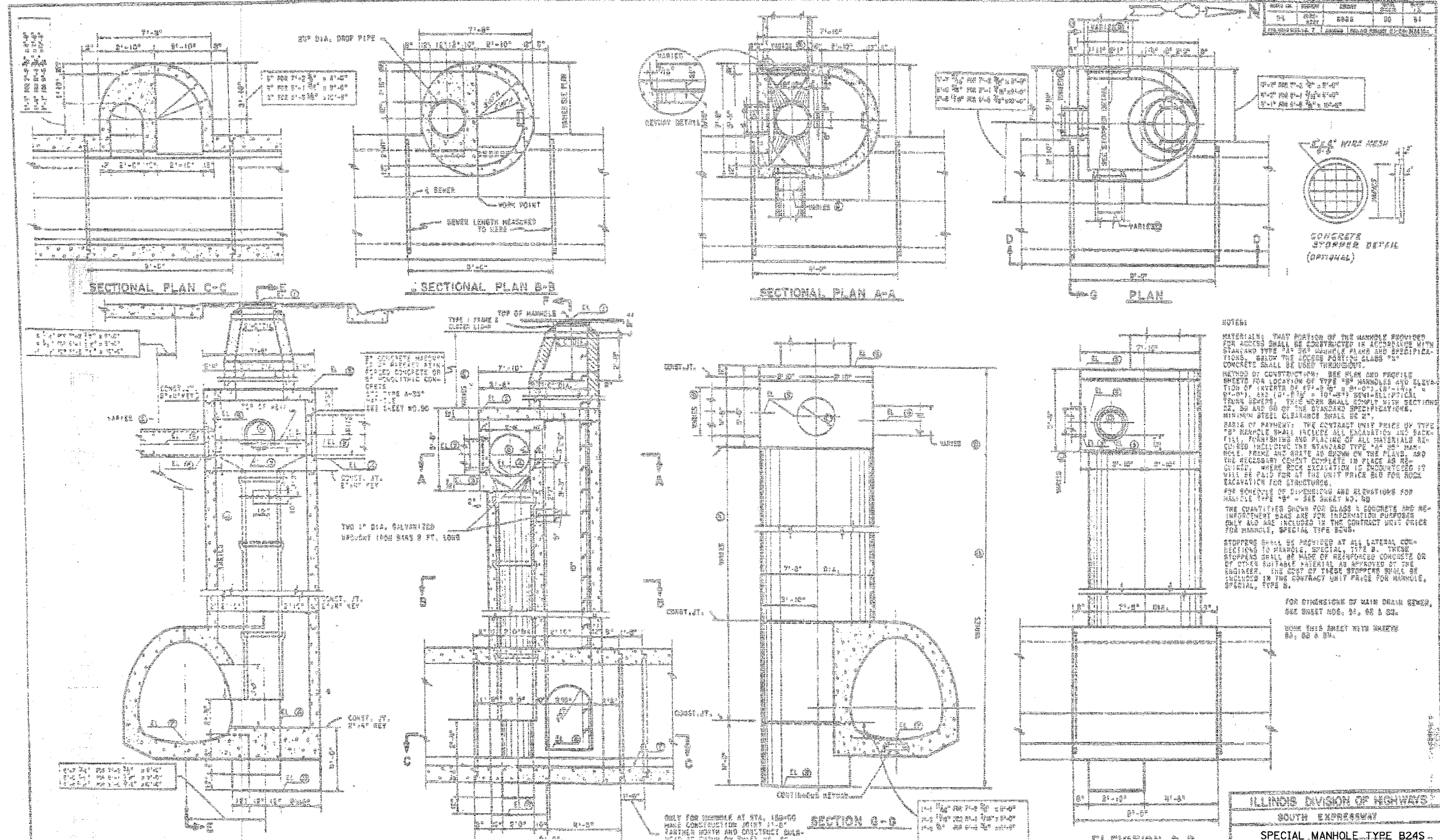
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| F.A.I.              | SECTION                   | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               |                           | COOK             | 556          | 416       |
| STA.                | TO STA.                   |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



**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 THE LATEST PORTLAND CEMENT "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. D.P.'S. SHALL BE 0'-0" TO 0'-6" FROM THE TOP OF THE MANHOLE. THE WORK SHALL COMPLY WITH SECTIONS 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, BENCH AND STAIRS TO SHOW ON THE PLAN, AND THE NECESSARY CURB COMPLETE IN PLACE AS REQUIRED, WHERE ROCK EXCAVATION IS INDICATED IT WILL BE PAID FOR AT THE UNIT PRICE SET FOR ROCK EXCAVATION FOR STRUCTURES.

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

THE QUANTITIES SHOWN FOR CLASS 3 CONCRETE AND REINFORCING 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.

SHOW THIS SHEET WITH SHEETS 22, 23 & 24.

ILLINOIS DIVISION OF HIGHWAYS  
SOUTH EXPRESSWAY  
SPECIAL MANHOLE TYPE B24S

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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

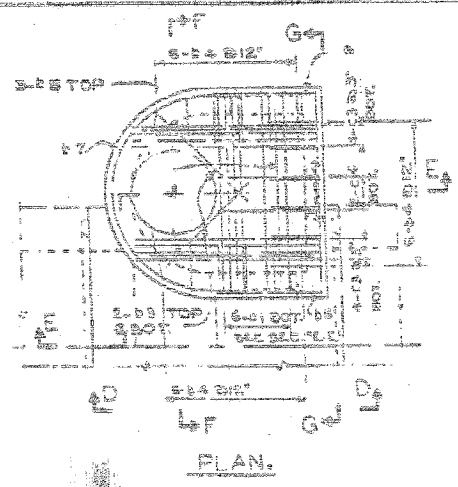
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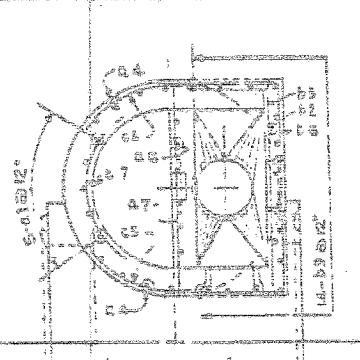
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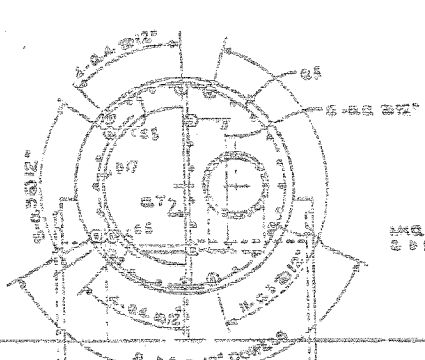
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| F.A.I.              | SECTION | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| 94/90               |         | COOK                      | 556          | 417       |
| STA.                |         | TO STA.                   |              |           |
| FED. ROAD DIST. NO. |         | ILLINOIS FED. AID PROJECT |              |           |
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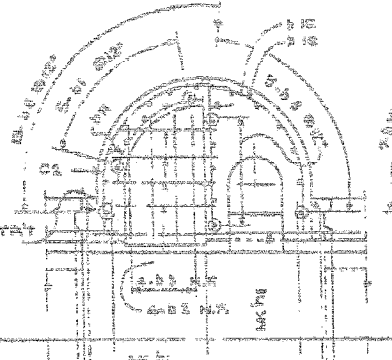
PLAN.



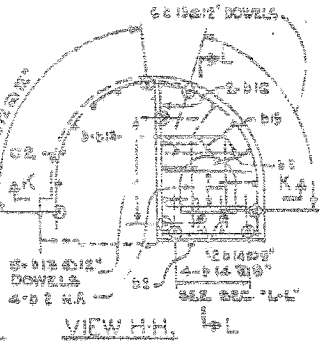
SECTIONAL PLAN A-A.



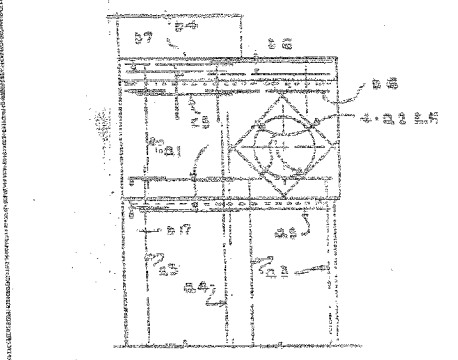
SECTIONAL PLAN B-B.



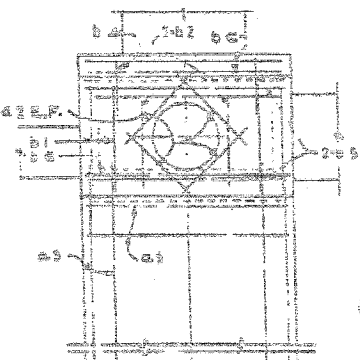
SECTIONAL PLAN C-C.



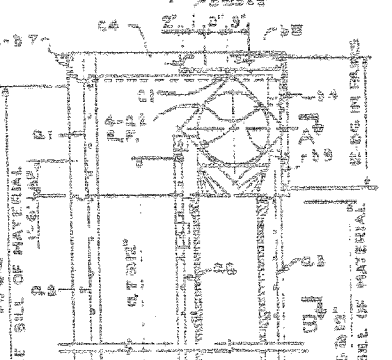
VIEW H-H.



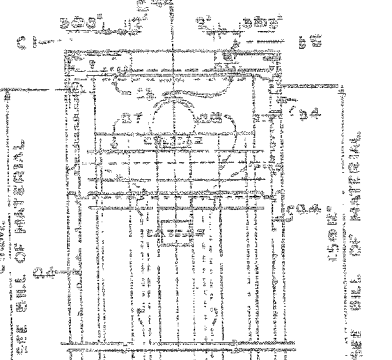
ELEVATION D-D.



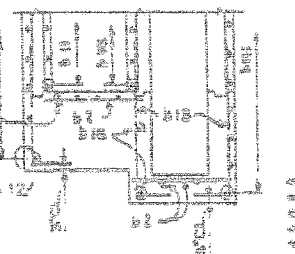
SECTION G-G.



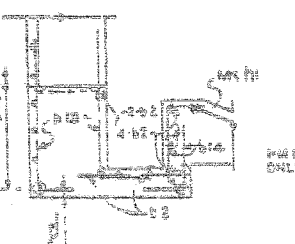
SECTION E-E.



SECTION F-F.



SECTION K-K.



SECTION L-L.

| BAR | A  | B  |
|-----|----|----|
| B4  | 20 | 20 |
| B5  | 20 | 20 |
| B6  | 20 | 20 |
| B7  | 20 | 20 |
| B8  | 20 | 20 |
| B9  | 20 | 20 |
| B10 | 20 | 20 |

| BAR | A  | B  | C  |
|-----|----|----|----|
| B7  | 20 | 20 | 20 |
| B8  | 20 | 20 | 20 |
| B9  | 20 | 20 | 20 |
| B10 | 20 | 20 | 20 |



BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

| ITEM NO. | DESCRIPTION      | QUANTITY | UNIT  |
|----------|------------------|----------|-------|
| 1        | REINFORCING BARS | 100      | LB    |
| 2        | CONCRETE         | 10       | CU YD |

| BILL OF MATERIAL |                  |          |       |
|------------------|------------------|----------|-------|
| ITEM NO.         | DESCRIPTION      | QUANTITY | UNIT  |
| 1                | REINFORCING BARS | 100      | LB    |
| 2                | CONCRETE         | 10       | CU YD |

| ADDITIONAL BARS FOR MAINLINE AT STATIONS |                  |          |       |
|------------------------------------------|------------------|----------|-------|
| ITEM NO.                                 | DESCRIPTION      | QUANTITY | UNIT  |
| 3                                        | REINFORCING BARS | 100      | LB    |
| 4                                        | CONCRETE         | 10       | CU YD |

| ADDITIONAL BARS FOR MAINLINE AT STATIONS |                  |          |       |
|------------------------------------------|------------------|----------|-------|
| ITEM NO.                                 | DESCRIPTION      | QUANTITY | UNIT  |
| 5                                        | REINFORCING BARS | 100      | LB    |
| 6                                        | CONCRETE         | 10       | CU YD |

| ADDITIONAL BARS FOR MAINLINE AT STATIONS |                  |          |       |
|------------------------------------------|------------------|----------|-------|
| ITEM NO.                                 | DESCRIPTION      | QUANTITY | UNIT  |
| 7                                        | REINFORCING BARS | 100      | LB    |
| 8                                        | CONCRETE         | 10       | CU YD |

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

NOTES:  
MINIMUM STEEL CLEARANCE SHALL BE 1" EXCEPT AS NOTED  
MINIMUM LAP OF REINFORCEMENT SHALL BE 33 DIA. ETERS  
BEND IF POSSIBLE OR BURN OFF REINFORCING BARS  
IN FIELD TO CLEAR OBSTACLES

REINFORCING:  
TYPE B - 24 H SHOWN  
TYPE B - 24 S OPPOSITE SIDE

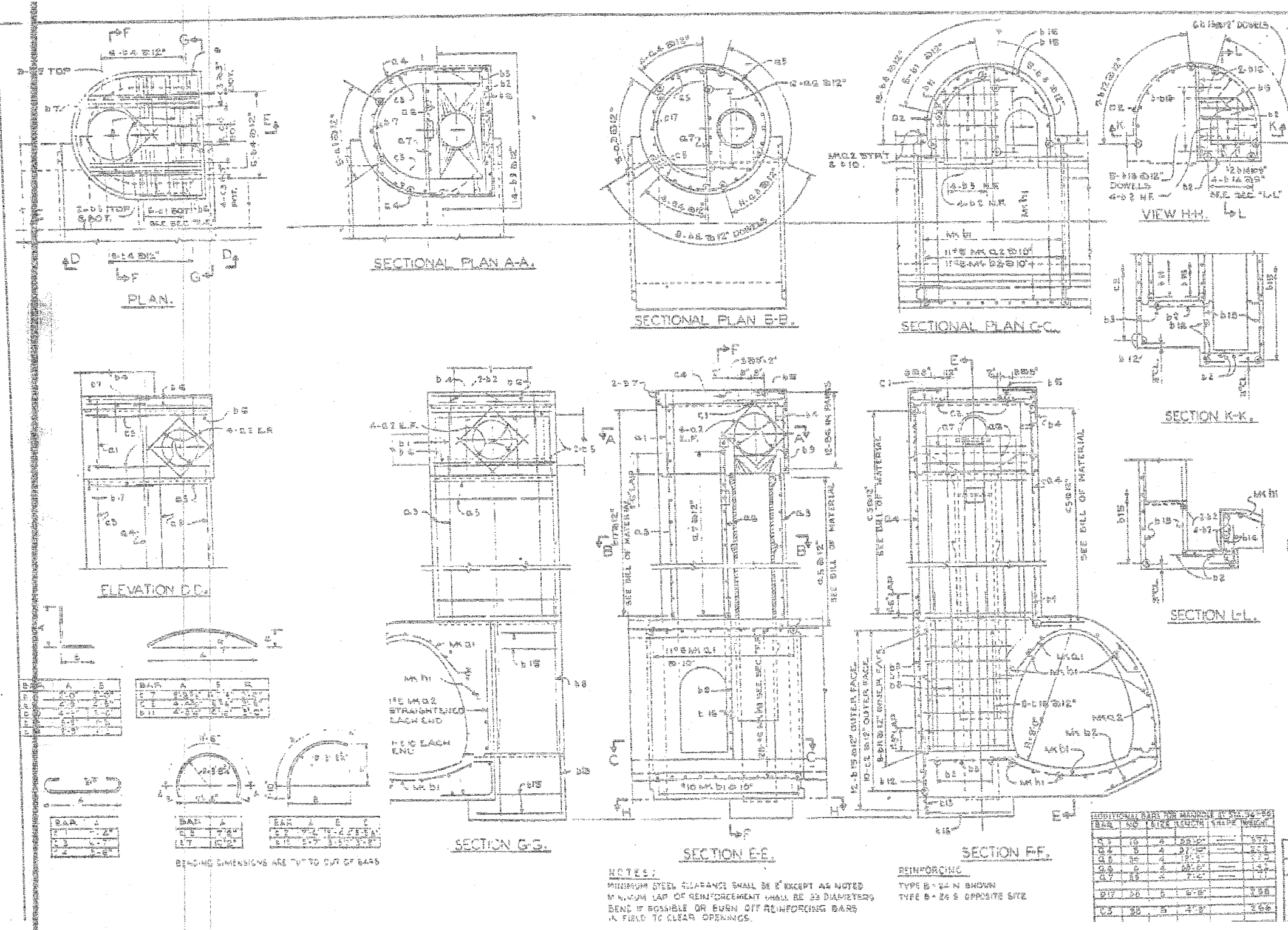
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| REVISIONS | DATE |
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| NAME      | DATE |
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SHEET JC-11 OF JC-22  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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



**BILL OF MATERIAL**

REINFORCING BARS TYPICAL OF ALL TYPES OF MANHOLES

| BAR NO. | SIZE | LENGTH (FEET) | WEIGHT (LBS) |
|---------|------|---------------|--------------|
| B1      | #4   | 1.0           | 1.0          |
| B2      | #4   | 1.0           | 1.0          |
| B3      | #4   | 1.0           | 1.0          |
| B4      | #4   | 1.0           | 1.0          |
| B5      | #4   | 1.0           | 1.0          |
| B6      | #4   | 1.0           | 1.0          |
| B7      | #4   | 1.0           | 1.0          |
| B8      | #4   | 1.0           | 1.0          |
| B9      | #4   | 1.0           | 1.0          |
| B10     | #4   | 1.0           | 1.0          |
| B11     | #4   | 1.0           | 1.0          |
| B12     | #4   | 1.0           | 1.0          |
| B13     | #4   | 1.0           | 1.0          |
| B14     | #4   | 1.0           | 1.0          |
| B15     | #4   | 1.0           | 1.0          |
| B16     | #4   | 1.0           | 1.0          |
| B17     | #4   | 1.0           | 1.0          |
| B18     | #4   | 1.0           | 1.0          |
| B19     | #4   | 1.0           | 1.0          |
| B20     | #4   | 1.0           | 1.0          |
| B21     | #4   | 1.0           | 1.0          |
| B22     | #4   | 1.0           | 1.0          |
| B23     | #4   | 1.0           | 1.0          |
| B24     | #4   | 1.0           | 1.0          |
| B25     | #4   | 1.0           | 1.0          |
| B26     | #4   | 1.0           | 1.0          |
| B27     | #4   | 1.0           | 1.0          |
| B28     | #4   | 1.0           | 1.0          |
| B29     | #4   | 1.0           | 1.0          |
| B30     | #4   | 1.0           | 1.0          |
| B31     | #4   | 1.0           | 1.0          |
| B32     | #4   | 1.0           | 1.0          |
| B33     | #4   | 1.0           | 1.0          |
| B34     | #4   | 1.0           | 1.0          |
| B35     | #4   | 1.0           | 1.0          |
| B36     | #4   | 1.0           | 1.0          |
| B37     | #4   | 1.0           | 1.0          |
| B38     | #4   | 1.0           | 1.0          |
| B39     | #4   | 1.0           | 1.0          |
| B40     | #4   | 1.0           | 1.0          |
| B41     | #4   | 1.0           | 1.0          |
| B42     | #4   | 1.0           | 1.0          |
| B43     | #4   | 1.0           | 1.0          |
| B44     | #4   | 1.0           | 1.0          |
| B45     | #4   | 1.0           | 1.0          |
| B46     | #4   | 1.0           | 1.0          |
| B47     | #4   | 1.0           | 1.0          |
| B48     | #4   | 1.0           | 1.0          |
| B49     | #4   | 1.0           | 1.0          |
| B50     | #4   | 1.0           | 1.0          |
| B51     | #4   | 1.0           | 1.0          |
| B52     | #4   | 1.0           | 1.0          |
| B53     | #4   | 1.0           | 1.0          |
| B54     | #4   | 1.0           | 1.0          |
| B55     | #4   | 1.0           | 1.0          |
| B56     | #4   | 1.0           | 1.0          |
| B57     | #4   | 1.0           | 1.0          |
| B58     | #4   | 1.0           | 1.0          |
| B59     | #4   | 1.0           | 1.0          |
| B60     | #4   | 1.0           | 1.0          |
| B61     | #4   | 1.0           | 1.0          |
| B62     | #4   | 1.0           | 1.0          |
| B63     | #4   | 1.0           | 1.0          |
| B64     | #4   | 1.0           | 1.0          |
| B65     | #4   | 1.0           | 1.0          |
| B66     | #4   | 1.0           | 1.0          |
| B67     | #4   | 1.0           | 1.0          |
| B68     | #4   | 1.0           | 1.0          |
| B69     | #4   | 1.0           | 1.0          |
| B70     | #4   | 1.0           | 1.0          |
| B71     | #4   | 1.0           | 1.0          |
| B72     | #4   | 1.0           | 1.0          |
| B73     | #4   | 1.0           | 1.0          |
| B74     | #4   | 1.0           | 1.0          |
| B75     | #4   | 1.0           | 1.0          |
| B76     | #4   | 1.0           | 1.0          |
| B77     | #4   | 1.0           | 1.0          |
| B78     | #4   | 1.0           | 1.0          |
| B79     | #4   | 1.0           | 1.0          |
| B80     | #4   | 1.0           | 1.0          |
| B81     | #4   | 1.0           | 1.0          |
| B82     | #4   | 1.0           | 1.0          |
| B83     | #4   | 1.0           | 1.0          |
| B84     | #4   | 1.0           | 1.0          |
| B85     | #4   | 1.0           | 1.0          |
| B86     | #4   | 1.0           | 1.0          |
| B87     | #4   | 1.0           | 1.0          |
| B88     | #4   | 1.0           | 1.0          |
| B89     | #4   | 1.0           | 1.0          |
| B90     | #4   | 1.0           | 1.0          |
| B91     | #4   | 1.0           | 1.0          |
| B92     | #4   | 1.0           | 1.0          |
| B93     | #4   | 1.0           | 1.0          |
| B94     | #4   | 1.0           | 1.0          |
| B95     | #4   | 1.0           | 1.0          |
| B96     | #4   | 1.0           | 1.0          |
| B97     | #4   | 1.0           | 1.0          |
| B98     | #4   | 1.0           | 1.0          |
| B99     | #4   | 1.0           | 1.0          |
| B100    | #4   | 1.0           | 1.0          |

ADDITIONAL BARS FOR MANHOLE AT STATIONS 71+20.00 TO 72+00.00

| BAR NO. | SIZE | LENGTH (FEET) | WEIGHT (LBS) |
|---------|------|---------------|--------------|
| CA      | #4   | 1.0           | 1.0          |
| CB      | #4   | 1.0           | 1.0          |
| CC      | #4   | 1.0           | 1.0          |
| CD      | #4   | 1.0           | 1.0          |
| CE      | #4   | 1.0           | 1.0          |
| CF      | #4   | 1.0           | 1.0          |
| CG      | #4   | 1.0           | 1.0          |
| CH      | #4   | 1.0           | 1.0          |
| CI      | #4   | 1.0           | 1.0          |
| CJ      | #4   | 1.0           | 1.0          |
| CK      | #4   | 1.0           | 1.0          |
| CL      | #4   | 1.0           | 1.0          |
| CM      | #4   | 1.0           | 1.0          |
| CN      | #4   | 1.0           | 1.0          |
| CO      | #4   | 1.0           | 1.0          |
| CP      | #4   | 1.0           | 1.0          |
| CQ      | #4   | 1.0           | 1.0          |
| CR      | #4   | 1.0           | 1.0          |
| CS      | #4   | 1.0           | 1.0          |
| CT      | #4   | 1.0           | 1.0          |
| CU      | #4   | 1.0           | 1.0          |
| CV      | #4   | 1.0           | 1.0          |
| CW      | #4   | 1.0           | 1.0          |
| CX      | #4   | 1.0           | 1.0          |
| CY      | #4   | 1.0           | 1.0          |
| CZ      | #4   | 1.0           | 1.0          |

ADDITIONAL BARS FOR MANHOLE AT STATION 72+45

| BAR NO. | SIZE | LENGTH (FEET) | WEIGHT (LBS) |
|---------|------|---------------|--------------|
| DA      | #4   | 1.0           | 1.0          |
| DB      | #4   | 1.0           | 1.0          |
| DC      | #4   | 1.0           | 1.0          |
| DD      | #4   | 1.0           | 1.0          |
| DE      | #4   | 1.0           | 1.0          |
| DF      | #4   | 1.0           | 1.0          |
| DG      | #4   | 1.0           | 1.0          |
| DH      | #4   | 1.0           | 1.0          |
| DI      | #4   | 1.0           | 1.0          |
| DJ      | #4   | 1.0           | 1.0          |
| DK      | #4   | 1.0           | 1.0          |
| DL      | #4   | 1.0           | 1.0          |
| DM      | #4   | 1.0           | 1.0          |
| DN      | #4   | 1.0           | 1.0          |
| DO      | #4   | 1.0           | 1.0          |
| DP      | #4   | 1.0           | 1.0          |
| DQ      | #4   | 1.0           | 1.0          |
| DR      | #4   | 1.0           | 1.0          |
| DS      | #4   | 1.0           | 1.0          |
| DT      | #4   | 1.0           | 1.0          |
| DU      | #4   | 1.0           | 1.0          |
| DV      | #4   | 1.0           | 1.0          |
| DW      | #4   | 1.0           | 1.0          |
| DX      | #4   | 1.0           | 1.0          |
| DY      | #4   | 1.0           | 1.0          |
| DZ      | #4   | 1.0           | 1.0          |

ADDITIONAL BARS FOR MANHOLE AT STA. 73+45

| BAR NO. | SIZE | LENGTH (FEET) | WEIGHT (LBS) |
|---------|------|---------------|--------------|
| EA      | #4   | 1.0           | 1.0          |
| EB      | #4   | 1.0           | 1.0          |
| EC      | #4   | 1.0           | 1.0          |
| ED      | #4   | 1.0           | 1.0          |
| EE      | #4   | 1.0           | 1.0          |
| EF      | #4   | 1.0           | 1.0          |
| EG      | #4   | 1.0           | 1.0          |
| EH      | #4   | 1.0           | 1.0          |
| EI      | #4   | 1.0           | 1.0          |
| EJ      | #4   | 1.0           | 1.0          |
| EK      | #4   | 1.0           | 1.0          |
| EL      | #4   | 1.0           | 1.0          |
| EM      | #4   | 1.0           | 1.0          |
| EN      | #4   | 1.0           | 1.0          |
| EO      | #4   | 1.0           | 1.0          |
| EP      | #4   | 1.0           | 1.0          |
| EQ      | #4   | 1.0           | 1.0          |
| ER      | #4   | 1.0           | 1.0          |
| ES      | #4   | 1.0           | 1.0          |
| ET      | #4   | 1.0           | 1.0          |
| EU      | #4   | 1.0           | 1.0          |
| EV      | #4   | 1.0           | 1.0          |
| EW      | #4   | 1.0           | 1.0          |
| EX      | #4   | 1.0           | 1.0          |
| EY      | #4   | 1.0           | 1.0          |
| EZ      | #4   | 1.0           | 1.0          |

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

**NOTES:**  
MINIMUM STEEL CLEARANCE SHALL BE 2" EXCEPT AS NOTED  
MINIMUM LAP OF REINFORCEMENT SHALL BE 33 DIAMETERS  
BEND IF POSSIBLE OR TURN OFF REINFORCING BARS  
A FIELD TO CLEAR OPENINGS.

**REINFORCING**  
TYPE B - 24 N BROWN  
TYPE B - 26 S OPPOSITE SIDE

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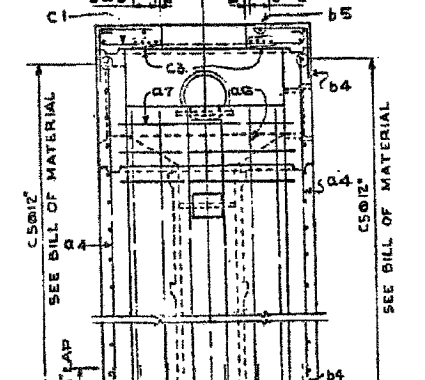
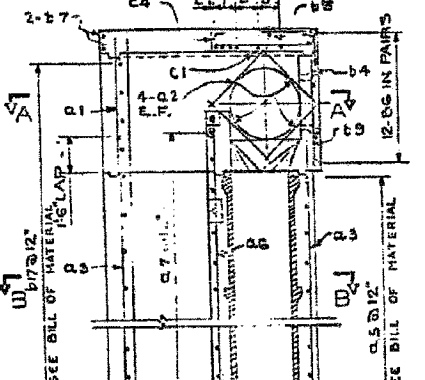
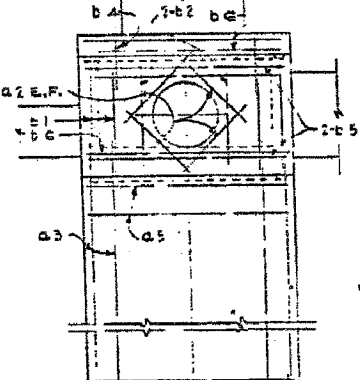
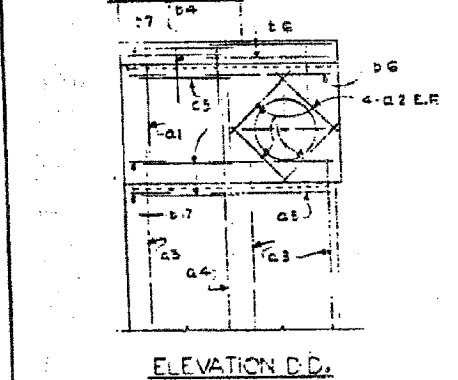
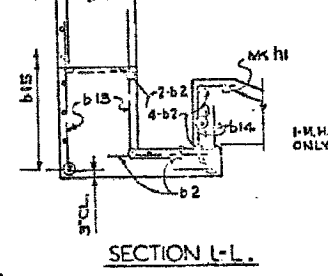
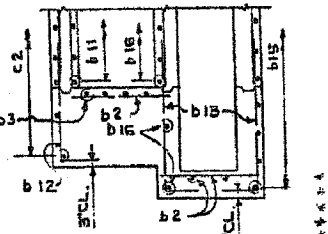
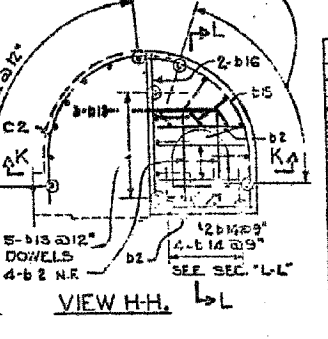
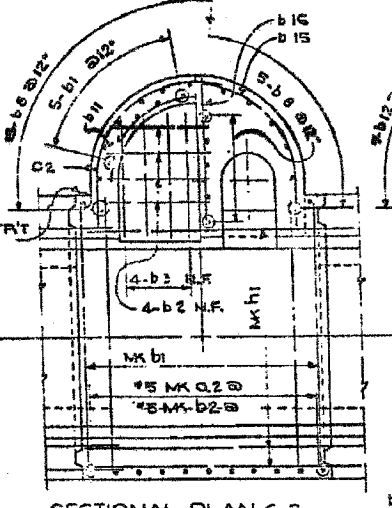
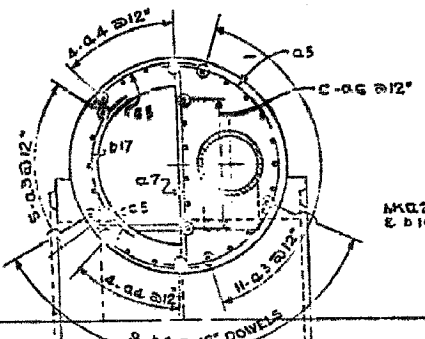
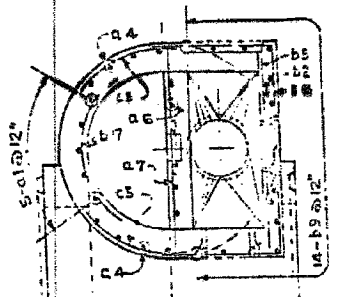
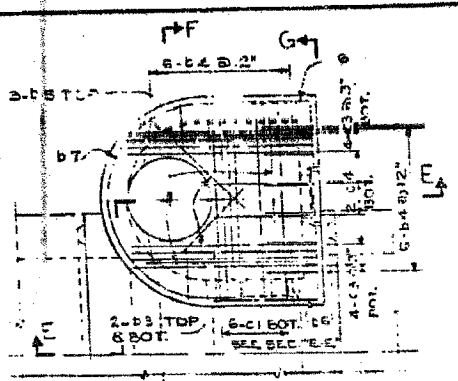
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| REVISIONS | DATE |
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBERS  
EXISTING DROP MANHOLE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

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





| BAR | A     | B     |
|-----|-------|-------|
| C-1 | 2'-0" | 2'-0" |
| C-2 | 4'-9" | 4'-9" |
| C-3 | 4'-3" | 3'-0" |
| C-4 | 1'-3" | 1'-3" |
| C-5 | 1'-3" | 1'-3" |

| BAR | A      | B      | F      |
|-----|--------|--------|--------|
| C-1 | 7'-2"  | 7'-2"  | 7'-2"  |
| C-2 | 16'-7" | 16'-7" | 16'-7" |
| C-3 | 16'-7" | 16'-7" | 16'-7" |

| BAR | A      | B      | C      |
|-----|--------|--------|--------|
| C-1 | 7'-2"  | 7'-2"  | 7'-2"  |
| C-2 | 16'-7" | 16'-7" | 16'-7" |
| C-3 | 16'-7" | 16'-7" | 16'-7" |

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  
 SPREAD IF POSSIBLE OR FURN OFF REINFORCING BARS

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

| BAR  | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|------|-----|------|---------|-------|--------|
| Q-3  | 16  | 4    | 29'-6"  |       | 273    |
| Q-4  | 8   | 4    | 28'-4"  |       | 181    |
| Q-5  | 25  | 4    | 12'-9"  |       | 213    |
| Q-6  | 6   | 4    | 28'-10" |       | 104    |
| Q-7  | 26  | 4    | 7'-4"   |       | 127    |
| D-17 | 29  | 5    | 6'-6"   |       | 196    |
| C-5  | 29  | 6    | 4'-8"   |       | 203    |

| F.A.I. NO. | SECTION   | COUNTY | TOTAL SHEETS | SHEET NO. |
|------------|-----------|--------|--------------|-----------|
| 94         | 2022-9587 | COOK   | 90           | 54        |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| B-1  | 5   | 5    | 7'-2"  |       | 40     |
| B-2  | 14  | 5    | 2'-3"  |       | 18     |
| B-3  | 29  | 5    | 2'-0"  |       | 113    |
| B-4  | 5   | 5    | 2'-0"  |       | 32     |
| B-5  | 12  | 5    | 5'-0"  |       | 118    |
| B-6  | 12  | 5    | 11'-3" |       | 25     |
| B-7  | 2   | 5    | 2'-0"  |       | 172    |
| B-8  | 14  | 5    | 2'-0"  |       | 83     |
| B-9  | 2   | 5    | 7'-3"  |       | 3      |
| B-10 | 2   | 5    | 2'-0"  |       | 25     |
| B-11 | 7   | 5    | 4'-2"  |       | 57     |
| B-12 | 7   | 5    | 2'-0"  |       | 102    |
| B-13 | 7   | 5    | 2'-0"  |       | 102    |
| B-14 | 15  | 5    | 2'-0"  |       | 83     |
| B-15 | 15  | 5    | 2'-0"  |       | 83     |
| B-16 | 10  | 5    | 5'-0"  |       | 57     |

| BAR | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|-----|-----|------|--------|-------|--------|
| C-1 | 6   | 6    | 8'-8"  |       | 78     |
| C-2 | 10  | 6    | 8'-3"  |       | 135    |
| C-3 | 6   | 6    | 7'-11" |       | 93     |
| C-4 | 2   | 6    | 5'-8"  |       | 11     |

| BAR    | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|--------|-----|------|--------|-------|--------|
| MK Q-1 | 13  | 7    | 13'-7" |       | 348    |
| MK Q-2 | 12  | 5    | 3'-11" |       | 145    |
| MK Q-3 | 13  | 11   | 13'-0" |       | 894    |
| MK Q-4 | 13  | 8    | 7'-8"  |       | 102    |
| MK Q-5 | 38  | 6    | 11'-0" |       | 628    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
| Q-5 | 25  | 4    | 12'-9"  |       | 130    |
| Q-6 | 6   | 4    | 28'-10" |       | 94     |
| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
| Q-5 | 25  | 4    | 12'-9"  |       | 130    |
| Q-6 | 6   | 4    | 28'-10" |       | 94     |
| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
| Q-5 | 25  | 4    | 12'-9"  |       | 130    |
| Q-6 | 6   | 4    | 28'-10" |       | 94     |
| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
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| Q-6 | 6   | 4    | 28'-10" |       | 94     |
| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
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| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
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| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
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| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
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| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
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| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
| Q-5 | 25  | 4    | 12'-9"  |       | 130    |
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| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

| BAR  | NO. | SIZE | LENGTH | SHAPE | WEIGHT |
|------|-----|------|--------|-------|--------|
| D-17 | 35  | 5    | 6'-6"  |       | 176    |
| C-5  | 35  | 6    | 4'-9"  |       | 182    |

| BAR | NO. | SIZE | LENGTH  | SHAPE | WEIGHT |
|-----|-----|------|---------|-------|--------|
| Q-3 | 16  | 4    | 29'-6"  |       | 240    |
| Q-4 | 8   | 4    | 28'-4"  |       | 136    |
| Q-5 | 25  | 4    | 12'-9"  |       | 130    |
| Q-6 | 6   | 4    | 28'-10" |       | 94     |
| Q-7 | 26  | 4    | 7'-4"   |       | 113    |

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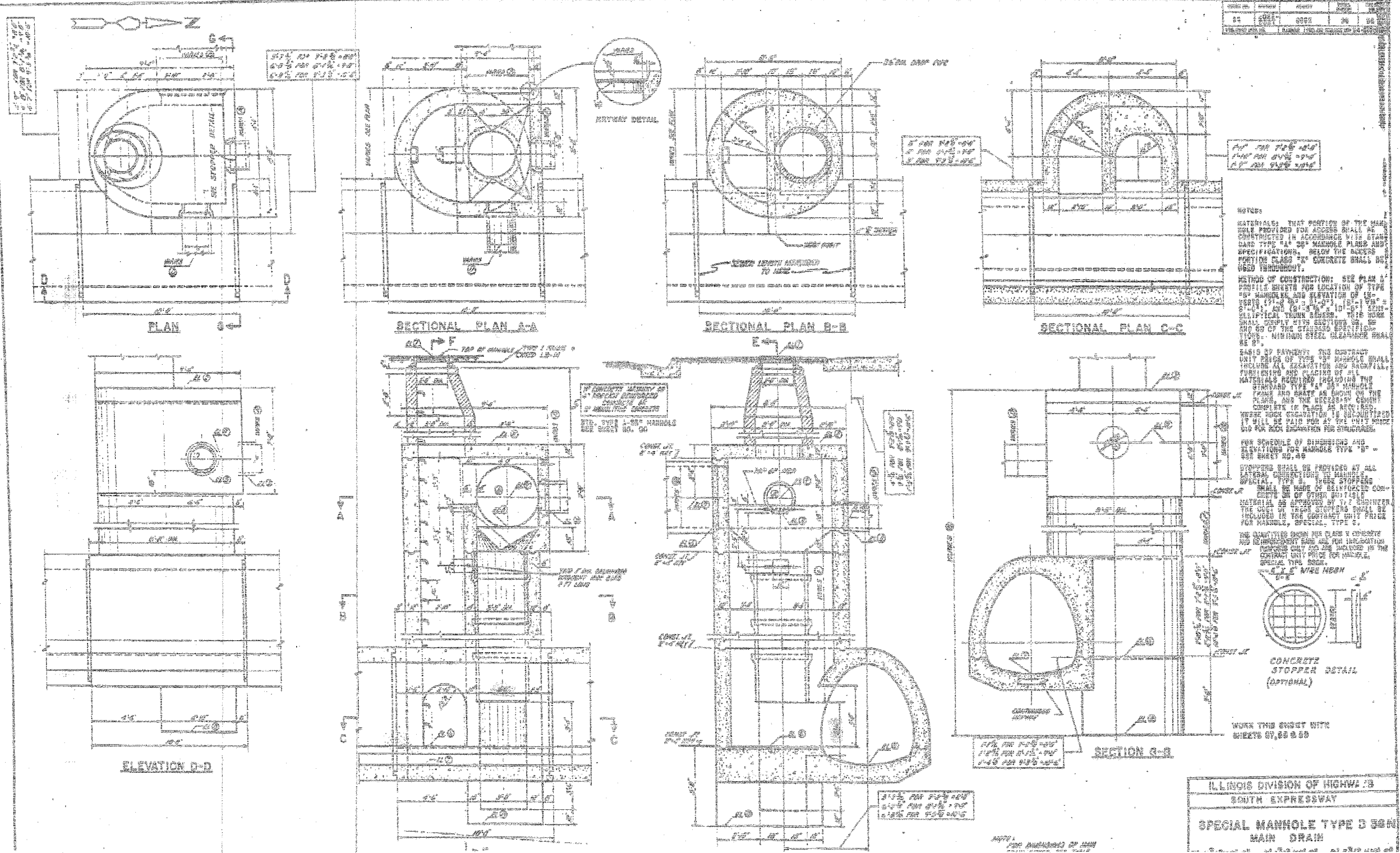
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 JUNCTION CHAMBERS  
 EXISTING DROP MANHOLE PLANS

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          | 420       |
| STA.                | TO STA.                   |        |              |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |        |              |           |
| 62300               | *1818, ETC, 2324.6-1PR-8  |        |              |           |



**NOTES:**

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" OR "B" MANHOLE PLANS AND SPECIFICATIONS. REINFORCING BARS AND CASTING CURBS TO CONCRETE SHALL BE USED THROUGHOUT.

METHOD OF CONSTRUCTION: SEE PLAN & SECTIONAL SHEETS FOR LOCATION OF TYPE "B" MANHOLE AND ELEVATION OF 18" ABOVE FINISH GRADE. THE 18" ABOVE FINISH GRADE SHALL BE TO THE TOP OF THE MANHOLE FRAME. THE 18" ABOVE FINISH GRADE SHALL BE TO THE TOP OF THE MAIN DRAIN PIPE. THE 18" ABOVE FINISH GRADE SHALL BE TO THE TOP OF THE MAIN DRAIN PIPE.

PAVEMENT: THE CONTRACTOR SHALL PROVIDE ALL PAVEMENT AND GRASS AS SHOWN ON THE PLANS AND THE NECESSARY CURBS, COMPLETE IN PLACE AS REQUIRED. WHERE ROCK ELEVATION IS ENCOUNTERED IT WILL BE PAID FOR BY THE UNIT PRICE FOR ROCK EXCAVATION FOR STRUCTURES.

FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" SEE SHEET 94-99.

STOPPERS SHALL BE PROVIDED AT ALL LATERAL CONNECTIONS TO MAINTAIN SPECIAL TYPE "B" TRUCK STOPPERS SHALL BE USED OF BELLEVILLE COMPANY. 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 CONTRACTOR SHALL PROVIDE ALL CONCRETE AND REINFORCING BARS AND CASTING CURBS ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE SPECIAL TYPE "B".

CONCRETE STOPPER DETAIL (OPTIONAL)

WORK THIS SHEET WITH SHEETS 94-99 & 94-100

ILLINOIS DIVISION OF HIGHWAYS  
 SOUTH EXPRESSWAY  
 SPECIAL MANHOLE TYPE D 60"  
 MAIN DRAIN

BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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SHEET JC-14 OF JC-22

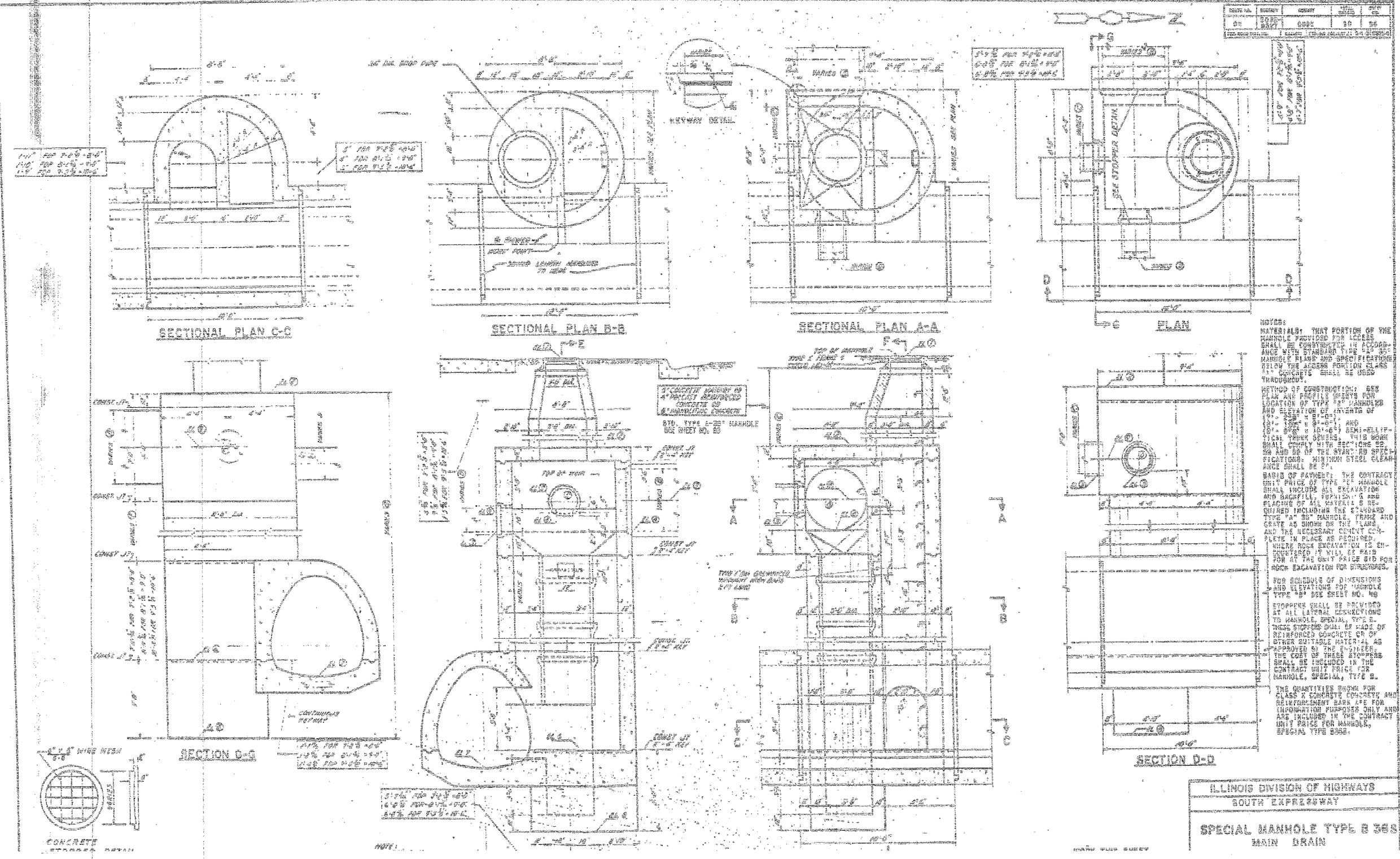
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 JUNCTION CHAMBERS  
 EXISTING DROP MANHOLE PLANS

SCALE: NTS  
 DATE: 07/07/05

DRAWN BY: BDC  
 CHECKED BY: BLU

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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 |              |           |



**NOTES:**

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" 36" MANHOLE PLANS AND SPECIFICATIONS BELOW THE ALGEBRA PORTION CLASS "A" CONCRETE SHALL BE USED THROUGHOUT.

METHOD OF CONSTRUCTION: SEE PLAN AND PROFILE SHEETS FOR LOCATION OF TYPE "A" MANHOLES AND ELEVATION OF INVERTS OF "A" MANHOLES SHALL BE 1.5' AND 1.0' FROM THE TOP OF THE MANHOLE SHALL COMPLY WITH SECTION 802 AND 803 OF THE STANDARD SPECIFICATIONS: MINIMUM STEEL CLEARANCE SHALL BE 2".

BASE OF PAYMENT: THE CONTRACT UNIT PRICE OF TYPE "A" MANHOLE SHALL INCLUDE ALL EXCAVATION AND BACKFILL, FORMWORK AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "A" 36" MANHOLE, FRAME AND GRISS AS SHOWN ON THE PLANS AND THE NECESSARY CONCRETE COMPLETE IN PLACE AS REQUIRED.

WHERE ROCK EXCAVATION IS ENCOUNTERED AT THE SITE OF MANHOLE FOR AT THE UNIT PRICE BID FOR ROCK EXCAVATION FOR STRUCTURES.

FOR QUANTITIES OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "A" SEE SHEET NO. 40.

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, FORMWORK AND REINFORCEMENT SHALL BE FOR INFORMATION PURPOSE ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE B.

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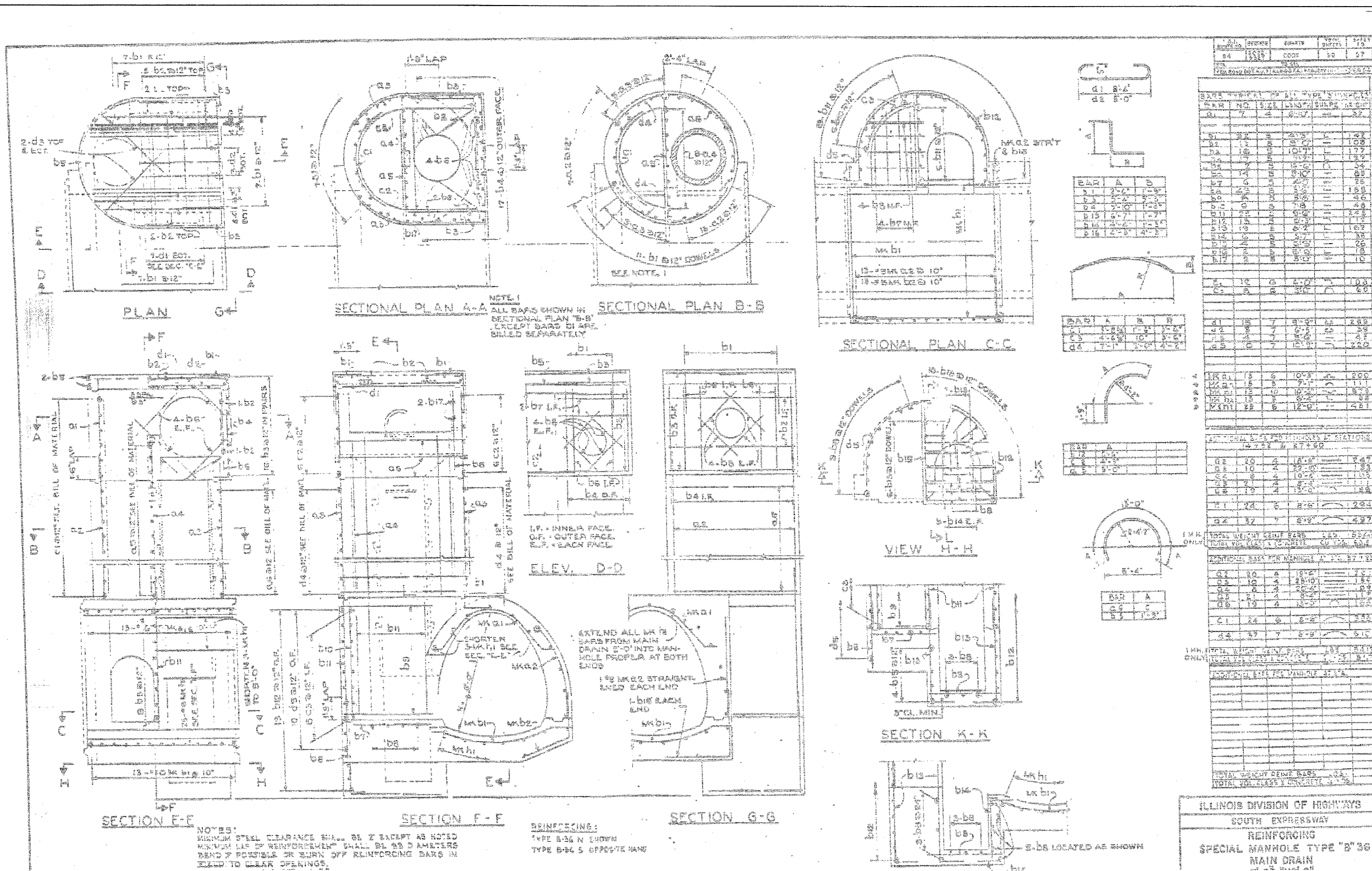
SHEET JC-15 OF JC-22

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

DRAWN BY: BDC  
CHECKED BY: BLU

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SHEET JC-16 OF JC-22

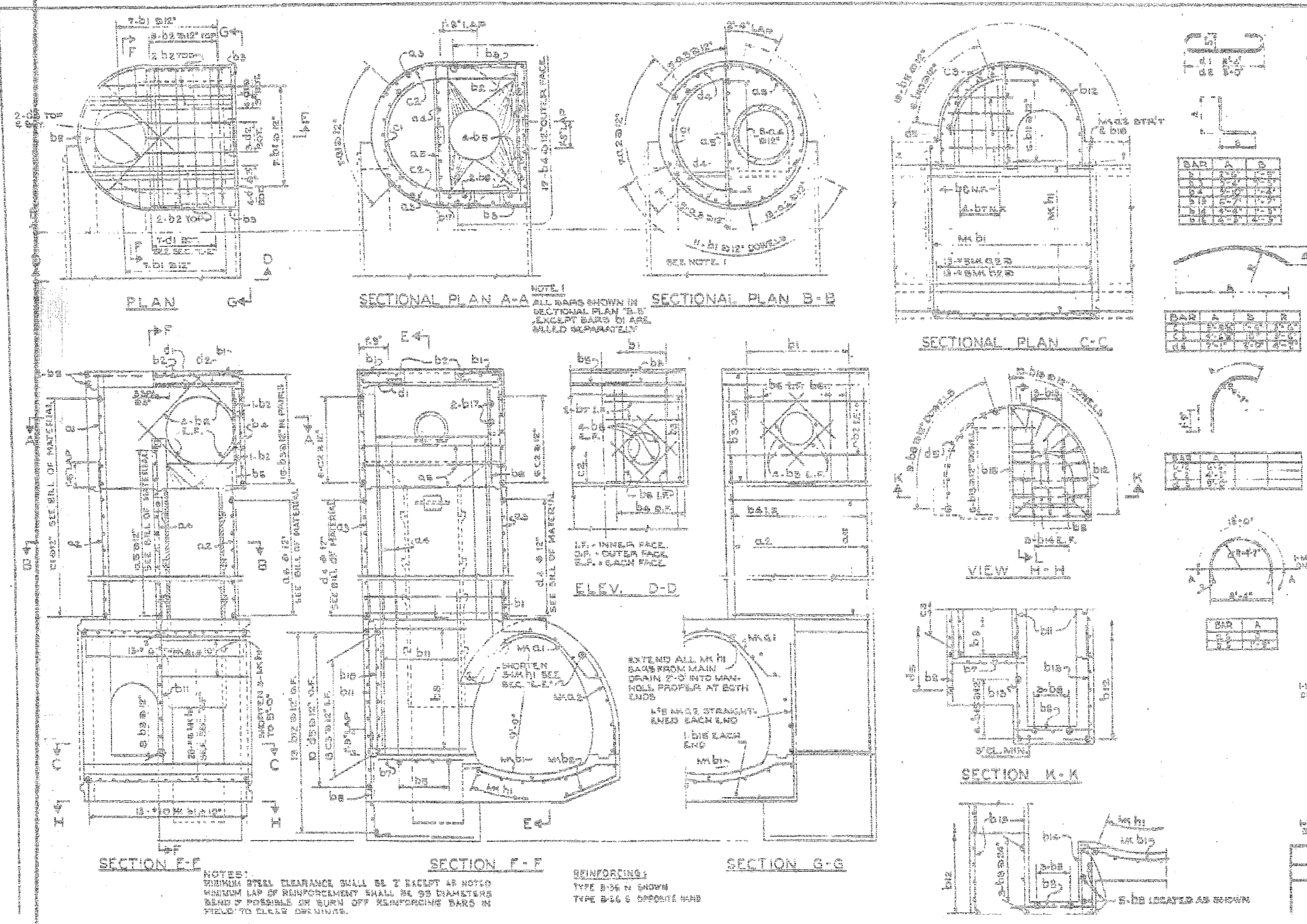
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBERS  
EXISTING DROP MANHOLE PLANS

SCALE: NTS  
DATE: 07/07/05

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| BAR NO. | LENGTH | SHAPE | QUANTITY | WEIGHT | TOTAL WEIGHT |
|---------|--------|-------|----------|--------|--------------|
| B1      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B2      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B3      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B4      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B5      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B6      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B7      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B8      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B9      | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B10     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B11     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B12     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B13     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B14     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B15     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B16     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B17     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B18     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B19     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B20     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B21     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B22     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B23     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B24     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B25     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B26     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B27     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B28     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B29     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B30     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B31     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B32     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B33     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B34     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B35     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B36     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B37     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B38     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B39     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B40     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B41     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B42     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B43     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B44     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B45     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B46     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B47     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B48     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B49     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B50     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B51     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B52     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B53     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B54     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B55     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B56     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B57     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B58     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B59     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B60     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B61     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B62     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B63     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B64     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B65     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B66     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B67     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B68     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B69     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B70     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B71     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B72     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B73     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B74     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B75     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B76     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B77     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B78     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B79     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B80     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B81     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B82     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B83     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B84     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B85     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B86     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B87     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B88     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B89     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B90     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B91     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B92     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B93     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B94     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B95     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B96     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B97     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B98     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B99     | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |
| B100    | 1.00   | 1/2"  | 1        | 0.38   | 0.38         |

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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  
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SHEET JC-17 OF JC-22

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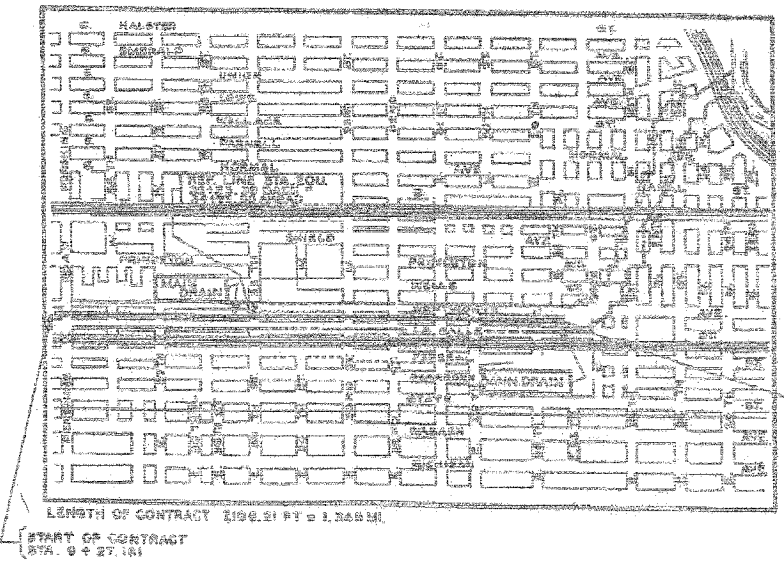
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| F.A.I.              | SECTION  | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| 94/90               |          | COOK                      | 556          | 426       |
| STA.                | TO STA.  |                           |              |           |
| 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<br>PERSHING ROAD TO 27TH STREET                                                          | 2        |
| C-3                     | PLAN AND PROFILE<br>27TH STREET TO 28TH STREET                                                            | 3        |
| C-4                     | PLAN AND PROFILE<br>28TH STREET TO 29TH STREET                                                            | 4        |
| C-5                     | PLAN AND PROFILE<br>29TH STREET TO 30TH STREET                                                            | 5        |
| C-6                     | PLAN AND PROFILE<br>30TH STREET TO 31ST STREET                                                            | 6        |
| C-7                     | PLAN AND PROFILE<br>31ST STREET TO 26TH PLACE                                                             | 7        |
| C-8                     | MANHOLE DETAILS                                                                                           | 8        |
| C-9                     | TYPICAL CROSS SECTION - MISCELLANEOUS<br>DETAILS                                                          | 9        |
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| S-2                     | SOIL BORING DATA<br>S-2-1, S-2-2, S-2-3, S-2-4, S-2-5, S-2-6, S-2-7, S-2-8, S-2-9, S-2-10, S-2-11, S-2-12 | 11       |
| S-3                     | SOIL BORING DATA<br>S-3-1, S-3-2, S-3-3, S-3-4, S-3-5, S-3-6, S-3-7, S-3-8, S-3-9, S-3-10, S-3-11, S-3-12 | 12       |
| S-4                     | SOIL BORING DATA<br>S-4-1, S-4-2, S-4-3, S-4-4, S-4-5, S-4-6, S-4-7, S-4-8, S-4-9, S-4-10, S-4-11, S-4-12 | 13       |
| S-5                     | SOIL BORING DATA<br>S-5-1, S-5-2, S-5-3, S-5-4, S-5-5, S-5-6, S-5-7, S-5-8, S-5-9, S-5-10, S-5-11, S-5-12 | 14       |
| S-6                     | SOIL BORING DATA<br>S-6-1, S-6-2, S-6-3, S-6-4, S-6-5, S-6-6, S-6-7, S-6-8, S-6-9, S-6-10, S-6-11, S-6-12 | 15       |
| S-7                     | SOIL BORING DATA<br>S-7-1, S-7-2, S-7-3, S-7-4, S-7-5, S-7-6, S-7-7, S-7-8, S-7-9, S-7-10, S-7-11, S-7-12 | 16       |
| S-8                     | SOIL BORING DATA<br>S-8-1, S-8-2, S-8-3, S-8-4, S-8-5, S-8-6, S-8-7, S-8-8, S-8-9, S-8-10, S-8-11, S-8-12 | 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<br>IN TUNNEL |
| 6        | CU. YDS. | 200       | ADDITIONAL CONCRETE IN TUNNEL            |



LOCATION MAP  
SCALE 1" = 100'

- CONVENTIONAL SIGNS
- COMMONWEALTH Edison CO
  - PEOPLES GAS LIGHT AND COKE CO.
  - ILLINOIS BELL TELEPHONE CO.
  - WESTERN UNION TELEGRAPH CO.
  - CITY WATER
  - CITY SEWERS
  - SANITARY DISTRICT OF CHICAGO
  - SOIL BORING

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 |
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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

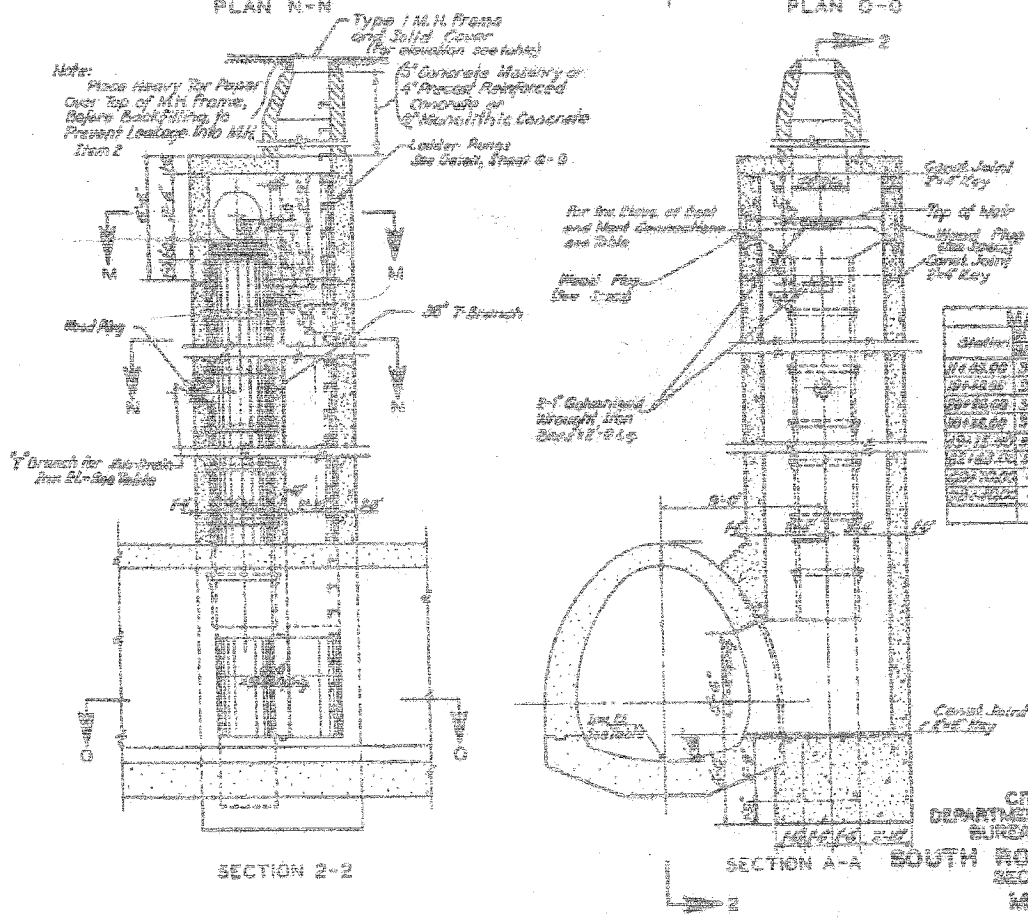
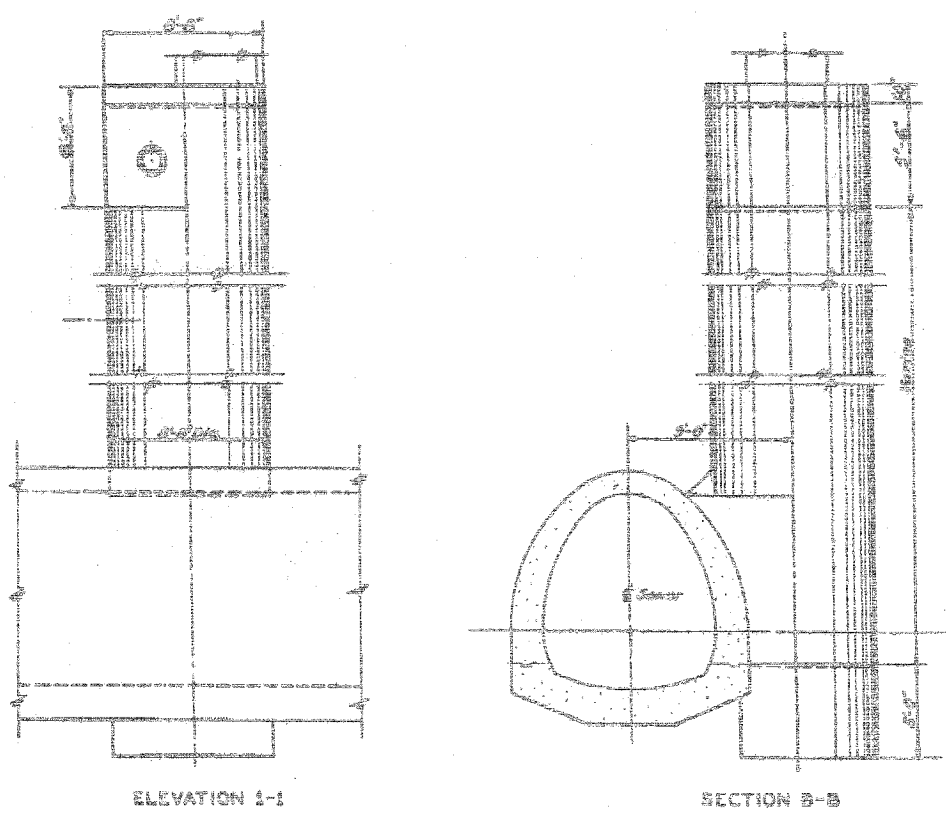
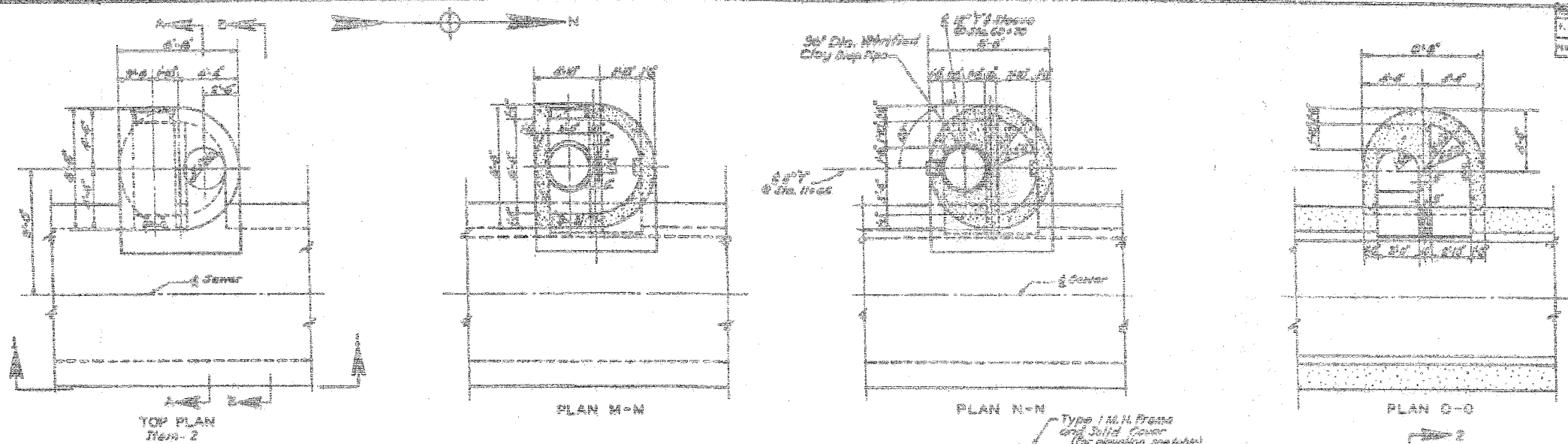
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|---------------------|----------|---------------------------|--------------|-----------|
| F.A.I.              | SECTION  | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| 94/90               | *        | COOK                      | 556          | 427       |
| STA.                | TO STA.  |                           |              |           |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT          |              |           |
| 62300               |          | *1818, ETC, 2324.6-1P1R-8 |              |           |



| Station  | Elevation | Distance | Station  | Elevation | Distance |
|----------|-----------|----------|----------|-----------|----------|
| 16+00.00 | -4.14     | 0.00     | 16+00.00 | -4.14     | 0.00     |
| 16+25.00 | -4.38     | 25.00    | 16+25.00 | -4.38     | 25.00    |
| 16+50.00 | -4.62     | 50.00    | 16+50.00 | -4.62     | 50.00    |
| 16+75.00 | -4.86     | 75.00    | 16+75.00 | -4.86     | 75.00    |
| 17+00.00 | -5.10     | 100.00   | 17+00.00 | -5.10     | 100.00   |
| 17+25.00 | -5.34     | 125.00   | 17+25.00 | -5.34     | 125.00   |
| 17+50.00 | -5.58     | 150.00   | 17+50.00 | -5.58     | 150.00   |
| 17+75.00 | -5.82     | 175.00   | 17+75.00 | -5.82     | 175.00   |
| 18+00.00 | -6.06     | 200.00   | 18+00.00 | -6.06     | 200.00   |
| 18+25.00 | -6.30     | 225.00   | 18+25.00 | -6.30     | 225.00   |
| 18+50.00 | -6.54     | 250.00   | 18+50.00 | -6.54     | 250.00   |
| 18+75.00 | -6.78     | 275.00   | 18+75.00 | -6.78     | 275.00   |
| 19+00.00 | -7.02     | 300.00   | 19+00.00 | -7.02     | 300.00   |
| 19+25.00 | -7.26     | 325.00   | 19+25.00 | -7.26     | 325.00   |
| 19+50.00 | -7.50     | 350.00   | 19+50.00 | -7.50     | 350.00   |
| 19+75.00 | -7.74     | 375.00   | 19+75.00 | -7.74     | 375.00   |
| 20+00.00 | -7.98     | 400.00   | 20+00.00 | -7.98     | 400.00   |

| Station  | Elevation |
|----------|-----------|
| 16+00.00 | -4.14     |
| 16+25.00 | -4.38     |
| 16+50.00 | -4.62     |
| 16+75.00 | -4.86     |
| 17+00.00 | -5.10     |
| 17+25.00 | -5.34     |
| 17+50.00 | -5.58     |
| 17+75.00 | -5.82     |
| 18+00.00 | -6.06     |
| 18+25.00 | -6.30     |
| 18+50.00 | -6.54     |
| 18+75.00 | -6.78     |
| 19+00.00 | -7.02     |
| 19+25.00 | -7.26     |
| 19+50.00 | -7.50     |
| 19+75.00 | -7.74     |
| 20+00.00 | -7.98     |

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 30" x 30" sewer as shown  
For Type 1 M.H. Frame see Sheet 6-7  
For location of Manholes see sheets 6-5 to 6-11  
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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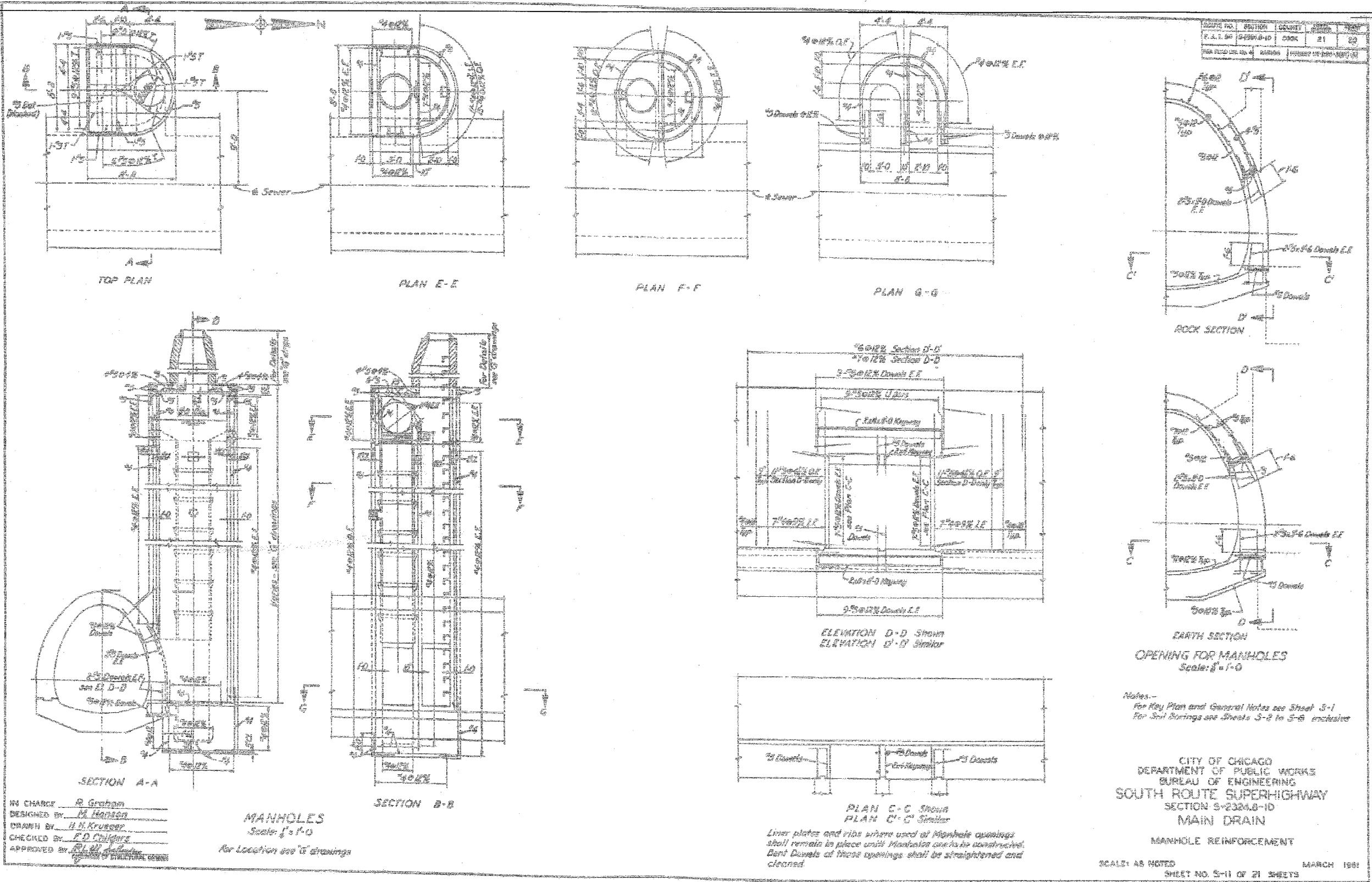
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBERS  
EXISTING DROP MANHOLE PLANS

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



IN CHARGE R. Graham  
DESIGNED BY M. Hanson  
DRAWN BY H.H. Krueger  
CHECKED BY F.D. Childers  
APPROVED BY [Signature]

**MANHOLES**  
Scale: 8"=1'-0"  
For Location see 'S' drawings

PLAN C-C SHOWN  
PLAN C'-C SIMILAR  
Liner plates and ribs where used at Manhole openings shall remain in place until finished work is constructed. Bent Dowels at these openings shall be straightened and cleaned.

CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
SOUTH ROUTE SUPERHIGHWAY  
SECTION S-2324.8-1D  
**MAIN DRAIN**  
MANHOLE REINFORCEMENT  
SCALE: AS NOTED MARCH 1981  
SHEET NO. S-11 OF 21 SHEETS

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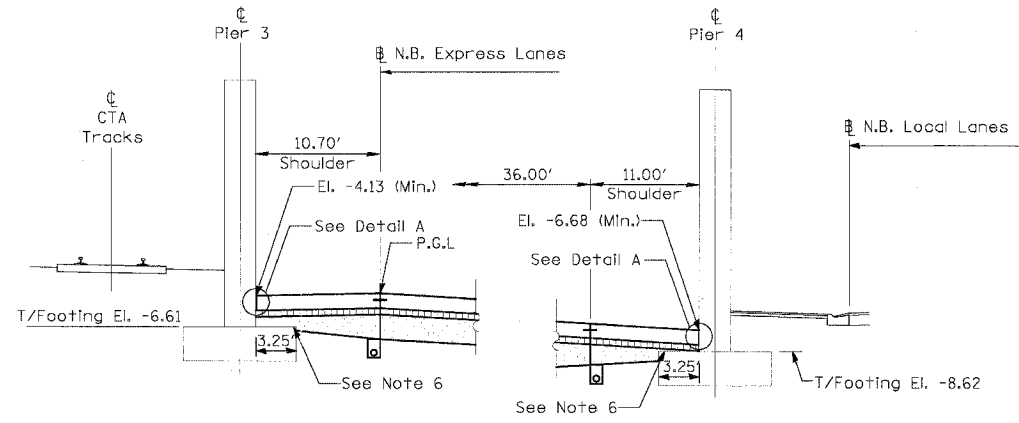
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
JUNCTION CHAMBERS  
EXISTING DROP MANHOLE PLANS  
SCALE: NTS  
DATE: 07/07/05  
DRAWN BY: BDC  
CHECKED BY: BLU

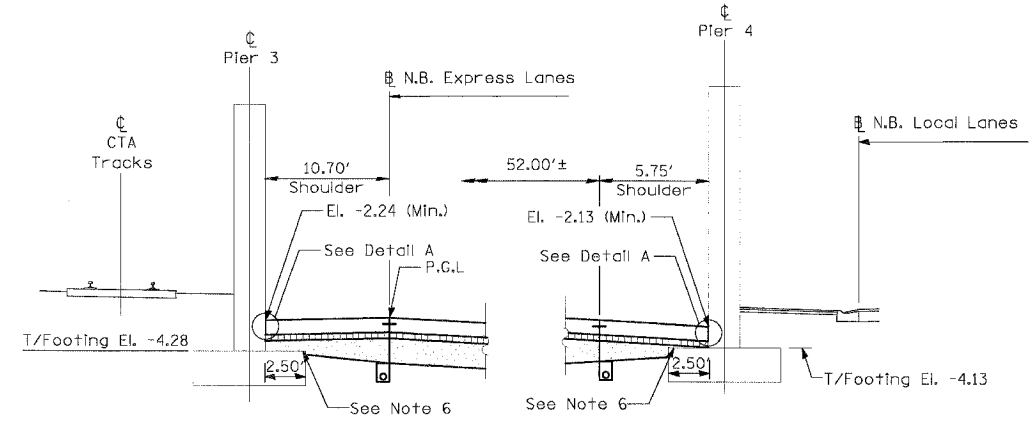
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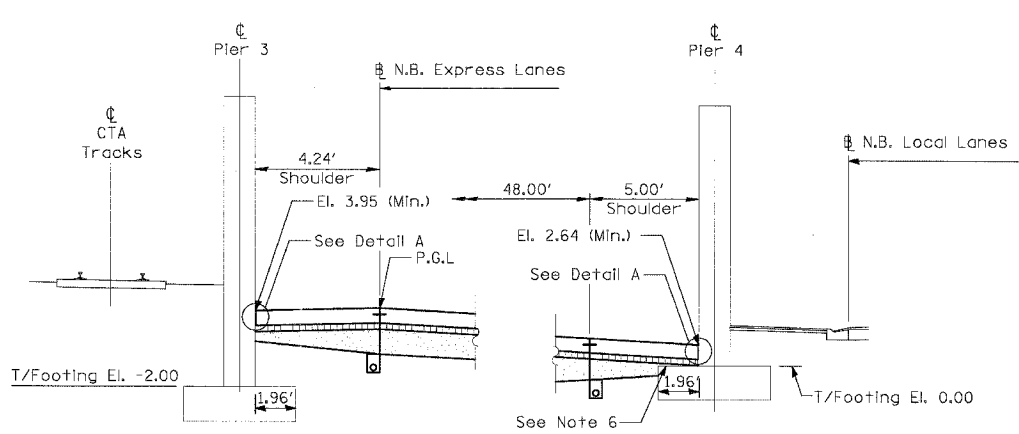
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| F.A.I. RTE.         | SECTION                     | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               |                             | COOK             | 556          | 429       |
| STA.                | TO STA.                     |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS                    | FED. AID PROJECT |              |           |
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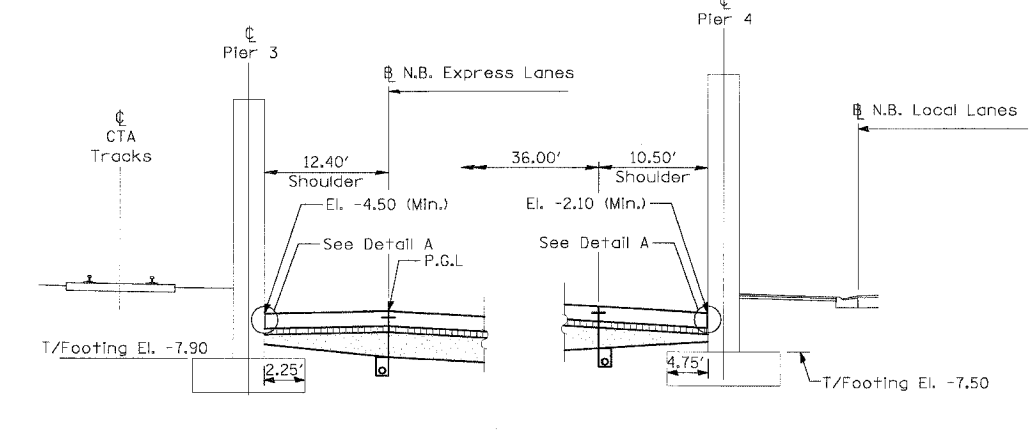
SHOULDER DETAIL AT 47th STREET (S.N. 016-1156)



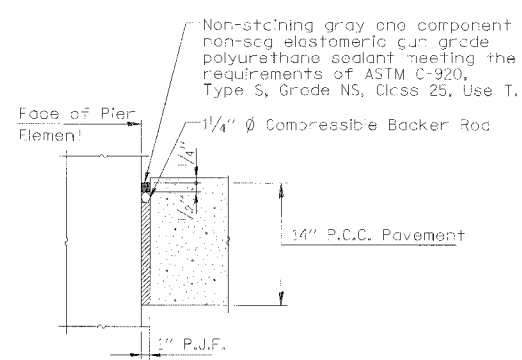
SHOULDER DETAIL AT 51st STREET (S.N. 016-1157)



SHOULDER DETAIL AT 63rd STREET

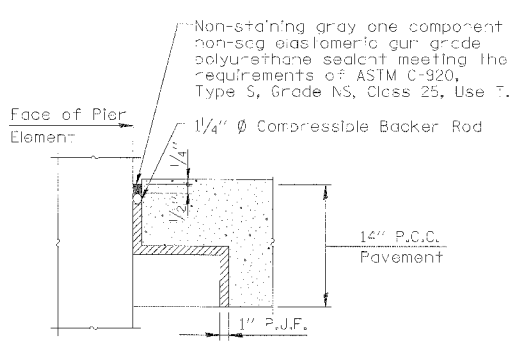


SHOULDER DETAIL AT 67th STREET (S.N. 016-1147)



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.

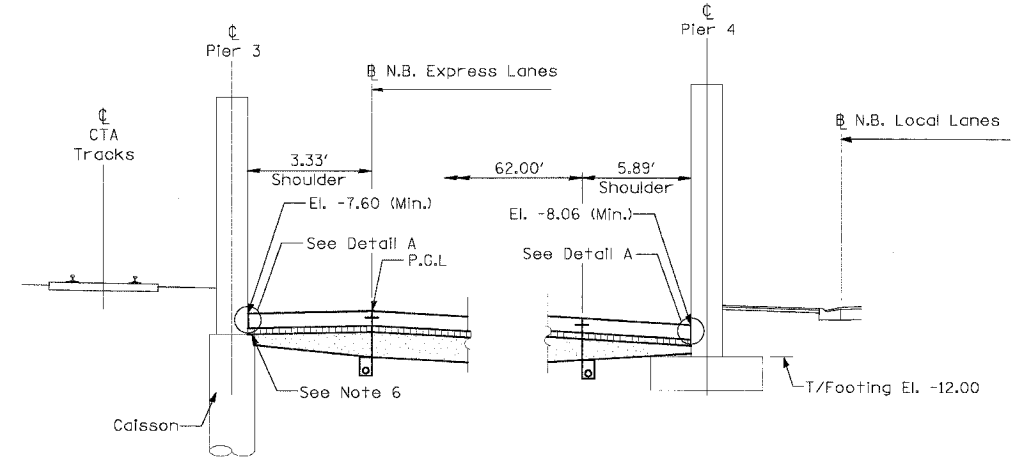
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SHEET SDET-1 OF SDET-4  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 PAVEMENT DETAILS AT  
 CROSS STREET BRIDGES  
 SCALE: NONE  
 DATE: 7/7/05  
 DRAWN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

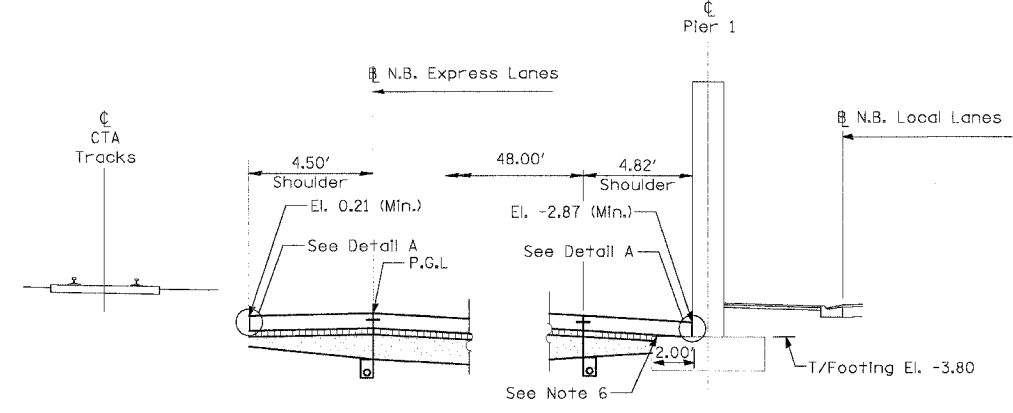
**Edwards AND Kelcey**  
 ONE NORTH FRANKLIN  
 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM

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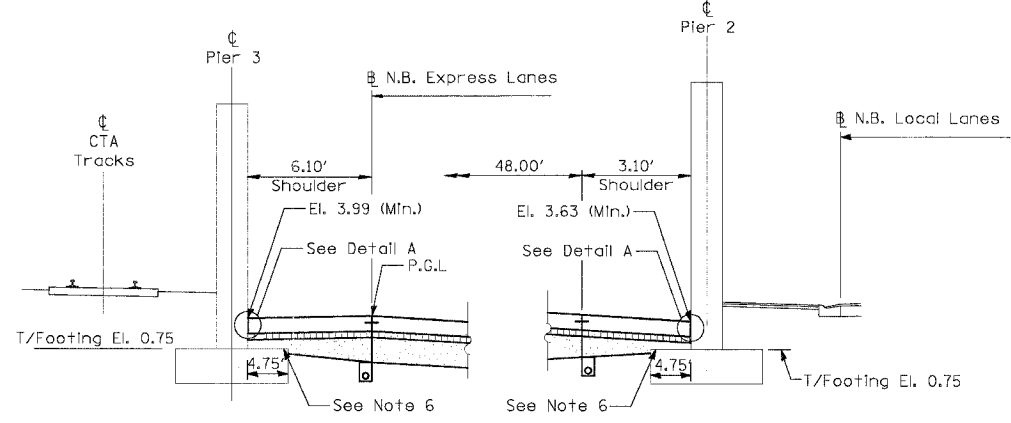
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| F.A.I. RTE.         | SECTION                     | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               |                             | COOK             | 556          | 430       |
| STA.                | TO STA.                     |                  |              |           |
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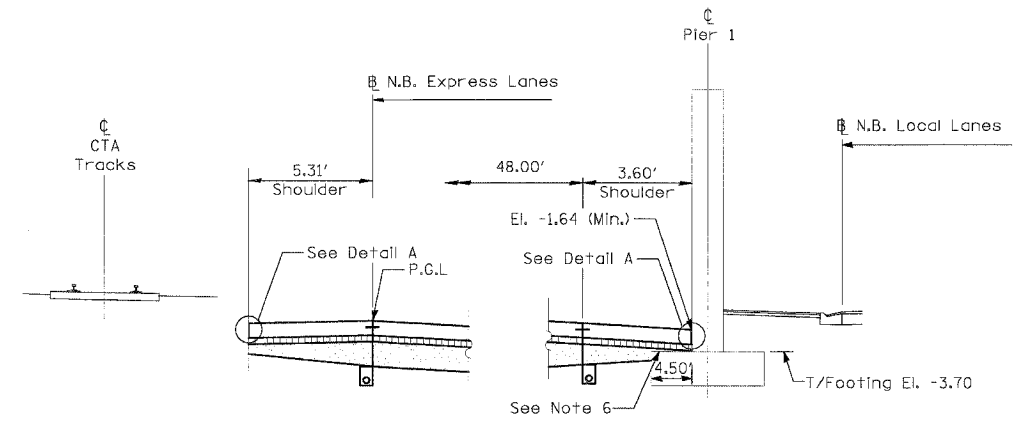
SHOULDER DETAIL AT 69th STREET (S.N. 016-0189)



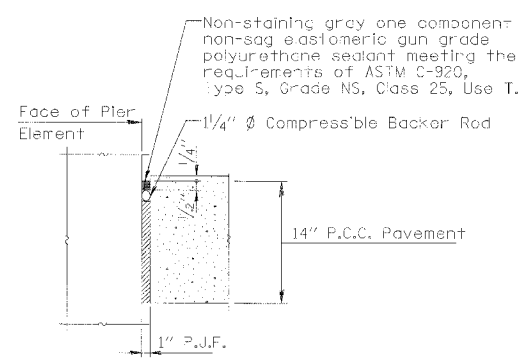
SHOULDER DETAIL AT WENTWORTH AVENUE



SHOULDER DETAIL AT CONRAIL RAILROAD

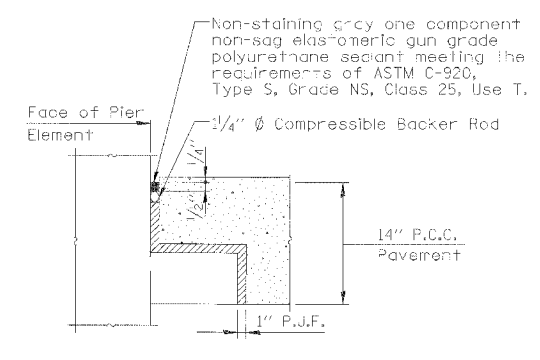


SHOULDER DETAIL AT ROCK ISLAND RAILROAD



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

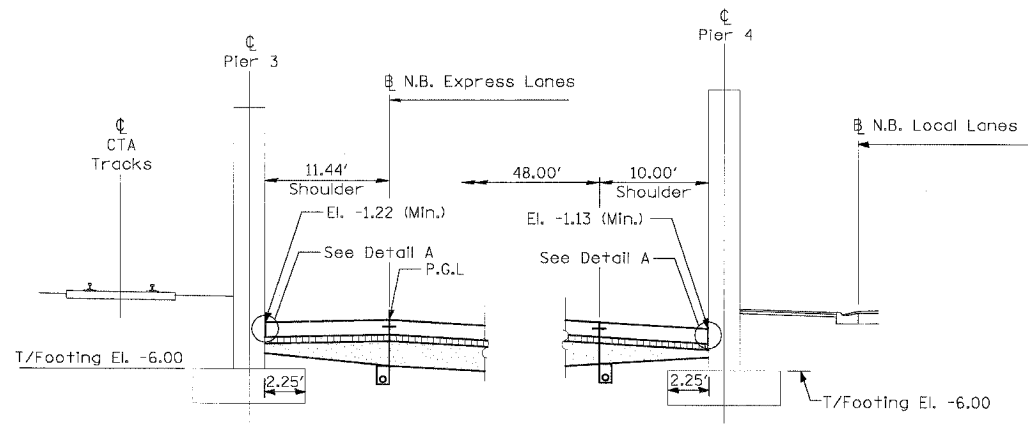
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|-----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NAME      | DATE |                 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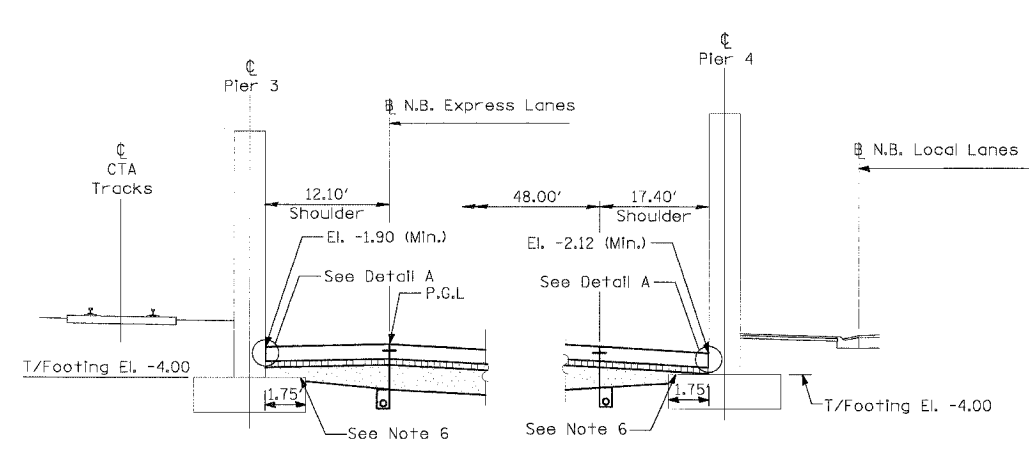
**Edwards AND Kelcey**  
ONE NORTH FRANKLIN  
CHICAGO, IL 60606  
PHONE: (312) 251-3000  
FAX: (312) 251-3015  
WEB: WWW.EKCORP.COM

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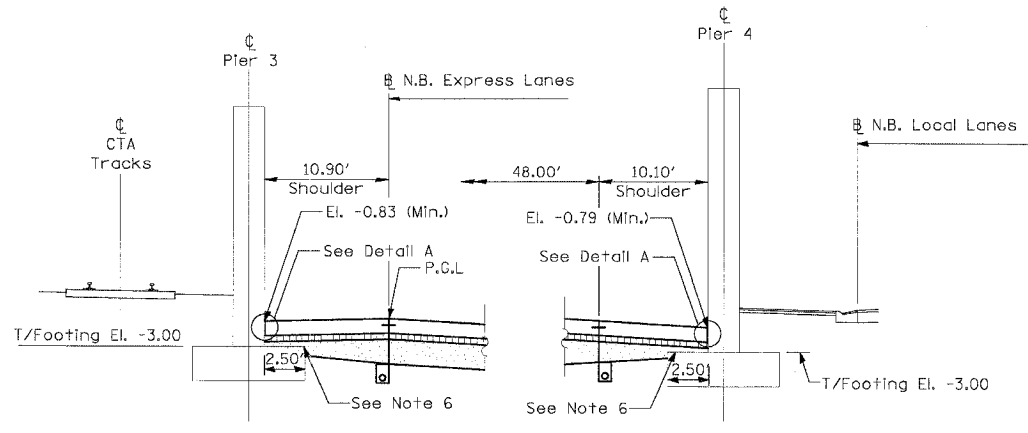
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| F.A.I. SECTION | COUNTY | TOTAL SHEETS                | SHEET NO. |
| 94/90          | COOK   | 556                         | 431       |
| STA. TO STA.   |        | ILLINOIS FED. AID PROJECT   |           |
| 62300          |        | • (1818, ETC.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



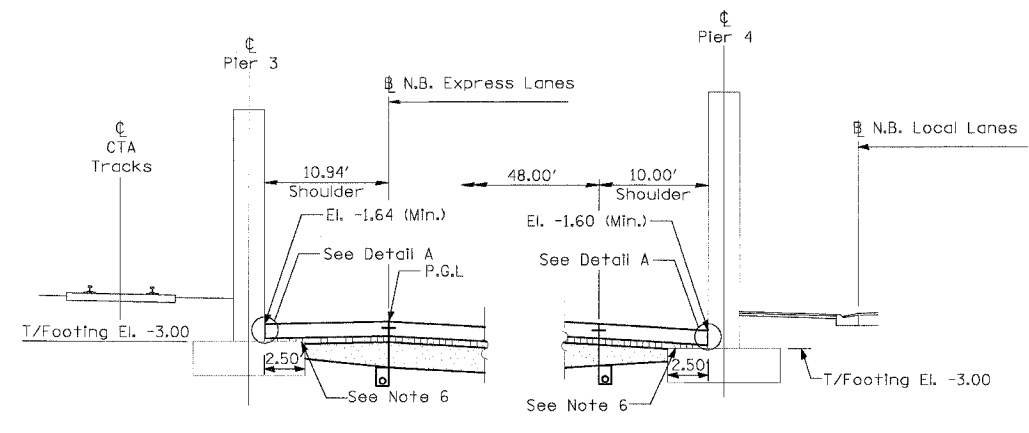
SHOULDER DETAIL AT 57th STREET (S.N. 016-1151)



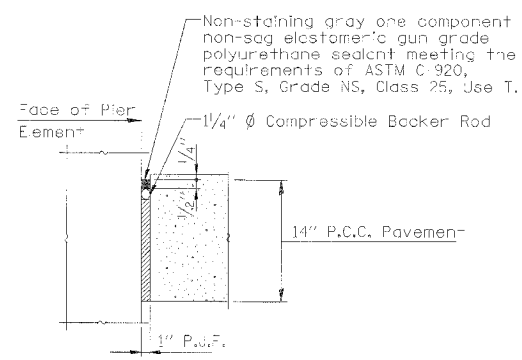
SHOULDER DETAIL AT 59th STREET (S.N. 016-1150)



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

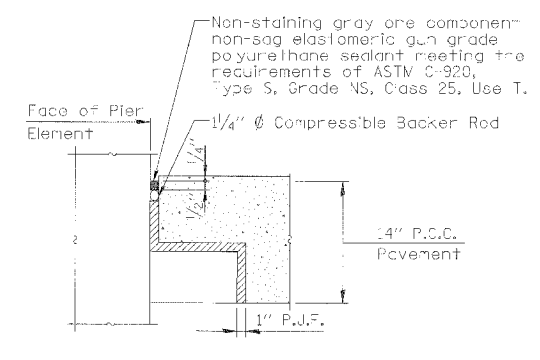


SHOULDER DETAIL AT 55th STREET (SOUTH) (S.N. 016-1152)



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 10ml polyethylene bond breaker and pour shoulder pavement directly on pier footing.

SHEET SDET-3 OF SDET-4

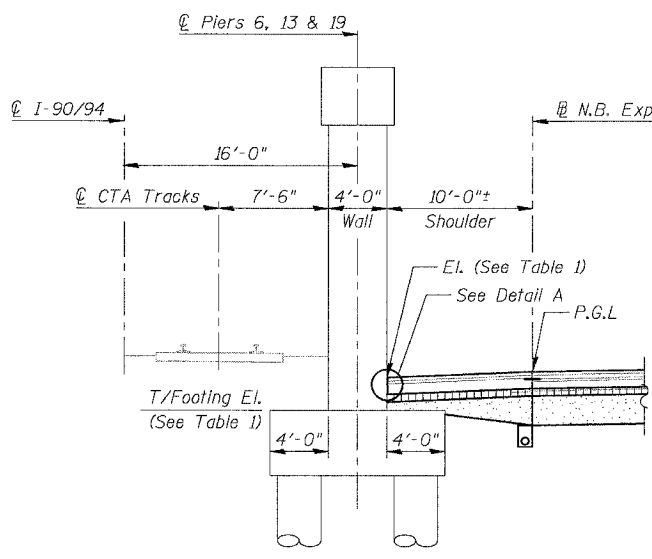
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 PAVEMENT DETAILS AT  
 CROSS STREET BRIDGES

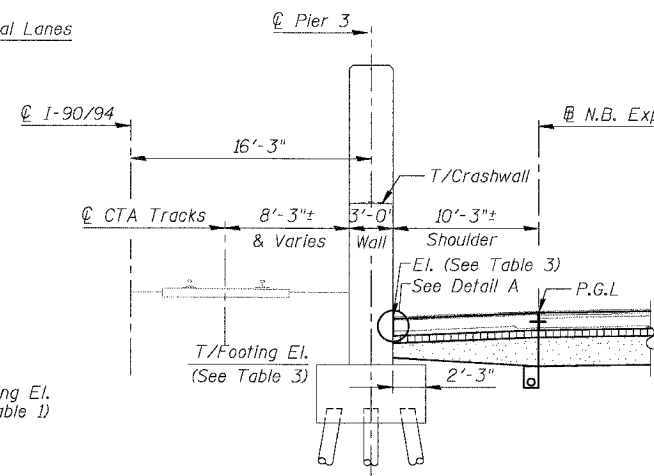
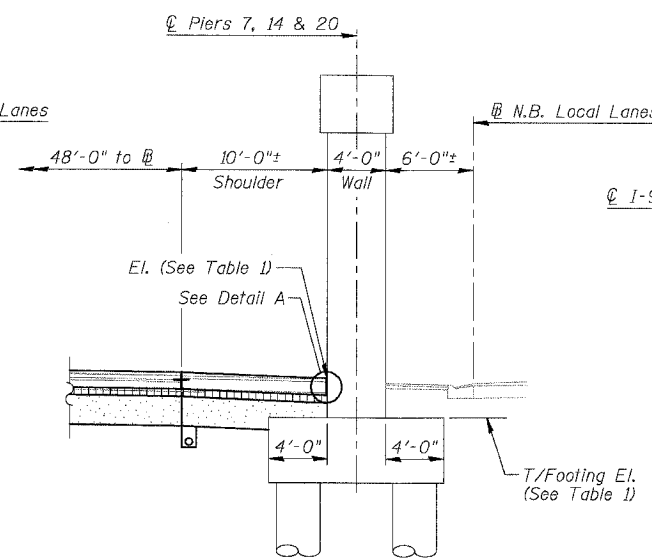
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 DATE: 7/7/05  
 DRAWN BY: MJP  
 CHECKED BY: TAI

**Edwards AND Kelcey**  
 ONE NORTH FRANKLIN  
 CHICAGO, IL 60606  
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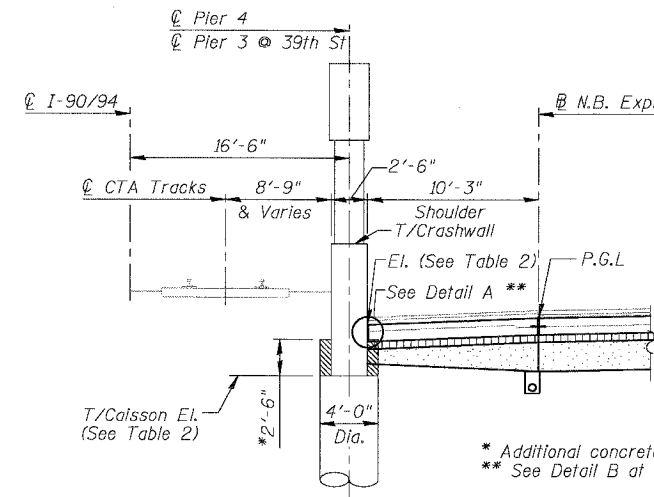
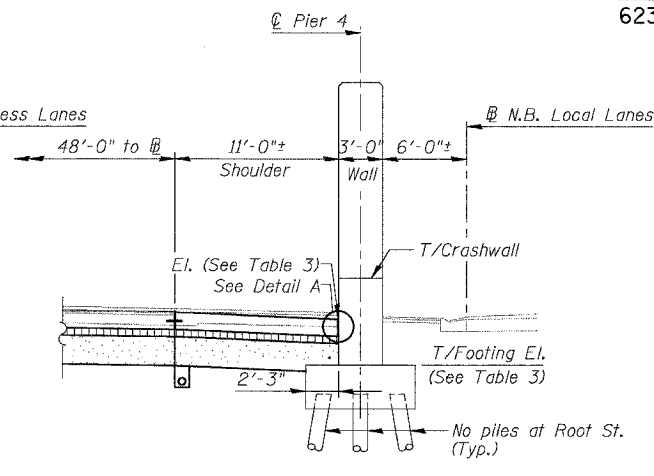
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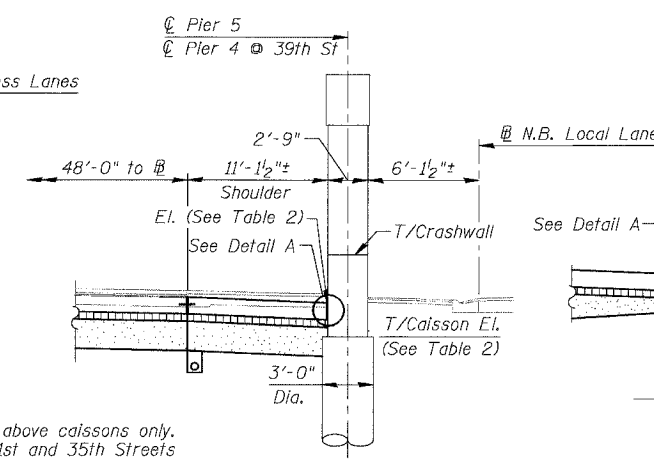
**SHOULDER DETAIL AT OVERHEAD RAILROAD**  
Near 40th Street (S.N.'s 016-0138, 0139 & 0140)



**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**

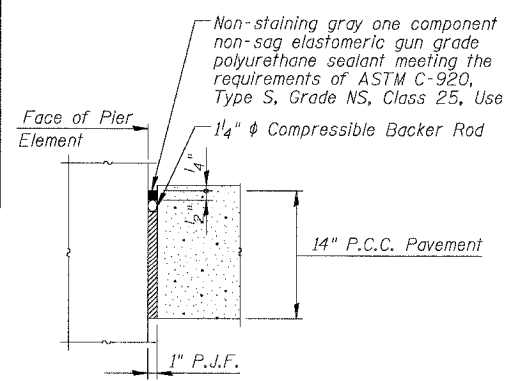
| LOCATION | PIER | T/CAISSON EL. | T/SHOULDER EL. |       |
|----------|------|---------------|----------------|-------|
|          |      |               | MAX.           | MIN.  |
| 31st St. | 4    | -7.71         | -4.24          | -4.50 |
|          | 5    | -6.44         | -4.25          | -4.54 |
| 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**

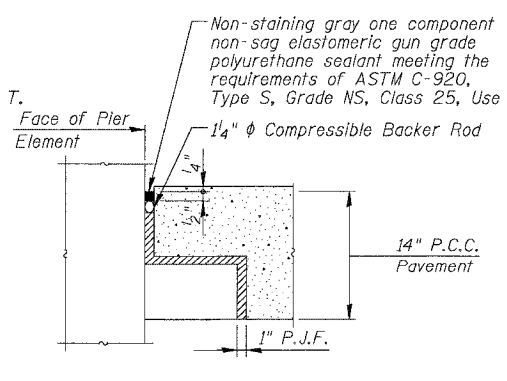
| LOCATION | PIER | T/FOOTING EL. | T/SHOULDER EL. |      |
|----------|------|---------------|----------------|------|
|          |      |               | MAX.           | MIN. |
| Root St. | 3    | -9.5          | -2.7           | -3.5 |
|          | 4    | -8.0          | -2.7           | -3.5 |
| 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:
1. See Typical Sections for Composition of Exst. & 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 10 mil polyethylene bond breaker and pour shoulder pavement directly on pier footing.

**REVISIONS**

| NAME | DATE |
|------|------|
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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

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|---------------------|----------|---------------------------|--------------|-----------|
| 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               |          | 11818, ETC, 2324.6-1P1R-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-232.3.2-4B 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 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 width 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.

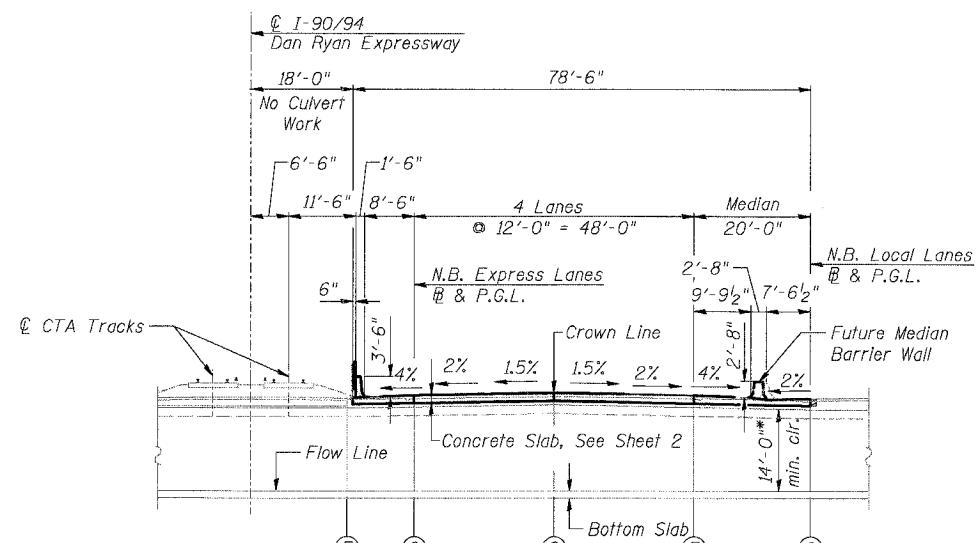
All elevations are based on the Chicago City Datum (C.C.D.)

**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. | 212    |
| Protective Coat                             | Sq. Yd. | 257    |
| Reinforcement Bars, Epoxy Coated            | Pound   | 21,450 |
| 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  | 1      |

**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)

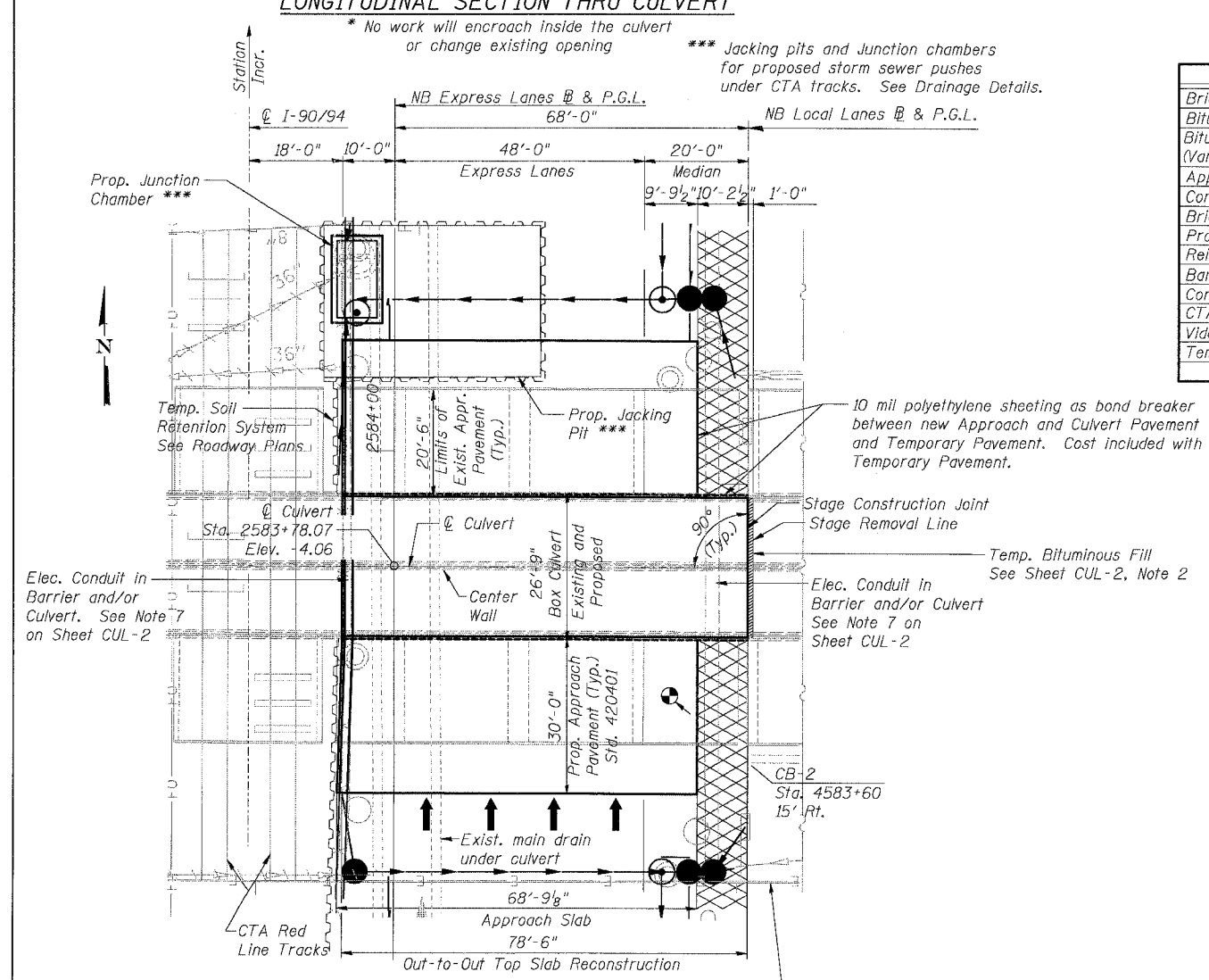
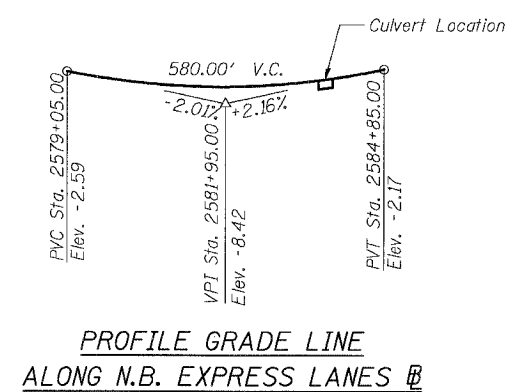
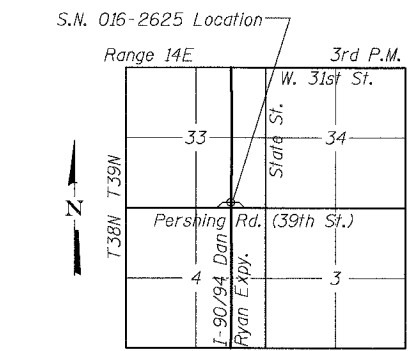
Existing:  
 f'c = 3,500 psi  
 fy = 40,000 psi (Reinforcement)

**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



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SHEET CUL-1 OF CUL-14

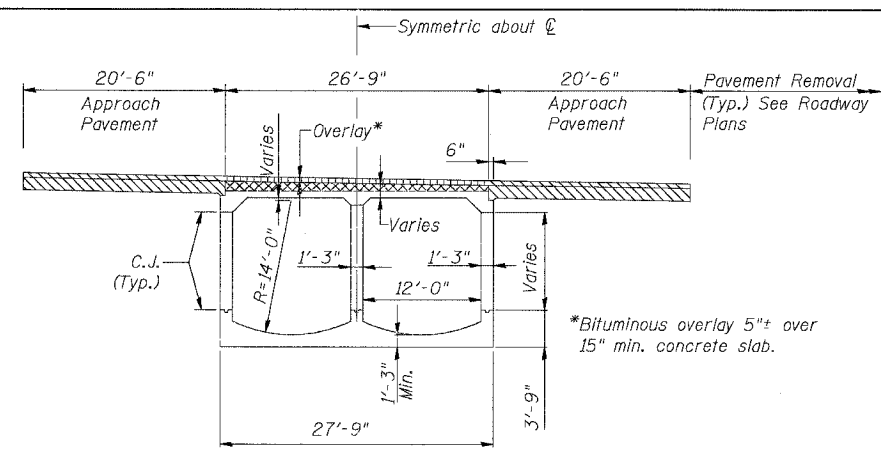
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 MWRD CULVERT, N. OF 39TH ST.,  
 COOK COUNTY, S.N. 016-2625  
 GENERAL PLAN

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

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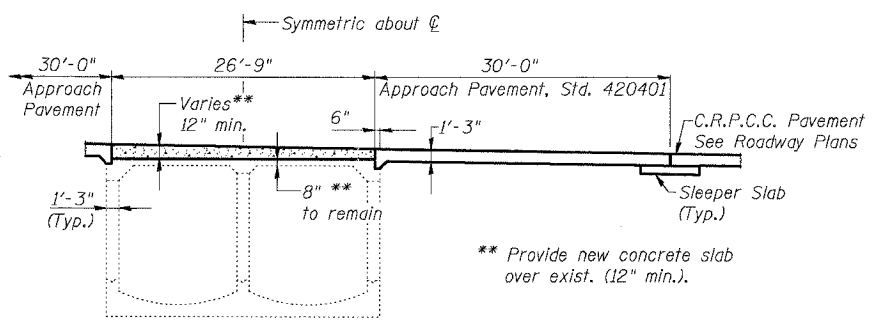
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| F.A.I.              | SECTION  | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| 94/90               | *        | COOK                      | 556          | 434       |
| STA.                | TO STA.  |                           |     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



**EXISTING SECTION THRU CULVERT**

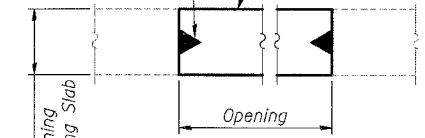
Exist. vertical, diagonal, and partially embedded horizontal reinforcement bars to be cleaned, straightened and incorporated into new concrete slab. Horizontal reinforcement bars that are not partially embedded in exist. slab shall be removed.



**PROPOSED SECTION THRU CULVERT**

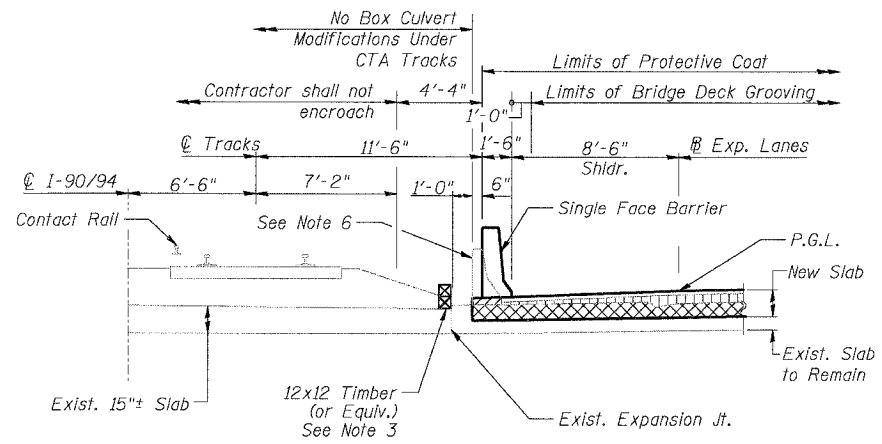
\*\* Provide new concrete slab over exist. (12" min.).

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



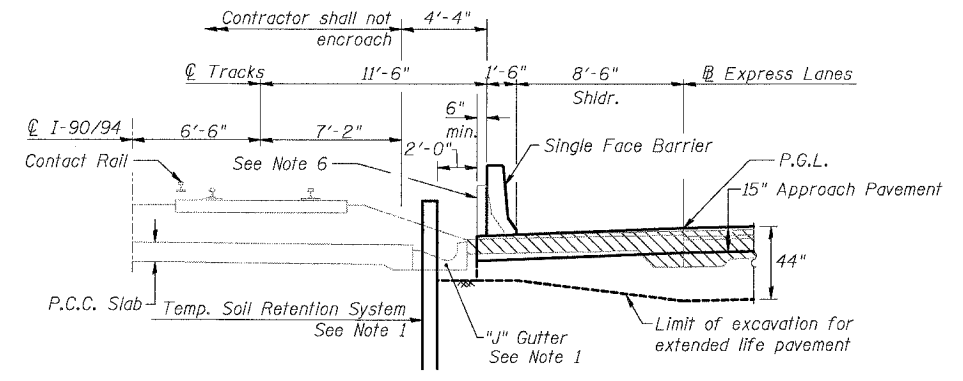
**WATER SEAL DETAIL**

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**

- 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.
- Provide temporary pavement as a water seal to be removed by others. Provide polyethylene sheeting as indicated on Sheet CUL-1.
- Temporary CTA Ballast Retention, see Special Provisions. Coordinate with requirements indicated in Roadway Plans and CTA Coordination Special Provision.
- Exist. and prop. fence attached to CTA barrier not shown for clarity.
- 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..
- 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.
- 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**

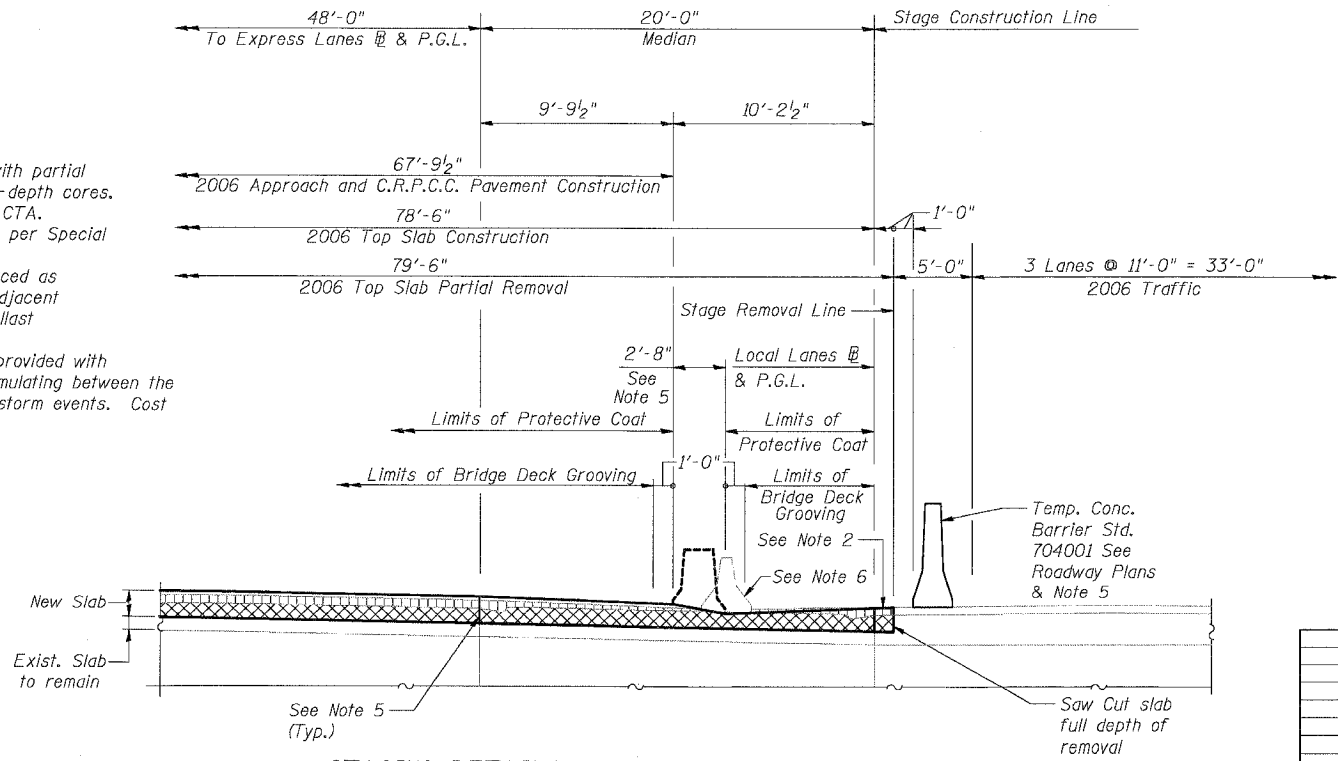
- [Cross-hatched] = Concrete Slab Hydro-Demolition
- [Horizontal lines] = Bituminous Surface Removal, 5" (Variable depth on shoulders)
- [Diagonal lines] = Approach Slab Removal

**ABBREVIATIONS**

C.J. = Construction Joint

**ANTICIPATED SEQUENCE OF CONSTRUCTION:**

- Televise existing culvert per Special Provisions.
- 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.
- Core drill full-depth through existing top slab to determine exact location of bottom of top slab before full-depth saw cutting.
- Remove existing bituminous overlay to level of top reinforcement by scarification methods.
- 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.
- Repair unsound areas of remaining slab with partial or full depth repair methods and plug full-depth cores.
- Construct new top slab and barrier along CTA.
- Re-televise culvert and repair any damage per Special Provisions.
- Approach slabs can be removed and replaced as necessary to coincide with top slab and adjacent pavement reconstruction. Provide CTA ballast support as required.
- 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.



**STAGING DETAILS @ EXPRESS/LOCAL LANES MEDIAN**

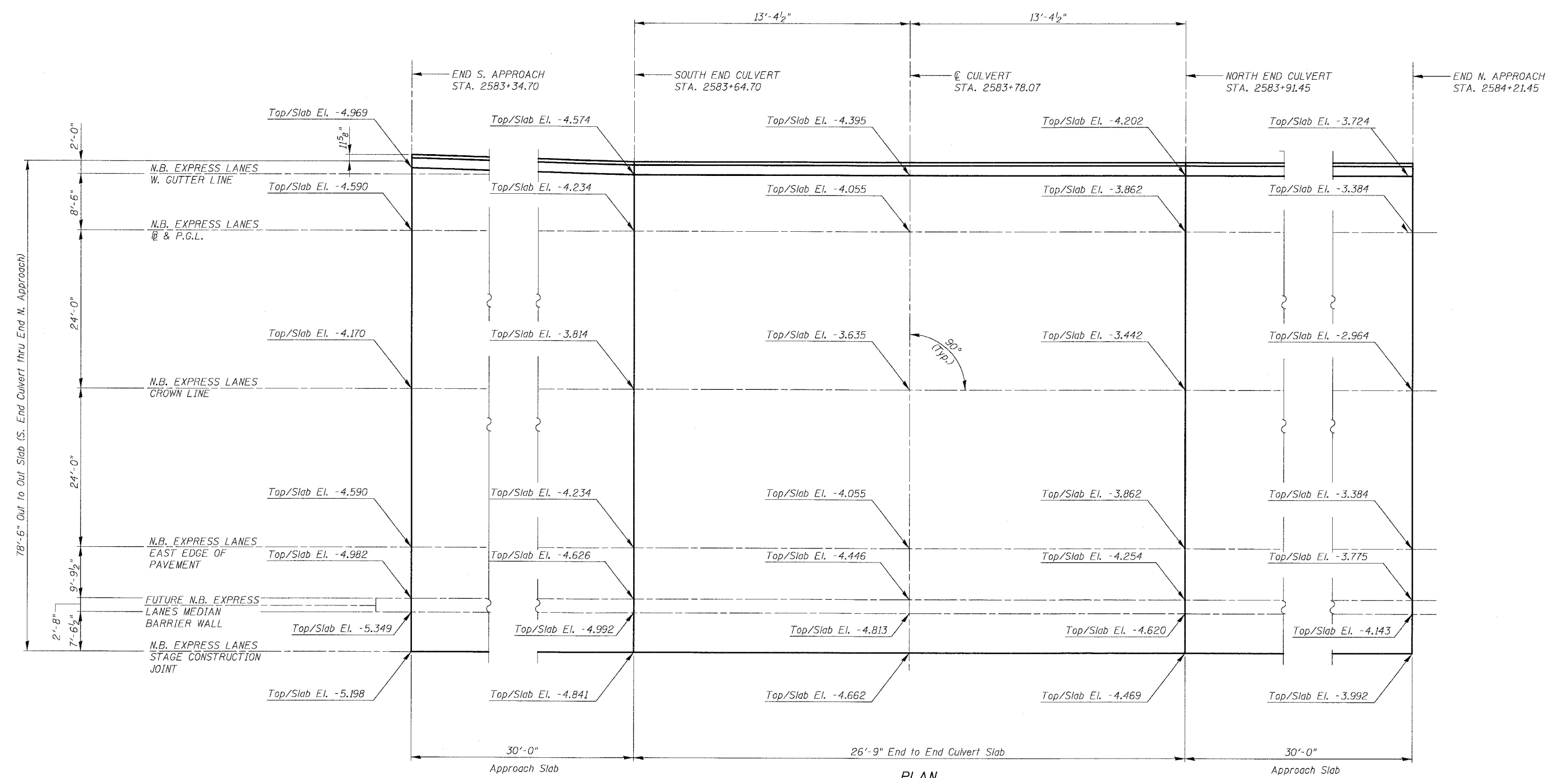
See Longitudinal Section for Dimensions not shown

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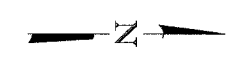
SHEET CUL-2 OF CUL-14  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
MISC. DETAILS  
SCALE: N.T.S. DRAWN BY: DJM  
DATE: 07/07/05 CHECKED BY: BLU

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| 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, 2324.6-1P)R-8 |              |           |



**PLAN**



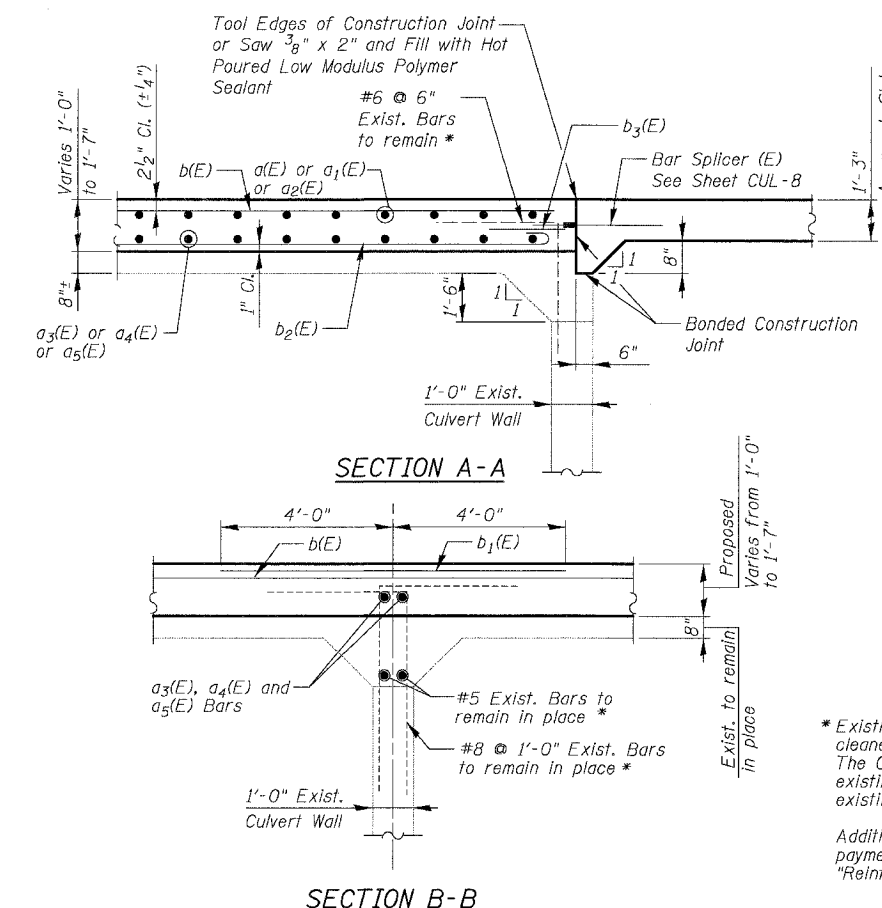
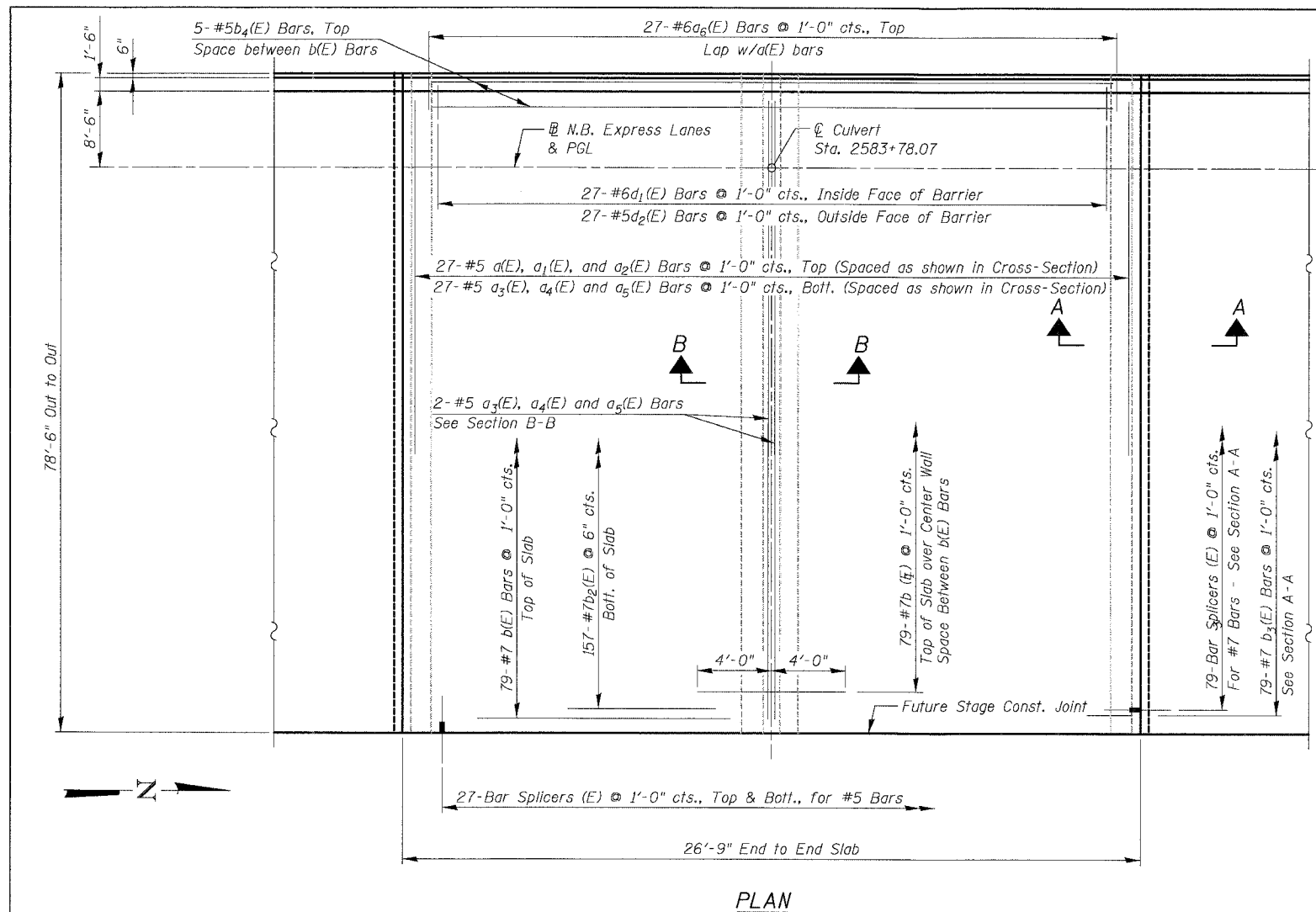
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**SHEET CUL-3 OF CUL-14**  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
**TOP SLAB ELEVATIONS**  
SCALE: N.T.S. DRAWN BY: DJM  
DATE: 07/07/05 CHECKED BY: BLU

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|---------------------|---------------------------|------------------|--------------|-----------|
| 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.

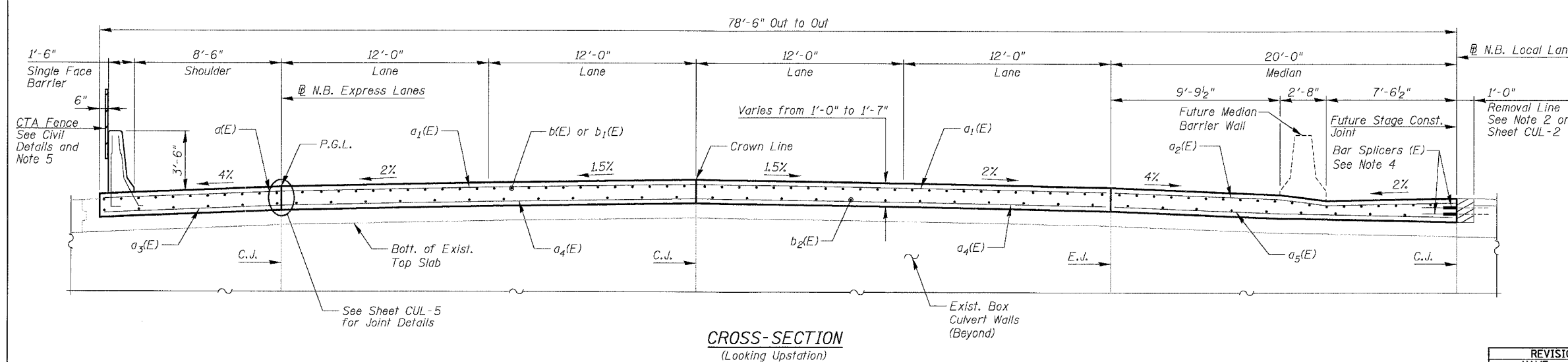
Additional reinforcement shall not be measured for payment but shall be included in the cost of "Reinforcement Bars, Epoxy Coated".

**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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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

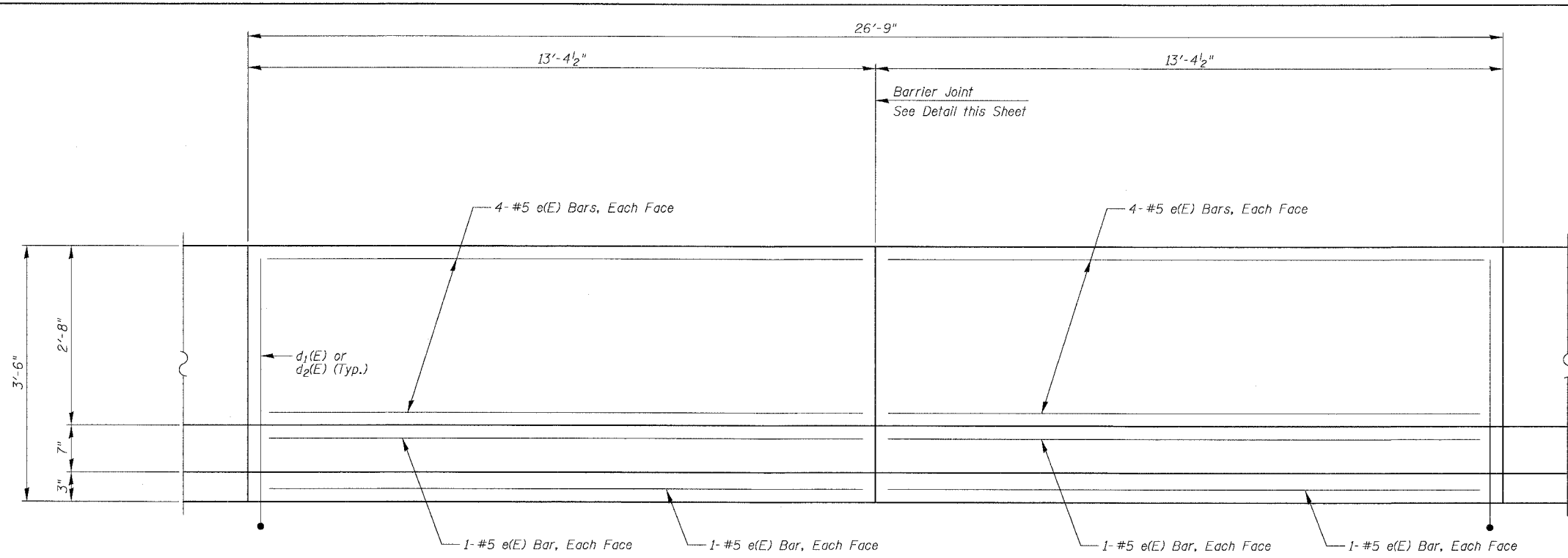
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| F.A.I.              | SECTION  | COUNTY                   | TOTAL SHEETS | SHEET NO. |
| 94/90               | *        | COOK                     | 556          | 437       |
| STA.                | TO STA.  |                          |              |           |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT         |              |           |
| 62300               |          | *1818, ETC, 2324.6-1PR-8 |              |           |

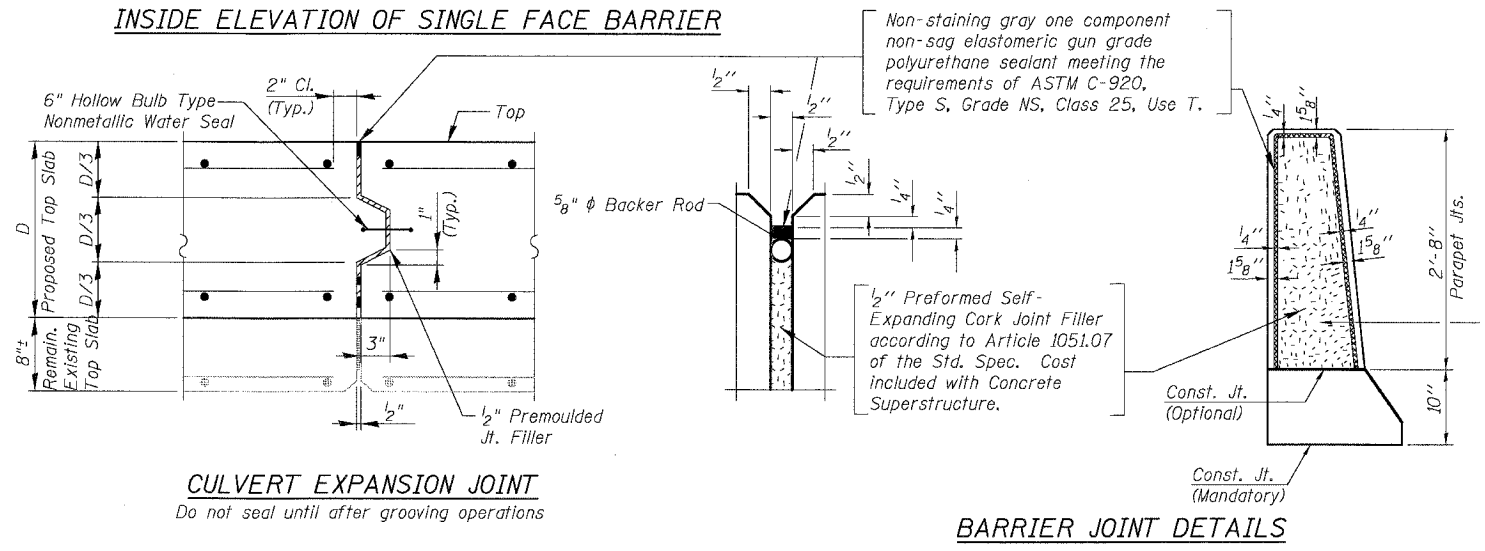
**TOP SLAB  
BILL OF MATERIAL**

| Bar                              | No. | Size    | Length  | Shape |
|----------------------------------|-----|---------|---------|-------|
| a(E)                             | 27  | #5      | 10'-2"  | —     |
| a <sub>1</sub> (E)               | 27  | #5      | 23'-8"  | —     |
| a <sub>2</sub> (E)               | 27  | #5      | 21'-10" | —     |
| a <sub>3</sub> (E)               | 29  | #5      | 10'-2"  | —     |
| a <sub>4</sub> (E)               | 29  | #5      | 23'-8"  | —     |
| a <sub>5</sub> (E)               | 29  | #5      | 19'-8"  | —     |
| a <sub>6</sub> (E)               | 27  | #6      | 4'-6"   | —     |
| b(E)                             | 79  | #7      | 26'-5"  | —     |
| b <sub>1</sub> (E)               | 79  | #7      | 8'-0"   | —     |
| b <sub>2</sub> (E)               | 157 | #7      | 28'-1"  | —     |
| b <sub>3</sub> (E)               | 79  | #7      | 4'-0"   | —     |
| b <sub>4</sub> (E)               | 5   | #5      | 26'-5"  | —     |
| d <sub>1</sub> (E)               | 27  | #6      | 5'-7"   | L     |
| d <sub>2</sub> (E)               | 27  | #5      | 5'-9"   | L     |
| e(E)                             | 24  | #5      | 13'-0"  | —     |
| Concrete Superstructure          |     | Cu. Yd. | 104.1   |       |
| Bridge Deck Grooving             |     | Sq. Yd. | 212     |       |
| Protective Coat                  |     | Sq. Yd. | 232     |       |
| 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.

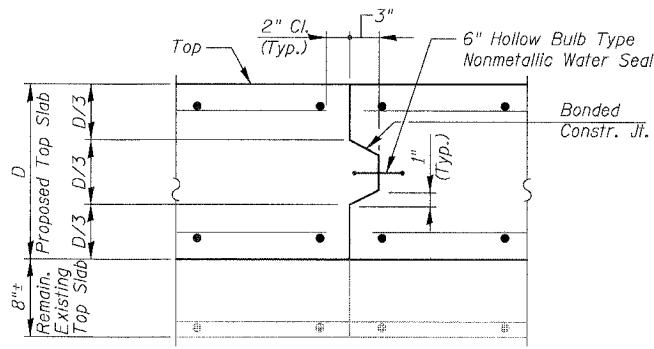
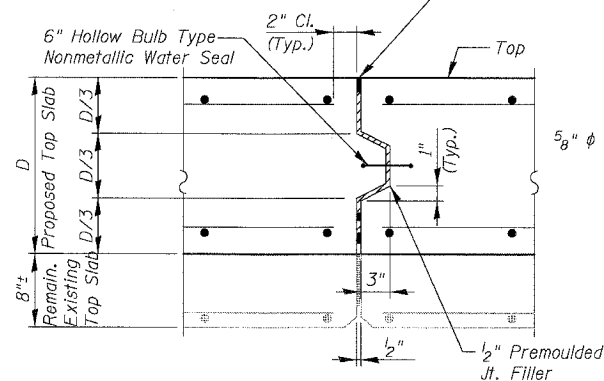


**INSIDE ELEVATION OF SINGLE FACE BARRIER**

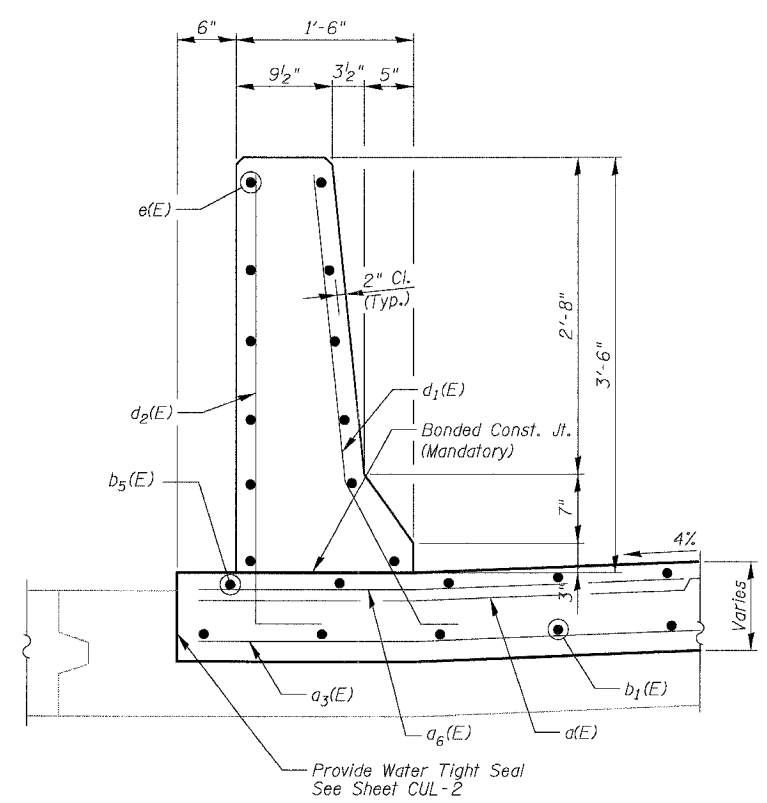
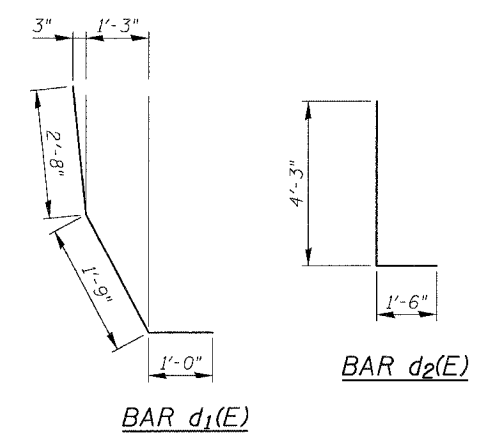
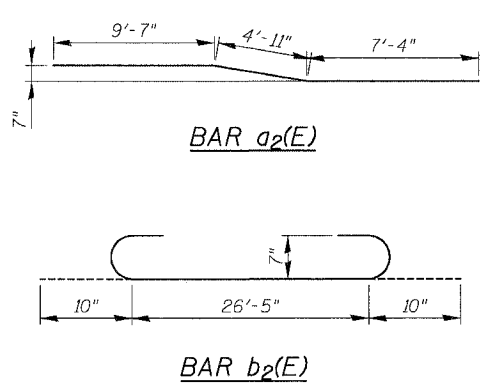


**BARRIER JOINT DETAILS**

**CULVERT EXPANSION JOINT**  
Do not seal until after grooving operations



**CULVERT CONSTRUCTION JOINT**



**SECTION THRU SINGLE FACE BARRIER**

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SHEET CUL-5 OF CUL-14

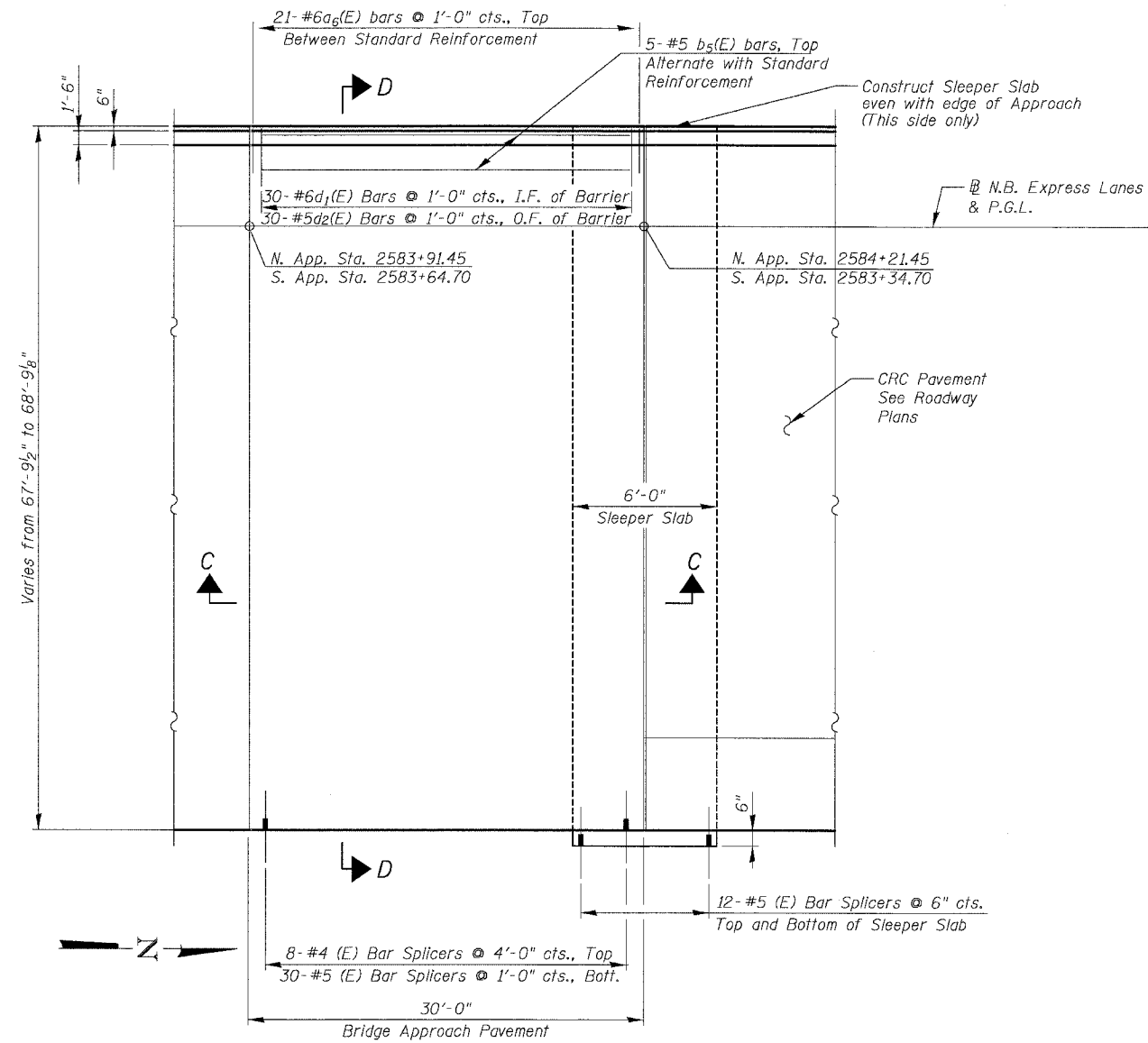
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
TOP SLAB DETAILS

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

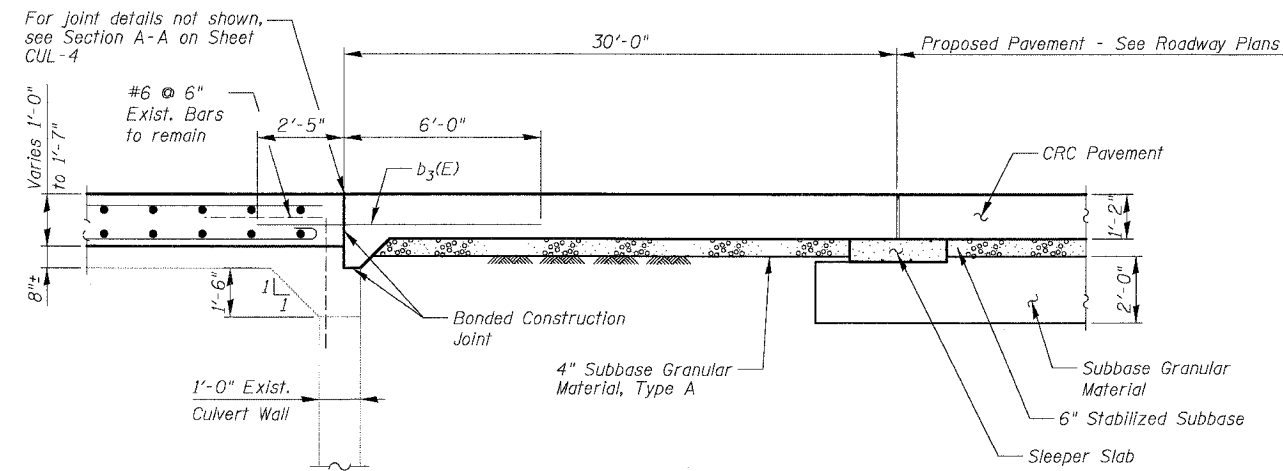
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| F.A.I.              | SECTION                    | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94/90               | *                          | COOK   | 556          | 438       |
| STA.                | TO STA.                    |        |        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



**PARTIAL PLAN**  
North Approach Shown  
South Approach Similar

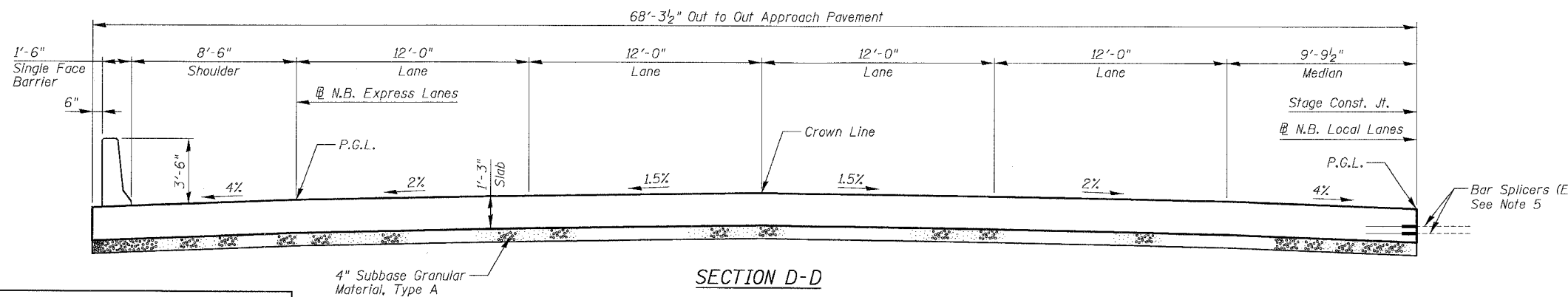


**SECTION C-C**

**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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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

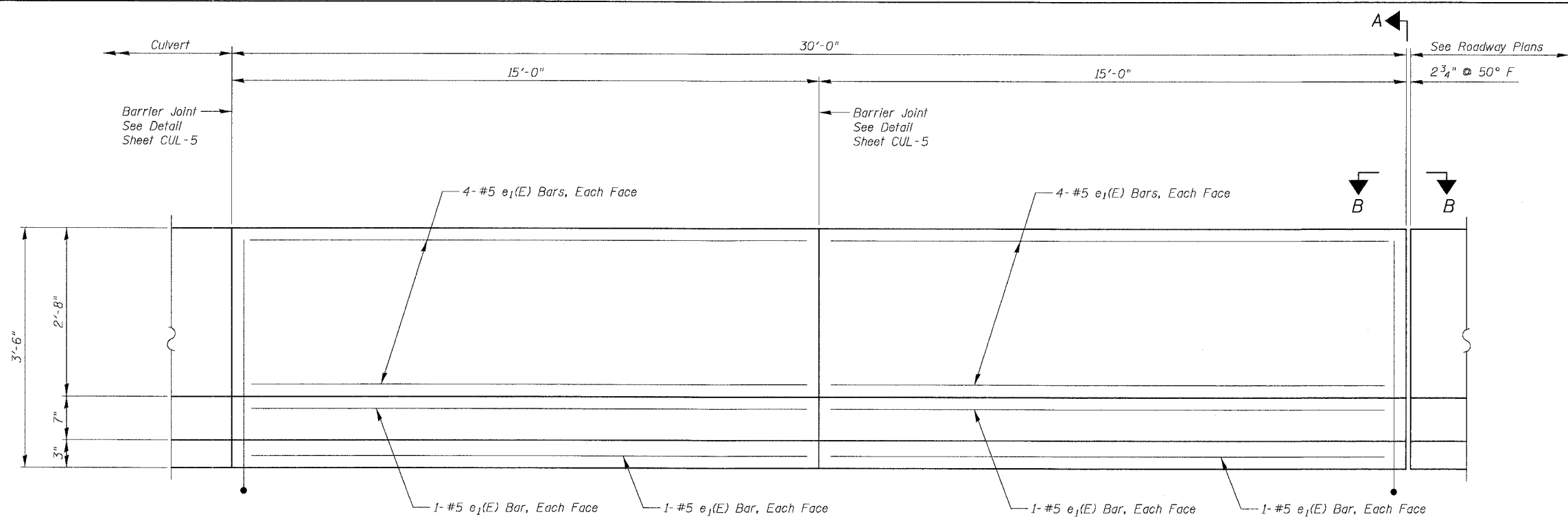
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| 94/90               |                           | COOK   | 556          | 439       |
| STA.                | TO STA.                   |        |              |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |        |              |           |
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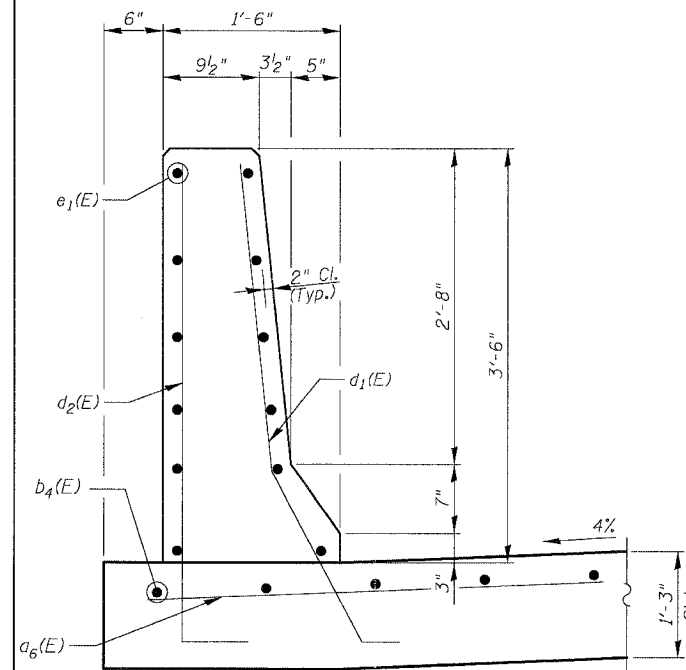
**APPROACH PAVEMENT  
BILL OF MATERIAL  
TOTAL FOR 2 APPROACH SLABS**

| 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. | 25    |
| 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.

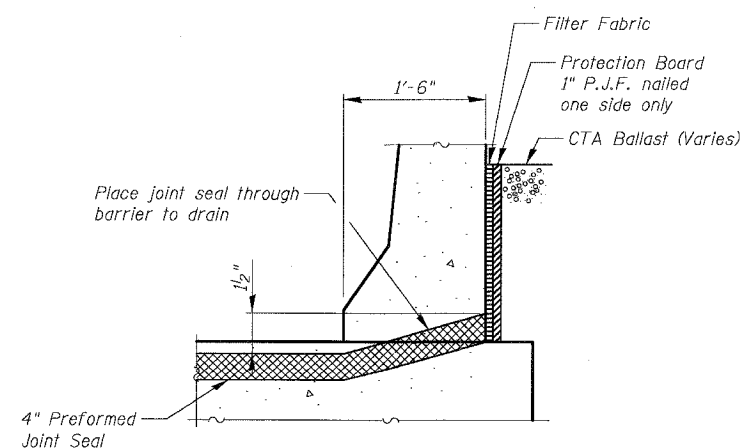


**INSIDE ELEVATION OF SINGLE FACE BARRIER ON APPROACH PAVEMENT**

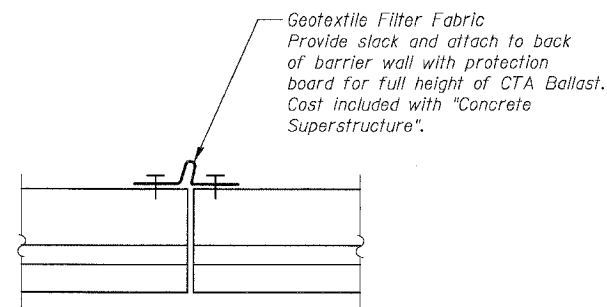


**SECTION THRU SINGLE FACE BARRIER**

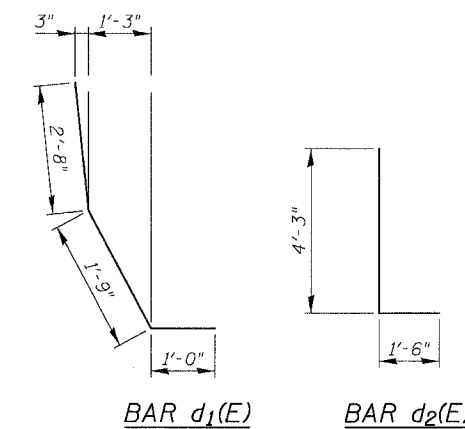
Note: Standard Approach Pavement reinforcement not shown for clarity



**SECTION A-A**



**VIEW B-B**



**BAR  $d_1(E)$**

**BAR  $d_2(E)$**

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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  
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**NOTES**

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

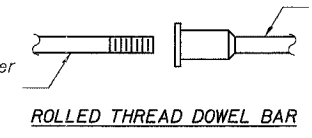
- ① Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_t$

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

| Bar 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."

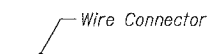
The diameter of this part is the same as the diameter of the bar spliced.



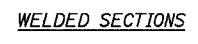
ROLLED THREAD DOWEL BAR



\*\* ONE PIECE



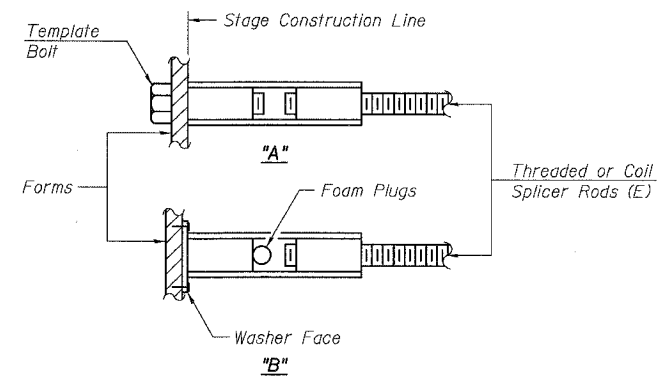
WIRE CONNECTOR



WELDED SECTIONS

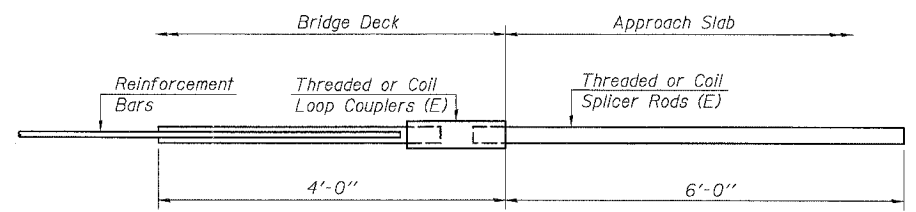
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



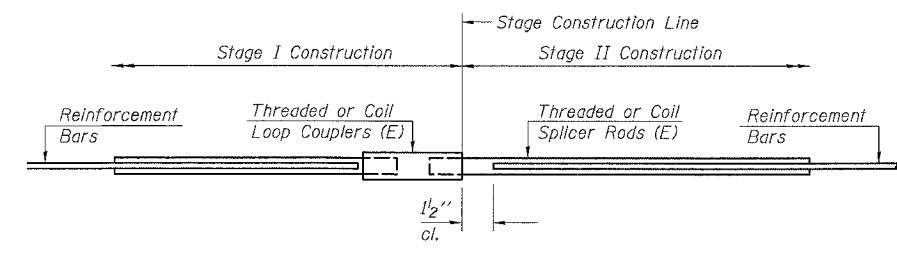
**INSTALLATION AND SETTING METHODS**

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



**FOR 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       | 133                     | Culvert Slab          |
| #4       | 16                      | Approach Slab         |
| #5       | 60                      | Approach Slab         |
| #5       | 24                      | Approach Sleeper Slab |

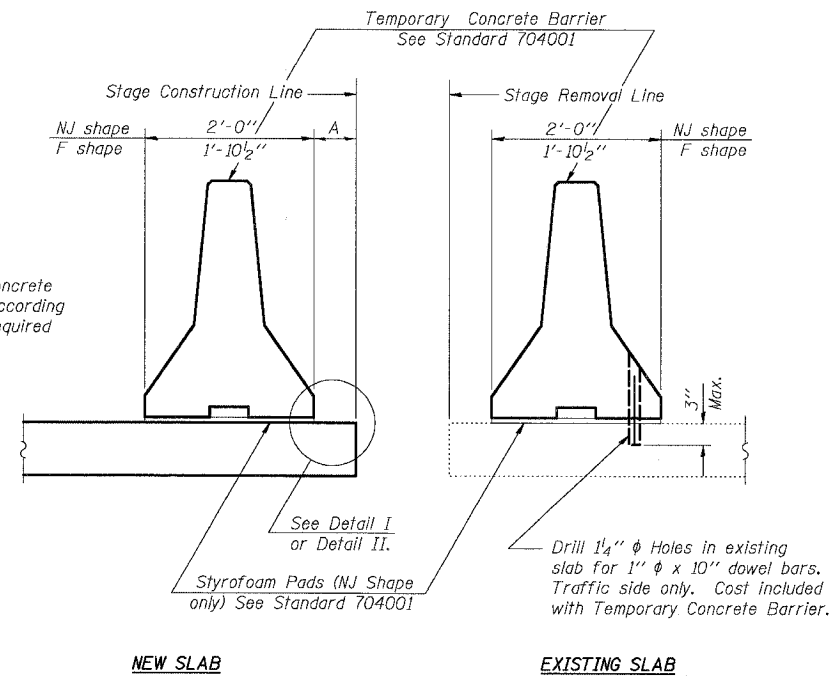
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
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**BAR SPLICER DETAILS**  
 SCALE: N.T.S. DRAWN BY: MTR  
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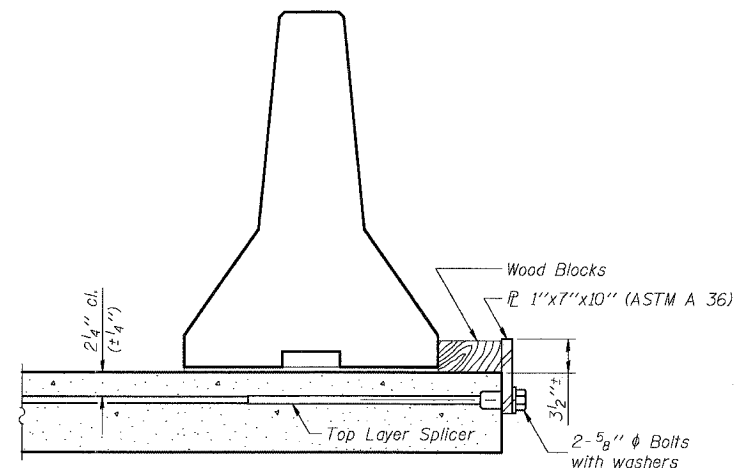
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| 94/90               | *                         | COOK   | 556          | 441       |
| STA.                | TO STA.                   |        |              |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |        |              |           |
| 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".

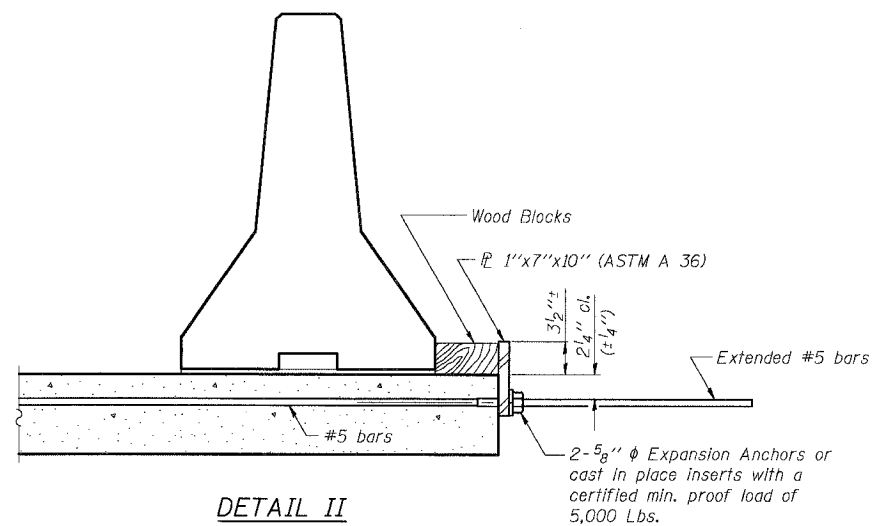


SECTIONS THRU SLAB



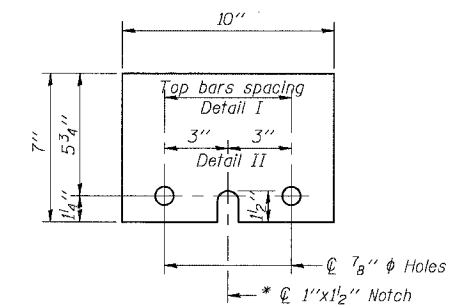
DETAIL I

The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1" x 7" x 10" 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

- NOTES**
- Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x 10" steel  $\bar{L}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.
- Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x 10" steel  $\bar{L}$  to the concrete slab with 2-5/8"  $\phi$  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.

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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  
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

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| 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                                                        |   | 50/5" | 3    |    |                     |   |   |     |   |
| Very Dense to Loose, Brown SANDY LOAM trace- gravel          |   |       |      |    |                     |   |   |     |   |
| FILL                                                         |   | 16    | 3.7  | 17 |                     |   |   |     |   |
| Medium Stiff to Hard, Gray SILTY CLAY trace- sand and gravel |   | 4     | B    |    |                     |   |   |     |   |
| -7.30                                                        |   | 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

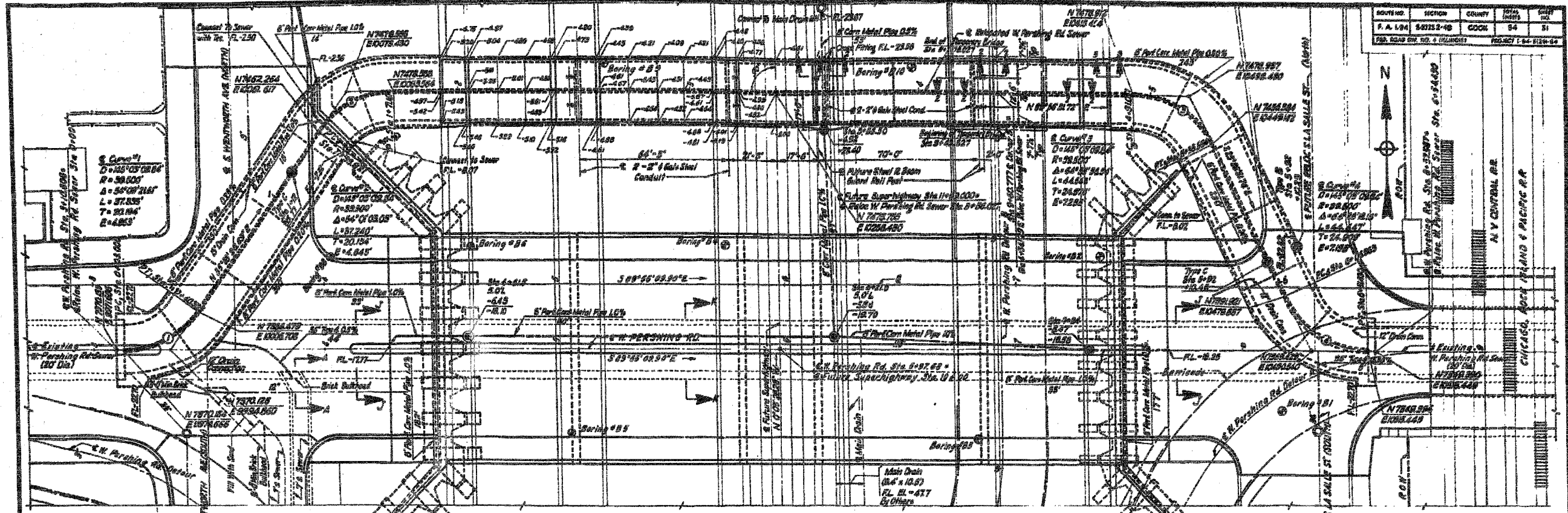
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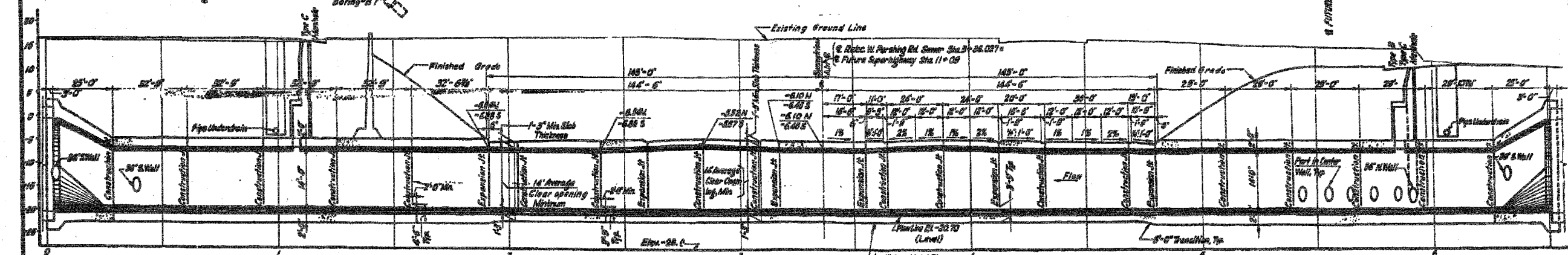
SHEET CUL-10 OF CUL-14  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
SOIL BORINGS  
SCALE: N.T.S. DRAWN BY: DJM  
DATE: 07/07/05 CHECKED BY: BLU

9/3/03 AM 6/24/2005





PLAN  
SCALE: 1\"/>



PROFILE  
SCALE: HORIZONTAL 1\"/>

**GENERAL NOTES**  
 Design Specifications: AASHTO 1987 Modified; AREA 1988 Modified; State of Illinois, Division of Highways 1988.  
 Design Load Loading: AASHTO H20-44 or Alternate designated in PPM 20-4, Sec 4c; and Chicago Transit Authority, April 23, 1982.

**NOTES**  
 1. Slopes for all cut and fill shall be as indicated on sheets.  
 2. For Soil Boring Data, see sheet S-1 & S-4.

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

SHEET CUL-11 OF CUL-14

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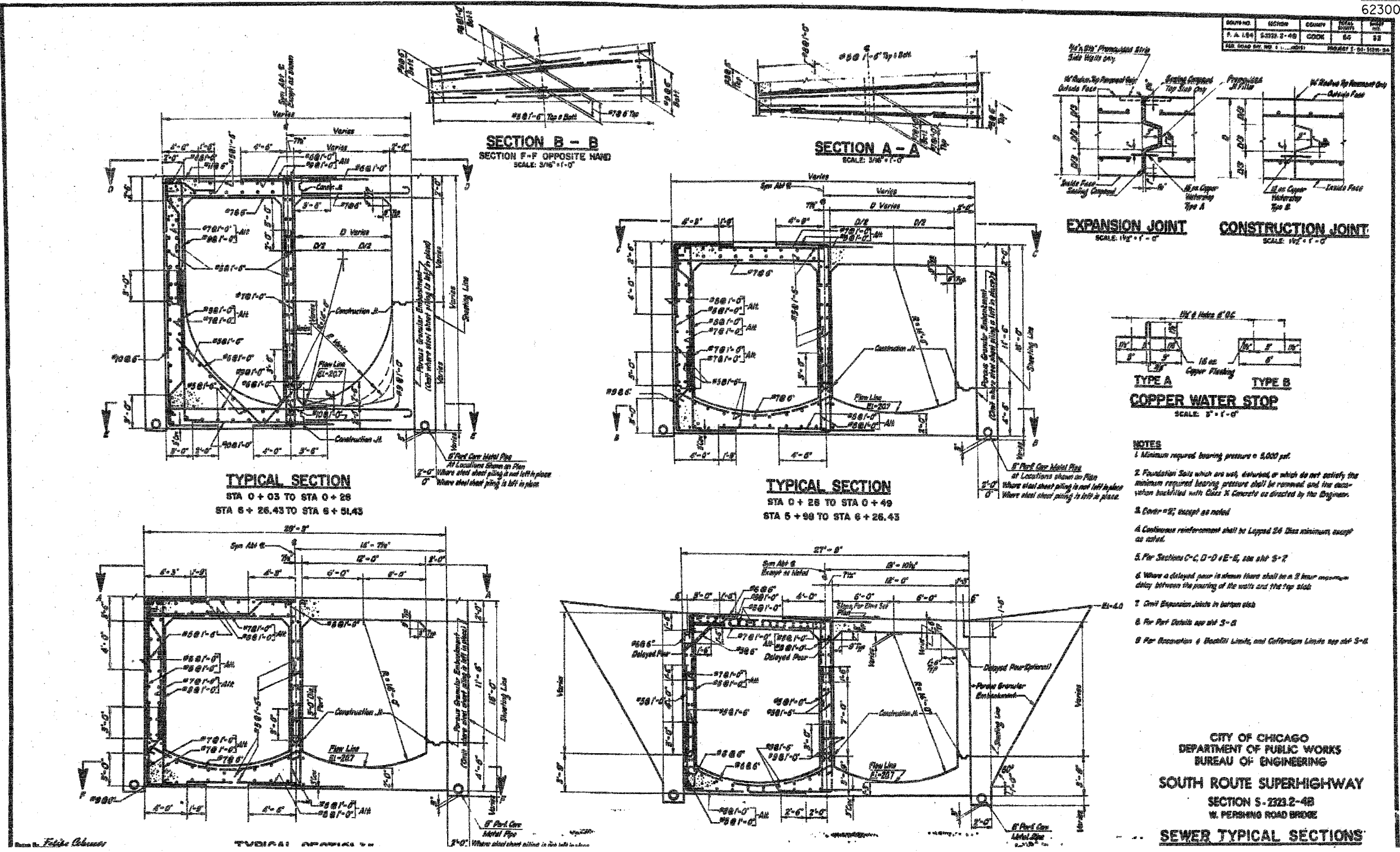
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 31ST STREET TO 71ST STREET  
 NB EXPRESS LANE RECONSTRUCTION  
 MWRD CULVERT, N. OF 39TH ST.,  
 COOK COUNTY, S.N. 016-2625  
 EXISTING PLAN AND ELEVATION

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

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CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
SOUTH ROUTE SUPERHIGHWAY  
SECTION S-2324-4B  
W. PERSHING ROAD BRIDGE  
SEWER TYPICAL SECTIONS

SHEET CUL-12 OF CUL-14

FOR INFORMATION ONLY

| REVISIONS | DATE |
|-----------|------|
| NAME      |      |
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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  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
EXISTING TYPICAL SECTIONS

SCALE: NTS  
DATE: 07/07/05

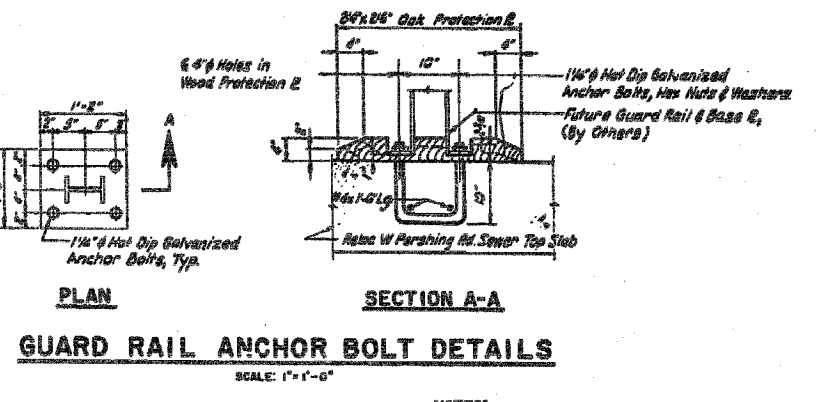
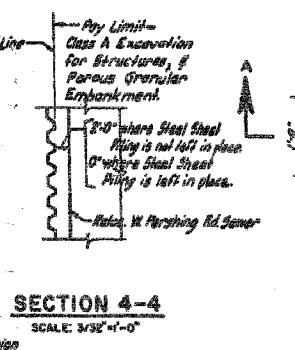
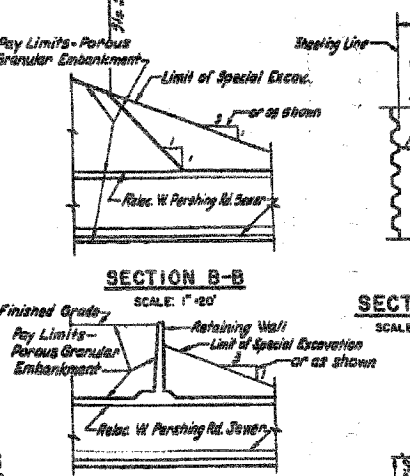
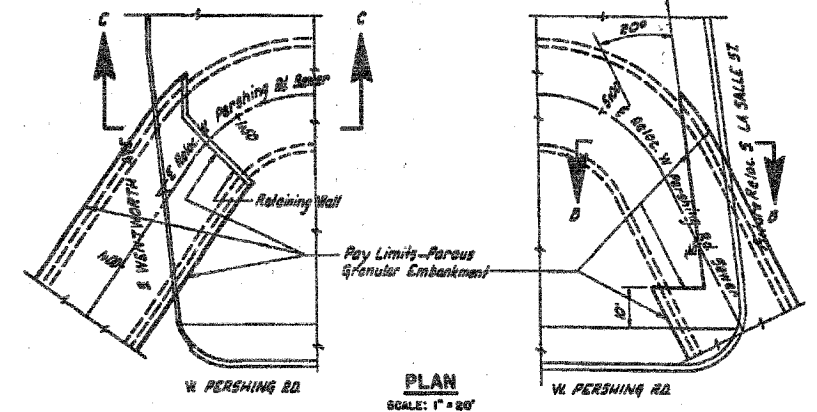
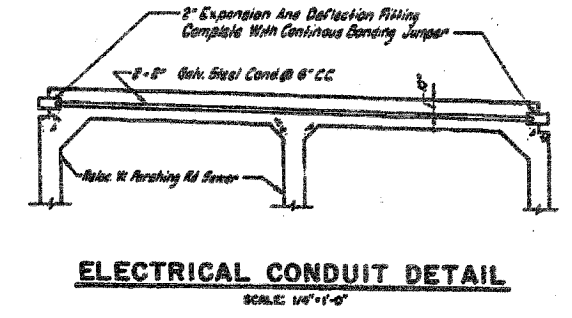
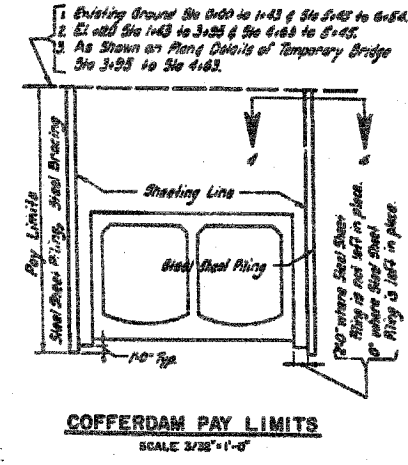
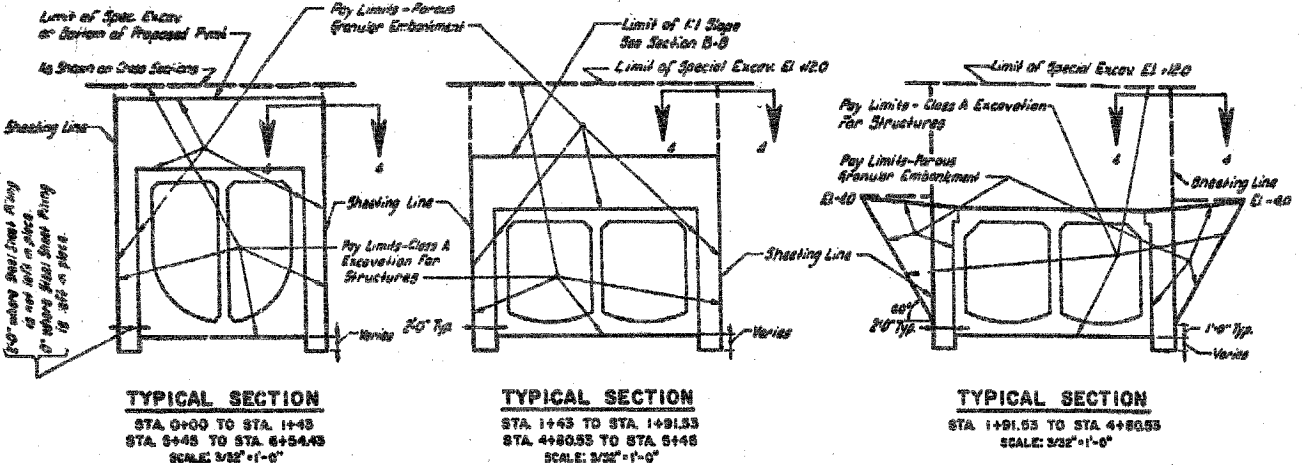
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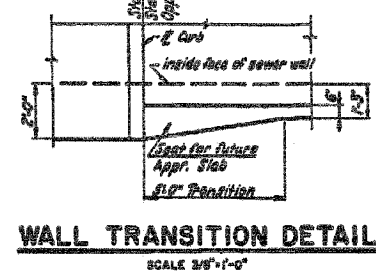
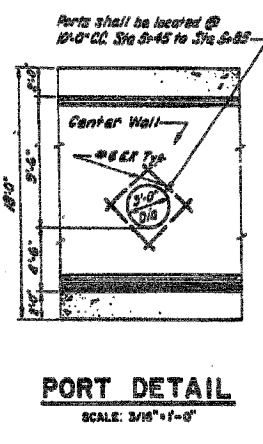
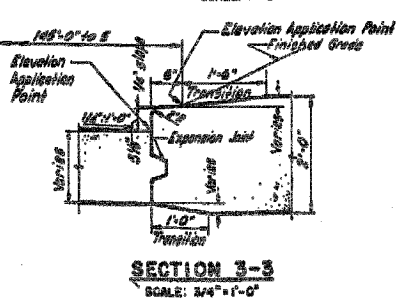
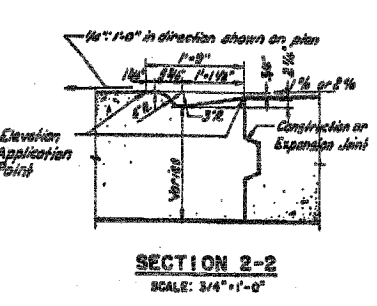
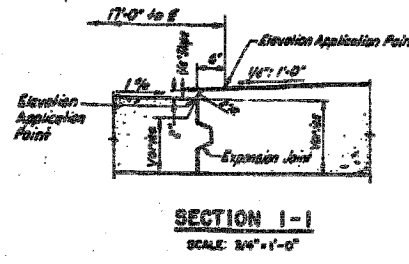
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|---------------------|---------------------------|--------|--------------|-----------|
| F.A.I.              | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94/90               |                           | COOK   | 556          | 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  
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BUREAU OF ENGINEERING  
SOUTH ROUTE SUPERHIGHWAY  
SECTION 5-2322-4B  
W PERSHING ROAD BRIDGE  
SEWER MISCELLANEOUS  
DETAILS

SHEET CUL-13 OF CUL-14

| REVISIONS |      |
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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  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
EXISTING GENERAL DETAILS

SCALE: NTS  
DATE: 07/07/05

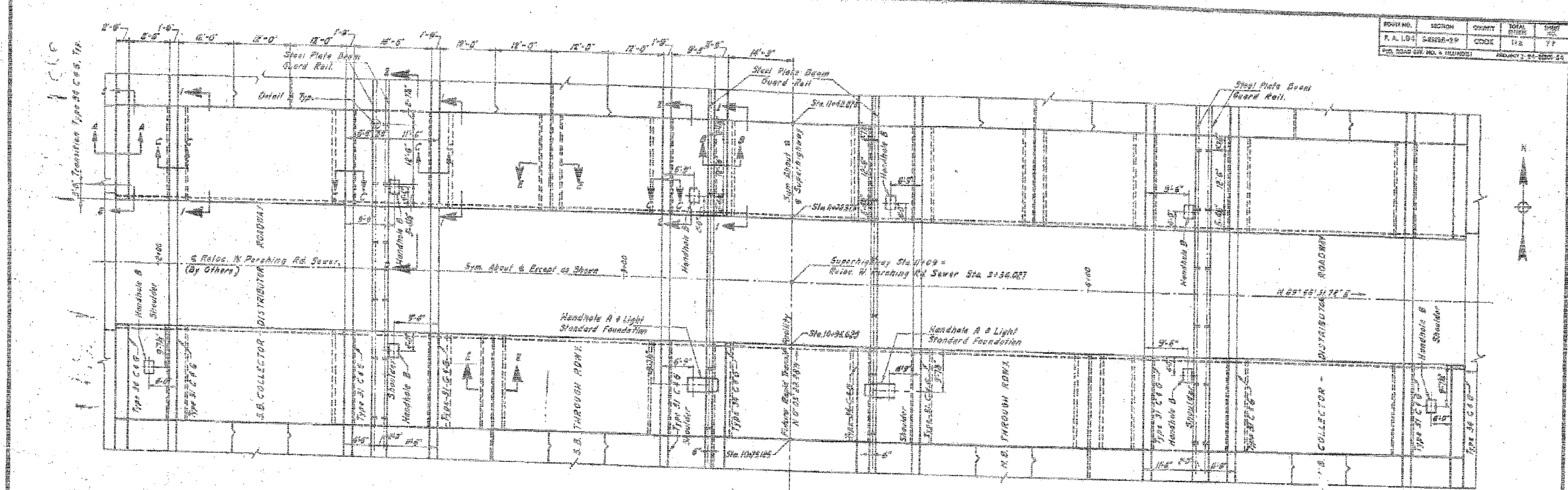
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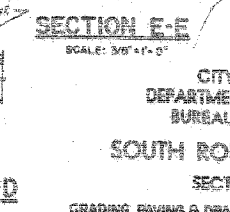
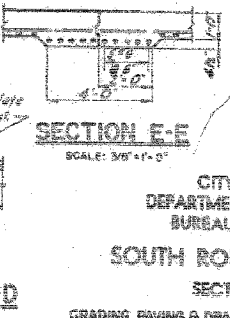
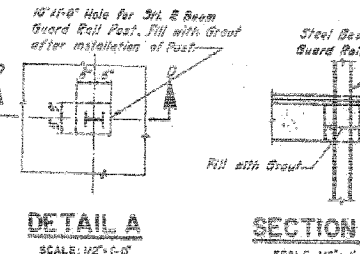
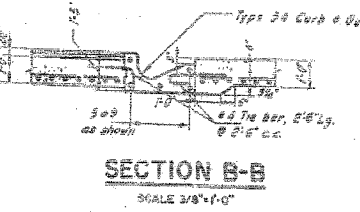
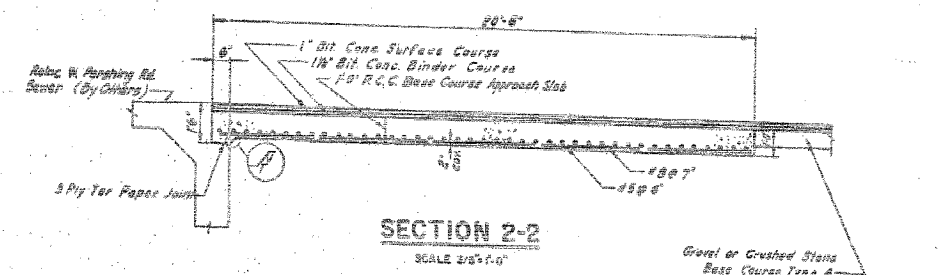
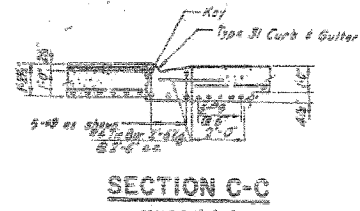
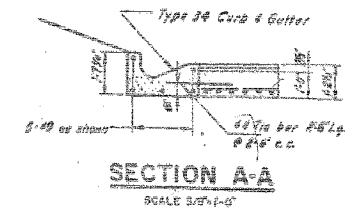
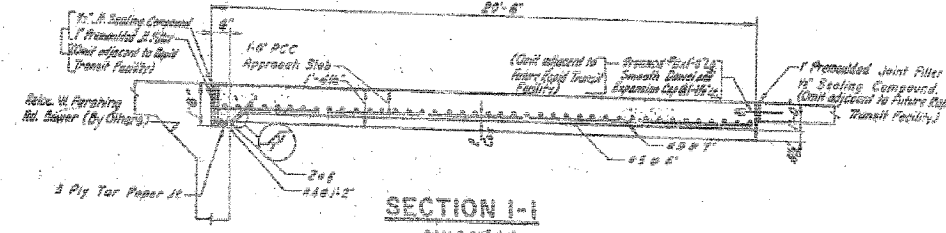
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| F.A.I.              | SECTION                   | COUNTY  | TOTAL SHEETS | SHEET NO. |
| 94/90               |                           | COOK    | 556          | 446       |
| STA.                |                           | TO STA. |              |           |
| 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 6-18.
  4. For Details of Handhole A & B, and Light Standard Foundation, see Sheet 6-8.

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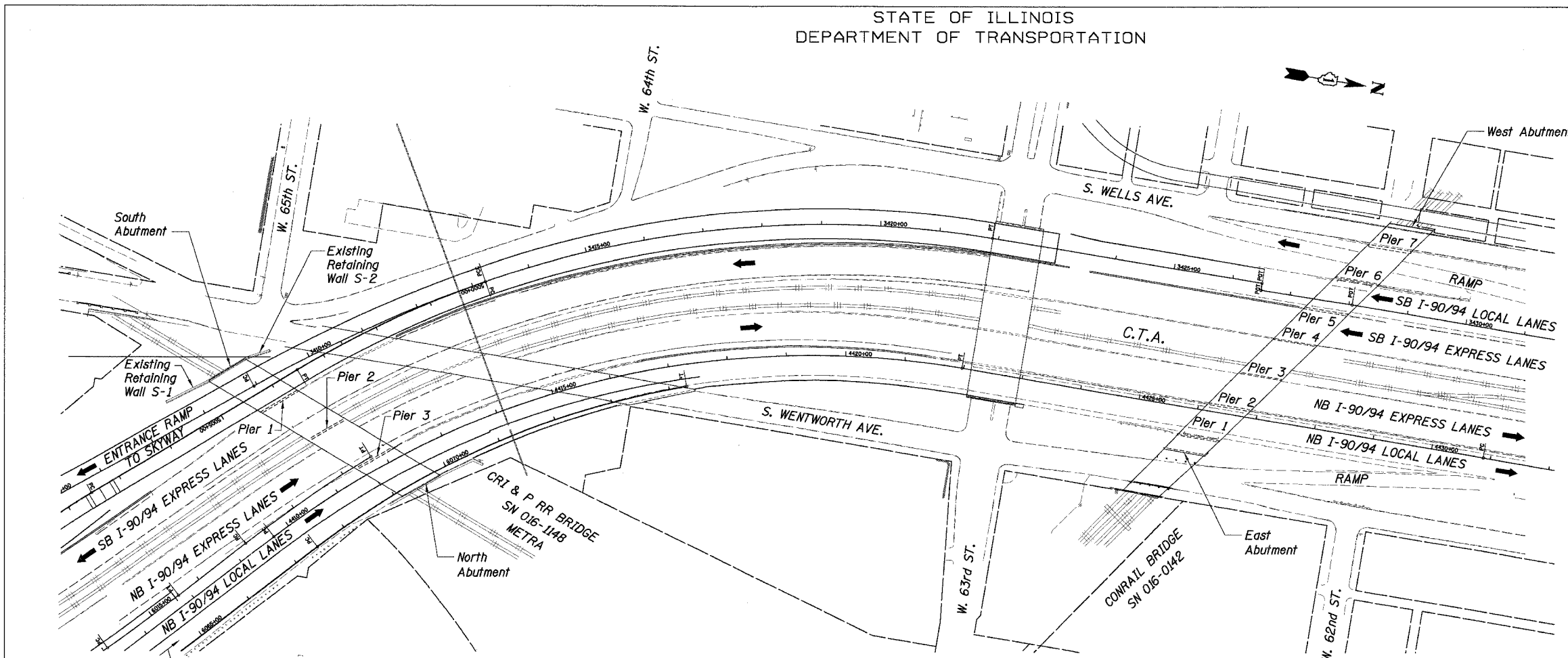
SHEET CUL-14 OF CUL-14  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
31ST STREET TO 71ST STREET  
NB EXPRESS LANE RECONSTRUCTION  
MWRD CULVERT, N. OF 39TH ST.,  
COOK COUNTY, S.N. 016-2625  
EXISTING APPROACH SLAB DETAILS  
SCALE: NTS  
DATE: 07/07/05  
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STATE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

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|-------------------------------------------------|---------|--------|--------------|-----------|
| 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) |

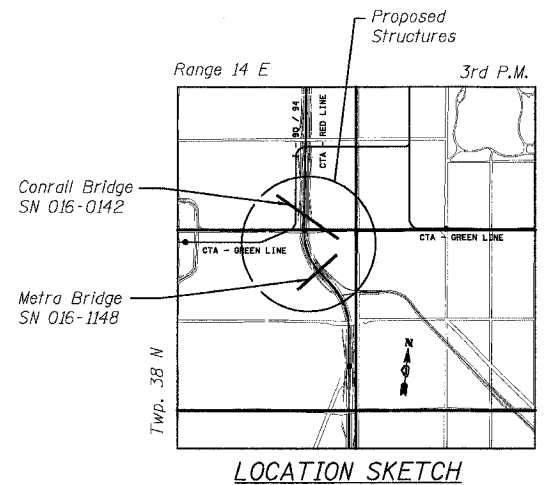
DESIGN SPECIFICATIONS  
2002 AASHTO, Standard Specifications for Highway Bridges

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

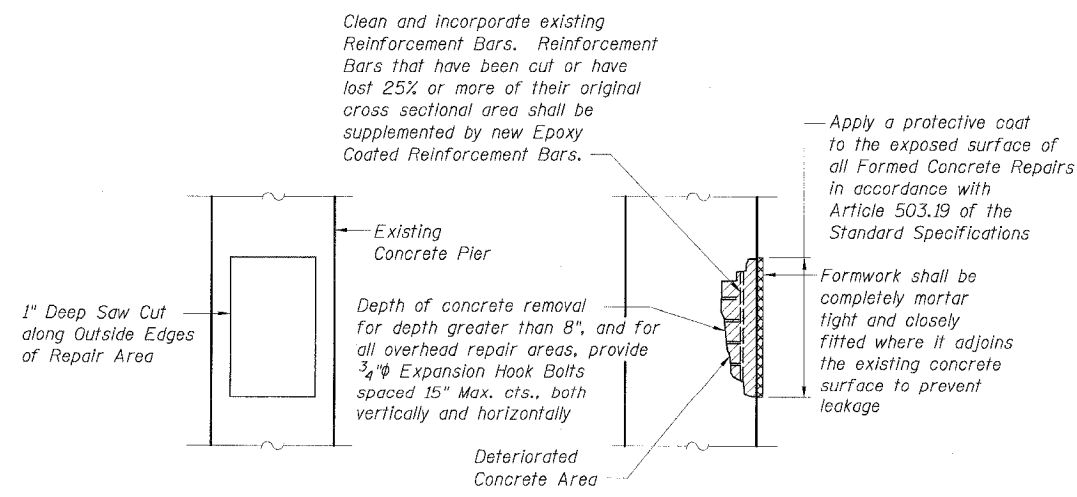
- SUBSTRUCTURE REPAIR WORK ITEMS
- Metra Railroad Bridge (SN 016-1148)
    - Pier 2 Repairs (North and South Face)
    - Pier 3 Repairs (South Face)
  - Conrail Railroad Bridge (SN 016-0142)
    - Pier 2 Repairs (West Face)
    - Pier 3 Repairs (East and West Face)
    - Pier 4 Repairs (East Face)

GENERAL NOTES:

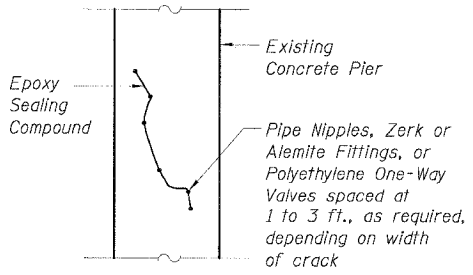
- Pier Repair Locations and Quantities are estimated. The necessary adjustments based on current field conditions will be made at time of construction. However, such variations shall not be cause for additional compensation for a change in the Scope of Work; however, the Contractor will be paid for the 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

CTE | AECOM

300 East Madison Drive, Suite 600, Chicago, Illinois 60605-0216  
T 312.258.6300 F 312.258.3163 www.cteaecom.com

| NAME | DATE |
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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

SCALE: None  
DATE: JULY 7, 2005

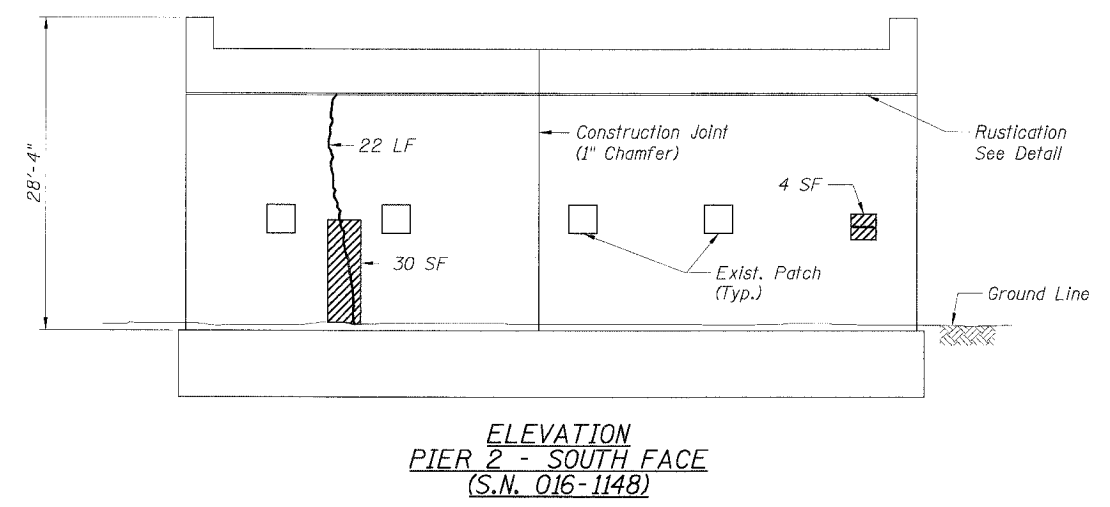
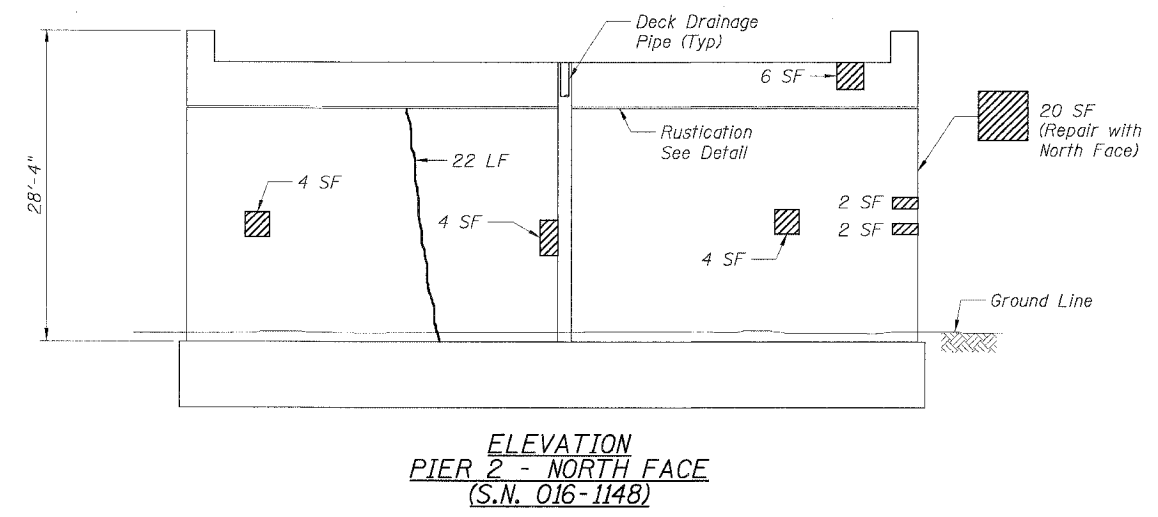
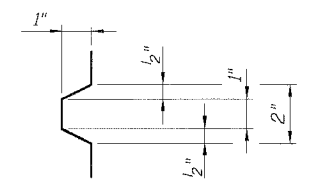
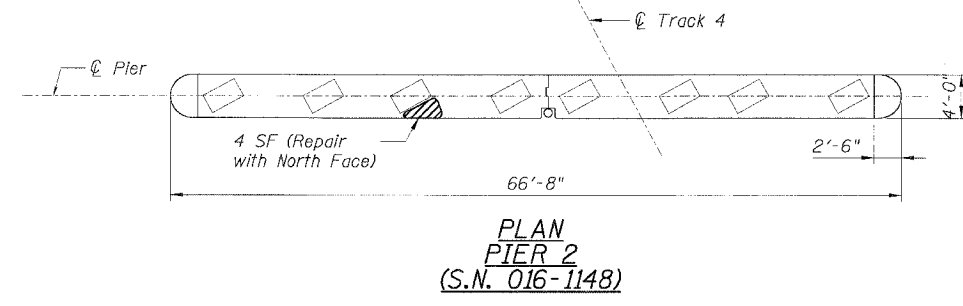
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                         |          |                  |                    |       |
|-------------------------|----------|------------------|--------------------|-------|
| 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         |

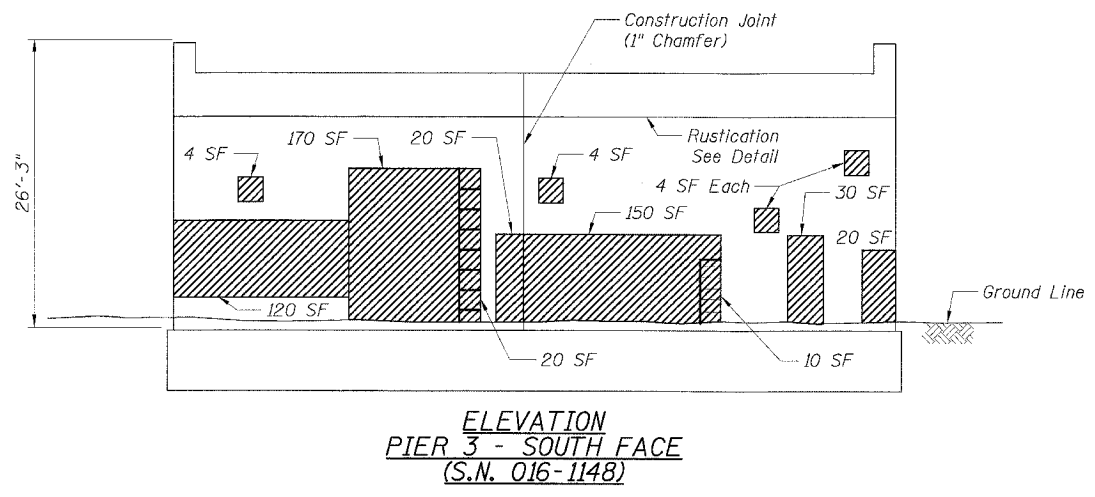
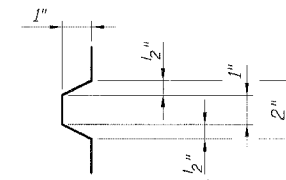
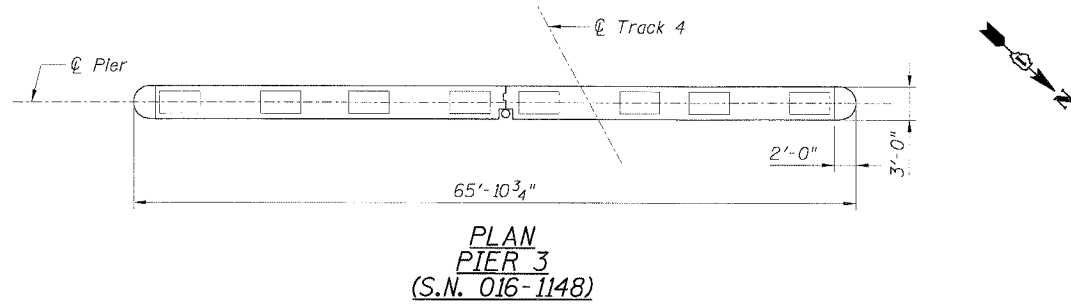
| REVISIONS |      |
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| NAME      | DATE |
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Sheet S2 of 5  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
**PIER 2 - PLAN AND ELEVATION  
SUBSTRUCTURE REPAIRS  
METRA 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        |           |



**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 |
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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

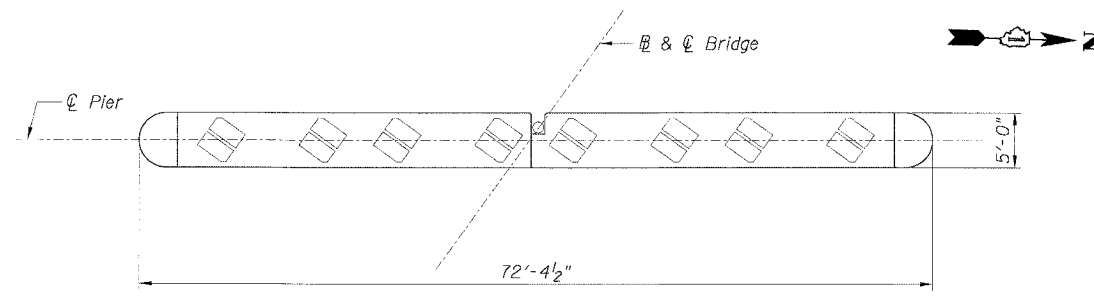
DRAWN BY: CHD  
CHECKED BY: MJP

**CTE | AECOM**

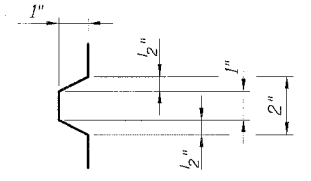
CTE  
263 East Broadview Drive, Suite 600, Chicago, Illinois 60608-5776  
T 312.358.0200 F 312.358.1053 www.cteaecom.com

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

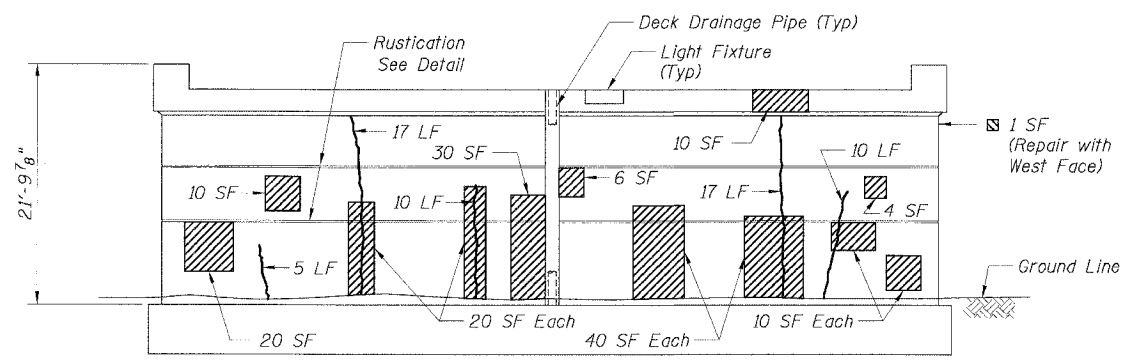
|                                |         |        |                  |           |
|--------------------------------|---------|--------|------------------|-----------|
| F.A.I. RTE.                    | SECTION | COUNTY | TOTAL SHEETS     | SHEET NO. |
| 90/94                          |         | COOK   | 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               |

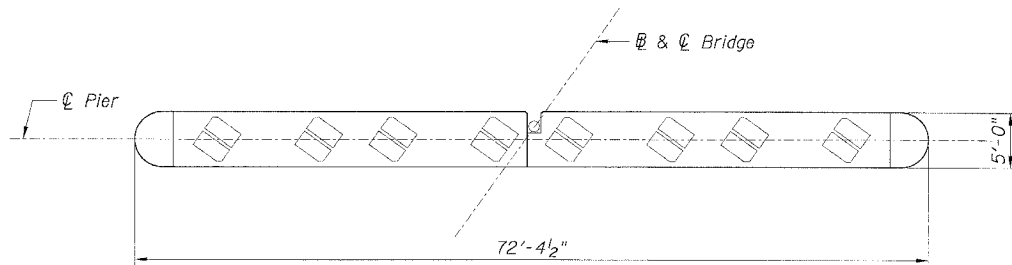
| REVISIONS |      |
|-----------|------|
| NAME      | DATE |
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Sheet S4 of 5  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)  
**PIER 2 - PLAN AND ELEVATION  
SUBSTRUCTURE REPAIRS  
CONRAIL BRIDGE (SN 016-0142)  
COOK COUNTY**  
SCALE: None  
DATE: JULY 7, 2005  
DRAWN BY: CHD  
CHECKED BY: MJP

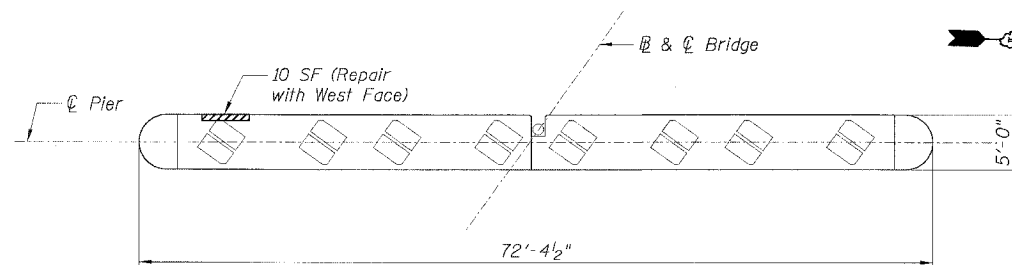
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

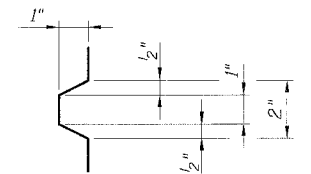
|                             |                           |        |              |           |
|-----------------------------|---------------------------|--------|--------------|-----------|
| F.A.I. RTE.                 | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| 90/94     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



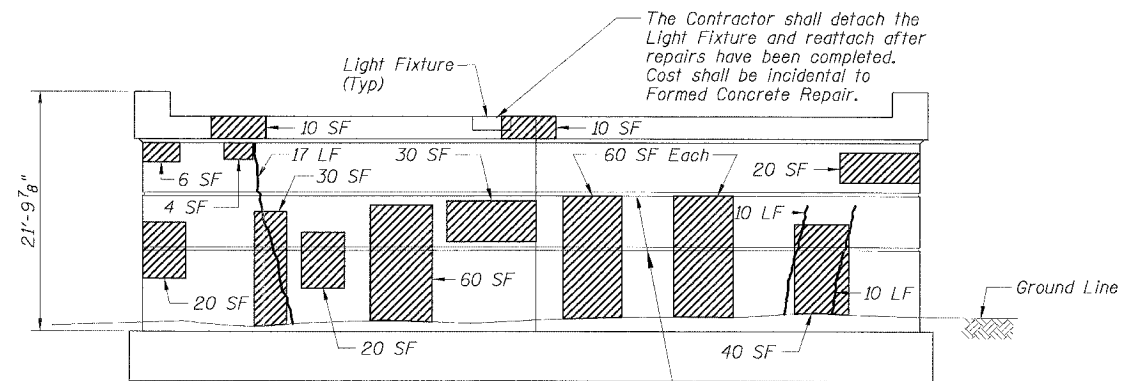
PLAN  
PIER 3  
(S.N. 016-0142)



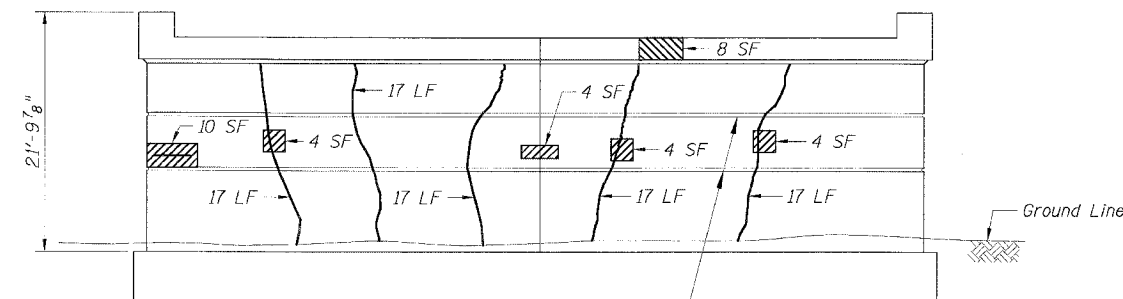
PLAN  
PIER 4  
(S.N. 016-0142)



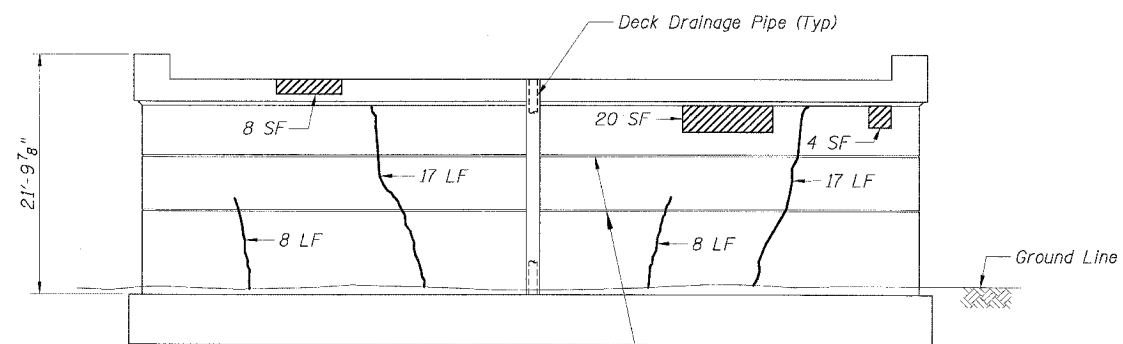
DETAIL OF  
RUSTICATION



ELEVATION  
PIER 3 - EAST FACE  
(S.N. 016-0142)



ELEVATION  
PIER 4 - EAST FACE  
(S.N. 016-0142)



ELEVATION  
PIER 3 - WEST FACE  
(S.N. 016-0142)

LEGEND

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

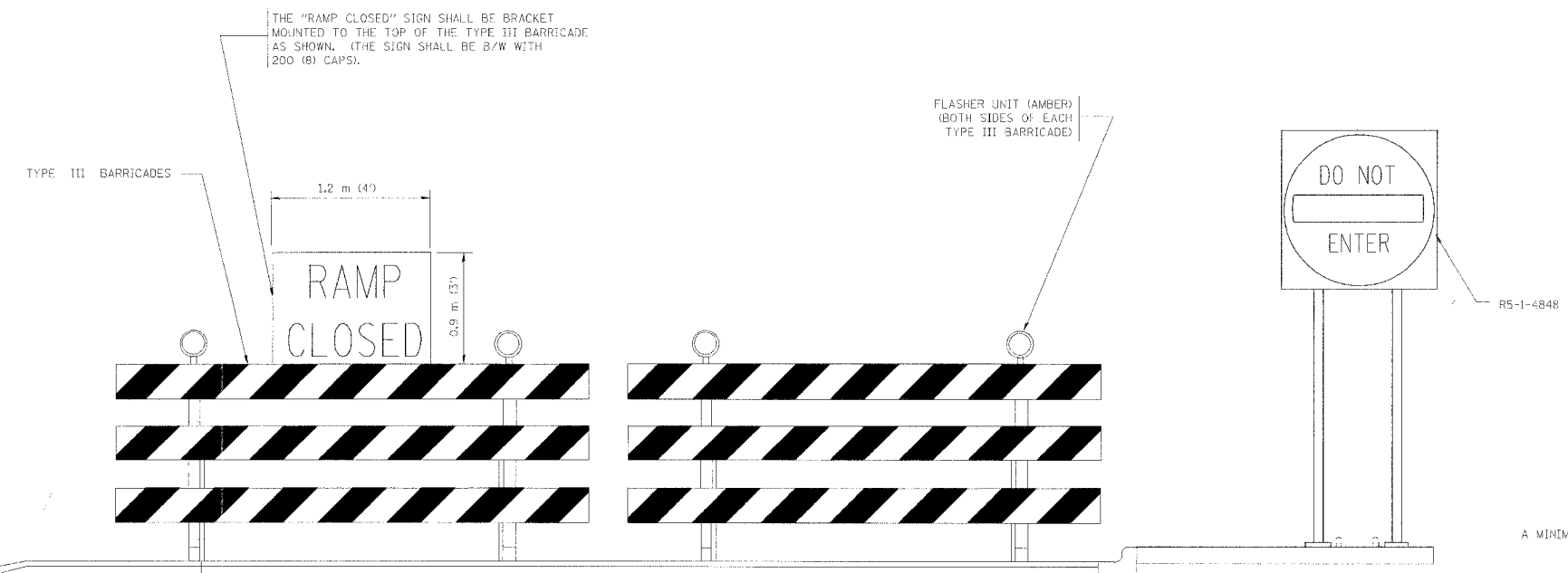
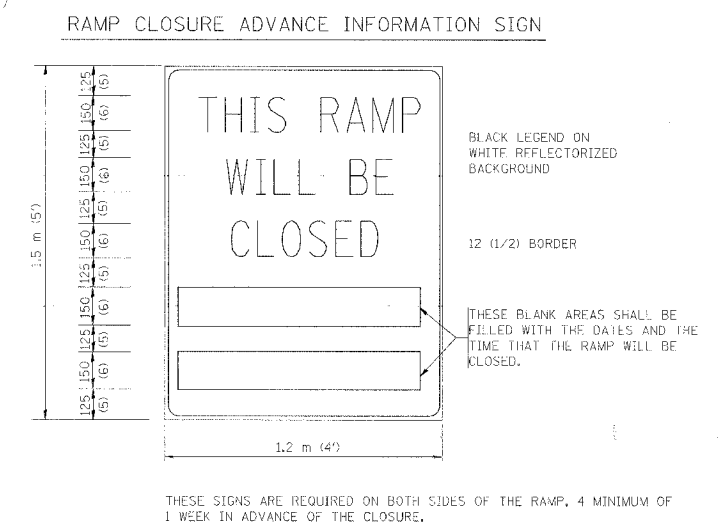
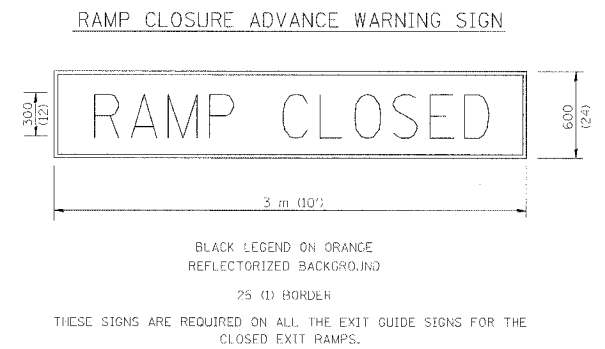
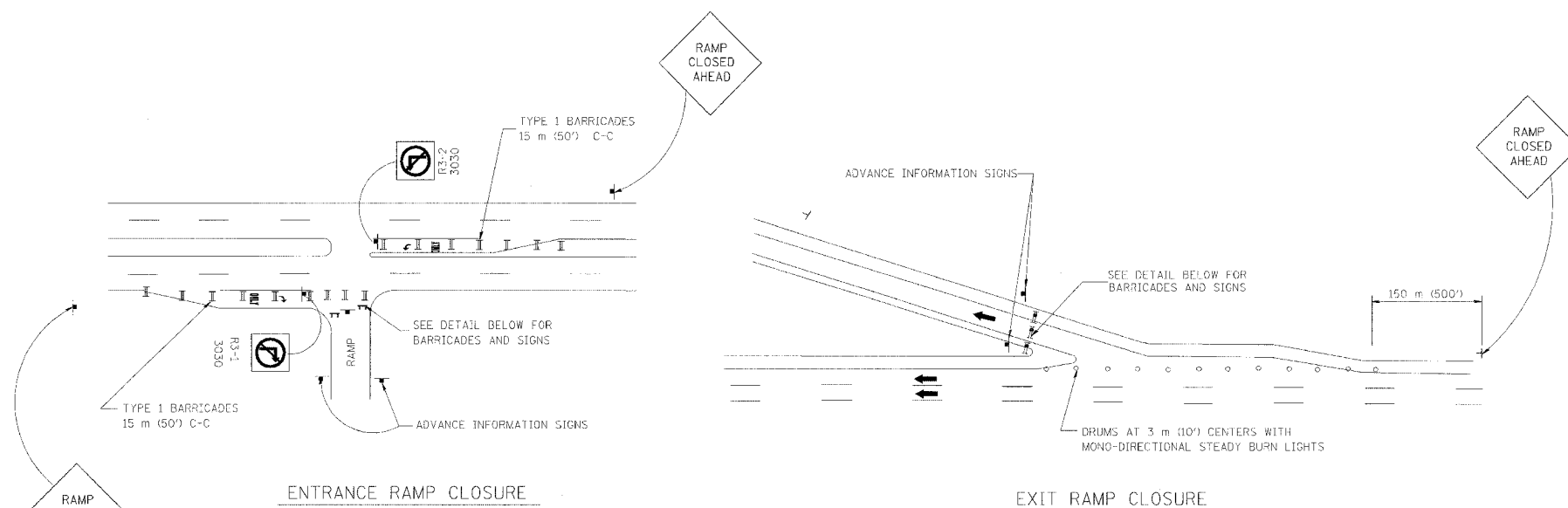
| BILL OF MATERIAL                                        |       |           |           |           |
|---------------------------------------------------------|-------|-----------|-----------|-----------|
| Item                                                    | Unit  | Quantity  |           |           |
|                                                         |       | 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 |
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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  
DATE: JULY 7, 2005  
DRAWN BY: CHD  
CHECKED BY: MJM

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|-----------------------|---------|----------|--------------|------------------|
| 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**

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

SCALE: NONE  
DATE: 01/03/2003

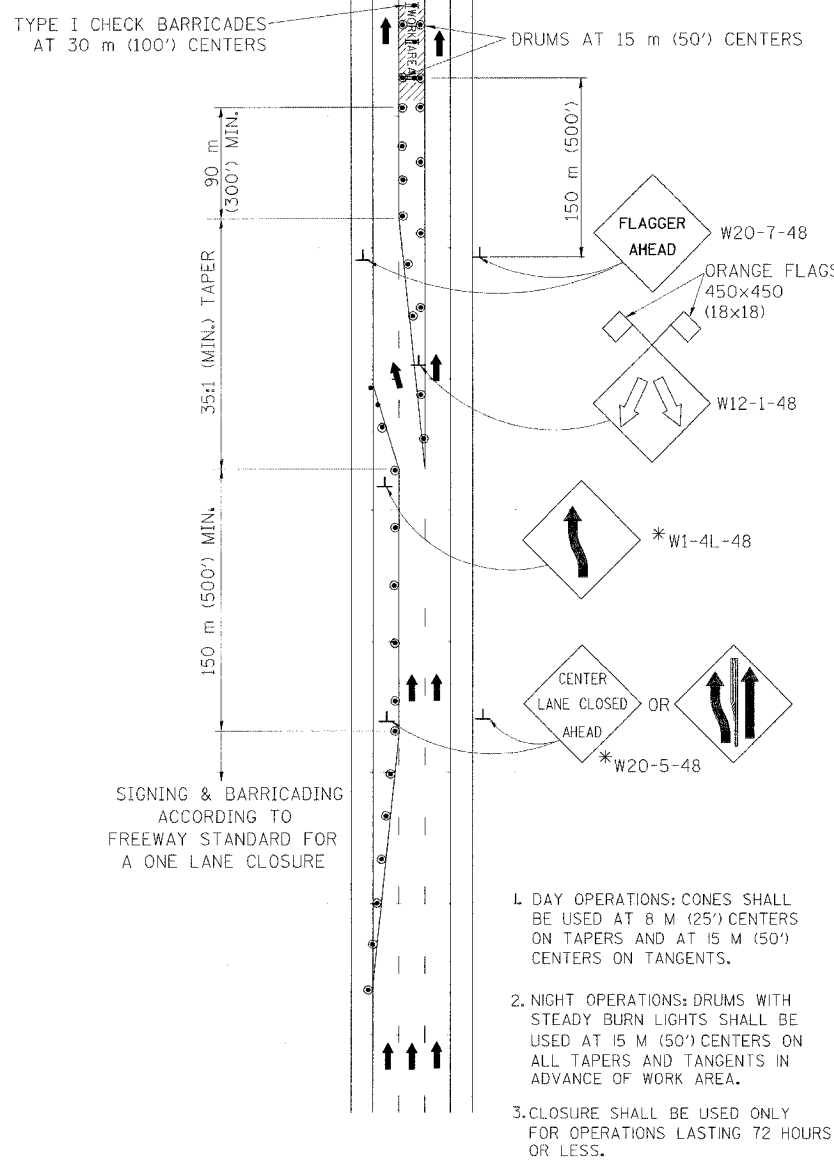
DRAWN BY  
CHECKED BY  
TC-8

REVISION DATE: 12/30/02

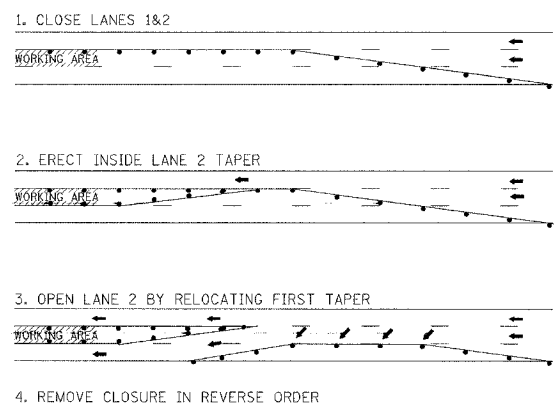


|                       |          |                  |              |           |
|-----------------------|----------|------------------|--------------|-----------|
| P. & I. SHEET NO.     | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                       |          |                  | 556          | 453       |
| STA.                  | TO STA.  |                  |              |           |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT |              |           |

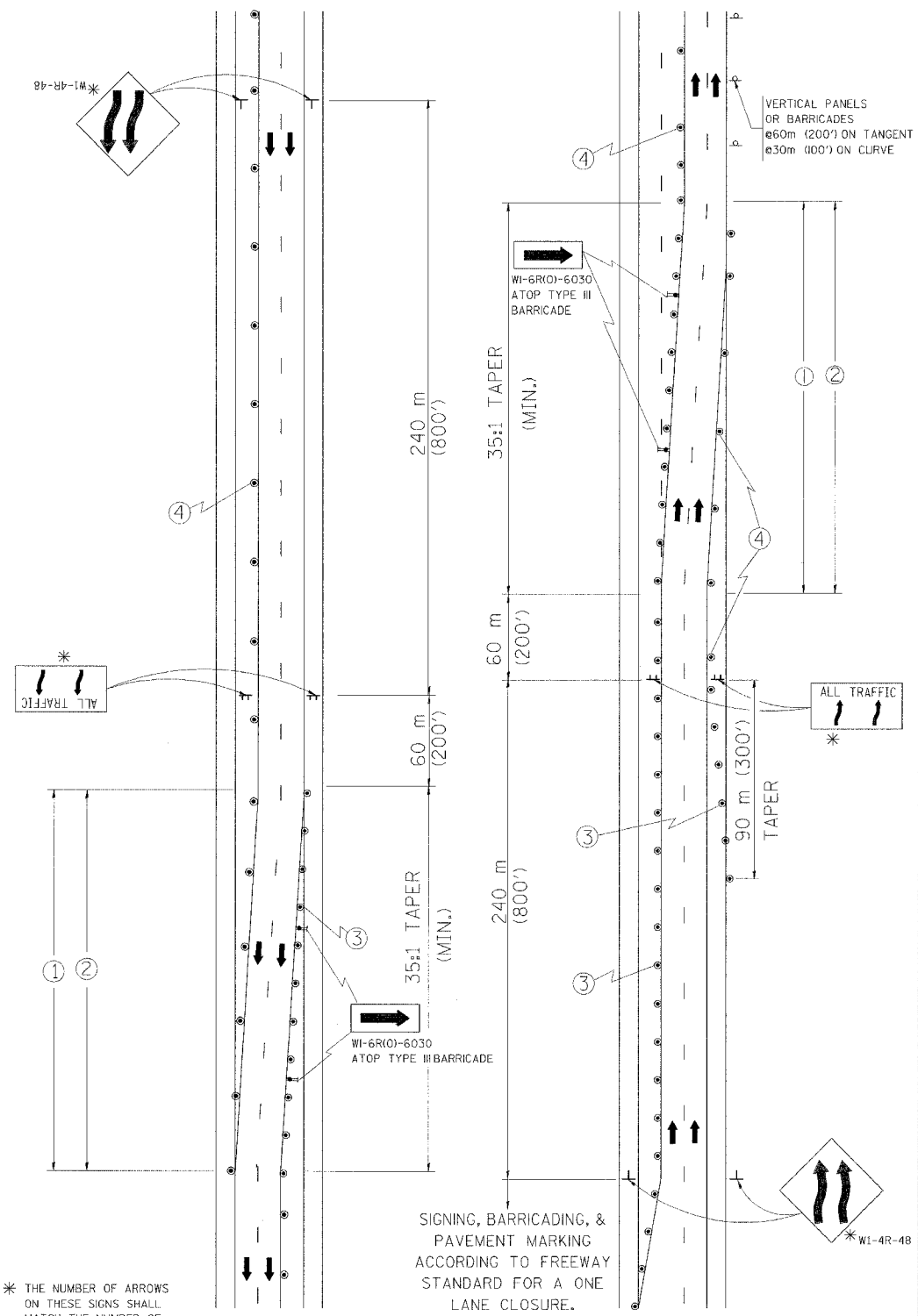
### CENTER LANE CLOSURE



#### INSTALLATION SEQUENCE



### MULTI-LANE WEAVE

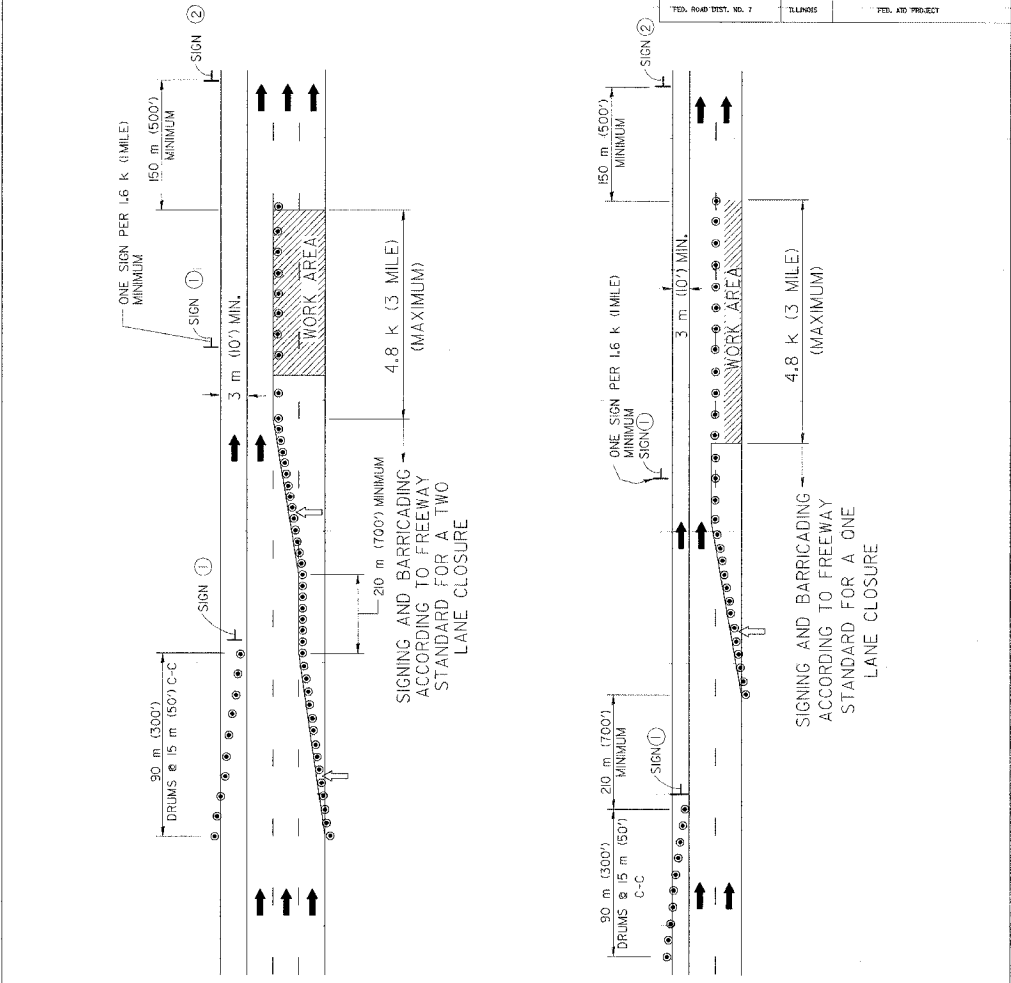


\* THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC

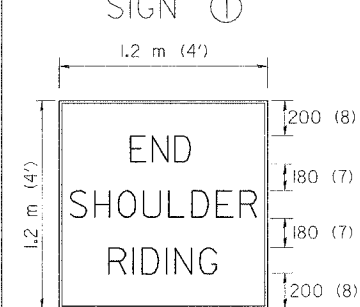
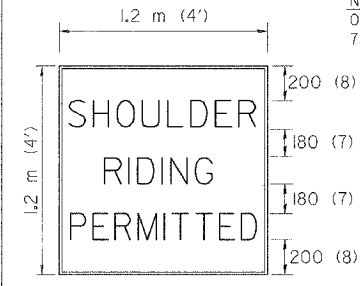
- ① TEMPORARY PAVEMENT MARKING TO BE INSTALLED; CONTINUOUS YELLOW LEFT EDGE LINE. LANE LINES 3 M-9 M (10'-30') SKIP-DASH, WHITE, CONTINUOUS WHITE RIGHT EDGE LINE.
- ② EXISTING PAVEMENT MARKING TO BE REMOVED.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 15 M (50') C-C SPACING.
- ④ PLASTIC DRUMS AT 30 M (100') SPACING.

ALL TRAFFIC 1.2 m x 2.4 m (4'x8'); 25 (I) BORDER; 250 (II) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.

### SHOULDER LANE



NOTE: CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.



150 (6) SERIES "C" LEGEND BLACK LEGEND WHITE REFLECT. BACKGROUND 25 (I) BORDER

| SYMBOLS                                                         |                                                  |
|-----------------------------------------------------------------|--------------------------------------------------|
| ↑                                                               | ARROWBOARD                                       |
| ▨                                                               | WORK AREA                                        |
| ◇                                                               | SIGN WITH 450x450 (18x18) ORANGE FLAG ATTACHED * |
| +                                                               | SIGN ON PORTABLE OR PERMANENT SUPPORT *          |
| •                                                               | CONES                                            |
| ●                                                               | DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT  |
| * ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5'). |                                                  |

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

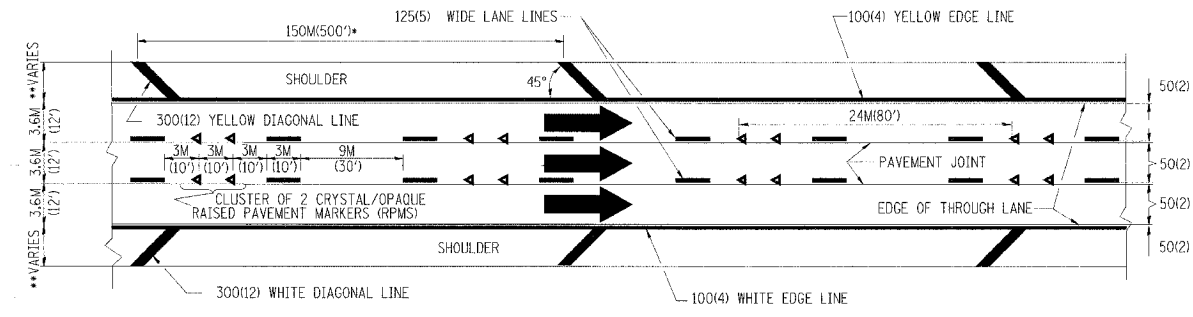
ILLINOIS DEPARTMENT OF TRANSPORTATION  
TRAFFIC CONTROL DETAILS  
FOR FREEWAY  
CENTER LANE CLOSURE  
MULTI-LANE WEAVE  
SHOULDER LANE

| REVISIONS |          |
|-----------|----------|
| NAME      | DATE     |
| DWS       | 2/87     |
| DWS       | 1/90     |
| DWS       | 12/27/94 |
| DWS       | 11/96    |

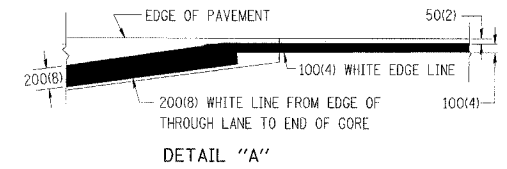
SCALE: NONE DRAWN BY R.H.  
DATE: ##DATE## CHECKED BY

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

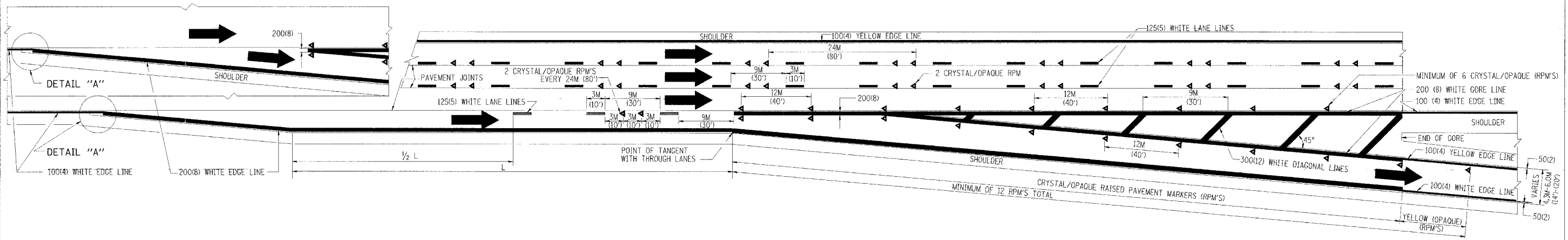
- THE DIAGONAL LINES SHALL BE SPACED AT 12M (40') C-C ACROSS ALL STRUCTURES WHICH ARE 150M (500') OR LESS IN LENGTH
- THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 1.8M (6') OR LESS IN WIDTH



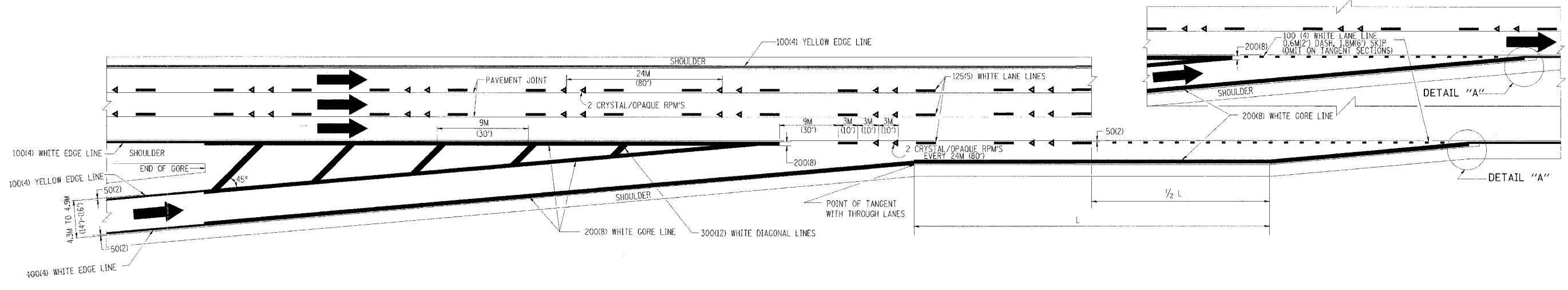
- NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
  2. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES
  3. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED ON PCC PAVEMENT.



TYPICAL EDGE LINES & LANE LINES



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 |

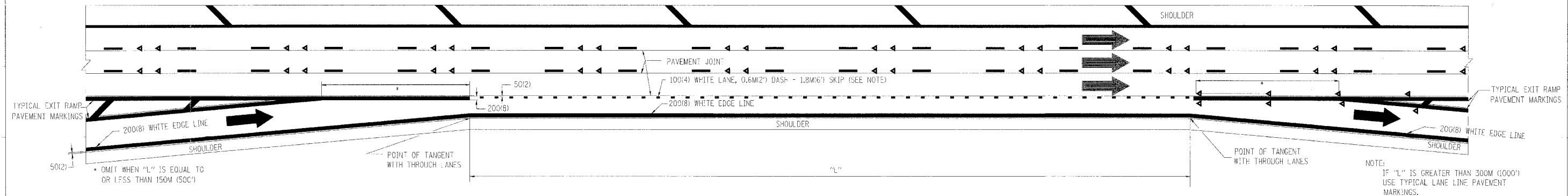
ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS**

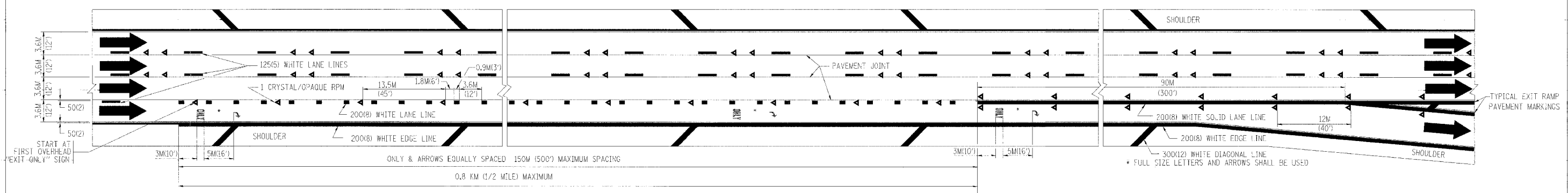
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DATE: \*\*DATE\*\*  
DRAWN BY C.A.D.D.  
CHECKED BY

•DATE-TIME•  
•DGN-SPEC•  
VI-TC12

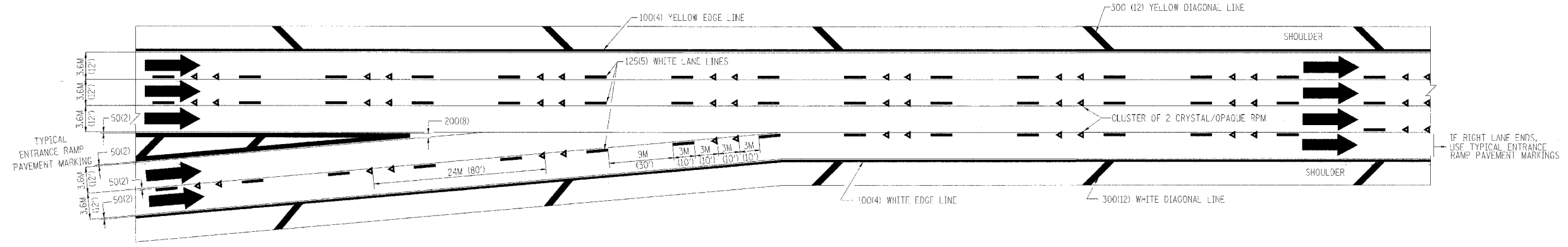
|                       |          |                  |              |           |
|-----------------------|----------|------------------|--------------|-----------|
| F.A. NO.              | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                       |          |                  | 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**

| REVISIONS |      |
|-----------|------|
| NAME      | DATE |
| DWS       | 1/90 |
| DWS       | 5/91 |
|           |      |
|           |      |

ILLINOIS DEPARTMENT OF TRANSPORTATION

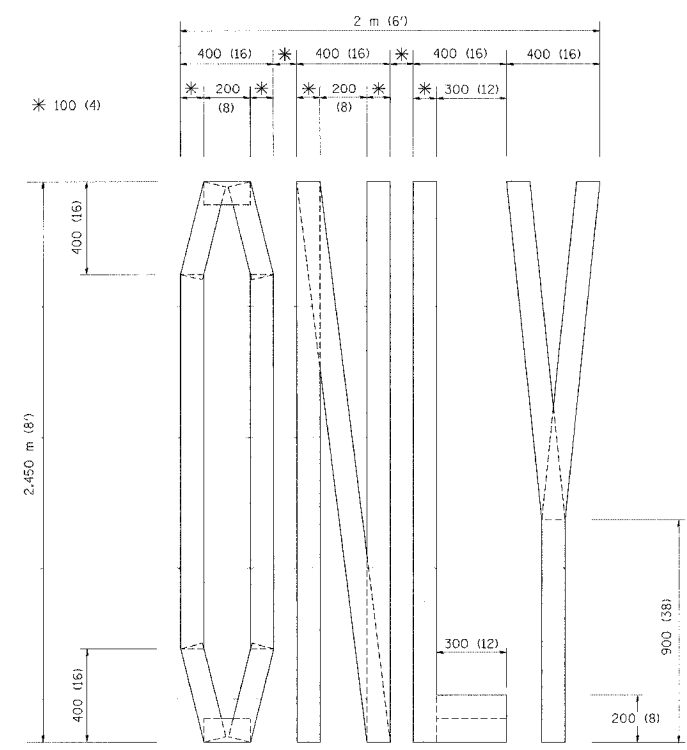
**MULTI-LANE FREEWAY  
PAVEMENT MARKING  
DETAILS**

SCALE: NONE  
DATE: \*\*DATE\*\*

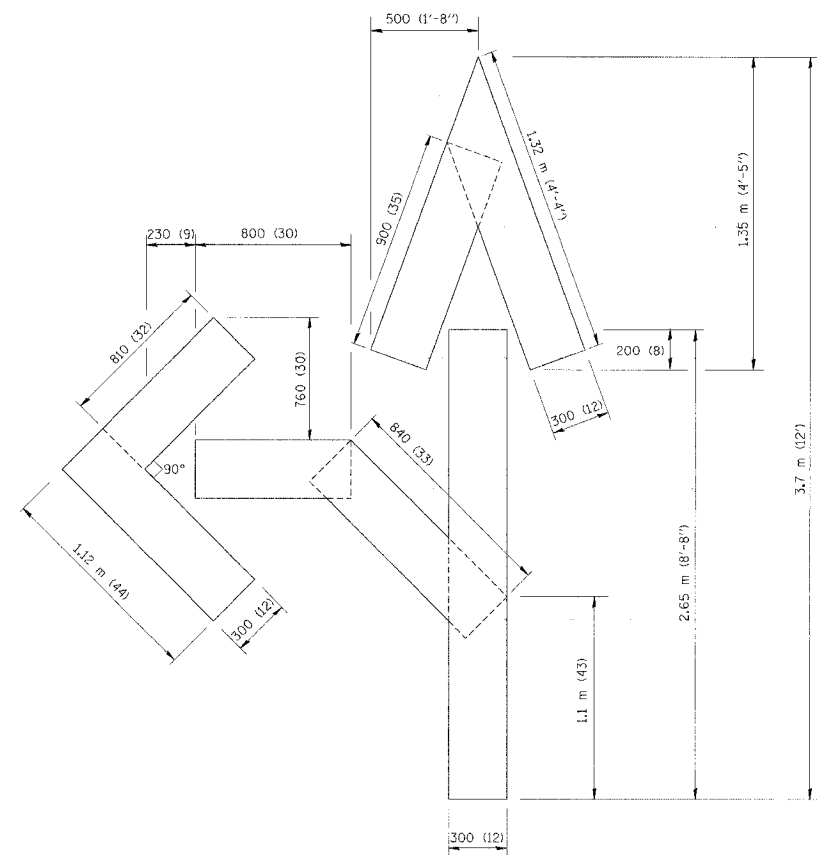
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CHECKED BY

DATE-TIME  
DGN-SPEC  
VI-TCLZ

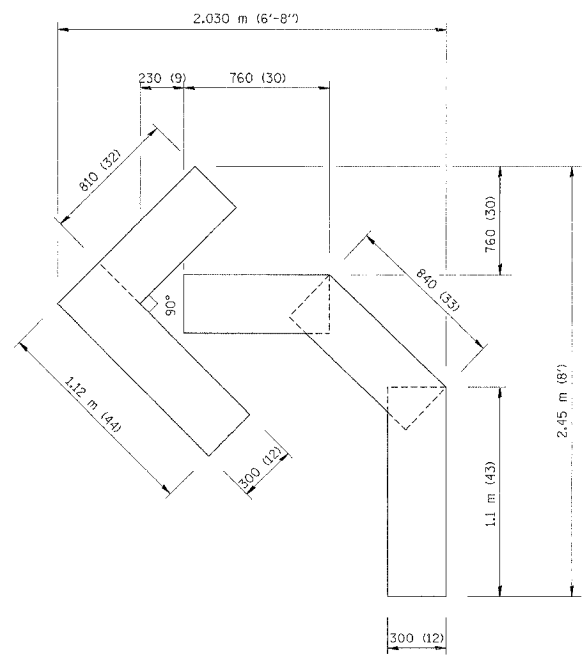
|                     |          |                  |              |          |
|---------------------|----------|------------------|--------------|----------|
| F. A. REL.          | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO |
|                     |          |                  | 556          | 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

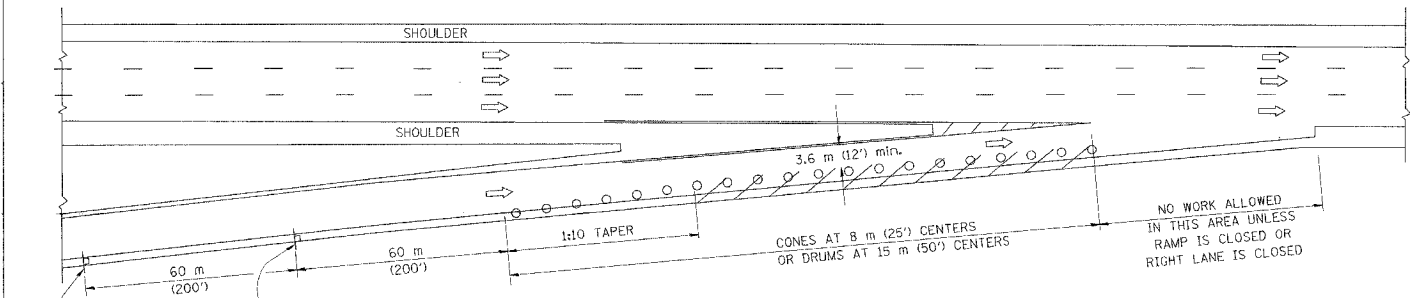
PAVEMENT MARKING  
 LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

| 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 |

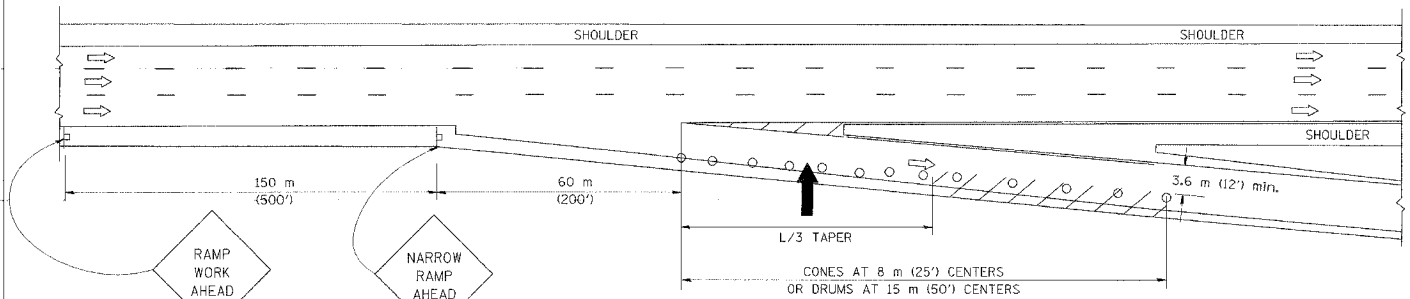
SCALE: NONE  
 DATE \$\$DATE\$\$

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 CHECKED BY

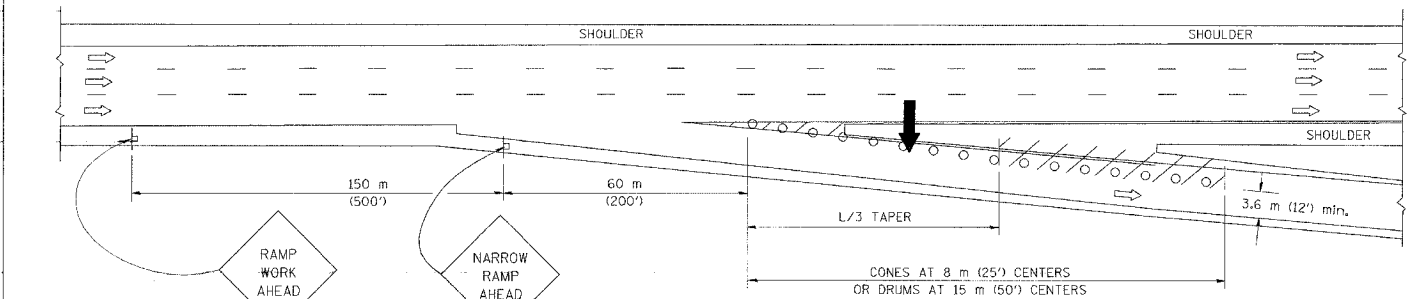
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

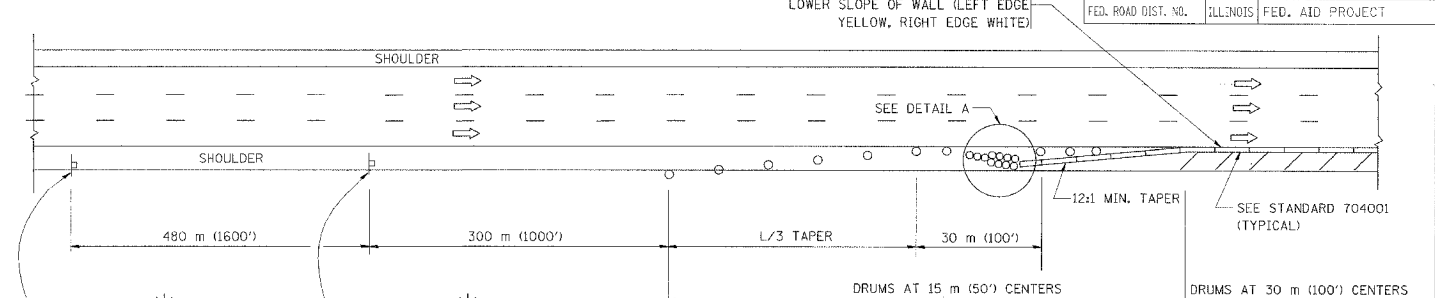
- ARROWBOARD
- WORK AREA
- 450 x 450 (18 x 18) MINIMUM ORANGE FLAG
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

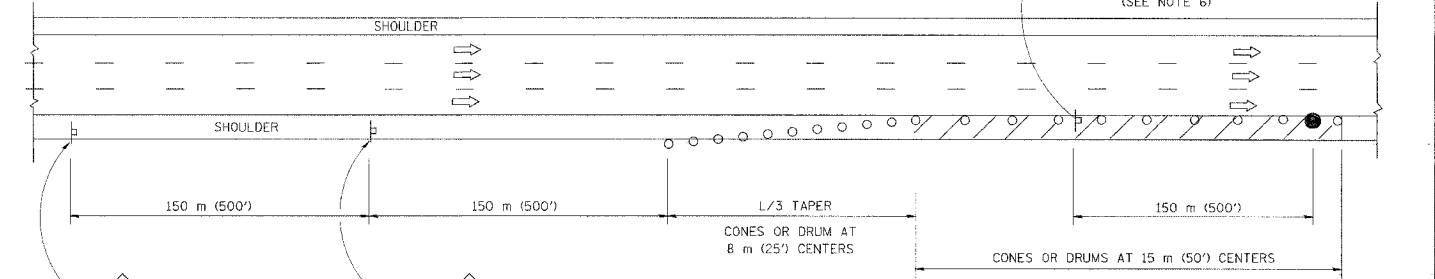
1. THE "L" DISTANCE EQUALS:  

|                                      |                                          |
|--------------------------------------|------------------------------------------|
| SPEED LIMIT                          | FORMULAS                                 |
| 80 km/h (45 mph) OR GREATER:         | METRIC $L=0.65(W)(S)$ ENGLISH $L=(W)(S)$ |
| 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.

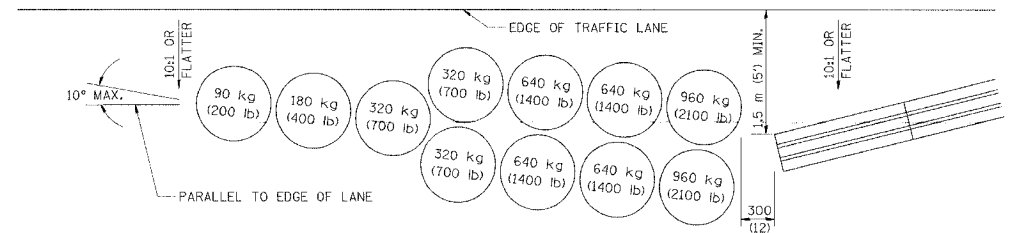
SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE



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

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

OR WHEN SPECIFIED INSTALL TEMPORARY CONCRETE BARRIER WALL WITH BARRIER WALL REFLECTORS PER STANDARD 701402, DETAIL A.

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 4.5 m (15') TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

5. THE SAND MODULE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS OUTSIDE THE CLEAR ZONE OR IS TIED INTO THE EXISTING GUARDRAIL.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

| REVISIONS |       |
|-----------|-------|
| NAME      | DATE  |
| DWS       | 11/96 |
| JAF       | 12/02 |
|           |       |
|           |       |

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE  
 DATE: 01/03/2003

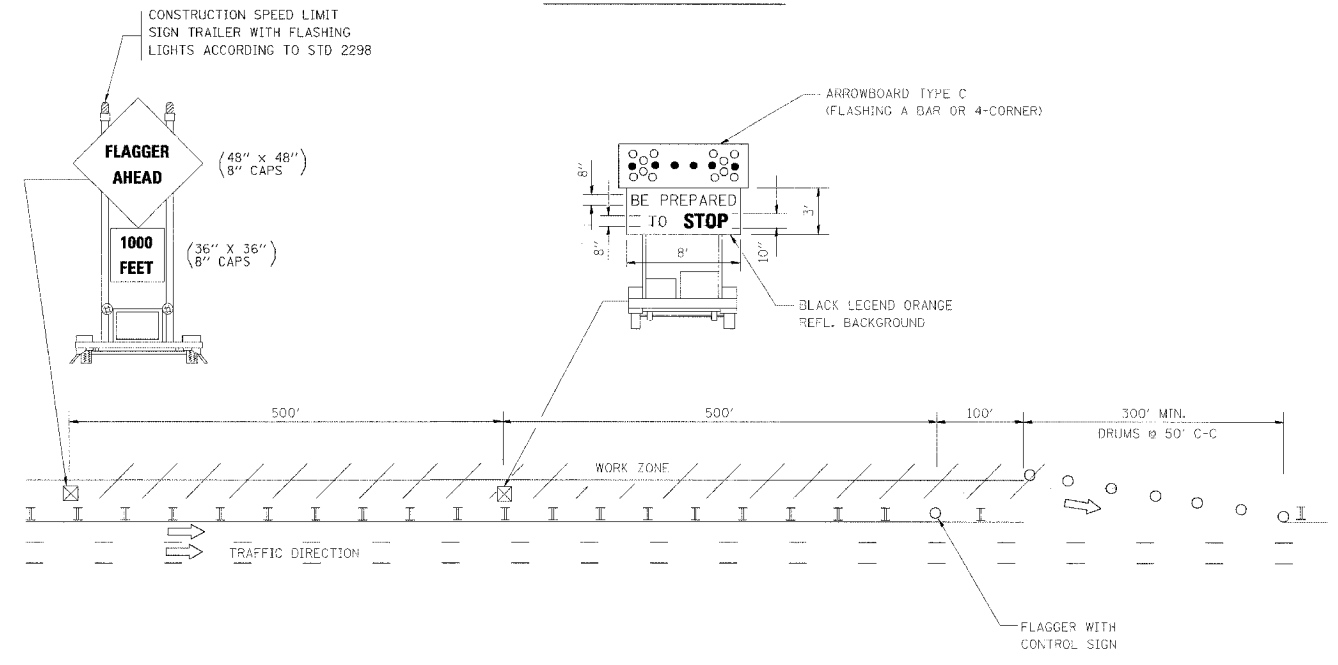
DRAWN BY: DWS  
 DESIGNED BY: DWS  
 CHECKED BY: [ ]  
 TC-17



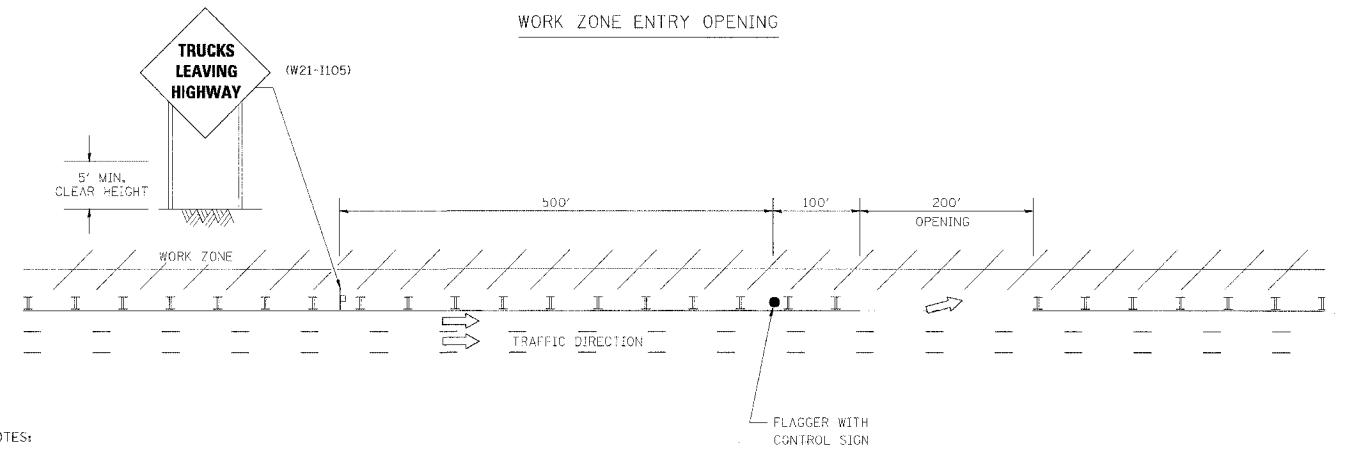
|                     |          |                  |              |           |
|---------------------|----------|------------------|--------------|-----------|
| STATE               | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                     |          |                  | 556          | 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

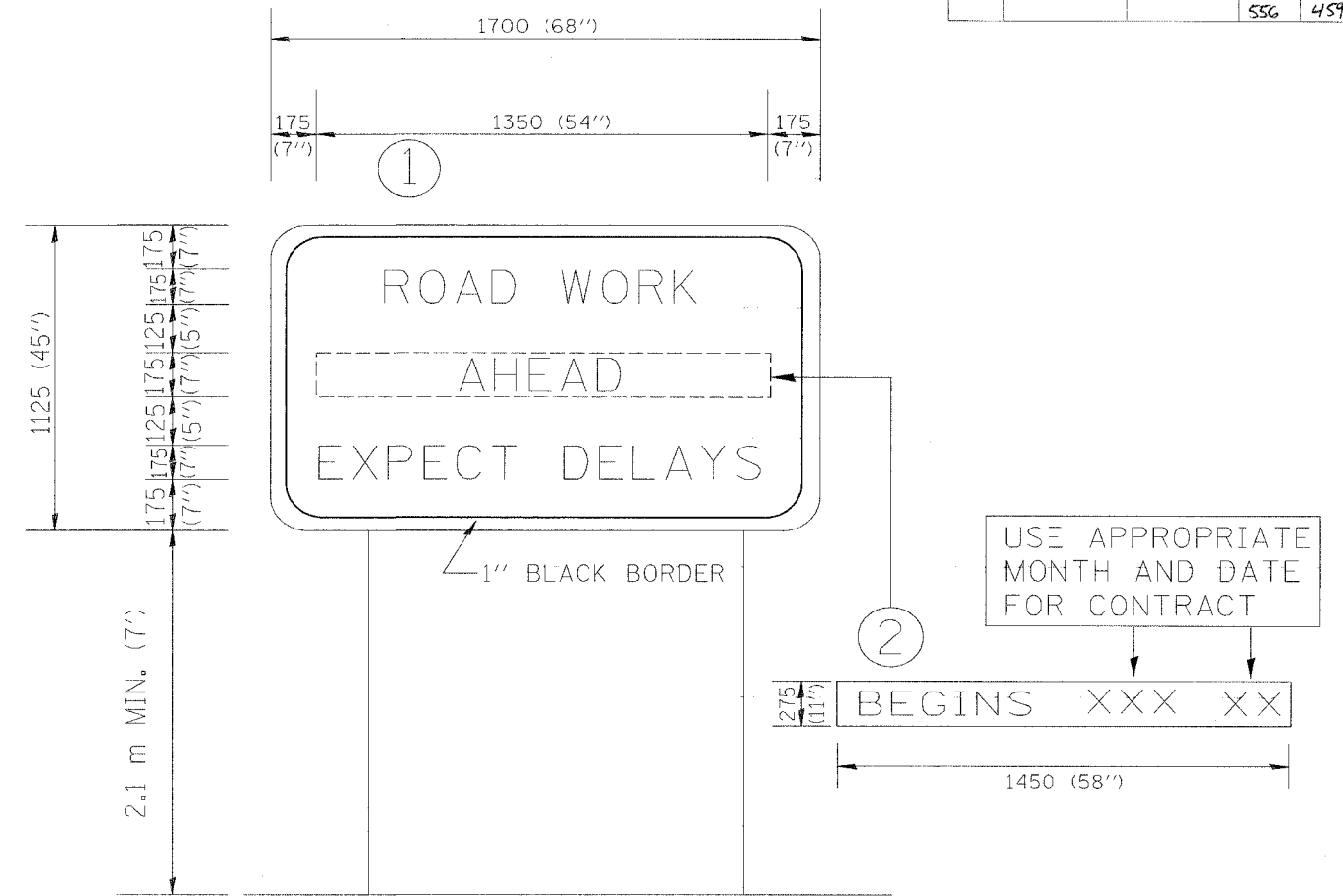
DATE: \*\*DATE\*\*

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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.)

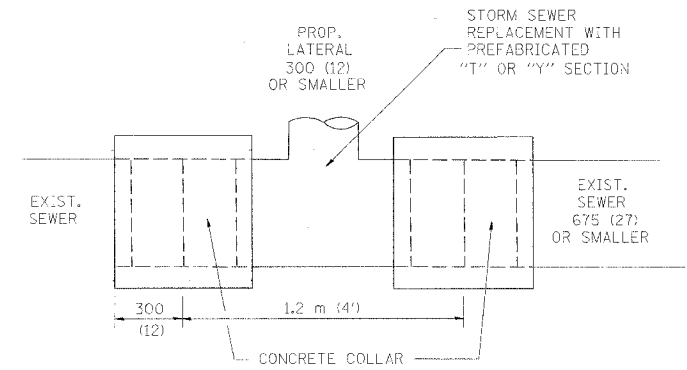
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

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

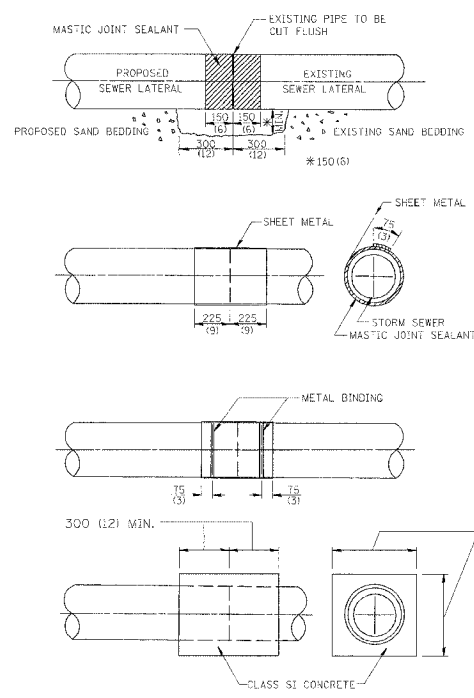
DRAWN BY: BUR. OF DESIGN  
CHECKED BY:

\*\*\*DATE\*\*

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



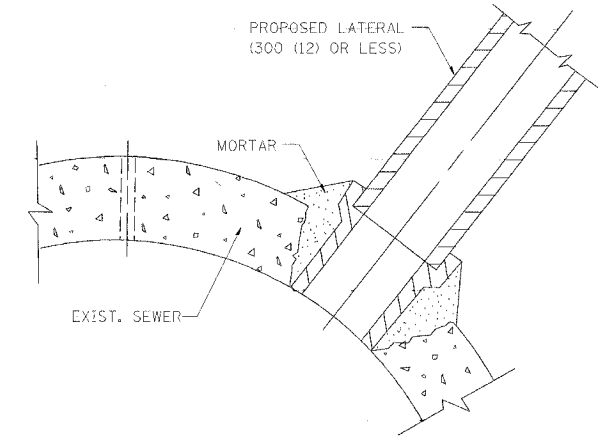
DETAIL "A"  
LATERAL CONNECTION TO EXISTING SEWER  
OF 675 (27) OR SMALLER



DETAIL "B"  
CLASS SI CONCRETE COLLAR

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.



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

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.

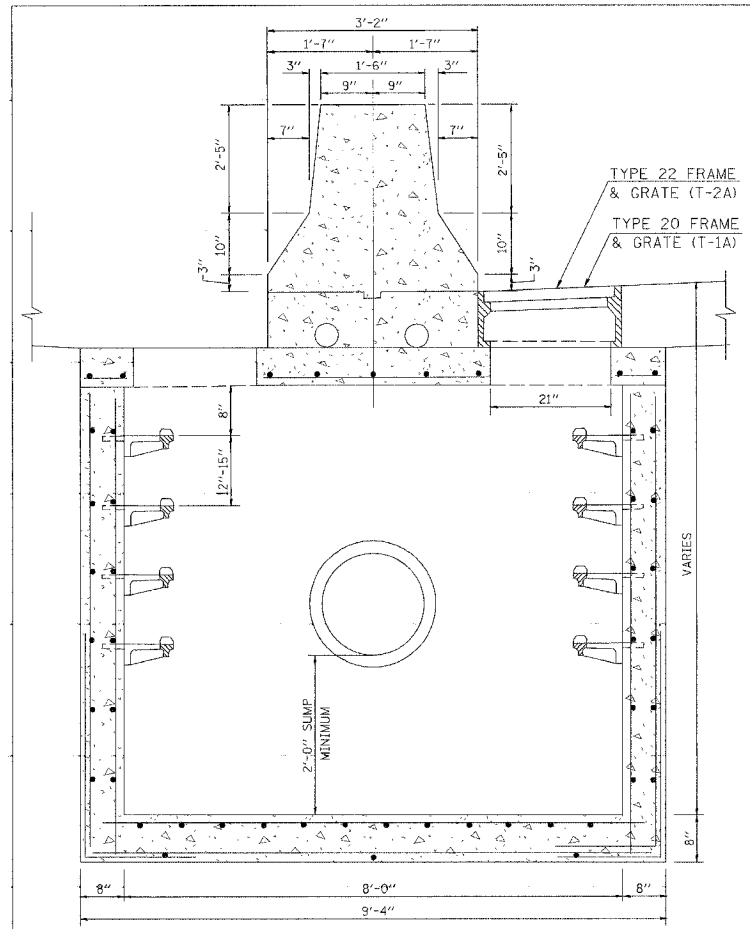
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

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

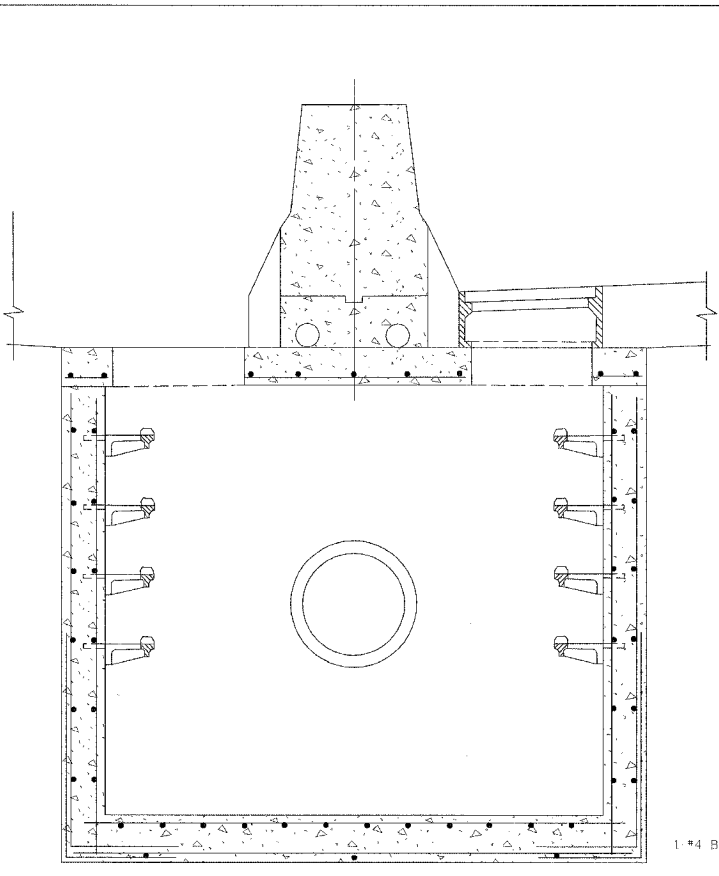
| REVISIONS  |          |
|------------|----------|
| NAME       | DATE     |
| M. DE YONG | 07/25/90 |
| M. DE YONG | 02/05/92 |
| M. DE YONG | 05/08/92 |
| R. SHAH    | 09/09/94 |
| R. SHAH    | 10/25/94 |
| R. SHAH    | 06/12/96 |

SCALE: NONE  
DATE \*\*DATE\*\*

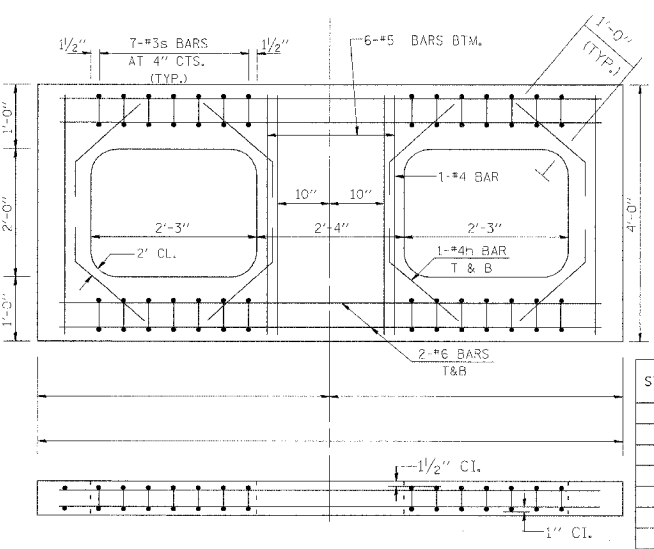
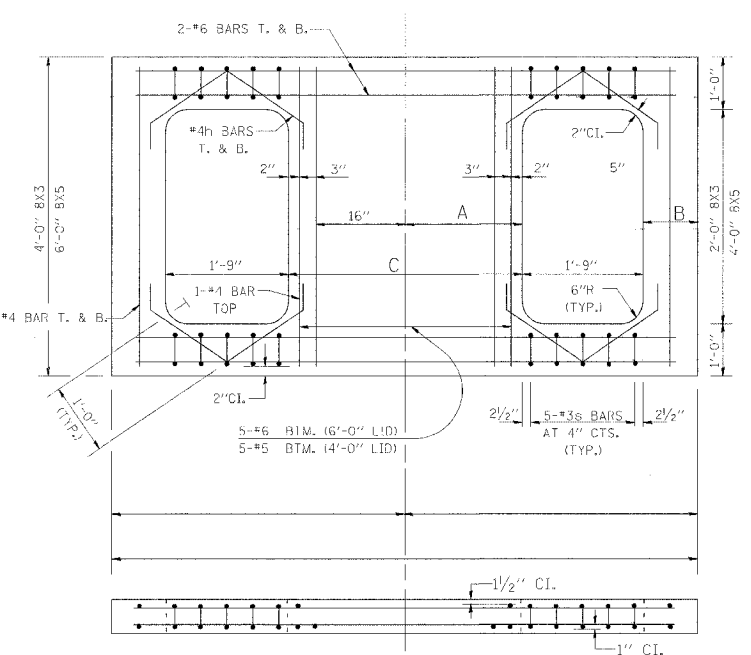
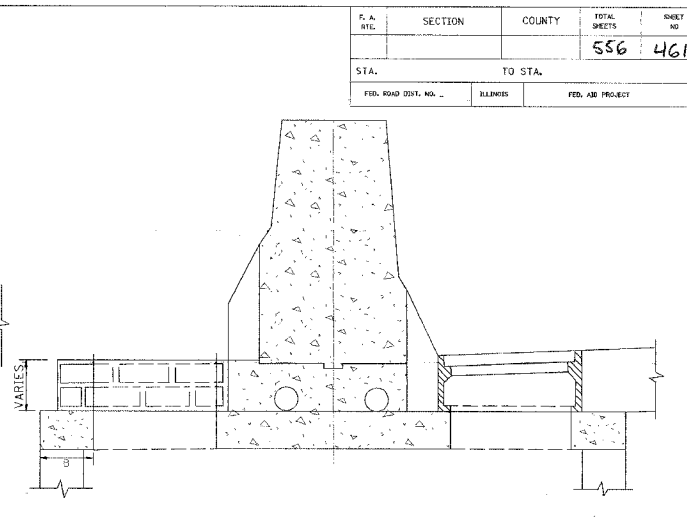
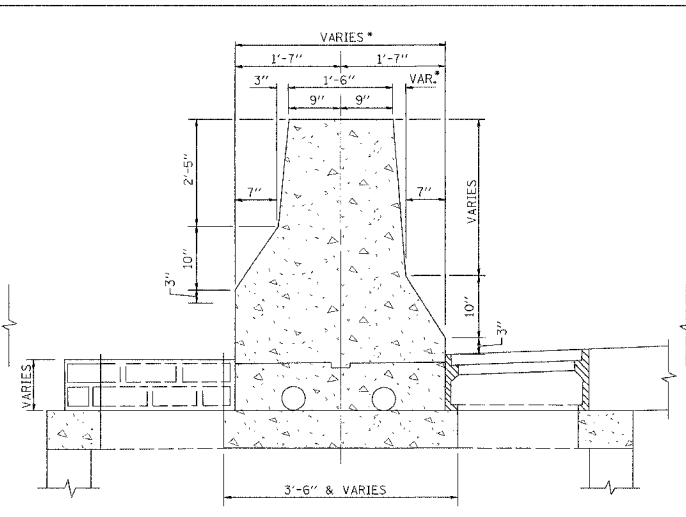
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CHECKED BY



CATCH BASIN 8X5 AND 8X3



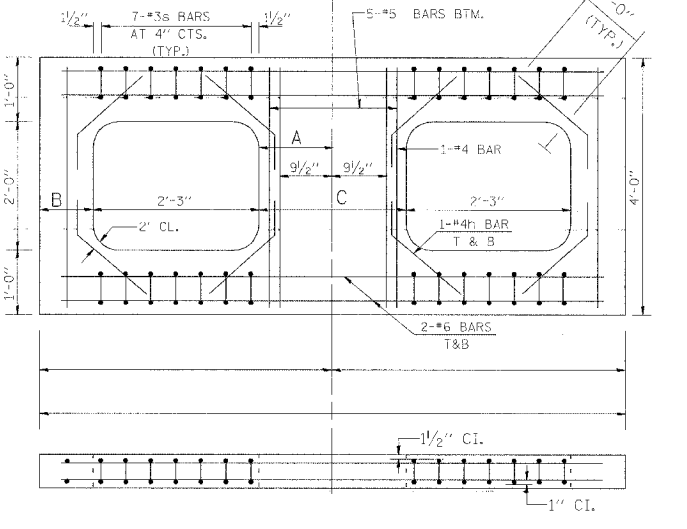
CATCH BASIN 8X3



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.



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

| 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" |        |

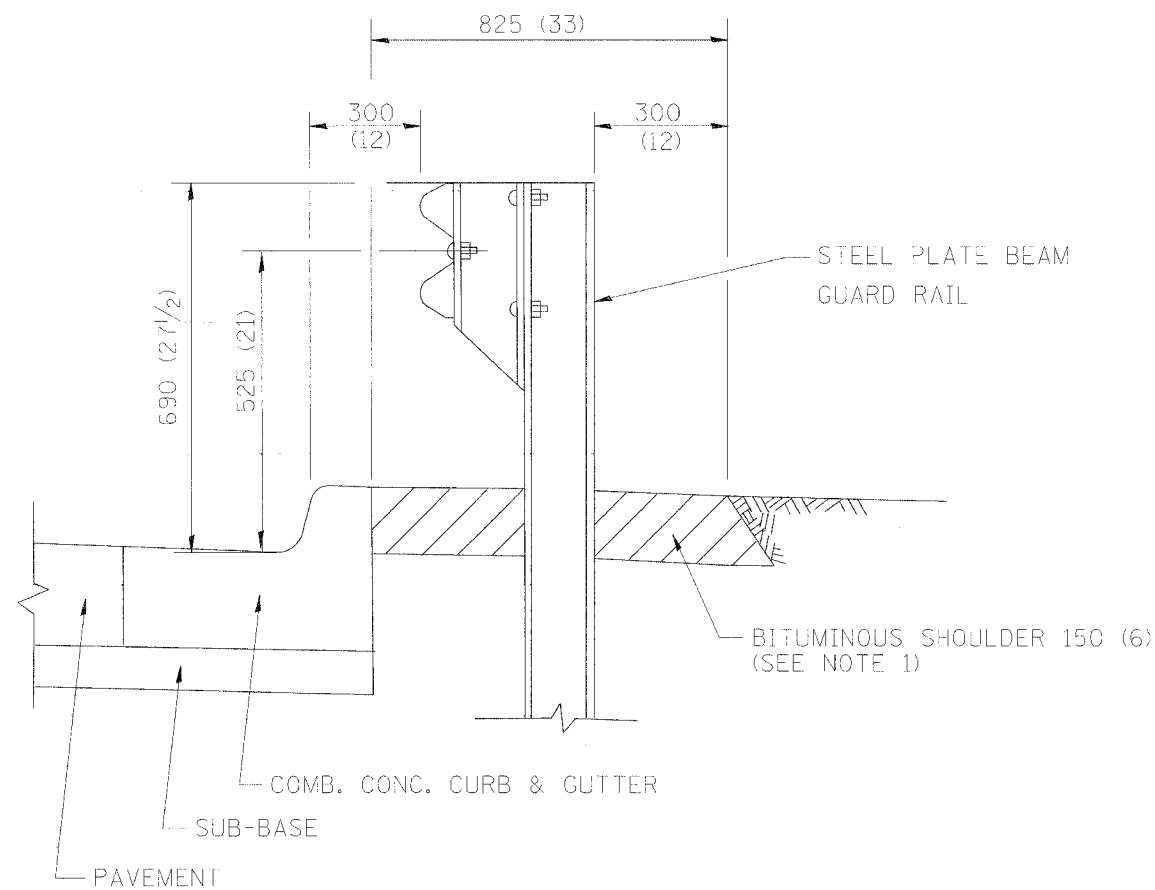
| STA. AND OFFSET | TYPE OF LID | A PGL | DIM. A | DIM. B | DIM. C | STA. AND OFFSET | TYPE OF LID | A PGL | DIM. A | DIM. B | DIM. C |
|-----------------|-------------|-------|--------|--------|--------|-----------------|-------------|-------|--------|--------|--------|
|                 |         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

| 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

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

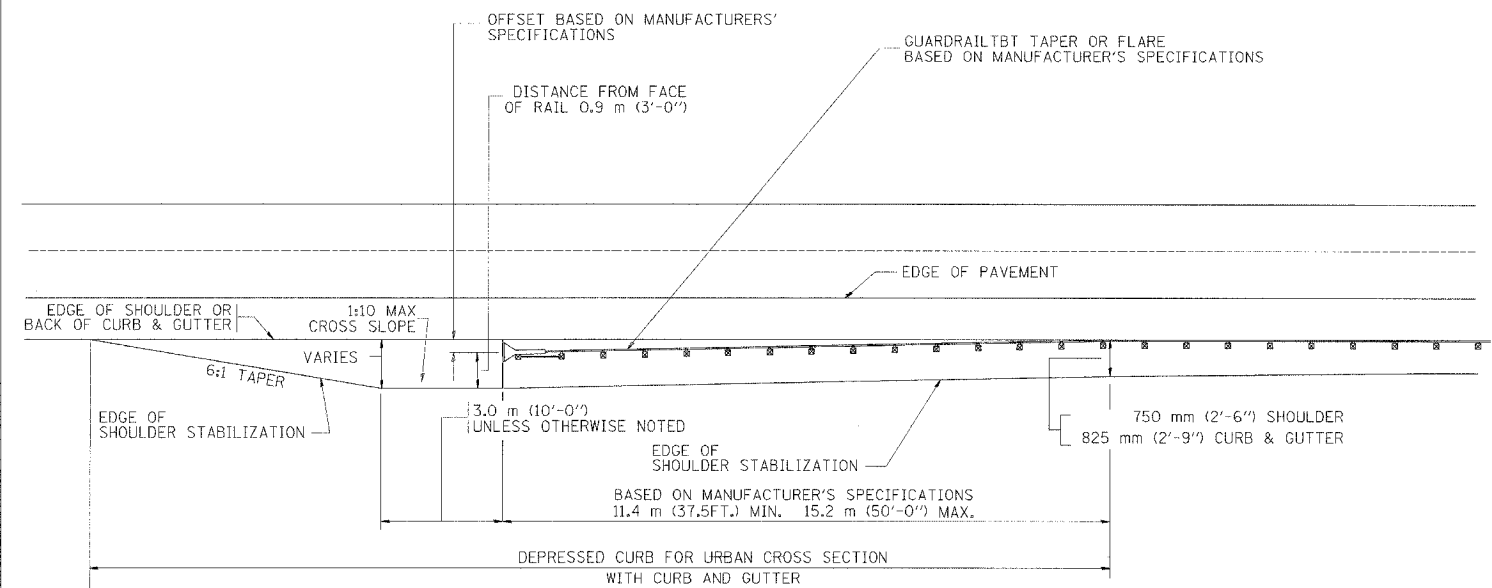


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

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.

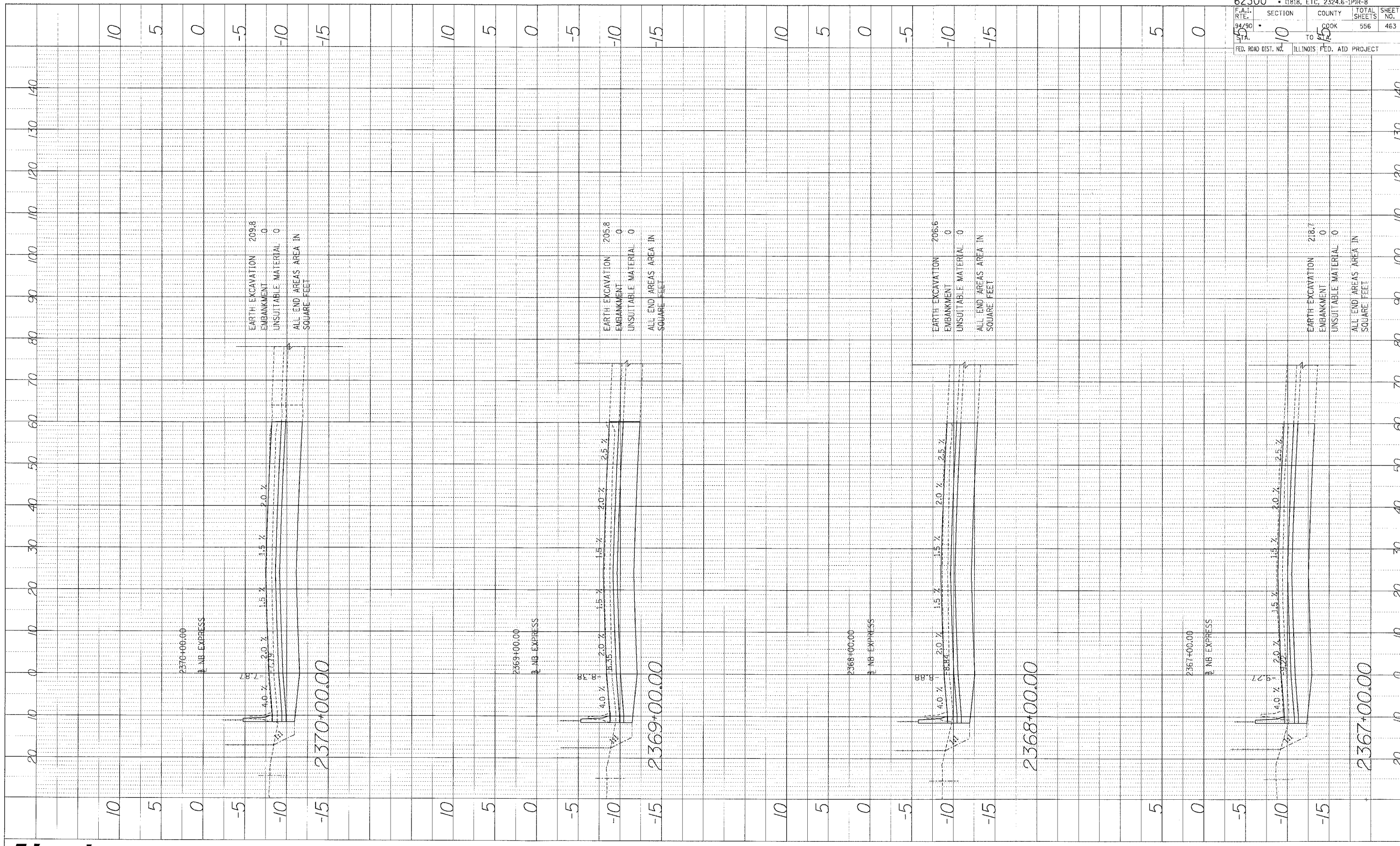
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DETAILS FOR  
STEEL PLATE BEAM GUARD RAIL  
ADJACENT TO CURB AND GUTTER  
STABILIZATION AT TBT TY 1 SPL.

| 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\*\*

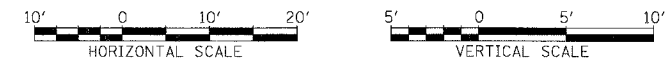
DRAWN BY: Jls  
CHECKED BY:

PROFILE SURVEYED BY DATE  
 NOTE BOOK UPDATES CHECKED  
 NO. STRUCTURE NOTATIONS 2370



|                                  |                           |
|----------------------------------|---------------------------|
| 62300 • (1818, ETC, 2324.6-1PR-8 |                           |
| F.A.I. RT. 94/90                 | SECTION 10                |
| STA. 15                          | TO 15                     |
| FED. ROAD DIST. NO.              | ILLINOIS FED. AID PROJECT |
| COUNTY COOK                      | TOTAL SHEETS 556          |
| SHEET NO. 463                    |                           |

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

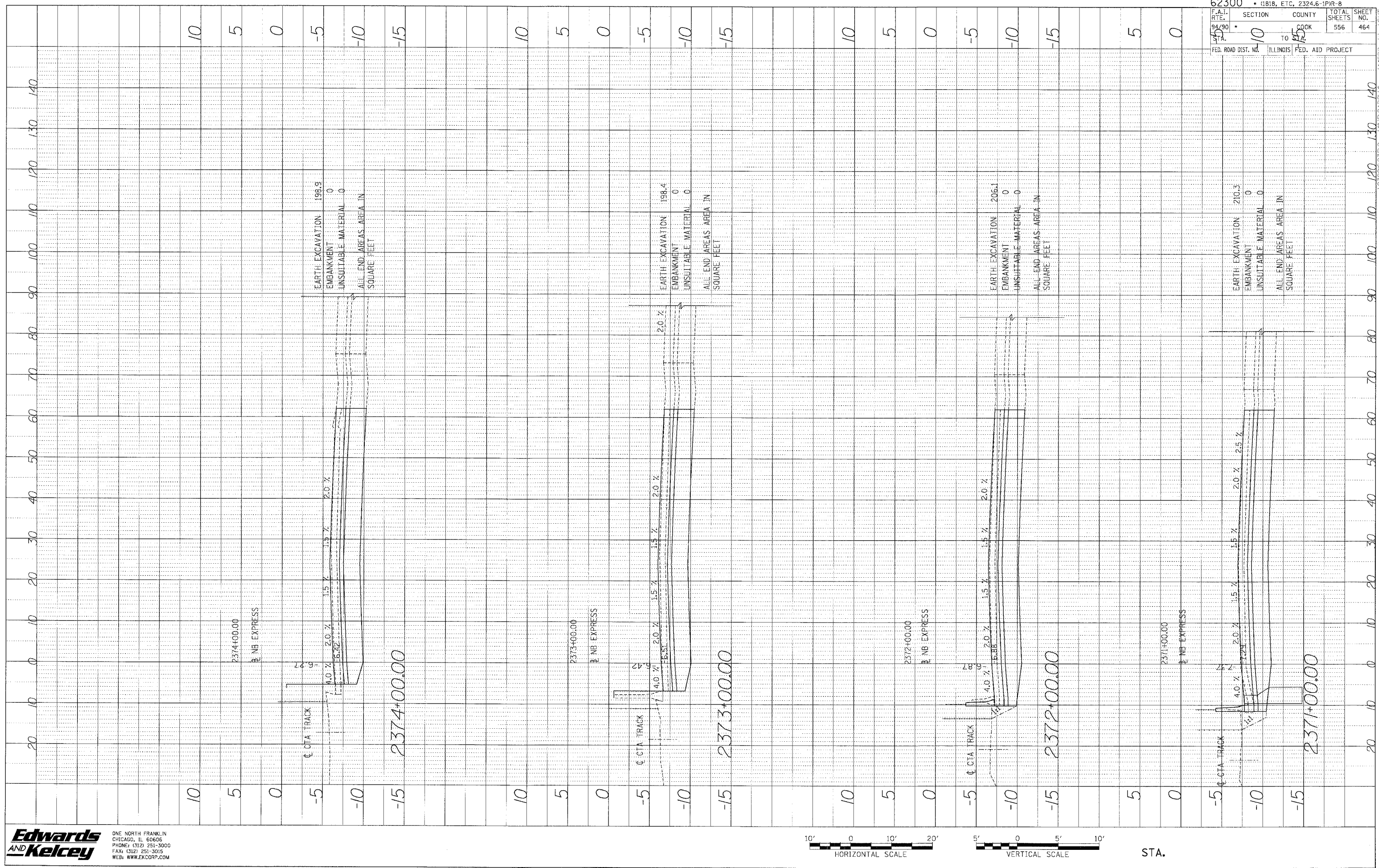


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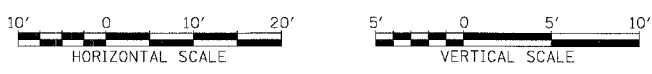


PROFILE REQUESTED BY DATE  
 FACILITY: \_\_\_\_\_  
 NO. IN BOOK: \_\_\_\_\_  
 NO.: \_\_\_\_\_



|                                   |            |                           |     |           |  |
|-----------------------------------|------------|---------------------------|-----|-----------|--|
| 62300 • (1818, ETC. 2324.6-1)PR-8 |            | TOTAL SHEETS              |     | SHEET NO. |  |
| F.A.I. RTE. 94/90                 | SECTION 10 | COUNTY COOK               | 556 | 464       |  |
| FED. ROAD DIST. NO. 11            |            | ILLINOIS FED. AID PROJECT |     |           |  |

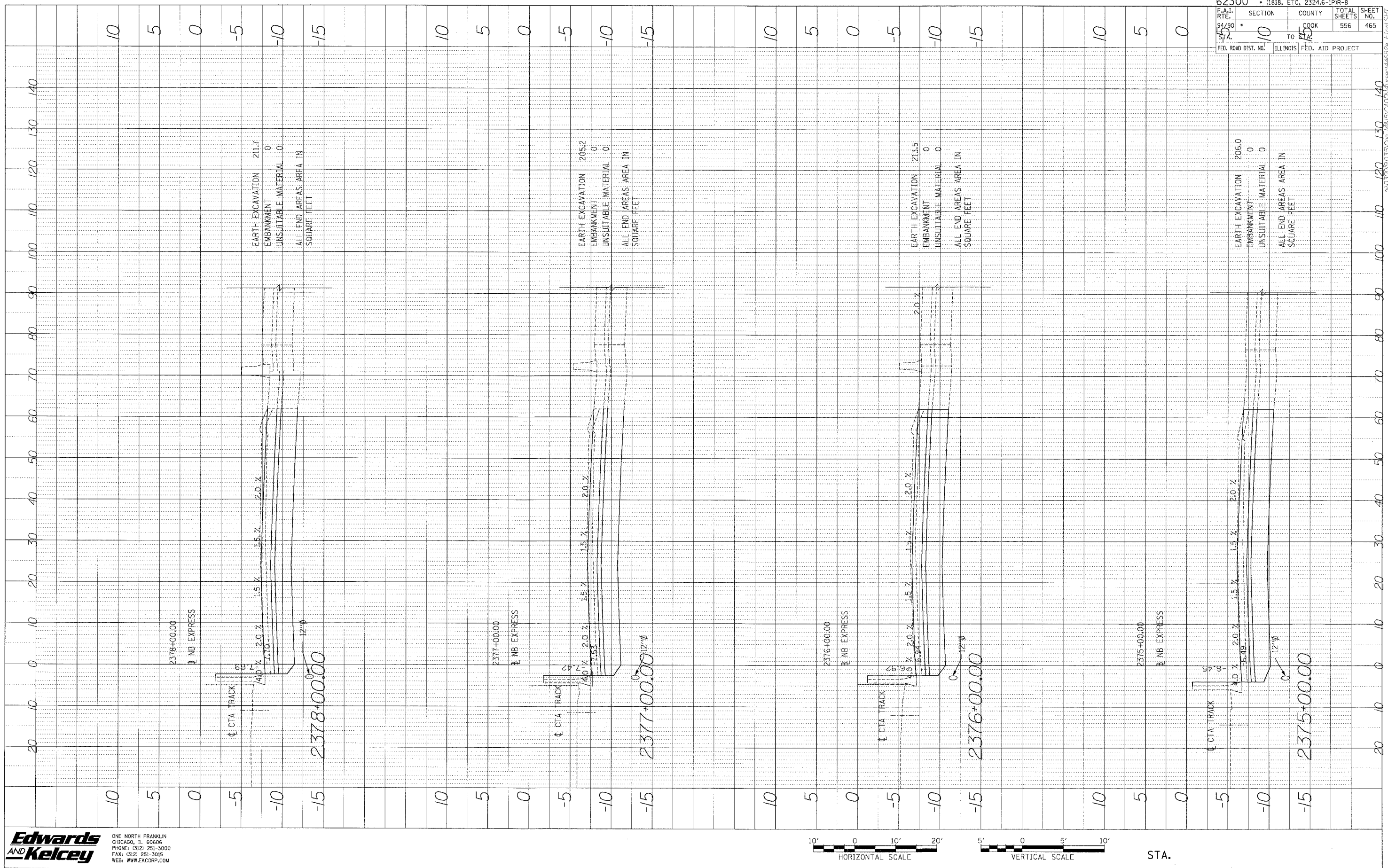
**Edwards AND Kelcey**  
 ONE NORTH FRANKLIN  
 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM



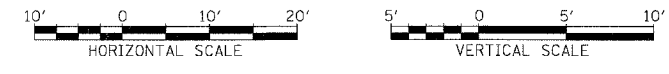
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PROFILE SHEET NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 NOTED BY \_\_\_\_\_  
 NO. \_\_\_\_\_



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

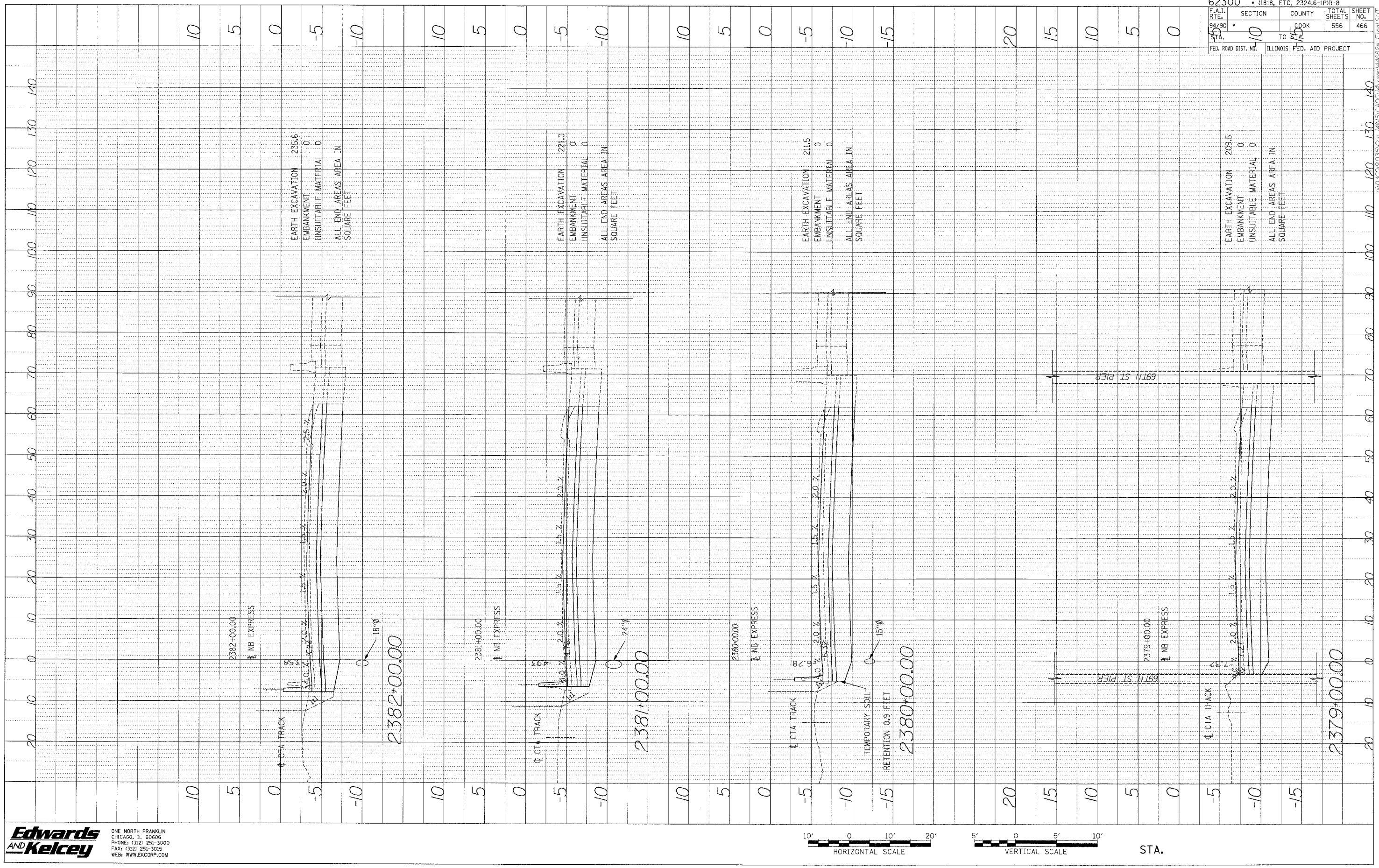


STA.

|                        |                          |
|------------------------|--------------------------|
| 62300                  | (1818, ETC, 2324.6-1PR-8 |
| F.A.I. RTE. 94/90      | SECTION 10               |
| COOK                   | COUNTY                   |
| 556                    | TOTAL SHEETS             |
| 465                    | SHEET NO.                |
| FED. ROAD DIST. NO. 10 | ILLINOIS                 |
| FED. AID PROJECT       |                          |

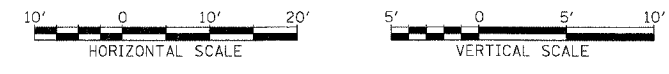
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PROFILE SHEET  
 DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STA. TO BE NOTED: \_\_\_\_\_



|                     |                             |
|---------------------|-----------------------------|
| 62300               | • (1818, ETC, 2324.6-1PIR-8 |
| F.A.L. RTE. 94/90   | SECTION TO                  |
| COOK                | COUNTY                      |
| 556                 | TOTAL SHEETS                |
| 466                 | SHEET NO.                   |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |

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 ONE NORTH FRANKLIN  
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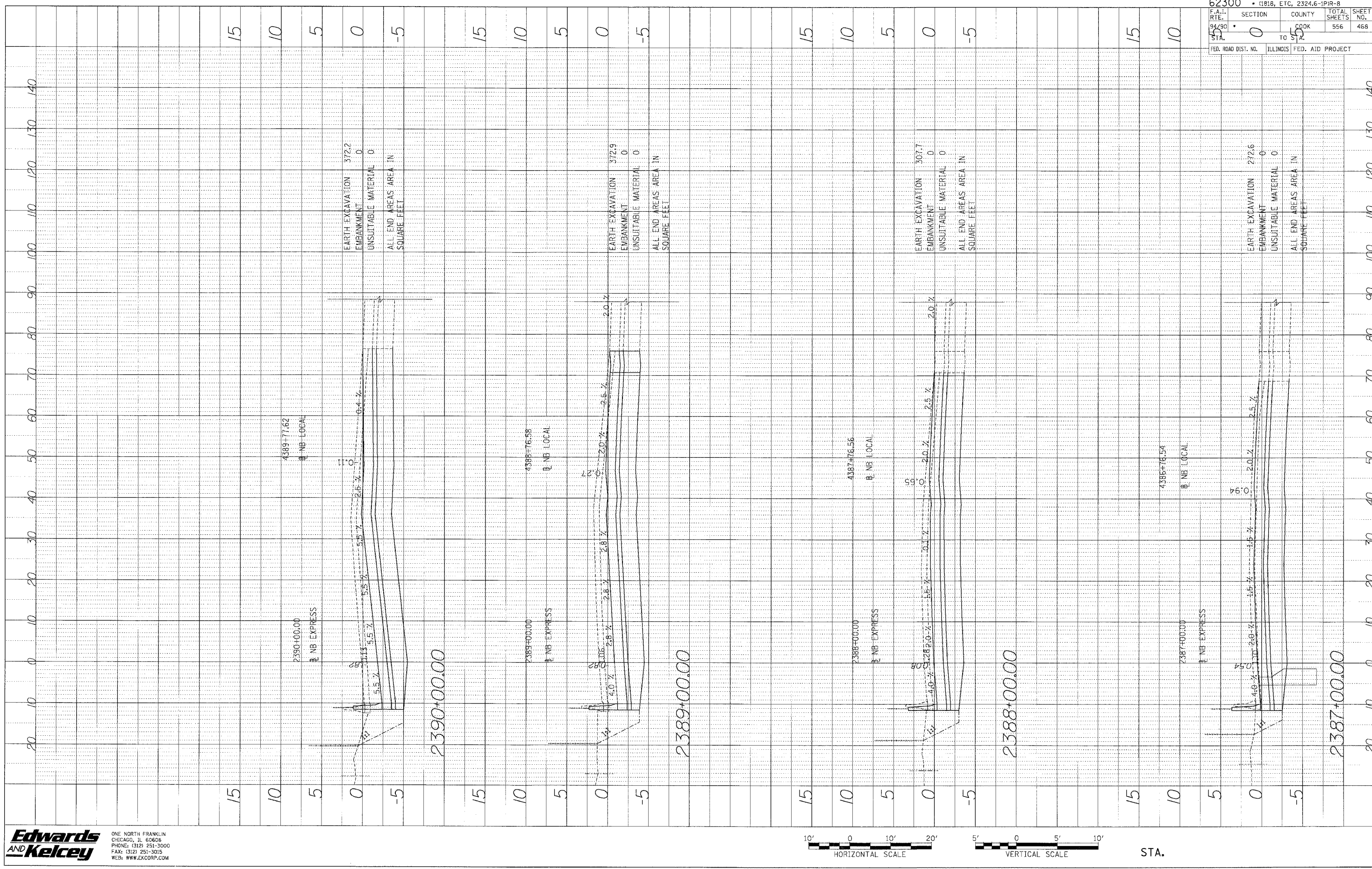
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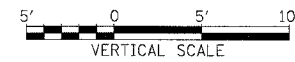




PROFILE DRAWN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NO. \_\_\_\_\_  
 STRUCTURE NO. \_\_\_\_\_  
 NOTES: NOTATION CHANGED



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|                                   |                  |
|-----------------------------------|------------------|
| 62300 • (1818, ETC, 2324.6-1)PR-8 |                  |
| F.A.T. RITE. STA. 94/90           | SECTION 0        |
| TO STA. 574                       | COUNTY COOK      |
| FED. ROAD DIST. NO. ILLINOIS      | FED. AID PROJECT |
| TOTAL SHEETS 556                  | SHEET NO. 468    |

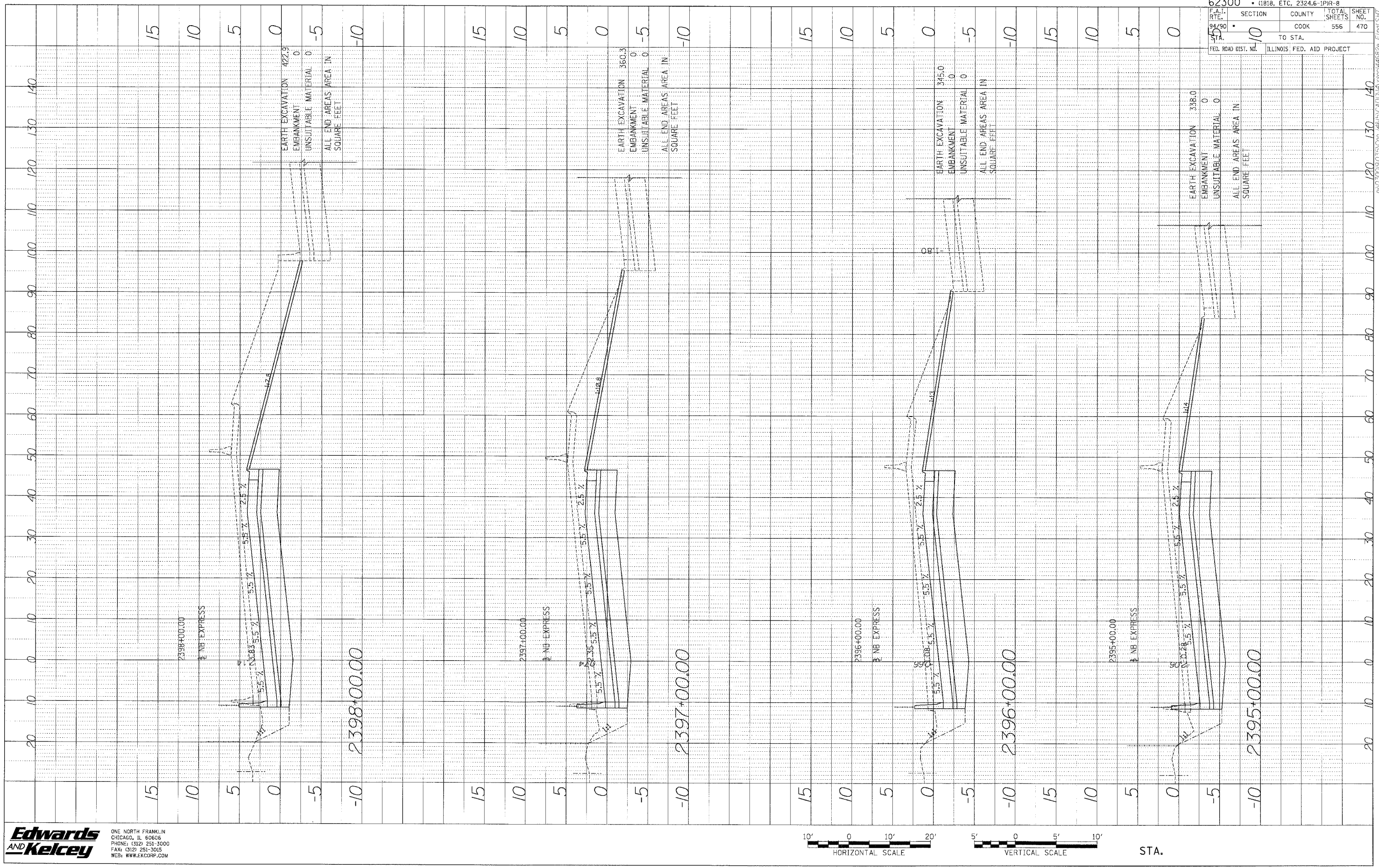
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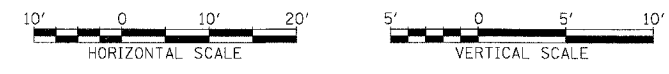


PROFILE  
 DATE \_\_\_\_\_ BY \_\_\_\_\_  
 REVISIONS  
 NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 DESIGNED \_\_\_\_\_  
 DRAWN \_\_\_\_\_  
 IN CHARGE \_\_\_\_\_  
 PROJECT NO. \_\_\_\_\_  
 PROJECT NAME \_\_\_\_\_  
 SHEET NO. \_\_\_\_\_  
 TOTAL SHEETS \_\_\_\_\_  
 COUNTY \_\_\_\_\_  
 SECTION \_\_\_\_\_  
 TO STA. \_\_\_\_\_  
 FROM STA. \_\_\_\_\_  
 ILLINOIS FED. AID PROJECT  
 FEDERAL ROAD DIST. NO. \_\_\_\_\_

62300 • (1818, ETC, 2324.6-1)PR-8  
 SECTION COUNTY TOTAL SHEETS SHEET NO.  
 94/90 COOK 556 470  
 TO STA.  
 FROM STA.  
 ILLINOIS FED. AID PROJECT  
 FEDERAL ROAD DIST. NO.



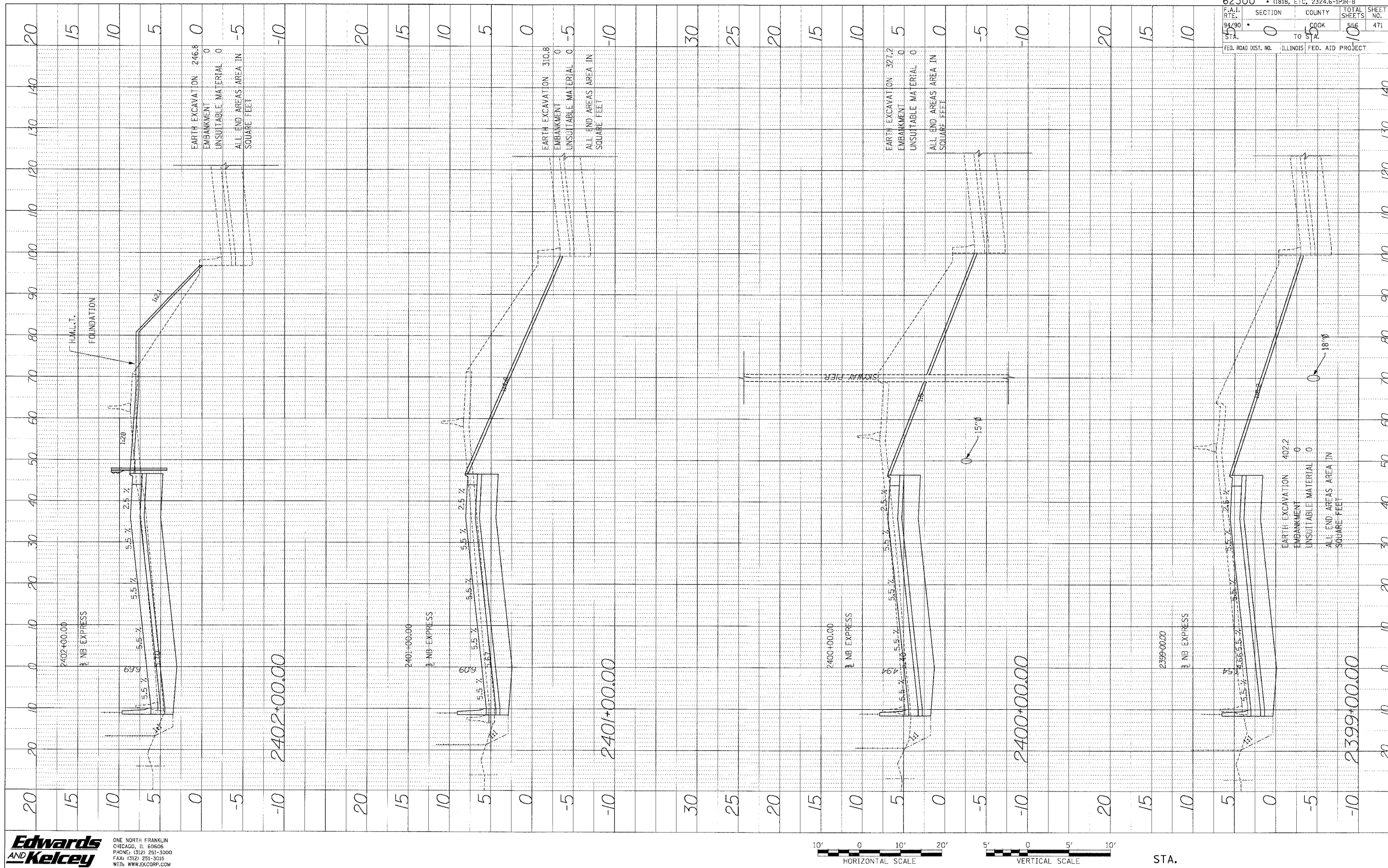
**Edwards and Kelcey**  
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 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3045  
 WEB: WWW.EDWARDS-AND-KELCEY.COM



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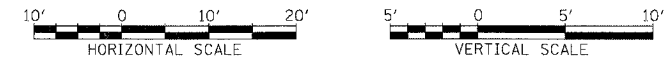
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PROFILE SURVEYED BY DATE  
 NOTED CHECKED  
 NO. DATE



|                                   |         |                           |     |           |  |
|-----------------------------------|---------|---------------------------|-----|-----------|--|
| 62300 • (1818, ETC, 2324.6-1PJR-8 |         | TOTAL SHEETS              |     | SHEET NO. |  |
| F.A.I. R.T.E.                     | SECTION | COUNTY                    | 556 | 471       |  |
| 94/90 STA.                        | 0       | COOK                      | 556 | 471       |  |
| FED. ROAD DIST. NO.               |         | ILLINOIS FED. AID PROJECT |     |           |  |

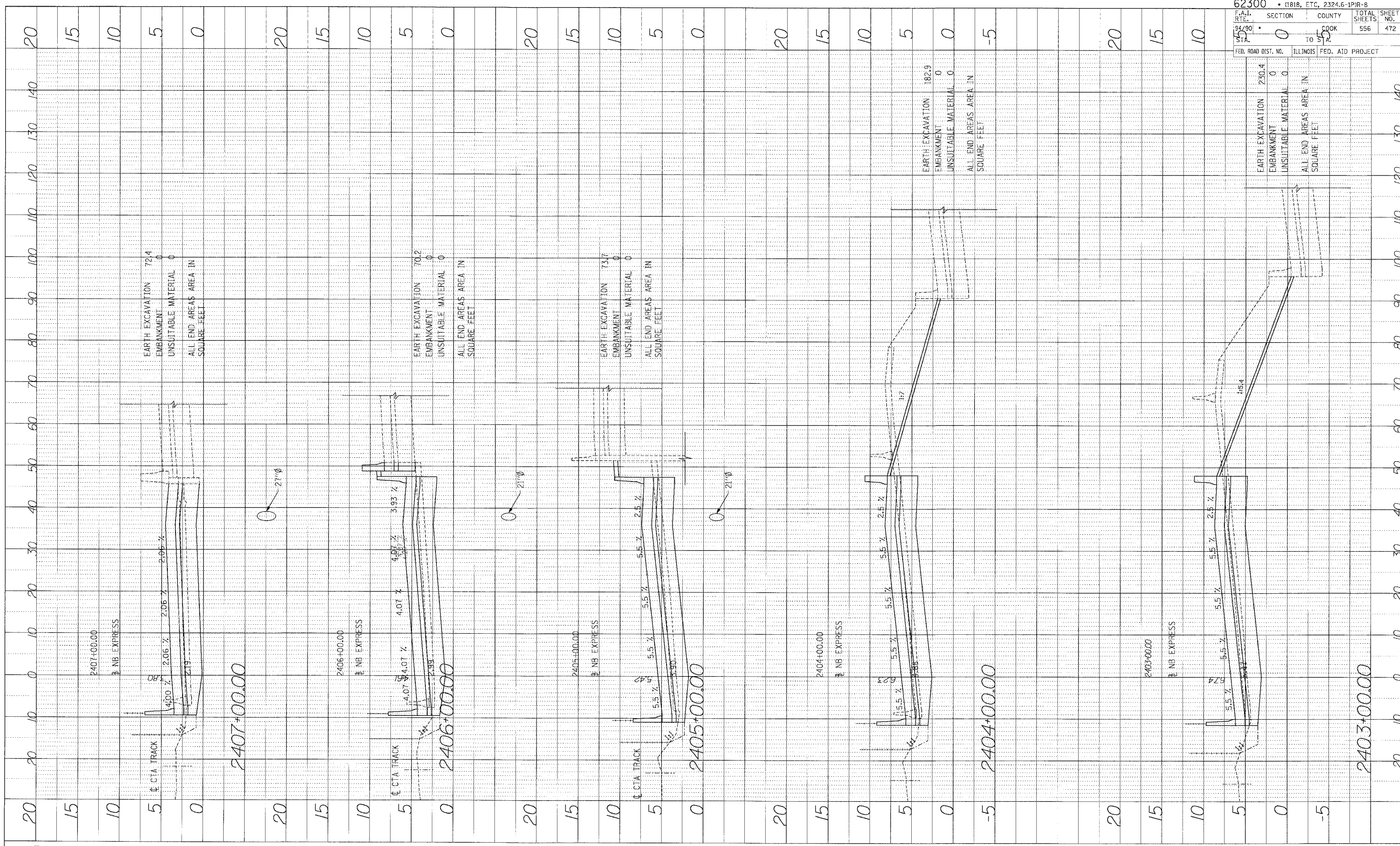
**Edwards AND Kelcey**  
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 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
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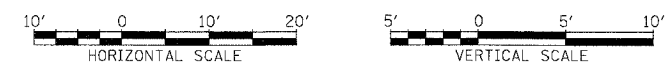
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PROFILE SURVEYED BY DATE  
 NOTE BOOK NO. PROJECT NO.  
 DATE OF SURVEY NOTES SHEET NO.



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|                     |                  |                             |              |
|---------------------|------------------|-----------------------------|--------------|
| 62300               |                  | • (1818, ETC., 2324.6-IPR-8 |              |
| DATE                | SECTION          | COUNTY                      | TOTAL SHEETS |
| 9/4/99              | 0                | COOK                        | 556          |
| BY                  | TO               | ILLINOIS                    | 472          |
| FED. ROAD DIST. NO. | FED. AID PROJECT |                             |              |

|                                   |       |
|-----------------------------------|-------|
| EARTH EXCAVATION                  | 230.4 |
| EMBANKMENT                        | 0     |
| UNSUITABLE MATERIAL               | 0     |
| ALL END AREAS AREA IN SQUARE FEET |       |

|                                   |      |
|-----------------------------------|------|
| EARTH EXCAVATION                  | 70.2 |
| EMBANKMENT                        | 0    |
| UNSUITABLE MATERIAL               | 0    |
| ALL END AREAS AREA IN SQUARE FEET |      |

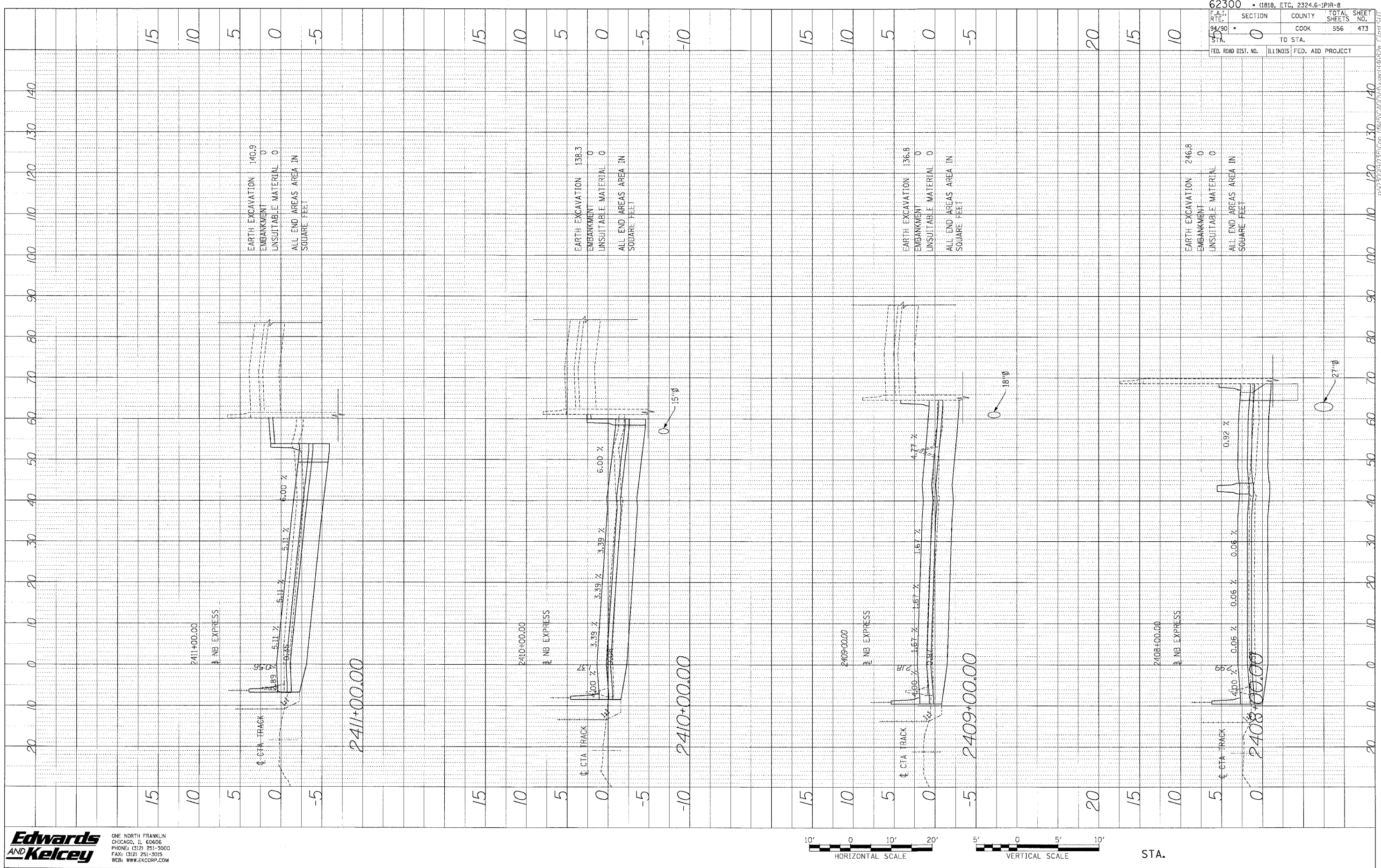
|                                   |      |
|-----------------------------------|------|
| EARTH EXCAVATION                  | 73.7 |
| EMBANKMENT                        | 0    |
| UNSUITABLE MATERIAL               | 0    |
| ALL END AREAS AREA IN SQUARE FEET |      |

|                                   |       |
|-----------------------------------|-------|
| EARTH EXCAVATION                  | 182.9 |
| EMBANKMENT                        | 0     |
| UNSUITABLE MATERIAL               | 0     |
| ALL END AREAS AREA IN SQUARE FEET |       |

|                                   |       |
|-----------------------------------|-------|
| EARTH EXCAVATION                  | 230.4 |
| EMBANKMENT                        | 0     |
| UNSUITABLE MATERIAL               | 0     |
| ALL END AREAS AREA IN SQUARE FEET |       |

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PROJECT: BY: JAL  
 NOTE BOOK: DRAWS CHECKED  
 NO. STRUCTURE MATERIALS SHOWN



|                                   |                           |
|-----------------------------------|---------------------------|
| 62300 • (1818, ETC, 2324.6-1PIR-8 |                           |
| F.A.I. R.T.E. 94/90               | SECTION 0                 |
| 94/90                             | COUNTY COOK               |
| 94/90                             | TOTAL SHEETS 556          |
| 94/90                             | SHEET NO. 173             |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT |

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

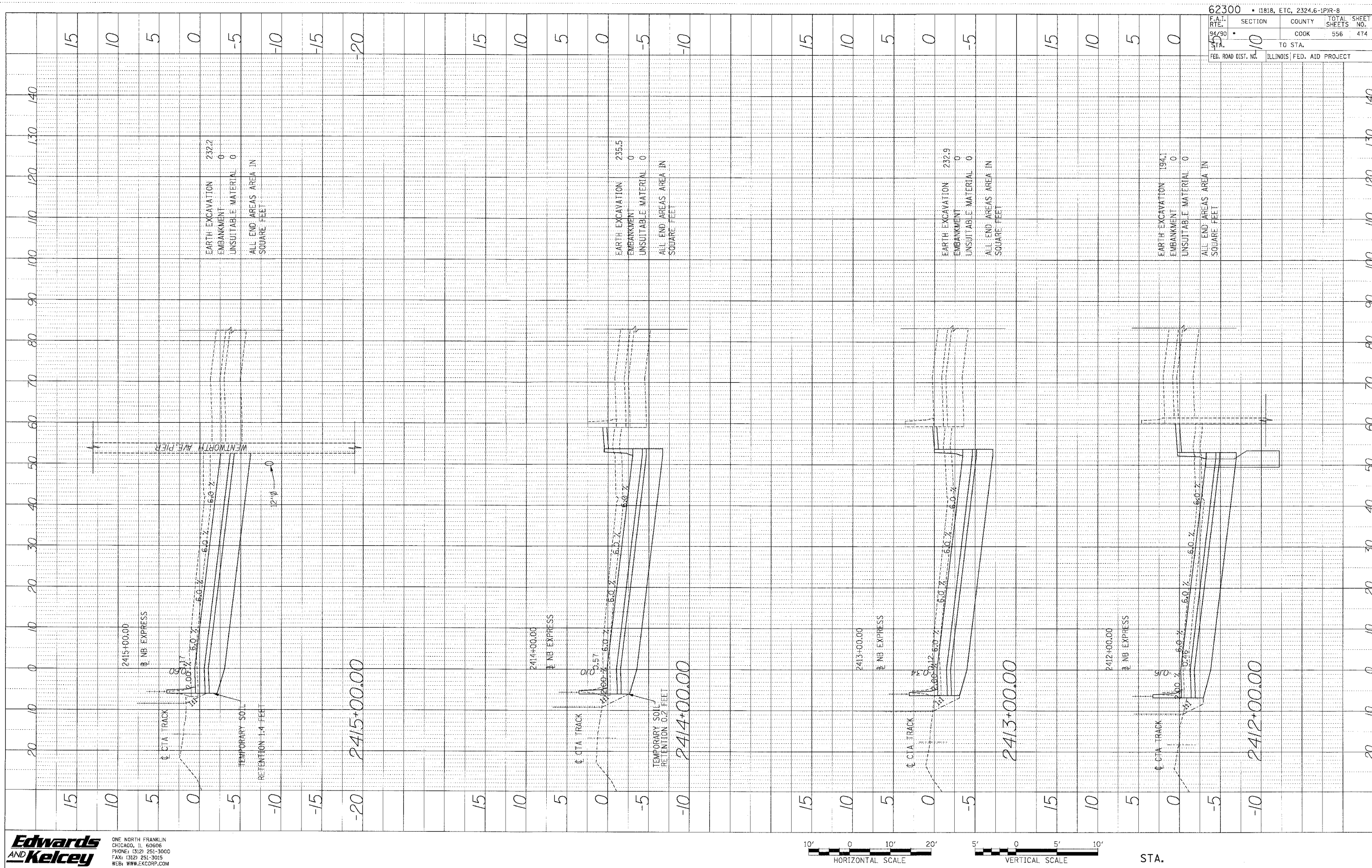


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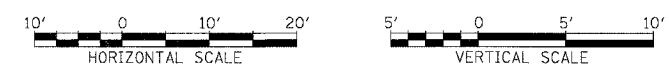
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 GRADES CHECKED \_\_\_\_\_  
 NO. OF STATIONS \_\_\_\_\_  
 NO. OF NOTES \_\_\_\_\_  
 NO. OF STATIONS CHECKED \_\_\_\_\_



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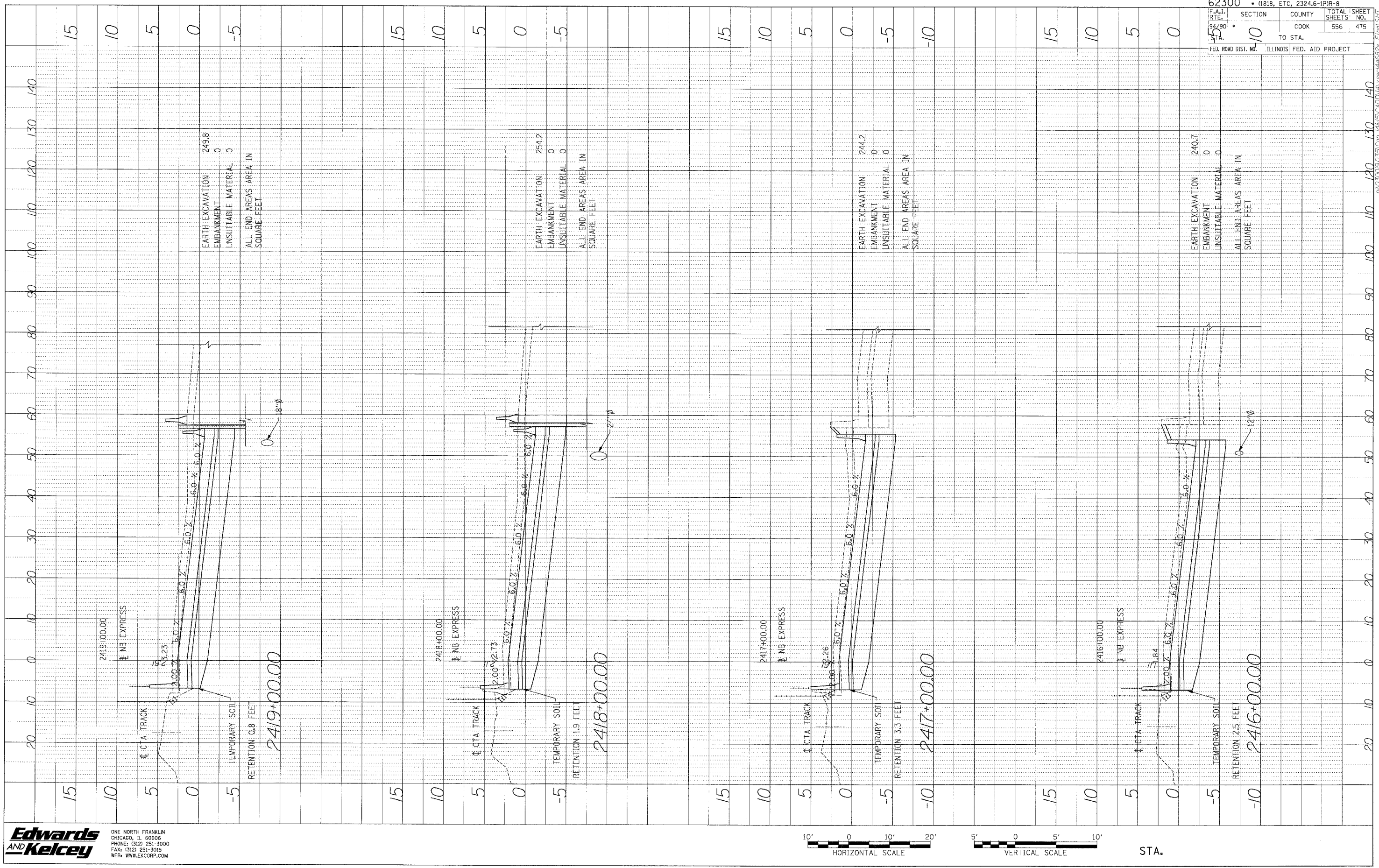


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|                                   |                  |
|-----------------------------------|------------------|
| 62300 • (1818, ETC, 2324.6-1P)R-8 |                  |
| F.A.I. R.T.E. 94/90               | SECTION 10       |
| TO STA. 45                        | COUNTY COOK      |
| FED. ROAD DIST. NO. 10            | TOTAL SHEETS 556 |
| ILLINOIS FED. AID PROJECT         | SHEET NO. 474    |

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 GRABES CHECKED  
 NO. STRUCTURE NOTATION'S BRK'G



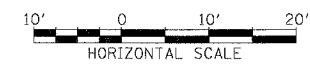
EARTH EXCAVATION 249.8  
 EMBANKMENT 0  
 UNSUITABLE MATERIAL 0  
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 254.2  
 EMBANKMENT 0  
 UNSUITABLE MATERIAL 0  
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 244.2  
 EMBANKMENT 0  
 UNSUITABLE MATERIAL 0  
 ALL END AREAS AREA IN SQUARE FEET

EARTH EXCAVATION 240.7  
 EMBANKMENT 0  
 UNSUITABLE MATERIAL 0  
 ALL END AREAS AREA IN SQUARE FEET

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 FAX: (312) 251-3015  
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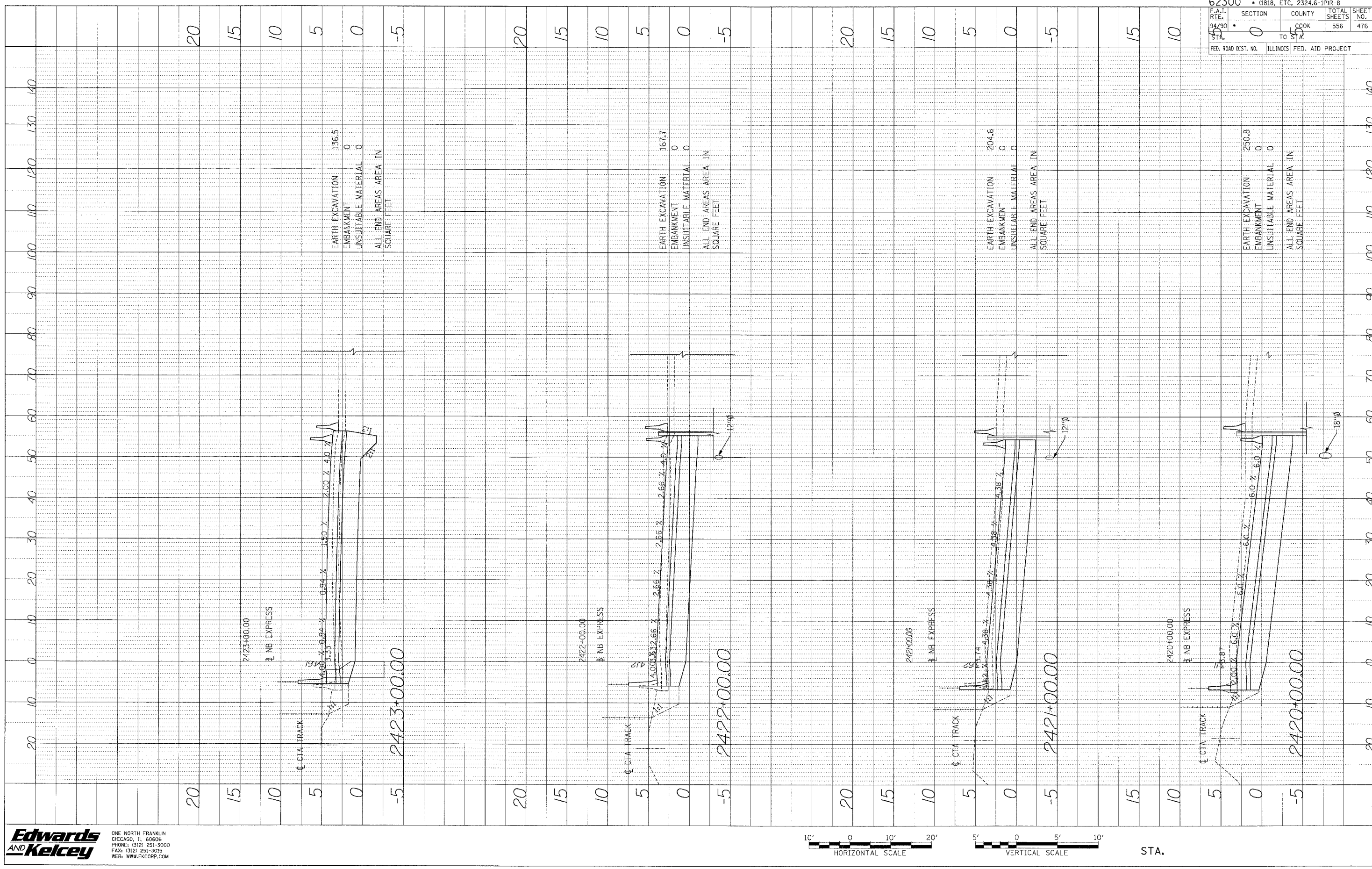
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|-----------------------------------|---------------------------|
| 62300 • (1818, ETC, 2324.6-1PIR-8 |                           |
| SECTION                           | COUNTY                    |
| 94.90                             | COOK                      |
| TO STA.                           |                           |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT |
| TOTAL SHEETS NO.                  | 475                       |
| SHEET NO.                         | 556                       |

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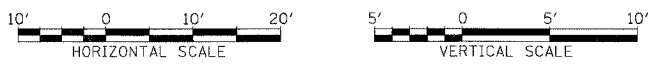


PROFILE SUBMITTED BY DATE  
 NO. 16 BOOK OFFICIALS CHECKED  
 NO. 16 DRAWING REVISIONS CHECKED



|                        |           |                             |                  |
|------------------------|-----------|-----------------------------|------------------|
| 62300                  |           | • (1818, ETC, 2324.6-1PIR-8 |                  |
| F.A.I. RTE. STA. 94/90 | SECTION 0 | COUNTY COOK                 | TOTAL SHEETS 556 |
| 55                     | TO 57     | 55                          | 476              |
| FED. ROAD DIST. NO.    |           | ILLINOIS FED. AID PROJECT   |                  |

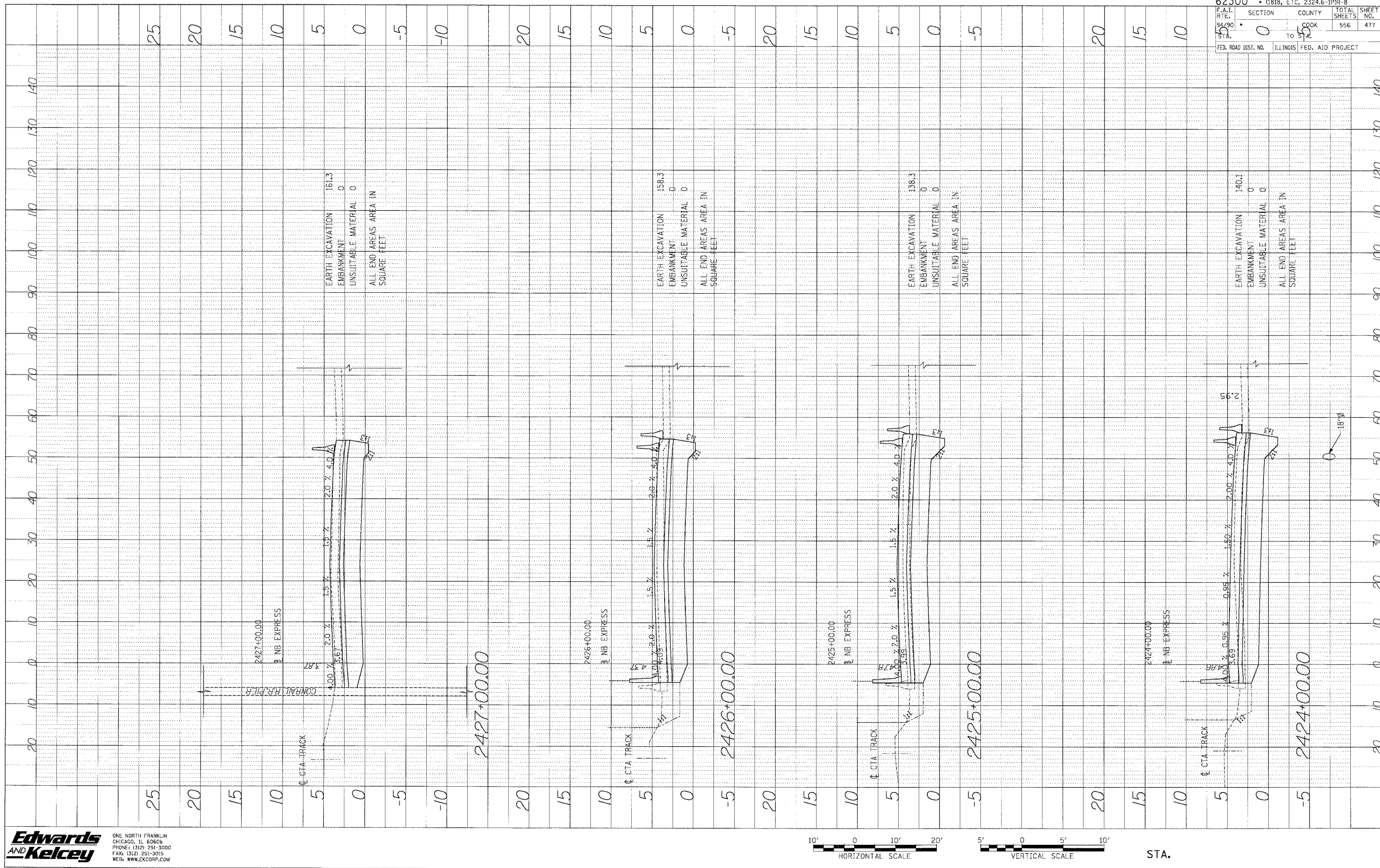
**Edwards AND Kelcey**  
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 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
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PROFILE SURVEYED BY DATE  
 GRADES CHECKED  
 NOTE BOOK NO. DATE  
 STRUCTURE NOTATIONS CRYED



|                              |                                |
|------------------------------|--------------------------------|
| 62300                        | (1818, ETC, 2324.6-1P/R-8      |
| F.A.I. RTE. STA. 94/90       | SECTION COUNTY COOK TO STA. 55 |
| FED. ROAD DIST. NO. ILLINOIS | FED. AID PROJECT               |
| TOTAL SHEETS 556             | SHEET NO. 477                  |

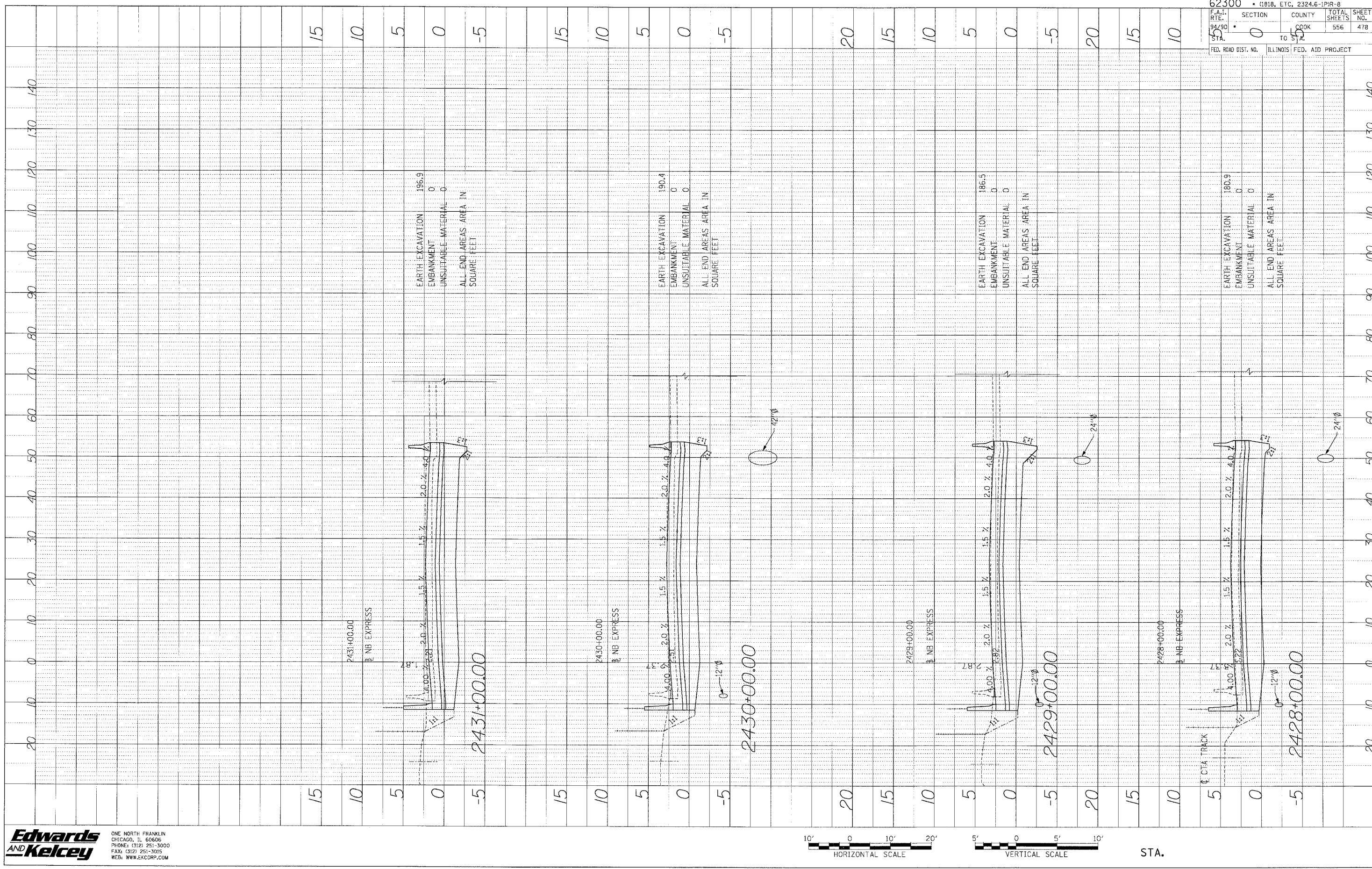
**Edwards AND Kelcey**  
 ONE NORTH FRANKLIN  
 CHICAGO, IL 60606  
 PHONE: (312) 251-3500  
 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM



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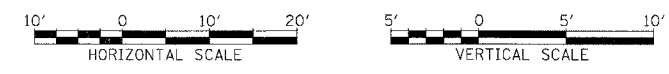
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PROFILE SUBMITTED BY DATE  
 DRAWN BY  
 CHECKED BY  
 NO. DATE



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|---------------------|---------------------------|--------|--------------|-----------|
| 62300               | 1818, ETC. 2324.6-IPR-8   |        |              |           |
| ROUTE               | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| 94/90               | 0                         | COOK   | 556          | 478       |
| STA.                | TO STA.                   |        |              |           |
|                     |                           |        |              |           |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |        |              |           |

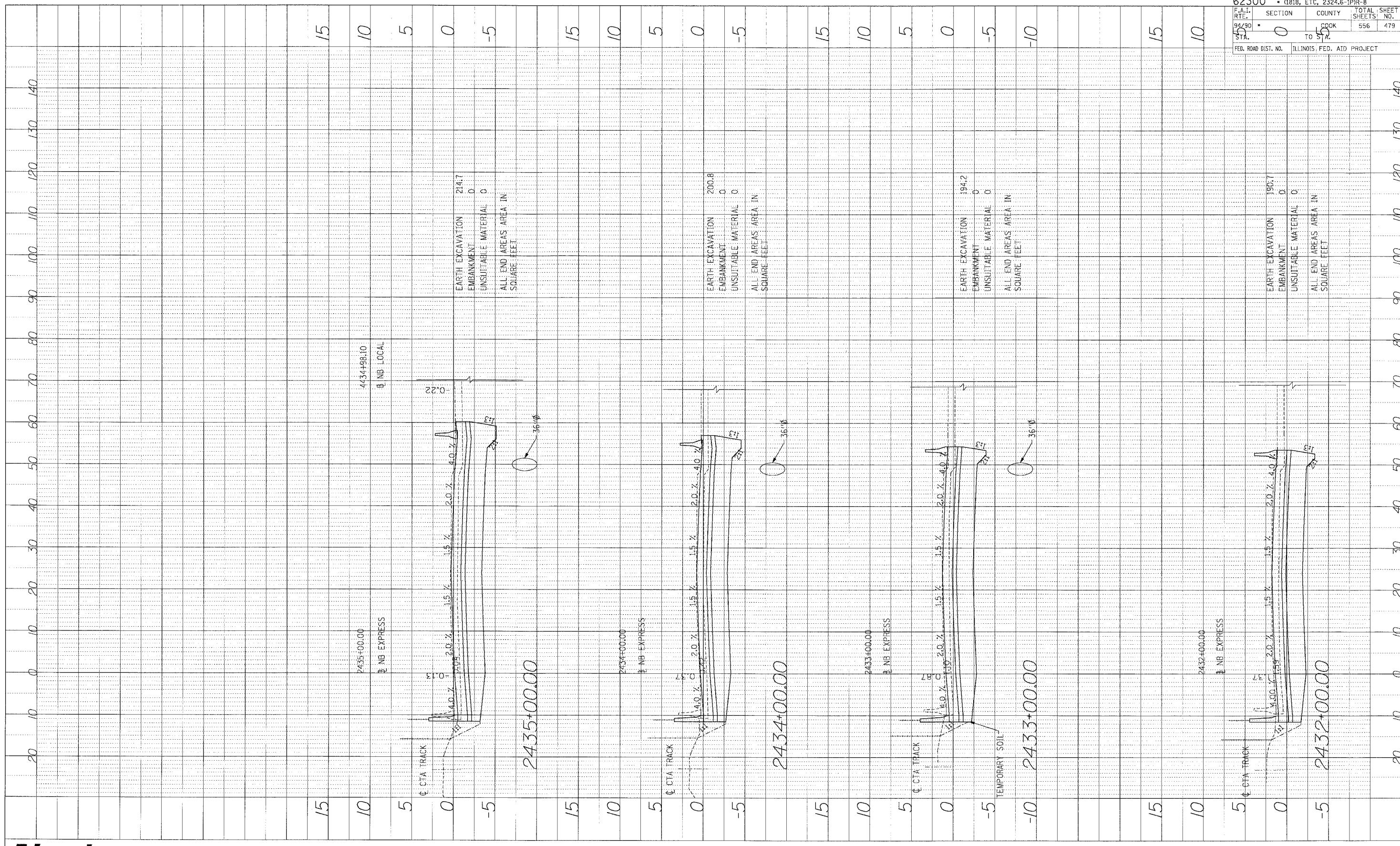
**Edwards AND Kelcey**  
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 CHICAGO, IL 60606  
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 FAX: (312) 251-3015  
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PROFILE SUBMITTED BY DATE  
 NOT BOOK GRADES CHECKED  
 STATIONING NOTATION SHOWN  
 NO.



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|------------------------------------------------|------------------|
| 62300 • (1818, ETC, 2324.6-1PJR-8              |                  |
| F.A.I. RTE. STA. 94/90                         | SECTION 0        |
| COUNTY COOK                                    | TOTAL SHEETS 556 |
| TO STA. 55                                     | NO. 479          |
| FED. ROAD DIST. NO. ILLINOIS, FED. AID PROJECT |                  |

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 CHICAGO, IL 60606  
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 FAX: (312) 251-3015  
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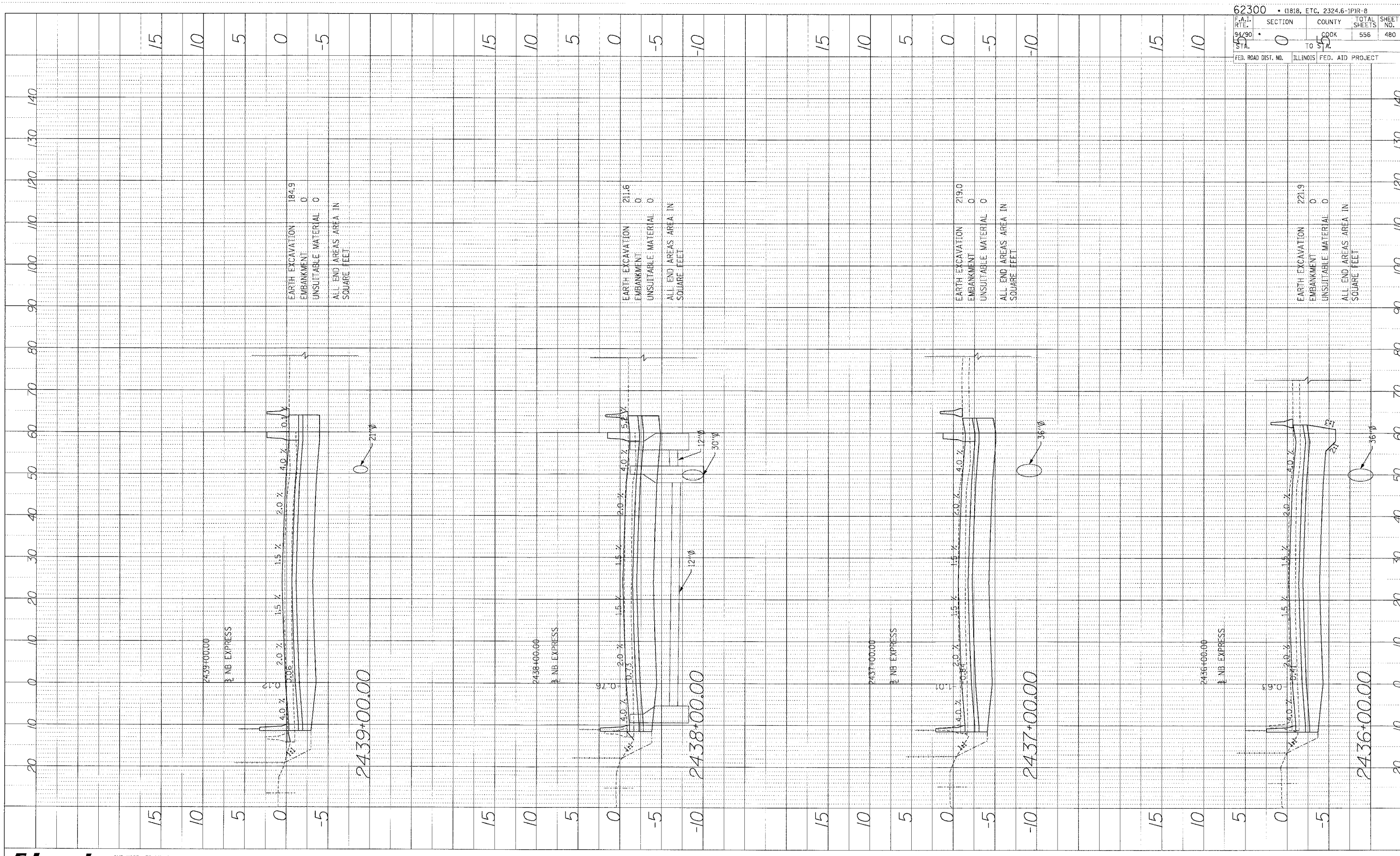


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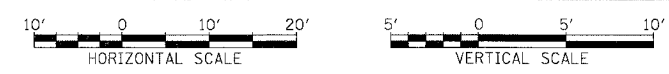
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PROFILE SHEET  
 NO. 1000  
 DATE



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 FAX (312) 261-3015  
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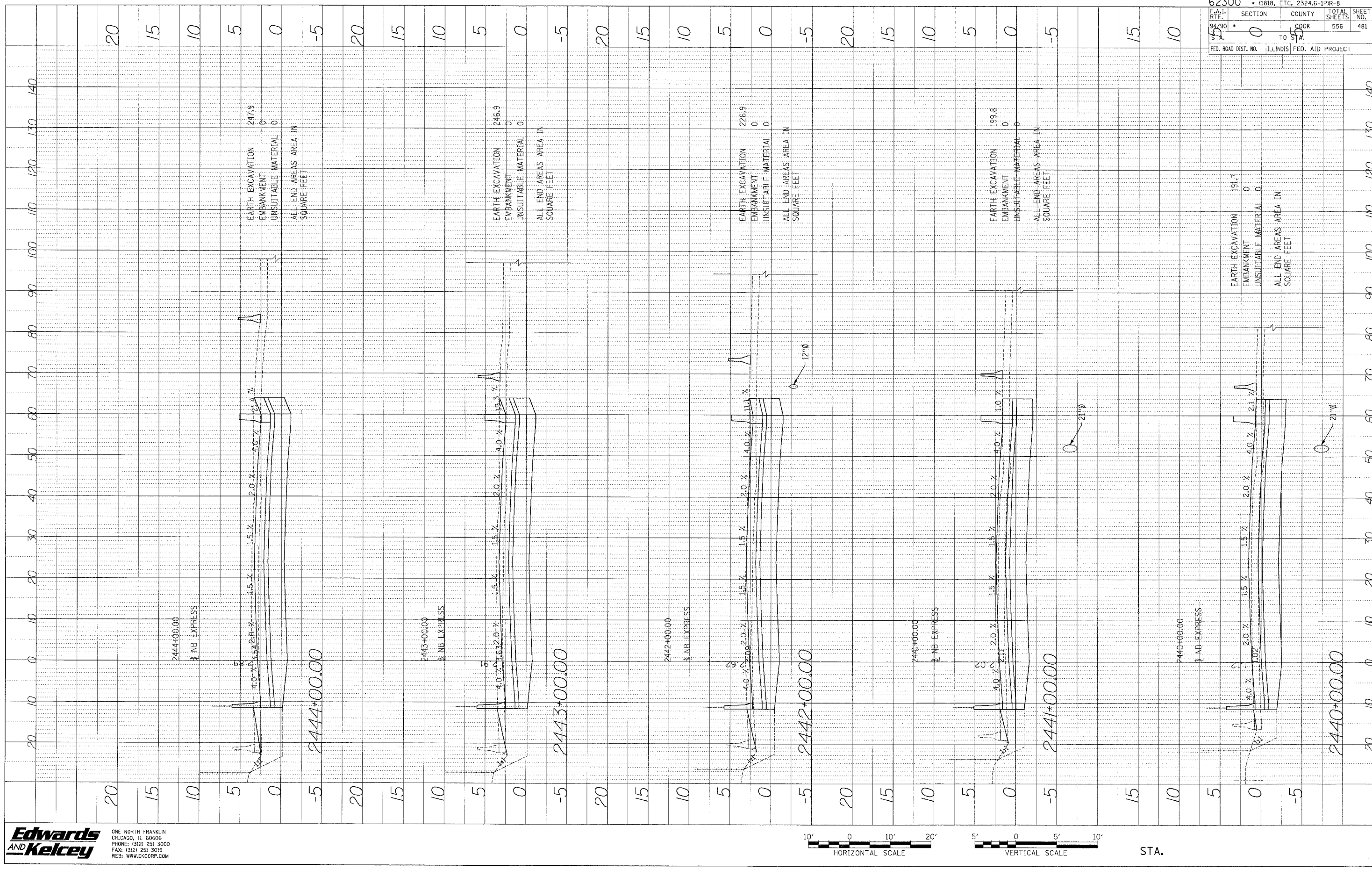


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|---------------------|---------------------------|------------------|--------------|-----------|
| 62300               | (1818, ETC. 2324.6-1P)R-8 |                  |              |           |
| F.A.I. RTE.         | SECTION                   | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 94/90               | 0                         | COOK             | 556          | 480       |
| STA.                | TO                        |                  |              |           |
| 5                   | 5                         |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS                  | FED. AID PROJECT |              |           |

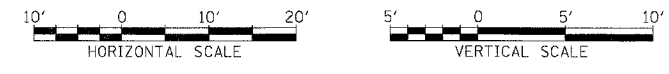
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PROFILE DRAWN BY DATE  
 CHECKED BY DATE  
 NOTE BOOK NO.  
 REVISIONS  
 NO. DATE DESCRIPTION



|                     |                             |
|---------------------|-----------------------------|
| 62300               | • (1818, ETC, 2324.6-1PJR-8 |
| F.A.I. RTE. 94/90   | SECTION 0                   |
| STA. 55             | COUNTY COOK                 |
|                     | TO STA. 55                  |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |
|                     | TOTAL SHEETS 556            |
|                     | SHEET NO. 481               |

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 CHICAGO, IL 60606  
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 FAX: (312) 251-3015  
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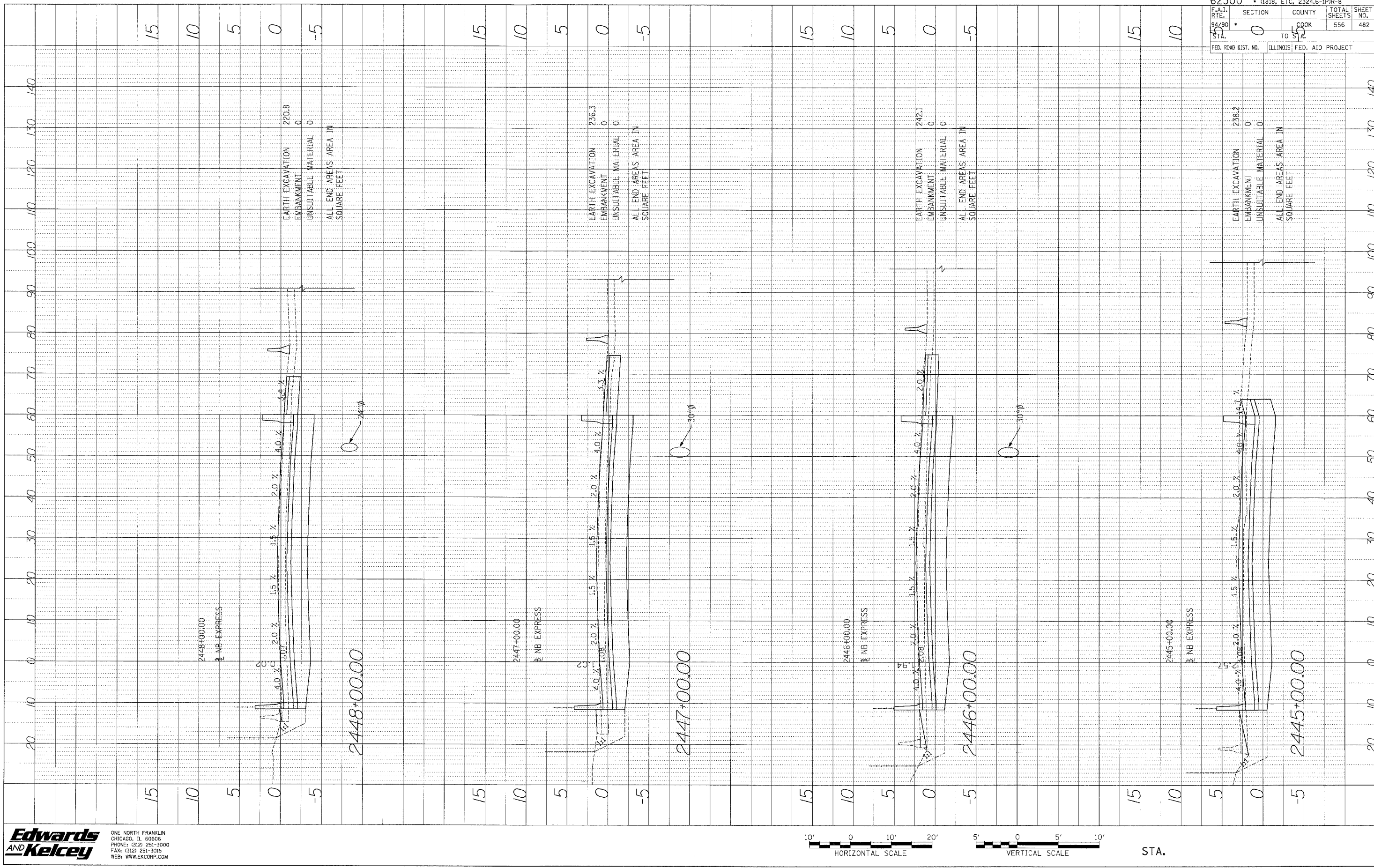


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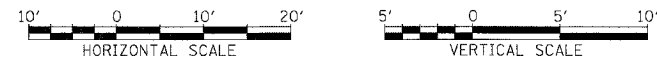
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PROFILE  
 DATE \_\_\_\_\_ BY \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 STRUCTURE NOTATIONS OKWD



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 FAX: (312) 251-3016  
 WEB: WWW.EKCORP.COM

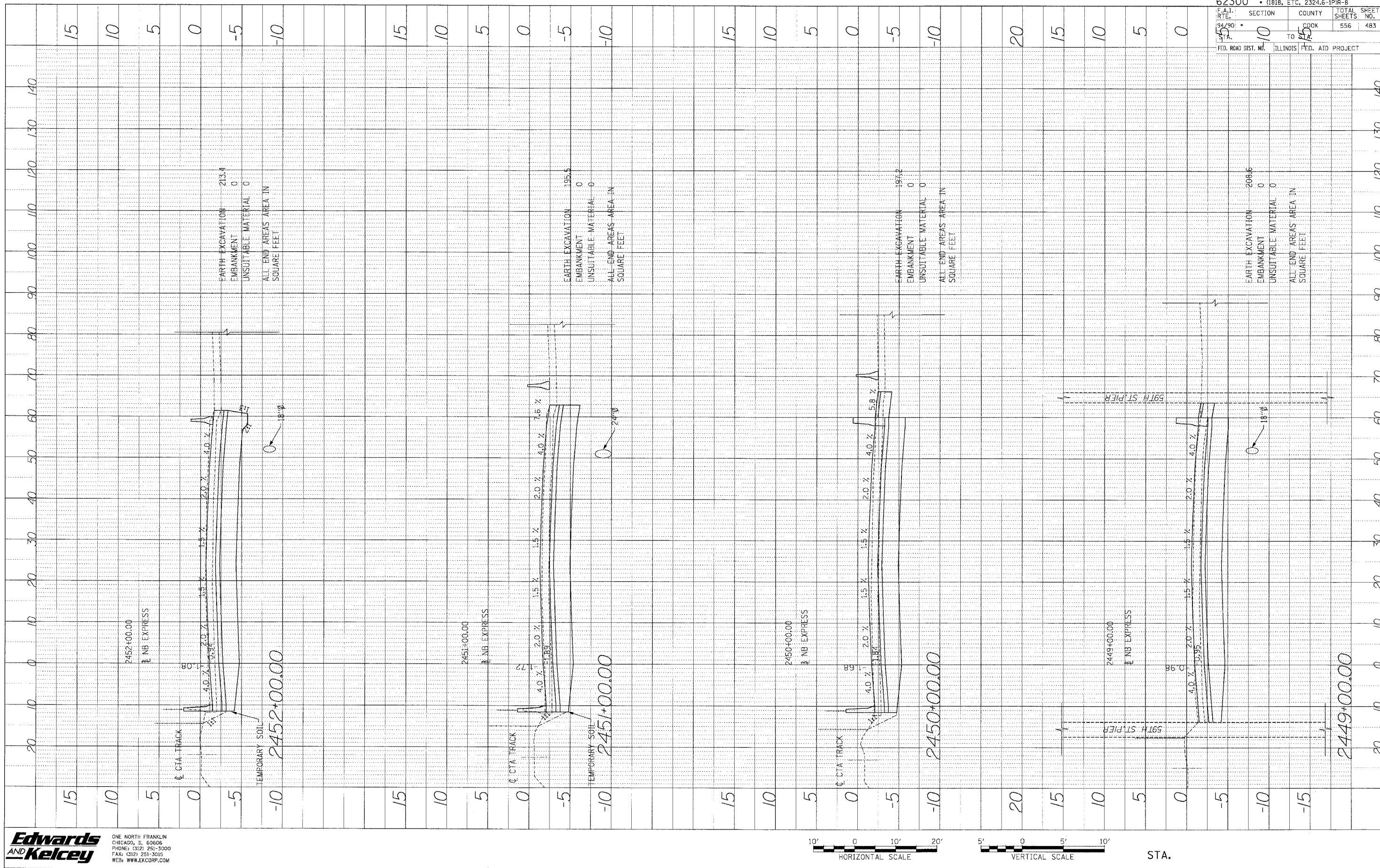


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|                           |                             |
|---------------------------|-----------------------------|
| 62300                     | • (1818, ETC, 2324.6-1PJR-8 |
| F.A.I. RTE. 94/90 STA. 55 | SECTION 0                   |
| FED. ROAD DIST. NO.       | COUNTY COOK                 |
| ILLINOIS FED. AID PROJECT | TOTAL SHEETS 556            |
|                           | SHEET NO. 482               |

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PROFILE SURVEYED BY DATE  
 DRAWING NO. PROJECT NO.  
 NOTE BOOK NO. STRUCTURE NO. DATE  
 NO. STRUCTURE NO. DATE



|                                   |                           |
|-----------------------------------|---------------------------|
| 62300 • (1818, ETC, 2324.6-1P1R-8 |                           |
| F.A.I. R.T.E. 94/90               | SECTION 10                |
| TO 15                             | COUNTY COOK               |
| FED. ROAD DIST. NO. 11            | ILLINOIS FED. AID PROJECT |
| TOTAL SHEETS 556                  | SHEET NO. 483             |

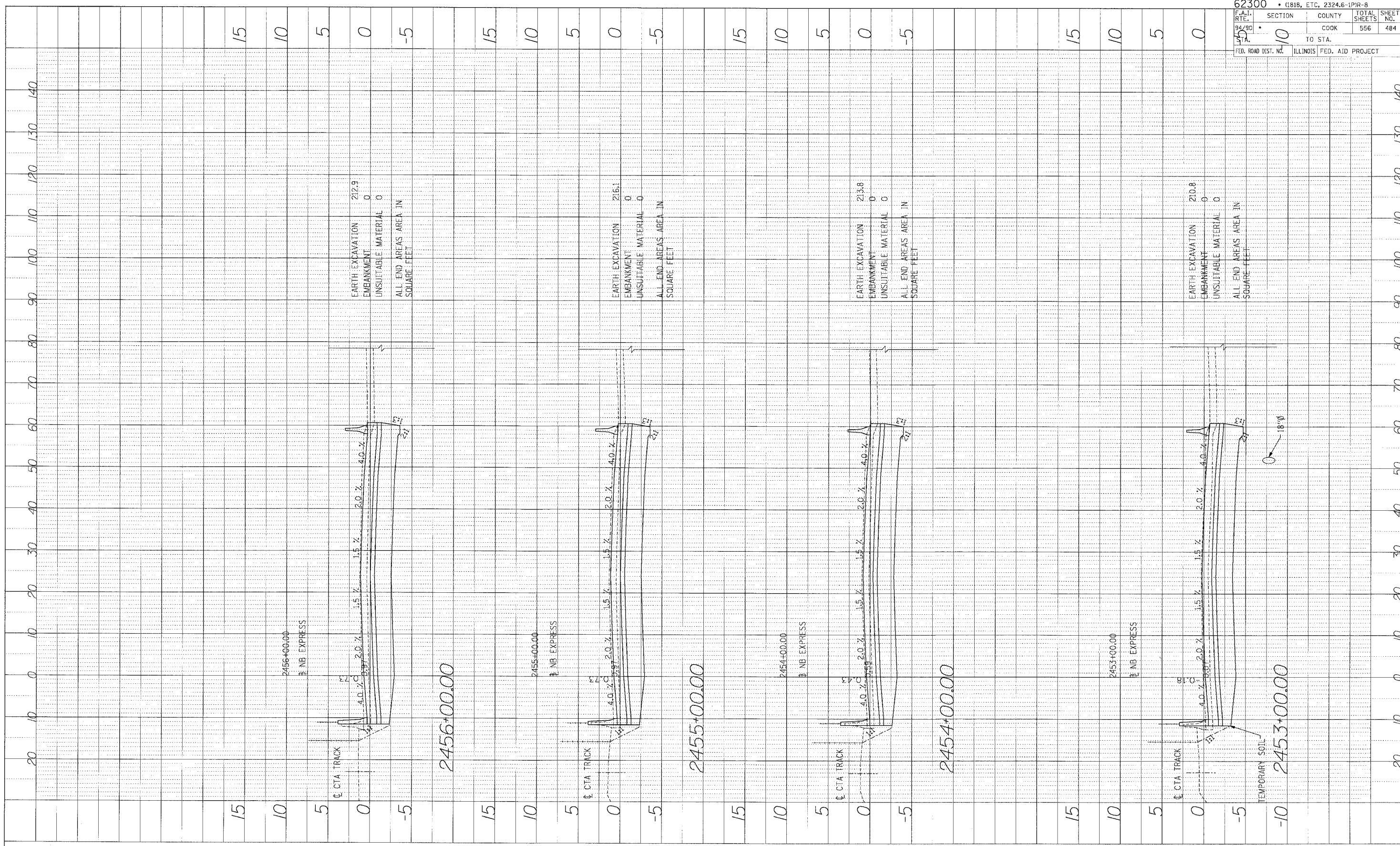
**Edwards and Kelcey**  
 ONE NORTH FRANKLIN  
 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 751-3010  
 WEB: WWW.EKCORP.COM



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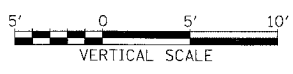
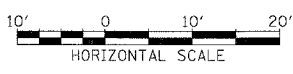
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PROFILE SURVEYED BY DATE  
 NOTE BOOK DRAWN'S CHECKED  
 NO. STRUCTURE NO. DATE'S CHECKED



|                                  |           |
|----------------------------------|-----------|
| 62300 • (1818, ETC, 2324.6-IPR-8 |           |
| SECTION                          | COUNTY    |
| 10                               | COOK      |
| TOTAL SHEETS                     | SHEET NO. |
| 556                              | 484       |
| TO STA.                          |           |
| ILLINOIS FED. AID PROJECT        |           |

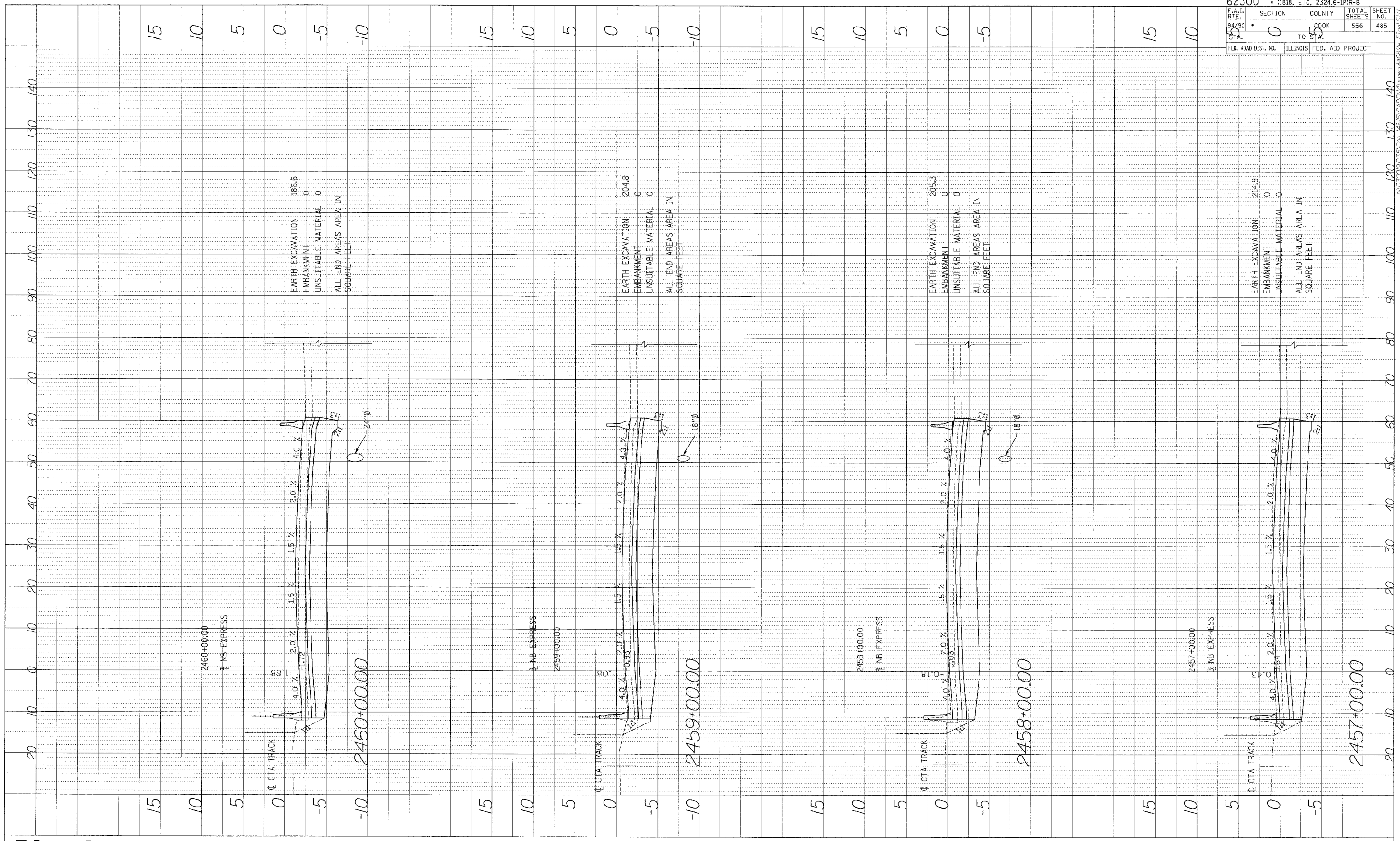
**Edwards AND Kelcey**  
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 FAX: (312) 251-3015  
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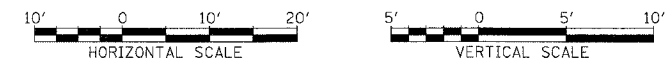
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PROFILE SURVEYED BY DATE  
 NOTE BOOK ISSUES CHECKED  
 NO. STRUCTURE NOTES THIS SHEET



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

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 FAX: (312) 251-3015  
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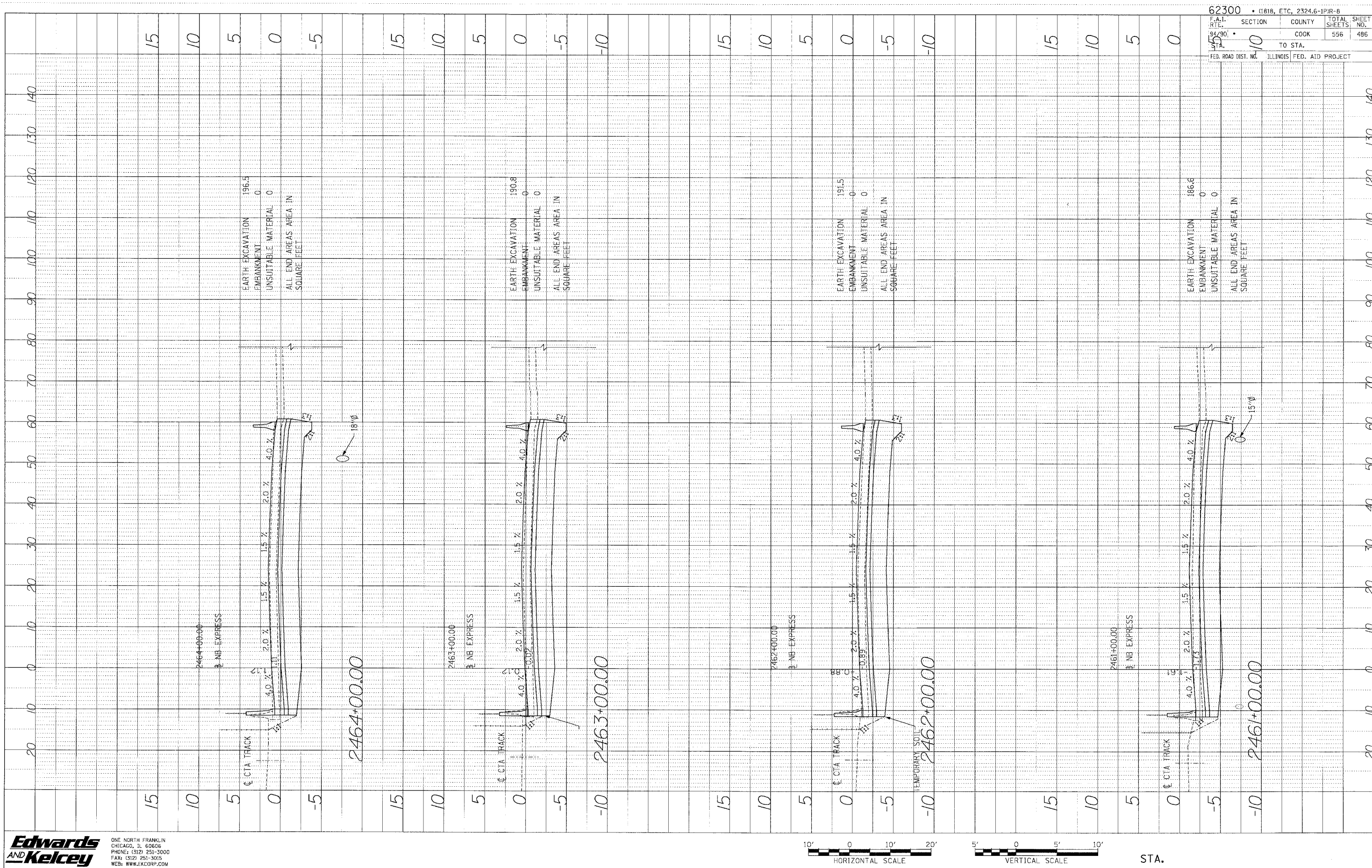


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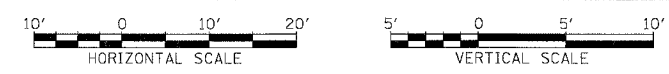


PROFILE  
 NO. 9006  
 NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 STATUS: \_\_\_\_\_  
 DATE: \_\_\_\_\_



|                                   |                                      |
|-----------------------------------|--------------------------------------|
| 62300 • (1818, ETC, 2324.6-1PJR-8 |                                      |
| F.A.I. NO. 94/90                  | SECTION COUNTY TOTAL SHEETS: 556 486 |
| DATE 9/2/90                       | COOK                                 |
| STATION 145                       | TO STA. 10                           |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT            |

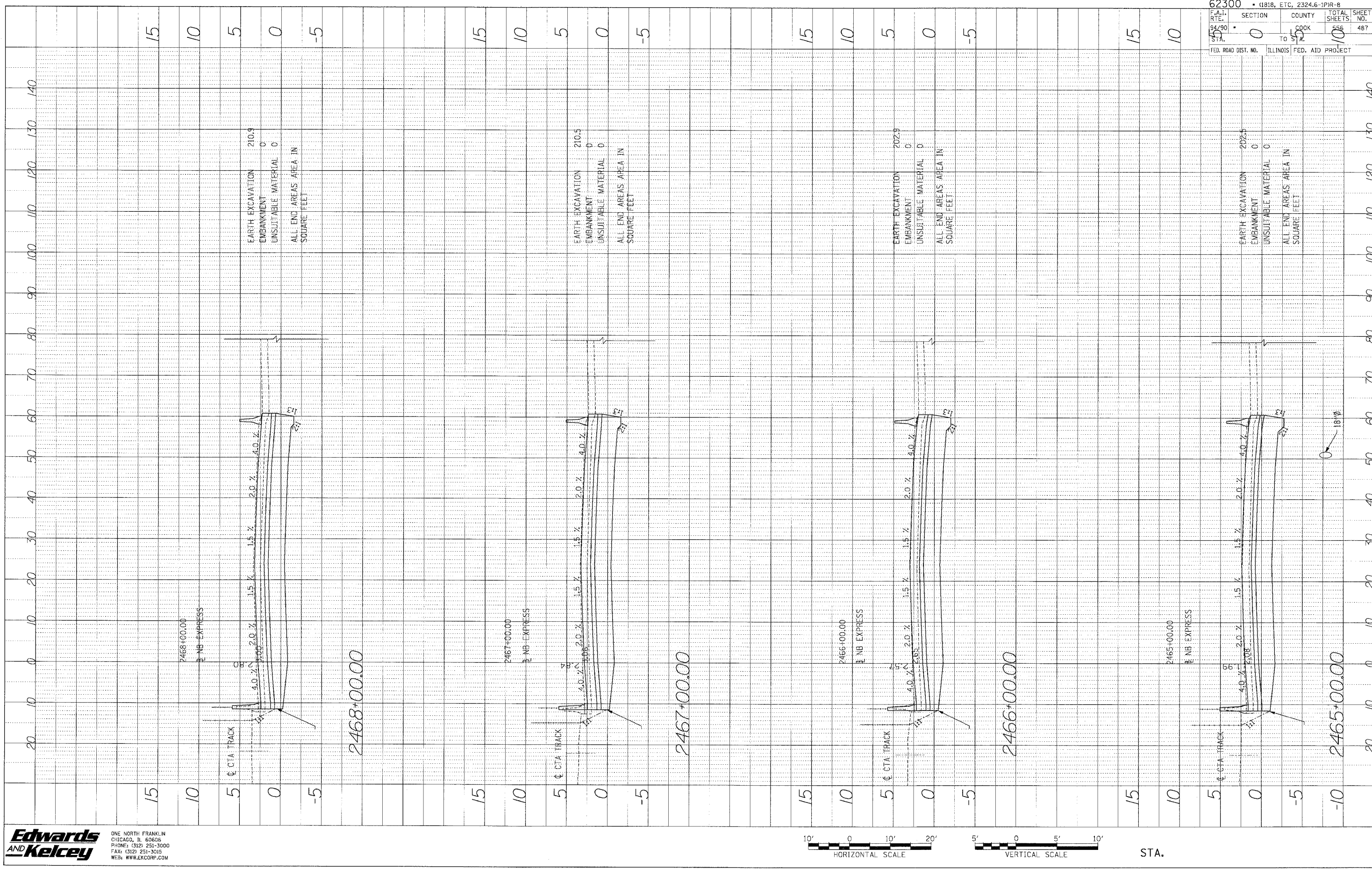
**Edwards and Kelcey**  
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 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM



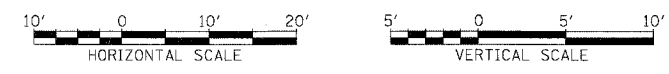
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PROFILE SHEET  
 DATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 DRAWN BY \_\_\_\_\_  
 PROJECT NO. \_\_\_\_\_



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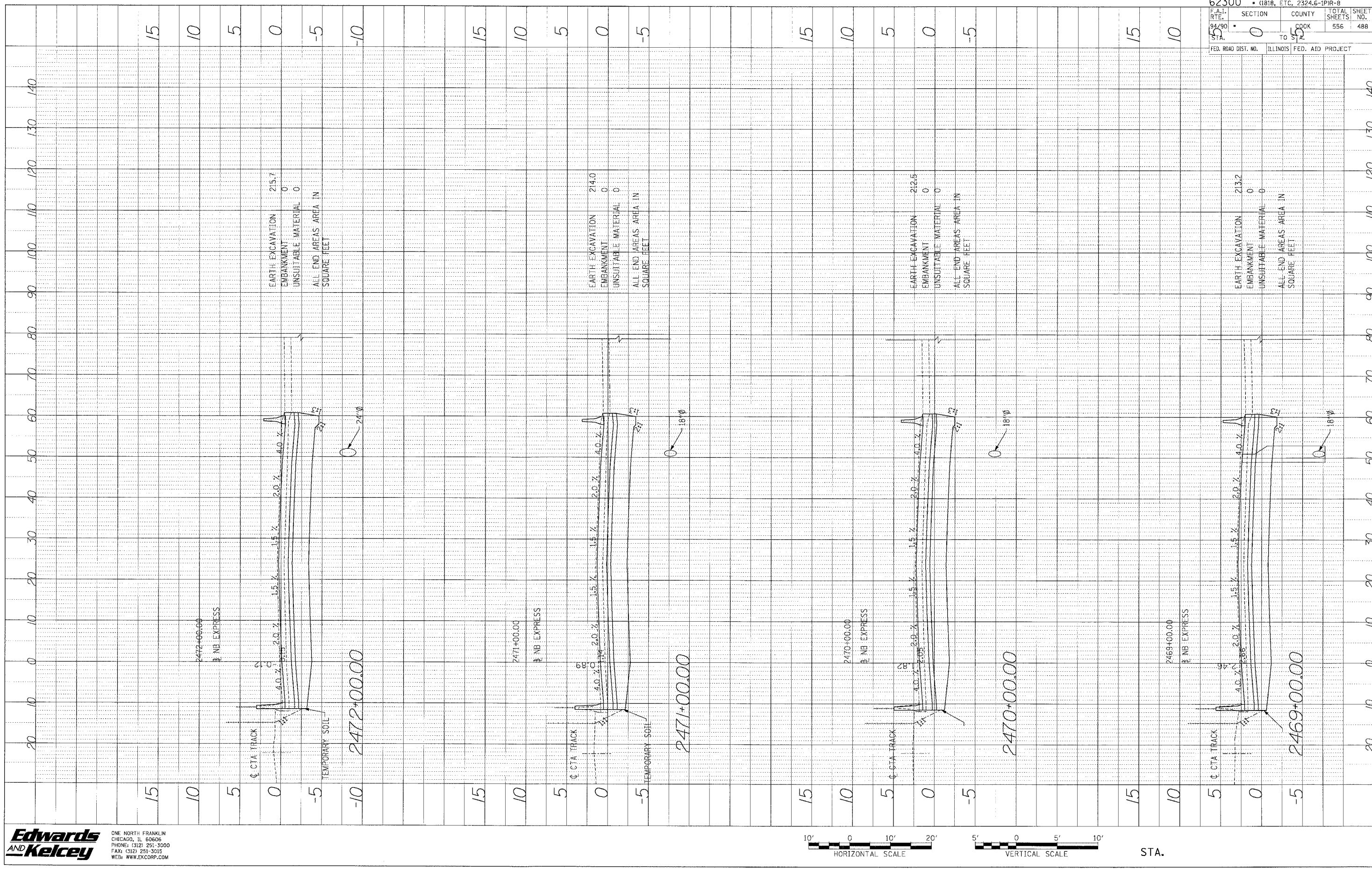
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|------------------------------------|-----------|
| 62300 • (1818, ETC., 2324.6-IPR-B) |           |
| SECTION                            | COUNTY    |
| 0                                  | COOK      |
| TO 10                              |           |
| ILLINOIS FED. AID PROJECT          |           |
| TOTAL SHEETS                       | SHEET NO. |
| 556                                | 487       |

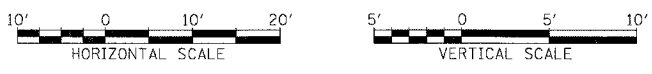
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PROFILE SHEET NO. \_\_\_\_\_ BY \_\_\_\_\_ DATE \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_ CHECKED BY \_\_\_\_\_  
 NO. \_\_\_\_\_ DRAWN BY \_\_\_\_\_



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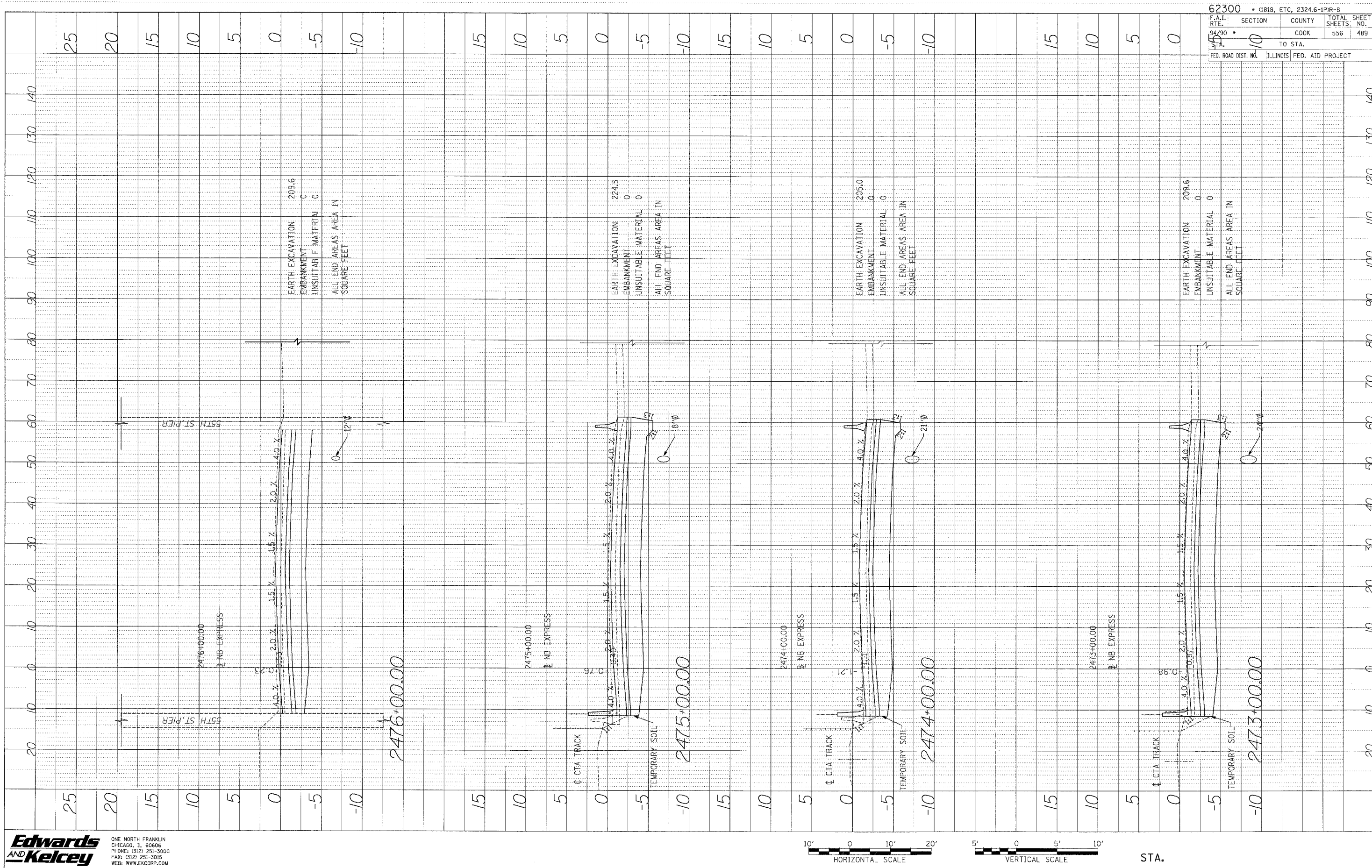


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|                                   |                           |
|-----------------------------------|---------------------------|
| 62300 • (1818, ETC., 2324.6-1PR-8 |                           |
| F.A.I. RTE. 94/90                 | SECTION 0                 |
| STA. 55                           | TO STA. 55                |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT |
| COUNTY COOK                       | TOTAL SHEETS 556          |
| SHEET NO. 488                     |                           |

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PROFILE SURVEYED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 GRADES CHECKED BY \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_ STRUCTURE NOTATION C-X-C

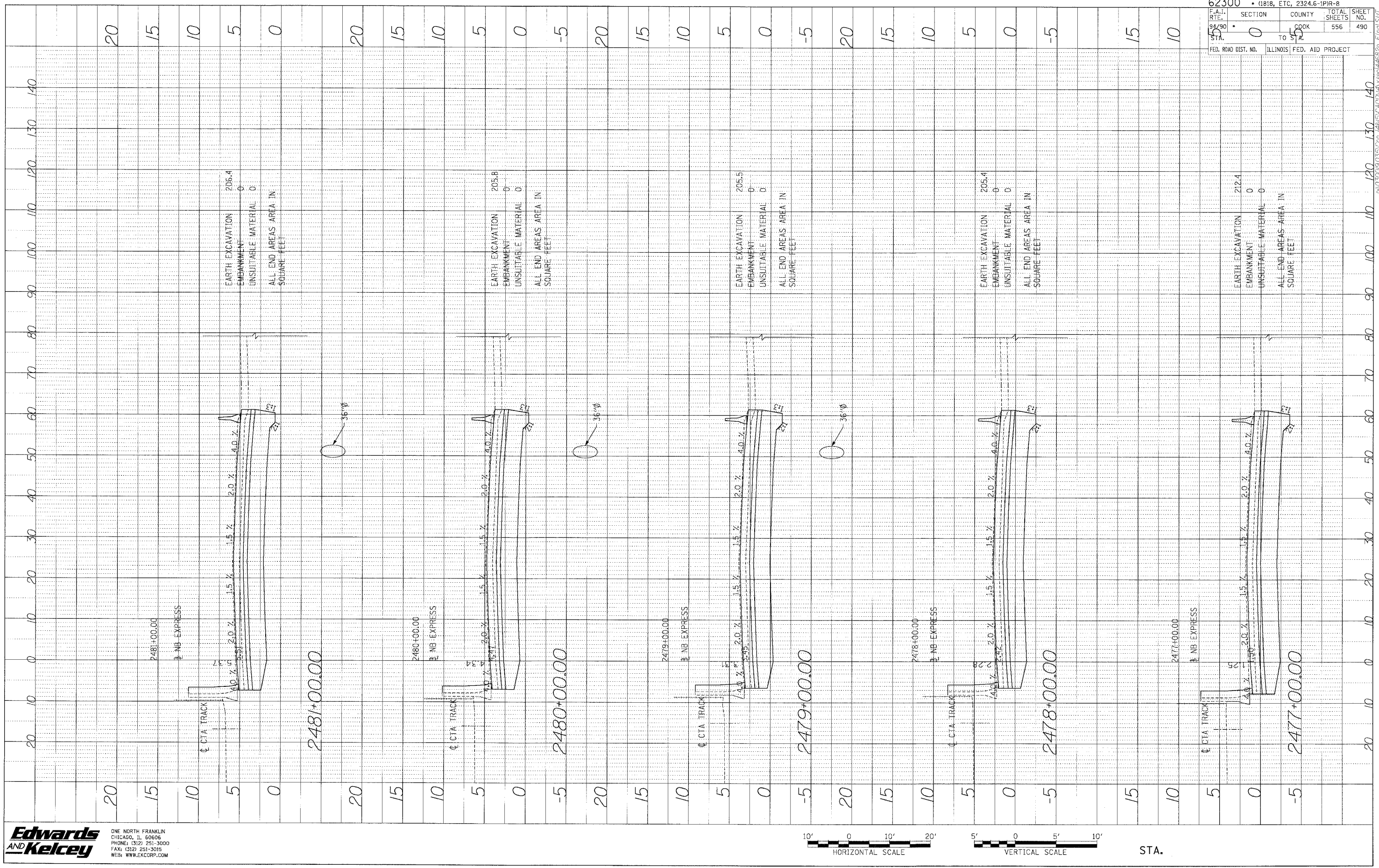


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 FAX: (312) 251-3015  
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62300 • (1818, ETC, 2324.6-1PJR-8)  
 F.A.I. SECTION COUNTY TOTAL SHEET  
 94/90 10 COOK 556 489  
 SHEET NO. NO.  
 TO STA.  
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

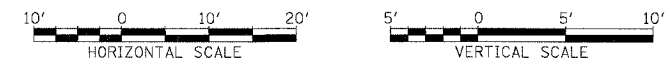
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 CHECKED BY \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 NO. \_\_\_\_\_  
 STRUCTURE NOTATION CHFD



|                     |                             |
|---------------------|-----------------------------|
| 62300               | • (1818, ETC, 2324.6-1PIR-8 |
| PLANT               | SECTION                     |
| ROUTE               | COUNTY                      |
| 94/90               | COOK                        |
| STA.                | TO STA.                     |
|                     | 556                         |
|                     | 490                         |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |

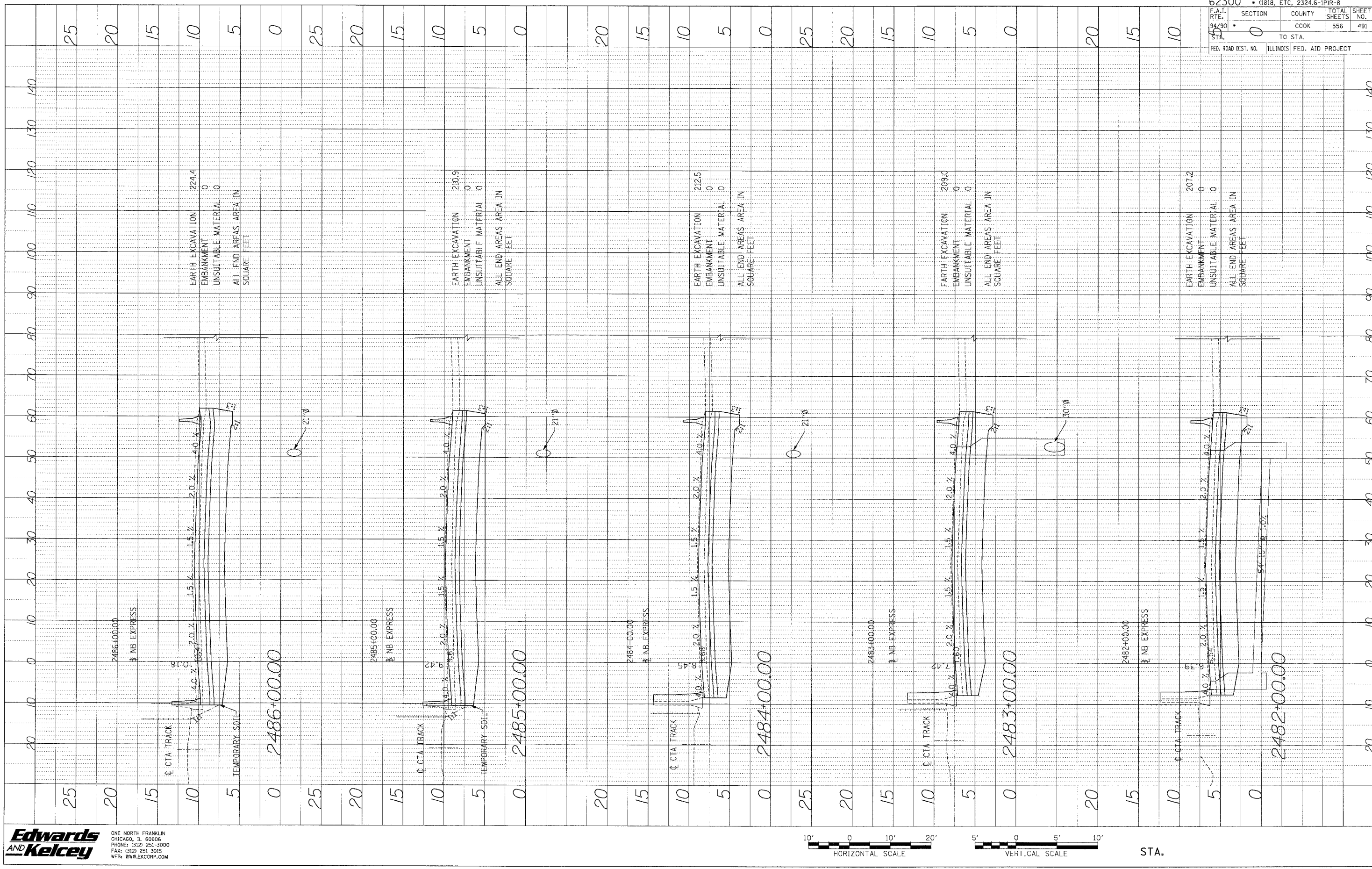
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 PHONE: (312) 251-3000  
 FAX: (312) 251-3035  
 WEB: WWW.EKCORP.COM



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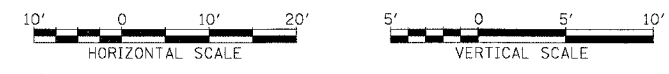
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 NOTED CHECKED BY  
 NO. STRUCTURE NUMBER OR NO.



|                                   |                                                |
|-----------------------------------|------------------------------------------------|
| 62300 • (1818, ETC, 2324.6-1PIR-8 |                                                |
| F.A.T. R.T.E. STA. 94+90          | SECTION COUNTY TOTAL SHEETS NO. 0 COOK 556 491 |
| TO STA. 155                       |                                                |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT                      |

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

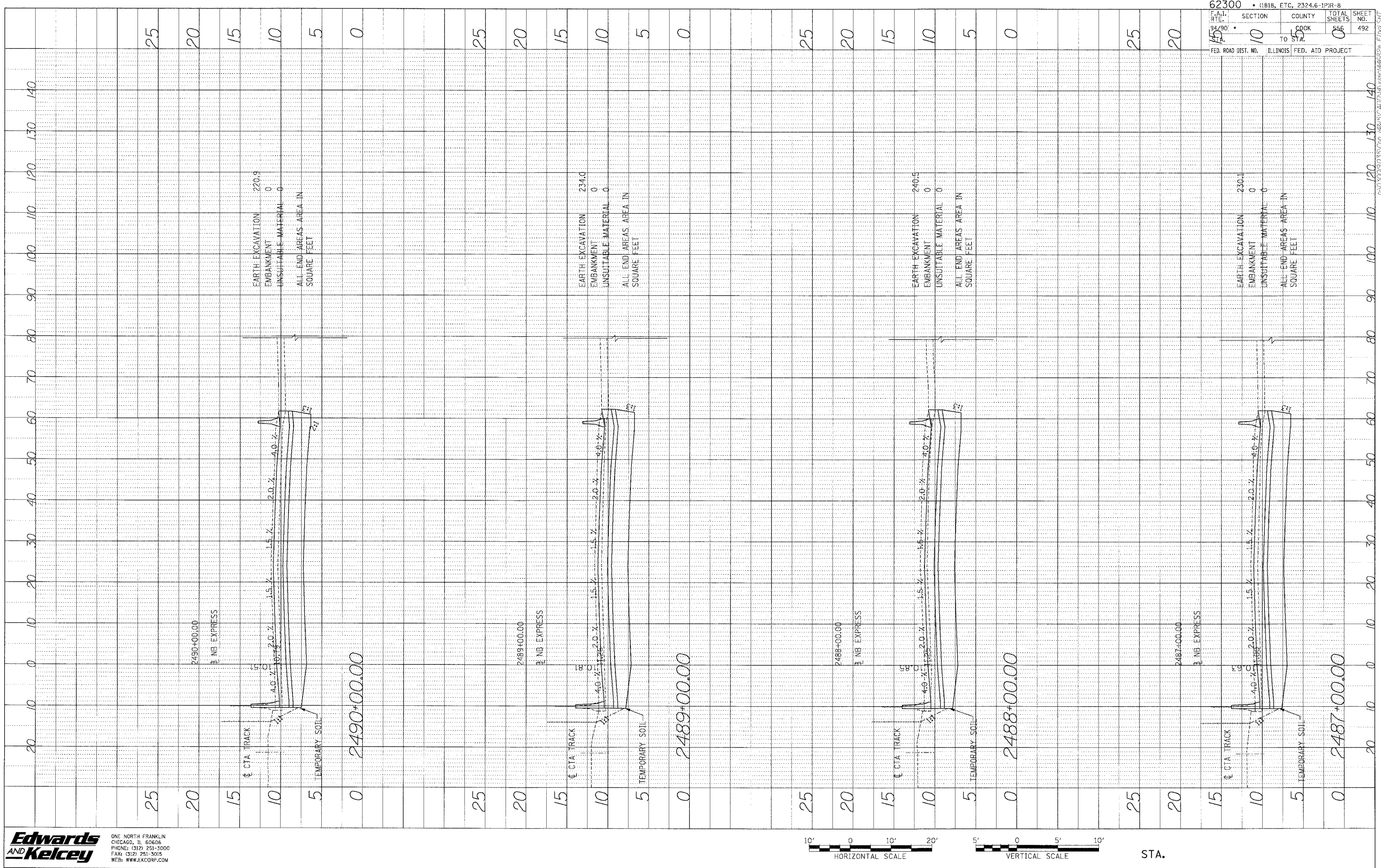


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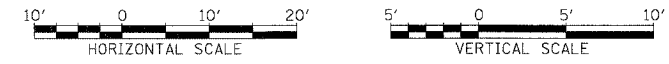
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PROFILE DRAFTER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_



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 FAX: (312) 251-3015  
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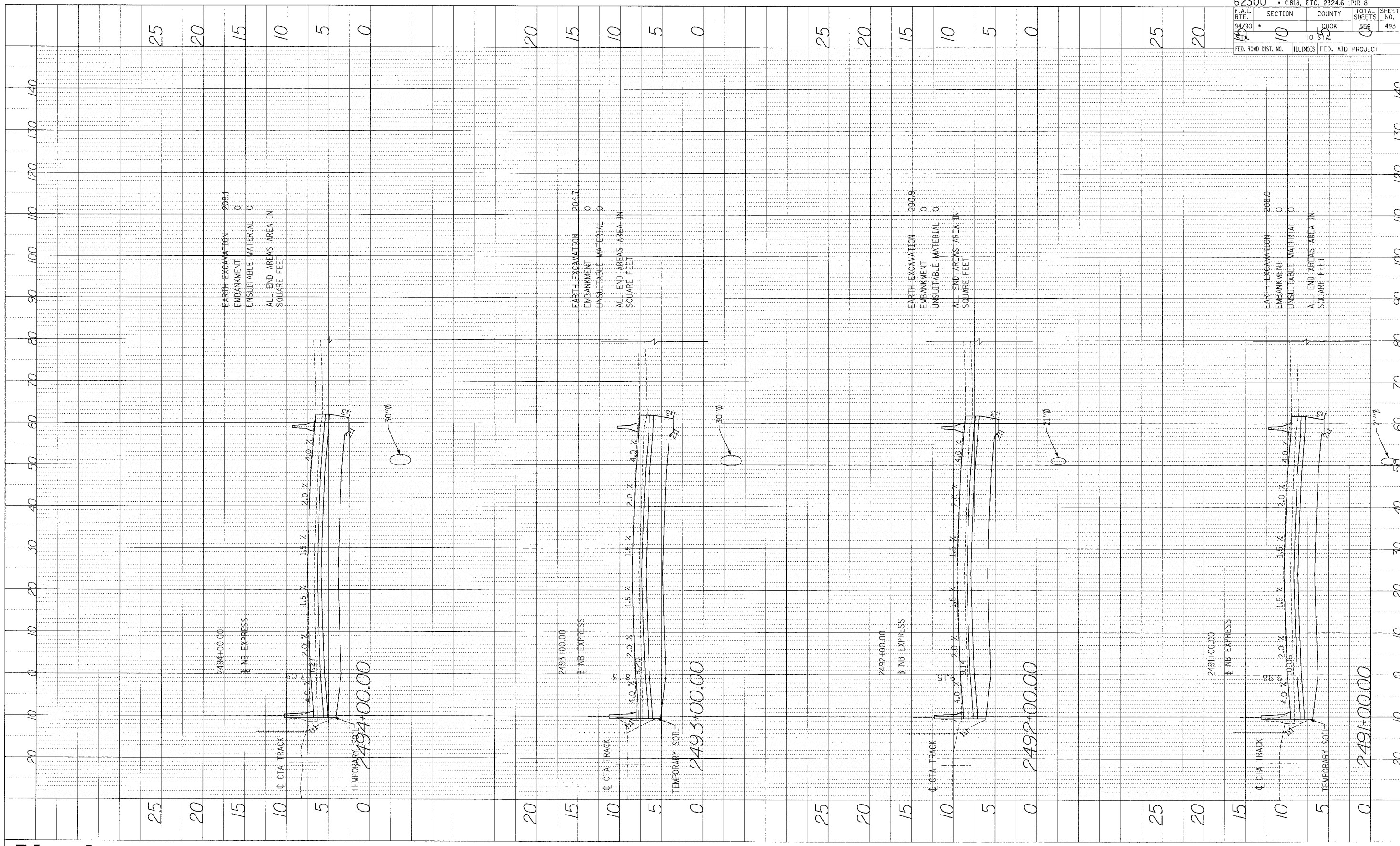


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|                              |                           |
|------------------------------|---------------------------|
| 62300                        | (1818, ETC, 2324.6-1PJR-8 |
| F.A.I. R.T.E. 94/90          | SECTION 10                |
| COOK                         | COUNTY                    |
| TO STA. 556                  | TOTAL SHEETS 492          |
| FED. ROAD DIST. NO. ILLINOIS | FED. AID PROJECT          |

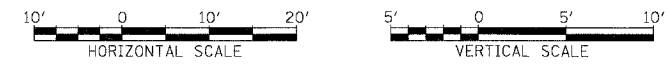
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PROFILE DERIVED BY DATE  
 GRADES CHECKED  
 NOTE BOOK STRUCTURE NOTATING CHFD  
 NO.



|                     |                             |
|---------------------|-----------------------------|
| 62300               | • (1818, ETC, 2324.6-1PIR-8 |
| F.A.L. RTE. 15      | SECTION 10                  |
| 94/90               | COUNTY COOK                 |
| TO STA. 15          | TOTAL SHEETS 556            |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |
|                     | SHEET NO. 493               |

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 CHICAGO, IL 60606  
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 FAX: (312) 251-3035  
 WEB: WWW.EKCORP.COM

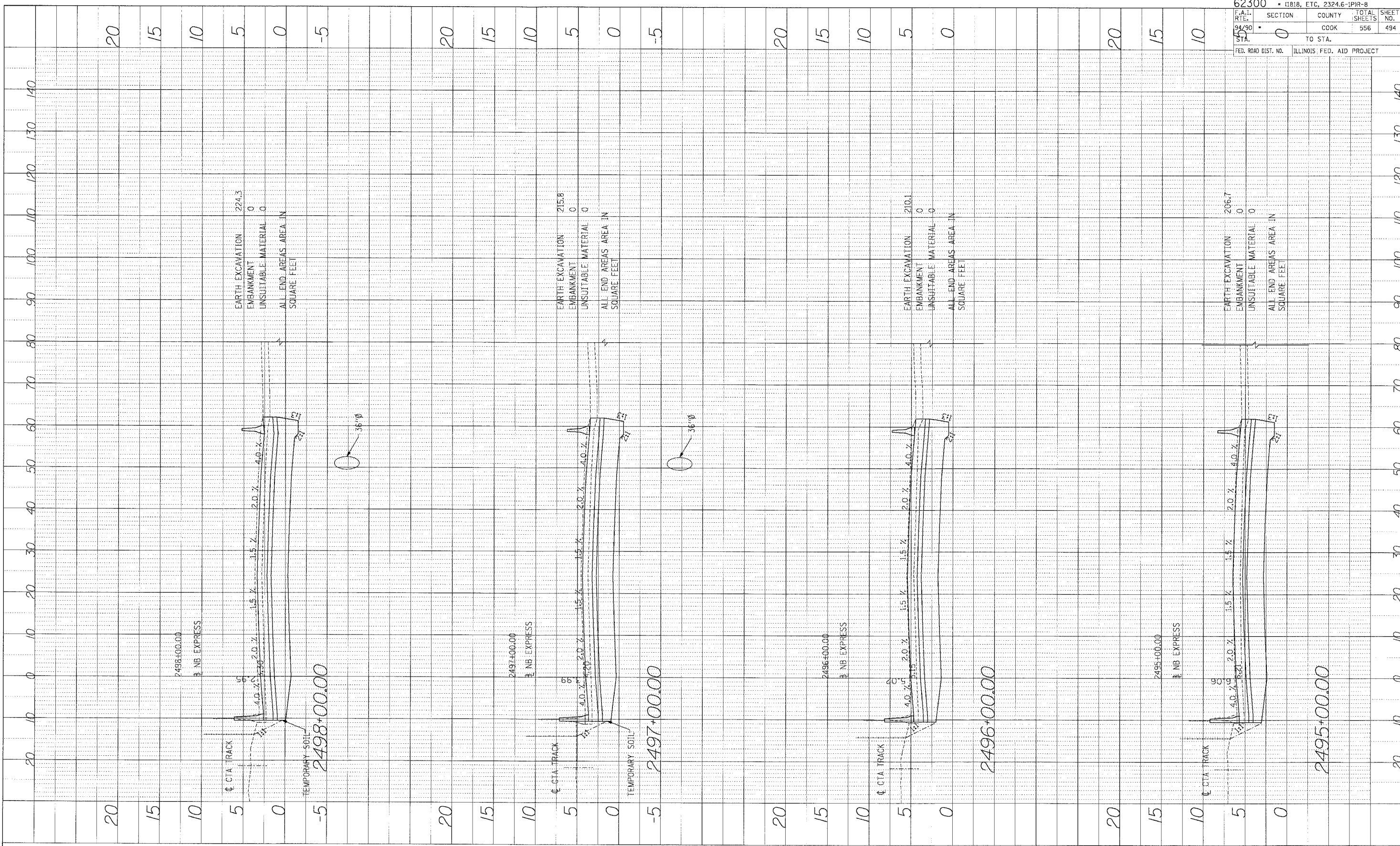


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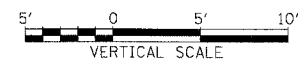
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PROFILE SURVEYS  
 BY DATE  
 CHECKED BY  
 NO. OF SHEETS  
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 NO. OF SHEETS



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 CHICAGO, IL 60606  
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 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM

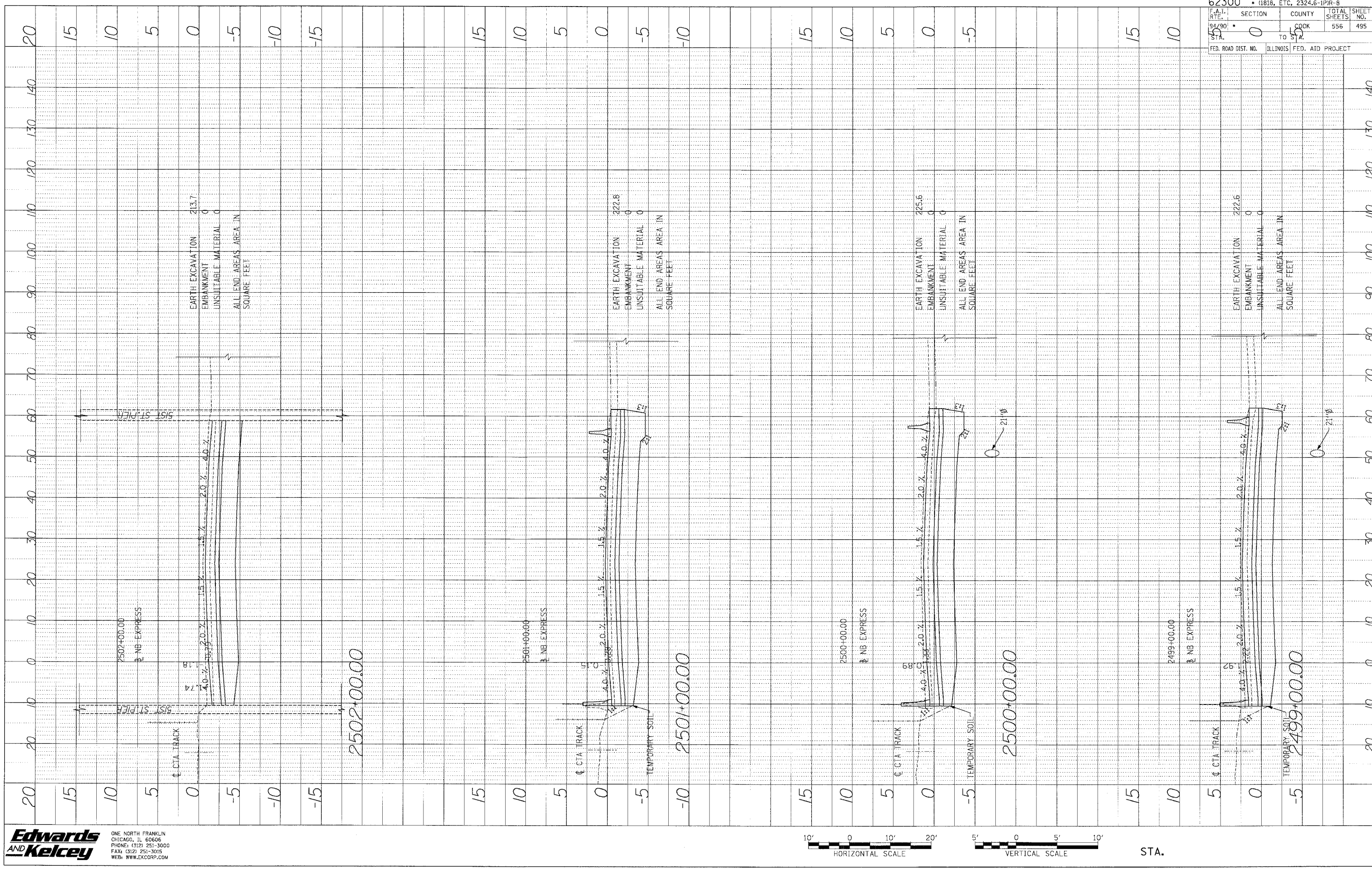


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|                           |                           |
|---------------------------|---------------------------|
| 62300                     | • 11818, ETC, 23246-IPR-8 |
| P.A.L. FILE NO. 94-90-55  | SECTION 0                 |
| TO STA.                   | COUNTY COOK               |
| FED. ROAD DIST. NO.       | TOTAL SHEETS 556          |
| ILLINOIS FED. AID PROJECT | SHEET NO. 494             |

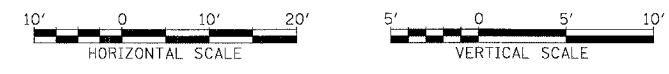
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PROFILE SURVEYED BY DATE  
 NOTED FOR GRADING CONTRACT NO. DATE  
 NO. STRUCTURE NO. PAVEMENT CRK



|                     |                             |
|---------------------|-----------------------------|
| 62300               | • (1818, ETC, 2324.6-1PJR-8 |
| F.A.I. R.T.E. 94/90 | SECTION 0                   |
| STA. 55             | COUNTY COOK                 |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |
| TOTAL SHEETS 556    | SHEET NO. 495               |

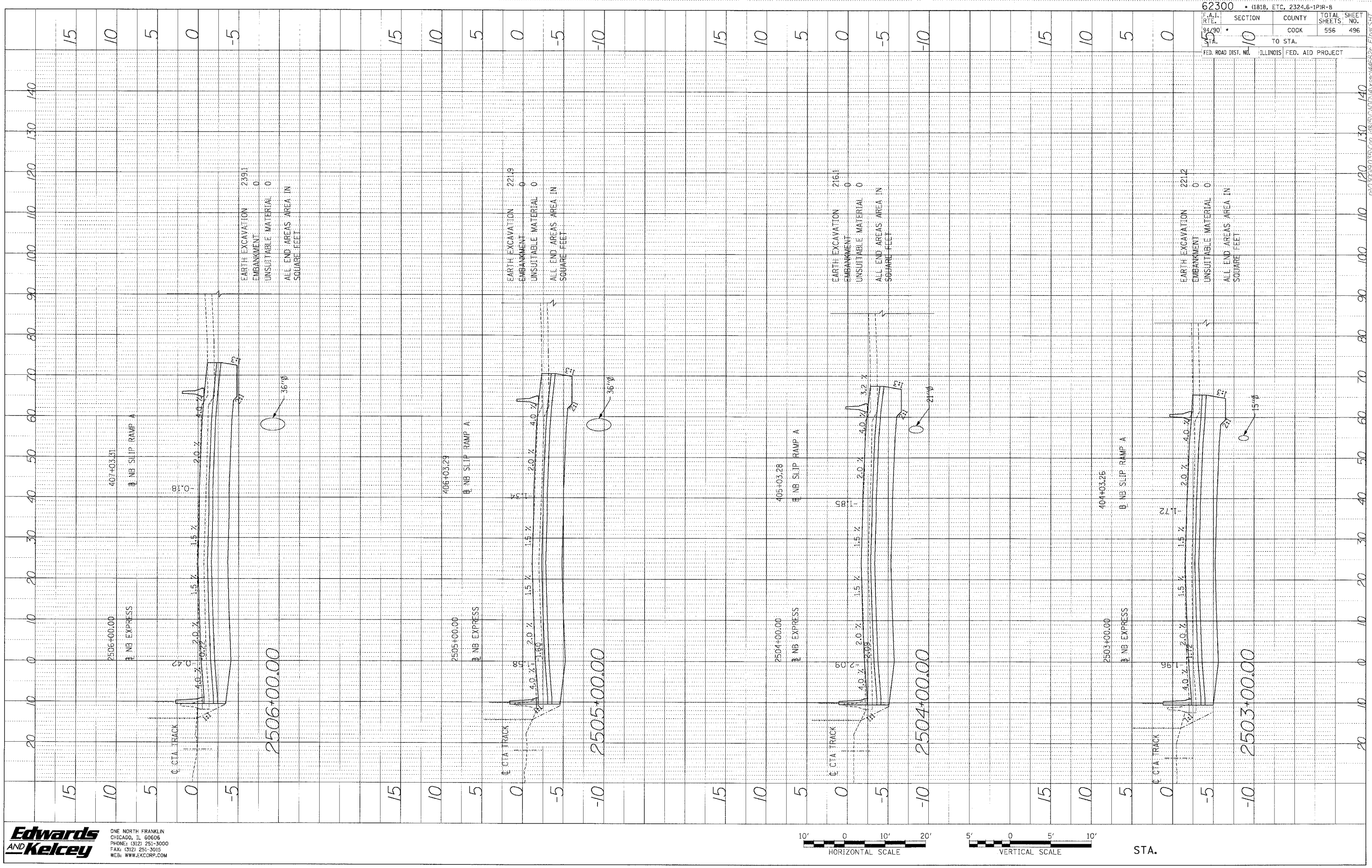
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PROFILE  
 SURVEY BY DATE  
 GRADES CHECKED  
 NOTT BOOK  
 NO. STRUCTURE MATERIALS USED



|                           |                           |
|---------------------------|---------------------------|
| 62300                     | (1818, ETC. 2324.6-1PIR-8 |
| F.A.I. RTE. 94/90         | SECTION 10                |
| TO STA. 55                | COUNTY COOK               |
| FED. ROAD DIST. NO. 10    | TOTAL SHEETS 556          |
| ILLINOIS FED. AID PROJECT | SHEET NO. 496             |

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

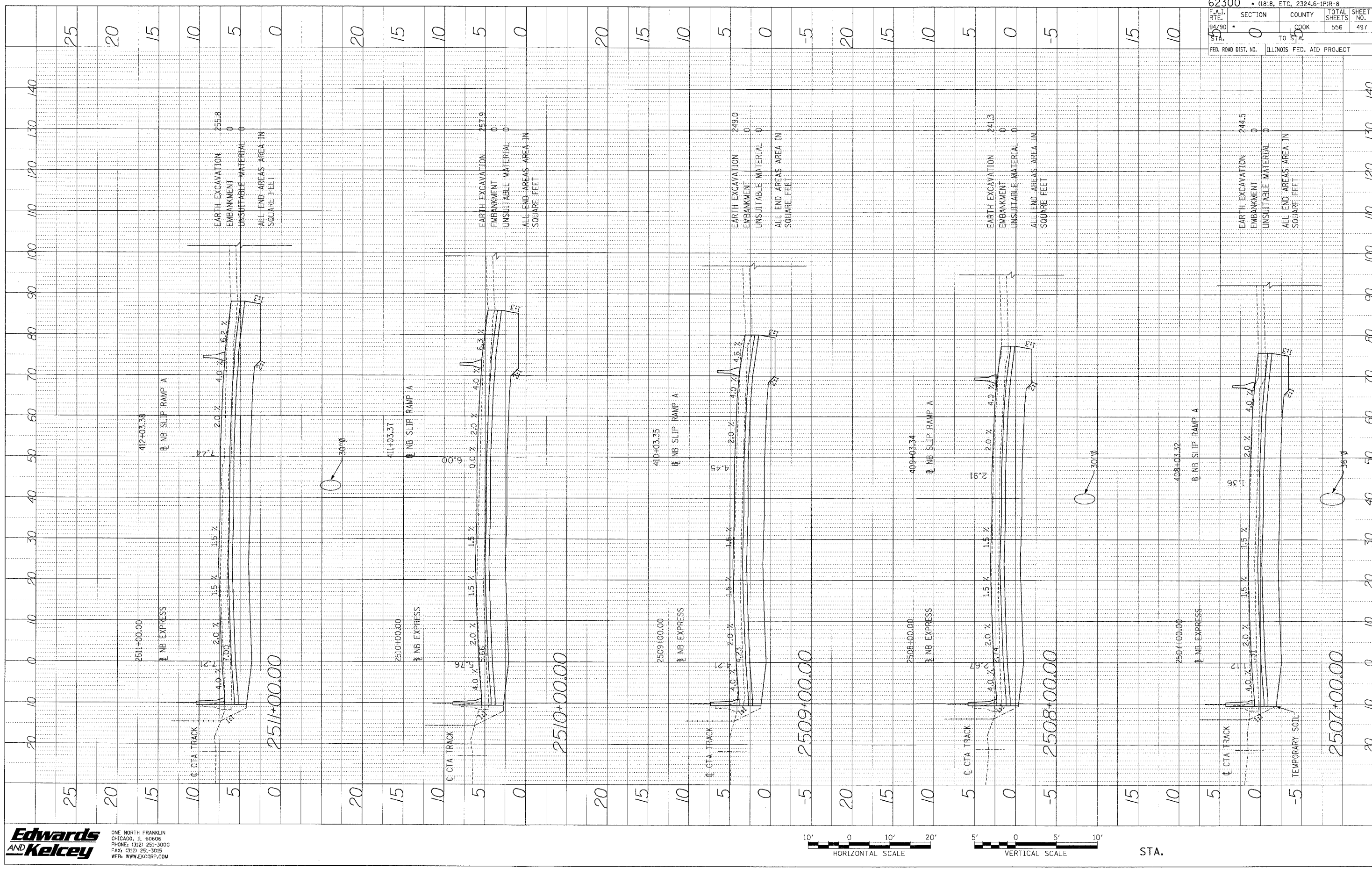


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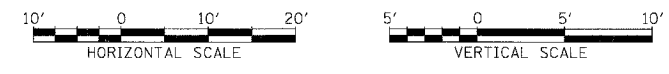


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 DRAWN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NO. \_\_\_\_\_



|                     |                            |                           |           |
|---------------------|----------------------------|---------------------------|-----------|
| 62300               | • (1818, ETC, 2324.6-1PR-8 |                           |           |
| SECTION             | COUNTY                     | TOTAL SHEETS              | SHEET NO. |
| 0                   | COOK                       | 556                       | 497       |
| FED. ROAD DIST. NO. |                            | ILLINOIS FED. AID PROJECT |           |

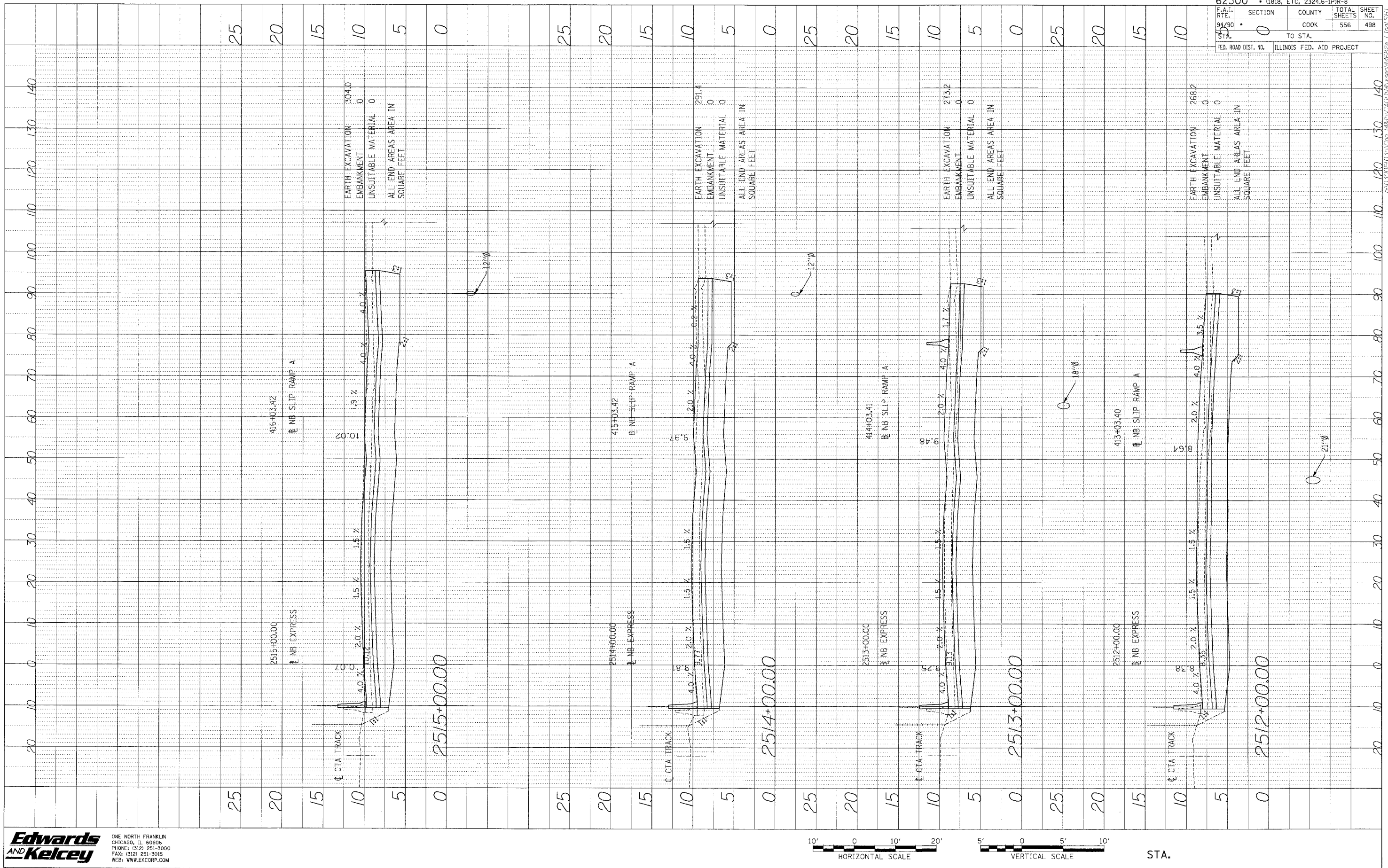
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 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM



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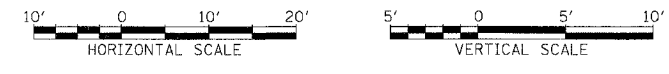
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PROFILE DATE BY  
 NOTE BOOK UPDATES CHECKED  
 NO. STRUCTURE NOTATION CIRCUIT



|                                   |                                       |
|-----------------------------------|---------------------------------------|
| 62300 • (1818, ETC, 2324.6-1PJR-8 |                                       |
| F.A.I. R.F.E. STA.                | SECTION COUNTY TOTAL SHEETS SHEET NO. |
| 94/90                             | 0 COOK 556 498                        |
| FED. ROAD DIST. NO.               | ILLINOIS FED. AID PROJECT             |

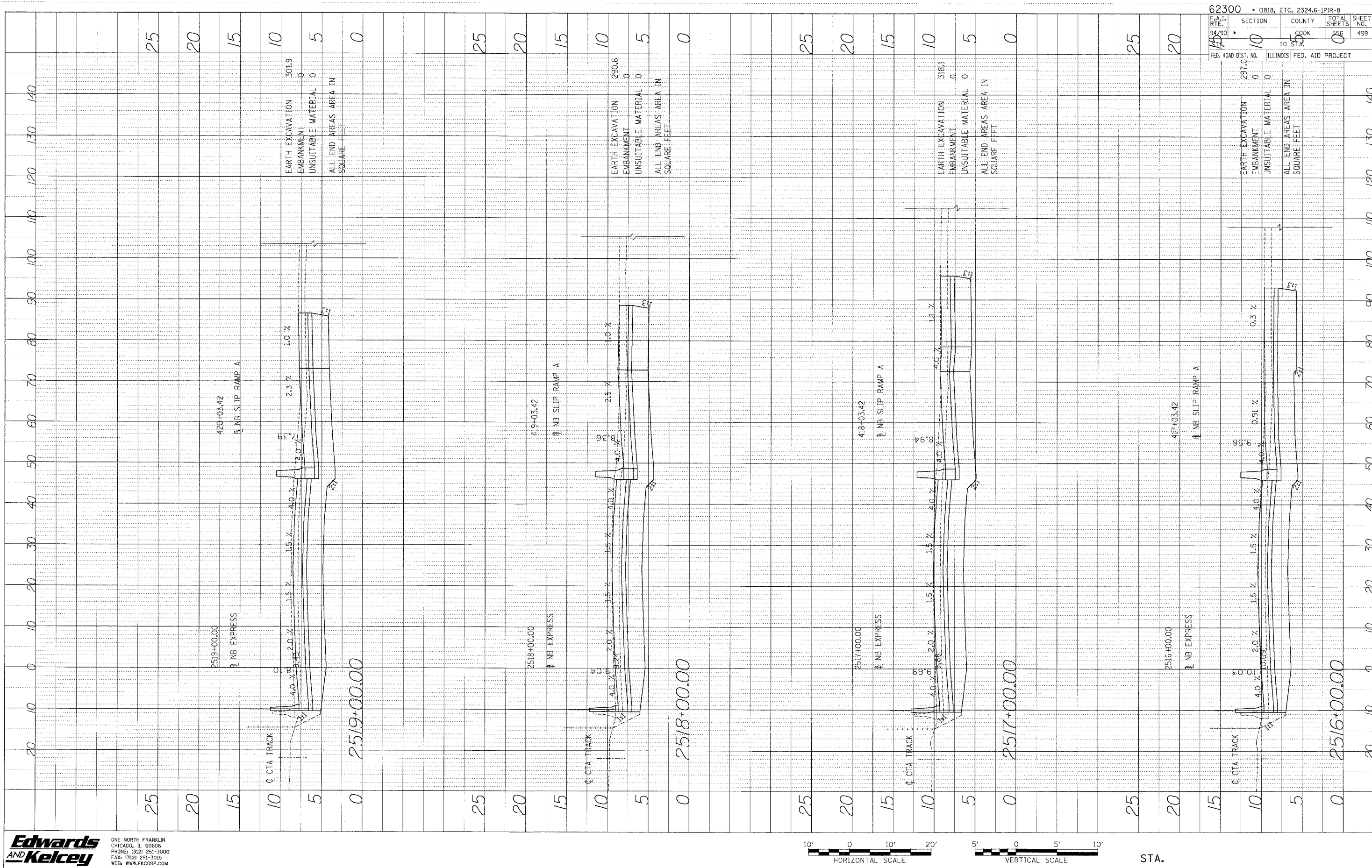
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 CHICAGO, IL 60606  
 PHONE: (312) 251-3000  
 FAX: (312) 251-3085  
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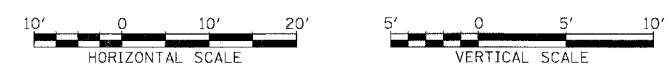
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PROFILE SUBMITTED BY DATE  
 DRAWN BY  
 CHECKED BY  
 NO. NO. DATE  
 SIGNATURE NOTATIONS CHFD



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 CHICAGO, IL 60606  
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 FAX: (312) 251-3015  
 WEB: WWW.EKCORP.COM



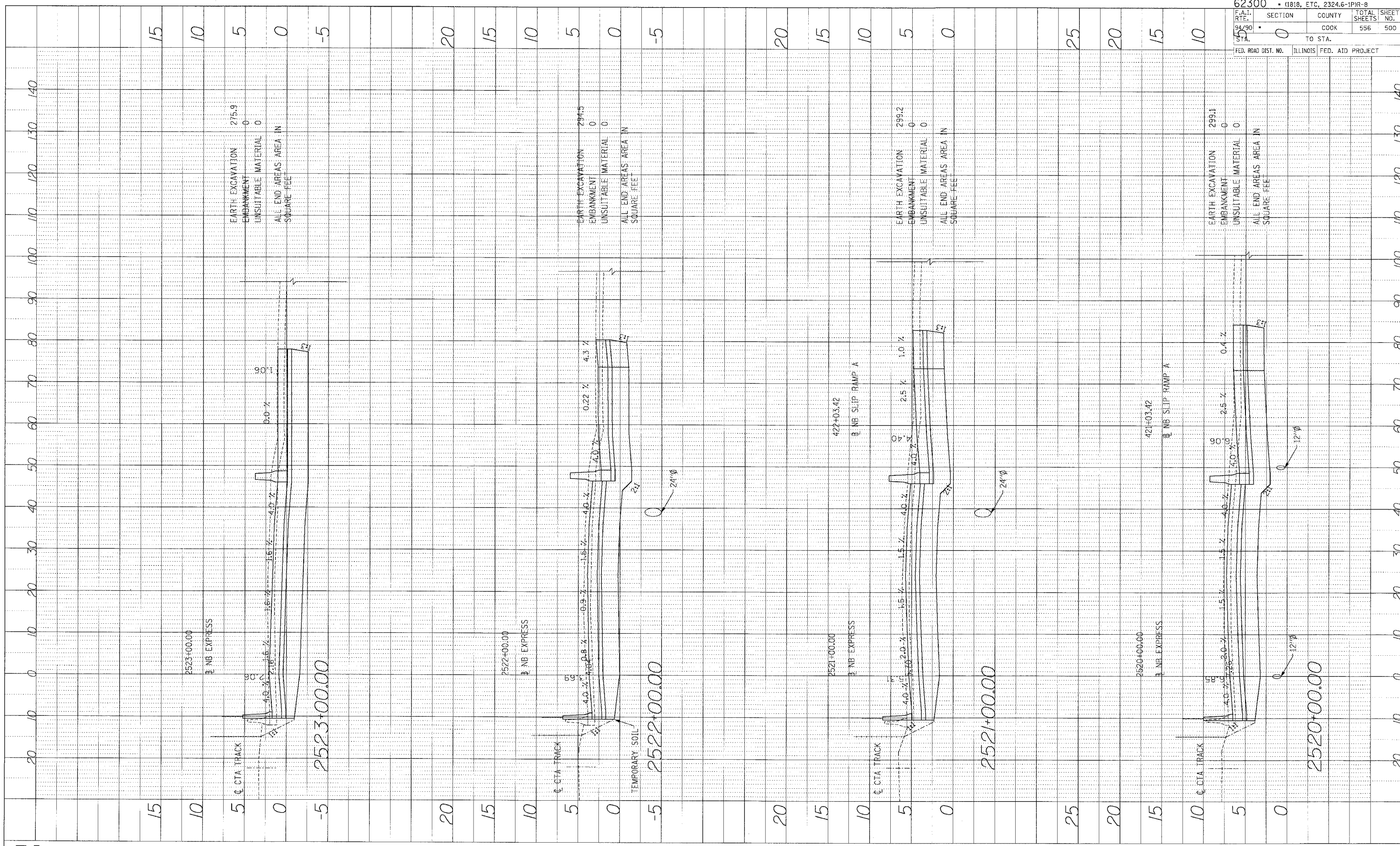
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 F.A.I. RY. 94/90  
 COUNTY COOK  
 SHEET NO. 499  
 TOTAL SHEETS 556  
 FEB. ROAD DIST. NO. TO STATE  
 ILLINOIS FED. AID PROJECT

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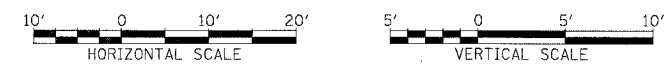


PROFILE SUBMITTED BY DATE  
 REVISIONS CHECKED  
 NO. DATE STRUCTURE MATRIAL CHG



|                     |                             |              |
|---------------------|-----------------------------|--------------|
| 62300               | • 11818, ETC, 2324.6-1P1R-8 |              |
| DATE                | SECTION                     | COUNTY       |
| 94/90               | 0                           | COOK         |
| STA                 | TO STA.                     | TOTAL SHEETS |
|                     |                             | 556          |
|                     |                             | 500          |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT   |              |

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 FAX: (312) 251-3015  
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