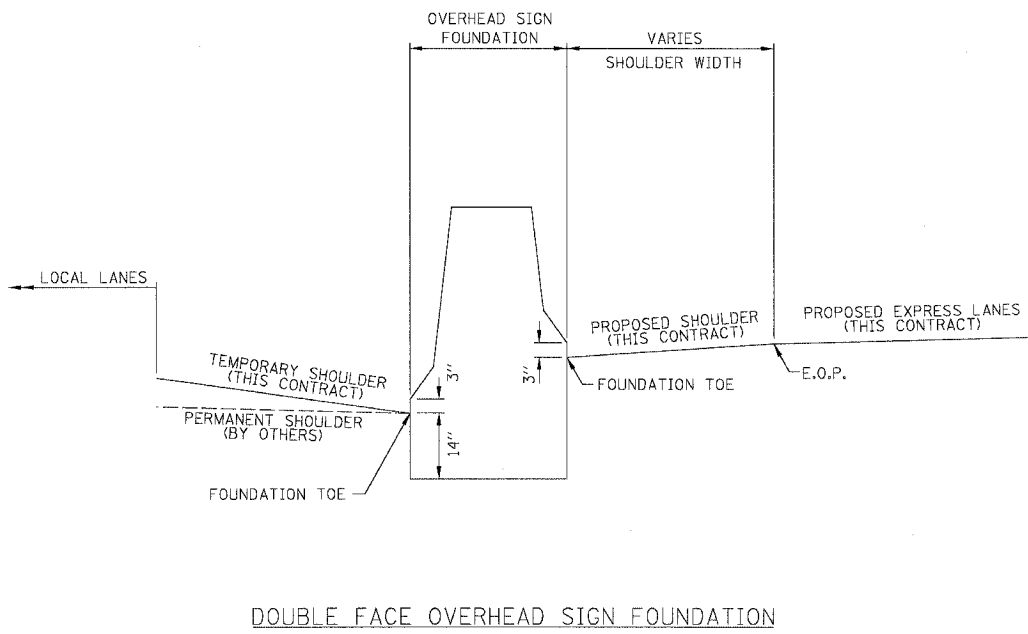
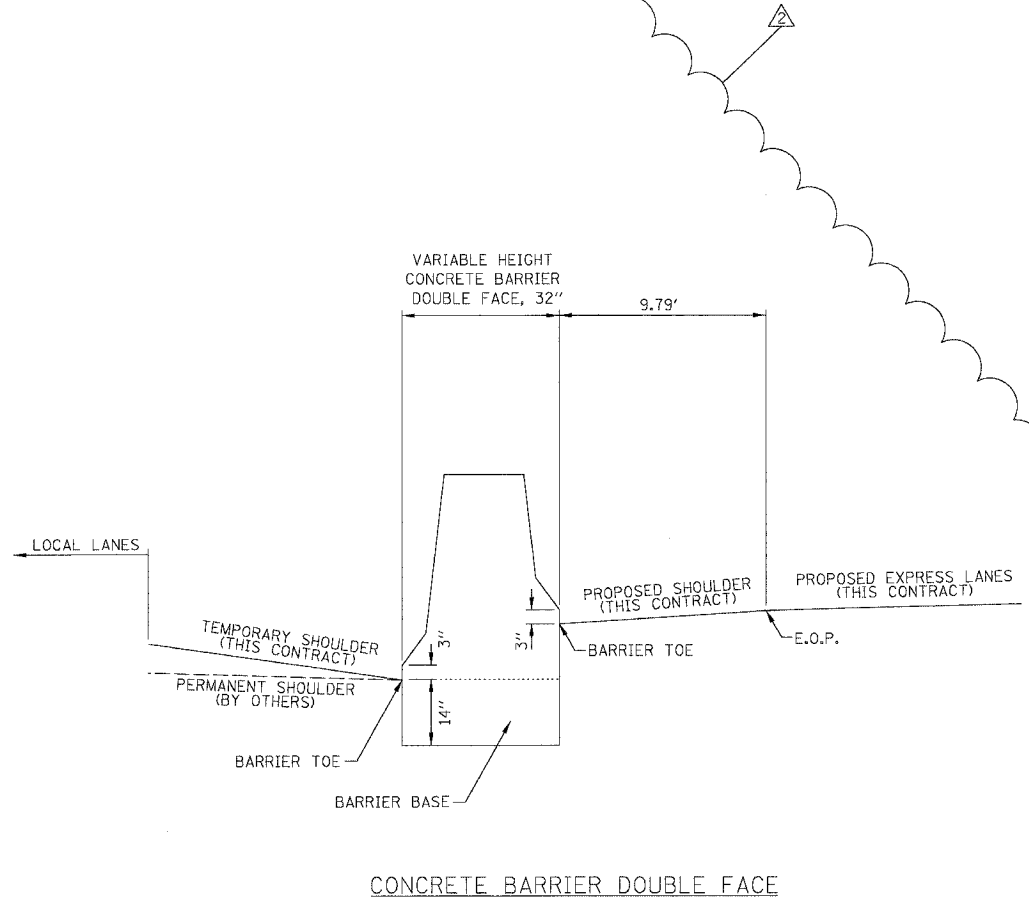


LOCAL LANE STATION	TOE OF FOUNDATION ELEV. ALONG LOCAL LANES	TOE OF FOUNDATION ELEV. ALONG EXPRESS LANES	SHOULDER WIDTH	E.O.P. ELEV. OUTSIDE EXPRESS LANES	EXPRESS LANE STATION
3531+94.62	-0.65	1.45	9.26	1.72	1531+70.59
3532+05.37	-0.54	1.47	9.26	1.76	1531+81.34
3542+94	6.86	7.41	6.16	7.66	719+57.80
3543+06	6.88	7.50	6.16	7.75	719+45.80
3550+81.86	-0.46	0.06	11.30	0.51	711+70.36
3550+92.61	-0.63	-0.10	11.30	0.35	711+59.61
3566+25	-4.59	-3.46	10.52	-3.04	1566+37.70
3566+35	-4.67	-3.54	10.52	-3.12	1566+47.70
3576+82.34	-0.37	0.27	9.59	0.65	1576+95.04
3576+92.34	-0.49	0.14	9.59	0.52	1577+05.04
3586+44	1.31	1.62	8.99	1.98	1586+56.66
3586+56	1.57	1.88	8.99	2.24	1586+68.66
3586+74	1.97	2.27	8.99	2.63	1586+86.66
3586+86	2.22	2.53	8.99	2.89	1586+98.66
3595+95	11.54	12.06	9.25	12.43	1596+07.66
3596+05	11.53	12.06	9.25	12.43	1596+17.66
3603+07.34	4.82	5.53	9.25	5.90	1603+20
3603+17.34	4.64	5.35	9.25	5.72	1603+30
3615+95	2.16	3.03	9.25	3.40	1616+07.66
3616+05	2.12	3.00	9.25	3.37	1616+17.66

LOCAL LANE STATION	E.O.P. ELEV. INSIDE LOCAL LANES	TOE OF BARRIER ELEV. ALONG LOCAL LANES
3529+50	-2.24	-2.83
3529+75	-2.07	-2.65
3530+00	-1.90	-2.47
3530+25	-1.73	-2.29
3530+50	-1.56	-2.12
3530+75	-1.39	-1.94
3531+00	-1.21	-1.73
3531+25	-0.98	-1.45
3531+50	-0.74	-1.16
3531+75	-0.52	-0.88
3532+00	-0.30	-0.61
3532+25	-0.09	-0.41
3532+50	0.13	-0.19
3532+75	0.35	0.02
3533+00	0.57	0.24
3533+25	0.80	0.46
3533+50	1.04	0.68
3533+75	1.28	0.92
3534+00	1.53	1.16
3534+25	1.78	1.40
3534+50	2.03	1.64
3534+75	2.29	1.89
727+50	2.64	2.23
727+25	2.90	2.49
727+00	3.16	2.73
726+75	3.42	2.97
726+50	3.66	3.24
726+25	3.91	3.55
726+00	4.17	3.86
725+75	4.42	4.17
725+50	4.59	4.35
725+25	4.75	4.51
725+00	4.92	4.68
724+75	5.08	4.83
724+50	5.25	5.00
724+25	5.42	5.17
724+00	5.58	5.33
723+75	5.75	5.51
723+50	5.91	5.67
723+25	6.08	5.84
723+00	6.25	6.01
722+75	6.43	6.19
722+50	6.60	6.37
722+25	6.77	6.54
722+00	6.94	6.72
721+75	7.11	6.89
721+68	7.16	6.95

EXPRESS LANE STATION	E.O.P. ELEV. OUTSIDE EXPRESS LANES	TOE OF BARRIER ELEV. ALONG EXPRESS LANES
1529+25	-0.87	-1.09
1529+50	-0.59	-0.81
1529+75	-0.30	-0.52
1530+00	-0.01	-0.23
1530+25	0.27	0.05
1530+50	0.56	0.34
1530+75	0.84	0.62
1531+00	1.13	0.91
1531+25	1.41	1.19
1531+50	1.63	1.39
1531+75	1.74	1.46
1532+00	1.83	1.49
1532+25	1.94	1.54
1532+50	2.03	1.64
1532+75	2.13	1.74
1533+00	2.24	1.85
1533+25	2.33	1.94
1533+50	2.44	2.05
1533+75	2.53	2.14
1534+00	2.64	2.25
1534+25	2.73	2.34
1534+50	2.84	2.45
1534+75	2.94	2.55
1535+00	3.04	2.65
1535+25	3.14	2.75
1535+50	3.24	2.85
1535+75	3.34	2.95
1536+00	3.45	3.05
1536+25	3.54	3.12
1536+50	3.65	3.18
1536+75	3.74	3.22
1537+00	3.84	3.28
1537+25	4.10	3.52
1537+50	4.39	3.81
1537+75	4.68	4.10
1538+00	4.96	4.38
1538+25	5.24	4.66
1538+50	5.51	4.93
1538+75	5.74	5.16
1539+00	5.98	5.40
1539+25	6.19	5.61
1539+50	6.39	5.81
1539+75	6.56	5.98
1540+00	6.72	6.14
1540+25	6.87	6.29
1540+50	6.99	6.41
1540+87	7.15	6.55



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

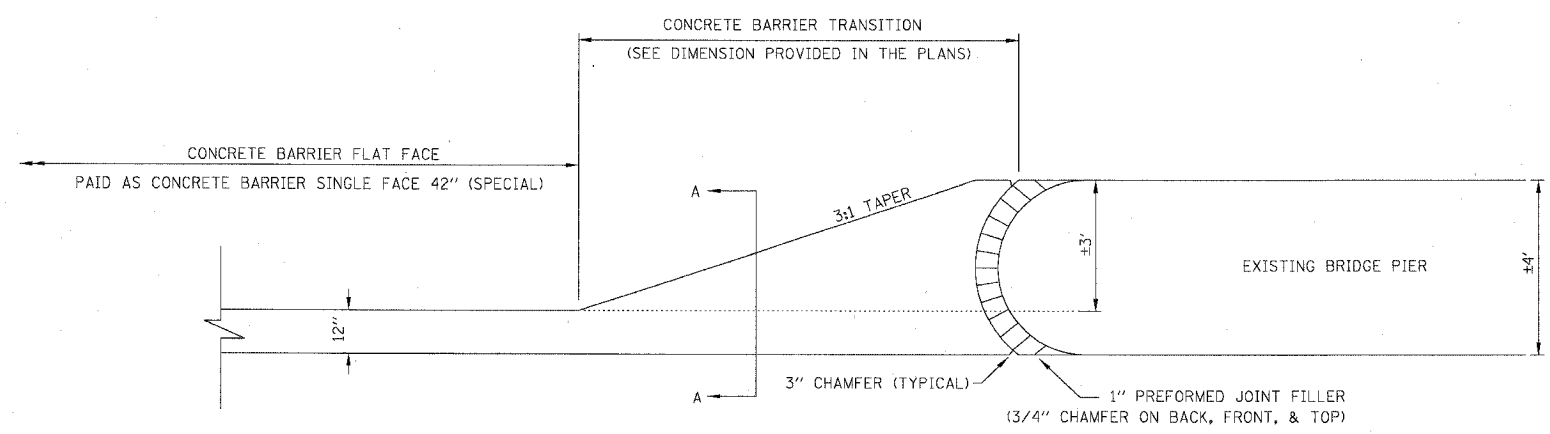
REVISIONS	
NAME	DATE
ADDENDUM 2	9/16/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
DOUBLE FACE BARRIER
ELEVATIONS
SCALE: NTS
DATE: 07/07/05
DRAWN BY: JDC
CHECKED BY: RS

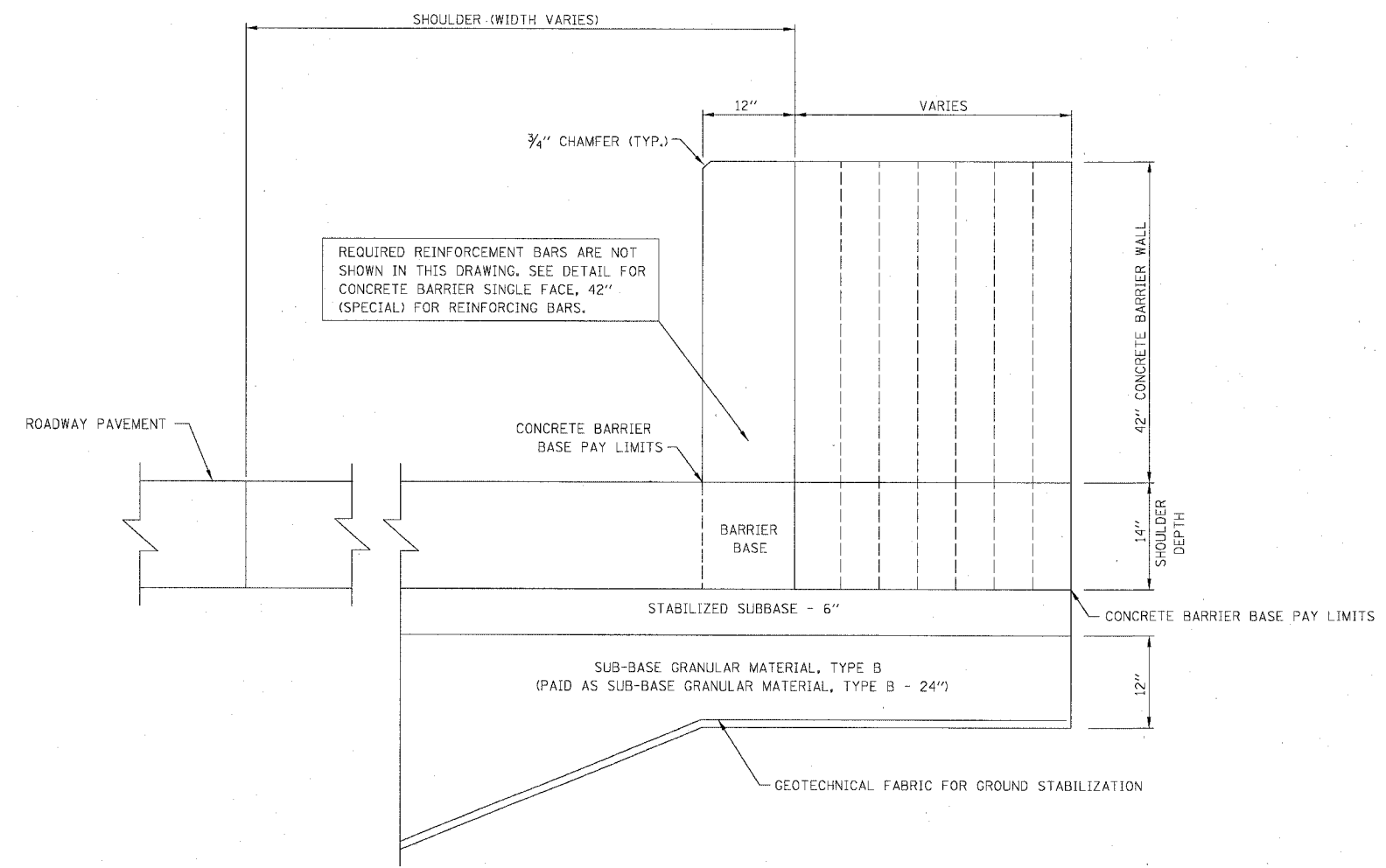
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16660000/04/09/05 SHEETS 660-15/207-14/09 04/28/05

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	402
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302 * (1818, ETC. 2324.6-1P/R-9				



CONCRETE BARRIER FLAT FACE
STA. 1575+63.01 TO 1576+02.11
STA. 1576+18.15 TO 1576+45.23



SECTION A-A

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER FLAT FACE

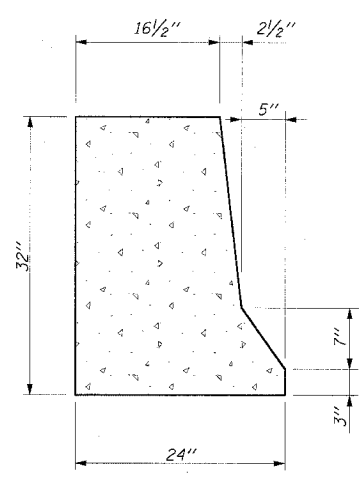
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DATE: 07/07/05

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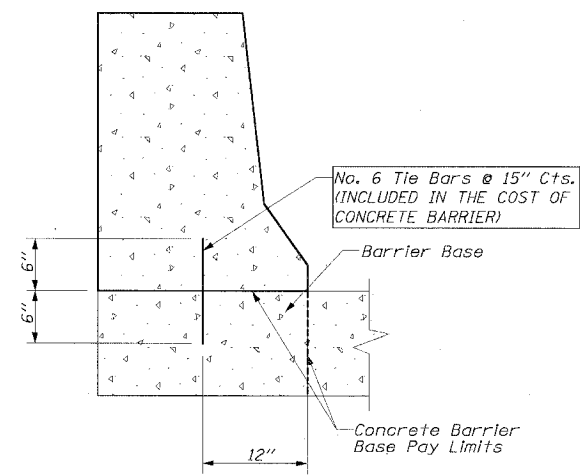
BOWMAN, BARRETT & ASSOCIATES INC.
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312.228.0100
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6/27/2005

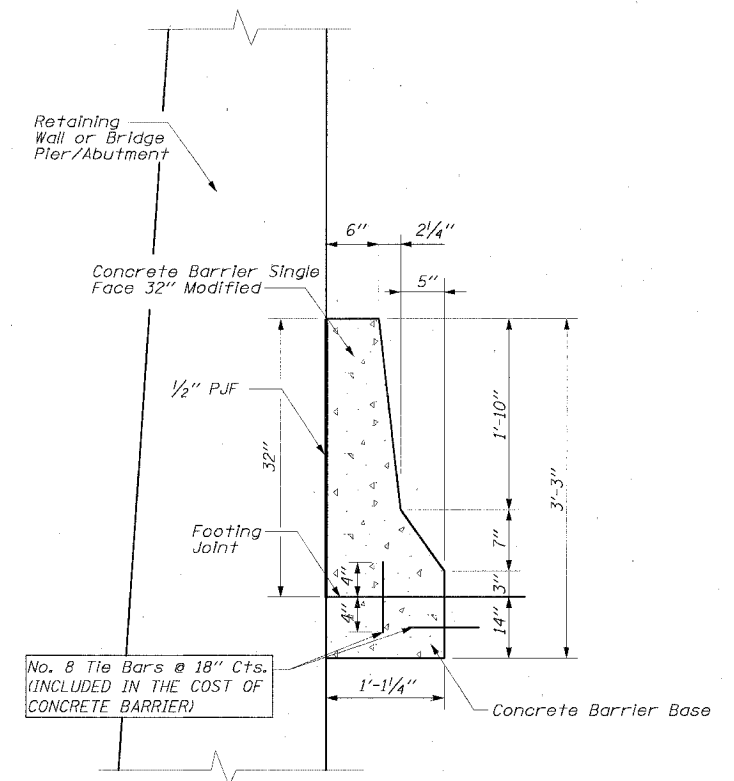
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	403
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		(1818, ETC, 2324.6-1PR-9		



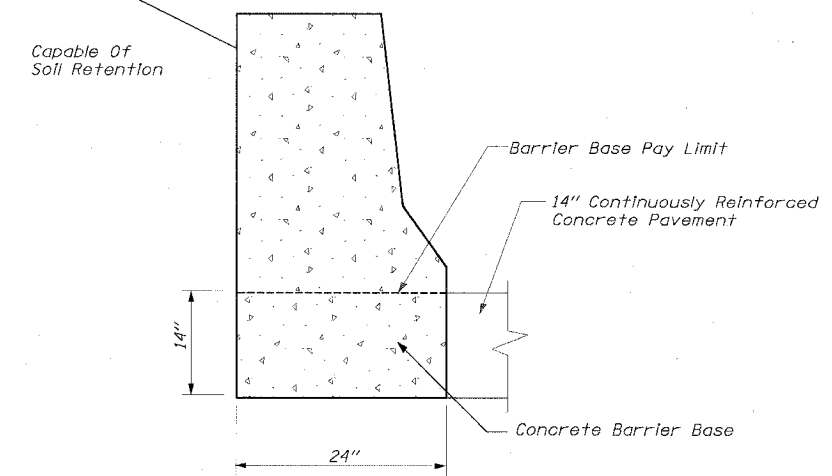
**CONCRETE BARRIER
TYPICAL SECTION**



ANCHORING METHOD

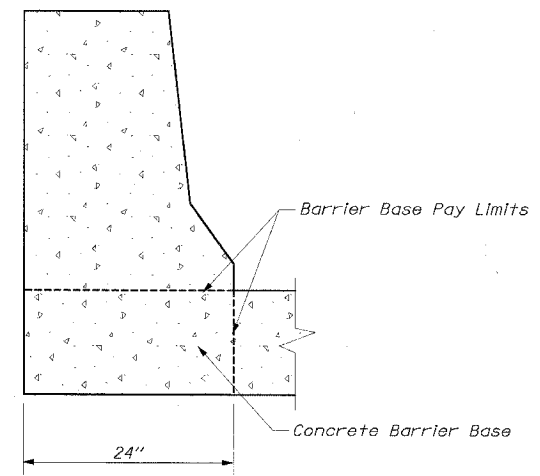


**CONCRETE BARRIER
SINGLE FACE, 32 IN, MODIFIED**
(Used Adjacent to Retaining Walls
or Bridge Piers or Abutments)

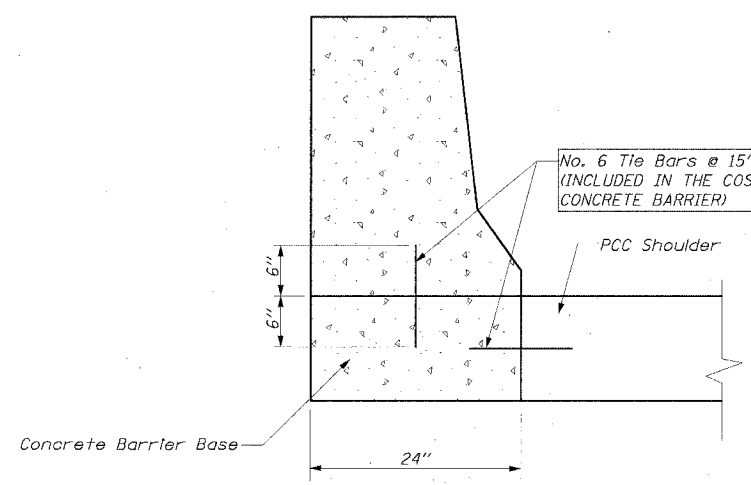


**CONCRETE BARRIER
ALTERNATE ANCHORING METHOD**

IF SOIL RETENTION IS USED, 14" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT MUST BE IN PLACE PRIOR TO BACKFILLING BARRIER WALL



**CONCRETE BARRIER INTEGRAL
WITH PCC SHOULDER SLAB**



**CONCRETE BARRIER ON
INDEPENDANT FOUNDATION**

- NOTE:
1. THE CONTRACTOR HAS THE OPTION OF CHOOSING BETWEEN ANCHORING METHODS SHOWN ON THIS SHEET.
 2. ALL TIE BARS SHOWN ON THIS SHEET SHALL BE EPOXY COATED.

**Edwards
AND Kelcey**
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION

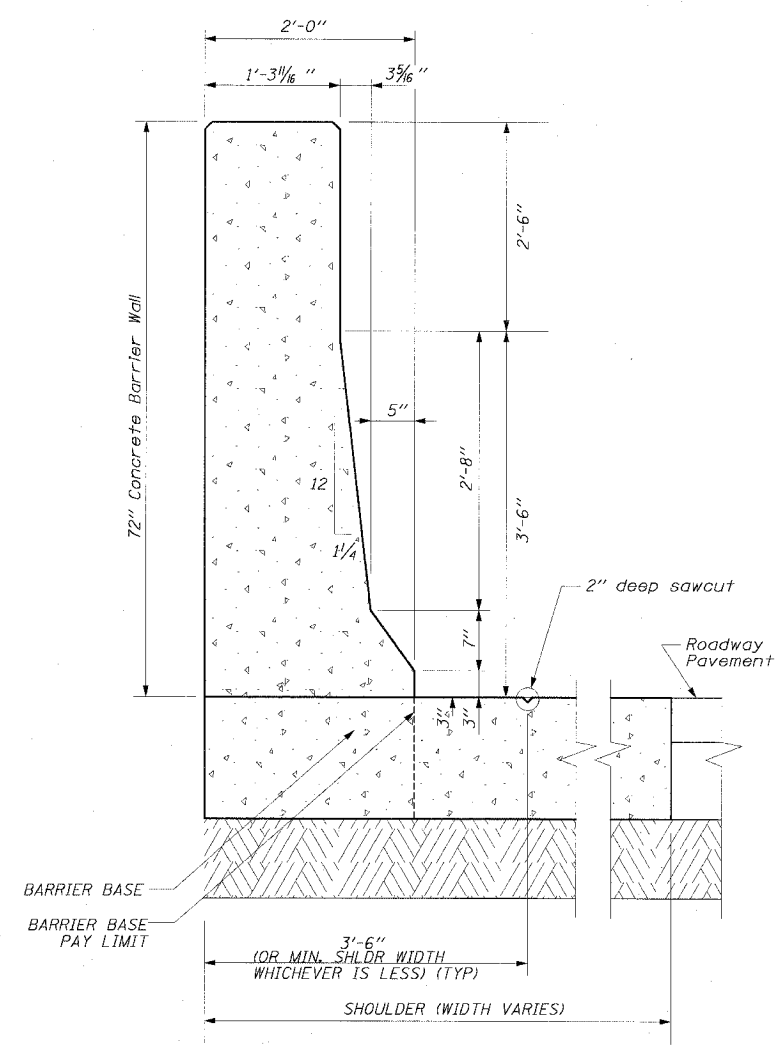
CIVIL DETAILS
CONCRETE BARRIER, SINGLE FACE, 32"

SCALE: NOT TO SCALE
DATE: 7/7/05

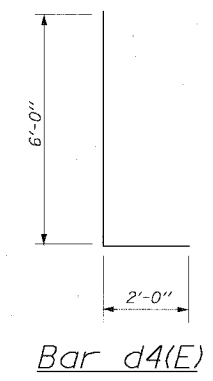
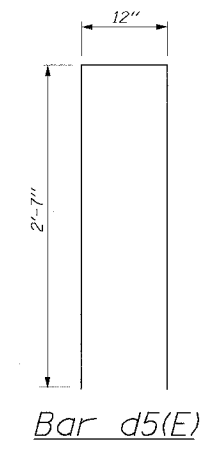
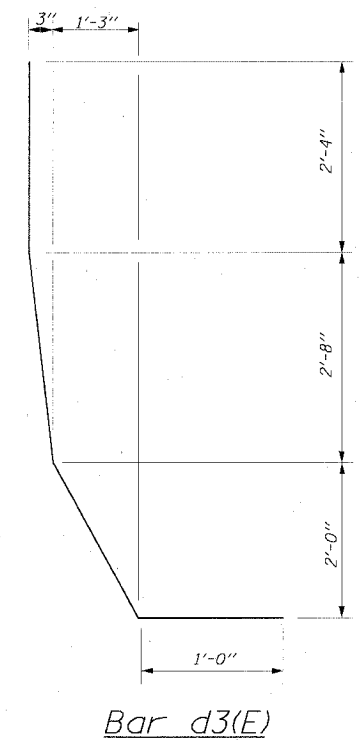
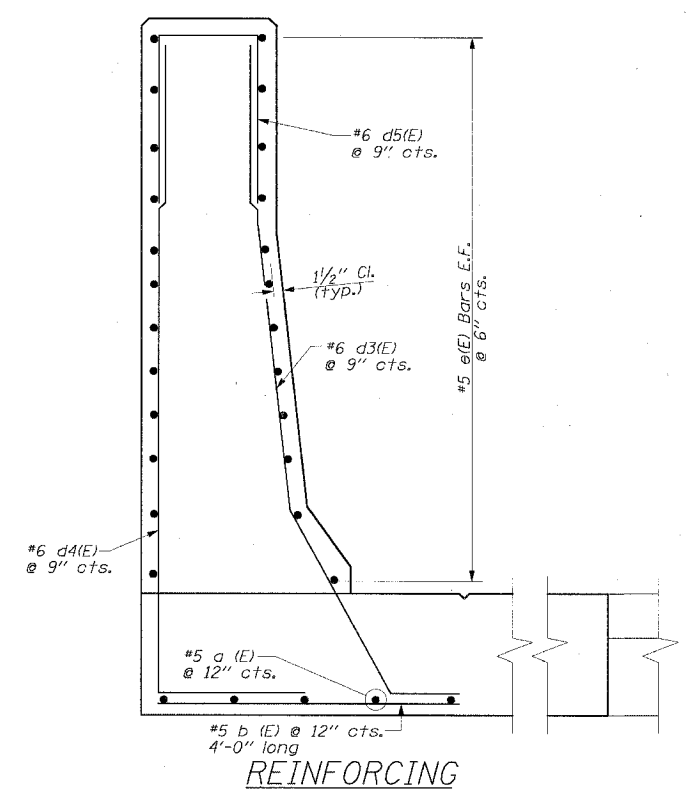
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06/24/2005 12:40 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	404
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		(1818, ETC, 2324.6-1PIR-9		



DIMENSIONS



- NOTES:**
1. All reinforcing bars, tie bars and dowel bars shall be seated in the final position prior to the concrete operations. The cost of these items is included in the cost of the barrier wall. Bars cannot be mucked into place.
 2. Maintain slope of face as shown on details.

MIN LAP:
 #5 Bars - 2'-2"
 #6 Bars - 2'-7"
 *Lap varies as necessary

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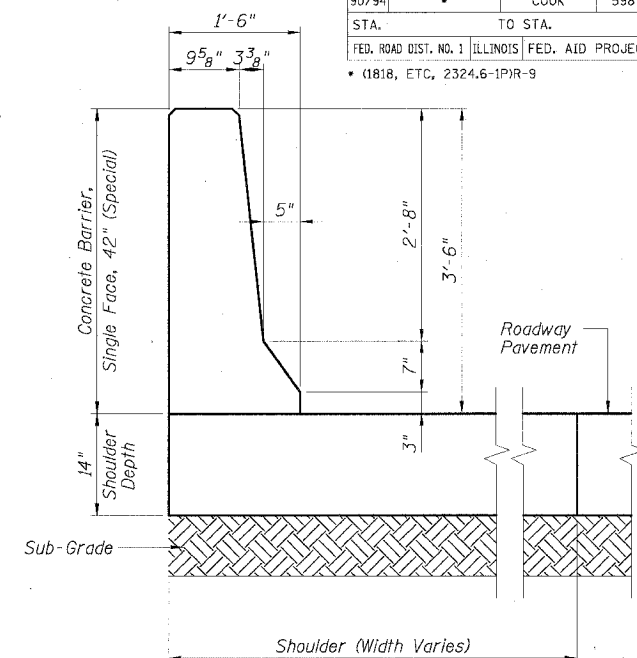
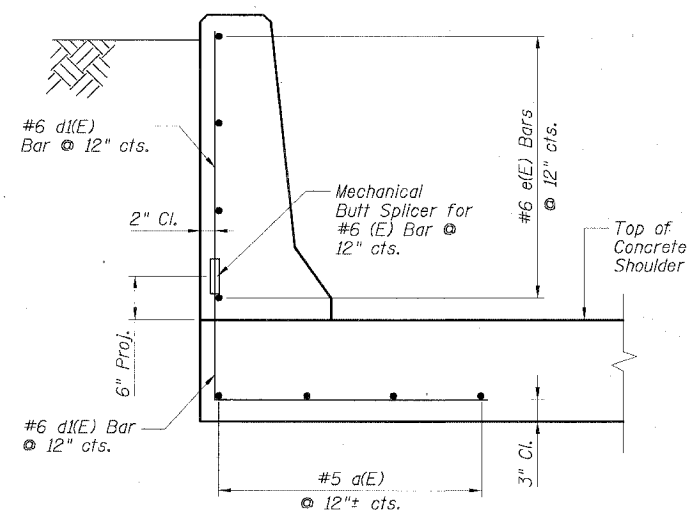
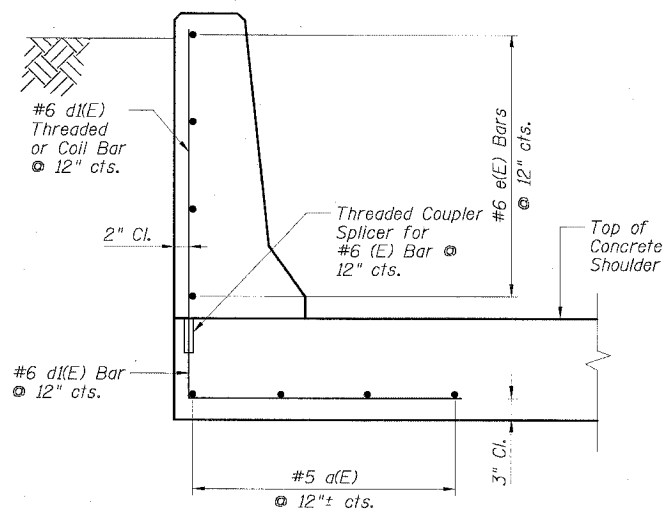
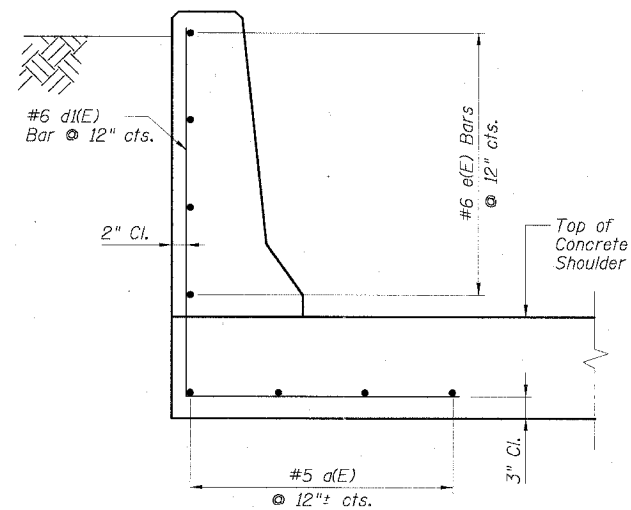
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 CONCRETE BARRIER,
 SINGLE FACE 72" (SPECIAL)
 SCALE: NOT TO SCALE
 DATE: 7/7/05
 DRAWN BY: AJW
 CHECKED BY: EL

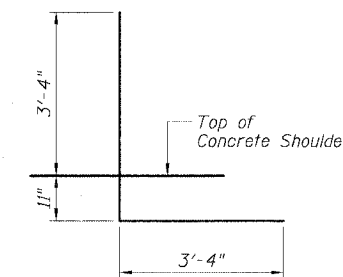
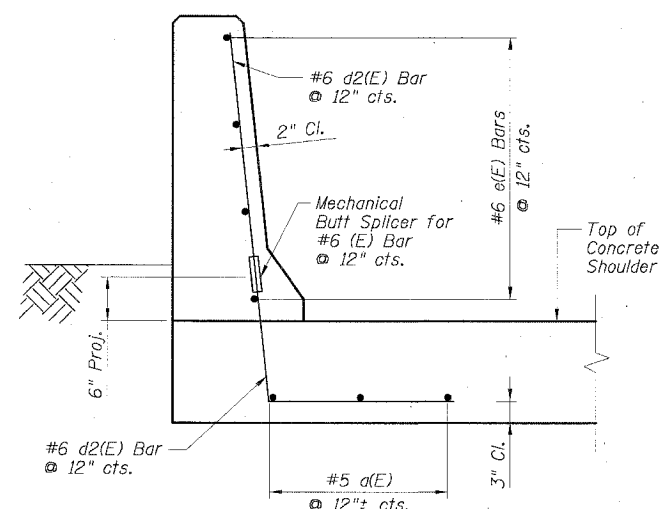
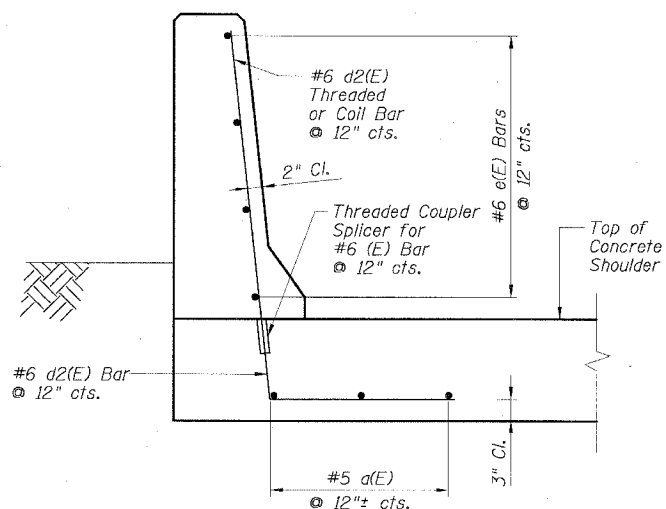
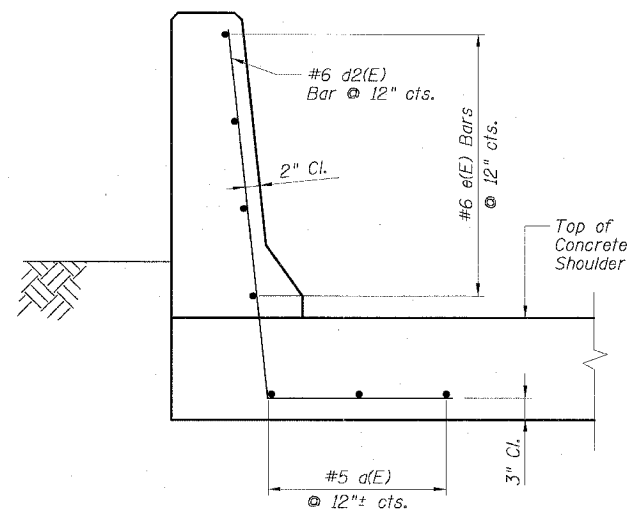
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

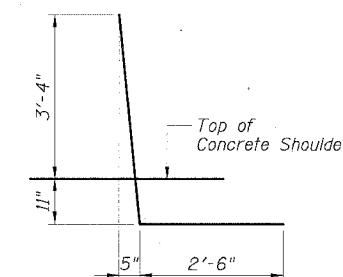
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90/94		COOK	598	405
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
(1818, ETC, 2324.6-IPR-9		62302		



DIMENSIONS



BAR d1(E)



BAR d2(E)

CONCRETE BARRIER,
SINGLE FACE, 42" (SPECIAL)
ALTERNATE I

CONCRETE BARRIER,
SINGLE FACE, 42" (SPECIAL)
ALTERNATE II

CONCRETE BARRIER,
SINGLE FACE, 42" (SPECIAL)
ALTERNATE III

NOTES:

- The cost of furnishing and placing reinforcing in concrete shoulders and barriers shall be included in the cost per foot for "Concrete Barrier, Single Face, 42" (Special).

NOTES:

- The cost of furnishing and placing reinforcing and threaded coupler splicer in concrete shoulders and barriers shall be included in the cost per foot for "Concrete Barrier, Single Face, 42" (Special).
- Threaded coupler splicers shall be capable of developing a minimum of 125% of the yield strength of a #6 bar.

NOTES:

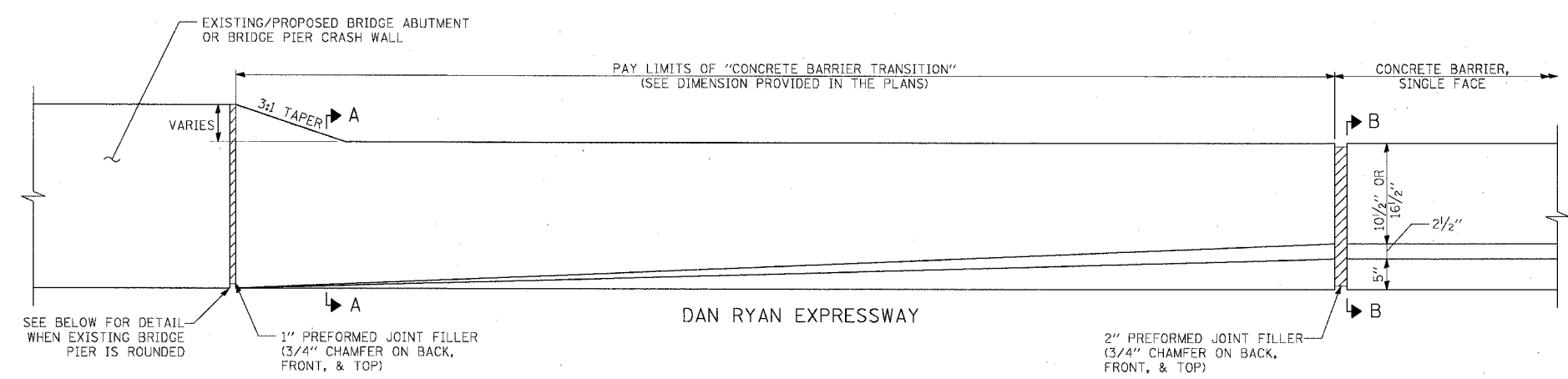
- The cost of furnishing and placing reinforcing in concrete shoulders and barriers shall be included in the cost per foot for "Concrete Barrier, Single Face, 42" (Special).
- Mechanical butt splicers shall be capable of developing a minimum of 125% of the yield strength of a #6 bar.

REVISIONS	
NAME	DATE

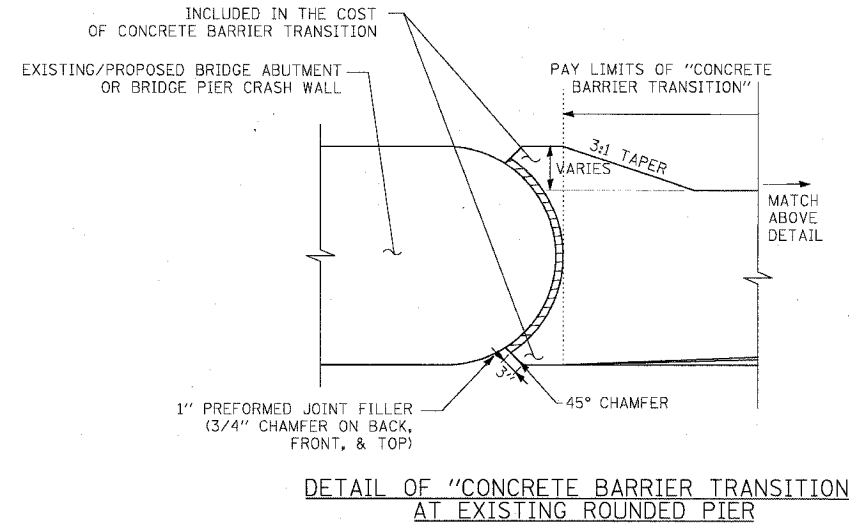
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
CONCRETE BARRIER
SINGLE FACE, 42" (SPECIAL)
ALTERNATES

SCALE: None
DATE: JULY 7, 2005
DRAWN BY:
CHECKED BY:

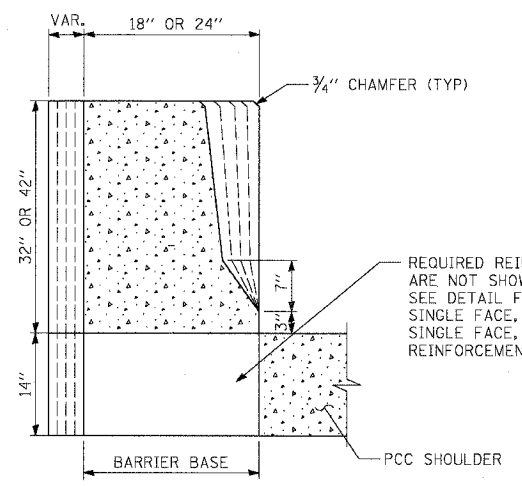
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94/90		COOK	598	406
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		(1818, ETC, 2324.6-1PJR-9		



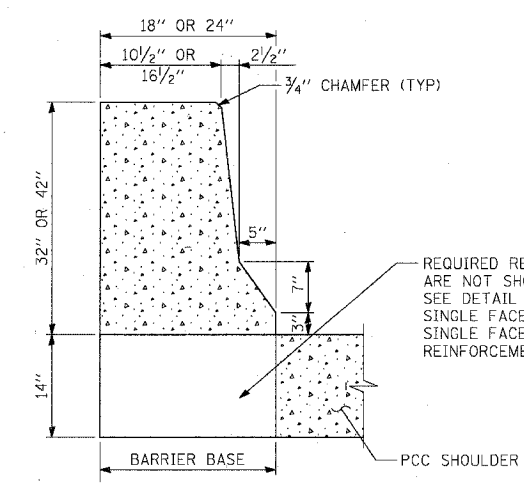
DETAIL OF "CONCRETE BARRIER TRANSITION"
FOR SINGLE FACE BARRIER WALL



DETAIL OF "CONCRETE BARRIER TRANSITION"
AT EXISTING ROUNDED PIER



SECTION A-A
CONCRETE BARRIER TRANSITION



SECTION B-B
CONCRETE BARRIER, SINGLE FACE
& CONCRETE BARRIER BASE

NOTE:
ALL TRANSITIONS PAID FOR AS
CONCRETE BARRIER TRANSITION

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

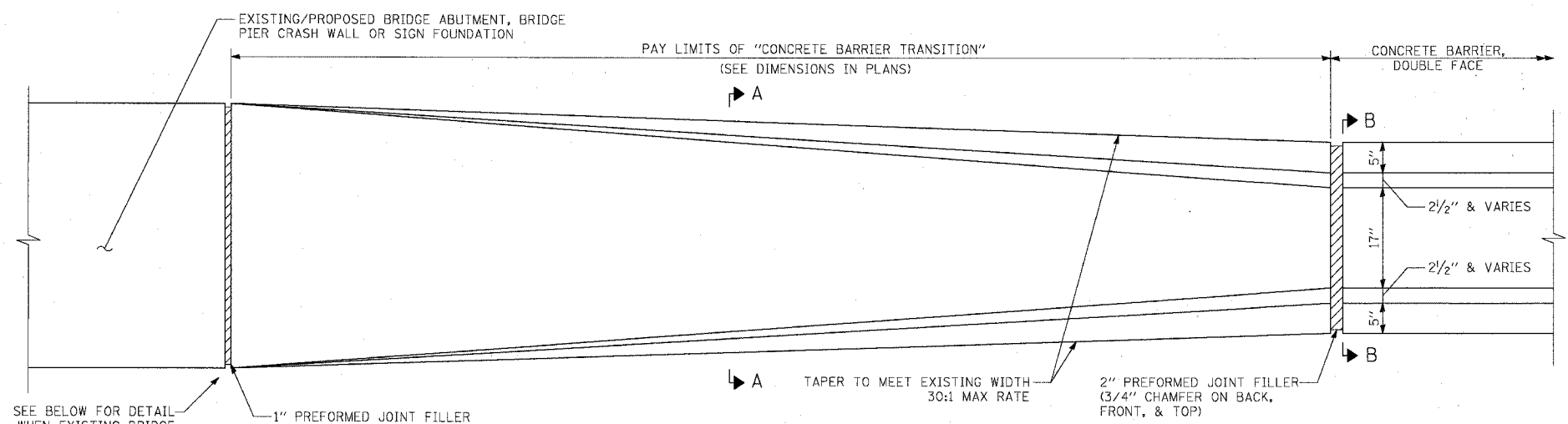
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER TRANSITION
(SHEET 1 OF 3)
SCALE: NONE
DATE: 7/7/05
DRAWN BY: TAI
CHECKED BY: PJM

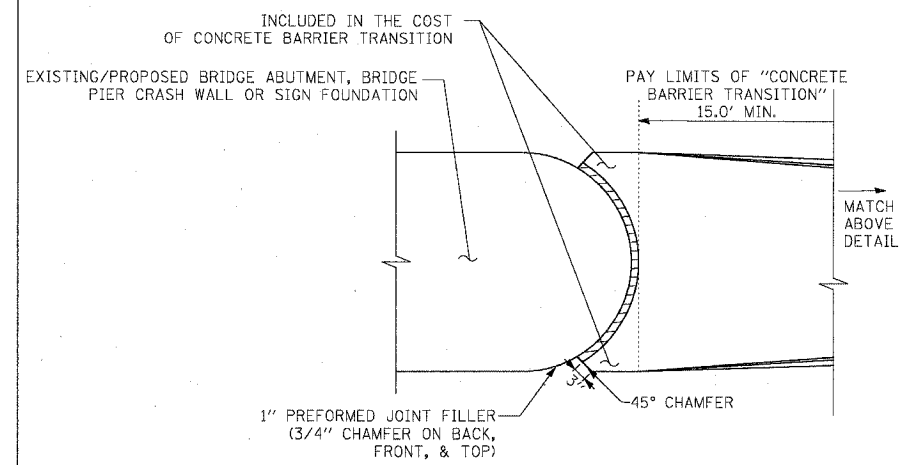
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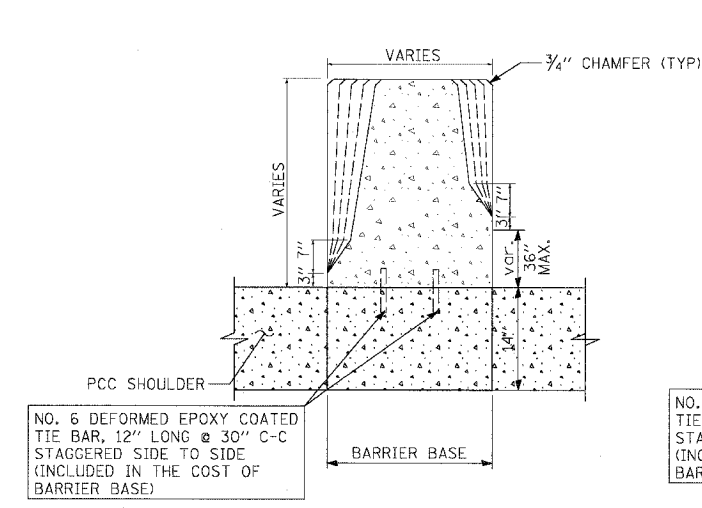
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	407
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		• (1818, ETC, 2324.6-1P)R-9		



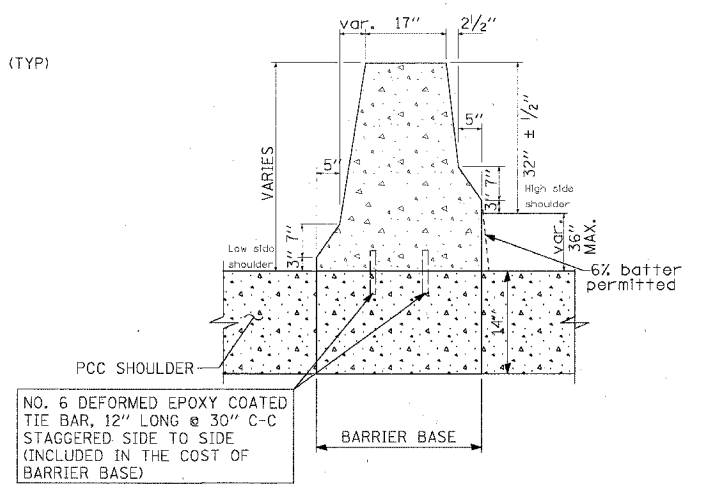
DETAIL OF "CONCRETE BARRIER TRANSITION" FOR DOUBLE FACE BARRIER WALL



DETAIL OF "CONCRETE BARRIER TRANSITION" AT EXISTING ROUNDED PIER



SECTION A-A CONCRETE BARRIER TRANSITION



SECTION B-B DOUBLE FACE BARRIER WALL

NOTE: ALL TRANSITIONS PAID FOR AS CONCRETE BARRIER TRANSITION

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

REVISIONS	
NAME	DATE

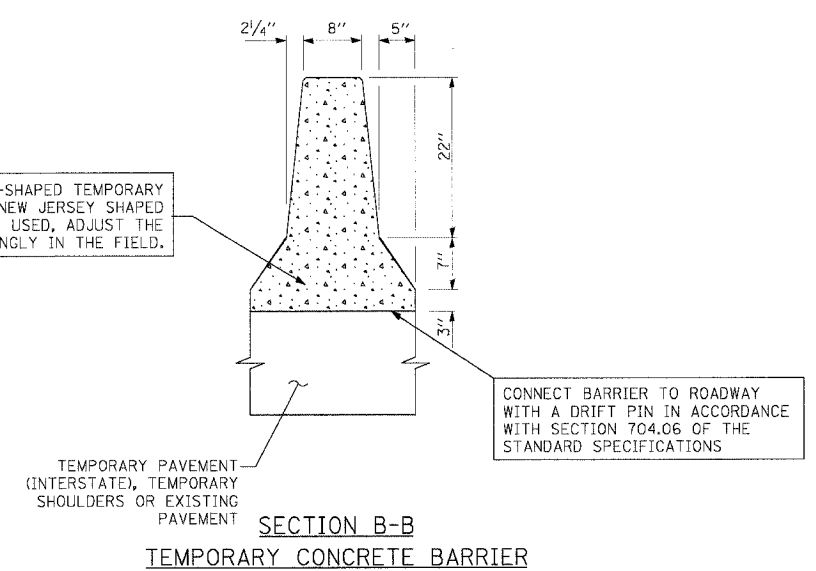
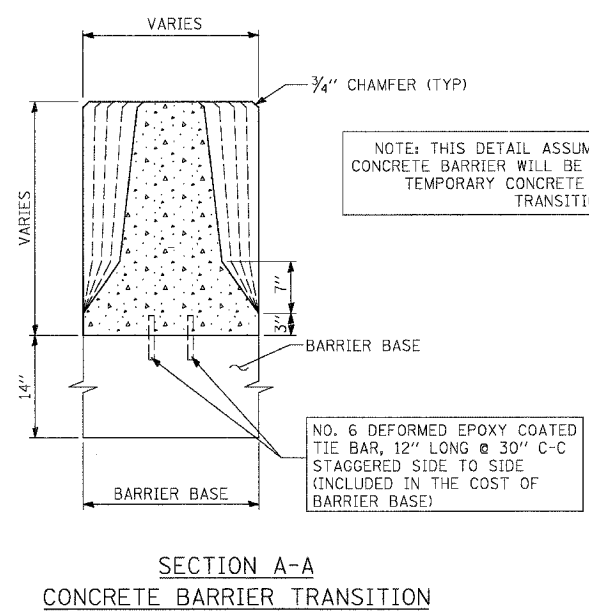
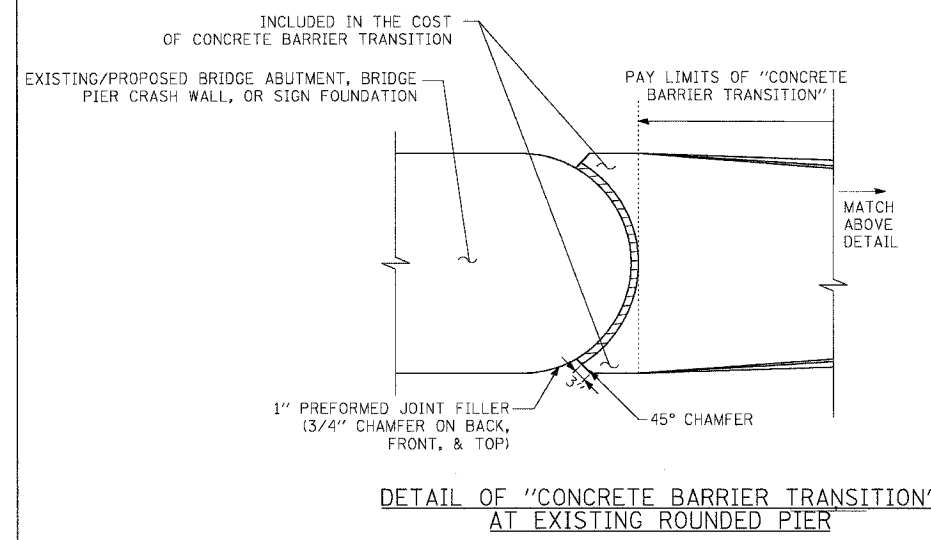
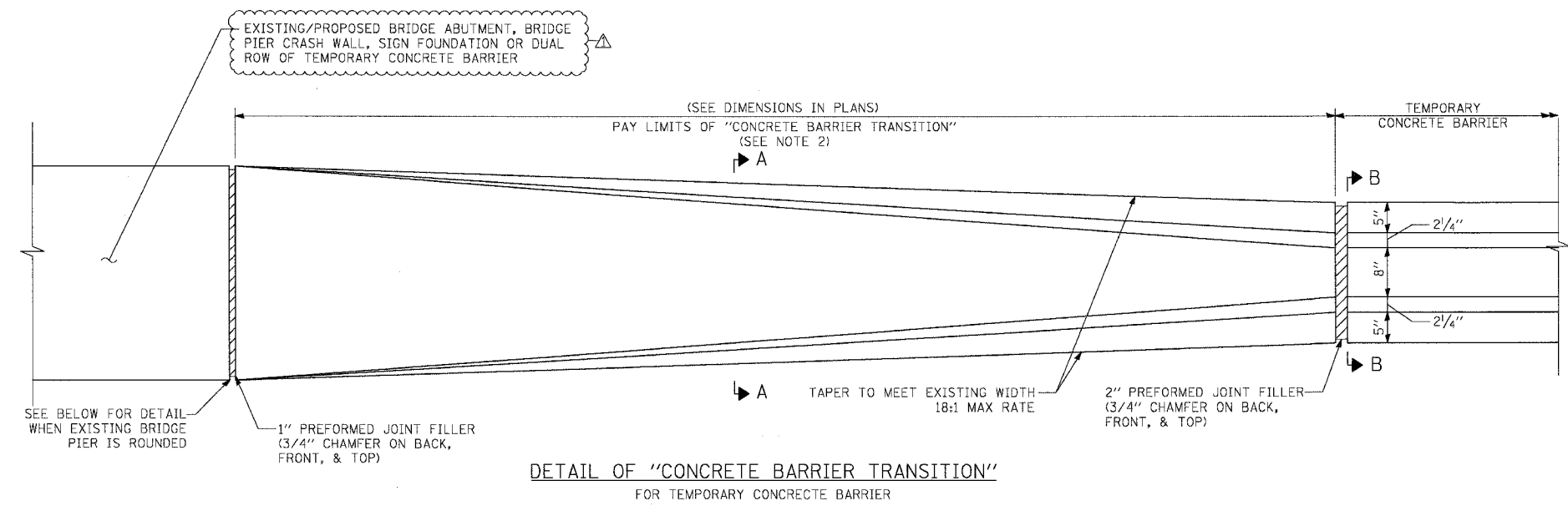
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 CONCRETE BARRIER TRANSITION
 (SHEET 2 OF 3)

SCALE: NONE
 DATE: 7/7/05

DRAWN BY: TAI
 CHECKED BY: PjM

CDT-20

08/24/2005 12:21:50 PM



- NOTE:
1. ALL TRANSITIONS PAID FOR AS CONCRETE BARRIER TRANSITION.
 2. LENGTHS PROVIDED IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR MUST ADJUST THE LENGTH OF CONCRETE BARRIER TRANSITION AS NECESSARY TO MEET TEMPORARY CONCRETE BARRIER SEGMENTS USED.

REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 CONCRETE BARRIER TRANSITION
 (SHEET 3 OF 3)

SCALE: NONE
 DATE: 7/7/05

DRAWN BY: TAI
 CHECKED BY: PJM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COCK	598	409
STA.	TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
			* (1818), ETC., 2324-2-LDR-9 62302	

CTA BARRIER WALL LOCATION AND MODIFICATION TABLE

STATION	CONTRACT 62300 - NORTH BOUND EXPRESS LANES						CONTRACT 62302 - SOUTH BOUND EXPRESS LANES							
	Soldier Piles			Proposed T / Shoulder At or Above Existing		Proposed T / Shoulder Below Existing		Soldier Piles			Proposed T / Shoulder At or Above Existing		Proposed T / Shoulder Below Existing	
	Size	Length	Max. Spacing	Location	Modification	Location	Modification	Size	Length	Max. Spacing	Location	Modification	Location	Modification
35th St.	W12x120	30'		Sta. 2620+38 to 2625+07 Sta. 2621+15 to 2622+34 Sta. 2622+36 to 2625+07	6" Facing			W12x120	30'	5'-0"	Sta. 1609+39 to 1624+89 Sta. 1622+64 to 1624+89	6" Facing		
47th St.	W12x106	20'				Sta. 2529+46 to 2540+38	1'-4 1/2" Facing	W12x72	20'	6'-6"	Sta. 1529+36 to 1537+94	6" Facing		
55th St.	W12x106	20'				Sta. 2476+01 to 2484+81	1'-4 1/2" Facing	W12x106	20'	8'-0"			Sta. 1475+84 to 1484+69	1'-4 1/2" Facing
69th St.	W12x72	20'		Sta. 2372+94 to 2379+56	②			W12x106	20'	8'-0"	Sta. 1372+75 to 1374+50	①	Sta. 1374+50 to 1378+53	①

- ① Replace Exist. 32" Barrier with Single Face Barrier, 42" Spacing
- ② Reface Existing CTA Barrier Wall with Vertical Facing

GENERAL NOTES:

1. Utility locations shown on these plans may not be correct or complete. The Contractor shall coordinate construction activities with the respective utilities of the city of Chicago. Before starting any excavation, the Contractor shall call "QUAN" (Chicago Utility Alert Network) at 312-744-7000 for field locations of buried electric, telephone, and gas facilities (48 hour notification is required). Contact the department of water management permit section at (312) 747-7893 for water and sewer locations.
2. In locations where the main sewers, drainage structures, public, and private drain connections are disturbed or damaged during construction by the Contractor, it will be the Contractor's responsibility to restore and replace the damaged facilities at his/her own expense to the satisfaction of the department of water management. The sewer flows must be maintained at all times.
3. In locations where pilings/drilled shafts are being proposed in the vicinity of the existing sewer facilities, a licensed Structural Engineer shall approve construction methods of support in order to maintain the structural integrity of the city's sewer system.
4. The Location of various items such as pavement, drainage structures, barrier walls and sign structure foundations built in contracts under construction during the preparation of these plans is based on the published contract plan drawings available during design. The Contractor must field verify limits, locations and elevations of these previously constructed items.
5. The Contractor shall use care in grading or excavating near any and all existing items which will not be removed. Any damage done to existing items by the Contractor shall be repaired by the Contractor at the Contractor's own expense.
6. The Contractor shall take all necessary safety precautions to protect and provide access to abutting CTA property, utilities and vehicular traffic.
7. It shall be the Contractor's responsibility to ensure that no gap remains between proposed CTA fencing or where proposed CTA fencing terminates and existing CTA fence remains in place.
8. Hammer driving of piles will not be allowed. All piles must be lifted or vibrated into place.
9. Plan dimensions and details relating to existing structures 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 or a change in the scope of work. However the Contractor will be paid for the quantity actually furnished at the unit price for the work.
10. All construction joints shall be bonded.
11. All exposed concrete edges shall have a 3/4" by 45° chamfer except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of 1 foot below the finished ground line.
12. A protective coat shall be applied within the limits shown on the plans according to Section 503.09 of the Standard Specifications.
13. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
14. Reinforcement bars designated "E" shall be epoxy coated.

15. For Existing Barrier Wall Modifications for Proposed T / Shoulder Below Existing, See Sheets B2 and B3.
16. For Existing Barrier Wall Modifications for Proposed T / Shoulder At or Above Existing, See Sheet B4 and B5.
17. For Existing Barrier Wall Modifications for 69th St. Station (SB) See Sheet B6.
18. For Existing Barrier Wall Modifications for 69th St. Station (NB) See Sheet B7.
19. For Refaced Barrier to Pier, Transition Details (Taper), Proposed T / Shoulder Below Existing, See Sheet B8.
20. For Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder Below Existing, See Sheet B9.
21. For Refaced Barrier to Pier, Transition Details (Taper), Proposed T / Shoulder At or Above Existing, See Sheet B10.
22. For Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder At or Above Existing, See Sheet B11.
23. For New 42" Barrier to Vert. Refaced Barrier, Transition Details (Taper), Proposed T / Shoulder At or Above Existing, See Sheet B12.
24. For Vert. Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder At or Above Existing, See Sheet B13.
25. For Refaced Barrier to New 42" Barrier, Transition Details, Proposed T / Shoulder Below Existing, See Sheet B14.
26. For Refaced Barrier to New 42" Barrier, Transition Details, Proposed T / Shoulder At or Above Existing, See Sheet B15.
27. For New 42" Barrier to Pier, Transition Details, Proposed T / Shoulder Below or Above Existing, See Sheet B16.
28. For Refaced Barrier to New Sign Structure, Transition Plan, Elevation and Details, Proposed T / Shoulder Below Existing, See Sheets B17 and B18.
29. If the Contractor chooses to alter the temporary soldier pile and lagging system shown in the Plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

DESIGN STRESSES:

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

CTE | AECOM

REVISIONS	
NAME	DATE
M.P.	8-12-05
M.P.	9-16-05

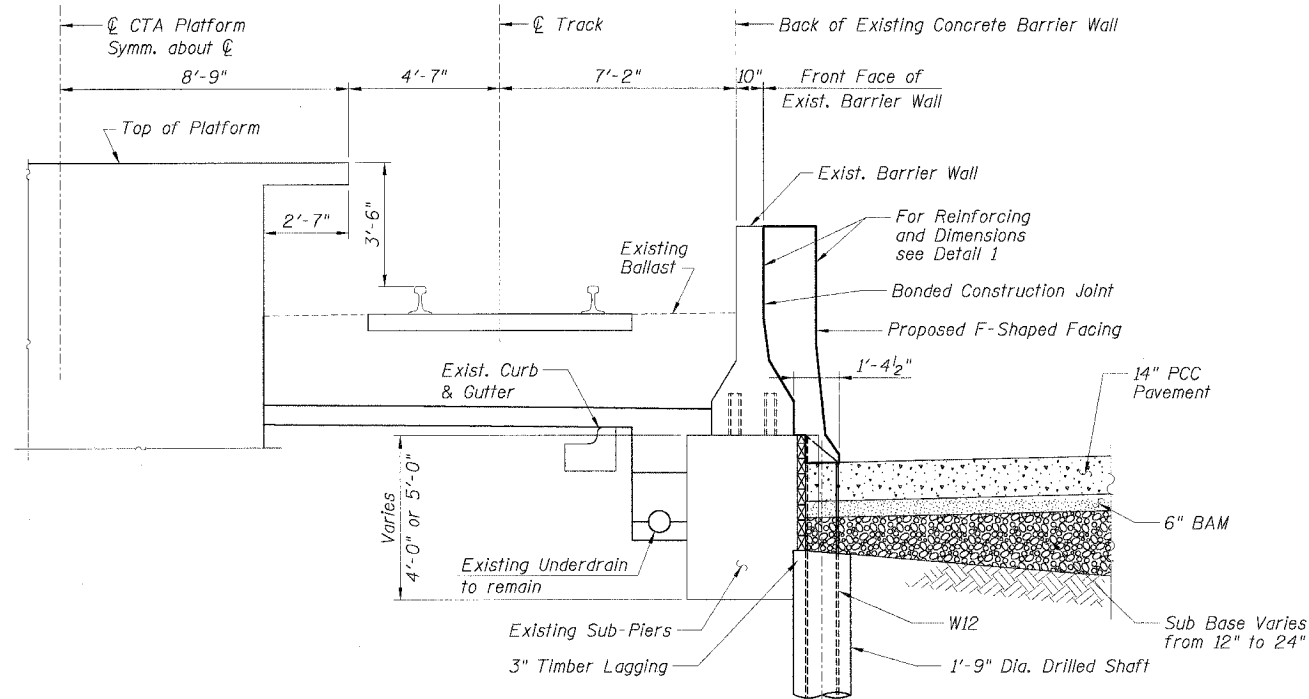
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
**EXISTING BARRIER WALL
AT CTA STATIONS
LOCATION AND MODIFICATION TABLE**
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

Sheet B1 of B1

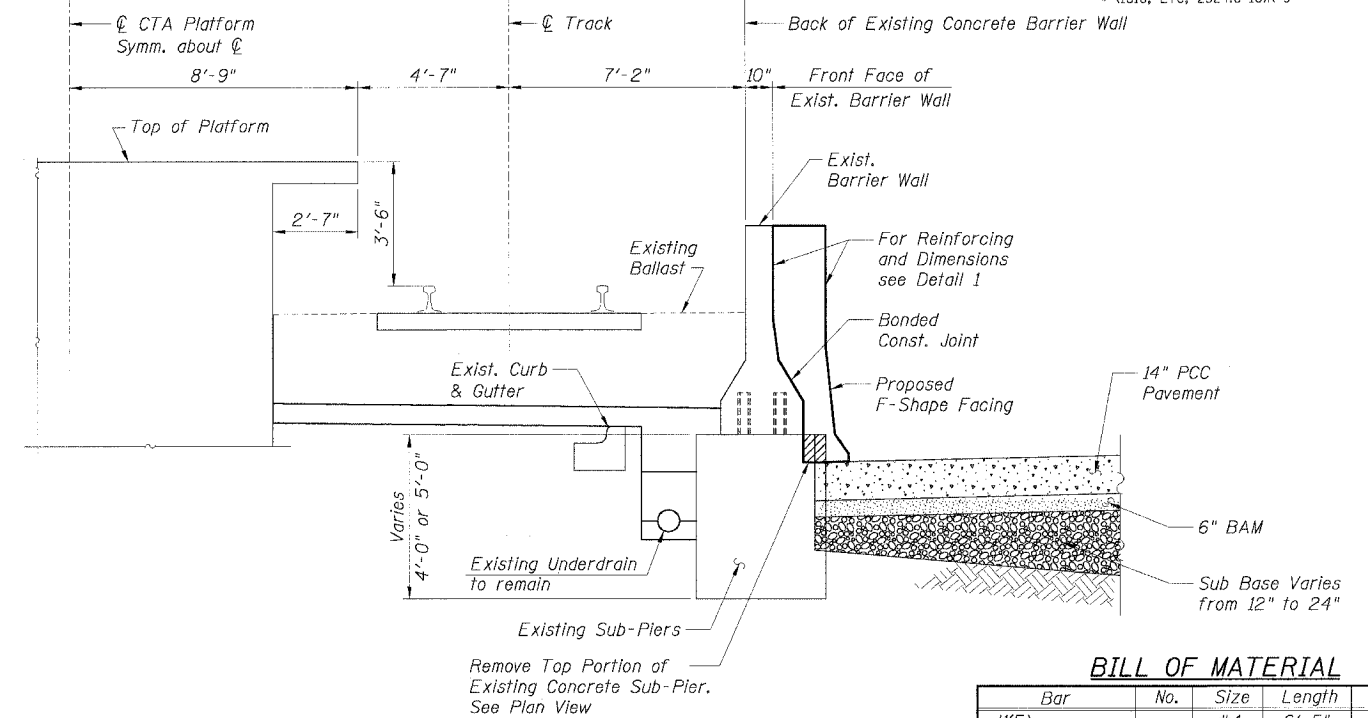
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 410
STA. •		TO STA. •		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT • (1818, ETC, 2324.6-101R-9				62302



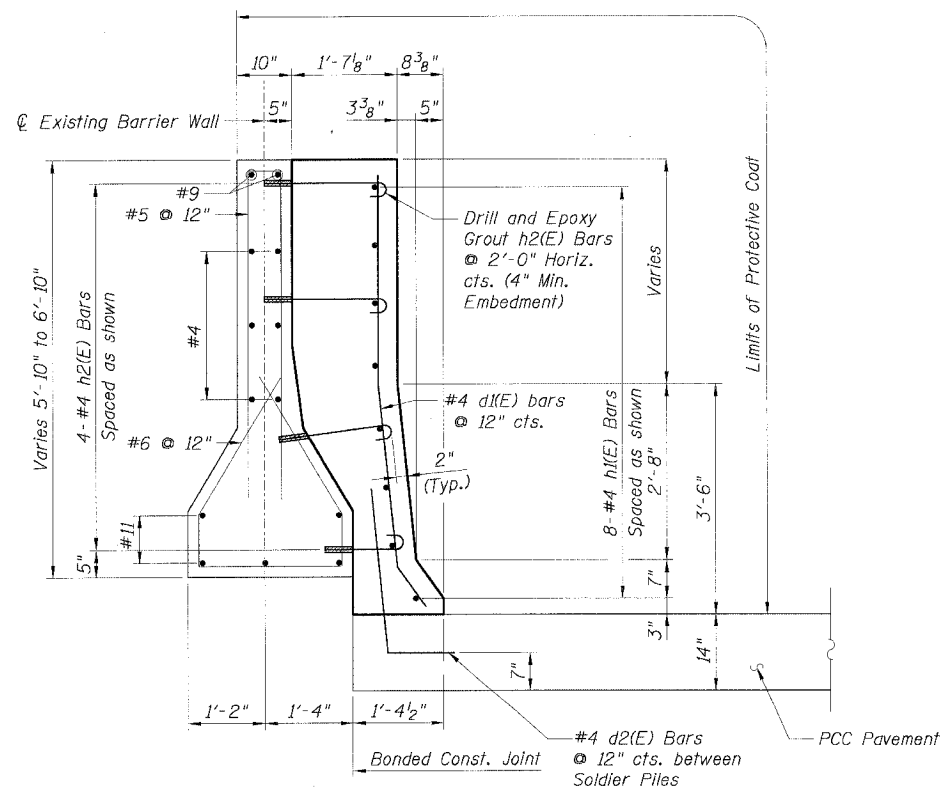
TYPICAL SECTION
BETWEEN SUB-PIERS



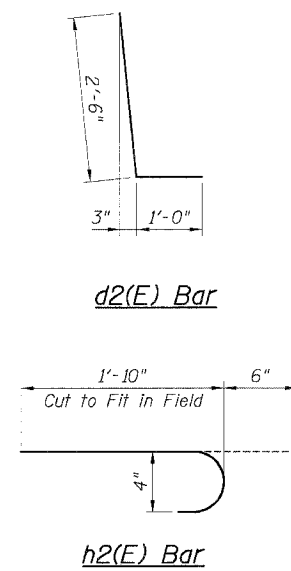
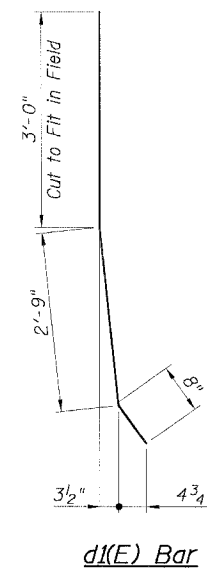
TYPICAL SECTION
AT SUB-PIER

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)		#4	6'-5"	┌
d2(E)		#4	3'-6"	└
h1(E)		#4		—
h2(E)		#4	2'-4"	└
Item	Unit	Quantity		
Furnishing Soldier Piles, W12x	Foot			
Drilling and Setting Soldier Piles (in Soil)	Cu. Ft.			
Untreated Timber Lagging	Sq. Ft.			
Concrete Removal	Cu. Yd.			
Reinforcement Bars, Epoxy Coated	Pound			
Concrete Superstructure	Cu. Yd.			
Protective Coat	Sq. Yd.			



DETAIL 1



d2(E) Bar

h2(E) Bar

LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

NOTES:

- Drilling and grouting of #4 h2(E) bars shall be in accordance with Section 584 of the Standard Specifications.
- The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h2(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
- #4 d2(E) bars shall be seated in their final position prior to the placement of the concrete shoulder. Bars shall be not mucked into place.
- Provide joints in facing to match those in the existing barrier wall. See Sheet B7 for details.
- Minimum lap length for #4 bars shall be 1'-8".
- For Typical Plan, see Sheet B3.
- For Existing Concrete Repair Details, see Sheet B3.
- For Facing Details at Existing Light Pole Foundation, see Sheet B5.

Sheet B2 of 18

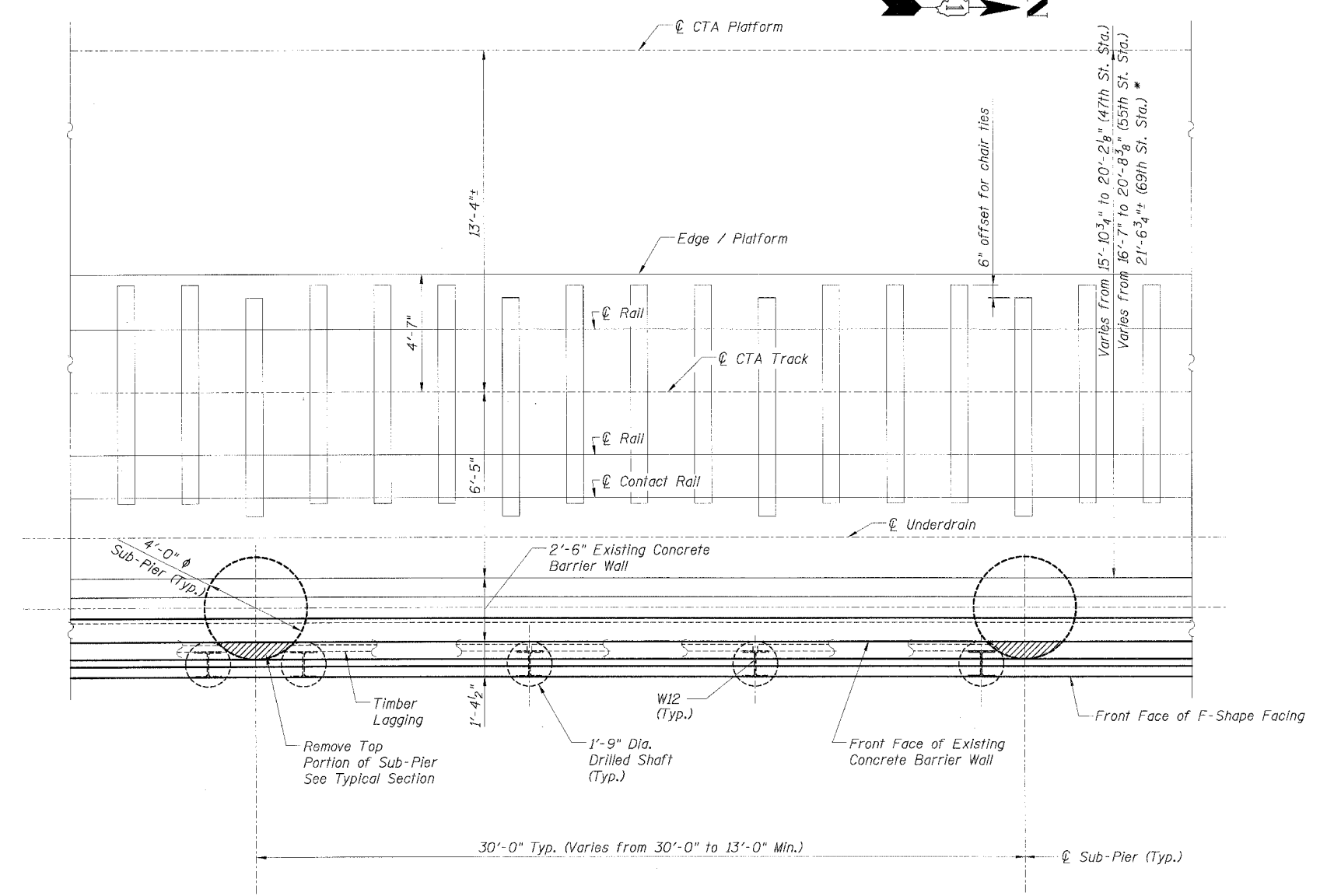
REVISIONS	
NAME	DATE
MJP	8-12-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
TYPICAL SECTIONS & DETAILS
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

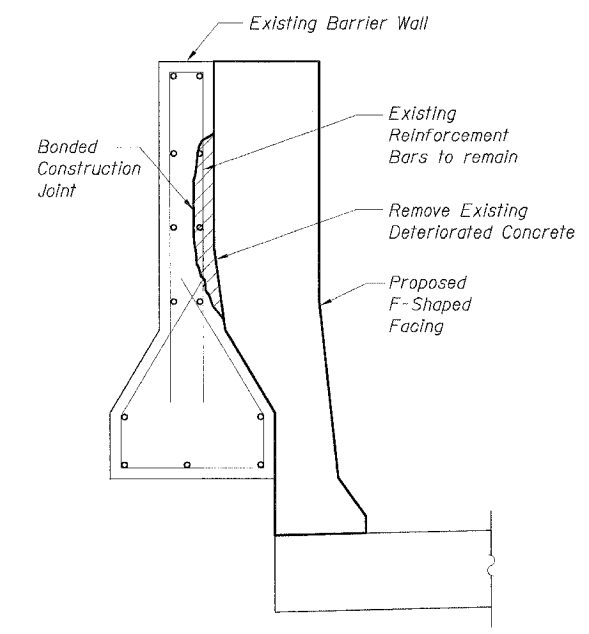
CTE | AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	411
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (1818, ETC, 2324.6-101R-9				62302



PLAN - (NORTH BOUND SHOWN)
(SOUTH BOUND SIMILAR)

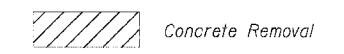


CONCRETE REPAIR DETAIL

NOTES:

- The Contractor shall remove deteriorated concrete to sound concrete at all locations designated by the Engineer in accordance with Section 501.03 of the Standard Specifications. Undercut exposed reinforcement bars by 3/4" to provide clearance between existing reinforcement bars and the remaining concrete.
- Exposed existing reinforcement bars shall remain in place and be blast cleaned to gray metal. Reinforcement bars that have been cut or have lost 25% or more of their original cross sectional area shall be supplemented by new epoxy coated reinforcement bars.
- The resulting voids shall be blast cleaned before applying a bonding agent and filled with Concrete Superstructure.
- The cost of removing deteriorated concrete, supplementing and cleaning existing reinforcement bars, blast cleaning and furnishing and placing a bonding agent and concrete shall be included in the cost per cubic yard for Concrete Superstructure.
- For Facing Details and Sections see Sheet B2.

LEGEND:

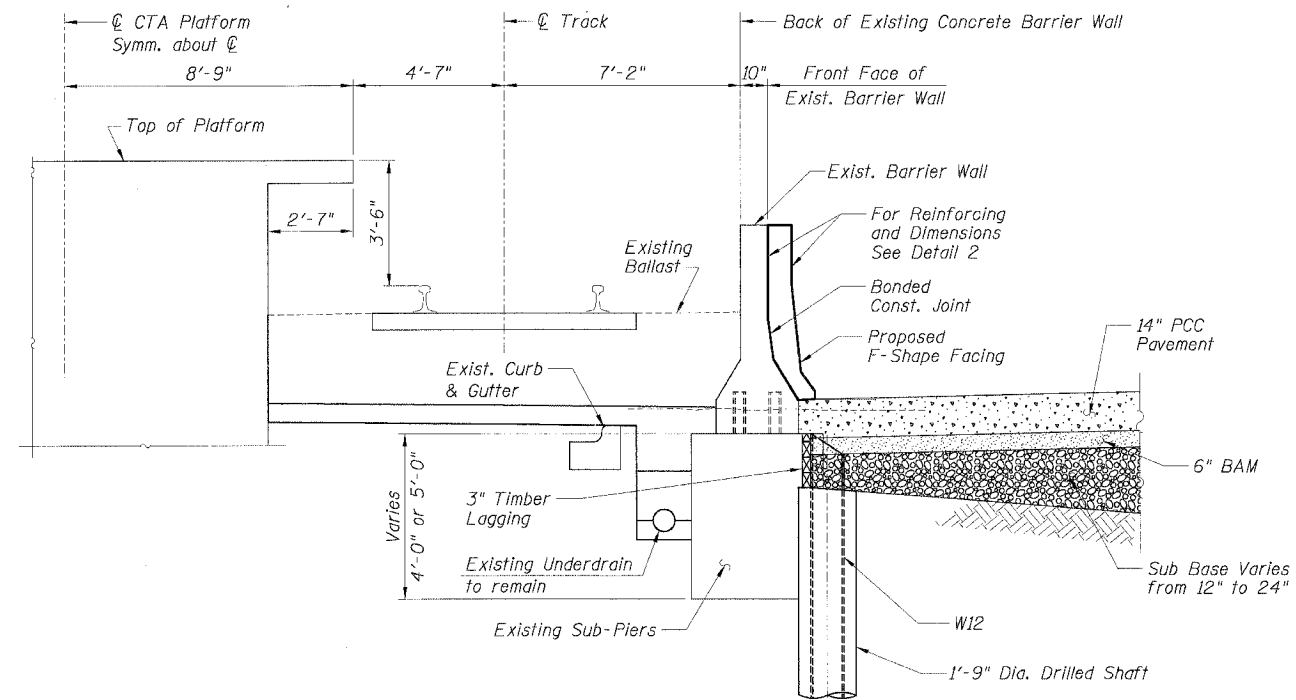


REVISIONS	
NAME	DATE
MJP	8-12-05

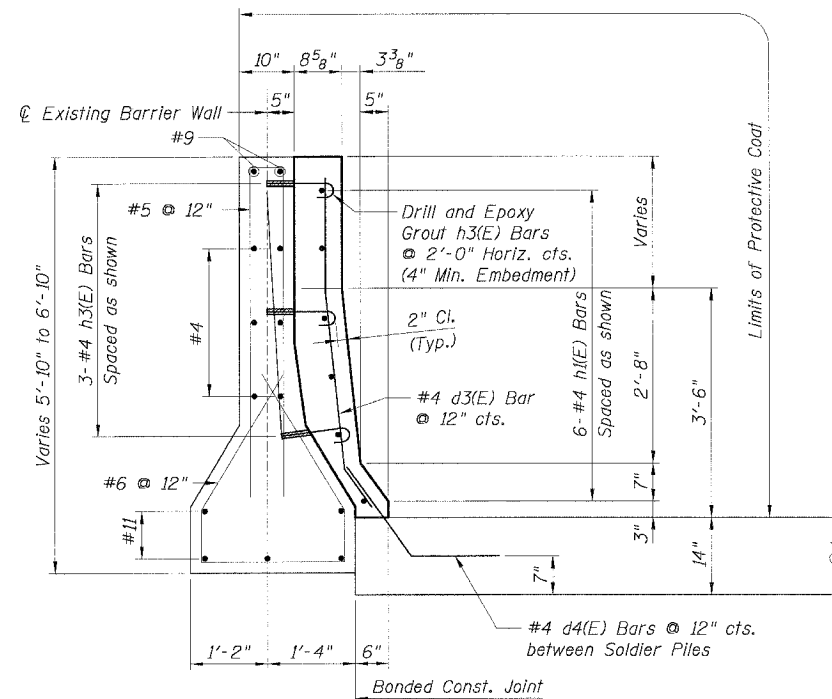
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/SOULDER BELOW EXISTING
TYPICAL PLAN
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

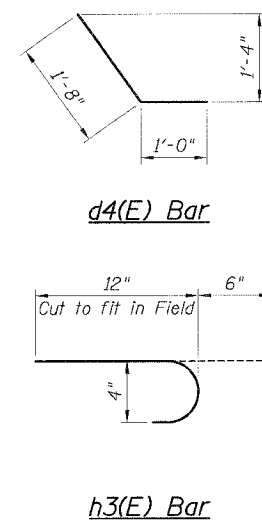
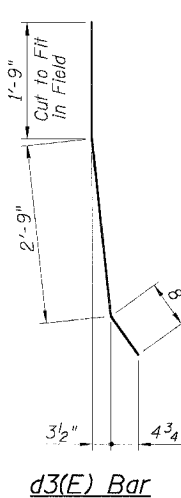
F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	412
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-10R-9) 62302				



TYPICAL SECTION
BETWEEN SUB-PIERS



DETAIL 2



d4(E) Bar

h3(E) Bar

LEGEND:

	PCC Pavement
	BAM
	Sub Base
	Earth

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d3(E)		#4	5'-2"	—
d4(E)		#4	2'-8"	—
h1(E)		#4		—
h3(E)		#4	1'-6"	—
Item	Unit	Quantity		
Furnishing Soldier Piles, W12x—	Foot			
Drilling and Setting				
Soldier Piles (in Soil)	Cu. Ft.			
Untreated Timber Lagging	Sq. Ft.			
Reinforcement Bars, Epoxy Coated	Pound			
Concrete Superstructure	Cu. Yd.			
Protective Coat	Sq. Yd.			

NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. #4 d4(E) bars shall be seated in their final position prior to the placement of the concrete shoulder. Bars shall not be mucked into place.
4. Provide joints in facing to match those in the existing barrier wall. See Sheet B7 for details.
5. Minimum lap length for #4 bars shall be 1'-8".
6. For Typical Plan, see Sheet B5.
7. For Existing Concrete Repair Details, see Sheet B3.
8. For Facing Details at Existing Light Pole Foundation, see Sheet B5.

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REVISIONS	
NAME	DATE
MJP	8-12-05

Sheet B4 of 18
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
TYPICAL SECTIONS & DETAILS
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

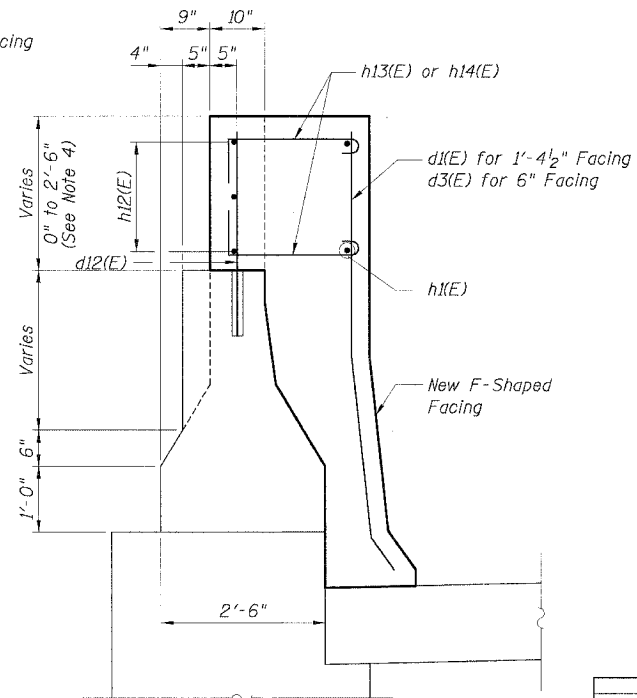
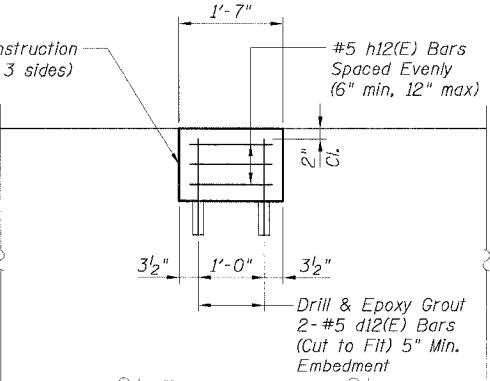
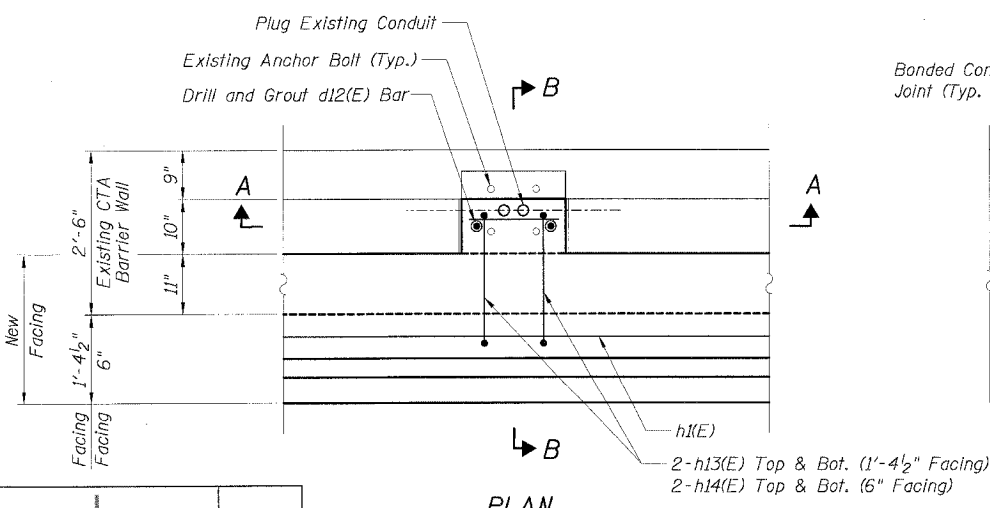
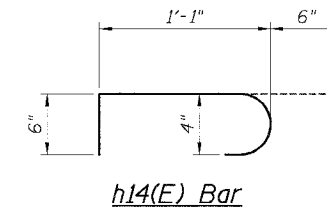
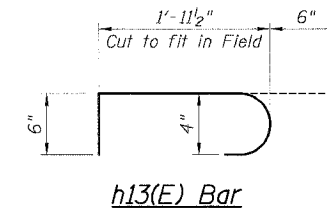
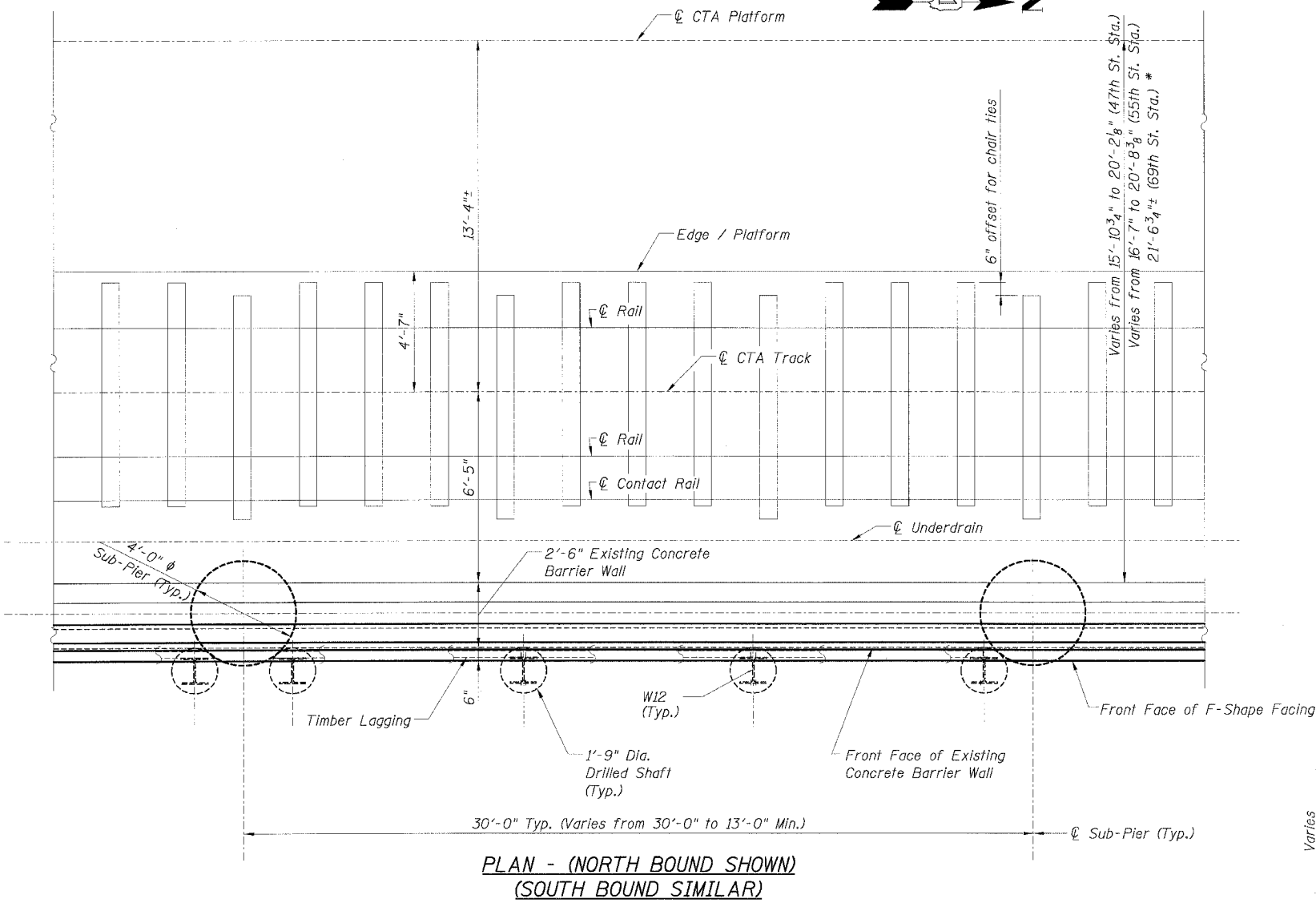
F.A.I. RYE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	413
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT	
* (1818, ETC, 2324.6-10)R-9			62302	

BAR SCHEDULE
FOR 1'-4 1/2" FACING @ ONE LIGHT FDN.

Bar	No.	Size	Length	Shape
d12(E)	2	#5	2'-9"	—
h12(E)	3	#4	1'-4"	—
h13(E)	4	#4	3'-0"	⌋

BAR SCHEDULE
FOR 6" FACING @ ONE LIGHT FDN.

Bar	No.	Size	Length	Shape
d12(E)	2	#5	2'-9"	—
h12(E)	3	#4	1'-4"	—
h14(E)	4	#4	2'-1"	⌋



- NOTES:**
- Existing anchor bolts shall remain in place and be blast cleaned to gray metal.
 - Drilling and grouting #4 d12(E) bars shall be in accordance with Section 584 of the Standard Specifications.
 - The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 d12(E) bars and blast cleaning existing anchor bolts shall be included in the cost per cubic yard for Concrete Superstructure.
 - For depth of existing light pole notch less than 10", do not use reinforcement bars.
 - Cast new concrete monolithically with new F-Shape Facing.
 - For Facing Details and Sections see Sheet B2.

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SECTION A-A
FACING DETAILS AT
EXISTING LIGHT POLE FOUNDATION

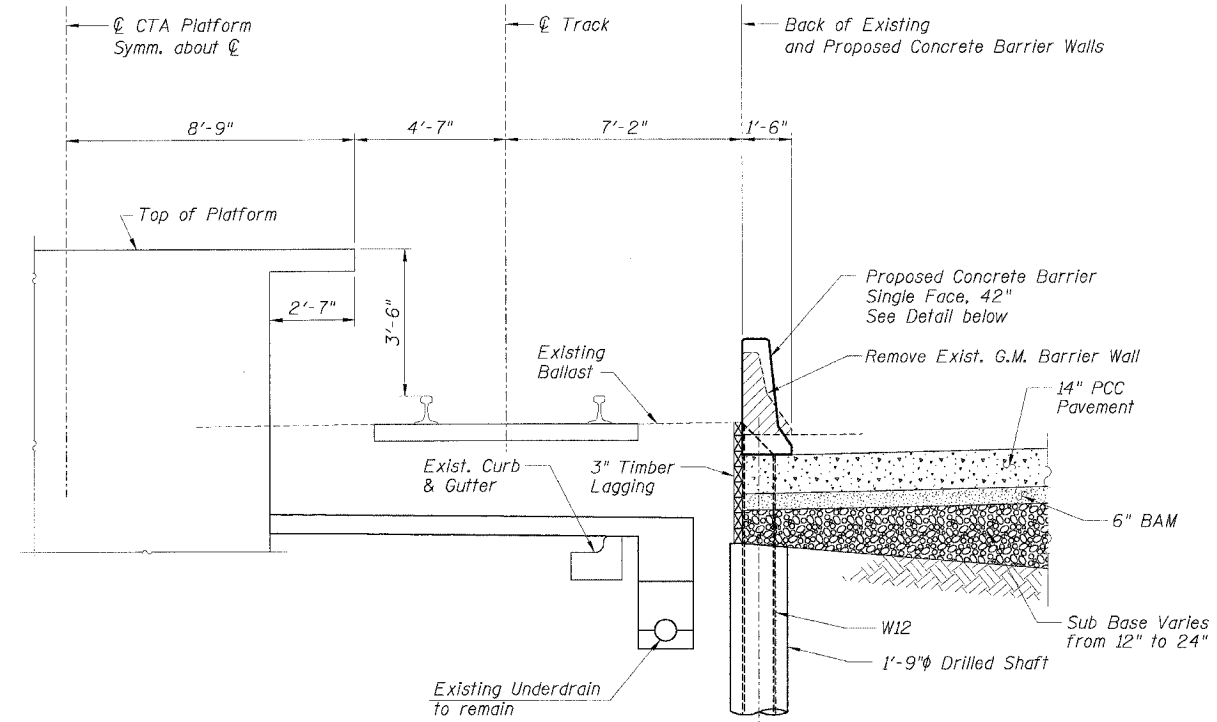
SECTION B-B

REVISIONS	
NAME	DATE
MJP	8-12-05

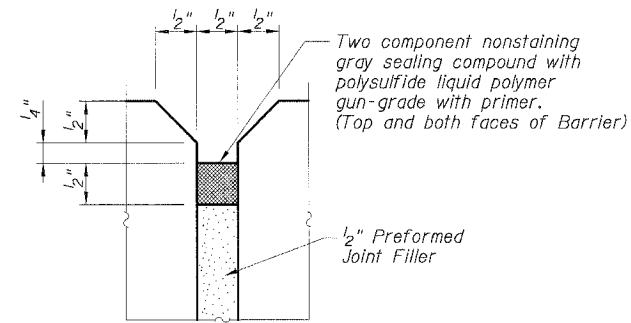
Sheet B5 of 18
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
TYPICAL PLAN
SCALE: None DRAWN BY: KWT/CHD
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	414
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
(1816, ETC., 2324.6-10R-9		62302		



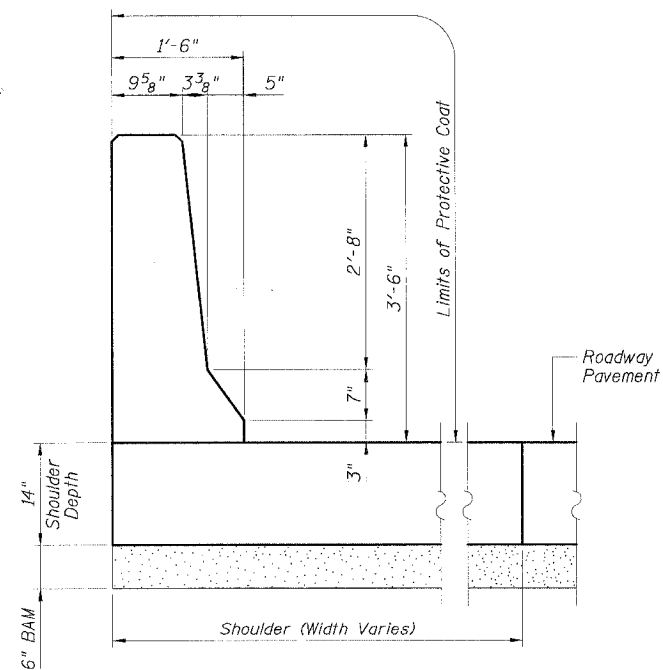
TYPICAL SECTION
AT 69TH ST. STATION (SB)



EXPANSION JOINT DETAIL

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Item	Unit	Quantity		
Concrete Barrier Removal	Foot			
Furnishing Soldier Piles W12x	Foot			
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.			
Untreated Timber Lagging	Sq. Ft.			
Concrete Barrier Single Face, 42" (Special)	Foot			
Protective Coat	Sq. Yd.			



CONCRETE BARRIER
SINGLE FACE, 42"
(DIMENSIONS)

NOTES:

- See "Concrete Barrier Single Face, 42" (Special)" for reinforcing details.
- Provide construction joints in the Single Face, 42" Barrier on maximum of 30'-0" centers.
- Provide 1/2" expansion joints in the Concrete Barrier Single Face, 42" on maximum of 90'-0" centers.
- The cost of furnishing and installing sealing compound shall be included in the cost per cubic yard for Concrete Barrier Single Face, 42" (Special).

LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

REVISIONS	
NAME	DATE
MJP	8-12-05

Sheet B6 of 18

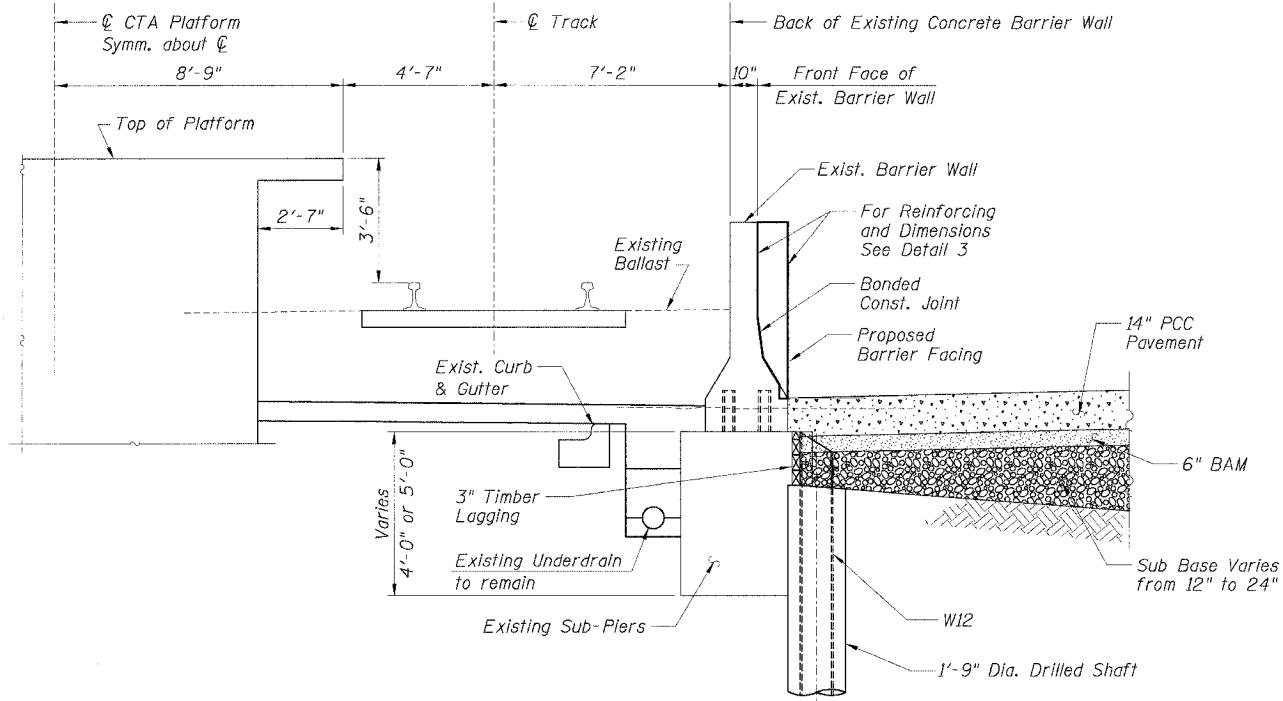
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
TYPICAL SECTIONS & DETAILS
FOR 69TH ST. STATION (SB)

SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

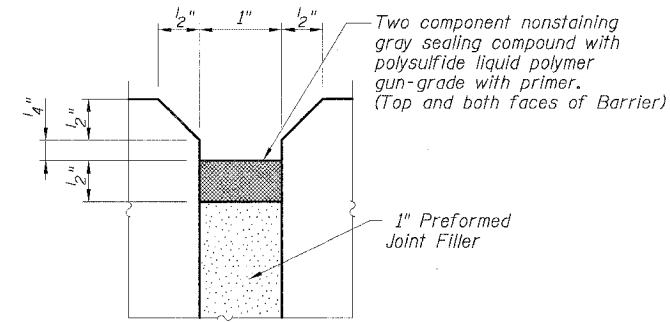
CTE | AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	415
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (181B, ETC, 2324.6-10R-9) 62302				



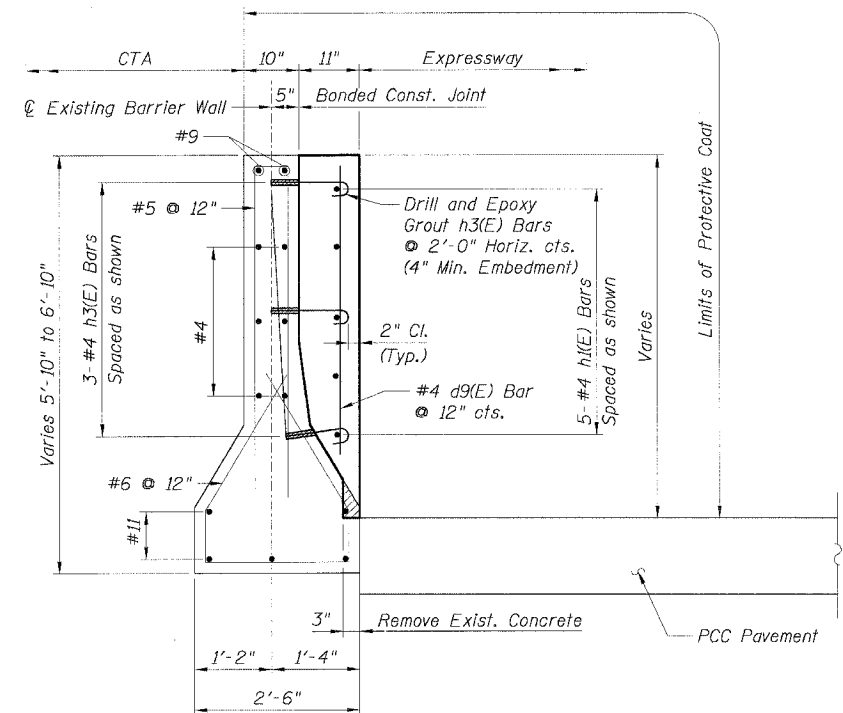
TYPICAL SECTION
BETWEEN SUB-PIERS
AT 69TH ST. STATION (NB)



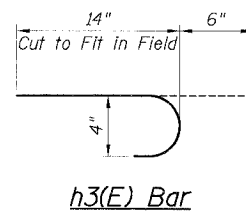
EXPANSION JOINT DETAIL
AT EXISTING JOINTS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d9(E)		#4	4'-2"	—
h1(E)		#4		—
h3(E)		#4	1'-8"	—
Item		Unit	Quantity	
Furnishing Soldier Piles W12x__		Foot		
Drilling and Setting Soldier Piles (in Soil)		Cu. Ft.		
Untreated Timber Lagging		Sq. Ft.		
Concrete Removal		Cu. Yd.		
Reinforcement Bars, Epoxy Coated		Pound		
Concrete Superstructure		Cu. Yd.		
Protective Coat		Sq. Yd.		



DETAIL 3



h3(E) Bar

LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. Provide joints in facing to match those in the existing barrier.
4. The cost of furnishing and installing sealing compound shall be included in the cost per cubic yard for Concrete Superstructure.
5. Minimum lap length for #4 bars shall be 1'-8".
6. For Existing Concrete Repair Details see Sheet B3.
7. For Facing Details at Existing Light Pole Foundation see Sheet B5.

CTE | AECOM

REVISIONS	
NAME	DATE
MJP	8-12-05

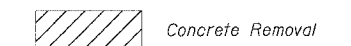
Sheet B7 of 18
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
TYPICAL SECTIONS & DETAILS
FOR 69th ST. STATION (NB)
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	416
STA.	TO STA.		FED. AID PROJECT	
			• (1818, ETC, 2324.6-10R-9	
			62302	

BILL OF MATERIAL FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d1(E)	17	#4	6'-5"	
d6(E)	50	#4	6'-0"	
h6(E)	112	#4	1'-9"	
h7(E)	8	#4	29'-0"	
h8(E)	16	#4	21'-5"	
Item		Unit	Quantity	
Reinforcement Bars, Epoxy Coated		Pound	788	
Concrete Superstructure		Cu. Yd.	18.0	
Protective Coat		Sq. Yd.	57	
Concrete Removal		Cu. Yd.	1.1	

LEGEND:



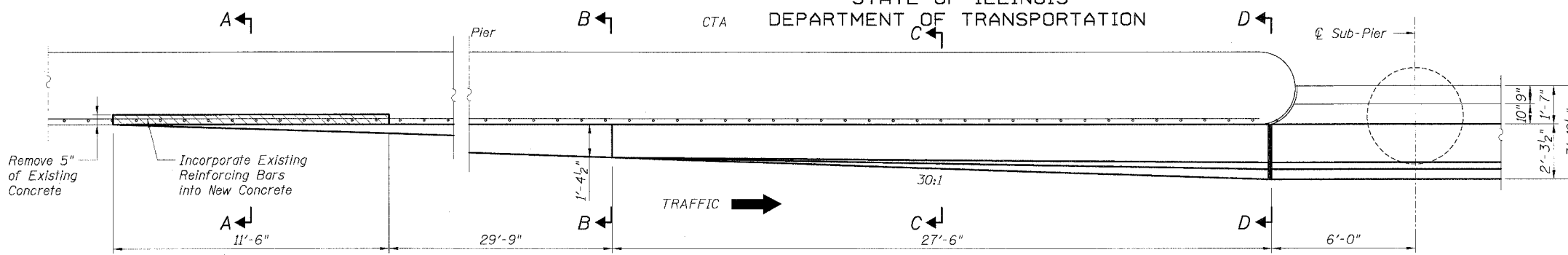
NOTES:

1. Drilling and grouting of #4 h2(E) and h6(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting h2(E) and h6(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. Exposed existing reinforcement bars shall remain in place and be blast cleaned to gray metal. Reinforcement bars that have been cut or have lost 25% or more of their original cross sectional area shall be supplemented by new epoxy coated reinforcement bars.
4. The cost of supplementing and cleaning existing reinforcement bars shall be included in the cost per cubic yard for Concrete Superstructure.
5. For Refaced Barrier Wall Details see Sheets B2 and B3.
6. For locations of Transition, see Roadway Plans.

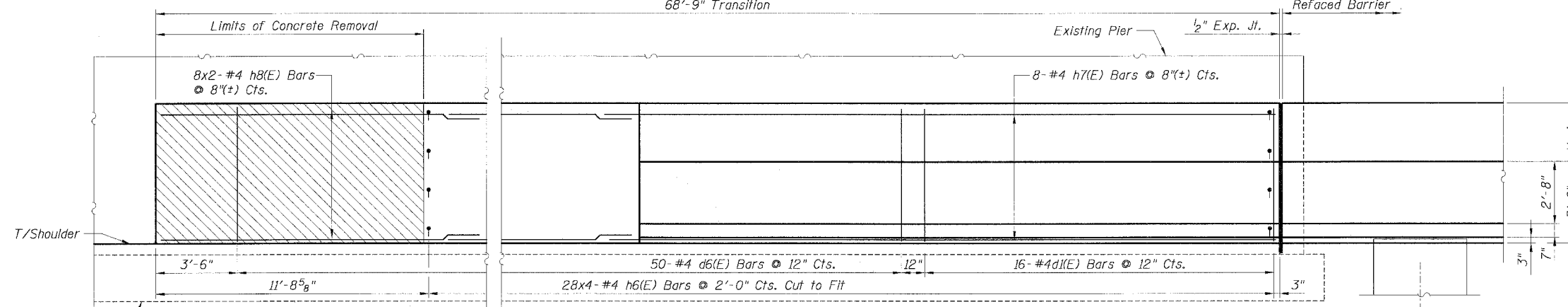
Sheet B8 of 18

REVISIONS	
NAME	DATE
MJP	8-12-05

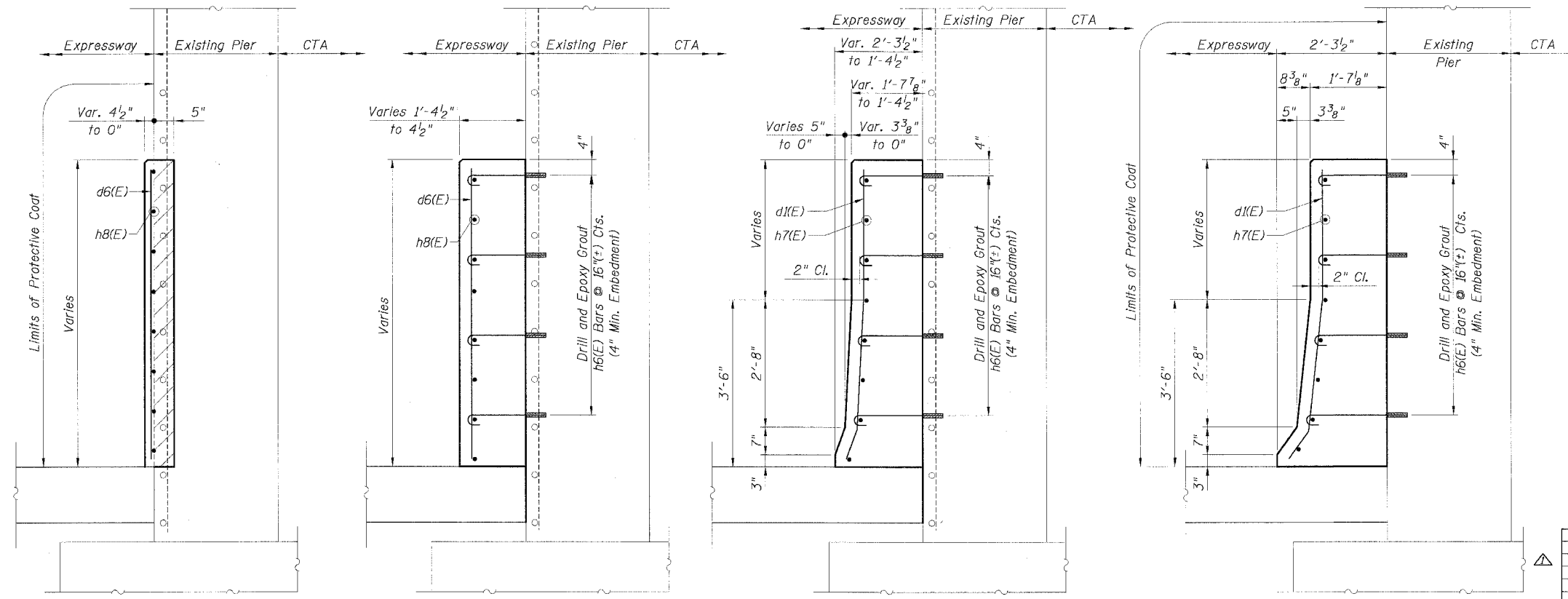
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP



PLAN



ELEVATION



CTE | AECOM

SECTION A-A

SECTION B-B

SECTION C-C

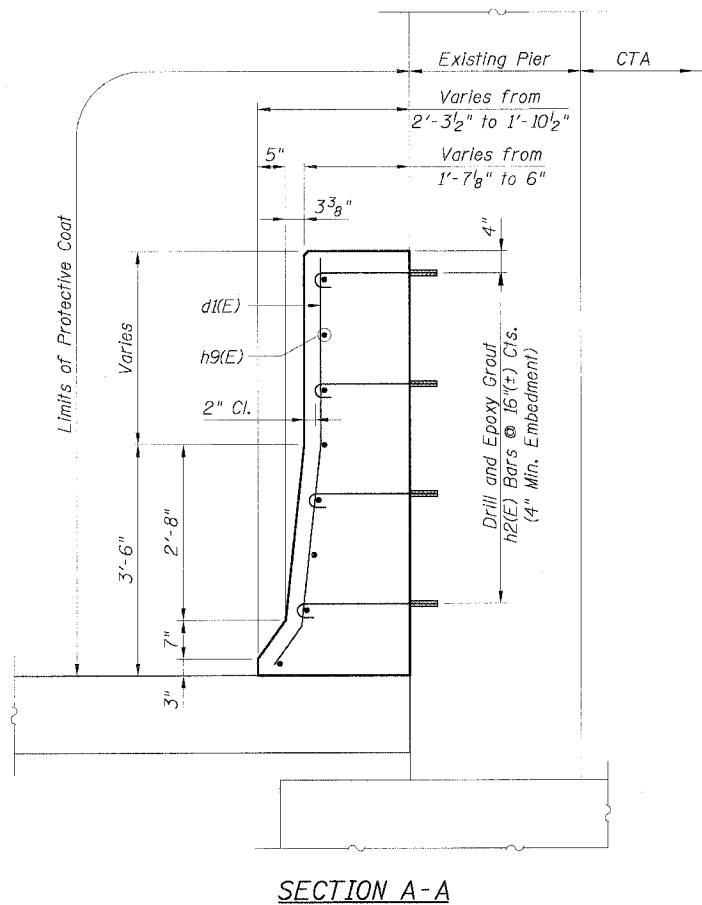
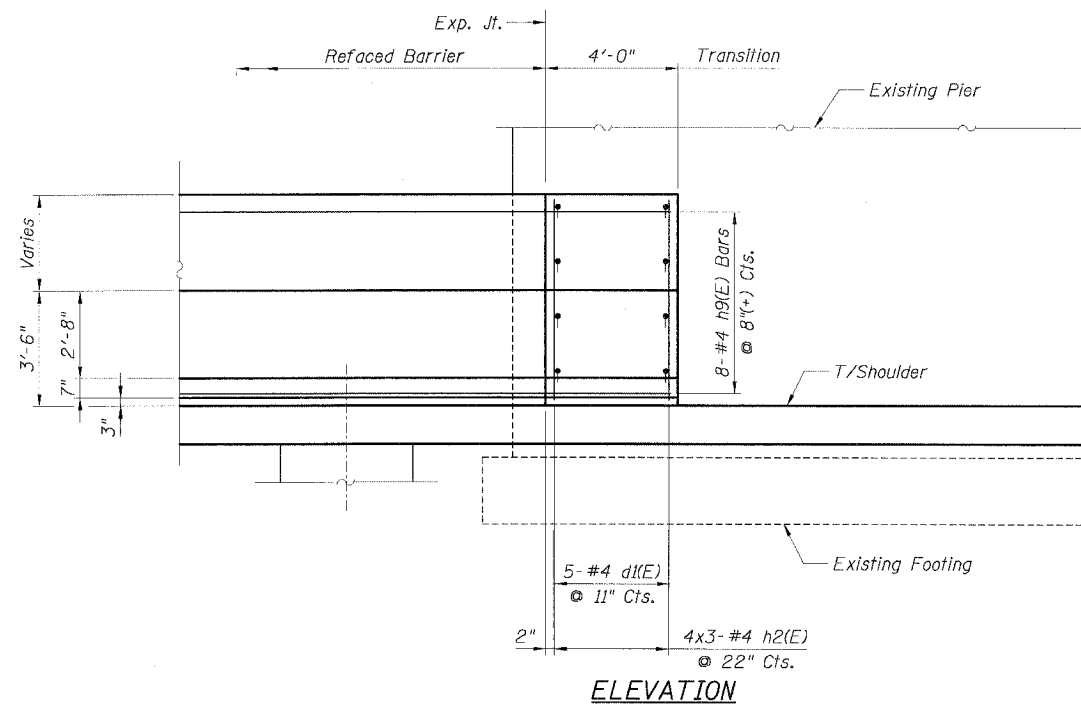
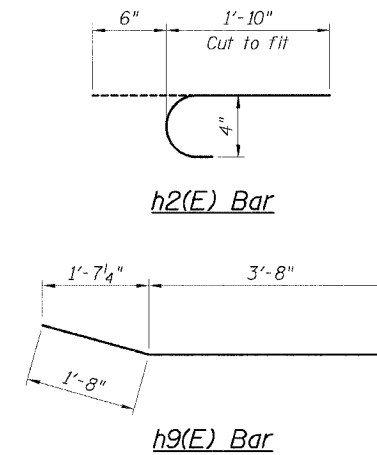
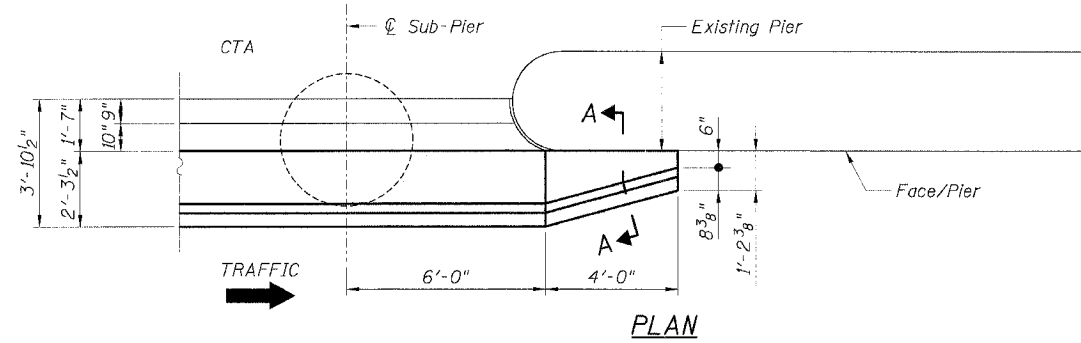
SECTION D-D

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

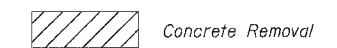
F.A.I. RTE. 90/94	SECTION *	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 417
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (1818, ETC, 2324.6-10)R-9 62302				

**BILL OF MATERIAL
FOR ONE TRANSITION**

Bar	No.	Size	Length	Shape
d1(E)	5	#4	6'-5"	—
h2(E)	12	#4	2'-4"	⌋
h9(E)	8	#4	5'-4"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	56		
Concrete Superstructure	Cu. Yd.	1.4		
Protective Coat	Sq. Yd.	4		



LEGEND:



NOTES:

1. Drilling and grouting of #4 h2(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h2(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. For d1(E) bar details, see Sheet B2.
4. For Refaced Barrier Wall Details, see Sheets B2 and B3.
5. For locations of Transition, see Roadway Plans.

CTE | AECOM

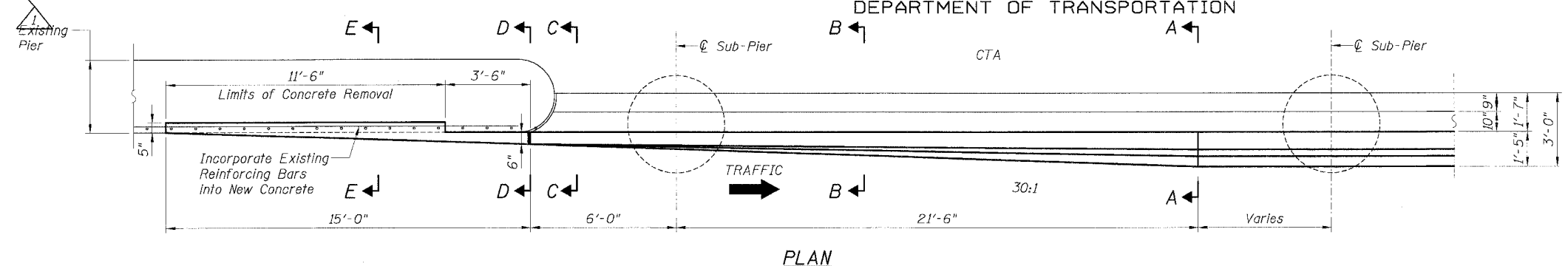
REVISIONS	NAME	DATE
MJP		8-12-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (NO TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: MJP

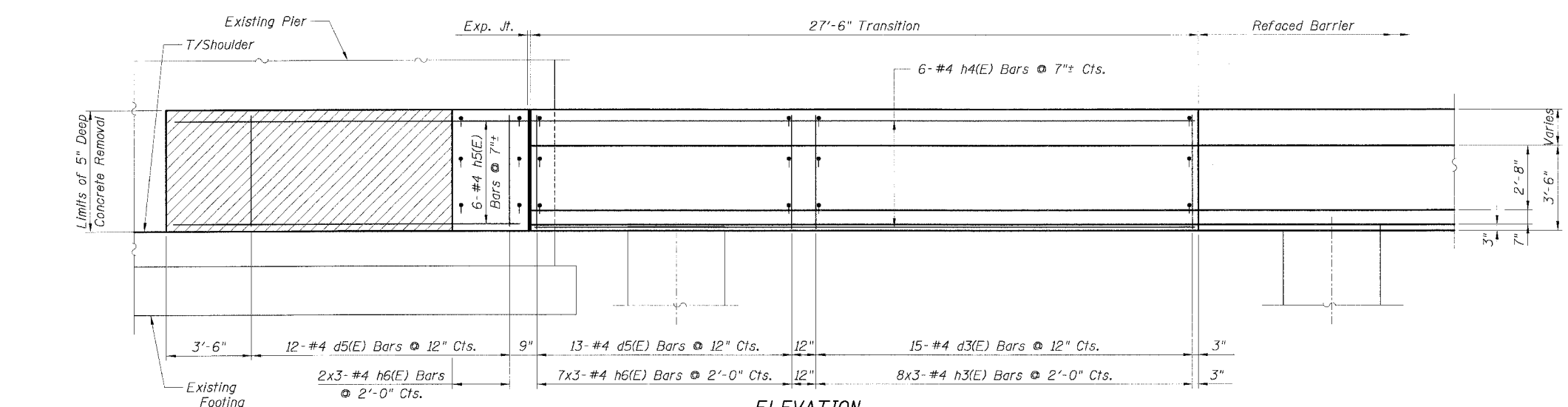
Sheet B9 of 18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

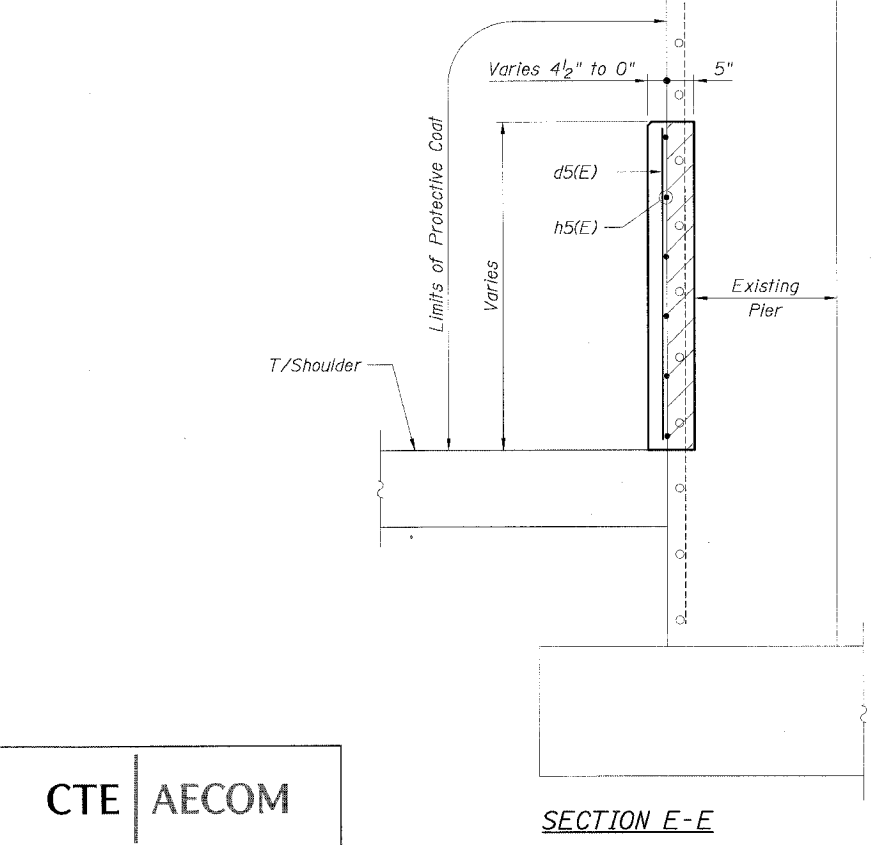
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90/94		COOK	598	418
STA.	TO STA.		FED. AID PROJECT	
			• 11818, ETC, 2324.6-10R-9 62302	



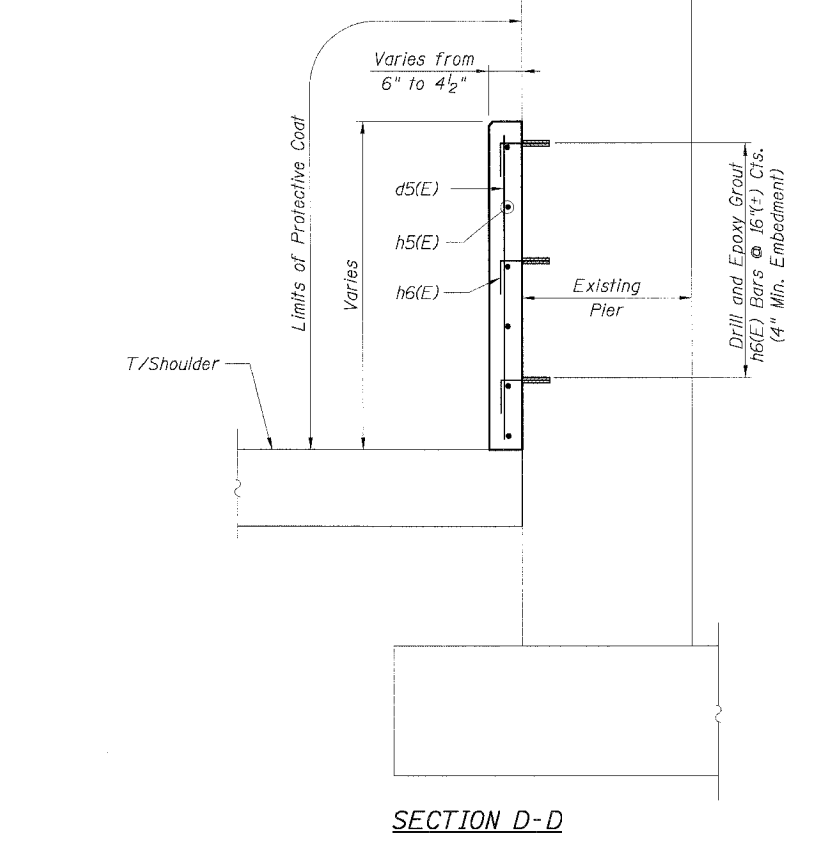
PLAN



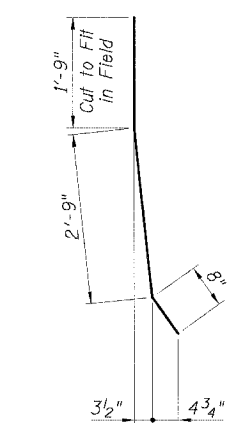
ELEVATION



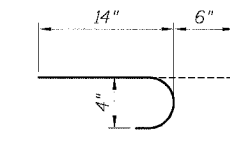
SECTION E-E



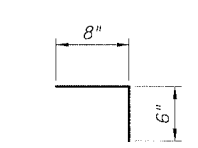
SECTION D-D



d3(E) Bar



h3(E) Bar



h6(E) Bar

BILL OF MATERIAL
FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d3(E)	15	#4	5'-2"	
d5(E)	25	#4	4'-8"	
h3(E)	48	#4	1'-8"	
h4(E)	6	#4	27'-2"	
h5(E)	6	#4	14'-8"	
h6(E)	27	#4	1'-2"	
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	372		
Concrete Superstructure	Cu. Yd.	4.7		
Protective Coat	Sq. Yd.	25		
Concrete Removal	Cu. Yd.	0.9		

NOTES:

1. Drilling and grouting of #4 h3(E) and h6(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) and h6(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. Exposed existing reinforcement bars shall remain in place and be blast cleaned to gray metal. Reinforcement bars that have been cut or have lost 25% or more of their original cross sectional area shall be supplemented by new epoxy coated reinforcement bars.
4. The cost of supplementing and cleaning existing reinforcement bars shall be included in the cost per cubic yard for Concrete Removal.
5. Provide joints in facing to match those in the existing barrier. See Sheet B7 for details.
6. For Soldier Pile and Lagging Retention System, see Sheets B1, B4 and B5.
7. For Refaced Barrier Wall Details, see Sheets B4 and B5.
8. For Sections A-A, B-B and C-C, see Sheet B11.
9. For Existing Concrete Repair Details, see Sheet B3.
10. For Facing Details at Existing Light Pole Foundation, see Sheet B5.
11. For locations of Transition, see Roadway Plans.

REVISIONS		DATE
NAME		
MJP		8-12-05

LEGEND:
 Concrete Removal

Sheet B10 of 18
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: MJP

CTE | AECOM

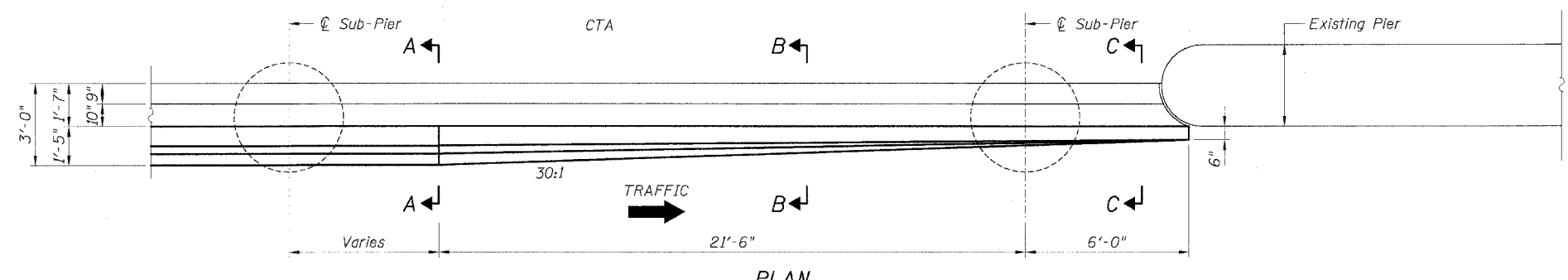
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	419

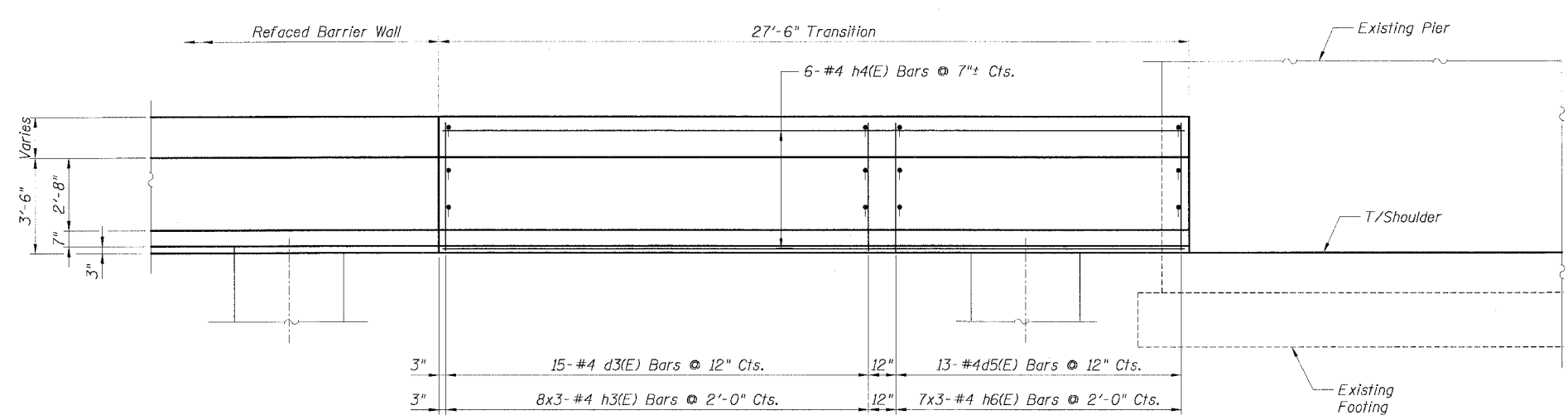
STA.	TO STA.
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT
(1818, ETC, 2324.6-101R-9	62302

**BILL OF MATERIAL
FOR ONE TRANSITION**

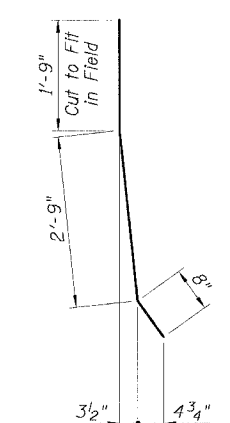
Bar	No.	Size	Length	Shape
d3(E)	15	#4	5'-2"	—
d5(E)	13	#4	4'-8"	—
h3(E)	24	#4	1'-8"	—
h4(E)	6	#4	27'-2"	—
h6(E)	21	#4	1'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	240		
Concrete Superstructure	Cu. Yd.	3.1		
Protective Coat	Sq. Yd.	20		



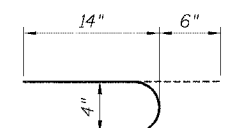
PLAN



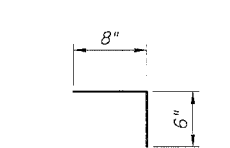
ELEVATION



d3(E) Bar



h3(E) Bar



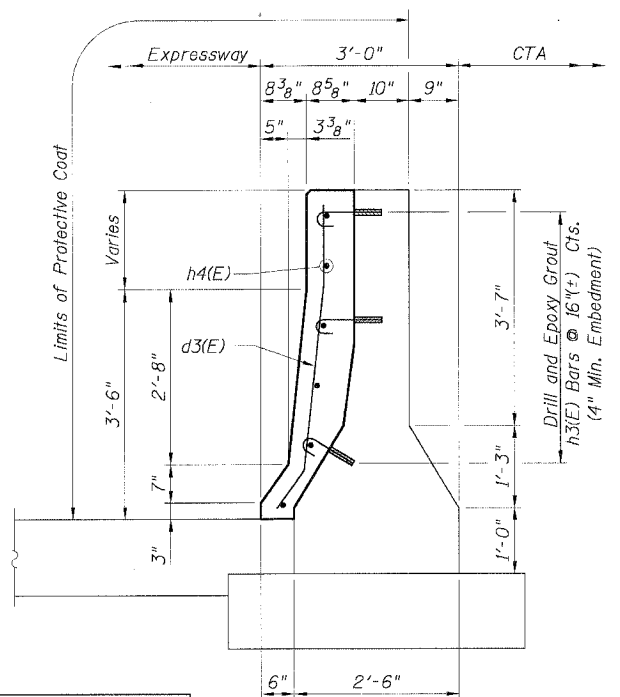
h6(E) Bar

LEGEND:

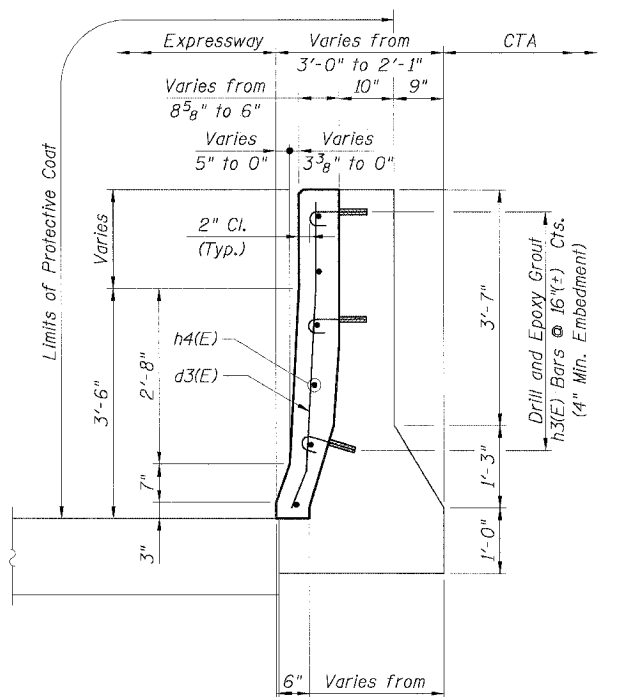


NOTES:

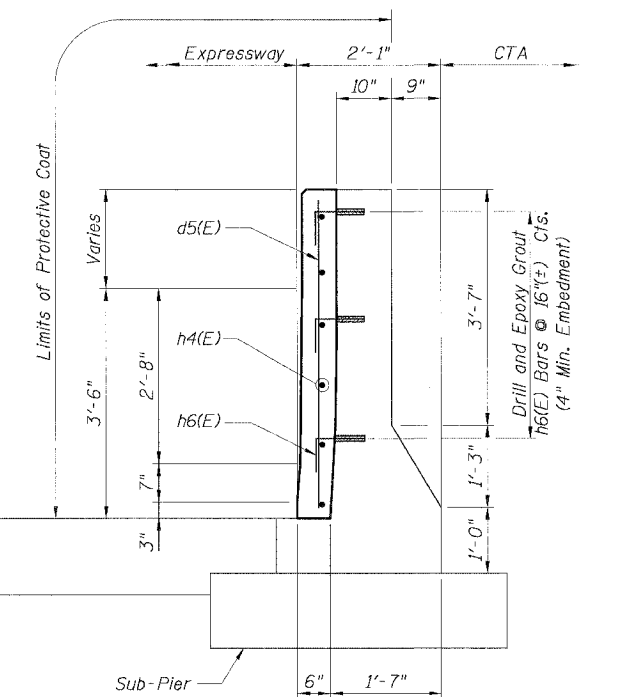
1. Drilling and grouting of #4 h3(E) and h6(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) and h6(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. Provide joints in facing to match those in the existing barrier. See Sheet B7 for details.
4. For Solder Pile and Lagging Retention System, see Sheets B1, B4 and B5.
5. For Refaced Barrier Wall Details, see Sheets B4 and B5.
6. For Existing Concrete Repair Details, see Sheet B3.
7. For Facing Details at Existing Light Pole Foundation, see Sheet B5.
8. For locations of Transition, see Roadway Plans.



SECTION A-A



SECTION B-B



SECTION C-C

CTE | AECOM

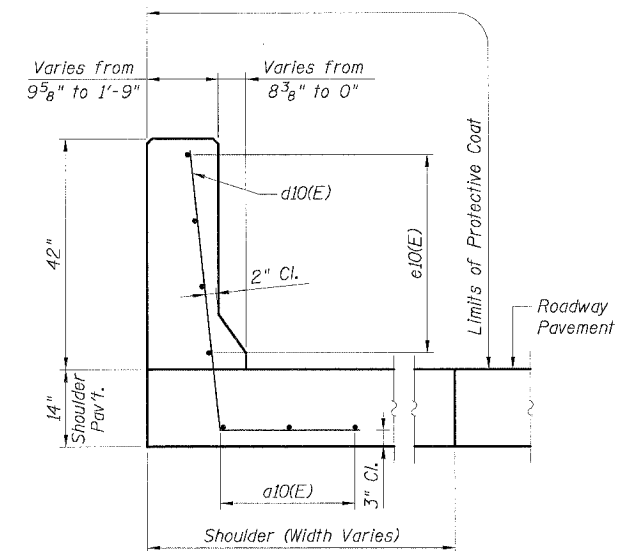
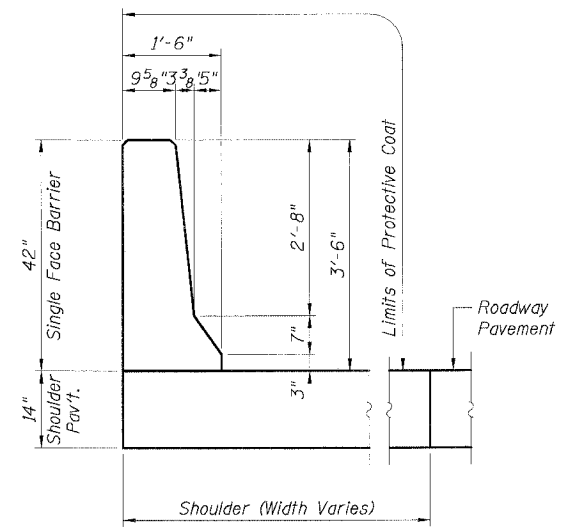
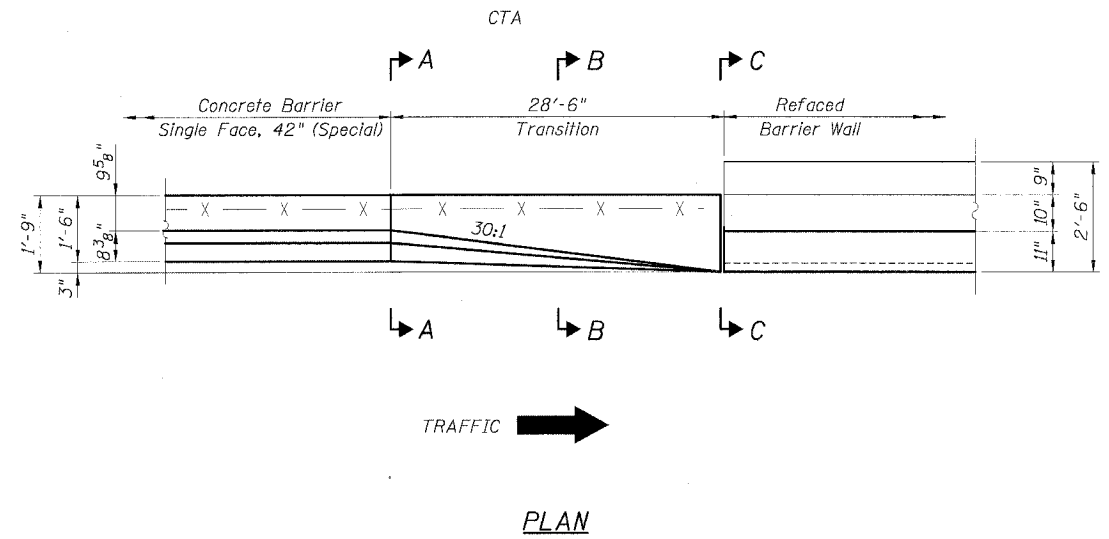
REVISIONS	
NAME	DATE
MJP	8-12-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/SOULDER AT OR ABOVE EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (NO TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: ROP

Sheet B11 of 18

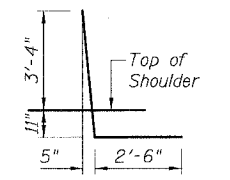
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	420
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-10R-9 62302				

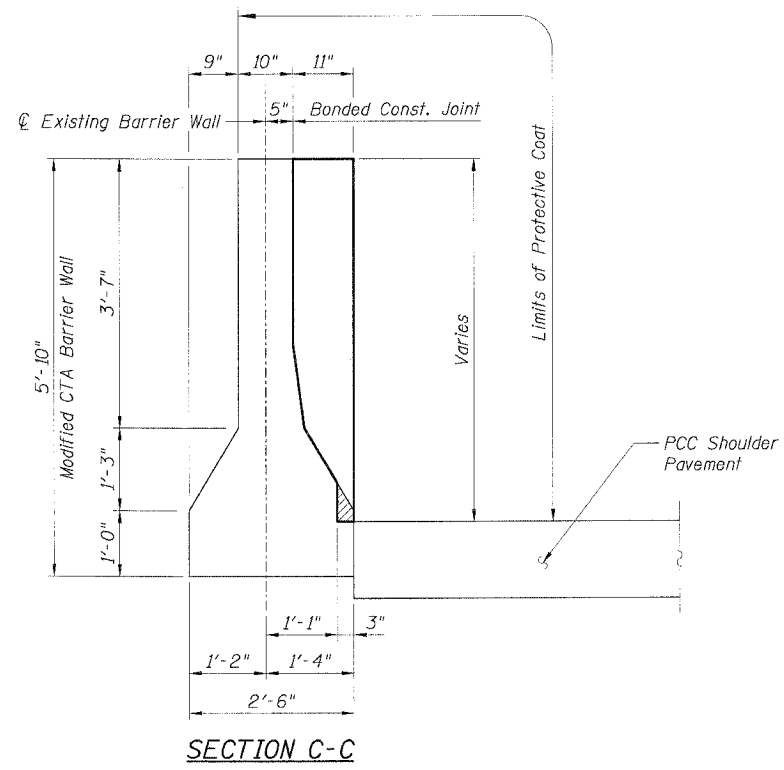
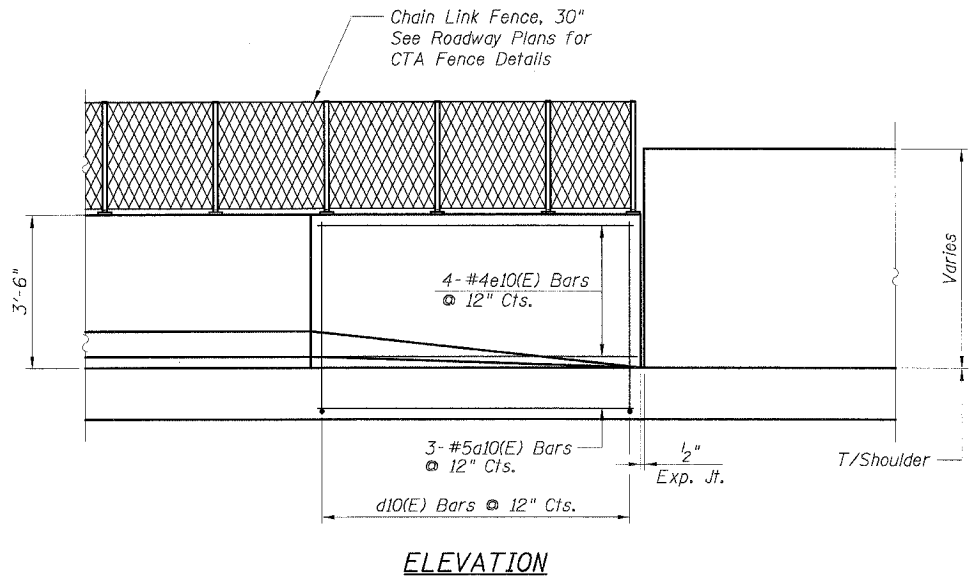


BILL OF MATERIAL FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
a10	3	#5	28'-2"	—
d10	29	#6	6'-9"	L
e10	4	#4	28'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	457		
Concrete Superstructure	Cu. Yd.	5.2		
Protective Coat	Sq. Yd.	15		



BAR d10(E)



- NOTES:**
- For alternative vertical reinforcing details, see "Concrete Barrier Single Face, 42" Alternates".
 - For existing CTA Barrier modifications - vertical facing, see sheet B7.
 - For Expansion Joint details see Sheet B6.
 - For locations of Transition, see Roadway Plans.

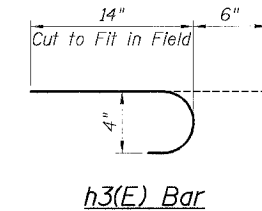
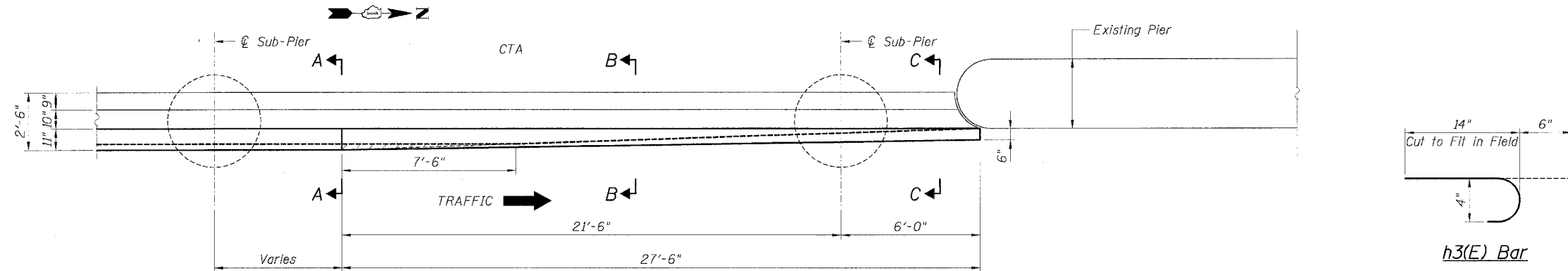
CTE | AECOM

REVISIONS	
NAME	DATE
MJP	8-12-05

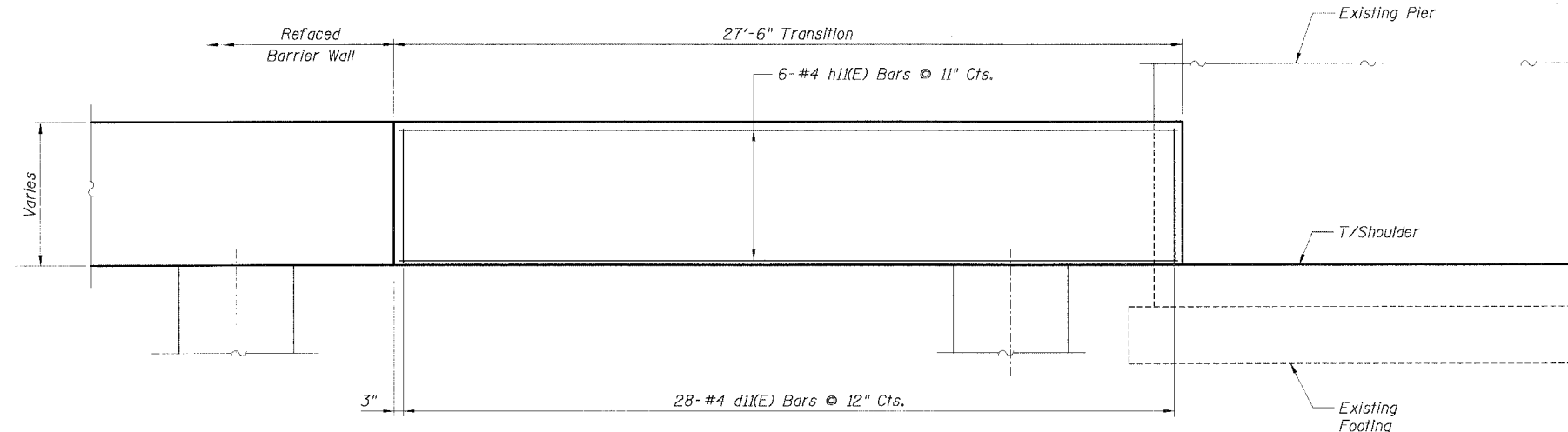
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
NEW 42" BARRIER TO VERT. REFACED BARRIER
TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

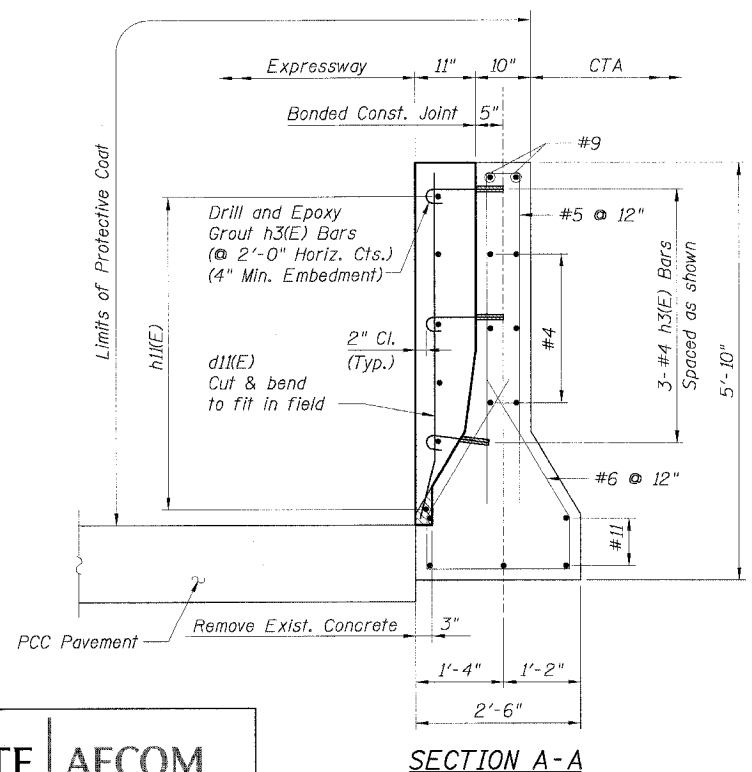
F.A.I. RTE. 90/94	SECTION *	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 421
STA.		TO STA.		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				
• (1818, ETC., 2324.6-101R-9				62302



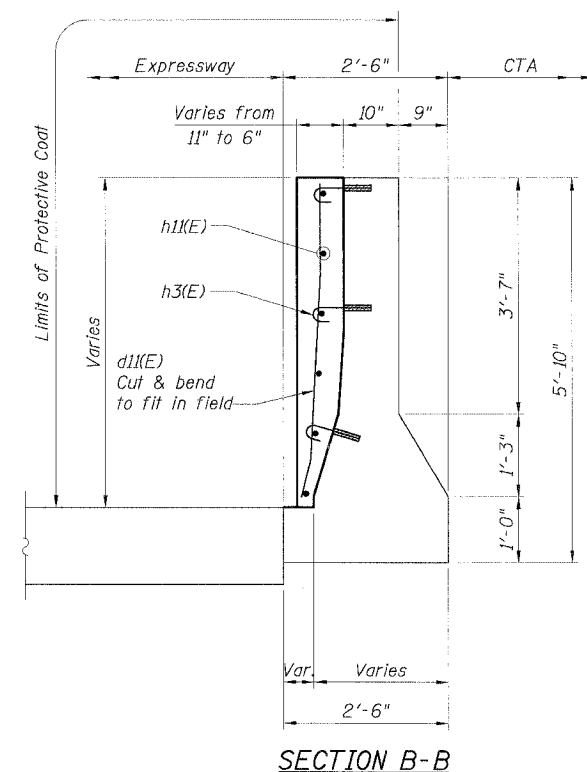
PLAN



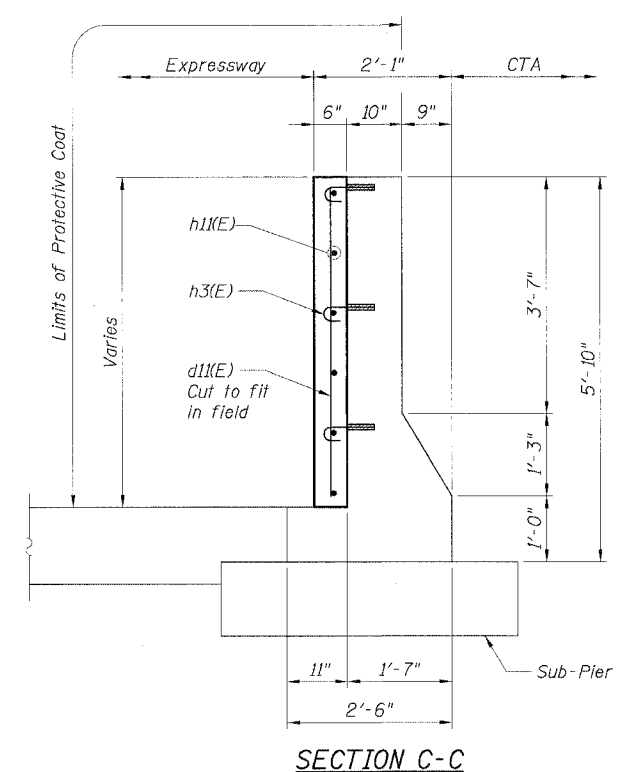
ELEVATION



SECTION A-A



SECTION B-B

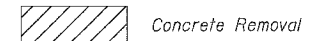


SECTION C-C

BILL OF MATERIAL
FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d1(E)	28	#4	4'-8"	—
h3(E)	42	#4	1'-8"	U
h1(E)	6	#4	24'-8"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	233		
Concrete Superstructure	Cu. Yd.	3.2		
Protective Coat	Sq. Yd.	20		
Concrete Removal	Cu. Yd.	0.1		

LEGEND:



NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Superstructure.
3. Provide joints in facing to match those in the existing barrier. See Sheet B7 for details.
4. For Soldier Pile and Lagging Retention System see Sheets B1, B4 and B5.
5. For Refaced Barrier Wall Details, see Sheet B7.
6. For Existing Concrete Repair Details, see Sheet B3.
7. For Facing Details at Existing Light Pole Foundation, see Sheet B5.
8. For locations of Transition, see Roadway Plans.

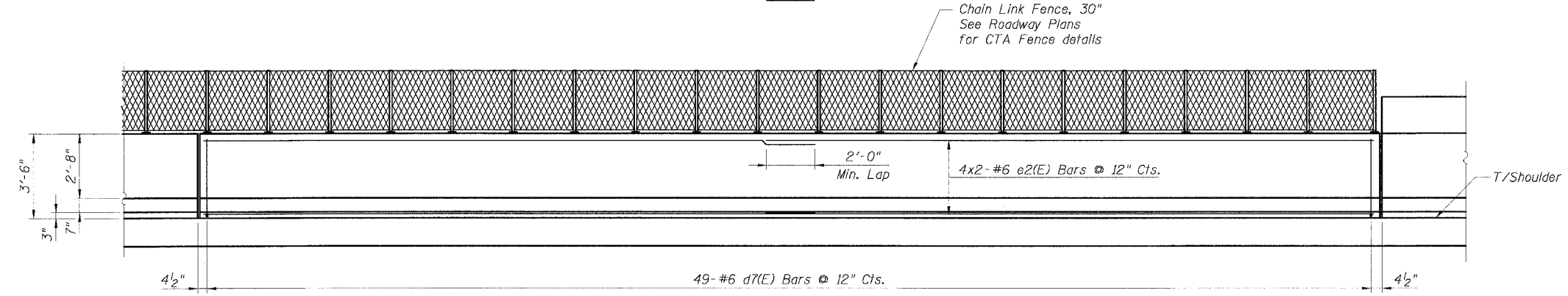
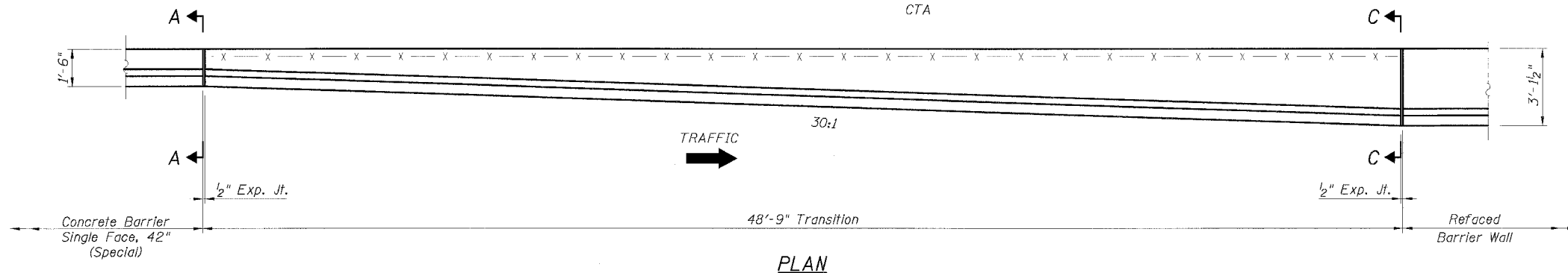
REVISIONS	
NAME	DATE
MJP	8-12-05

Sheet B13 of 18
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
FOR 69TH ST. STATION (NB)
VERT. REFACED BARRIER TO PIER
TRANSITION DETAILS (NO TAPER)
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP

CTE | AECOM

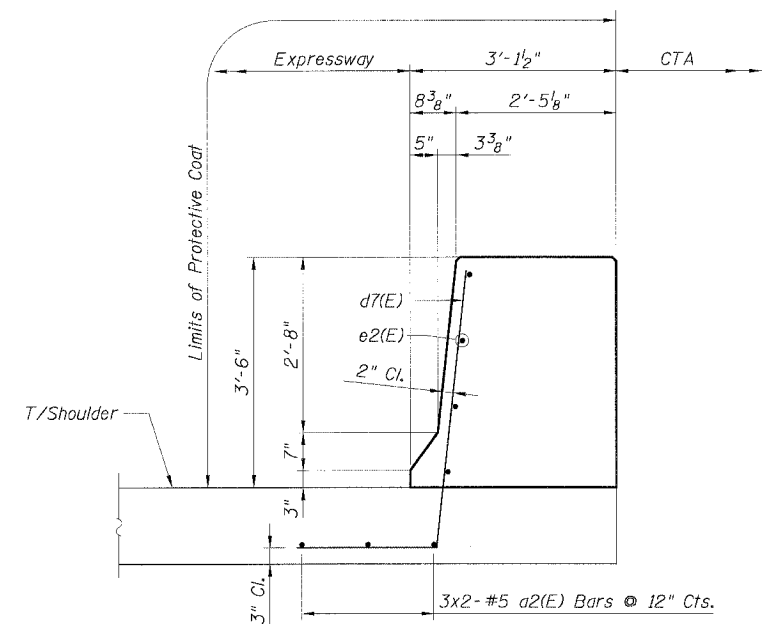
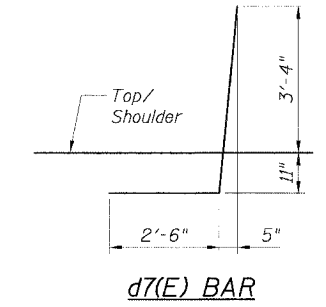
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	422
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				62302
• (1818, ETC, 2324.6-10R-9				



BILL OF MATERIAL FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
a2(E)	6	#5	25'-3"	—
d7(E)	49	#6	6'-9"	—
e2(E)	8	#6	25'-3"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	958		
Concrete Superstructure	Cu. Yd.	11.7		
Protective Coat	Sq. Yd.	28.5		



- NOTES:**
1. Provide Construction Joint in the transition.
 2. For Expansion Joint Details, see Sheet B6.
 3. For Section A-A, see Sheet B15.
 4. For alternative vertical reinforcing details, see "Concrete Barrier Single Face, 42" Alternatives".
 5. For Refaced Barrier Wall Details, see Sheets B2 and B3.
 6. For Soldier Pile and Lagging Retention System, see Sheets B1 thru B3.
 6. For Concrete Barrier Single Face, 42" (Special) Details, see Roadway details.
 7. For locations of Transition, see Roadway Plans.

CTE | AECOM

REVISIONS		
NAME	DATE	
MJP	8-12-05	

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
REFACED BARRIER TO NEW 42" BARRIER
TRANSITION DETAILS

SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP

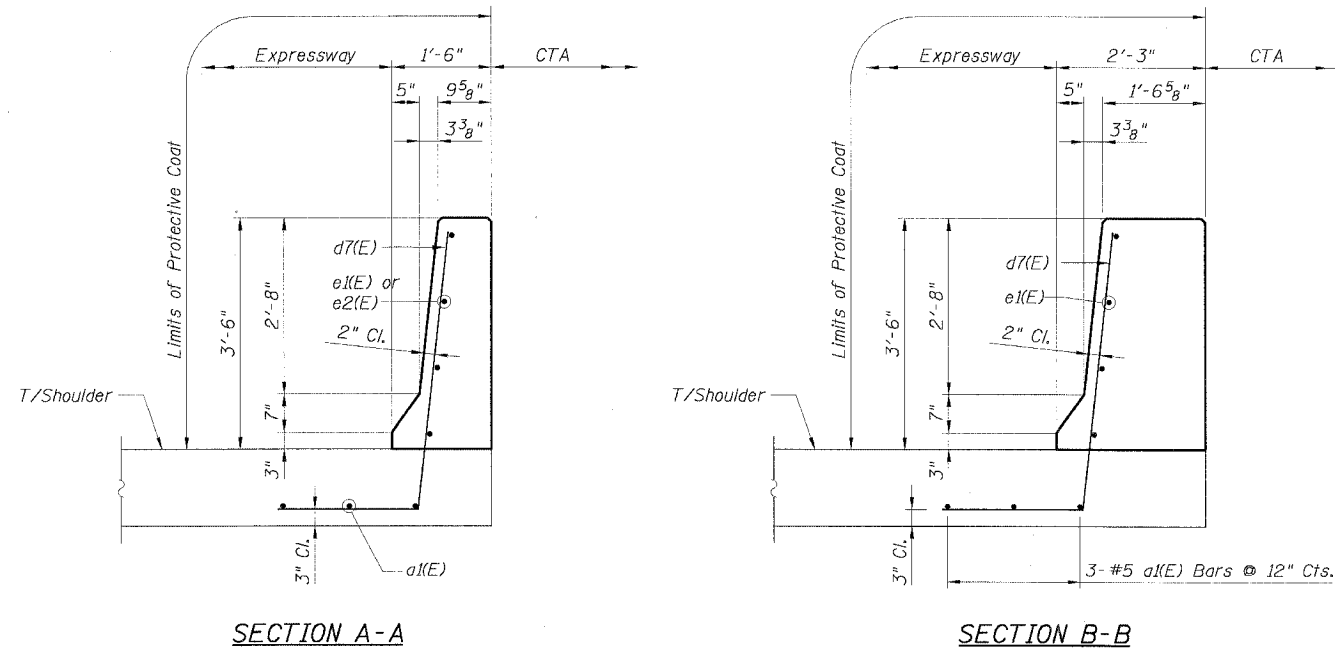
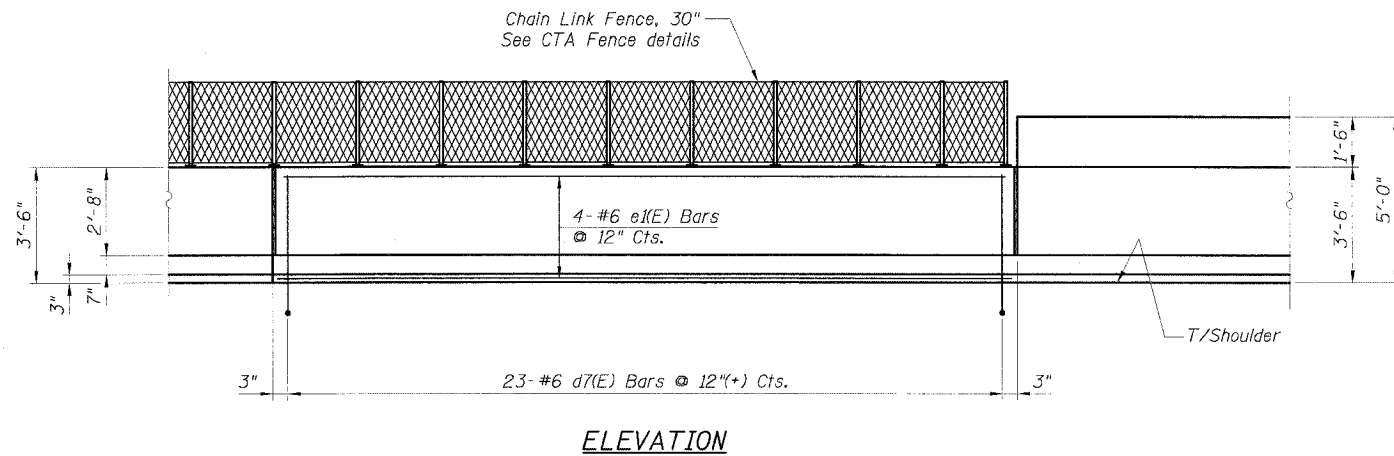
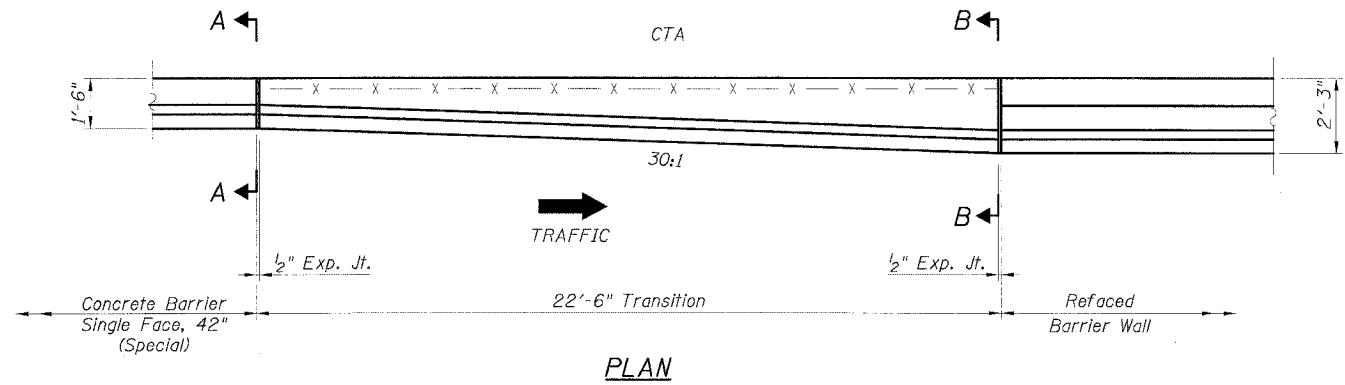
Sheet B14 of 18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 423
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (181B, ETC, 2324.6-101R-9				62302

**BILL OF MATERIAL
FOR ONE TRANSITION**

Bar	No.	Size	Length	Shape
a1(E)	3	#5	22'-2"	—
d7(E)	23	#6	6'-9"	—
e1(E)	4	#6	22'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	436		
Concrete Superstructure Protective Coat	Sq. Yd.	12		



NOTES:

1. For Expansion Joint Details, see Sheet B6.
2. For alternative vertical reinforcing details, see "Concrete Barrier Single Face, 42" Alternatives".
3. For d7(E) bar details, see Sheet B14.
4. For Refaced Barrier Wall details, see Sheets B4 and B5.
5. For Soldier Pile and Lagging Retention System, see Sheets B1, B4 and B5.
6. For Concrete Barrier Single Face, 42" (Special), see Roadway details.
7. For locations of Transition, see Roadway Plans.

CTE | AECOM

REVISIONS	
NAME	DATE
MJP	8-12-05

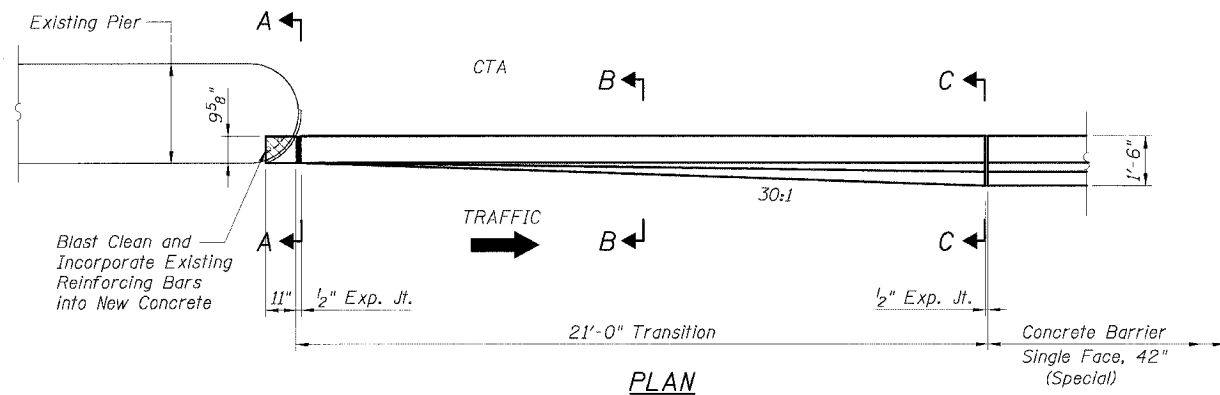
Sheet B15 of 18

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/SOULDER AT OR ABOVE EXISTING
REFACED BARRIER TO NEW 42" BARRIER
TRANSITION DETAILS

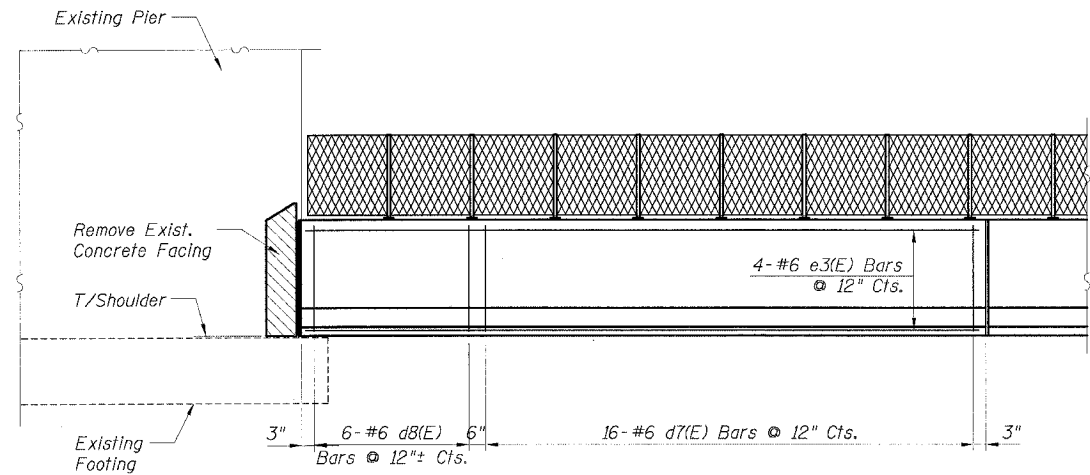
SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

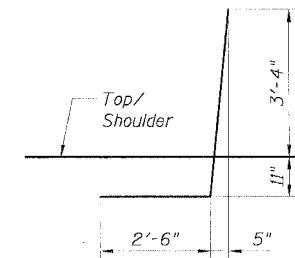
F.A.I. RTE. 90/94	SECTION	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 424
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-10IR-9 62302				



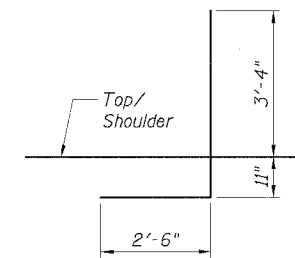
PLAN



ELEVATION



d7(E) BAR



d8(E) BAR

BILL OF MATERIAL FOR ONE TRANSITION

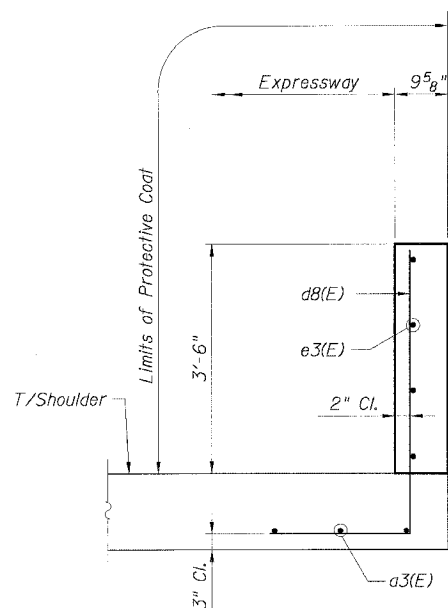
Bar	No.	Size	Length	Shape
a3(E)	3	#5	20'-8"	
d7(E)	15	#6	6'-9"	
d8(E)	5	#6	6'-9"	
e3(E)	4	#6	20'-8"	
Item			Unit	Quantity
Reinforcement Bars, Epoxy Coated			Pound	392
Concrete Superstructure			Cu. Yd.	2.6
Protective Coat			Sq. Yd.	10
Concrete Removal			Cu. Yd.	0.1

LEGEND:

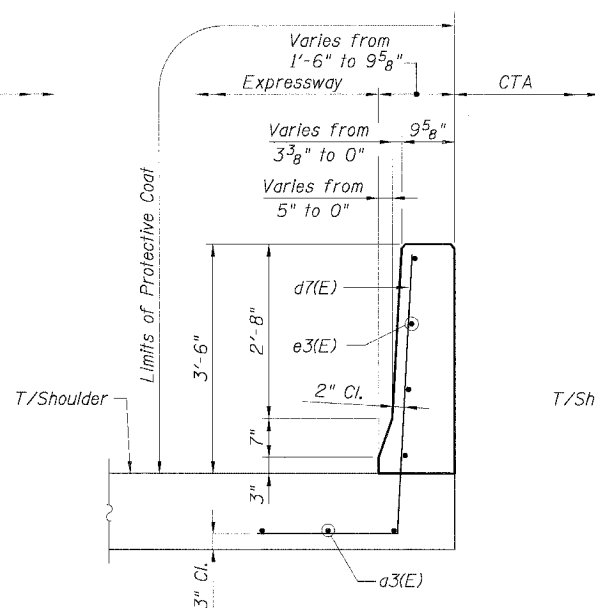
Concrete Removal

NOTES:

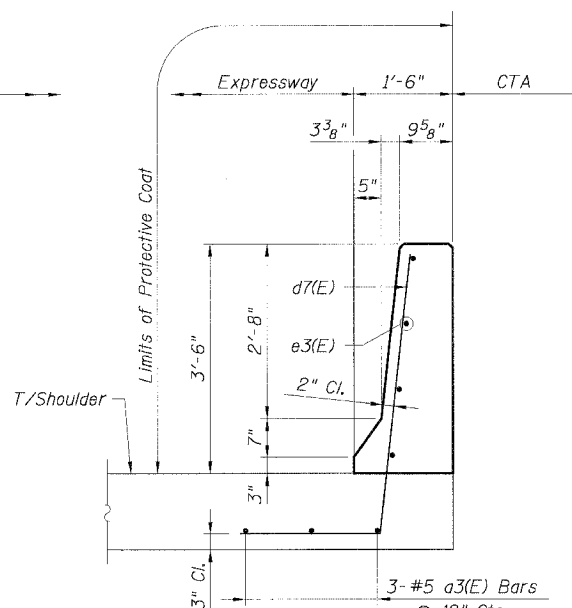
- For Expansion Joint Details see Sheet B6.
- For alternative vertical reinforcing details see "Concrete Barrier Single Face, 42" Alternatives".
- For Concrete Barrier Single Face, 42" (Special), see Roadway details.
- For locations of Transition, see Roadway Plans.



SECTION A-A



SECTION B-B



SECTION C-C

CTE | AECOM

REVISIONS	
NAME	DATE
MJP	8-12-05

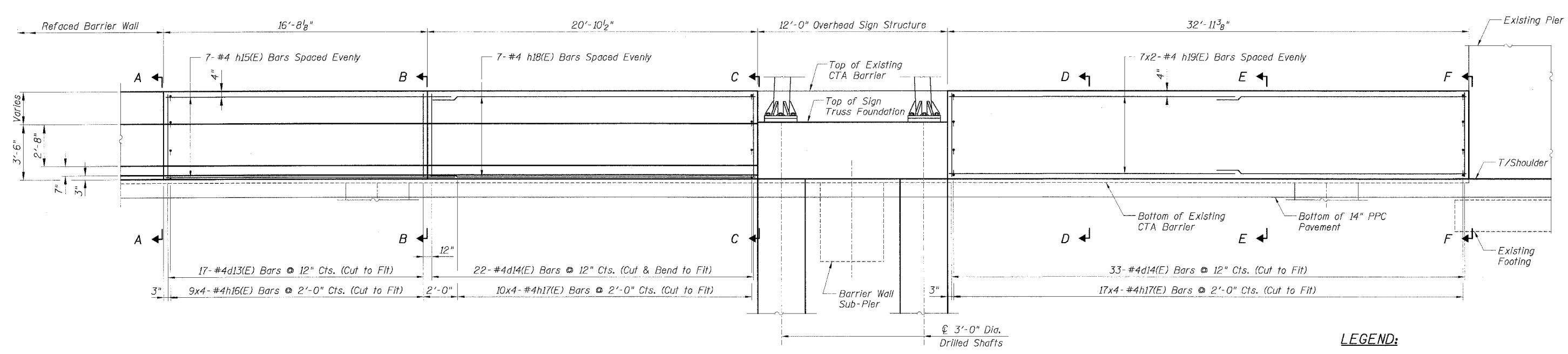
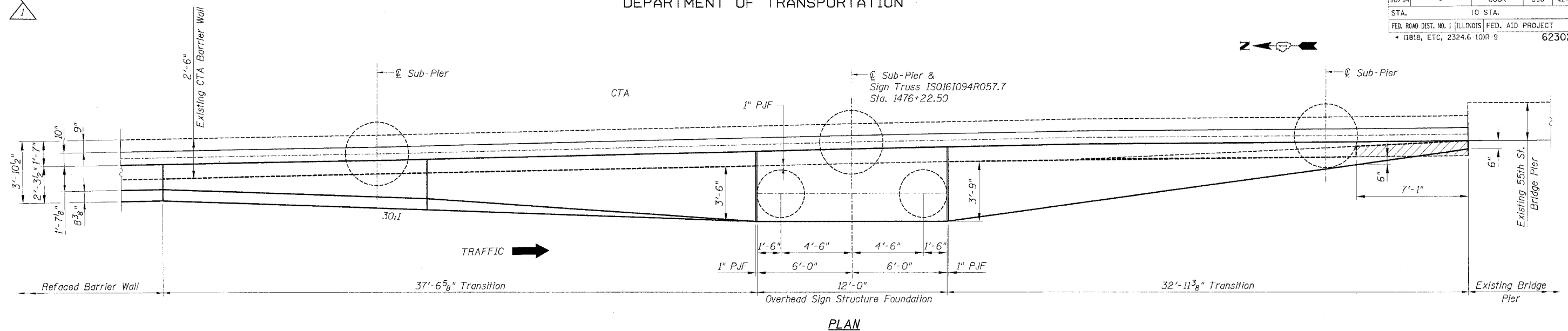
Sheet B16 of 18

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROP. T/S SHOULDER ABOVE OR BELOW EXISTING
NEW 42" BARRIER TO PIER
TRANSITION DETAILS

SCALE: None DRAWN BY: CHD
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 424A
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-10R-9 62302				



LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

NOTES:

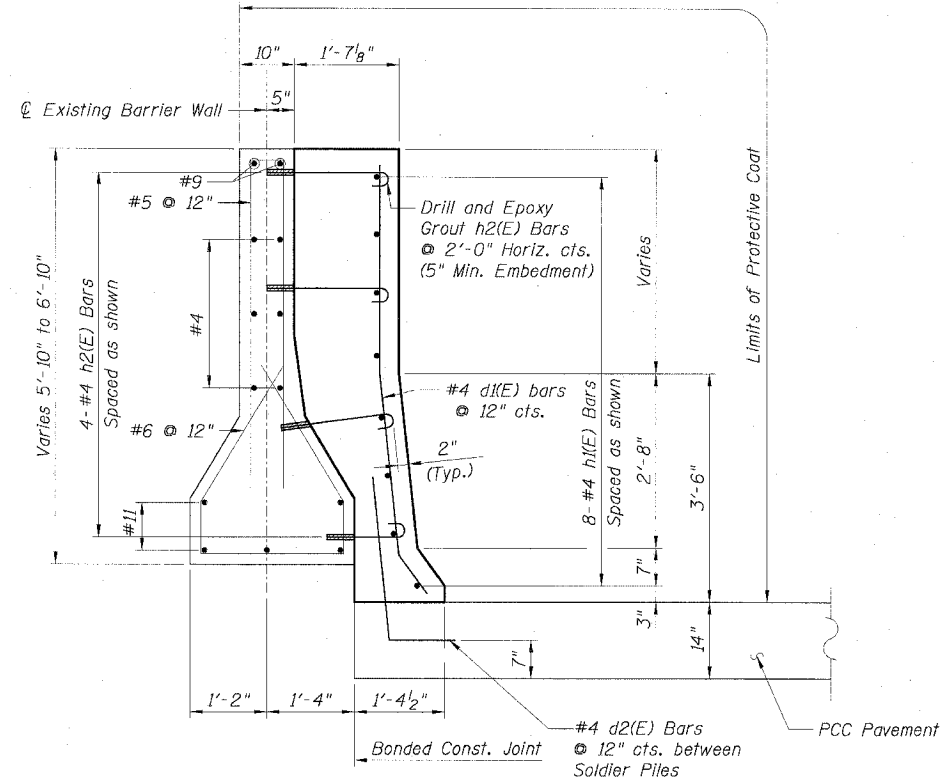
1. Drilling and grouting of #4 h2(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. #4 d2(E) bars shall be seated in their final position prior to the placement of the concrete shoulder. Bars shall not be mucked into place.
3. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h2(E) bars shall be included in the cost per cubic yard for Concrete Structures.
4. Provide joints in facing to match those in the existing barrier.
5. Exposed existing reinforcement shall remain in place and be blast cleaned to gray metal. Reinforcement bars that are cut or have lost 25% or more of their original cross sectional area shall be supplemented by new epoxy coated reinforcement bars. The cost of supplementing and cleaning existing reinforcement bars shall be included in the cost per cubic yard for Concrete Removal.

REVISIONS		
M/J/P	NAME	DATE
		8-12-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
REFACED BARRIER TO NEW SIGN STRUCTURE
TRANSITION PLAN AND ELEVATION
SCALE: None DRAWN BY: JSS
DATE: July 7, 2005 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	424B
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
• (1818, ETC, 2324.6-1)R-9		62302		



DETAIL 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
dx(E)		#4	X'-4"	┌	
dx(E)		#4	X'-6"	└	
hx(E)		#4		—	
hx(E)		#4	X'-4"	└	
Item				Unit	Quantity
Furnishing Soldier Piles, W12x				Foot	
Drilling and Setting					
Soldier Piles (in Soil)				Cu. Ft.	
Untreated Timber Lagging				Sq. Ft.	
Concrete Removal				Cu. Yd.	
Reinforcement Bars, Epoxy Coated				Lbs.	
Concrete Structures				Cu. Yd.	
Protective Coat				Sq. Yd.	

NOTES:

1. Drilling and grouting of #4 h2(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. #4 d2(E) bars shall be seated in their final position prior to the placement of the concrete shoulder. Bars shall not be mucked into place.
3. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h2(E) bars shall be included in the cost per cubic yard for Concrete Structures.
4. Provide joints in facing to match those in the existing barrier.

LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS**
**PROPOSED T/SOULDER BELOW EXISTING
REFACED BARRIER TO NEW SIGN STRUCTURE
TRANSITION DETAILS**
SCALE: None DRAWN BY: KWT
DATE: JULY 7, 2005 CHECKED BY: RDP

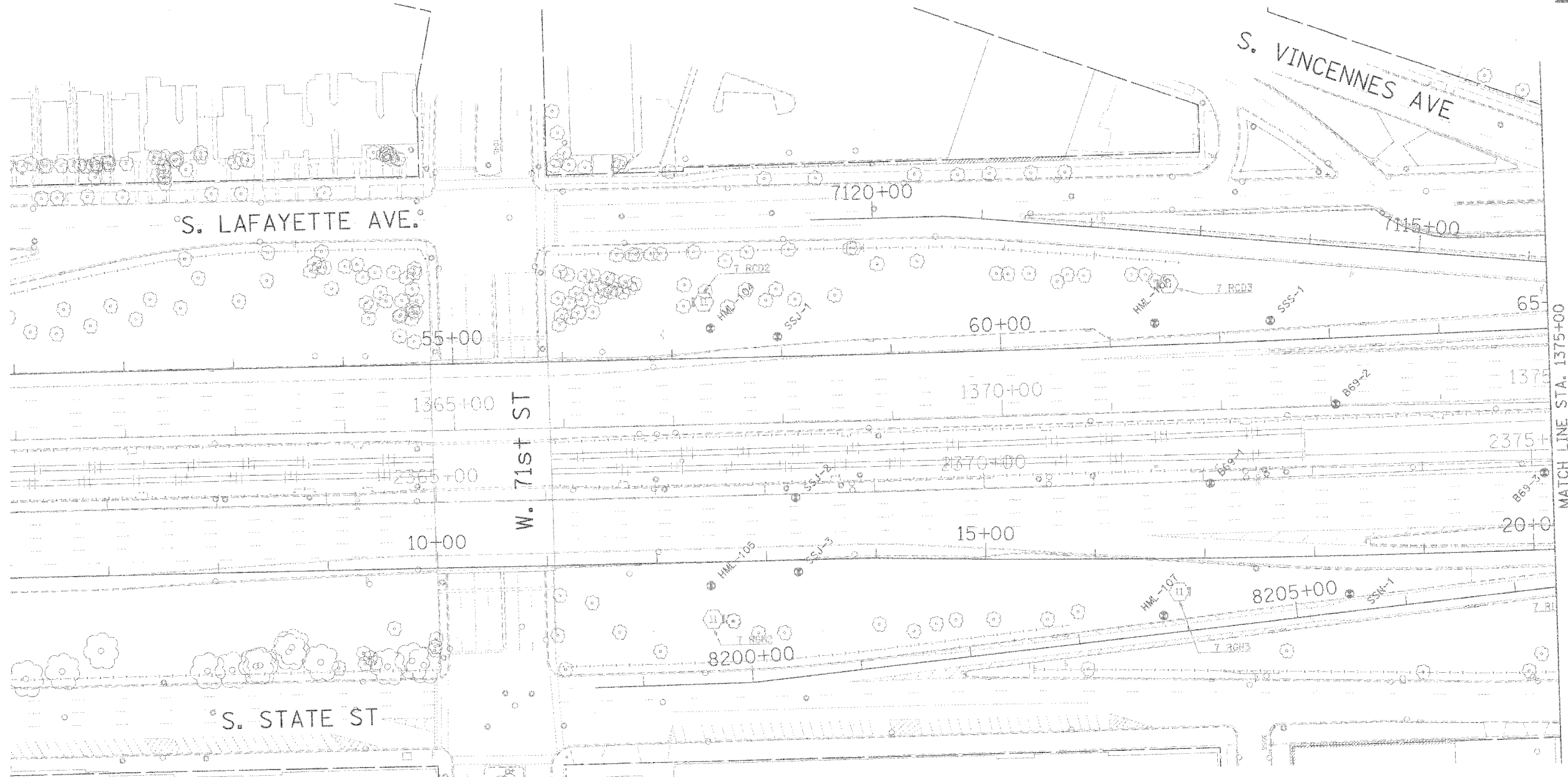
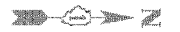
Sheet B18 of 18

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CTE
300 East Wacker Drive, Suite 400, Chicago, Illinois 60601-2076
T 312.384.0900 F 312.384.1109 www.cteaecom.com

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F.A.I. RTE. 90/94	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	598	424C
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* CBIR, ETC. 2324.6-1PIR-9				62302



MATCH LINE STA. 1375+00

LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- (H) HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REG : RETAINING WALL, EAST SIDE, WALL-O
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW.SWW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CORING

ADDED SHEET

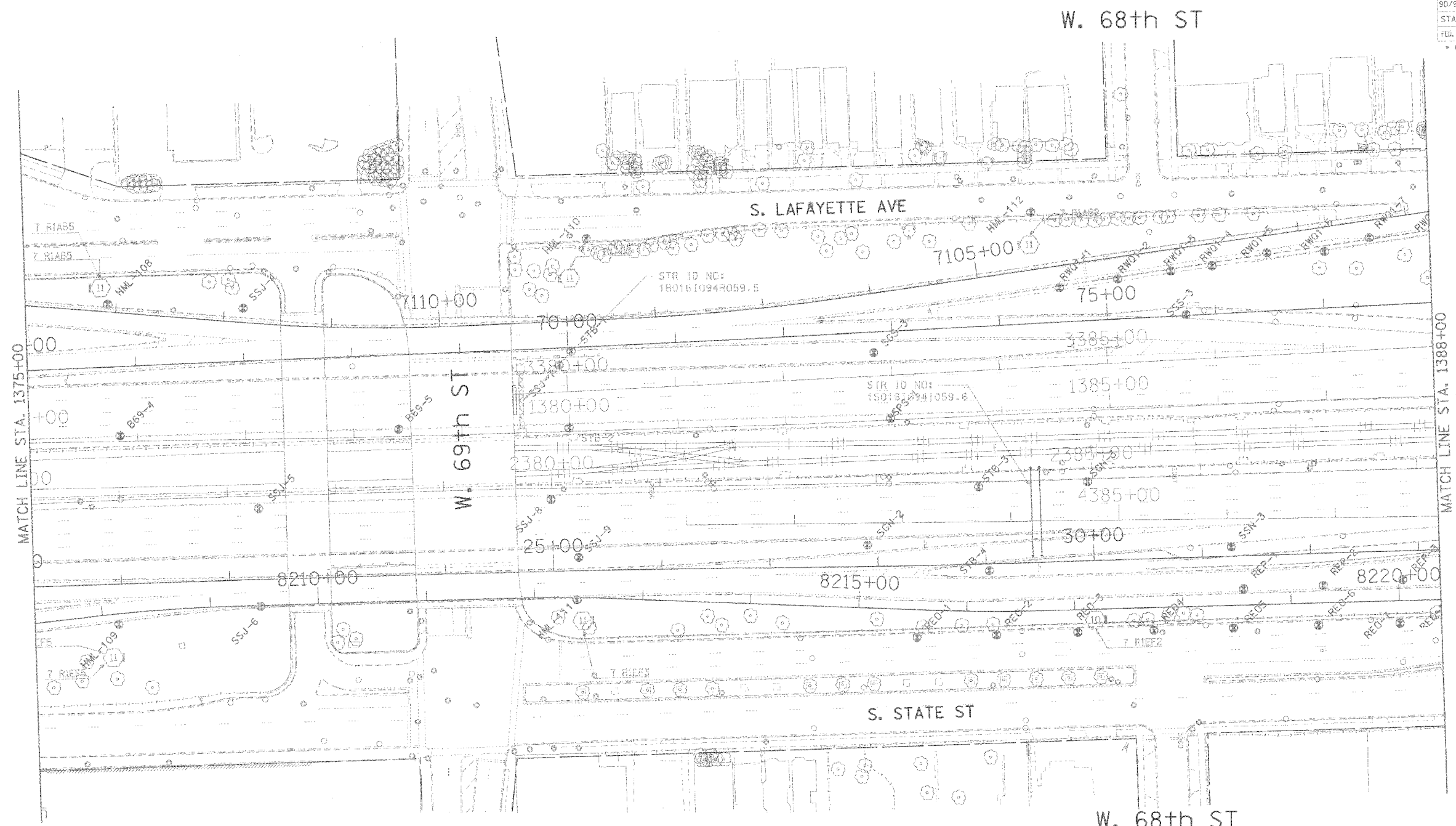


REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)
SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	4240
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			62302	
* GS18, ETC. 2324.6-1PR-9				



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-C
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SSW : BRIDGE
- SCN : SUBGRADE, NORTHBOUND
- SCS : SUBGRADE, SOUTHBOUND
- BRN : 47TH ST. RAMP
- C : BORING

ADDED SHEET



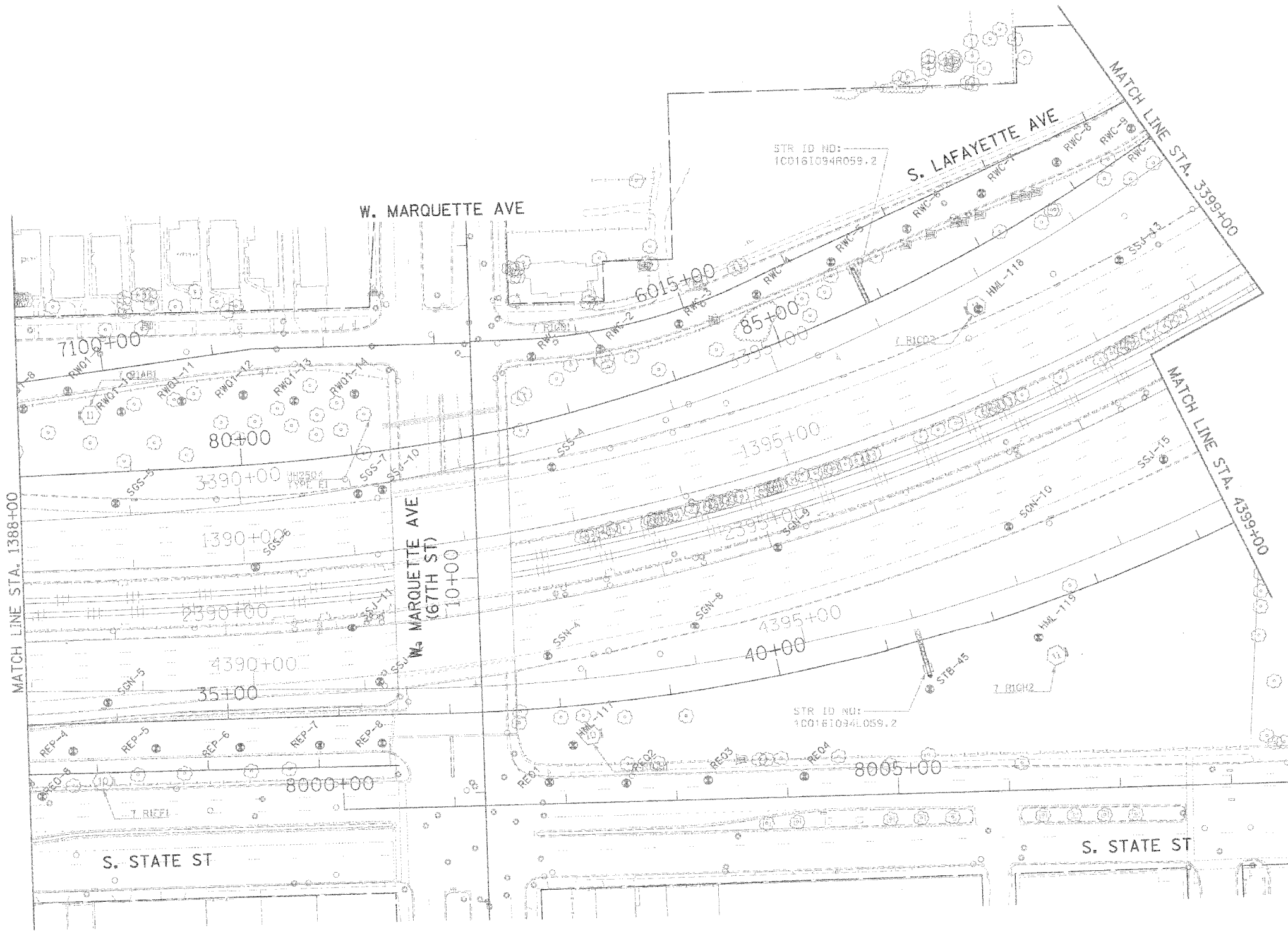
REVISIONS	
NAME	DATE
ADDENDUM #2	9.16.05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	424E
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
+ 41616, ETC, 2324.6-IPR-9		62302		



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REW : RETAINING WALL, EAST SIDE, WALL-B
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWA : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SEW : BRIDGE
- SWW : BRIDGE
- SON : SUBGRADE, NORTHBOUND
- SSS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CORING

ADDED SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

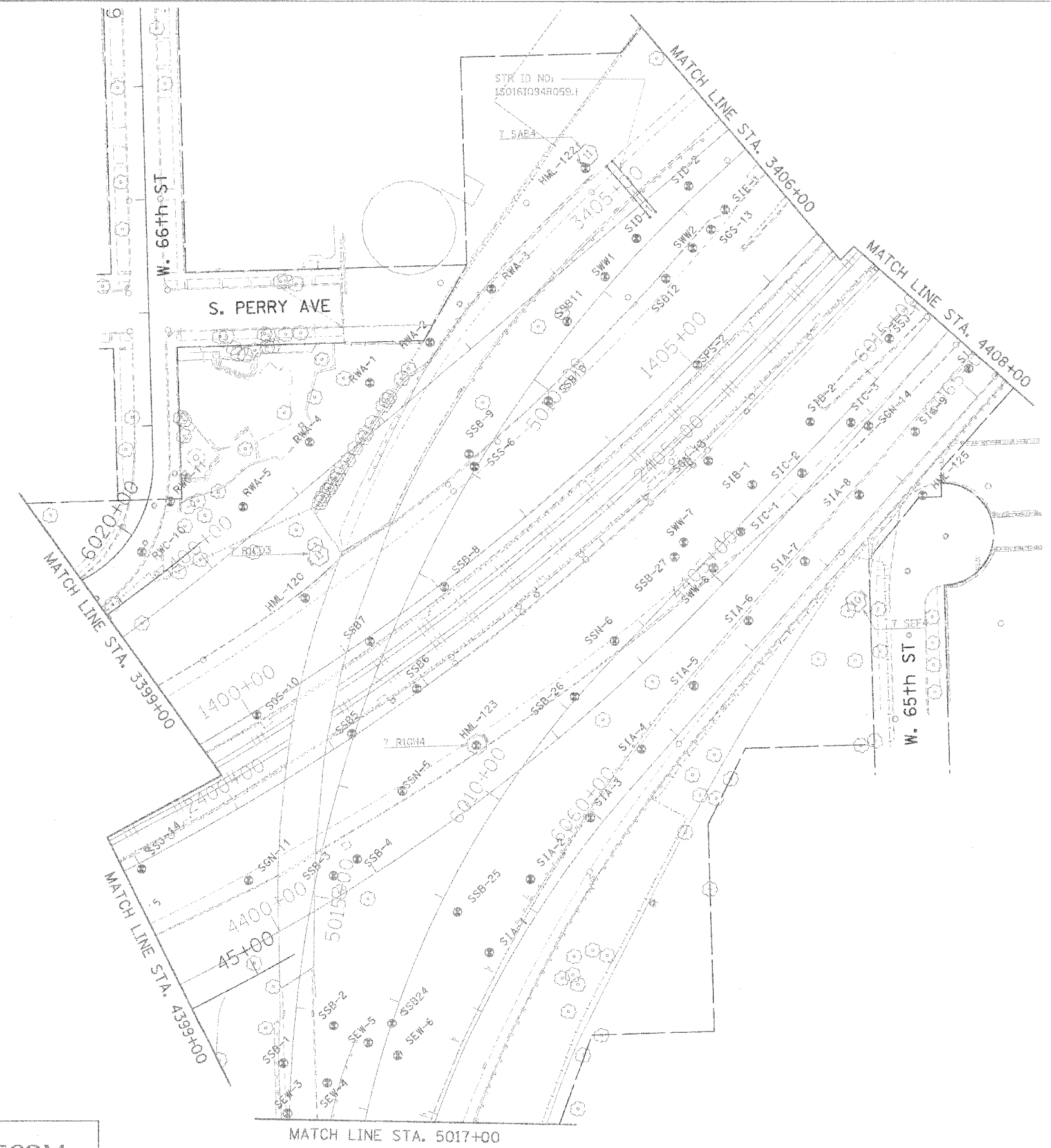
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	424F
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT		62302	
* UR18, ETC, 2324.G-1PR-9				



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REQ : RETAINING WALL, EAST SIDE, WALL-Q
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW, SWW : BRIDGE
- SSN : SUBGRADE, NORTHBOUND
- SSS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CORING

ADDED SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

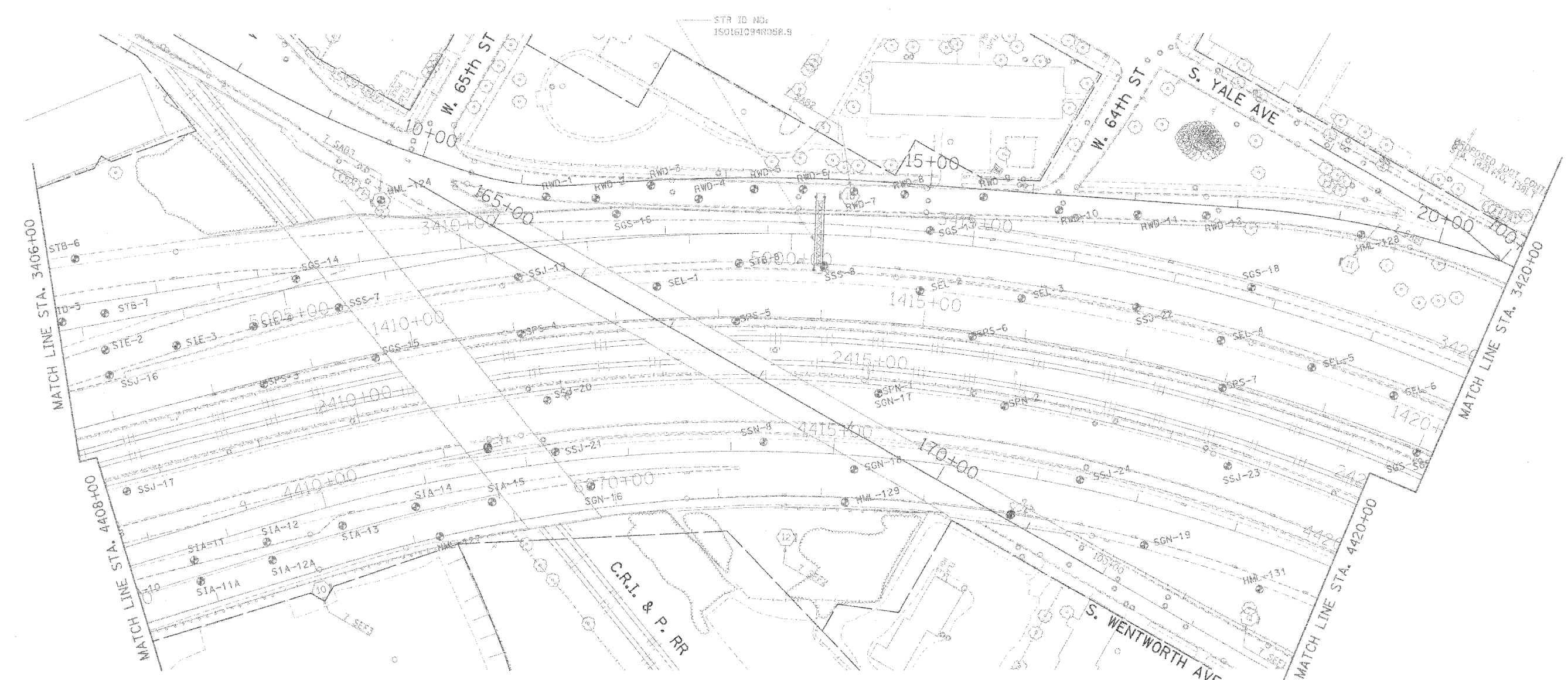
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

CTE | AECOM

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LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-O
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- STA : RETAINING WALL, INTERCHANGE, WALL TA
- SGN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSR : BRIDGE
- SEW.SWW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 4TH ST. RAMP
- C : CORING

ADDED SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-26-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

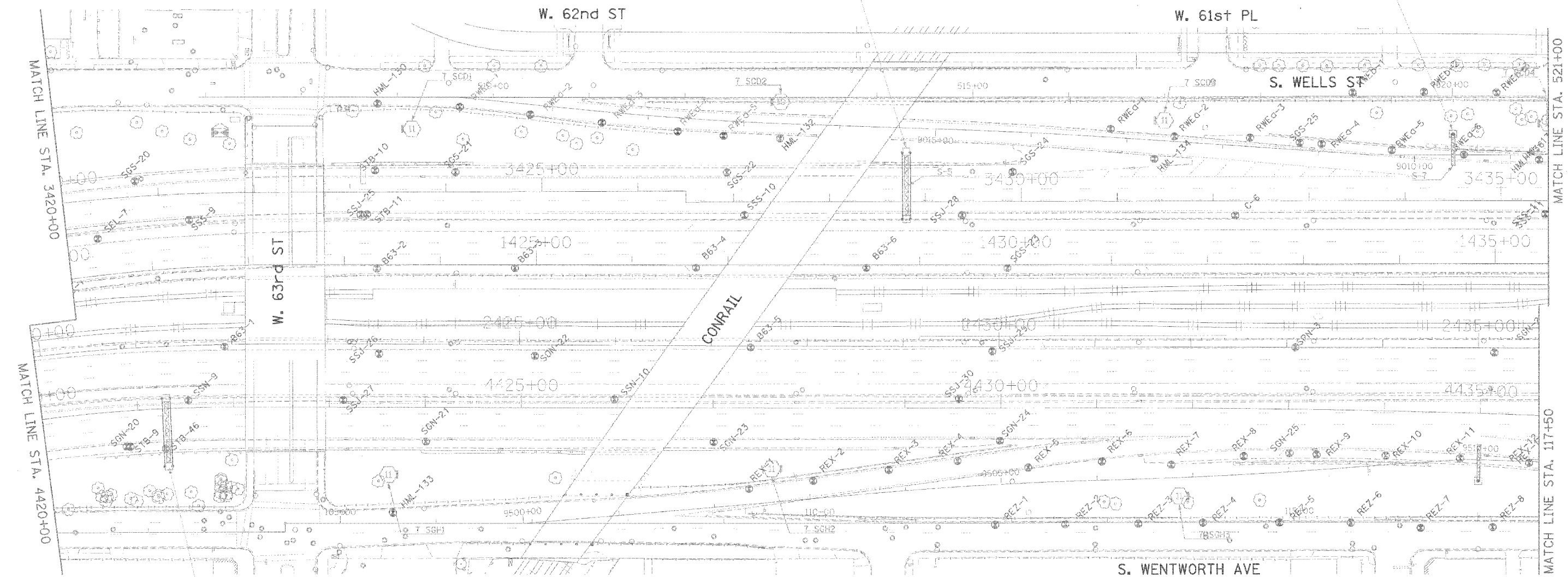
SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
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 CHECKED BY: JAL



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	424H
STA.	TO STA.		PROJECT	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	62302	
• (R18, ETC, 2324.6-1PR-9				



STR ID NO: 150161094R058.6

STR ID NO: 100161094R058.5

MATCH LINE STA. 3420+00

MATCH LINE STA. 521+00

MATCH LINE STA. 4420+00

MATCH LINE STA. 117+50

LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REO : RETAINING WALL, EAST SIDE, WALL-O
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW.SSW : BRIDGE
- SSN : SUBGRADE, NORTHBOUND
- SSS : SUBGRADE, SOUTHBOUND
- BRN : 4TH ST. RAMP
- C : CORING

ADDED SHEET



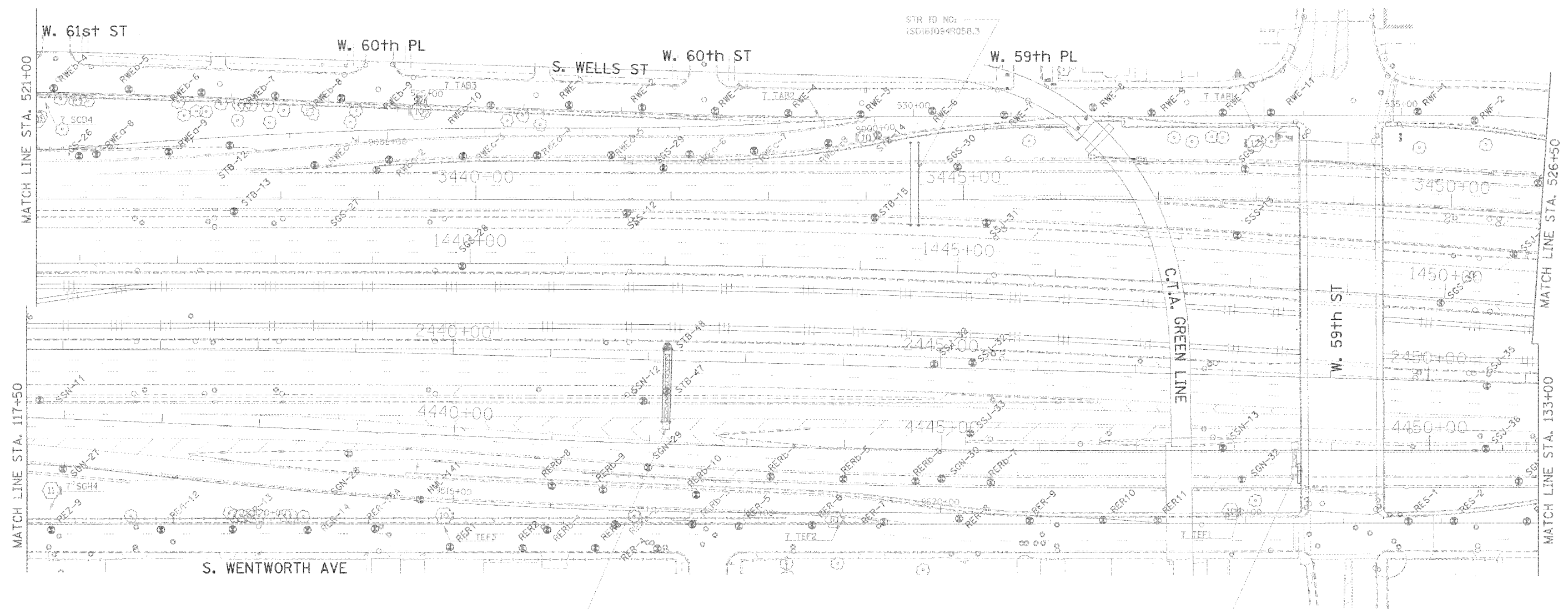
REVISIONS	
NAME	DATE
ADDENDUM #2	9-15-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

F.A.I. RFL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	4241
STA.	TO STA.		PROJECT	
			62302	



STR ID NO:
1S0161094L058.4

LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- ⊙ HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-D
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SJA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW.SRW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CURBING

STR ID NO:
1B0161094L058.2

ADDU SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-15-05

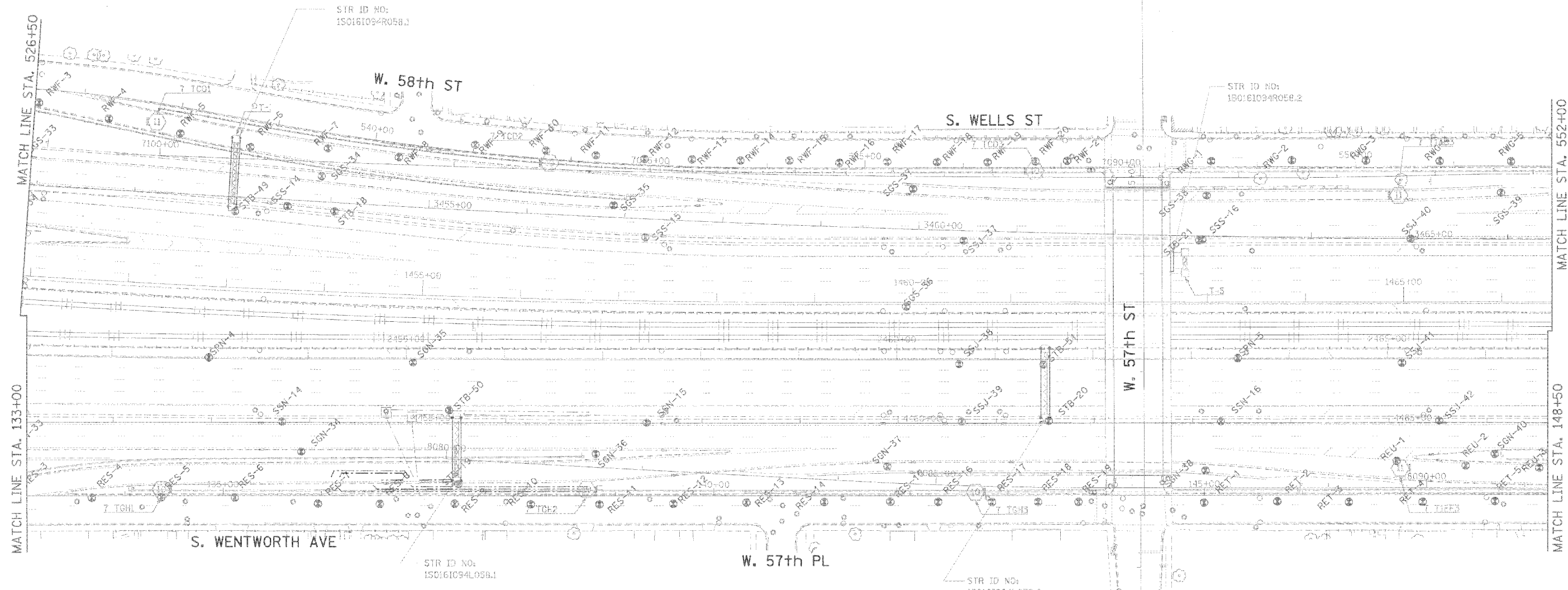
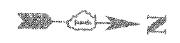
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
DATE: September 16, 2005
DRAWN BY: PHP
CHECKED BY: JAL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	424J
STA.	TO STA.		PROJECT	
			ILLINOIS FED. AID PROJECT	
			* CB18, ETC, 2324.6-1PH-3	
			62302	



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- ⊙ HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-D
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW-SHW : BRIDGE
- SSN : SUBGRADE, NORTHBOUND
- SSS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CORING

ADDED SHEET



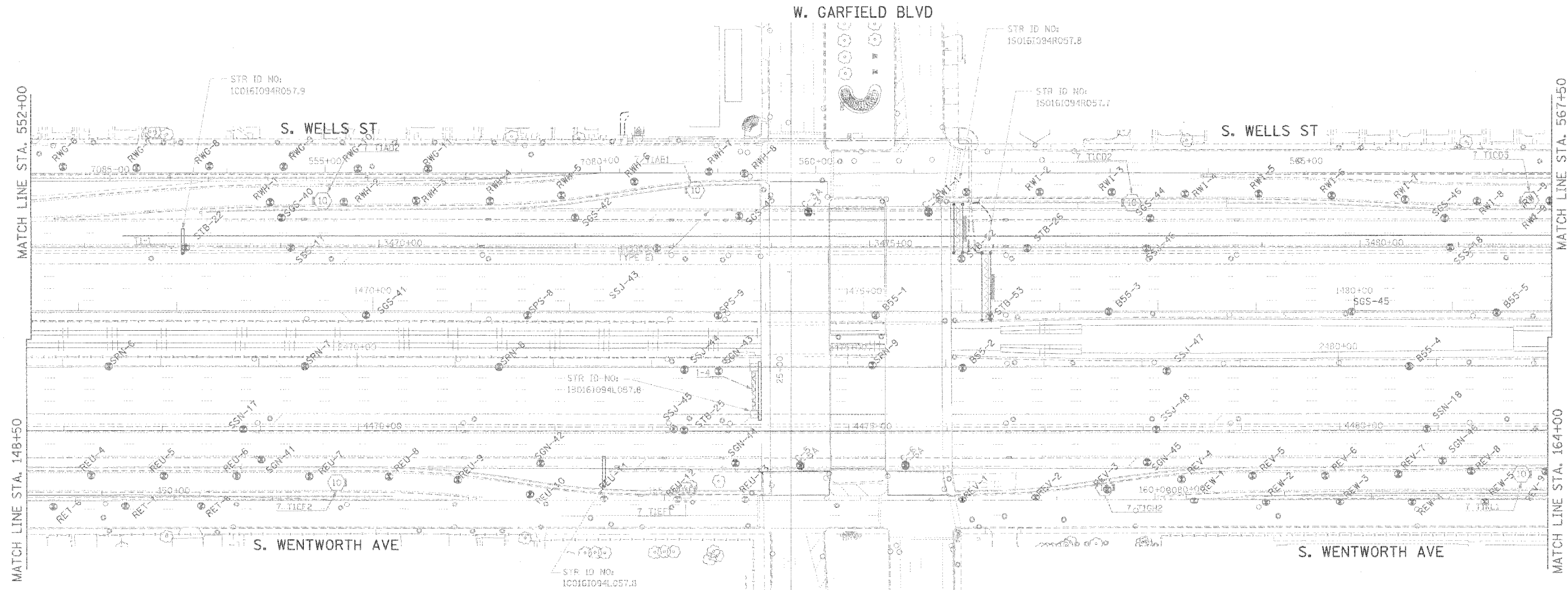
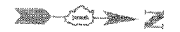
REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

F.A.I. RTE. 90/94	SECTION A	COUNTY COOK	TOTAL SHEETS 598	SHEET NO. 424K
STA. FED. ROAD DIST. NO. 1		TO STA. ILLINOIS FED. AID PROJECT		62302
* 0818, ETC. 2324.6-191R-9				



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REC : RETAINING WALL, EAST SIDE, WALL-D
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW-SBW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CURBING

ADDED SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

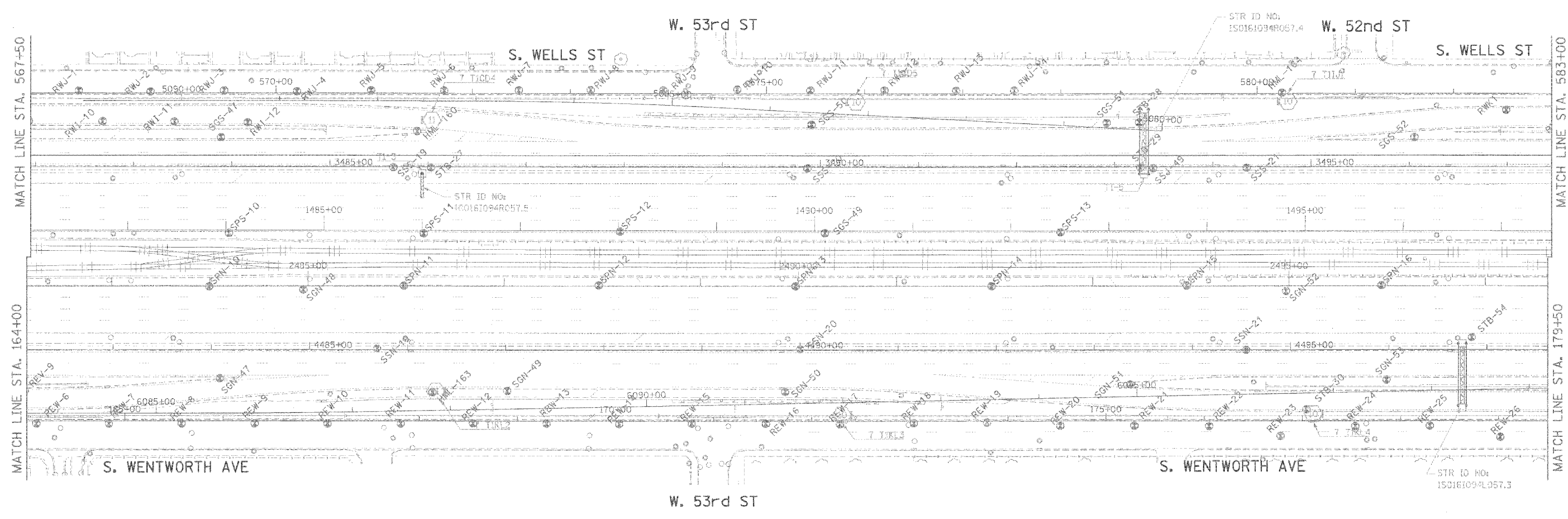
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
DATE: September 16, 2005
DRAWN BY: PHP
CHECKED BY: JAL

CTE | AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	424
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* 0815, ETC, 2324.6-IPR-9			62302	



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-D
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKLING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SFW-SW : BRIDGE
- SN : SUBGRADE, NORTHBOUND
- SS : SUBGRADE, SOUTHBOUND
- BRN : 4TH ST. BAMP
- C : CORING

ADD'D SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

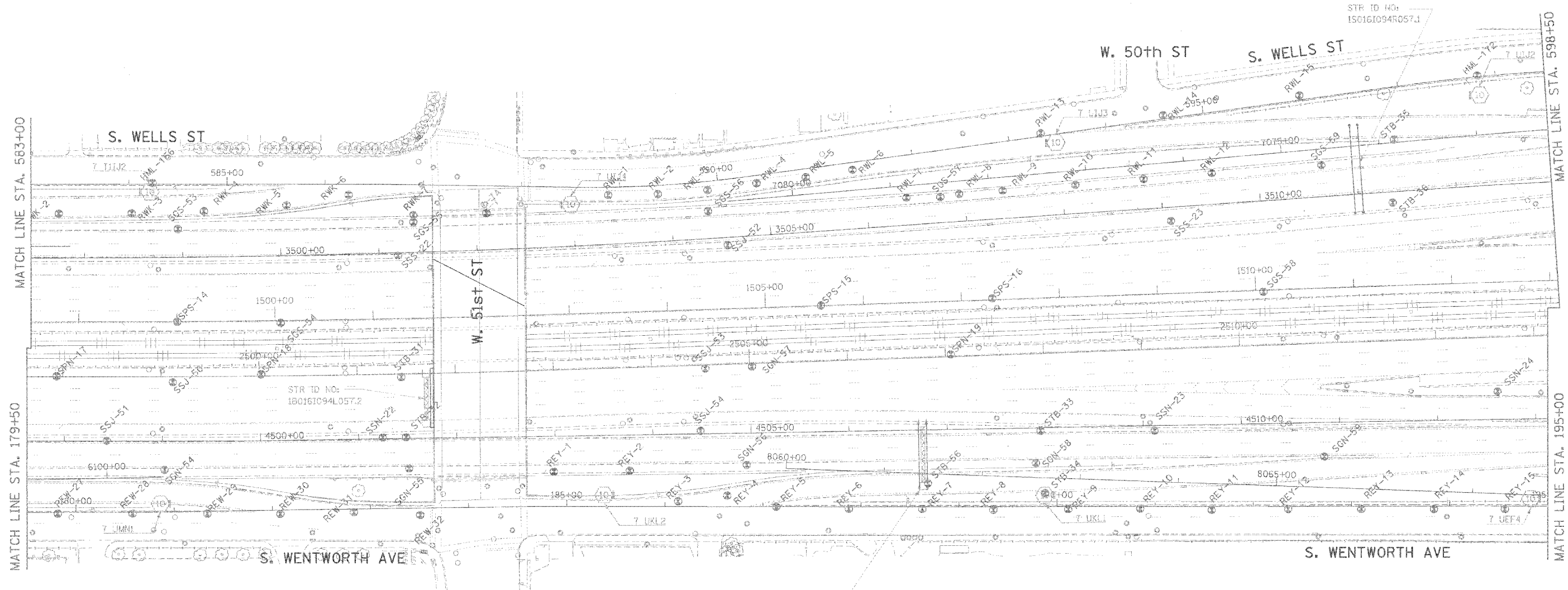
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL



F.A.I. R/F.C.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	424M
STA.	TO STA.		PROJECT	
			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
			• GB18, ETC. 2324.6-IPR-9 62302	



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-D
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RML : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEN, SWW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SOS : SUBGRADE, SOUTHBOUND
- BRN : 47TH ST. RAMP
- C : BORING

ADDL SHEET



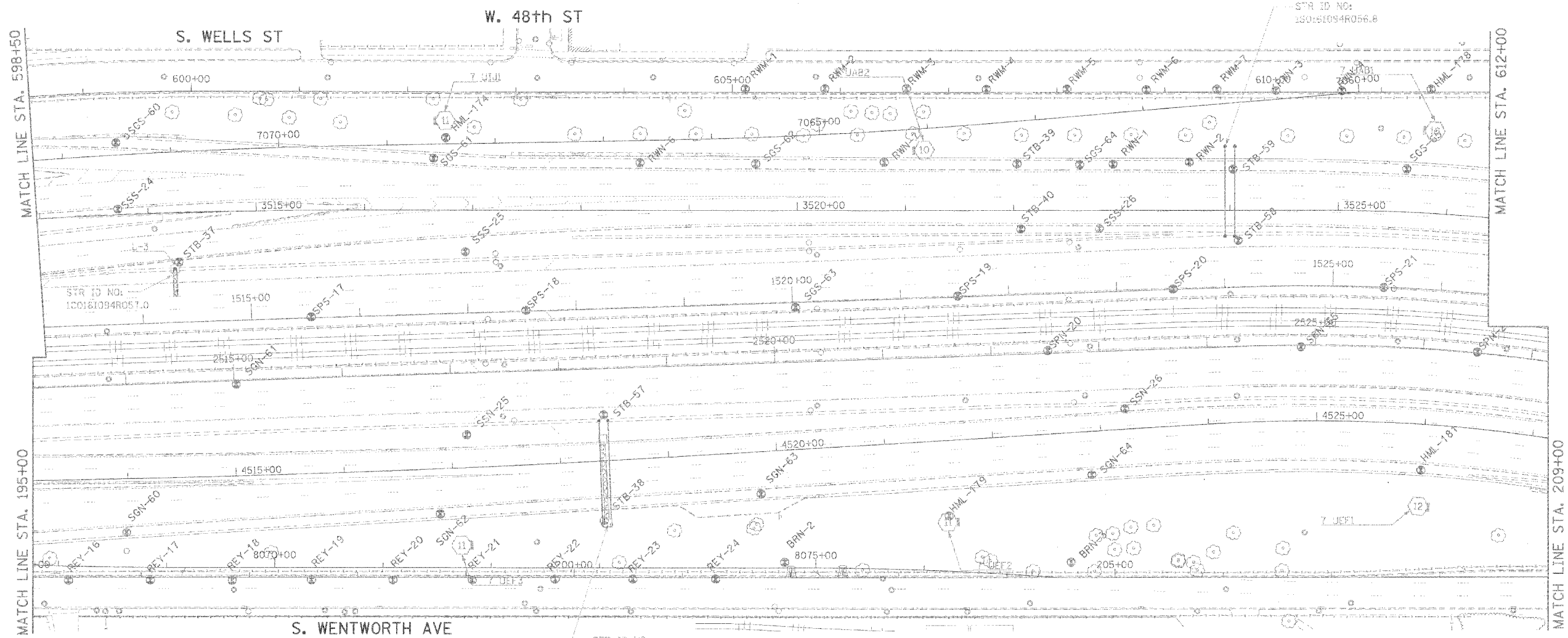
REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
 DATE: September 16, 2005
 DRAWN BY: PHP
 CHECKED BY: JAL

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	424N
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT	
• 01818, ETC. 2324.6-1PR-9			62302	



LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- REO : RETAINING WALL, EAST SIDE, WALL-O
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STB : SIGN STRUCTURE
- SSB : BRIDGE
- SEW-SWB : BRIDGE
- SON : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 47 FT. ST. RAMP
- C : CORING

ADDED SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-15-05

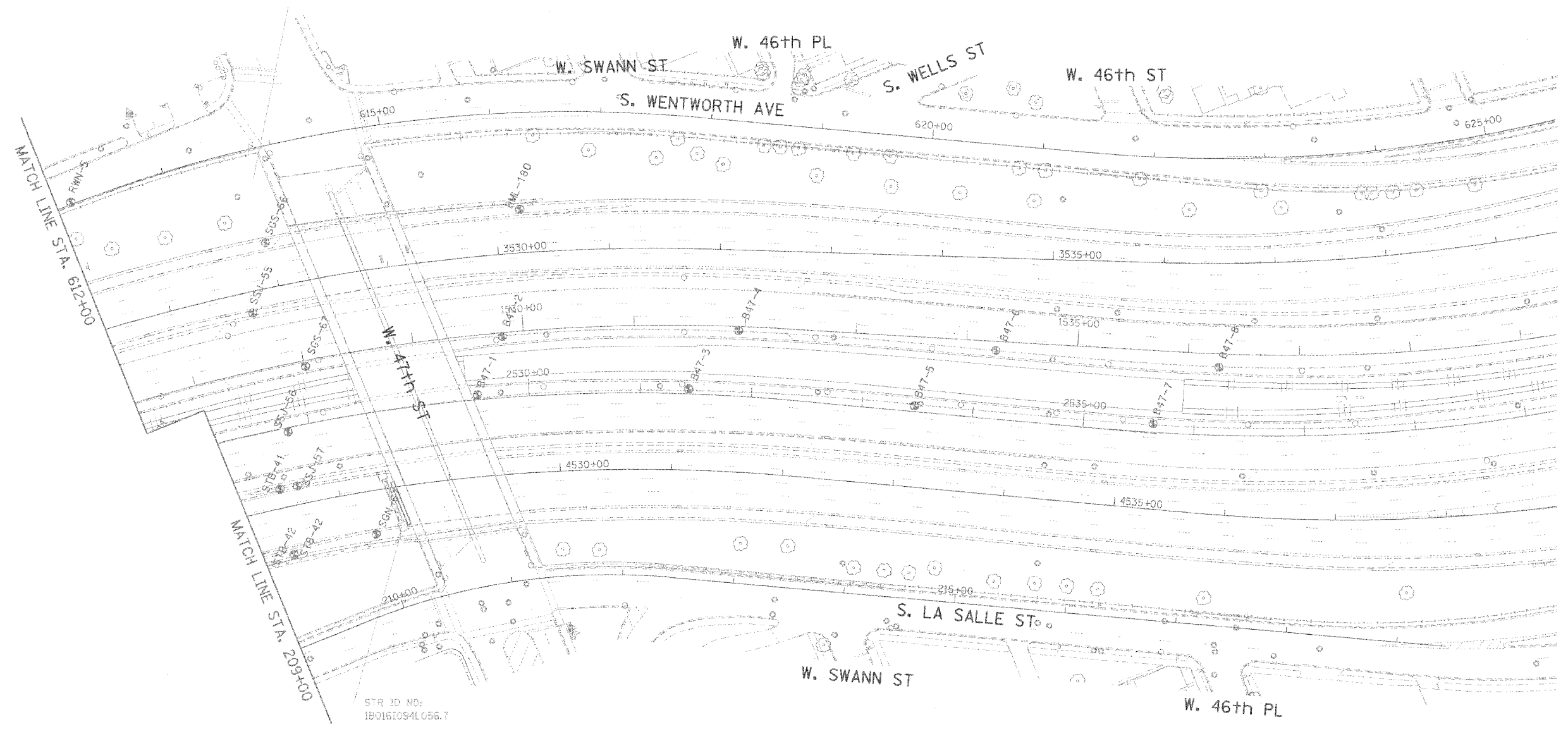
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
DATE: September 16, 2005
DRAWN BY: PHP
CHECKED BY: JAL



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	4240
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
11818, ETC. 2324.6-1PR-9			62302	



STR ID NO:
1B0161094L056.7

LEGEND FOR BORINGS

- PROPOSED SIGN STRUCTURE
- HIGH MAST LIGHT POLE
- HML : HIGH MAST LIGHT POLE
- RED : RETAINING WALL, EAST SIDE, WALL-O
- REW : RETAINING WALL, EAST SIDE, WALL-W
- RWC : RETAINING WALL, WEST SIDE, WALL-C
- RWL : RETAINING WALL, WEST SIDE, WALL-L
- SIA : RETAINING WALL, INTERCHANGE, WALL IA
- SSN : STORM SEWER, NORTHBOUND
- SSS : STORM SEWER, SOUTHBOUND
- SSJ : STORM SEWER, JACKING
- STS : SIGN STRUCTURE
- SSB : BRIDGE
- SEW.SW : BRIDGE
- SGN : SUBGRADE, NORTHBOUND
- SGS : SUBGRADE, SOUTHBOUND
- BRN : 47th ST. RAMP
- C : CORING

4000 SHEET



REVISIONS	
NAME	DATE
ADDENDUM #2	9-15-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOCATIONS

SCALE: 1"=50'
DATE: September 16, 2005
DRAWN BY: PHP
CHECKED BY: JAL

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-92			Groundwater Elev. _____ ft	
STATION	1401-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	-1.81	ft	19	After _____ ft	19
Concrete, 1'					
Hard / Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)					
	2	1	4	13	10.7
	4	6.1	14.8	17	11.8
	2	4	17.8	15	11.8
	4	4.6	17.8	13	11.8
	4	8	17.8	18	11.8
End of Boring					
	3	5	17.8		
	5	4.4	17.8		
	8	8	17.8		
	2	4.4	17.8		
	5	8	17.8		
Medium Dense Gray SILT					
	4	10	17.8		
	10	10	17.8		
Hard / Dense Gray SILTY CLAY LOAM / SILTY LOAM					
	5	6.5	17.8		
	10	8	17.8		
	8	5.9	17.8		
	10	5	17.8		
	5	3.5	17.8		
	12	5	17.8		
			17.8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-92			Groundwater Elev. _____ ft	
STATION	1401-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	4.94	ft	19	After _____ ft	19
Concrete, 1'					
Very Stiff to Hard Gray SILTY CLAY LOAM / SILTY LOAM (continued)					
	2	4	6.8	13	5
	4	4	13	13	5
Damaged Sample, No Qu					
	2	4	13	17	14.5
	4	4	13	15	8
End of Boring					
	2	3	13		
	3	2.8	13		
	2	3	13		
Loose Gray SILT					
	3	4	13		
	5	3	13		
Very Stiff to Hard Gray SILTY CLAY LOAM					
	2	3	13		
	3	2.8	13		
	5	8	13		
	2	4	13		
	4	6	13		
Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM					
	6	12	13		
Damaged Sample, No Qu					
	5	6	13		
	9	8.7	13		
	17	5	13		
			13		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-93			Groundwater Elev. _____ ft	
STATION	1401-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	4.57	ft	19	After _____ ft	19
Asphalt, 1'					
Medium Dense Gray SAND					
	5	6	2	8	5.8
	8	9	2	8	8
Hard Gray CLAY					
	4	4.4	18.8	5	3.8
	5	3	18.8	7	8
End of Boring					
	3	6	17.8		
	6	8.2	17.8		
	5	8	17.8		
Medium Dense Gray SILTY LOAM					
	3	3	17.8		
	8	12	17.8		
Very Stiff to Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM					
	5	8.3	17.8		
	9	8	17.8		
	3	7	17.8		
	7	8.3	17.8		
	10	8	17.8		
	4	6.8	13.8		
	6	8	13.8		
	4	5.4	14.8		
	7	8	14.8		
			14.8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-94			Groundwater Elev. _____ ft	
STATION	1411-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	-3.70	ft	19	After _____ ft	19
Asphalt, 1'					
Medium Dense Gray SAND					
	7	11	6.2	12.8	
	6	14	5	12.8	
Very Stiff to Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM					
	3	18	18.8		
	4	18	18.8		
End of Boring					
	3	4	13.8		
	7	8	13.8		
	4	6.6	14.8		
	7	8	14.8		
	5	7.5	13.8		
	8	8	13.8		
	4	7.1	14.8		
	6	8	14.8		
	1	5.4	15.8		
	8	8	15.8		
	5	10	12.8		
	12	8	12.8		
			12.8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-95			Groundwater Elev. _____ ft	
STATION	1413-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	-3.11	ft	19	After _____ ft	19
Asphalt, 1'					
Loose Brown SAND					
	4	4	16.8		
	5	5	16.8		
Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)					
	3	11	17.7	6.8	
End of Boring					
	4	4	12.8		
	5	7.7	12.8		
	5	8	12.8		
	4	8.5	13.8		
	9	8	13.8		
	5	7.7	15.8		
	5	8	15.8		
	6	8.3	12.8		
	8	8	12.8		
			12.8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Maintenance

SOIL BORING LOG Page 1 of 1
Date 7/18/95

ROUTE F.A.I. 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY	Cook	DRIILLING METHOD	Hollow Stem Auger	HAMMER TYPE	Automatic
STRUCT. NO.		D E P T M H S	B L C S I M O U T	Surface Water Elev. _____ ft	D E P T M H S
STATION		1 1 1 1 1	0 0 0 0 0	Stream Bed Elev. _____ ft	0 0 0 0 0
BORING NO.	SPS-96			Groundwater Elev. _____ ft	
STATION	1415-1505			First Encounter _____ ft	
OFFSET	4.80 CL BT			Upon Completion _____ ft	
GROUND SURFACE ELEV.	-1.81	ft	19	After _____ ft	19
Asphalt, 1'					
Medium Dense Brown SAND					
	5	7	4.8	10.8	
	7	9	8	10.8	
Very Stiff to Hard Gray SILTY CLAY LOAM					
	4	5	3.8	14.8	
	5	8	14.8		
End of Boring					
	3	4	16.8		
	8	8	16.8		
	4	5	13.8		
	5	8.4	13.8		
	7	8	13.8		
Very Stiff to Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM					
	5	8.5	12.8		
	8	8	12.8		
	5	8.7	12.8		
	10	8	12.8		
	4	8.4	20.8		
	8	8	20.8		
	11	8	20.8		
			20.8		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Blow, S-Shear, P-Permeometer)
The SPT (N) values is the sum of the last two blow values in each sampling zone (MSHTD 1286)
BBS, from 137 (Rev. 8-99)

ADDED SHEET SB-01

CTE | AECOM

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOGS

REVISIONS	NAME	DATE
1	ADDENDUM #2	9-15-05

SCALE: NONE DRAWN BY: PHP
DATE: September 16, 2005 CHECKED BY: JAL

2

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 7/9/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 18"	0.00															
Concrete, 11"	0.00															
Medium Dense Brown SAND	0.00															
Very Stiff to Hard Gray SILTY CLAY LOAM	0.00															
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	0.00															
Auger Refusal at 14 feet	14.00															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 7/11/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 2"	0.00															
Concrete, 11"	0.00															
Loose Brown SAND	0.00															
Very Stiff to Hard Gray SILTY CLAY LOAM	0.00															
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	0.00															
Auger Refusal at 21.5 feet	21.50															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 7/11/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 2.5"	0.00															
Concrete, 18"	0.00															
Sub Base FILL	0.00															
Very Stiff to Hard Gray SILTY CLAY LOAM	0.00															
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	0.00															
Auger Refusal at 28 feet	28.00															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 7/9/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 18"	0.00															
Concrete, 11"	0.00															
Sub base FILL	0.00															
Loose Brown Coarse SAND	0.00															
Very Loose to Loose Gray SILT	0.00															
Very Stiff Gray CLAY	0.00															
Stiff to Very Stiff Gray SILTY CLAY LOAM	0.00															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 7/9/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 2"	0.00															
Concrete, 11"	0.00															
Sub Base and Sand FILL	0.00															
Loose to Medium Dense Brown to Gray Coarse to Fine SAND	0.00															
Very Stiff Gray SILTY CLAY LOAM	0.00															
Very Stiff Gray SILTY CLAY LOAM	0.00															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Geotechnical Engineering, Inc.

SOIL BORING LOG

Page 1 of 1
Date 9/24/95

ROUTE FALL 94 / I-94 DESCRIPTION Dan Ryan Expressway (I-91-919-91) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station	DEPTH ft	D L P O S T	B L C S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.	First Encounter	Upon Completion	After	ft	ft	ft	ft	ft
						ft	ft									
ASPHALT, 2"	0.00															
Concrete, 14"	0.00															
Medium Dense to Dense Brown to Gray Coarse to Fine SAND	0.00															
Very Loose to Medium Dense Gray SILT	0.00															
Stiff to Very Stiff Gray SILTY CLAY LOAM	0.00															

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Parabola/rect). The SPT (N) values is the sum of the last two blow values in each sampling zone (ASTM D 1586) BGS, from 137 (Rev. 8-99)

F.A.I. DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	420
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
• 1616, ETC. 2324.6-1P13-9		62302		

ADJUST SHEET SB-02

CTE | AECOM

REVISIONS	NAME	DATE
ADDENDUM #2		9-26-95

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SCALE: NONE DRAWN BY: PHP
DATE: September 16, 2005 CHECKED BY: JAL



SOIL BORING LOG

Page 1 of 1

Date 6/24/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/24/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/24/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/23/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/23/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 6/23/05

Table with columns for SOIL BORING LOG, including ROUTE (F.A.I. 90 / I-94), LOCATION (Dan Ryan Expressway), and detailed soil data with columns for depth, blow counts, and soil descriptions.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Bulge, S-Shear, P-Penetrometer. The SPT (N) value is the sum of the last two blow values in each sampling zone (MSH10 T286) BBS, Form 137 (Rev. 8-99)

Table with columns: F.A.I. INTL. (90/94), SECTION (*), COUNTY (COOK), TOTAL SHEETS (598), SHEET NO. (424R), STA. TO STA., FED. ROAD DIST. NO. 1 (ILLINOIS), FED. AID PROJECT (* 0818, ETC, 2324.6-1PR-9), 62302

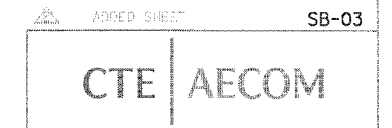


Table with columns: REVISIONS, NAME, DATE, ADDENDUM #2, 9/16/05

ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 71ST STREET TO 31ST STREET (SB EXPRESS LANES) SOIL BORING LOGS SCALE: NONE DRAWN BY: PHP CHECKED BY: JAL DATE: September 16, 2005

Vertical text on the right edge: 12-48-04 PM 9/16/05

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	4245
STA.	TO STA.		FED. AID PROJECT	
			* (B1B, ETC, 2324.E-IPR-9) 62302	

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 6/22/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-19 Station 1621+54.08 Offset 8.492+1.17 Ground Surface Elev. 4.26

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
2.00	Sub Base (FLL)				
2.26	Very Silty / Dense Gray SILTY CLAY LOAM / SILTY LOAM				
2.74	Very Dense Gray SILTY LOAM				
4.50	Auger Refused at 9.5 feet End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 6/22/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-20 Station 1623+52.14 Offset 8.492+1.17 Ground Surface Elev. 1.37

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
2.00	Sub Base (FLL)				
2.68	Very Stiff to Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM				
4.20	Very Dense Gray SILTY LOAM				
12.00	Auger Refused at 14 feet End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 6/22/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-21 Station 1625+56.74 Offset 8.416+1.01 Ground Surface Elev. -2.64

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
2.00	Sub Base (FLL)				
2.60	Very Silty to Hard / Dense Gray SILTY CLAY LOAM / SILTY LOAM				
4.50	Broken Sample, No. D4				
5.00	Dense to Very Dense Gray SILTY LOAM				
12.50	Auger Refused at 12.5 feet End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 7/6/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-22 Station 1627+49.63 Offset 1.025+1.01 Ground Surface Elev. 8.85

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
1.40	Gray Sand, Gravel and Clay (FLL)				
2.20	Medium Stiff to Stiff Gray CLAY				
2.80	Hard / Dense Gray SILTY CLAY LOAM / SILTY LOAM				
4.00	End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 6/22/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-23 Station 1627+49.63 Offset 1.025+1.01 Ground Surface Elev. -6.76

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
2.00	Sub Base (FLL)				
2.26	Very Stiff Gray SILTY CLAY LOAM				
4.20	Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM				
25.00	End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
SOIL BORING LOG
Page 1 of 1
Date 7/6/05

ROUTE FALL 90 / I-94 DESCRIPTION Dan Ryan Expressway (I-90-419-80) LOGGED BY RP

SECTION LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. Station

BORING NO. SPS-24 Station 1629+59.08 Offset 1.031+1.01 Ground Surface Elev. 6.86

DEPTH (ft)	DESCRIPTION	Surface Water Elev. (ft)	Stream Bed Elev. (ft)	Groundwater Elev. (ft)	First Encounter Upon Completion After (hrs)
0.00	Asphalt 15' Concrete 10'				
2.00	Sub Base (FLL)				
2.40	Very Soft to Medium Stiff Gray CLAY (continued)				
24.00	End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @-Blow, S-Shear, P-Permeometer
The SPT (N) value is the sum of the last two blow values in each sampling zone (MSR10 T206) BBS, from 137 (Rev. 8-99)

ADDED SHEET SB-04
CTE | AECOM

REVISIONS	
NAME	DATE
ADDENDUM #2	9-5-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
SOIL BORING LOGS
SCALE: NONE
DATE: September 16, 2005
DRAWN BY: PHP
CHECKED BY: JAL



Illinois Department of Transportation
Division of Highway Maintenance & Construction

SOIL BORING LOG

Page 1 of 1
Date 7/8/05

ROUTE	DESCRIPTION	LOCATION	LOGGED BY							
F.A.I. 90/94 / 1-94	Don Ryan Expressway (I-91-419-8U)	Chicago, Illinois	RP							
SECTION	COUNTY	DRILLING METHOD	HAMMER TYPE							
	Cook	Hollow Stem Auger	Automatic							
STRUCT. NO.	STATION	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE
		ft	in		ft	in		ft	in	
BORING NO. SPS-25	Station 1624+95.00									
Offset 1.80 ft										
Ground Surface Elev. -2.87										
Asphalt 10' / Concrete 10' / Sub Base FILL / Very SLT / Gray SILTY CLAY LOAM / Soft to Medium STIFF Gray CLAY										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @; Dilg, S-Shear; P-Parallels (water)
The SPT (N) value is the sum of the last two blow values in each sampling zone (ASTM D 1586) BBS, Form 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highway Maintenance & Construction

SOIL BORING LOG

Page 1 of 1
Date 7/8/05

ROUTE	DESCRIPTION	LOCATION	LOGGED BY							
F.A.I. 90/94 / 1-94	Don Ryan Expressway (I-91-419-8U)	Chicago, Illinois	RP							
SECTION	COUNTY	DRILLING METHOD	HAMMER TYPE							
	Cook	Hollow Stem Auger	Automatic							
STRUCT. NO.	STATION	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE
		ft	in		ft	in		ft	in	
BORING NO. SPS-26	Station 1624+95.00									
Offset 1.80 ft										
Ground Surface Elev. -2.73										
Asphalt 2' / Concrete 10' / Sub Base FILL / Very SLT / Gray SILTY CLAY LOAM / Very Soft to Medium STIFF Gray CLAY										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @; Dilg, S-Shear; P-Parallels (water)
The SPT (N) value is the sum of the last two blow values in each sampling zone (ASTM D 1586) BBS, Form 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highway Maintenance & Construction

SOIL BORING LOG

Page 1 of 1
Date 7/8/05

ROUTE	DESCRIPTION	LOCATION	LOGGED BY							
F.A.I. 90/94 / 1-94	Don Ryan Expressway (I-91-419-8U)	Chicago, Illinois	RP							
SECTION	COUNTY	DRILLING METHOD	HAMMER TYPE							
	Cook	Hollow Stem Auger	Automatic							
STRUCT. NO.	STATION	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE	DEPTH	DIAMETER	SOIL TYPE
		ft	in		ft	in		ft	in	
BORING NO. SPS-27	Station 1624+95.00									
Offset 1.80 ft										
Ground Surface Elev. 4.26										
Asphalt 2' / Concrete 14' / Sub Base FILL / Medium STIFF to STIFF Gray CLAY / Medium STIFF to STIFF Gray CLAY										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by @; Dilg, S-Shear; P-Parallels (water)
The SPT (N) value is the sum of the last two blow values in each sampling zone (ASTM D 1586) BBS, Form 137 (Rev. 8-99)

ADDED SHEET SB-05



REVISIONS	NAME	DATE
ADDENDUM #2		9-26-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
SOIL BORING LOGS
SCALE: NONE DRAWN BY: PHP
DATE: September 16, 2005 CHECKED BY: JAL

9/16/2005

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 63rd Street

BORING NO.: B55-6
Station: 1428+44.08
Offset: 3.12ft (SBOR)
Ground Surface Elev.: 5.43

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 55th Street

BORING NO.: B55-1
Station: 1475+12.13
Offset: 3.64ft (SBOR)
Ground Surface Elev.: -0.02

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 55th Street

BORING NO.: B55-3
Station: 1477+49.85
Offset: 0.31ft (SBOR)
Ground Surface Elev.: 2.39

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 55th Street

BORING NO.: B55-5
Station: 1481+45.07
Offset: 1.99ft (SBOR)
Ground Surface Elev.: 6.05

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 47th Street

BORING NO.: B47-2
Station: 1529+81.00
Offset: 3.33ft (SBOR)
Ground Surface Elev.: -2.84

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

Illinois Department of Transportation
SOIL BORING LOG

ROUTE: F.A.I. I-94 / I-90 DESCRIPTION: Dan Ryan Expressway (I-91-419-01) LOGGED BY: JL

SECTION: CHICAGO, ILLINOIS

COUNTY: Cook DRILLING METHOD: Hollow Stem Auger HAMMER TYPE: Automatic

STRUCTURE NO.: 47th Street

BORING NO.: B47-4
Station: 1531+94.21
Offset: 3.49ft (SBOR)
Ground Surface Elev.: -1.19

DEPTH (ft)	SOIL TYPE	REMARKS
0.00	Surface	Surface
0.50	CLAY	
1.00	CLAY	
1.50	CLAY	
2.00	CLAY	
2.50	CLAY	
3.00	CLAY	
3.50	CLAY	
4.00	CLAY	
4.50	CLAY	
5.00	CLAY	
5.50	CLAY	
6.00	CLAY	
6.50	CLAY	
7.00	CLAY	
7.50	CLAY	
8.00	CLAY	
8.50	CLAY	
9.00	CLAY	
9.50	CLAY	
10.00	CLAY	
10.50	CLAY	
11.00	CLAY	
11.50	CLAY	
12.00	CLAY	
12.50	CLAY	
13.00	CLAY	
13.50	CLAY	
14.00	CLAY	
14.50	CLAY	
15.00	CLAY	

End of Boring

ADDED SHEET SB-07

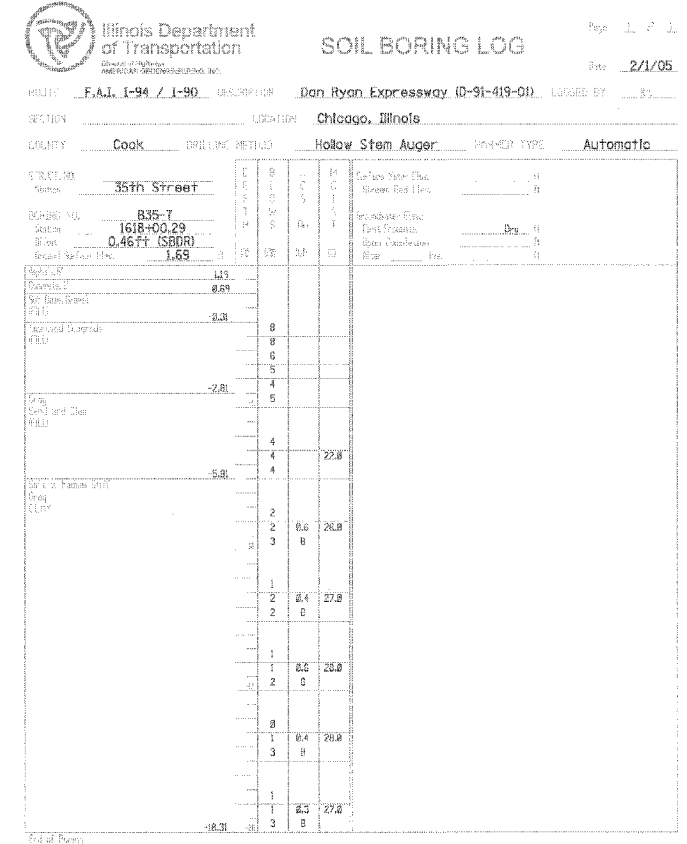
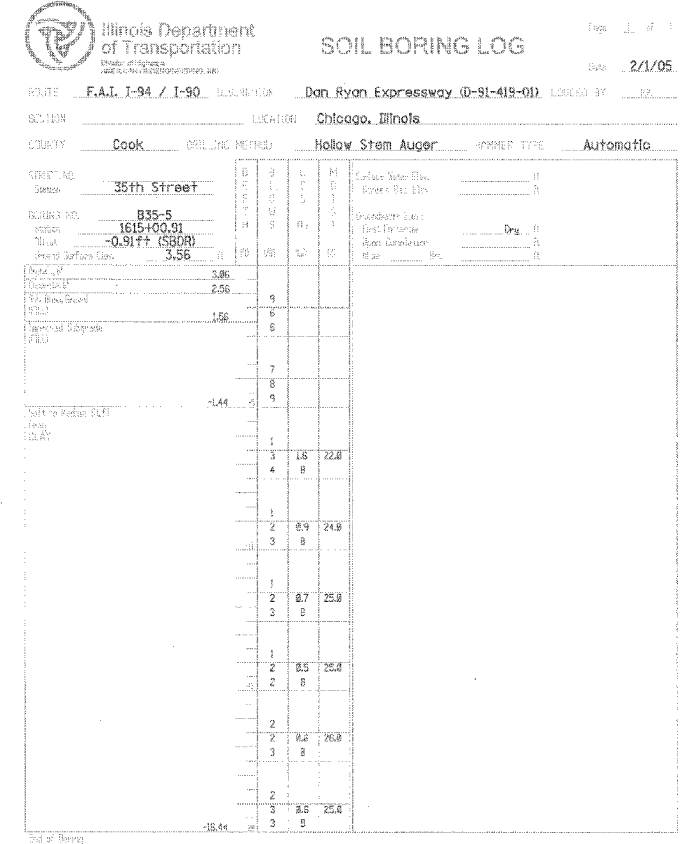
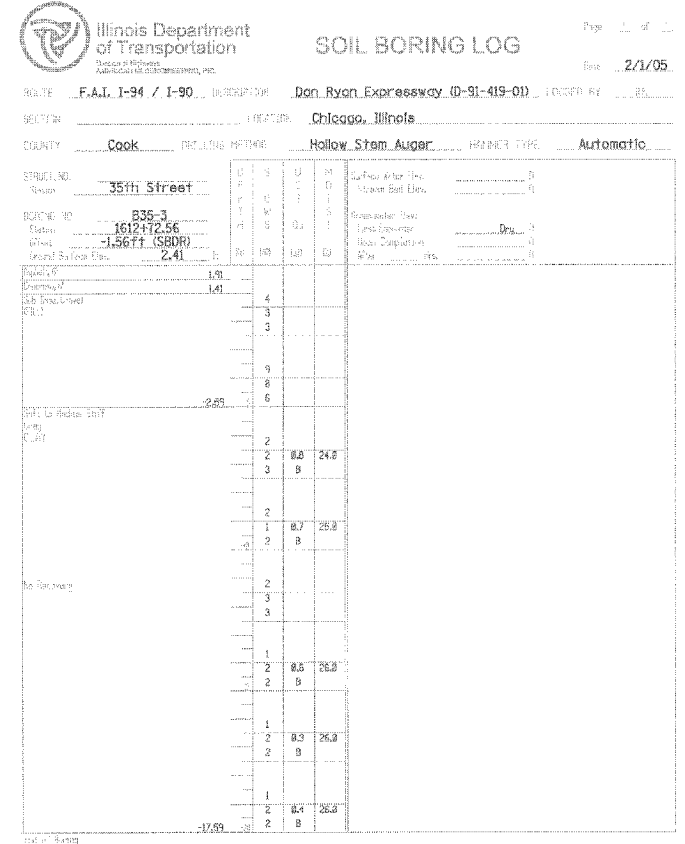
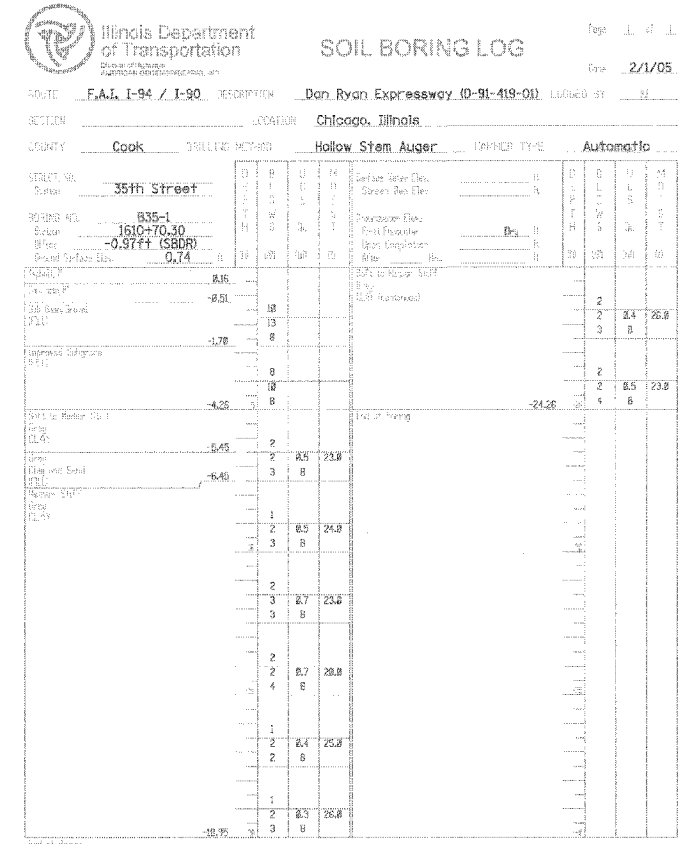
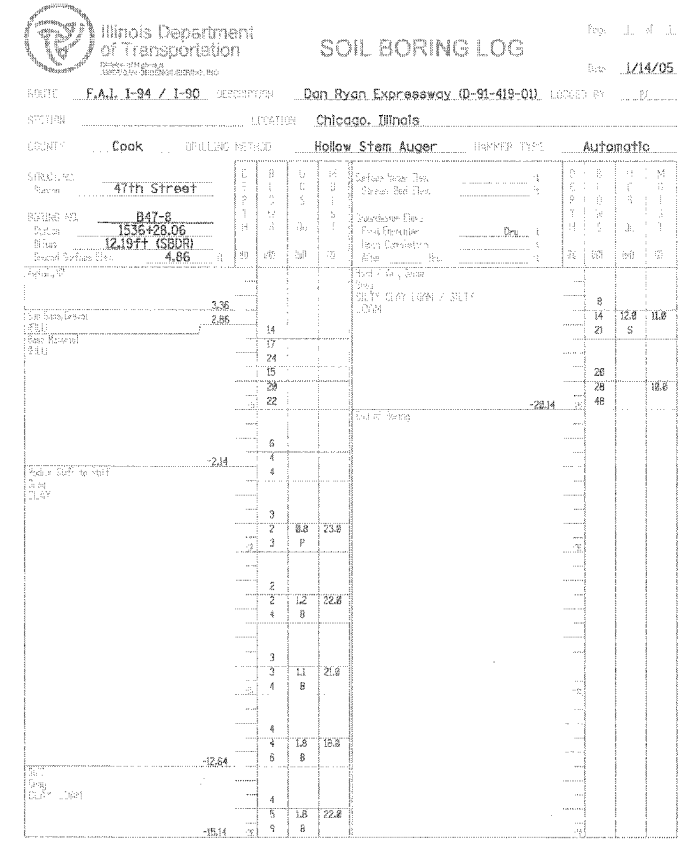
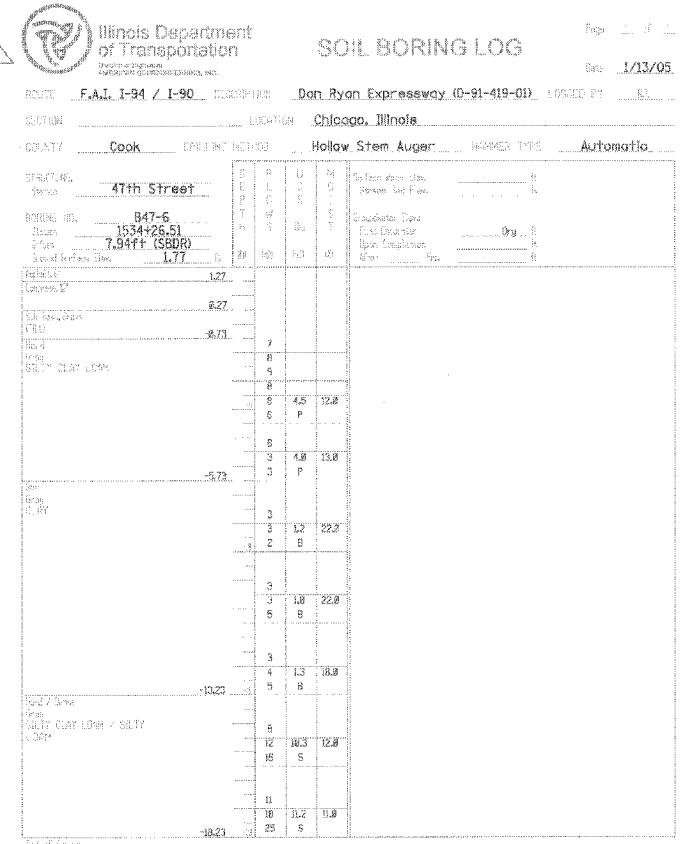


REVISIONS	
NAME	DATE
ADDENDUM #2	9-16-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOGS

SCALE: NONE DRAWN BY: LAM
DATE: September 16, 2005 CHECKED BY: JAL



ADDENDUM SHEET SB-08

CTE | AECOM

REVISIONS	NAME	DATE
ADDENDUM #2		9-16-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)

SOIL BORING LOGS

SCALE: NONE DRAWN BY: LAM
DATE: September 16, 2005 CHECKED BY: JAL

End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118

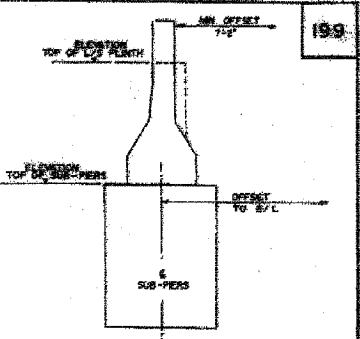
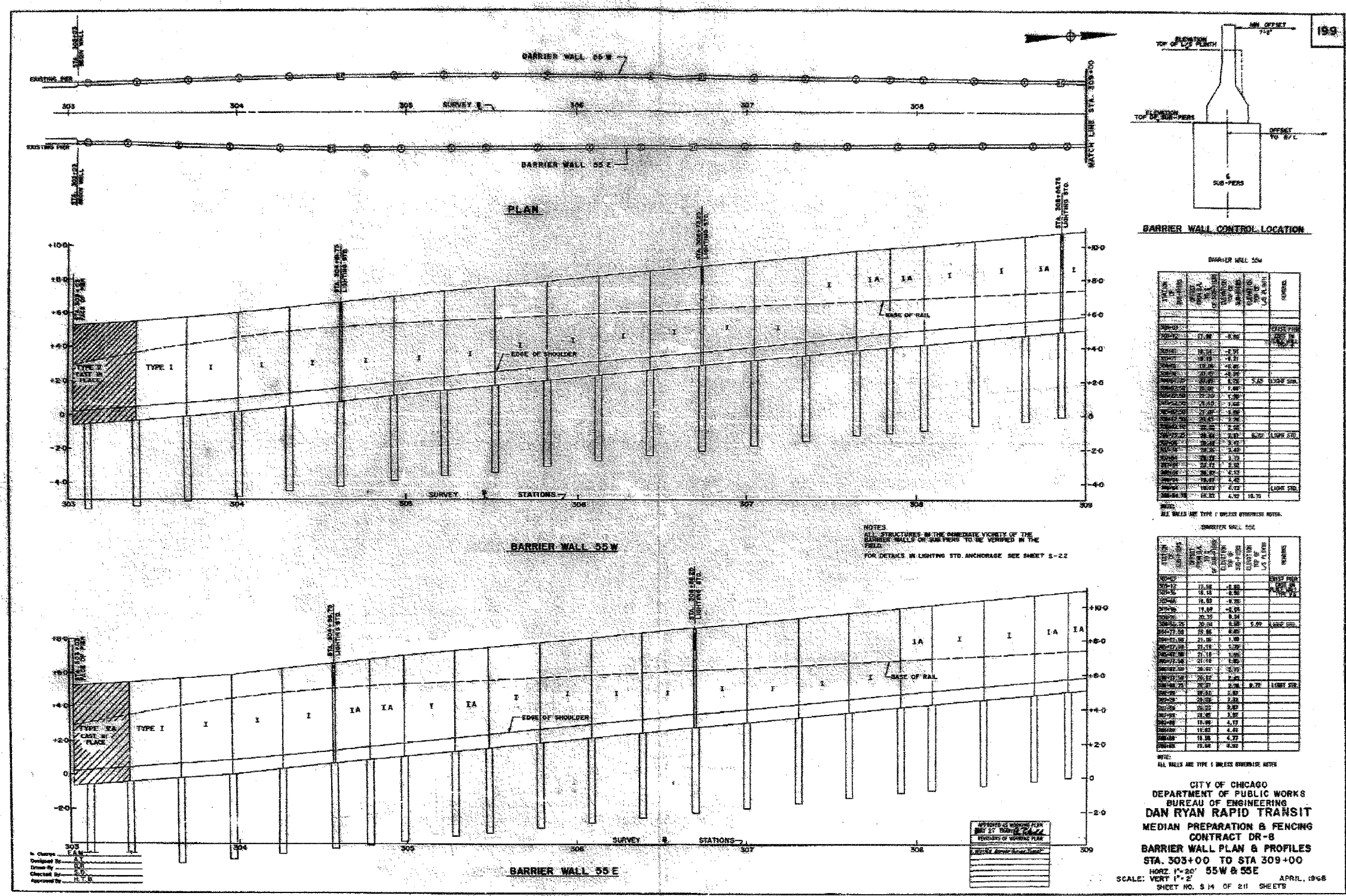
End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118

End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118

End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118

End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118

End of Boring
The Standard Penetration Test (SPT) Blow Count is indicated by the 'N' value in the 'SPT' column. The 'SPT' value is the sum of the last two blow counts in each sampling run (SPT) 'N'.
SPT Blow Count: 118



BARRIER WALL CONTROL LOCATION

BARRIER WALL 55W

STATION	TYPE	HEIGHT	WIDTH	SPACING	REMARKS
303+00	I	4.00	4.00	10.00	
303+10	I	4.00	4.00	10.00	
303+20	I	4.00	4.00	10.00	
303+30	I	4.00	4.00	10.00	
303+40	I	4.00	4.00	10.00	
303+50	I	4.00	4.00	10.00	
303+60	I	4.00	4.00	10.00	
303+70	I	4.00	4.00	10.00	
303+80	I	4.00	4.00	10.00	
303+90	I	4.00	4.00	10.00	
304+00	I	4.00	4.00	10.00	
304+10	I	4.00	4.00	10.00	
304+20	I	4.00	4.00	10.00	
304+30	I	4.00	4.00	10.00	
304+40	I	4.00	4.00	10.00	
304+50	I	4.00	4.00	10.00	
304+60	I	4.00	4.00	10.00	
304+70	I	4.00	4.00	10.00	
304+80	I	4.00	4.00	10.00	
304+90	I	4.00	4.00	10.00	
305+00	I	4.00	4.00	10.00	
305+10	I	4.00	4.00	10.00	
305+20	I	4.00	4.00	10.00	
305+30	I	4.00	4.00	10.00	
305+40	I	4.00	4.00	10.00	
305+50	I	4.00	4.00	10.00	
305+60	I	4.00	4.00	10.00	
305+70	I	4.00	4.00	10.00	
305+80	I	4.00	4.00	10.00	
305+90	I	4.00	4.00	10.00	
306+00	I	4.00	4.00	10.00	
306+10	I	4.00	4.00	10.00	
306+20	I	4.00	4.00	10.00	
306+30	I	4.00	4.00	10.00	
306+40	I	4.00	4.00	10.00	
306+50	I	4.00	4.00	10.00	
306+60	I	4.00	4.00	10.00	
306+70	I	4.00	4.00	10.00	
306+80	I	4.00	4.00	10.00	
306+90	I	4.00	4.00	10.00	
307+00	I	4.00	4.00	10.00	
307+10	I	4.00	4.00	10.00	
307+20	I	4.00	4.00	10.00	
307+30	I	4.00	4.00	10.00	
307+40	I	4.00	4.00	10.00	
307+50	I	4.00	4.00	10.00	
307+60	I	4.00	4.00	10.00	
307+70	I	4.00	4.00	10.00	
307+80	I	4.00	4.00	10.00	
307+90	I	4.00	4.00	10.00	
308+00	I	4.00	4.00	10.00	
308+10	I	4.00	4.00	10.00	
308+20	I	4.00	4.00	10.00	
308+30	I	4.00	4.00	10.00	
308+40	I	4.00	4.00	10.00	
308+50	I	4.00	4.00	10.00	
308+60	I	4.00	4.00	10.00	
308+70	I	4.00	4.00	10.00	
308+80	I	4.00	4.00	10.00	
308+90	I	4.00	4.00	10.00	
309+00	I	4.00	4.00	10.00	

BARRIER WALL 55E

STATION	TYPE	HEIGHT	WIDTH	SPACING	REMARKS
303+00	I	4.00	4.00	10.00	
303+10	I	4.00	4.00	10.00	
303+20	I	4.00	4.00	10.00	
303+30	I	4.00	4.00	10.00	
303+40	I	4.00	4.00	10.00	
303+50	I	4.00	4.00	10.00	
303+60	I	4.00	4.00	10.00	
303+70	I	4.00	4.00	10.00	
303+80	I	4.00	4.00	10.00	
303+90	I	4.00	4.00	10.00	
304+00	I	4.00	4.00	10.00	
304+10	I	4.00	4.00	10.00	
304+20	I	4.00	4.00	10.00	
304+30	I	4.00	4.00	10.00	
304+40	I	4.00	4.00	10.00	
304+50	I	4.00	4.00	10.00	
304+60	I	4.00	4.00	10.00	
304+70	I	4.00	4.00	10.00	
304+80	I	4.00	4.00	10.00	
304+90	I	4.00	4.00	10.00	
305+00	I	4.00	4.00	10.00	
305+10	I	4.00	4.00	10.00	
305+20	I	4.00	4.00	10.00	
305+30	I	4.00	4.00	10.00	
305+40	I	4.00	4.00	10.00	
305+50	I	4.00	4.00	10.00	
305+60	I	4.00	4.00	10.00	
305+70	I	4.00	4.00	10.00	
305+80	I	4.00	4.00	10.00	
305+90	I	4.00	4.00	10.00	
306+00	I	4.00	4.00	10.00	
306+10	I	4.00	4.00	10.00	
306+20	I	4.00	4.00	10.00	
306+30	I	4.00	4.00	10.00	
306+40	I	4.00	4.00	10.00	
306+50	I	4.00	4.00	10.00	
306+60	I	4.00	4.00	10.00	
306+70	I	4.00	4.00	10.00	
306+80	I	4.00	4.00	10.00	
306+90	I	4.00	4.00	10.00	
307+00	I	4.00	4.00	10.00	
307+10	I	4.00	4.00	10.00	
307+20	I	4.00	4.00	10.00	
307+30	I	4.00	4.00	10.00	
307+40	I	4.00	4.00	10.00	
307+50	I	4.00	4.00	10.00	
307+60	I	4.00	4.00	10.00	
307+70	I	4.00	4.00	10.00	
307+80	I	4.00	4.00	10.00	
307+90	I	4.00	4.00	10.00	
308+00	I	4.00	4.00	10.00	
308+10	I	4.00	4.00	10.00	
308+20	I	4.00	4.00	10.00	
308+30	I	4.00	4.00	10.00	
308+40	I	4.00	4.00	10.00	
308+50	I	4.00	4.00	10.00	
308+60	I	4.00	4.00	10.00	
308+70	I	4.00	4.00	10.00	
308+80	I	4.00	4.00	10.00	
308+90	I	4.00	4.00	10.00	
309+00	I	4.00	4.00	10.00	

NOTES:
 1. ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUBPERS TO BE VERIFIED IN THE FIELD.
 2. FOR DETAILS IN LIGHTING STD. ANCHORAGE SEE SHEET S-22

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA. 303+00 TO STA 309+00
 HORZ. 1"=20'
 VERT. 1"=2'
 APRIL, 1968
 SHEET NO. 514 OF 211 SHEETS

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

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

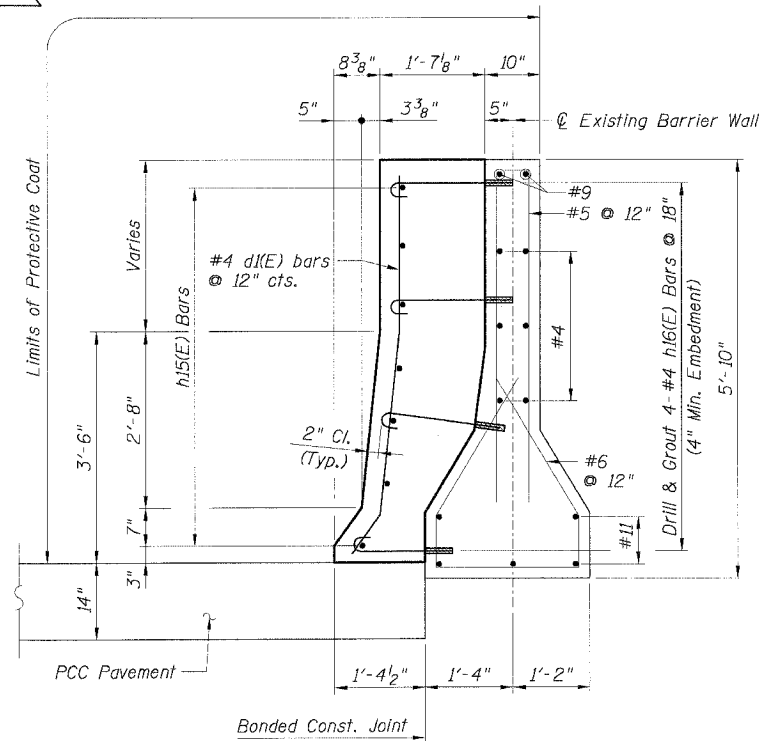
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

SCALE: NONE
 DATE: 7/7/05

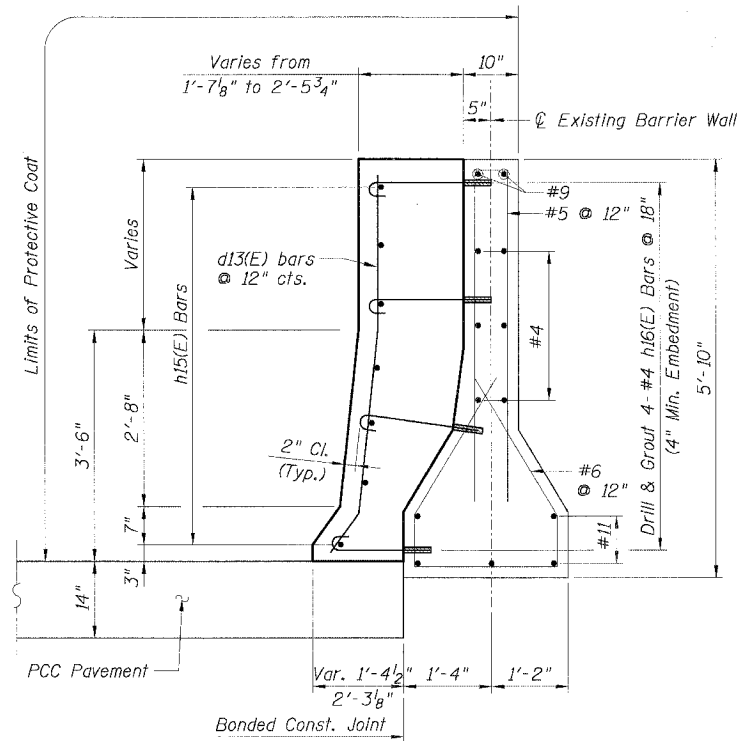
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 CHECKED BY: CTA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

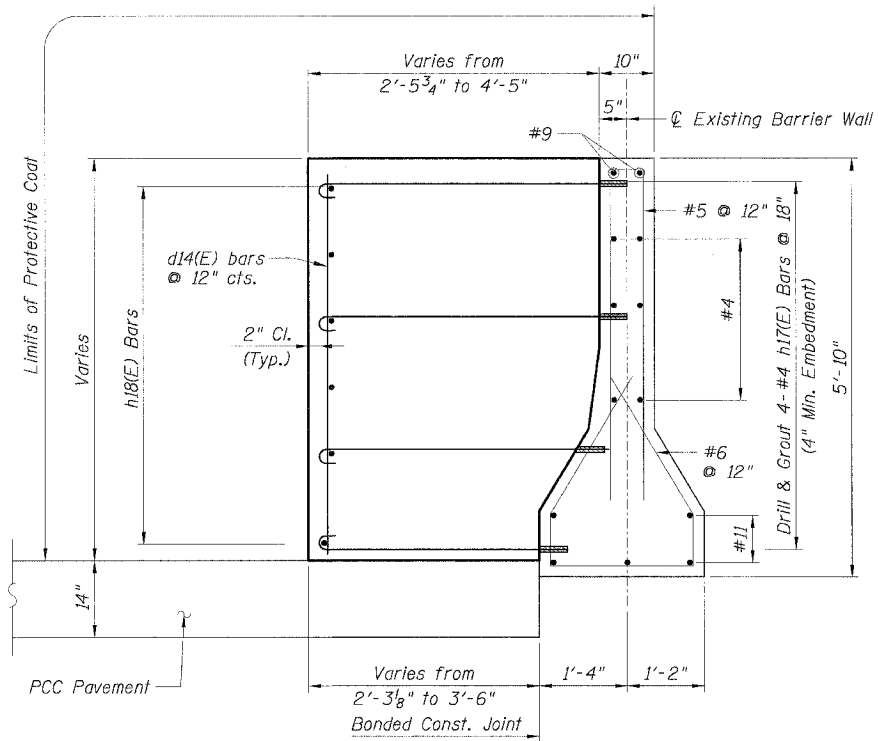
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	598	424B
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	62302	
• (1816, ETC, 2324.6-10R-9				



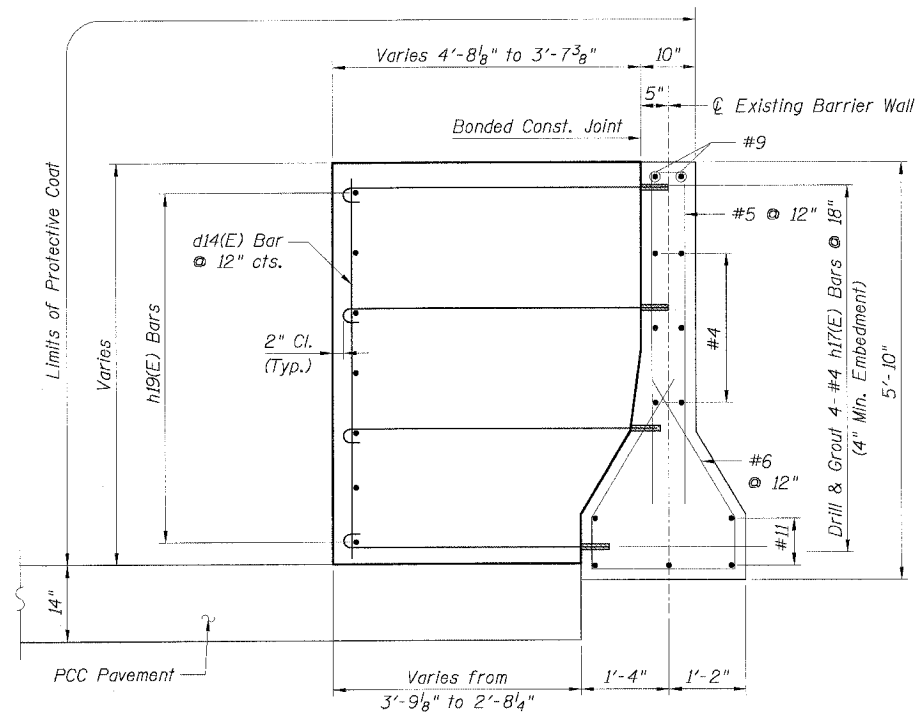
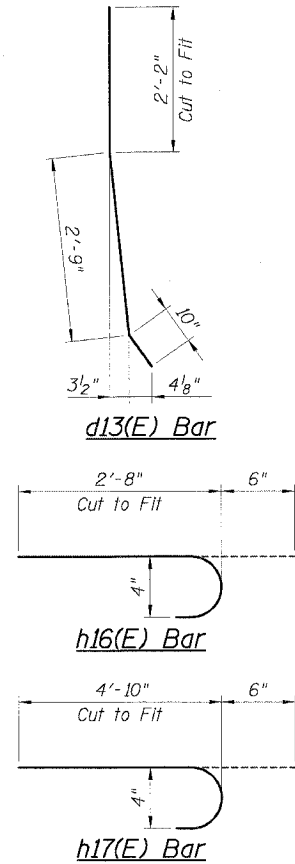
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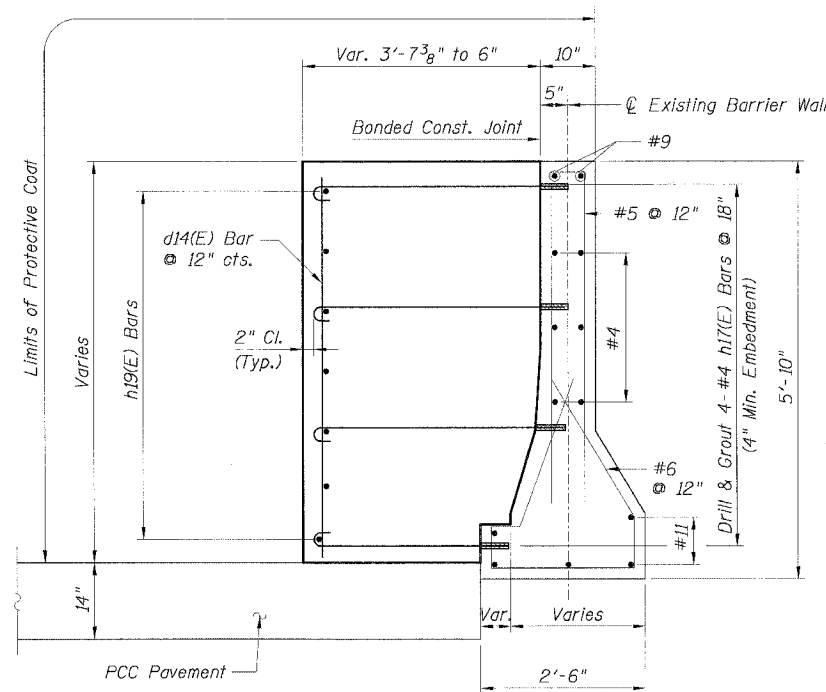
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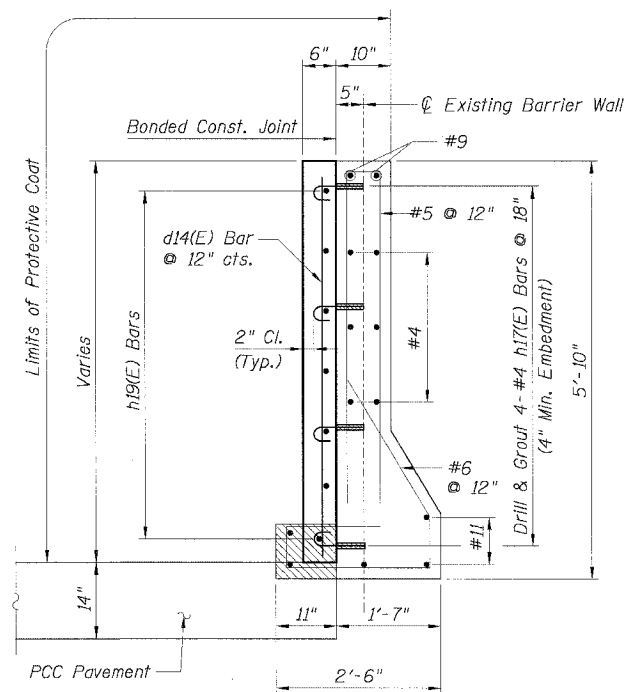
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d13(E)	17	#4	5'-9"	—
d14(E)	55	#4	5'-9"	—
h15(E)	7	#4	18'-4"	—
h16(E)	36	#4	3'-0"	—
h17(E)	108	#4	5'-4"	—
h18(E)	7	#4	20'-7"	—
h19(E)	14	#4	17'-5"	—

Item	Unit	Quantity
Furnishing Soldier Piles, W12x106	Foot	200
Drilling and Setting		
Soldier Piles (In Soil)	Cu. Ft.	962
Untreated Timber Lagging	Sq. Ft.	188
Concrete Removal	Cu. Yd.	0.2
Reinforcement Bars, Epoxy Coated	Pound	1078
Concrete Superstructure	Cu. Yd.	39.3
Protective Coat	Sq. Yd.	74

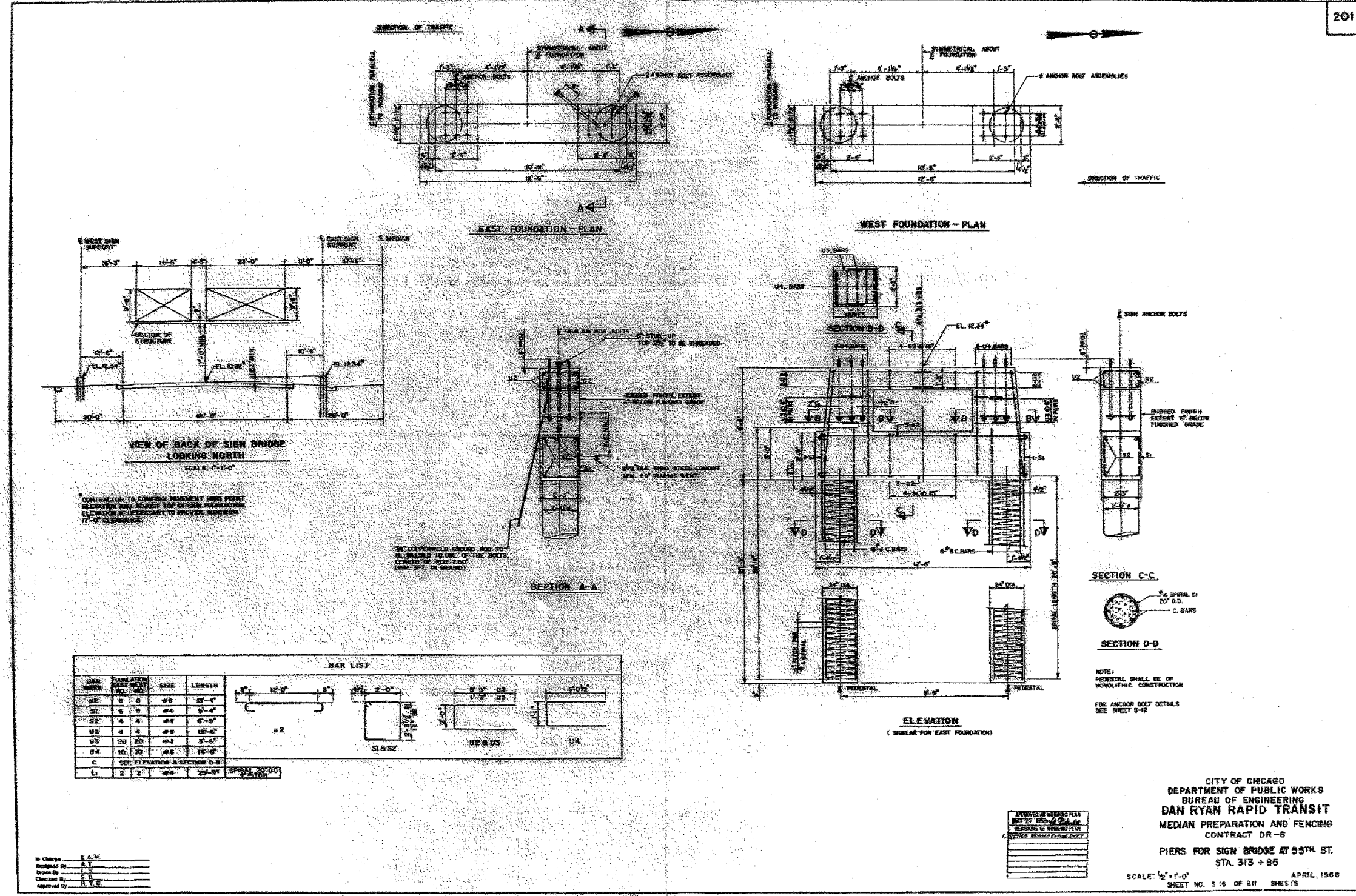
Sheet B18 of 18

REVISIONS

NO.	NAME	DATE
MJP		8-12-05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
71ST STREET TO 31ST STREET (SB EXPRESS LANES)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
REFACED BARRIER TO NEW SIGN STRUCTURE
TRANSITION DETAILS
SCALE: None DRAWN BY: KWT
DATE: July 7, 2005 CHECKED BY: RDP

CTE | AECOM



FOR INFORMATION ONLY

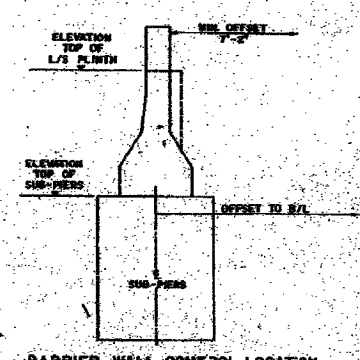
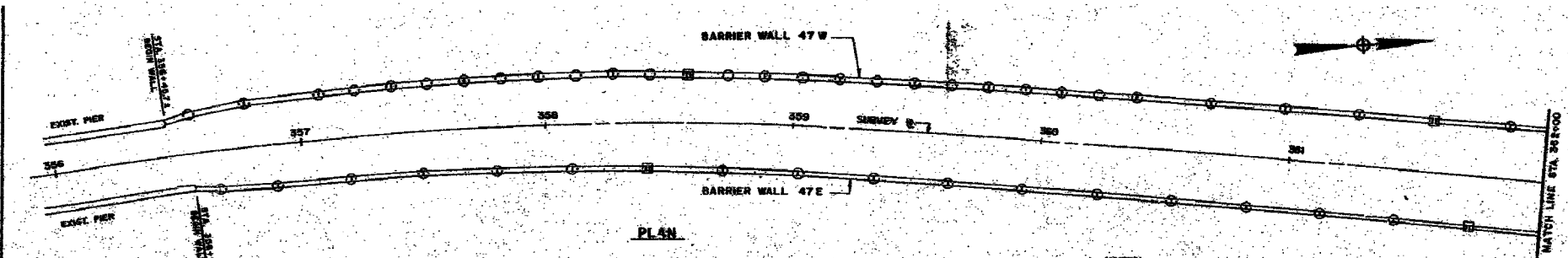
Edwards and Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

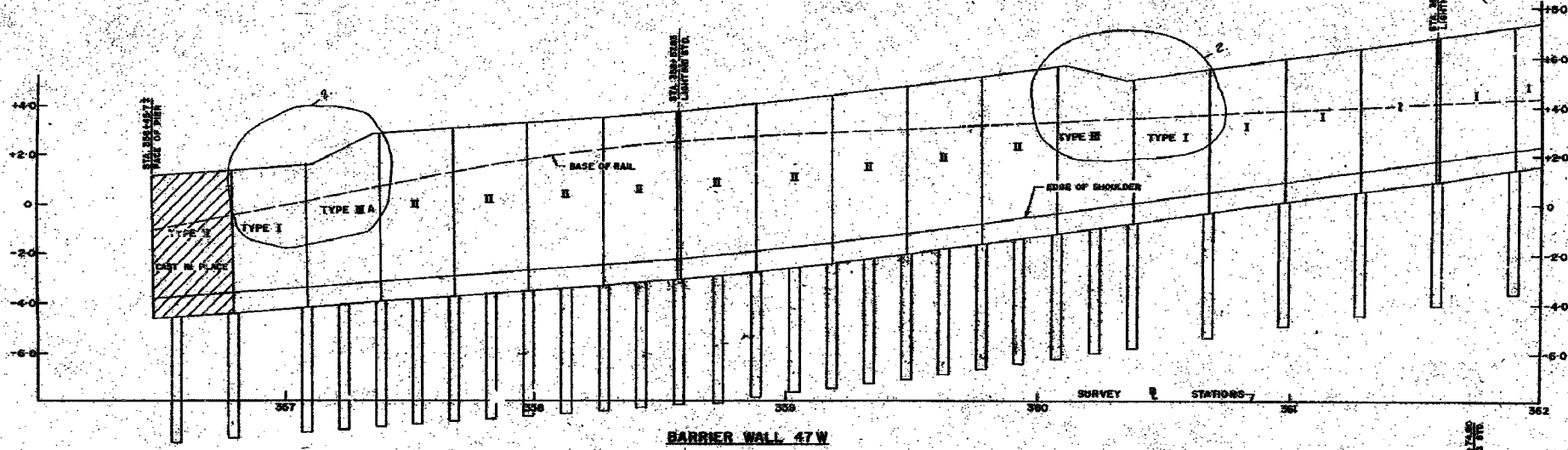
SCALE: NONE
DATE: 7/7/05

DRAWN BY: CTA
CHECKED BY: CTA

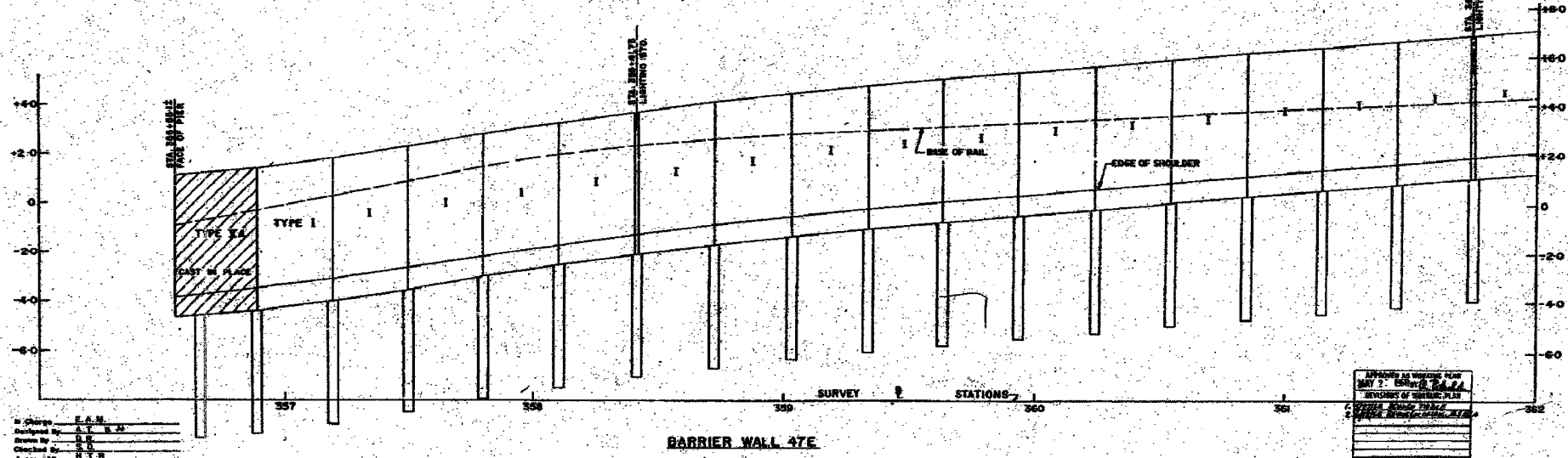


NOTES:
ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
FOR DETAILS OF LIGHTING STA ANCHORAGE SEE SHEET S-22

BARRIER WALL CONTROL LOCATION



STATION	ELEVATION TOP OF SUB-PIERS	ELEVATION TOP OF L/S FLUSH	OFFSET TO R/L	REMARKS
357+00	10.40	-1.72	2.18	TYPE III
357+10	10.40	-1.72	2.18	TYPE III
357+20	10.40	-1.72	2.18	TYPE III
357+30	10.40	-1.72	2.18	TYPE III
357+40	10.40	-1.72	2.18	TYPE III
357+50	10.40	-1.72	2.18	TYPE III
357+60	10.40	-1.72	2.18	TYPE III
357+70	10.40	-1.72	2.18	TYPE III
357+80	10.40	-1.72	2.18	TYPE III
357+90	10.40	-1.72	2.18	TYPE III
358+00	10.40	-1.72	2.18	TYPE III
358+10	10.40	-1.72	2.18	TYPE III
358+20	10.40	-1.72	2.18	TYPE III
358+30	10.40	-1.72	2.18	TYPE III
358+40	10.40	-1.72	2.18	TYPE III
358+50	10.40	-1.72	2.18	TYPE III
358+60	10.40	-1.72	2.18	TYPE III
358+70	10.40	-1.72	2.18	TYPE III
358+80	10.40	-1.72	2.18	TYPE III
358+90	10.40	-1.72	2.18	TYPE III
359+00	10.40	-1.72	2.18	TYPE III
359+10	10.40	-1.72	2.18	TYPE III
359+20	10.40	-1.72	2.18	TYPE III
359+30	10.40	-1.72	2.18	TYPE III
359+40	10.40	-1.72	2.18	TYPE III
359+50	10.40	-1.72	2.18	TYPE III
359+60	10.40	-1.72	2.18	TYPE III
359+70	10.40	-1.72	2.18	TYPE III
359+80	10.40	-1.72	2.18	TYPE III
359+90	10.40	-1.72	2.18	TYPE III
360+00	10.40	-1.72	2.18	TYPE III
360+10	10.40	-1.72	2.18	TYPE III
360+20	10.40	-1.72	2.18	TYPE III
360+30	10.40	-1.72	2.18	TYPE III
360+40	10.40	-1.72	2.18	TYPE III
360+50	10.40	-1.72	2.18	TYPE III
360+60	10.40	-1.72	2.18	TYPE III
360+70	10.40	-1.72	2.18	TYPE III
360+80	10.40	-1.72	2.18	TYPE III
360+90	10.40	-1.72	2.18	TYPE III



STATION	ELEVATION TOP OF SUB-PIERS	ELEVATION TOP OF L/S FLUSH	OFFSET TO R/L	REMARKS
357+00	10.40	-1.72	2.18	TYPE I
357+10	10.40	-1.72	2.18	TYPE I
357+20	10.40	-1.72	2.18	TYPE I
357+30	10.40	-1.72	2.18	TYPE I
357+40	10.40	-1.72	2.18	TYPE I
357+50	10.40	-1.72	2.18	TYPE I
357+60	10.40	-1.72	2.18	TYPE I
357+70	10.40	-1.72	2.18	TYPE I
357+80	10.40	-1.72	2.18	TYPE I
357+90	10.40	-1.72	2.18	TYPE I
358+00	10.40	-1.72	2.18	TYPE I
358+10	10.40	-1.72	2.18	TYPE I
358+20	10.40	-1.72	2.18	TYPE I
358+30	10.40	-1.72	2.18	TYPE I
358+40	10.40	-1.72	2.18	TYPE I
358+50	10.40	-1.72	2.18	TYPE I
358+60	10.40	-1.72	2.18	TYPE I
358+70	10.40	-1.72	2.18	TYPE I
358+80	10.40	-1.72	2.18	TYPE I
358+90	10.40	-1.72	2.18	TYPE I
359+00	10.40	-1.72	2.18	TYPE I
359+10	10.40	-1.72	2.18	TYPE I
359+20	10.40	-1.72	2.18	TYPE I
359+30	10.40	-1.72	2.18	TYPE I
359+40	10.40	-1.72	2.18	TYPE I
359+50	10.40	-1.72	2.18	TYPE I
359+60	10.40	-1.72	2.18	TYPE I
359+70	10.40	-1.72	2.18	TYPE I
359+80	10.40	-1.72	2.18	TYPE I
359+90	10.40	-1.72	2.18	TYPE I
360+00	10.40	-1.72	2.18	TYPE I
360+10	10.40	-1.72	2.18	TYPE I
360+20	10.40	-1.72	2.18	TYPE I
360+30	10.40	-1.72	2.18	TYPE I
360+40	10.40	-1.72	2.18	TYPE I
360+50	10.40	-1.72	2.18	TYPE I
360+60	10.40	-1.72	2.18	TYPE I
360+70	10.40	-1.72	2.18	TYPE I
360+80	10.40	-1.72	2.18	TYPE I
360+90	10.40	-1.72	2.18	TYPE I

ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION & FENCING
CONTRACT DR-8
BARRIER WALL PLAN & PROFILES
STA 356+45 TO STA 362+00
47E & 47W
SCALE: HORIZ. 1"=20'
VERT. 1"=2'
APRIL, 1968
SHEET NO. 5 OF 211 SHEETS

Designed by: E.A.M.
Checked by: H.T.B.
Approved by: H.T.B.

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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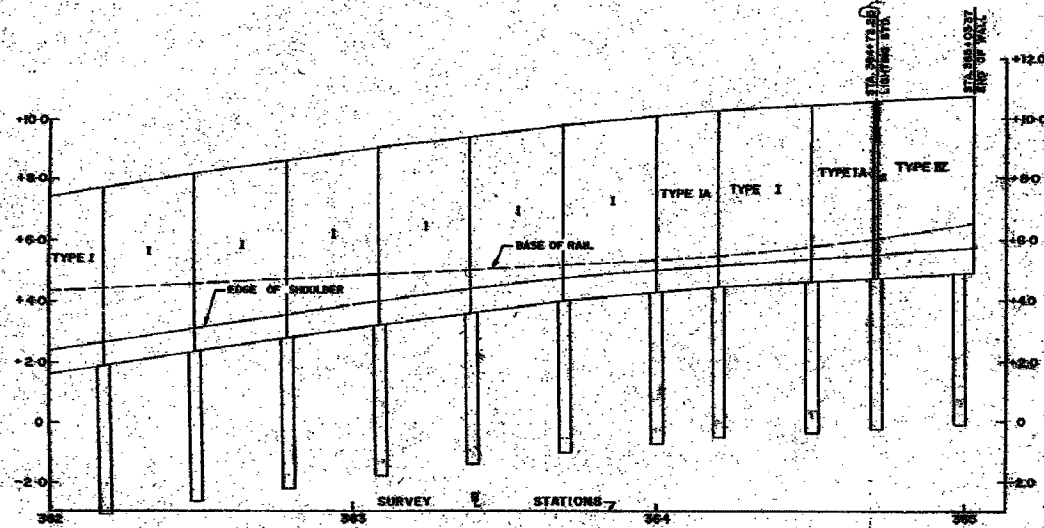
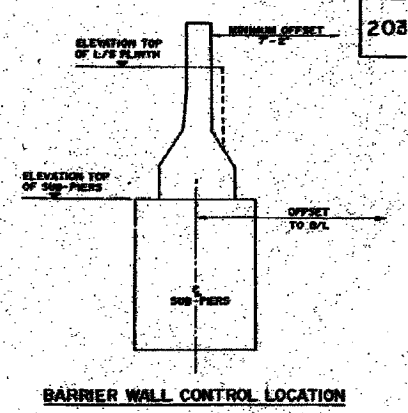
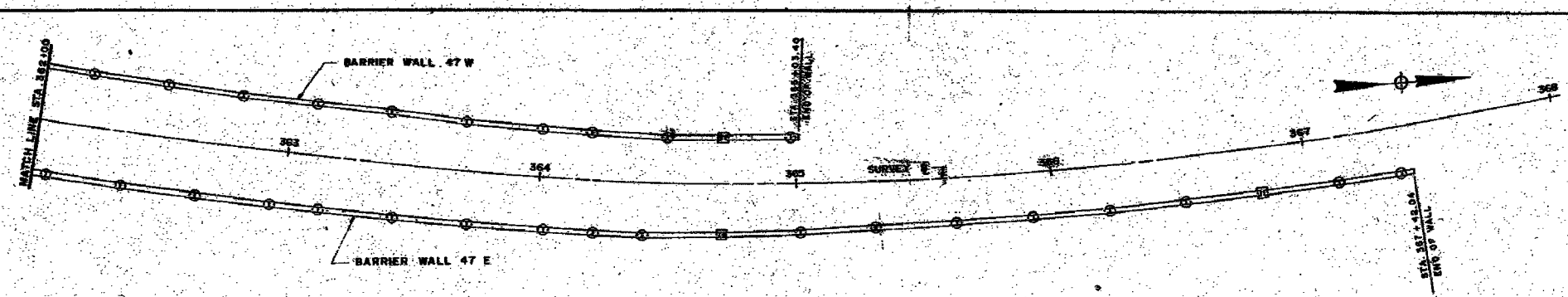
REVISIONS	
NAME	DATE

SHEET SD-4 OF SD-10

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

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

140250 AM 5/24/2005



PLAN

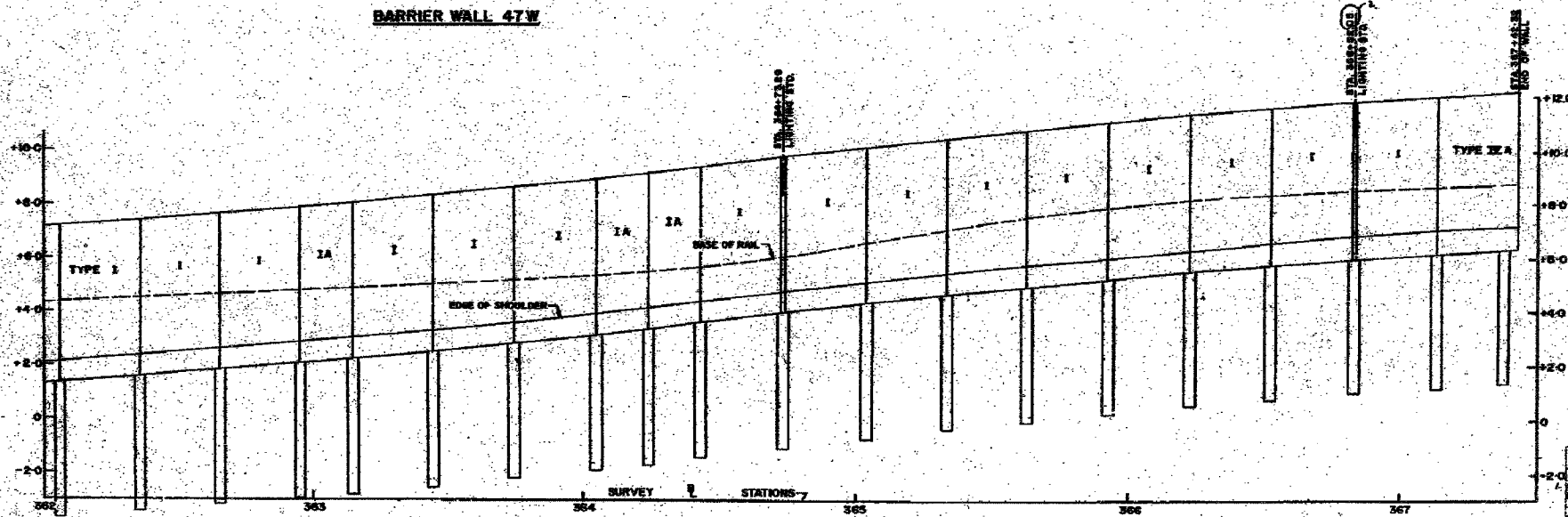
NOTES
 ALL DIMENSIONS IN FEET UNLESS OTHERWISE SPECIFIED.
 THE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE AND STRUCTURES, 1988 EDITION, SECTION 6-22.

BARRIER WALL 47W

STATION	TYPE	WIDTH	HEIGHT	REMARKS
362+00	I	21.10	1.75	
362+10	I	21.10	1.75	
362+20	I	21.10	1.75	
362+30	I	21.10	1.75	
362+40	I	21.10	1.75	
362+50	I	21.10	1.75	
362+60	I	21.10	1.75	
362+70	I	21.10	1.75	
362+80	I	21.10	1.75	
362+90	I	21.10	1.75	
363+00	I	21.10	1.75	
363+10	I	21.10	1.75	
363+20	I	21.10	1.75	
363+30	I	21.10	1.75	
363+40	I	21.10	1.75	
363+50	I	21.10	1.75	
363+60	I	21.10	1.75	
363+70	I	21.10	1.75	
363+80	I	21.10	1.75	
363+90	I	21.10	1.75	
364+00	I	21.10	1.75	
364+10	I	21.10	1.75	
364+20	I	21.10	1.75	
364+30	I	21.10	1.75	
364+40	I	21.10	1.75	
364+50	I	21.10	1.75	
364+60	I	21.10	1.75	
364+70	I	21.10	1.75	
364+80	I	21.10	1.75	
364+90	I	21.10	1.75	
365+00	I	21.10	1.75	
365+10	I	21.10	1.75	
365+20	I	21.10	1.75	
365+30	I	21.10	1.75	
365+40	I	21.10	1.75	
365+50	I	21.10	1.75	
365+60	I	21.10	1.75	
365+70	I	21.10	1.75	
365+80	I	21.10	1.75	
365+90	I	21.10	1.75	
366+00	I	21.10	1.75	
366+10	I	21.10	1.75	
366+20	I	21.10	1.75	
366+30	I	21.10	1.75	
366+40	I	21.10	1.75	
366+50	I	21.10	1.75	
366+60	I	21.10	1.75	
366+70	I	21.10	1.75	
366+80	I	21.10	1.75	
366+90	I	21.10	1.75	
367+00	I	21.10	1.75	

BARRIER WALL 47E

STATION	TYPE	WIDTH	HEIGHT	REMARKS
362+00	I	21.10	1.75	
362+10	I	21.10	1.75	
362+20	I	21.10	1.75	
362+30	I	21.10	1.75	
362+40	I	21.10	1.75	
362+50	I	21.10	1.75	
362+60	I	21.10	1.75	
362+70	I	21.10	1.75	
362+80	I	21.10	1.75	
362+90	I	21.10	1.75	
363+00	I	21.10	1.75	
363+10	I	21.10	1.75	
363+20	I	21.10	1.75	
363+30	I	21.10	1.75	
363+40	I	21.10	1.75	
363+50	I	21.10	1.75	
363+60	I	21.10	1.75	
363+70	I	21.10	1.75	
363+80	I	21.10	1.75	
363+90	I	21.10	1.75	
364+00	I	21.10	1.75	
364+10	I	21.10	1.75	
364+20	I	21.10	1.75	
364+30	I	21.10	1.75	
364+40	I	21.10	1.75	
364+50	I	21.10	1.75	
364+60	I	21.10	1.75	
364+70	I	21.10	1.75	
364+80	I	21.10	1.75	
364+90	I	21.10	1.75	
365+00	I	21.10	1.75	
365+10	I	21.10	1.75	
365+20	I	21.10	1.75	
365+30	I	21.10	1.75	
365+40	I	21.10	1.75	
365+50	I	21.10	1.75	
365+60	I	21.10	1.75	
365+70	I	21.10	1.75	
365+80	I	21.10	1.75	
365+90	I	21.10	1.75	
366+00	I	21.10	1.75	
366+10	I	21.10	1.75	
366+20	I	21.10	1.75	
366+30	I	21.10	1.75	
366+40	I	21.10	1.75	
366+50	I	21.10	1.75	
366+60	I	21.10	1.75	
366+70	I	21.10	1.75	
366+80	I	21.10	1.75	
366+90	I	21.10	1.75	
367+00	I	21.10	1.75	



BARRIER WALL 47E

APPROVED AS SHOWN PLAN
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: [Date]

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA 362+00 TO STA. 367+42.32
 47E & 47W
 SCALE: HORIZ 1"=20'
 VERT 1"=2'
 APRIL, 1968
 SHEET NO. 5 OF 211 SHEETS

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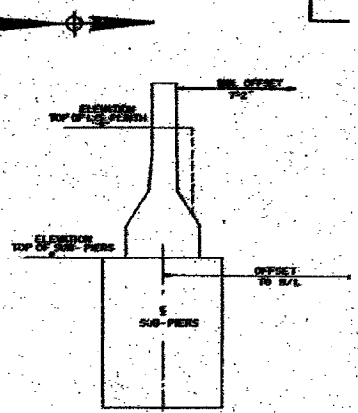
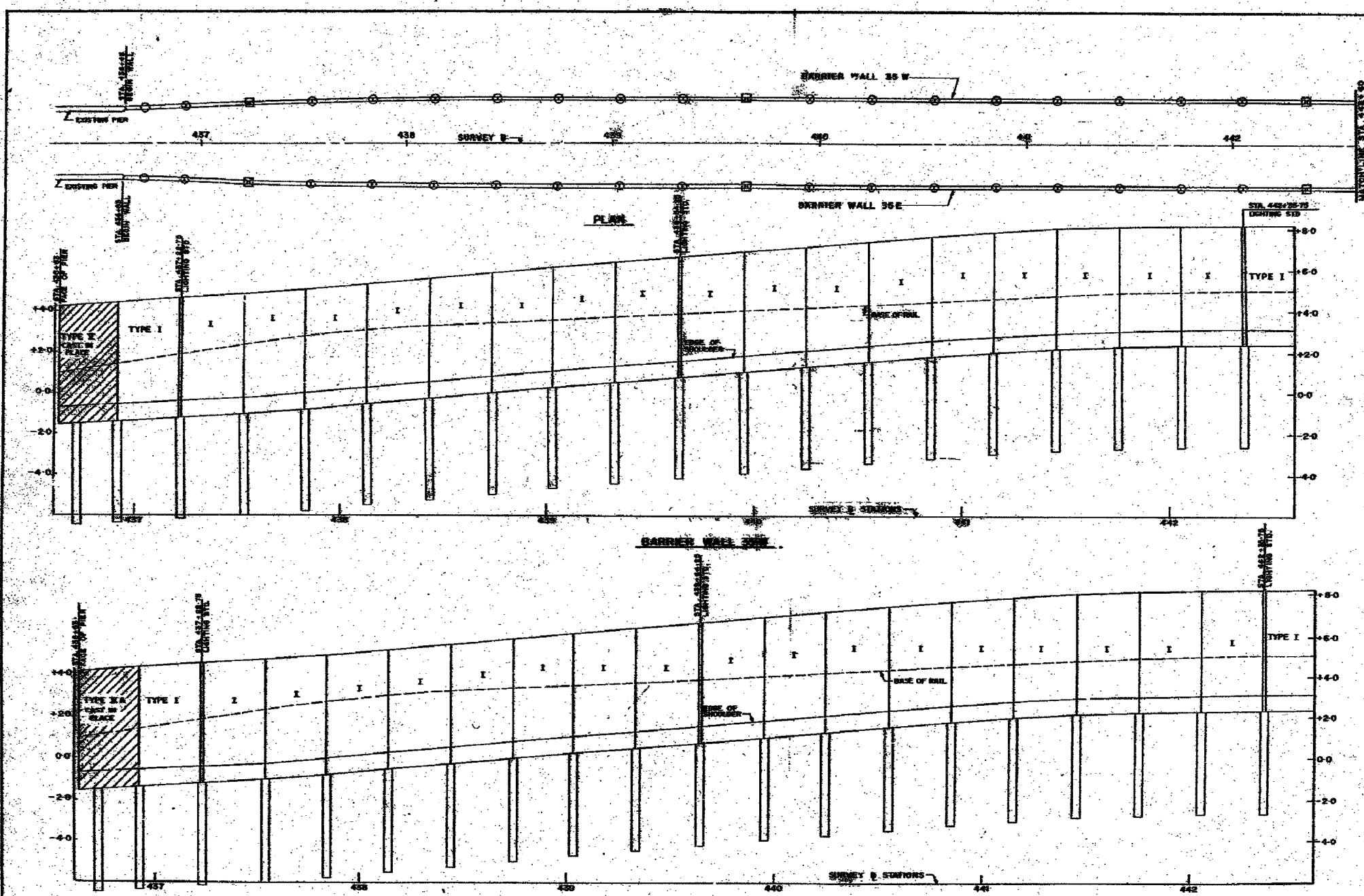
FOR INFORMATION ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS
 SCALE: N.T.S.
 DATE: 07/07/05
 DRAWN BY: MTR
 CHECKED BY: BLU

6/24/2005 11:03:05 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	430
STA. 2596+00		TO STA. 2602+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		• (1818, ETC, 2324.6-1PIR-9		



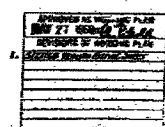
BARRIER WALL CONTROL LOCATION

STATION	OFFSET FROM DA TO CENTER OF SUB-PIERS	ELEVATION TOP OF SUB-PIERS	ELEVATION TOP OF RAIL	HEIGHT	REMARKS
437-43	17.00	-1.87			
437-47	16.50	-1.87			
438-00	16.00	-1.87			
438-04	15.50	-1.87	2.37	4.24	BASE SUB.
438-08	15.00	-1.87			
438-12	14.50	-1.87			
438-16	14.00	-1.87			
438-20	13.50	-1.87			
438-24	13.00	-1.87			
438-28	12.50	-1.87			
438-32	12.00	-1.87			
438-36	11.50	-1.87			
438-40	11.00	-1.87			
438-44	10.50	-1.87			
438-48	10.00	-1.87			
439-02	9.50	-1.87			
439-06	9.00	-1.87			
439-10	8.50	-1.87			
439-14	8.00	-1.87			
439-18	7.50	-1.87			
439-22	7.00	-1.87			
439-26	6.50	-1.87			
439-30	6.00	-1.87			
439-34	5.50	-1.87			
439-38	5.00	-1.87			
440-02	4.50	-1.87			
440-06	4.00	-1.87			
440-10	3.50	-1.87			
440-14	3.00	-1.87			
440-18	2.50	-1.87			
440-22	2.00	-1.87			
440-26	1.50	-1.87			
440-30	1.00	-1.87			
440-34	0.50	-1.87			
440-38	0.00	-1.87			
441-02	-0.50	-1.87			
441-06	-1.00	-1.87			
441-10	-1.50	-1.87			
441-14	-2.00	-1.87			
441-18	-2.50	-1.87			
441-22	-3.00	-1.87			
441-26	-3.50	-1.87			
441-30	-4.00	-1.87			
441-34	-4.50	-1.87			
441-38	-5.00	-1.87			
442-02	-5.50	-1.87			
442-06	-6.00	-1.87			
442-10	-6.50	-1.87			
442-14	-7.00	-1.87			
442-18	-7.50	-1.87			
442-22	-8.00	-1.87			

BARRIER WALL 35E

STATION	OFFSET FROM DA TO CENTER OF SUB-PIERS	ELEVATION TOP OF SUB-PIERS	ELEVATION TOP OF RAIL	HEIGHT	REMARKS
438-43	17.00	-1.87			
438-47	16.50	-1.87			
439-00	16.00	-1.87			
439-04	15.50	-1.87	2.37	4.24	BASE SUB.
439-08	15.00	-1.87			
439-12	14.50	-1.87			
439-16	14.00	-1.87			
439-20	13.50	-1.87			
439-24	13.00	-1.87			
439-28	12.50	-1.87			
439-32	12.00	-1.87			
439-36	11.50	-1.87			
439-40	11.00	-1.87			
439-44	10.50	-1.87			
439-48	10.00	-1.87			
440-02	9.50	-1.87			
440-06	9.00	-1.87			
440-10	8.50	-1.87			
440-14	8.00	-1.87			
440-18	7.50	-1.87			
440-22	7.00	-1.87			
440-26	6.50	-1.87			
440-30	6.00	-1.87			
440-34	5.50	-1.87			
440-38	5.00	-1.87			
441-02	4.50	-1.87			
441-06	4.00	-1.87			
441-10	3.50	-1.87			
441-14	3.00	-1.87			
441-18	2.50	-1.87			
441-22	2.00	-1.87			
441-26	1.50	-1.87			
441-30	1.00	-1.87			
441-34	0.50	-1.87			
441-38	0.00	-1.87			
442-02	-0.50	-1.87			
442-06	-1.00	-1.87			
442-10	-1.50	-1.87			
442-14	-2.00	-1.87			
442-18	-2.50	-1.87			
442-22	-3.00	-1.87			
442-26	-3.50	-1.87			
442-30	-4.00	-1.87			
442-34	-4.50	-1.87			
442-38	-5.00	-1.87			
443-02	-5.50	-1.87			
443-06	-6.00	-1.87			
443-10	-6.50	-1.87			
443-14	-7.00	-1.87			
443-18	-7.50	-1.87			
443-22	-8.00	-1.87			

NOTES
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
 FOR DETAILS OF LIGHTING STANDARD ANCHORAGE SEE SHEET 5-22



CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA. 436 + 63 TO STA 442 + 60-0
 HORIZ. 1" = 20' 35E & 35W
 SCALE: VERT. 1" = 2'
 APRIL, 1964
 SHEET NO. 5 19 OF 24 SHEETS

in Charge: E.A.M.
 Drafted By: J.L.
 Checked By: J.L.
 Approved: E.A.M.

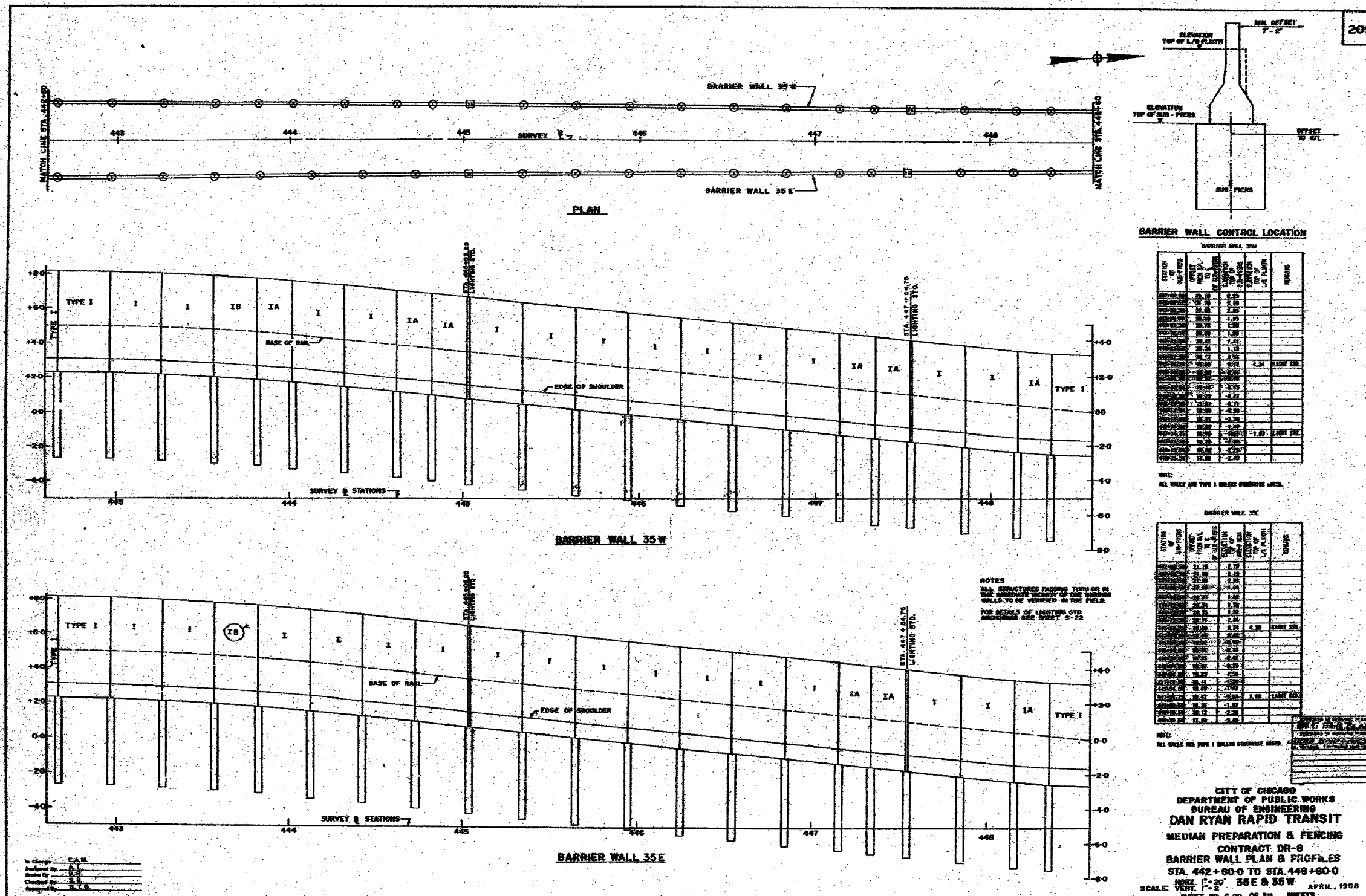
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312 228 0100
 www.bbainc.com

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS
 SCALE: N.T.S.
 DATE: 07/07/05
 DRAWN BY: MTR
 CHECKED BY: BLU

6/24/2005 10:35:30 AM



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REVISIONS	
NAME	DATE

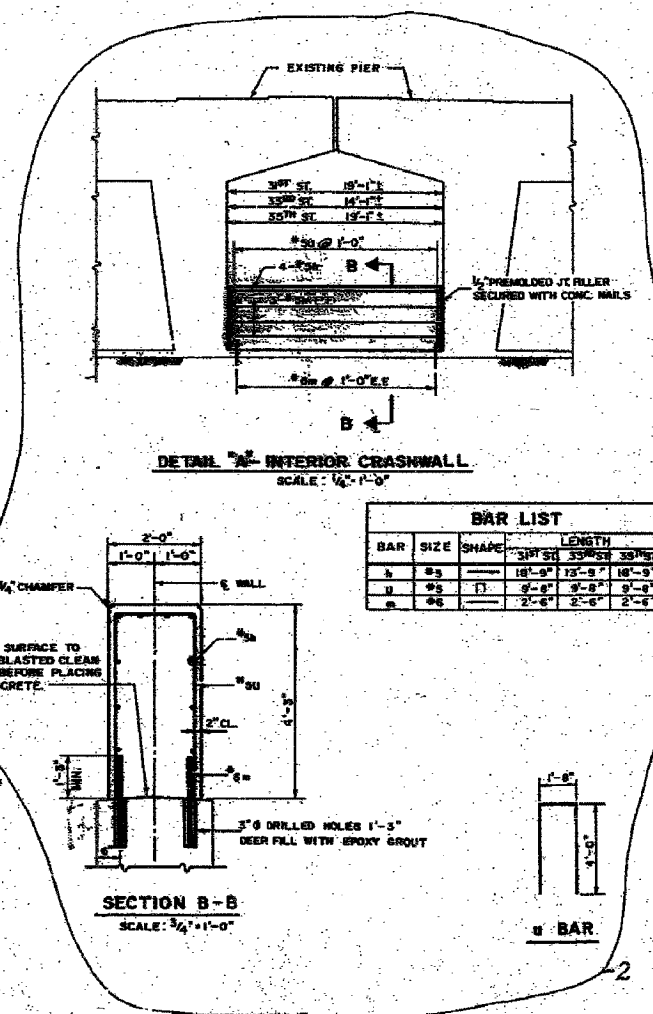
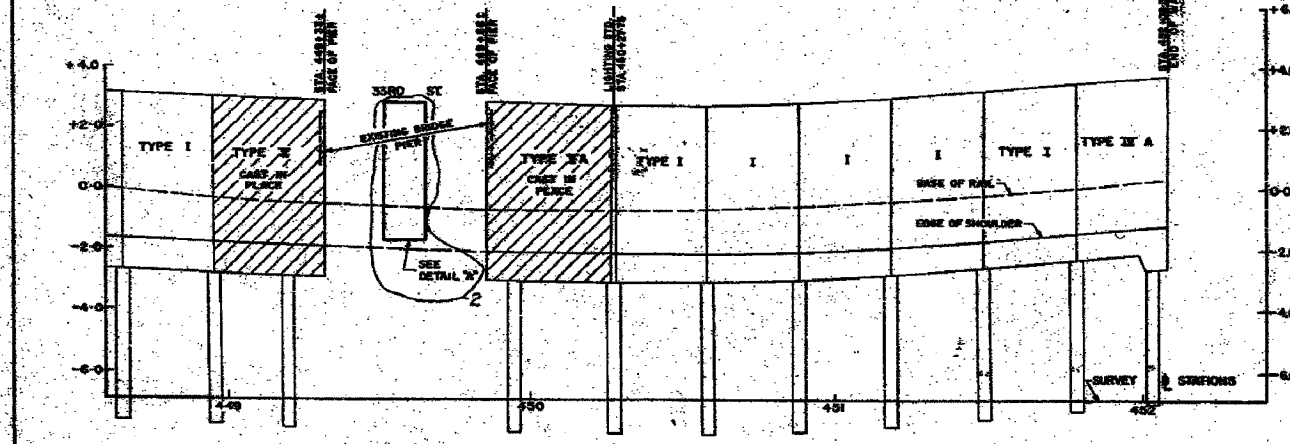
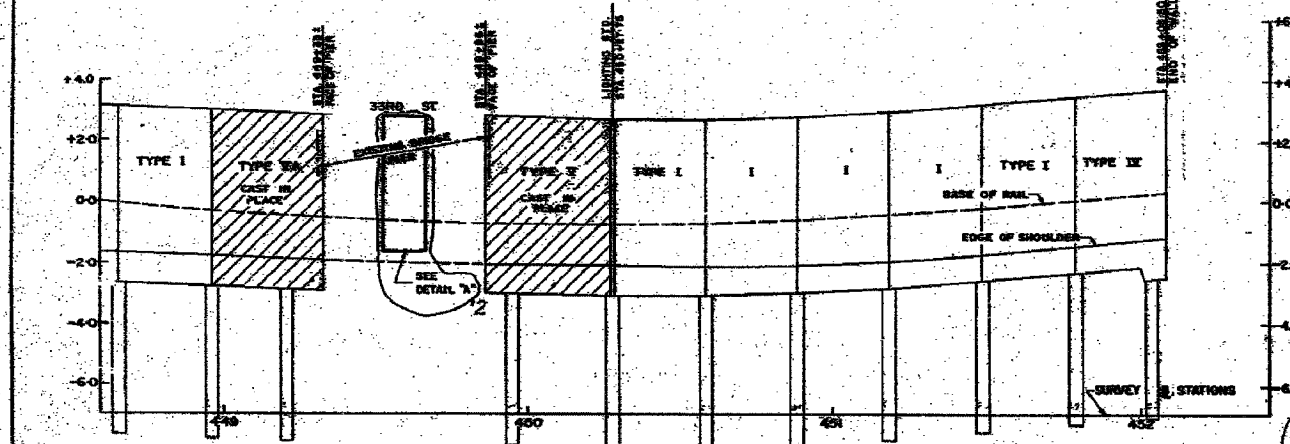
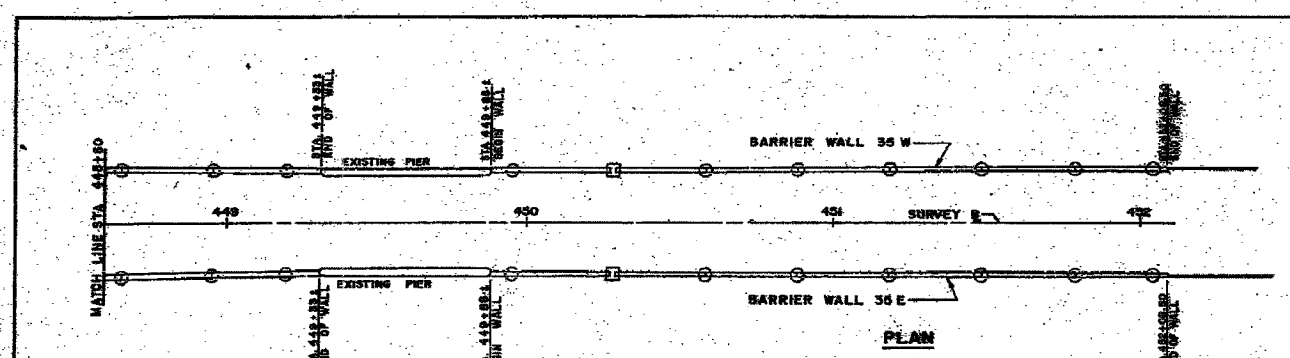
SHEET SD-7 OF SD-10

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

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

m:\600\road\civil\STRUCTURES\CTA_BARRIER_As-Built\660\SUBJECT_A_BARRIER_WALL.Plot

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	432
STA. 2596+00		TO STA. 2602+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		* (1818, ETC, 2324.6-1)PR-9		



BAR	SIZE	SHAPE	SPACING	LENGTH
a	#3	—	18" @ 12'-0"	18'-0"
b	#2	□	6" @ 9'-0"	9'-0"
c	#6	—	2'-0"	2'-0"

STATION	SUB-PIERS	OFFSET TO B/L	REMARKS
448+00	17.77	-3.75	EXIST. WALL
448+00	17.80	-2.85	TYPE I
448+00	17.85	-3.15	TYPE II
448+00	17.90	-3.30	TYPE III
448+00	17.95	-3.45	TYPE III
448+00	18.00	-3.60	TYPE III
448+00	18.05	-3.75	TYPE III
448+00	18.10	-3.90	TYPE III
448+00	18.15	-4.05	TYPE III
448+00	18.20	-4.20	TYPE III
448+00	18.25	-4.35	TYPE III
448+00	18.30	-4.50	TYPE III
448+00	18.35	-4.65	TYPE III
448+00	18.40	-4.80	TYPE III
448+00	18.45	-4.95	TYPE III
448+00	18.50	-5.10	TYPE III
448+00	18.55	-5.25	TYPE III
448+00	18.60	-5.40	TYPE III
448+00	18.65	-5.55	TYPE III
448+00	18.70	-5.70	TYPE III
448+00	18.75	-5.85	TYPE III
448+00	18.80	-6.00	TYPE III
448+00	18.85	-6.15	TYPE III
448+00	18.90	-6.30	TYPE III
448+00	18.95	-6.45	TYPE III
448+00	19.00	-6.60	TYPE III
448+00	19.05	-6.75	TYPE III
448+00	19.10	-6.90	TYPE III
448+00	19.15	-7.05	TYPE III
448+00	19.20	-7.20	TYPE III
448+00	19.25	-7.35	TYPE III
448+00	19.30	-7.50	TYPE III
448+00	19.35	-7.65	TYPE III
448+00	19.40	-7.80	TYPE III
448+00	19.45	-7.95	TYPE III
448+00	19.50	-8.10	TYPE III
448+00	19.55	-8.25	TYPE III
448+00	19.60	-8.40	TYPE III
448+00	19.65	-8.55	TYPE III
448+00	19.70	-8.70	TYPE III
448+00	19.75	-8.85	TYPE III
448+00	19.80	-9.00	TYPE III
448+00	19.85	-9.15	TYPE III
448+00	19.90	-9.30	TYPE III
448+00	19.95	-9.45	TYPE III
448+00	20.00	-9.60	TYPE III

STATION	SUB-PIERS	OFFSET TO B/L	REMARKS
448+00	17.83	-3.75	EXIST. WALL
448+00	17.87	-3.85	TYPE I
448+00	17.90	-3.95	TYPE II
448+00	17.93	-4.05	TYPE III
448+00	17.97	-4.15	TYPE III
448+00	18.00	-4.25	TYPE III
448+00	18.03	-4.35	TYPE III
448+00	18.07	-4.45	TYPE III
448+00	18.10	-4.55	TYPE III
448+00	18.13	-4.65	TYPE III
448+00	18.17	-4.75	TYPE III
448+00	18.20	-4.85	TYPE III
448+00	18.23	-4.95	TYPE III
448+00	18.27	-5.05	TYPE III
448+00	18.30	-5.15	TYPE III
448+00	18.33	-5.25	TYPE III
448+00	18.37	-5.35	TYPE III
448+00	18.40	-5.45	TYPE III
448+00	18.43	-5.55	TYPE III
448+00	18.47	-5.65	TYPE III
448+00	18.50	-5.75	TYPE III
448+00	18.53	-5.85	TYPE III
448+00	18.57	-5.95	TYPE III
448+00	18.60	-6.05	TYPE III
448+00	18.63	-6.15	TYPE III
448+00	18.67	-6.25	TYPE III
448+00	18.70	-6.35	TYPE III
448+00	18.73	-6.45	TYPE III
448+00	18.77	-6.55	TYPE III
448+00	18.80	-6.65	TYPE III
448+00	18.83	-6.75	TYPE III
448+00	18.87	-6.85	TYPE III
448+00	18.90	-6.95	TYPE III
448+00	18.93	-7.05	TYPE III
448+00	18.97	-7.15	TYPE III
448+00	19.00	-7.25	TYPE III
448+00	19.03	-7.35	TYPE III
448+00	19.07	-7.45	TYPE III
448+00	19.10	-7.55	TYPE III
448+00	19.13	-7.65	TYPE III
448+00	19.17	-7.75	TYPE III
448+00	19.20	-7.85	TYPE III
448+00	19.23	-7.95	TYPE III
448+00	19.27	-8.05	TYPE III
448+00	19.30	-8.15	TYPE III
448+00	19.33	-8.25	TYPE III
448+00	19.37	-8.35	TYPE III
448+00	19.40	-8.45	TYPE III
448+00	19.43	-8.55	TYPE III
448+00	19.47	-8.65	TYPE III
448+00	19.50	-8.75	TYPE III
448+00	19.53	-8.85	TYPE III
448+00	19.57	-8.95	TYPE III
448+00	19.60	-9.05	TYPE III
448+00	19.63	-9.15	TYPE III
448+00	19.67	-9.25	TYPE III
448+00	19.70	-9.35	TYPE III
448+00	19.73	-9.45	TYPE III
448+00	19.77	-9.55	TYPE III
448+00	19.80	-9.65	TYPE III
448+00	19.83	-9.75	TYPE III
448+00	19.87	-9.85	TYPE III
448+00	19.90	-9.95	TYPE III
448+00	19.93	-10.05	TYPE III
448+00	19.97	-10.15	TYPE III
448+00	20.00	-10.25	TYPE III

In Charge: E.A.M.
 Designed by: E.A.M.
 Drawn by: E.A.M.
 Checked by: E.A.M.
 Approved by: E.A.M.

NOTES
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
 FOR DETAILS OF LIGHTING STANDARD ANCHORAGE SEE SHEET 3-22

APPROVED AS SHOWN PLAN
 MAY 27 1968
 REVISIONS TO BARRIER WALL PLAN
 CONTRACT DR-6
 BARRIERS WALL PLAN & PROFILES
 STA. 448+60.0 TO STA. 452+08.5
 SCALE: VERT. 1"=2' HORIZ. 1"=20'

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION AND FENCING
 CONTRACT DR-6
 BARRIER WALL PLAN & PROFILES
 STA. 448+60.0 TO STA. 452+08.5
 HORIZ. 1"=20' VERT. 1"=2'
 APRIL, 1968
 SHEET NO. 521 OF 211 SHEETS

REVISIONS	NAME	DATE

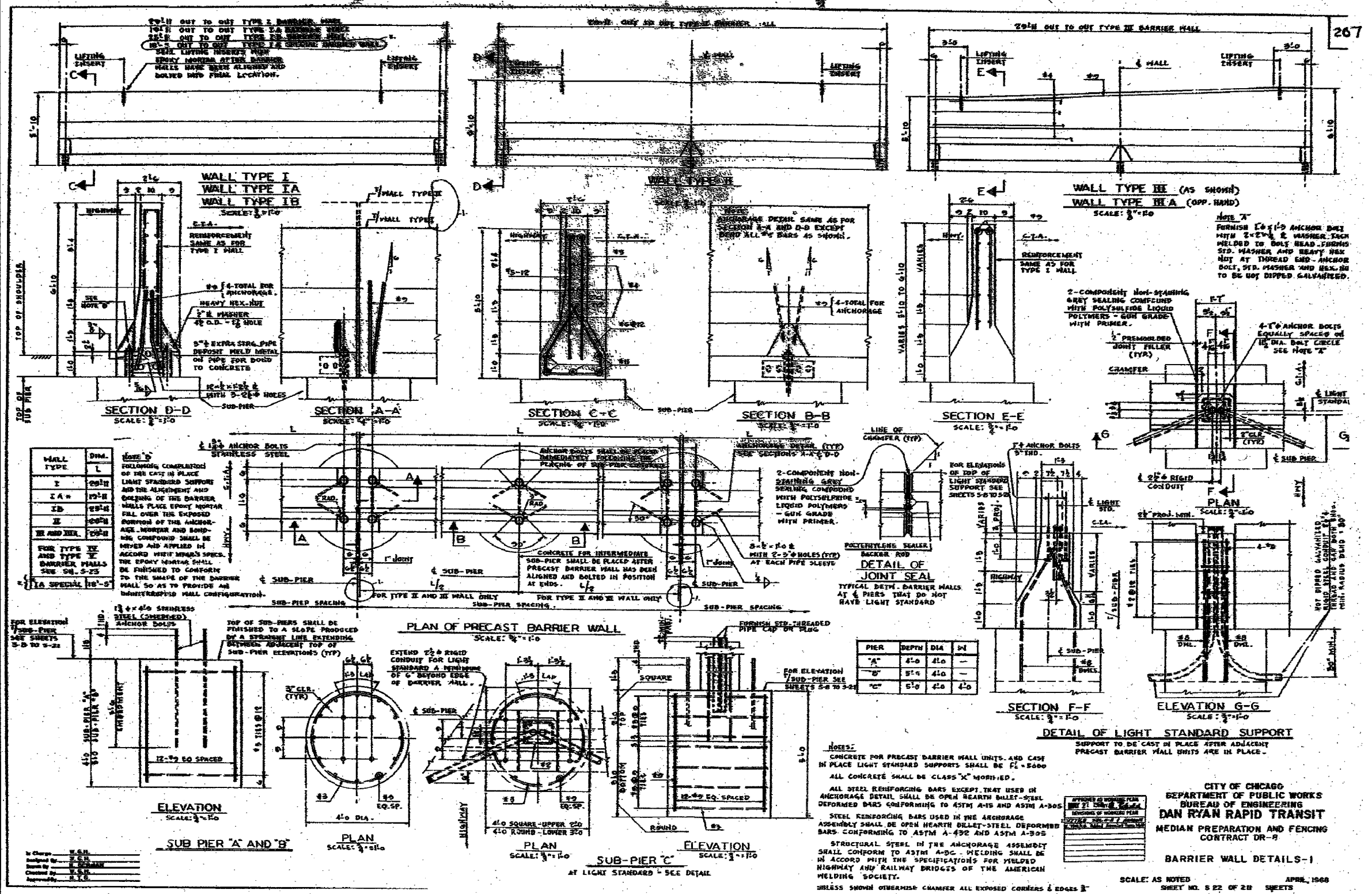
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

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

FOR INFORMATION ONLY

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

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 312.228.0100
 www.bbainc.com

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REVISIONS	
NAME	DATE

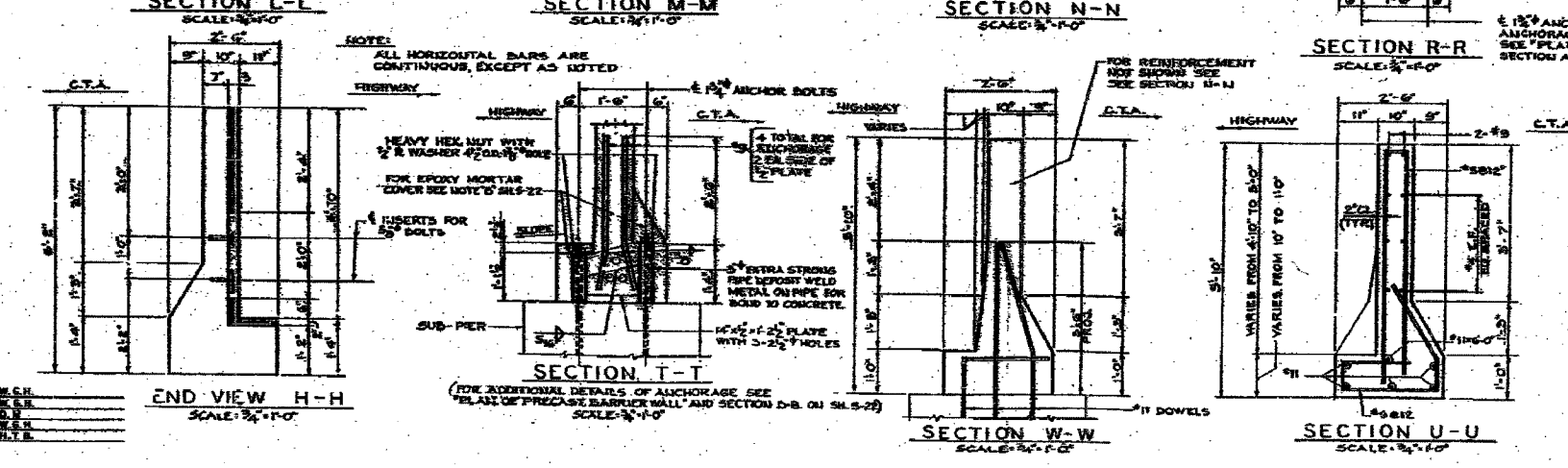
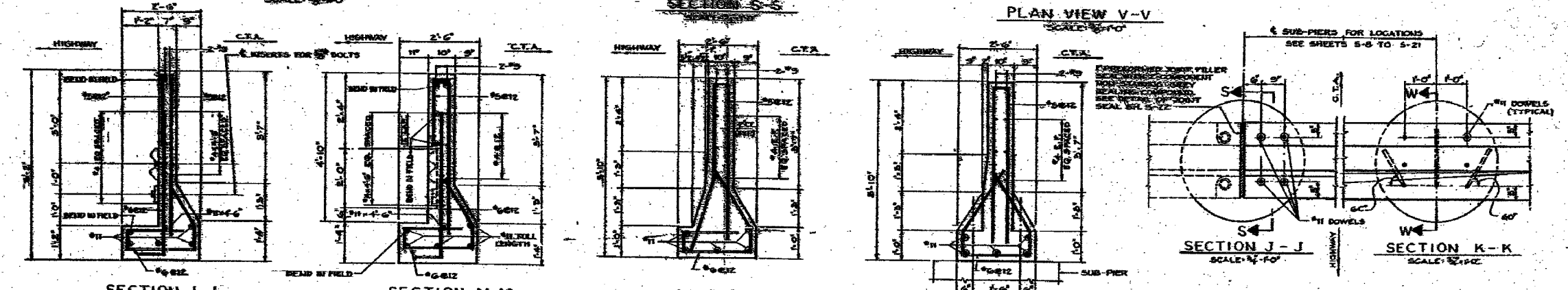
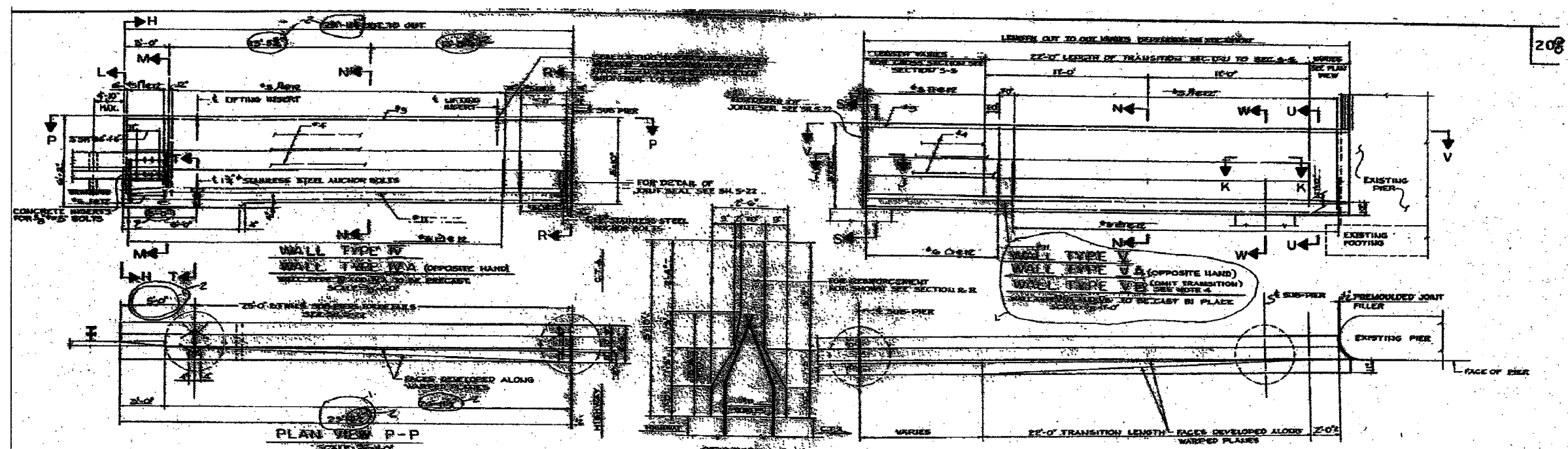
SHEET SD-9 OF SD-10

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

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

12-25-82 PM 5/24/2005
 12-25-82 PM 5/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	434
STA. 2596+00		TO STA. 2602+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62302		* (1818, ETC., 2324.6-1PJR-9)		



- NOTES:
1. CONCRETE FOR PRECAST AND CAST IN PLACE BARRIER WALLS SHALL BE FC-5000.
 2. ALL CONCRETE SHALL BE CLASS X MODIFIED.
 3. FOR ANCHOR BOLT AND SUB-PIER DETAILS AND SUPPLEMENTARY NOTES AND DETAILS SEE SH. S-22.
 4. WALL TYPE X8 SHALL HAVE HIGHWAY FACE SAME AS WALL TYPE I BUT SHALL BE CAST IN PLACE.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION AND FENCING
CONTRACT DR-8
BARRIER WALL DETAILS-2

SCALE: AS NOTED
APRIL, 1968
SHEET NO. 23 OF 211 SHEETS

REVISIONS	
NAME	DATE

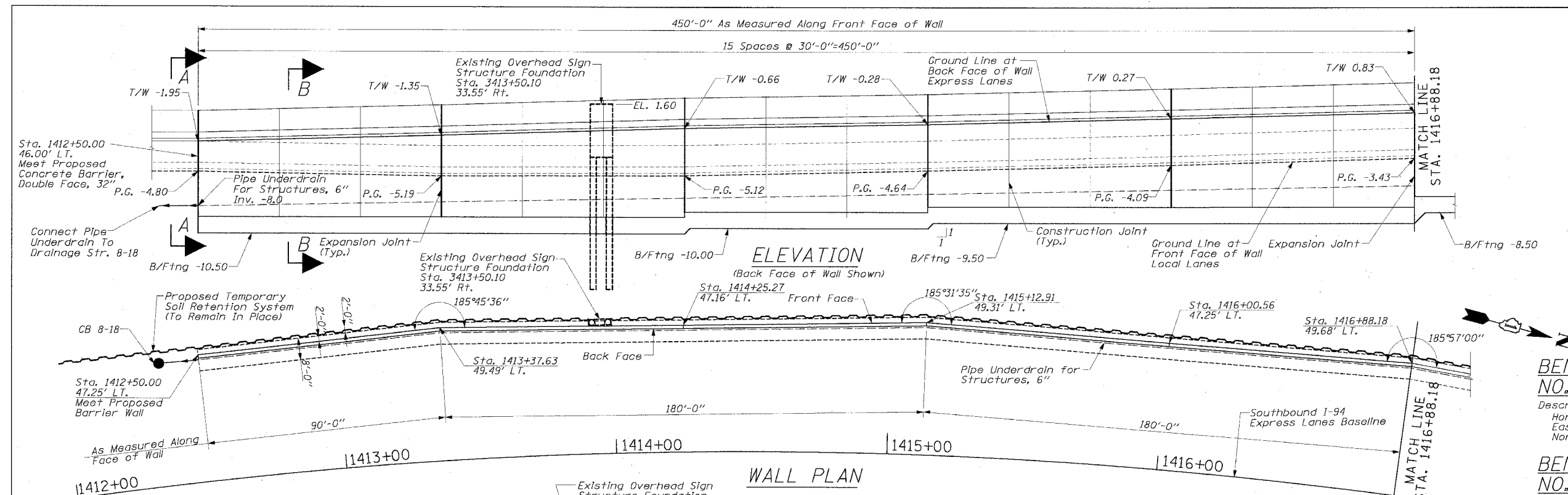
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS
SCALE: N.T.S.
DATE: 01/07/05
DRAWN BY: MTR
CHECKED BY: BLU

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CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
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6/24/2005 10:58 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	435
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	11818, ETC, 2324.6-1P/R-9			

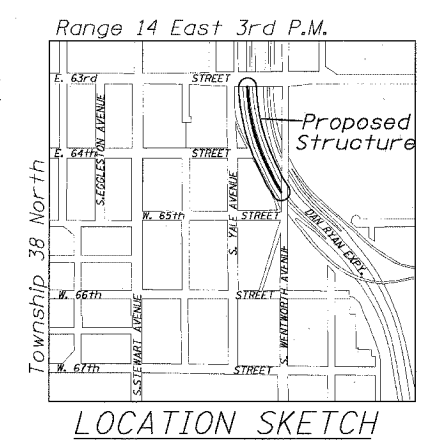
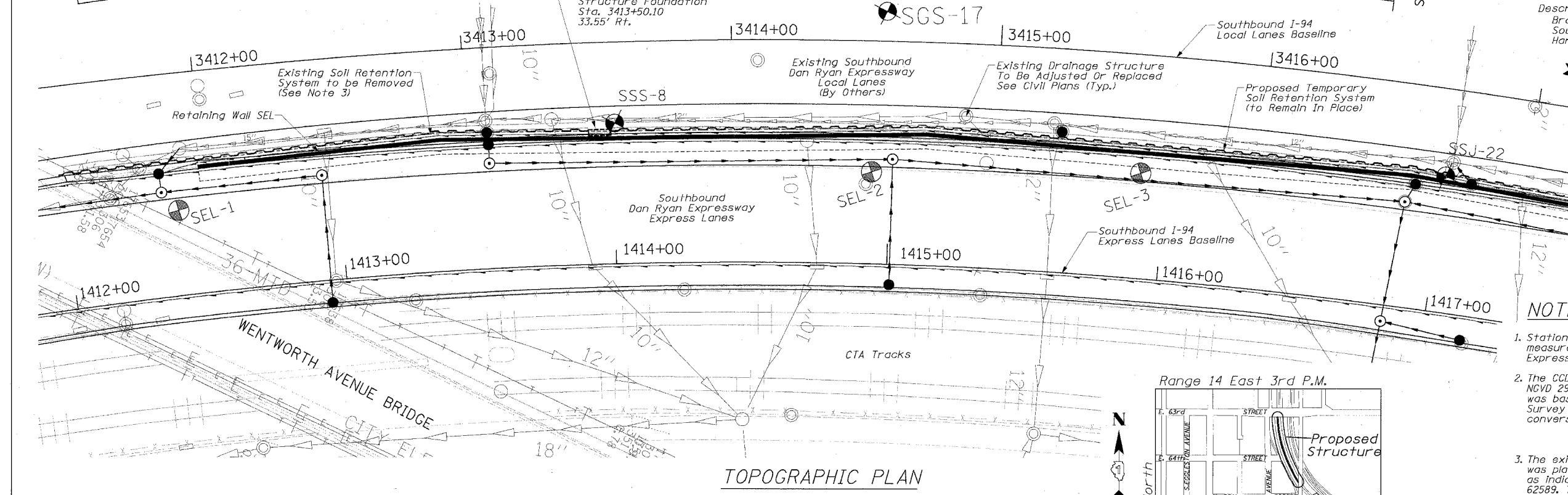


BENCH MARK
NO. 3532 ELEV. 18.84
 Description:
 Horizontal bolt on CTA "EL" structure, East side of Wells St. Approx. 50 feet North of 59th Place.

BENCH MARK
NO. 3533 ELEV. 19.71
 Description:
 Brass Disk (CTA Monument) at Southwest corner of 63rd St and Harvard St.

LEGEND:
 B/Ftng = Bottom Of Footing Elev.
 T/W = Top Of Wall Elev.
 P.G. = Proposed Ground Elev.
 SEL-1 Soil Boring Location

- NOTES:**
- Stations and Offsets for the Retaining Wall are measured from the Base Line of I 94/90 SB Express Lanes.
 - The CCD, by City Ordinance, is based on the NVD 29 Datum. The mapping for the project was based on the NAVD 88 Datum. American Survey Consultants has computed the following conversion factor from CCD to NAVD 88:
 NAVD 88 Elevation = CCD + 579.19
 - The existing Soil Retention System to be removed was placed during contract 62589, and is shown as indicated on the contract plans for contract 62589. The contractor must field verify its location.



HIGHWAY CLASSIFICATION
 F.A.I. 94 / 90 (Dan Ryan Expressway)
 Class: Urban Interstate
 ADT: 272,000 (2000)
 DHV: 7,410
 Posted Speed: 55 MPH
 Design Speed: 60 MPH

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

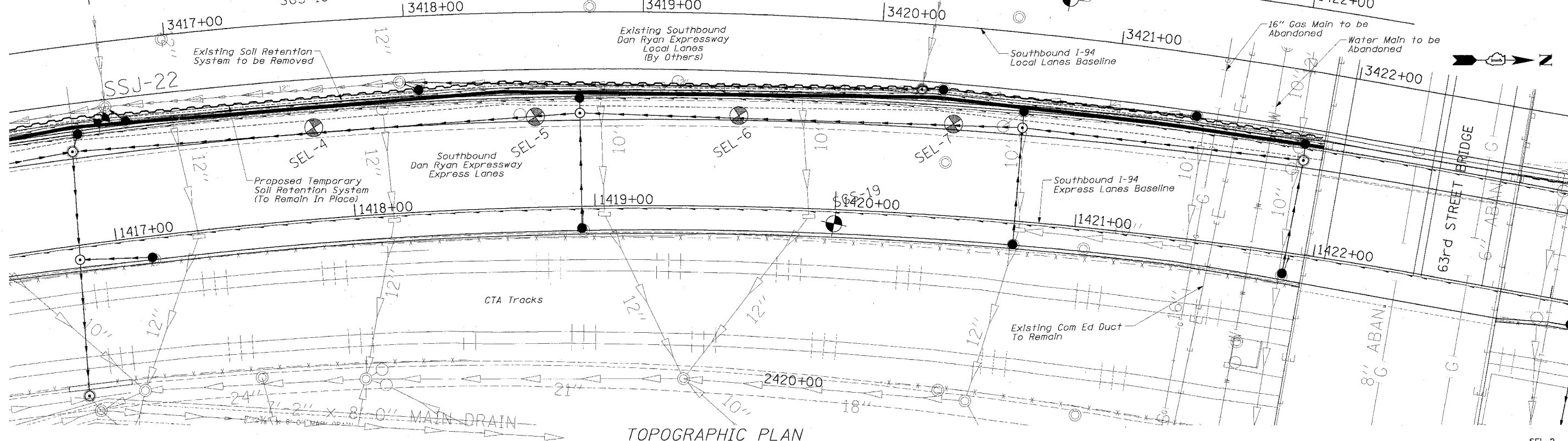
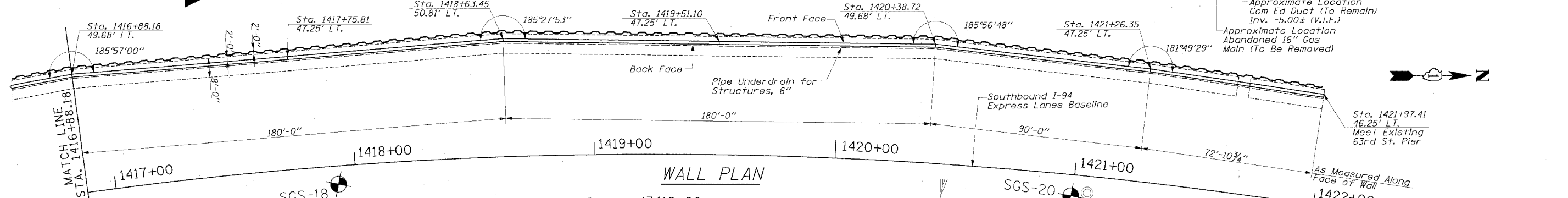
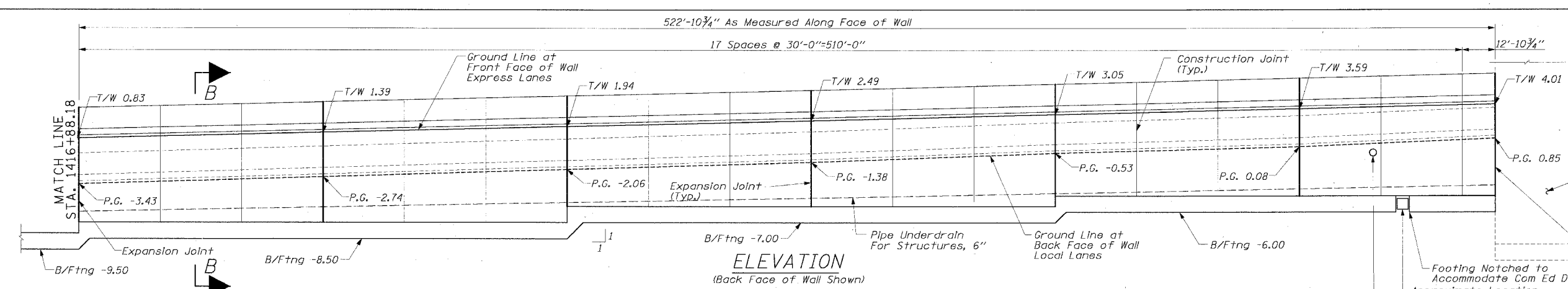
DESIGN SPECIFICATIONS
 2002 AASHTO Standard Specification
 for Highway Bridges

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

REVISIONS		DATE	DRAWN BY: ABW	CHECKED BY: EL
NAME	DATE			

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1412+50 TO STA. 1416+88.18
 STRUCTURE NO. NONE
 SCALE: 1" = 20'
 DATE: 7/7/05

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	436
STA.	TO STA.			
62302	(1818, ETC, 2324.6-1PR-9			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- LEGEND:**
- B/Ftng = Bottom Of Footing Elev.
 - T/W = Top Of Wall Elev.
 - P.G. = Proposed Ground Elev.
 - ⊕ Soil Boring Location
 - SSJ-22

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE

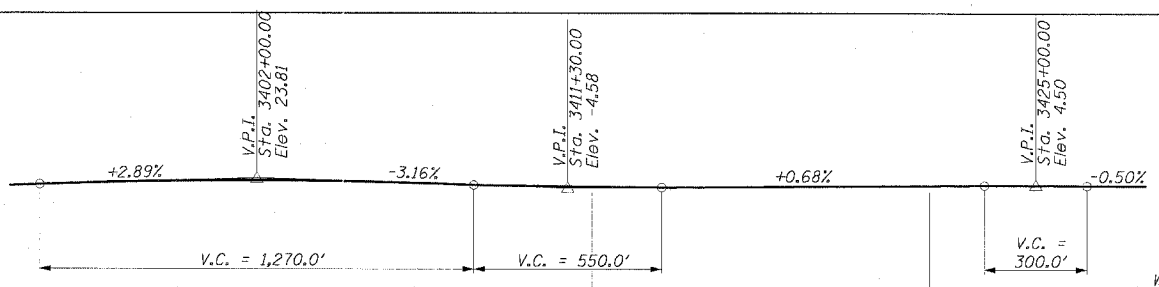
SCALE: DATE: 07/17/05 DRAWN BY: ABW CHECKED BY: EI

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 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
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 FAX: (312) 251-3015
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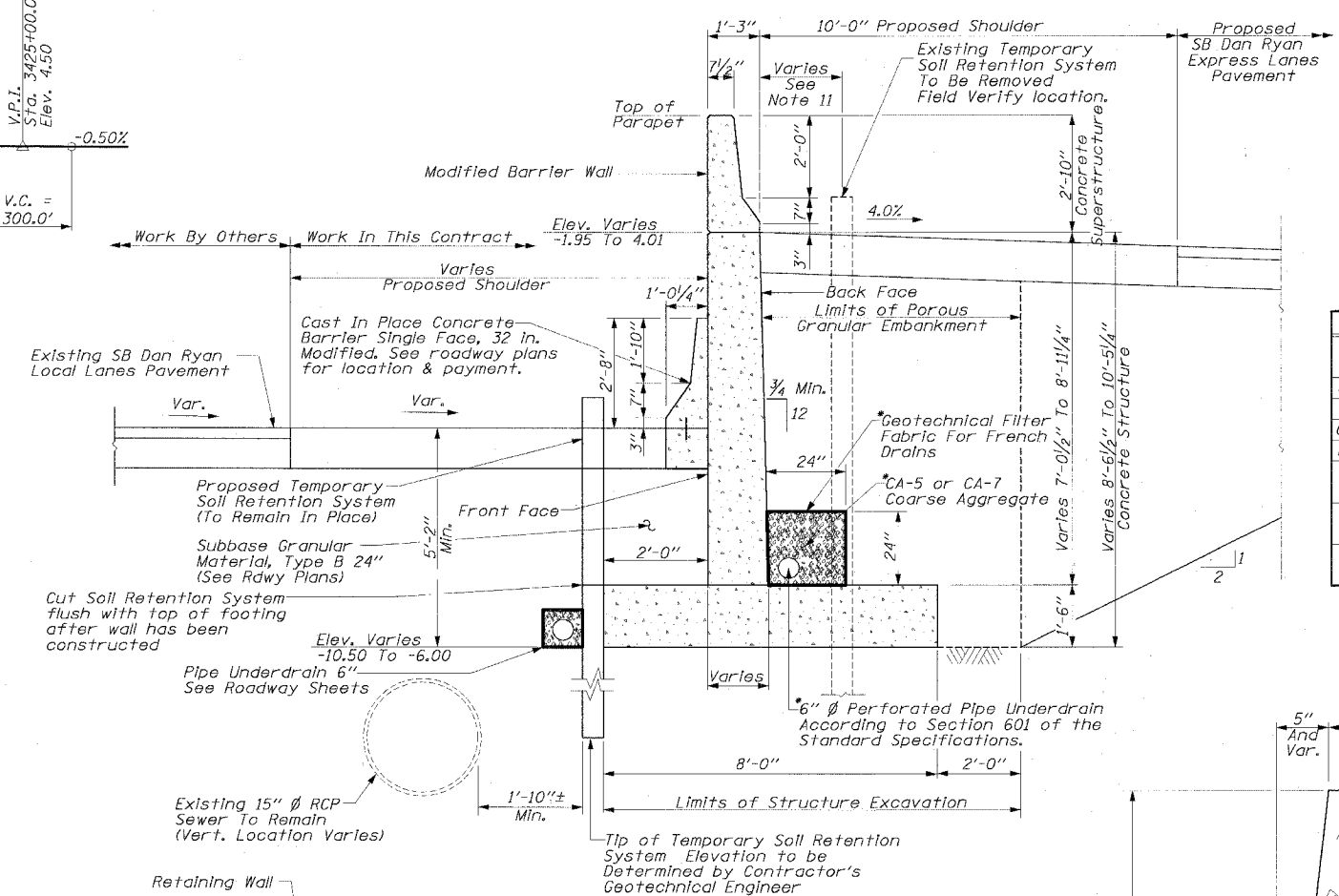
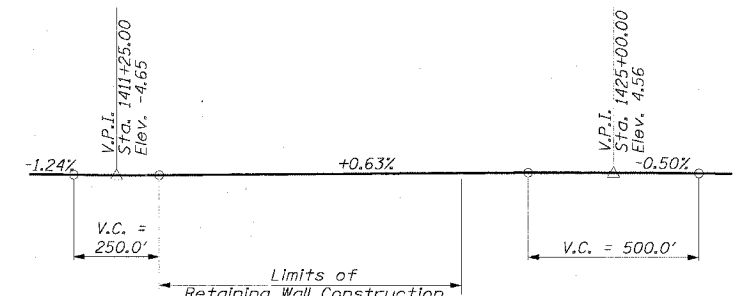
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	(1818, ETC.	2324.6-1PR-9		

SOUTHBOUND LOCAL LANES PROFILE GRADE



SOUTHBOUND EXPRESS LANES PROFILE GRADE



TOTAL BILL OF MATERIAL

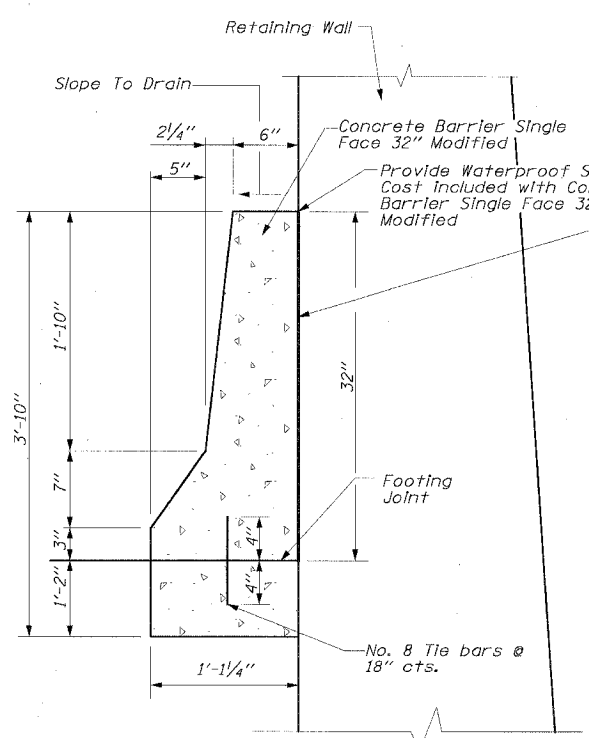
ITEM	Unit	Quantity
Porous Granular Embankment	Cu. Yd.	965
Structure Excavation	Cu. Yd.	2,695
Concrete Structures	Cu. Yd.	865.0
Concrete Superstructure Protective Coat	Sq. Yd.	1,570
Reinforcement Bars, Epoxy Coated	Pounds	109,910
Pipe Underdrains for Structures 6"	Foot	1,100
Temporary Soil Retention System (to Remain In Place)	Sq. Ft.	16,000

NOTES:

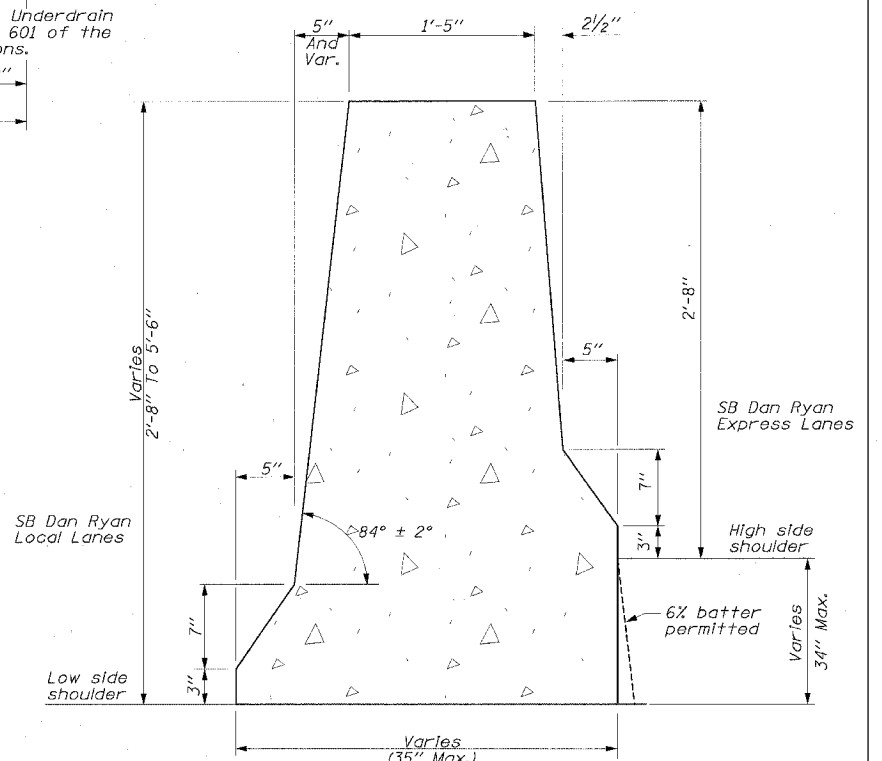
- Construction joints shall be provided at 30'-0" intervals and expansion joints at 90'-0" intervals, unless otherwise noted. Reinforcing steel shall be placed continuously through construction joints.
- The back face of Retaining Walls shall be waterproofed according to Article 503.18 of the Standard Specifications.
- A protective coat shall be applied according to Section 503 of the Standard Specifications to all concrete surfaces not in contact with soil.
- Existing utilities in conflict with retaining wall shall be abandoned or relocated according to directions given on the Roadway Plans.
- All exposed concrete edges shall have a 3/4" by 45° chamfer except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of 1 foot below the finished ground line.
- Reinforcement bars shall conform to the requirements of AASHTO M31, M42 or M53 Grade 60.
- Reinforcement bars bending dimensions are out to out.
- Reinforcement bars designated "E" shall be epoxy coated.
- The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
- All construction joints shall be bonded.
- Existing Temporary Soil Retention System is to be removed as needed to construct the retaining wall and the proposed pavement. Portions of the existing temporary soil retention system may be left in place with the approval of the Engineer. Its location varies and it may be located at either side of the proposed wall. The cost of removal is to be included in the cost of Structure Excavation.

TYPICAL SECTION B-B

Cost Included with Pay Item Pipe Underdrains for Structures, 6"



CONCRETE BARRIER SINGLE FACE, 32 IN, MODIFIED
(Used Adjacent to Retaining Wall)



SECTION A-A
(See Standard 637001-02)

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

REVISIONS	NAME	DATE

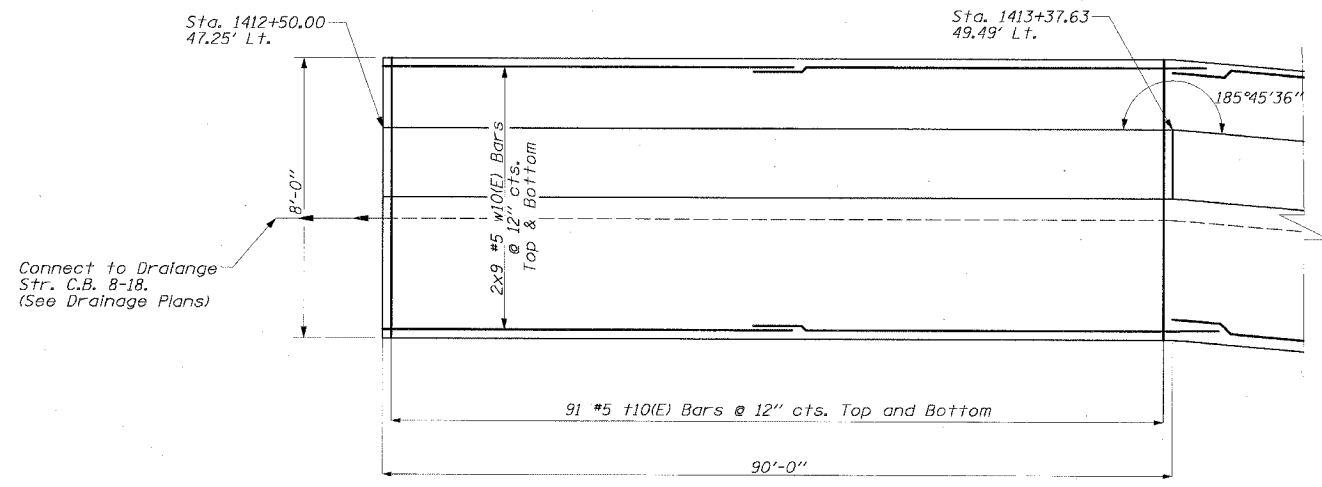
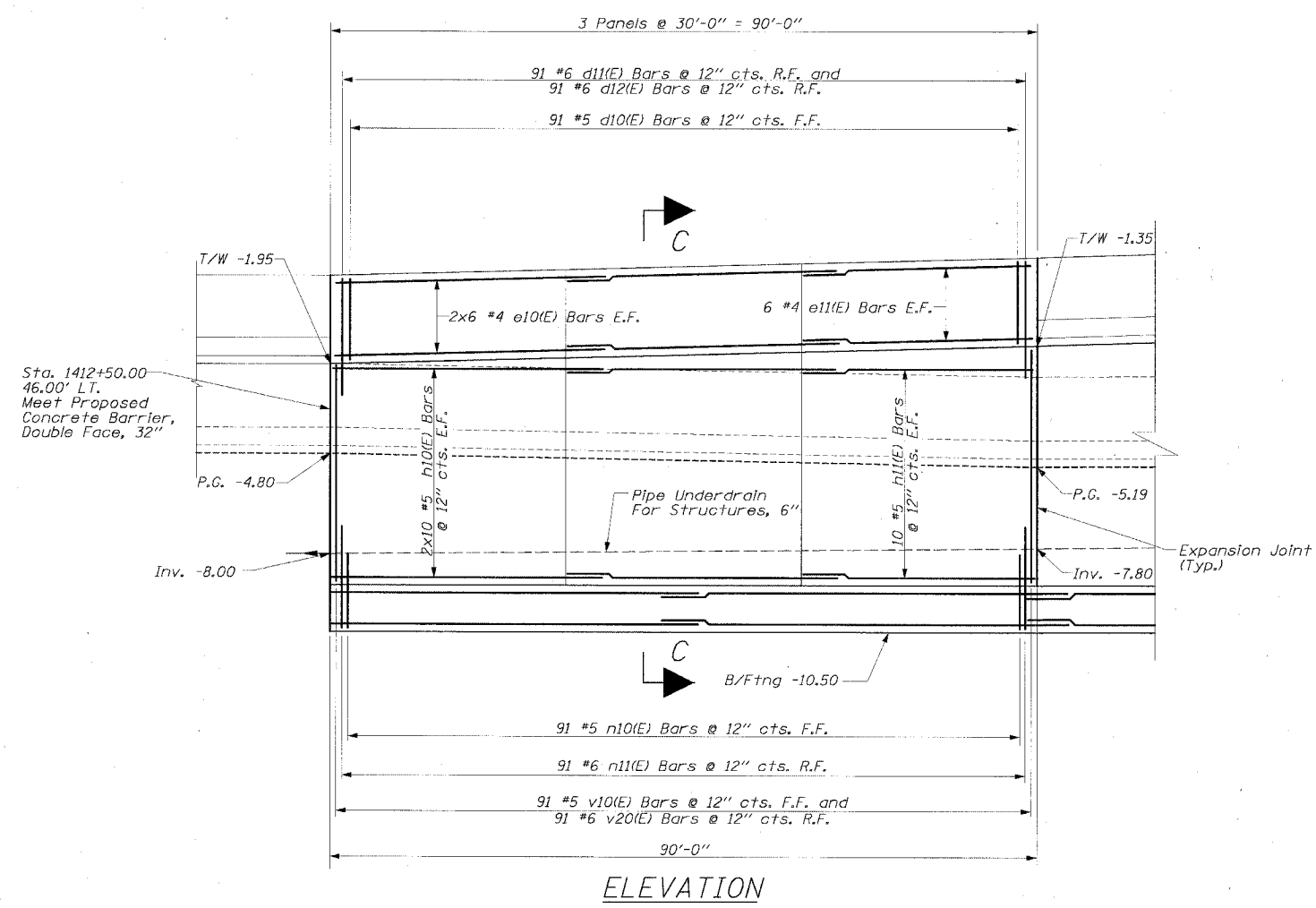
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
RETAINING WALL SEL
BARRIER WALL DETAILS
STRUCTURE NO. NONE

SCALE: NOT TO SCALE
DATE: 1/1/05

DRAWN BY: ABW
CHECKED BY: EL

06/24/2005 12:45:51 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	438
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		• (1818, ETC, 2324.6-1P)R-9		



LEGEND:
 B/Ftng = Bottom Of Footing Elev.
 T/W = Top Of Wall Elev.
 P.G. = Proposed Ground Elev.
 ⬤ Soil Boring Location
 SSSJ-22

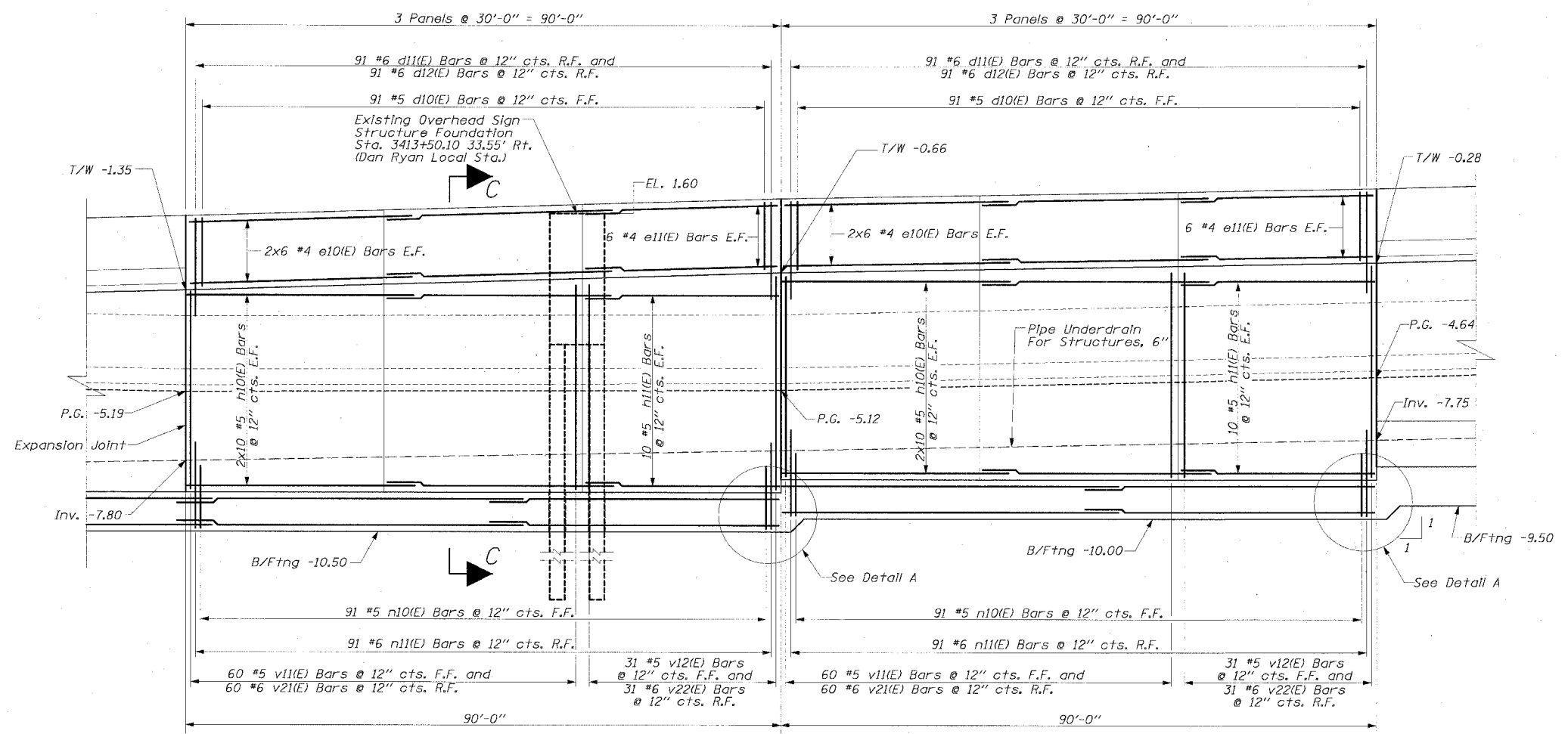
REVISIONS	
NAME	DATE

SEL-4
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE
 SCALE: 1" = 20'
 DATE: 07/17/05
 DRAWN BY: ABW
 CHECKED BY: EL

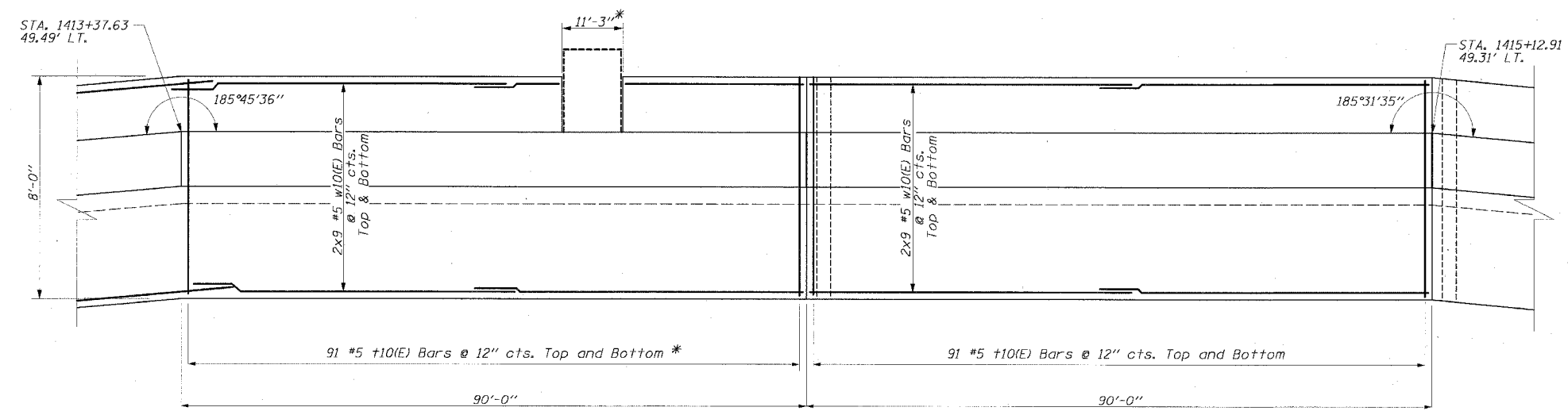
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

A:\030099\03\5\Con 1418\15\CAUD\5\Retaining Wall\Plans\6-Final\RetWall-04.dgn 06/24/2005 12:42:15 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	439
STA.		TO STA.		
62302		1818, ETC, 2324.6-1PR-9		

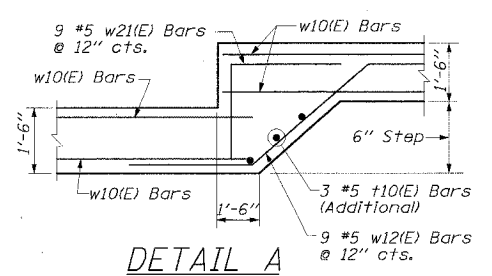


ELEVATION



FOOTING PLAN

*Cut bars as needed in field to clear Existing Overhead Sign Foundation. Contractor to verify location in field.



DETAIL A

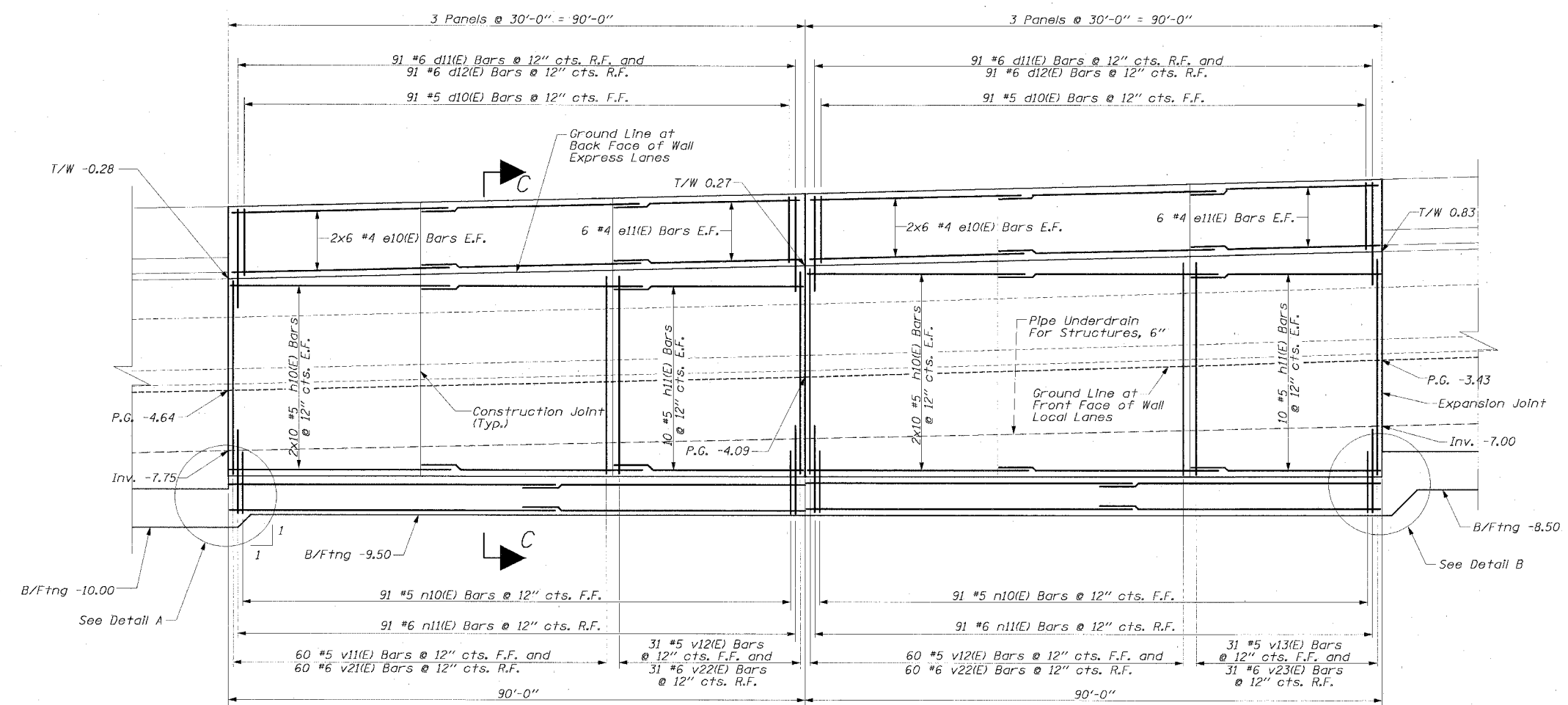
LEGEND:
 B/Ftng = Bottom Of Footing Elev.
 T/W = Top Of Wall Elev.
 P.G. = Proposed Ground Elev.
 SSSJ-22 Soil Boring Location

REVISIONS	
NAME	DATE

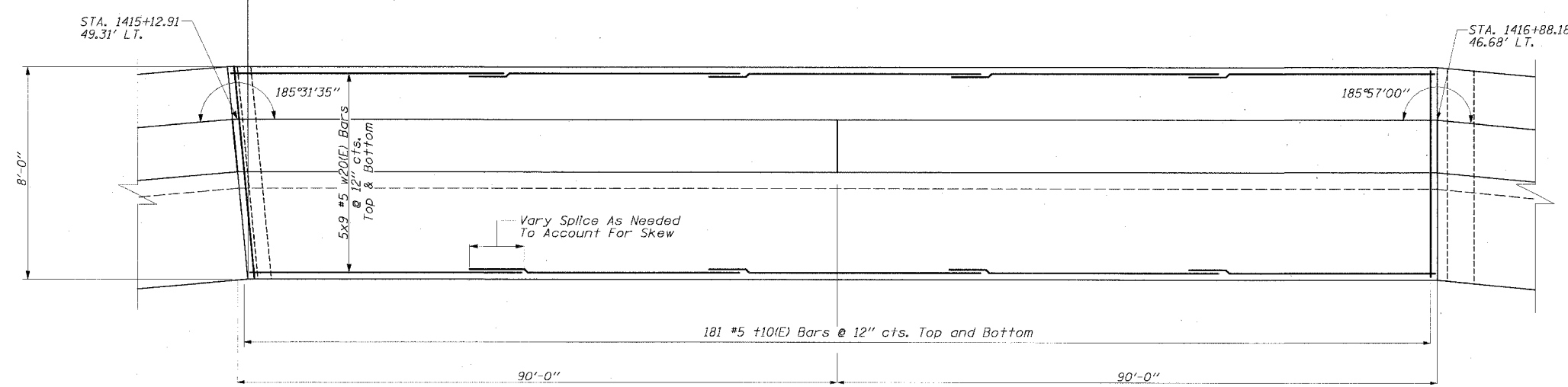
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE
 SCALE: 1" = 20'
 DATE: 07/1/05
 DRAWN BY: ABW
 CHECKED BY: EL

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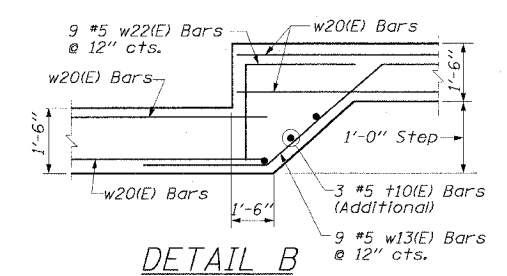
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94/90		COOK	598	440
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	• (1818, ETC, 2324.6-1PR-9			



ELEVATION



FOOTING PLAN



DETAIL B

LEGEND:
 B/Ftng = Bottom Of Footing Elev.
 T/W = Top Of Wall Elev.
 P.G. = Proposed Ground Elev.
 SSS = Soil Boring Location
 SSS-22

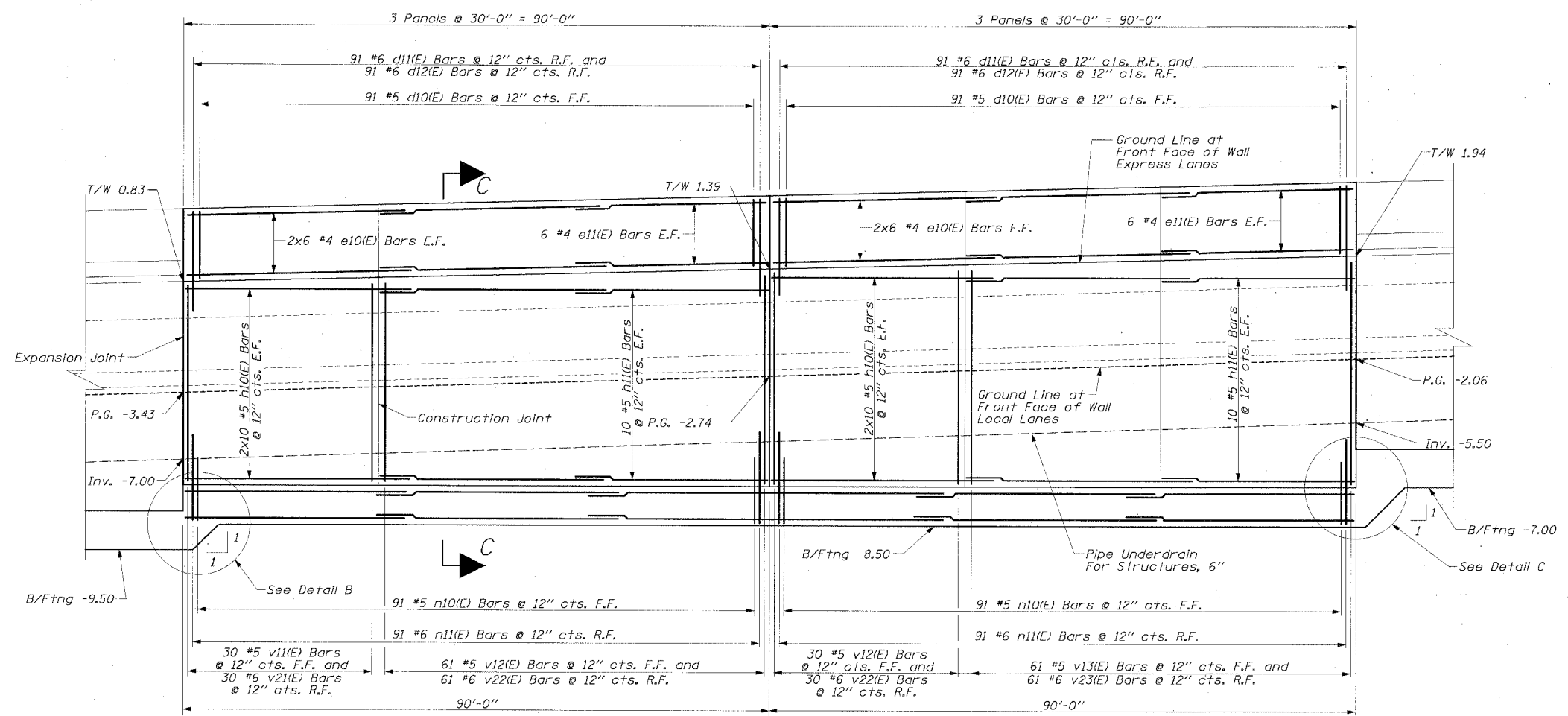
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE
 SCALE: 1" = 20'
 DATE: 07/1/05
 DRAWN BY: ABW
 CHECKED BY: EL

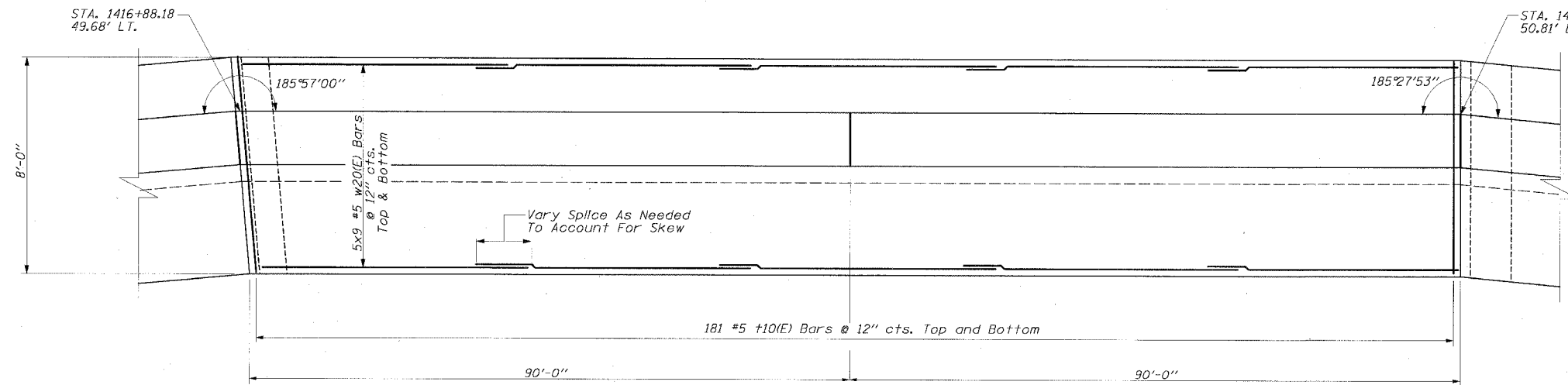
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

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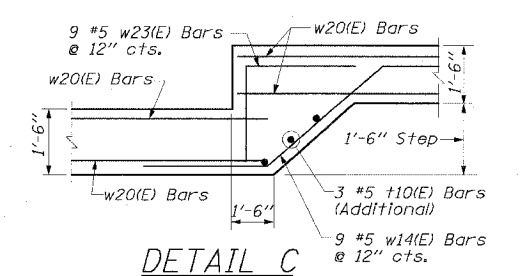
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	441
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	(1818, ETC, 2324.6-1PIR-9			



ELEVATION



FOOTING PLAN



DETAIL C

- LEGEND:**
- B/Ftng = Bottom Of Footing Elev.
 - T/W = Top Of Wall Elev.
 - P.G. = Proposed Ground Elev.
 - Soil Boring Location
 - SSJ-22

REVISIONS	
NAME	DATE

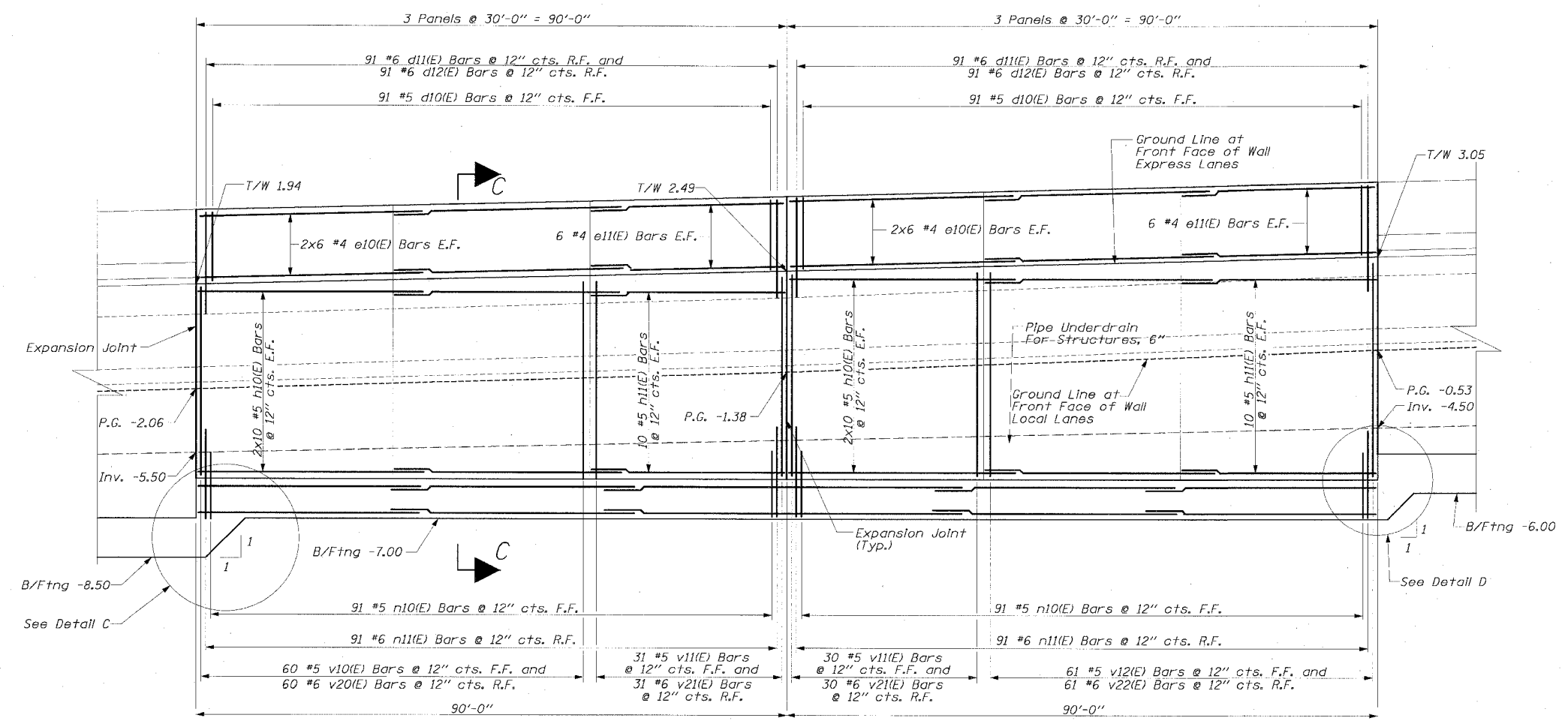
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE

SCALE: 1" = 20' / 1" = 40'
 DATE: 07/17/05
 DRAWN BY: ABW
 CHECKED BY: EL

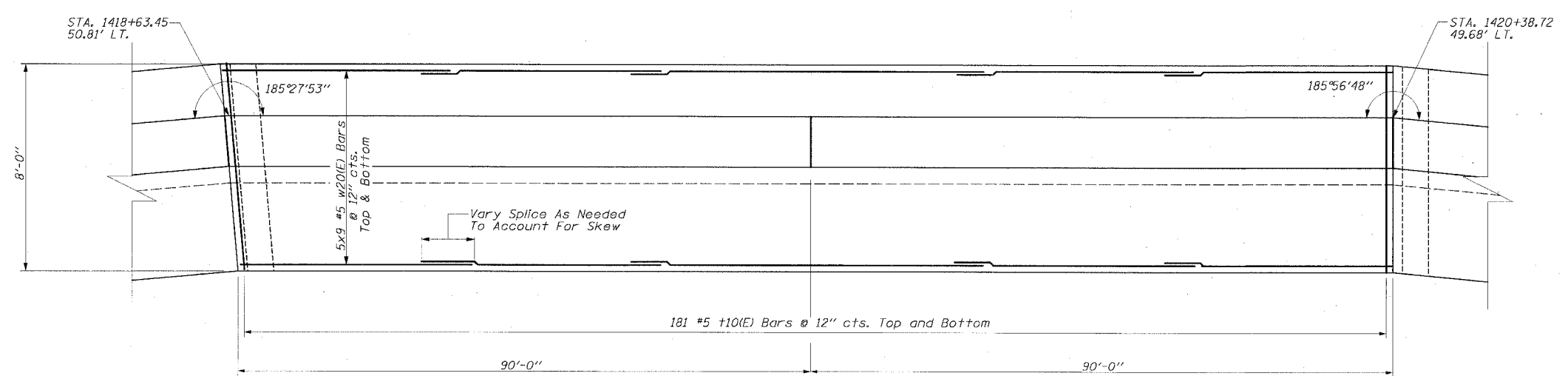
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

06/24/2005 12:43:40 PM

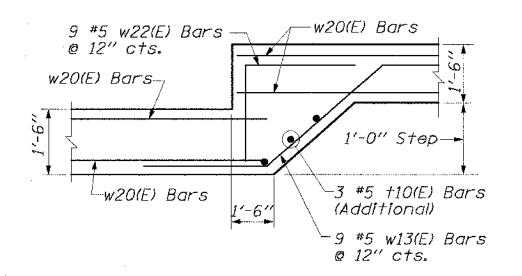
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	442
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	1818, ETC, 2324.6-1PR-9			



ELEVATION



FOOTING PLAN



DETAIL D
(Similar to Detail B on SEL-6)

LEGEND:
 B/Ftng = Bottom Of Footing Elev.
 T/W = Top Of Wall Elev.
 P.G. = Proposed Ground Elev.
 ⬤ Soil Boring Location
 SSJ-22

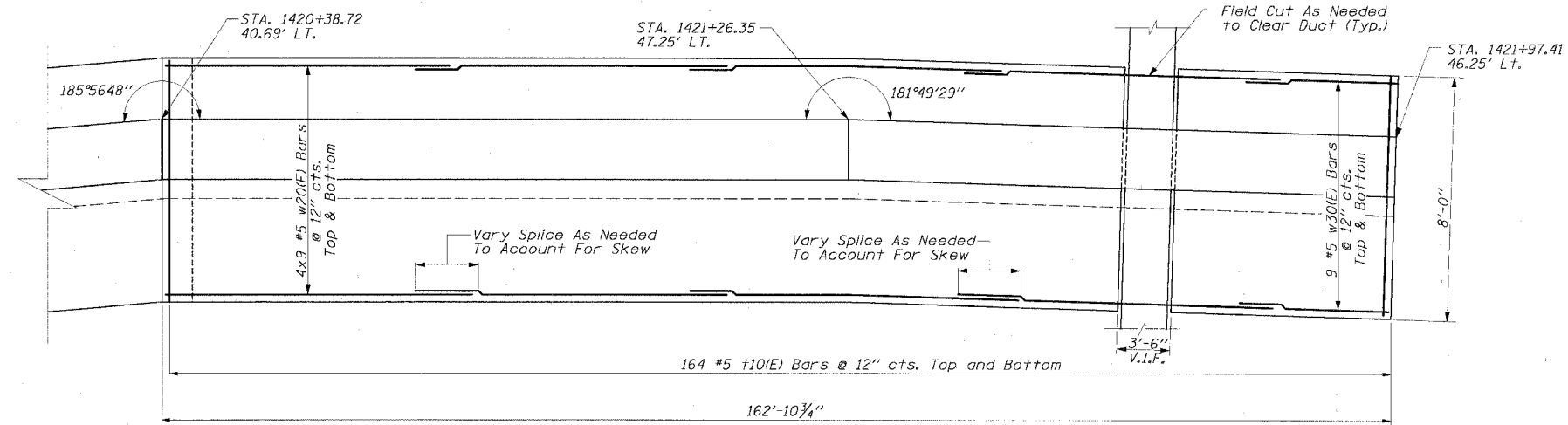
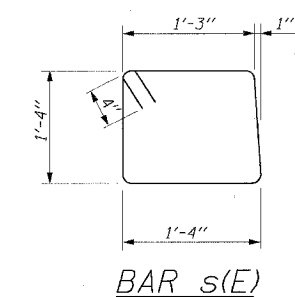
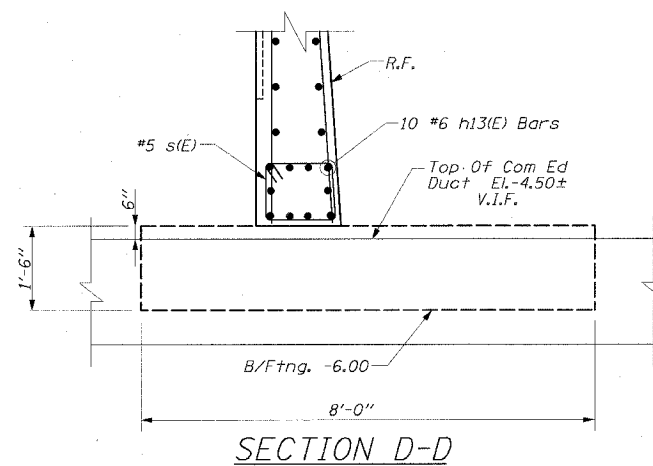
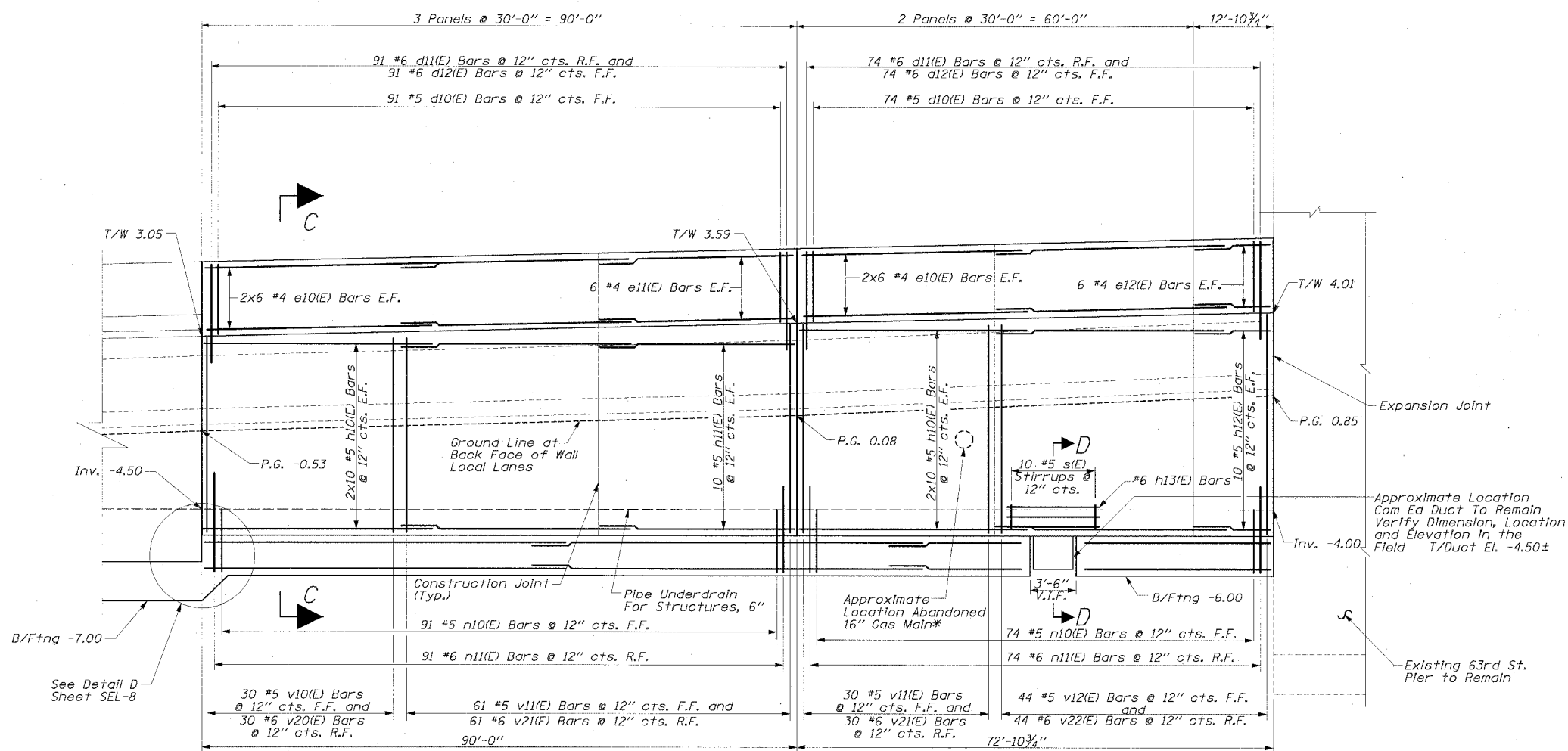
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO, NONE
 SCALE: 1" = 40'
 DATE: 07/17/05
 DRAWN BY: ABW
 CHECKED BY: EL

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

06/24/2005 12:41:12 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	443
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	• (1818, ETC, 2324.6-IPR-9			



* To Be Removed As Needed by People's Energy and / or as Directed by the Engineer.

- NOTES:**
- Note that the cost for field cutting and adjusting reinforcement to accommodate blockouts is included with the Pay Item "Reinforcement Bars, Epoxy Coated".
 - Contractor to verify Com Ed Duct and block-out footing as needed. Field cut bars as required to clear blockout.

LEGEND:

B/Ftng = Bottom Of Footing Elev.

T/W = Top Of Wall Elev.

P.G. = Proposed Ground Elev.

SSJ-22 Soil Boring Location

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE

SCALE: 1" = 20' 1" = 40'

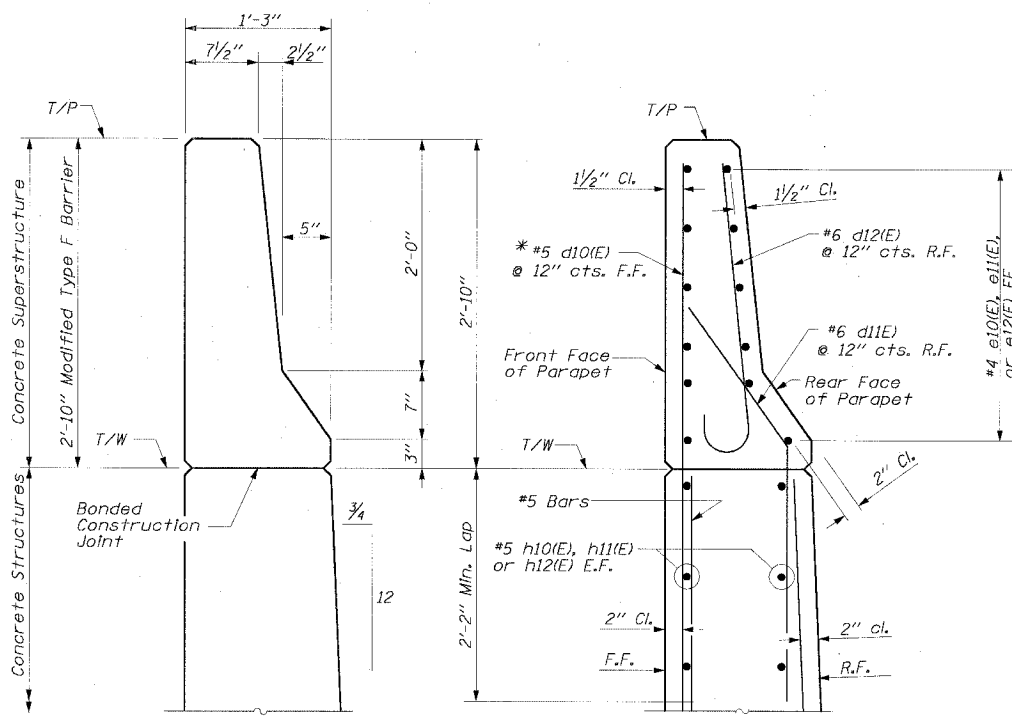
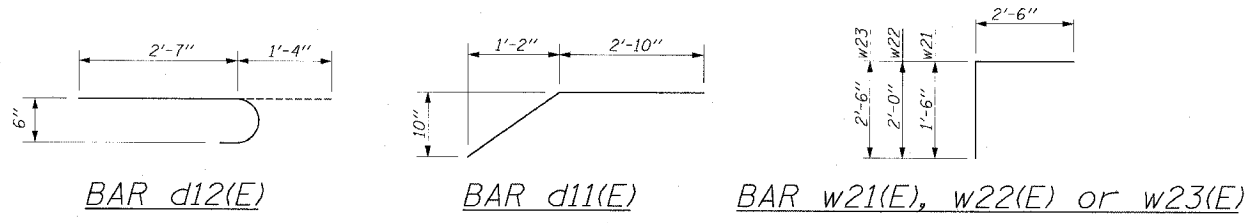
DATE: 07/17/05 DRAWN BY: ABW CHECKED BY: EL

Edwards AND Kelcey

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

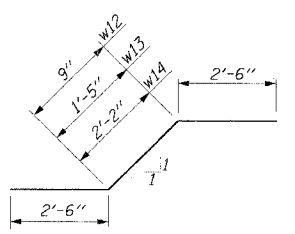
P:\0-001910-0-35\Corr_14815\CADD\15-Retaining Wall\Plan\SEL-9.dwg 06/24/2005 12:44:42 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	444
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	• (1818, ETC. 2324.6-1)PR-9			

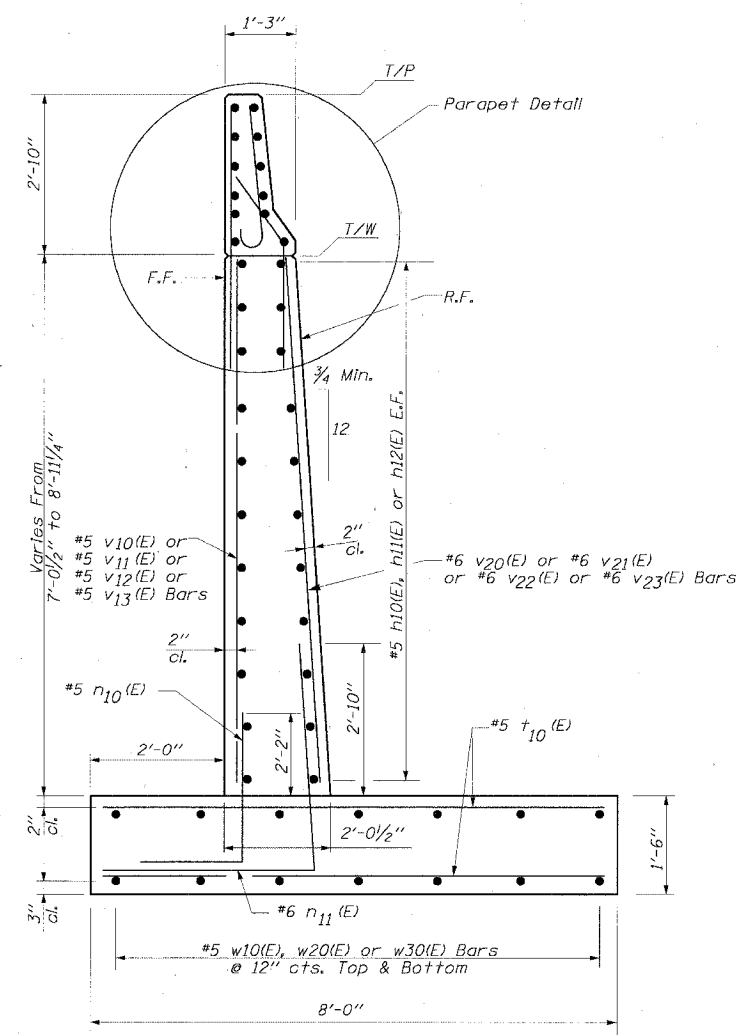


DIMENSIONS **REINFORCING**
PARAPET DETAIL - MODIFIED TYPE F BARRIER

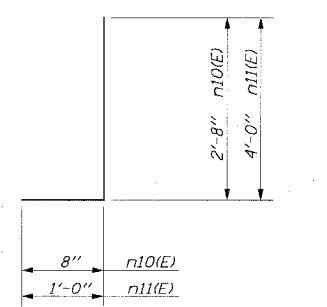
* Note Bar d10(E) has been detailed at 6'-0" long to ensure a min. 2'-2" lap with v(E) Bars as the wall height changes



BAR w12(E), w13(E) or w14(E)



SECTION C-C
 Actual maximum soil pressure = 1890 psf



BAR n10(E) & n11(E)

- MIN LAP:**
- #4 Bars - 1'-8"
 - #5 Bars - 2'-2"
 - #6 Bars - 2'-7"
 - #7 Bars - 3'-5"
 - #8 Bars - 4'-6"
 - #9 Bars - 5'-9"
 - #10 Bars - 7'-2"

- NOTATION:**
- T/P - Top of Parapet
 - T/W - Top of Wall
 - B/Fing - Bottom of Footing
 - F.F. - Front Face
 - R.F. - Rear Face
 - E.F. - Each Face
 - T - Top
 - B - Bottom
 - P.G. Elev. - Proposed Grade Elevation

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 RETAINING WALL SEL
 GENERAL PLAN AND ELEVATION
 SB STA. 1416+88.18 TO STA. 1421+97.41
 STRUCTURE NO. NONE

SCALE: 1" = 20'
 DATE: 07/17/05

DRAWN BY: ABW
 CHECKED BY: EL

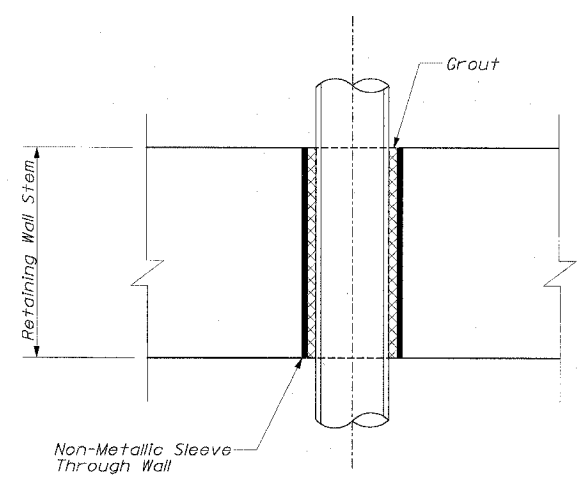


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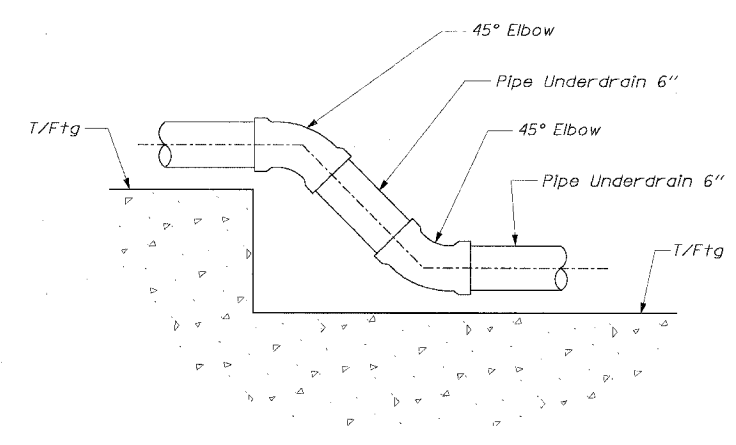
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	445
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
62302 • (1818, ETC, 2324.6-1P)R-9				

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e10(E)	264	#4	32'-2"	
e11(E)	120	#4	29'-10"	
e12(E)	12	#4	12'-8"	
d10(E)	984	#5	6'-0"	
d11(E)	984	#6	1'-5"	
d12(E)	984	#6	3'-11"	
h10(E)	440	#5	32'-2"	
h11(E)	200	#5	29'-10"	
h12(E)	20	#5	12'-8"	
h13(E)	10	#6	10'-0"	
n10(E)	984	#5	3'-4"	
n11(E)	984	#6	5'-0"	
s(E)	10	#5	6'-0"	
t10(E)	1975	#5	7'-8"	
v10(E)	181	#5	7'-2"	
v11(E)	362	#5	7'-10"	
v12(E)	349	#5	8'-3"	
v13(E)	92	#5	8'-10"	
v20(E)	181	#6	7'-2"	
v21(E)	362	#6	7'-10"	
v22(E)	349	#6	8'-3"	
v23(E)	92	#6	8'-10"	
w10(E)	108	#5	46'-8"	
w12(E)	18	#5	5'-9"	
w13(E)	18	#5	6'-5"	
w14(E)	9	#5	7'-2"	
w20(E)	342	#5	38'-0"	
w21(E)	18	#5	4'-0"	
w22(E)	18	#5	4'-6"	
w23(E)	9	#5	5'-0"	
w30(E)	18	#5	21'-4"	
Reinforcement Bars, Epoxy Coated	Pounds	109,910		
Concrete Structures	Cu. Yd.	865.0		
Concrete Superstructure	Cu. Yd.	86.0		

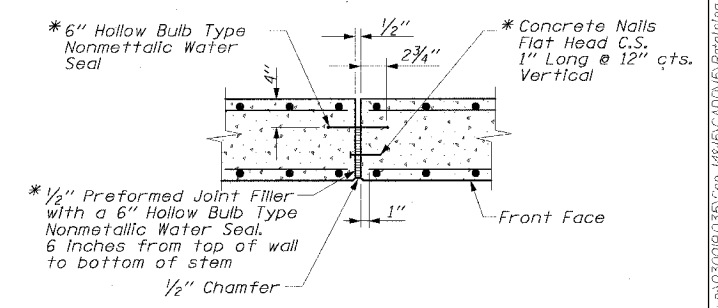


Detail 1
Non-Metallic Sleeve and Grout
Furnishing and Installing Non-Metallic Sleeve and Grout is included in the cost of Concrete Structures.

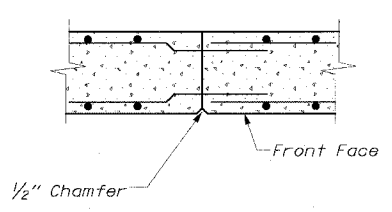


Detail 2
45° Bend for Pipe Underdrain 6"

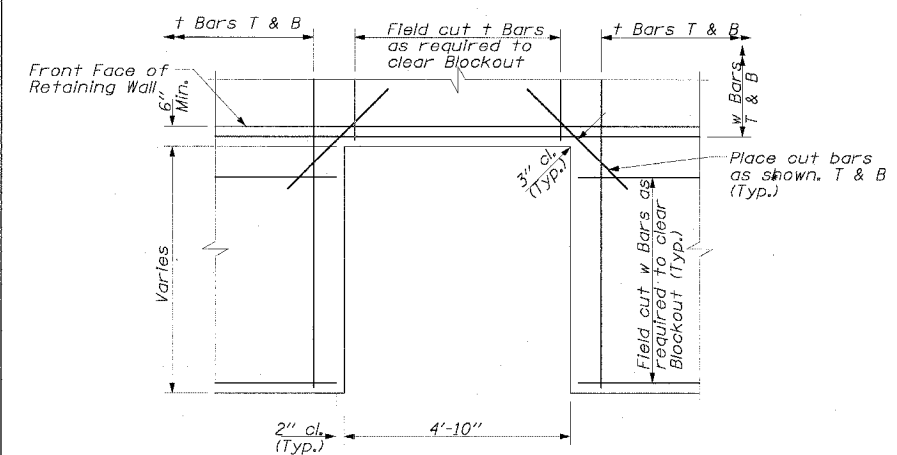
WALL DRAINAGE DETAILS



EXPANSION JOINT DETAIL
* Cost Included with Concrete Structures



CONSTRUCTION JOINT DETAIL

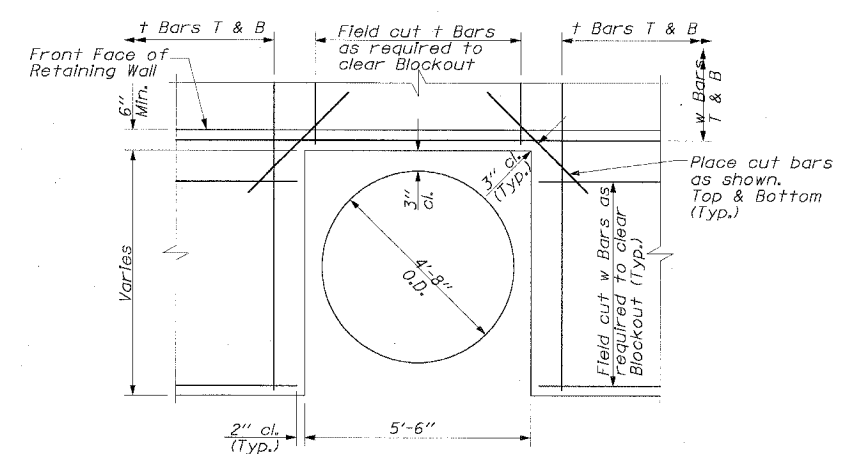


BLOCKOUT AT HANDHOLE

*Note that the cost for field cutting and adjusting reinforcement to accommodate blockouts is included with the Pay Item "Reinforcement Bars, Epoxy Coated"

NOTES:

- Contractor to Field Coordinate/Verify Location of Existing And Proposed Catch Basin and Handholes (Station and Offset) prior to forming the blockouts.
- See Drainage Plans for Proposed Catch Basin Locations.



BLOCKOUT AT CATCH BASIN


*Note that the cost for field cutting and adjusting reinforcement to accommodate blockouts is included with the Pay Item "Reinforcement Bars, Epoxy Coated"

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

REVISIONS		SEL-11	
NAME	DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION	
		F.A.I. 94/90 (DAN RYAN EXPRESSWAY)	
		31ST STREET TO 71ST STREET	
		SB EXPRESS LANE RECONSTRUCTION	
		RETAINING WALL SEL	
		GENERAL PLAN AND ELEVATION	
		SB STA. 1416+88.18 TO STA. 1421+97.41	
		STRUCTURE NO. NONE	
SCALE:		DRAWN BY: ABW	
DATE: 07/17/05	20' 40'	CHECKED BY: EL	

P:\030019\35\5\con_148\5-CADD\5-Retaining Wall\Plan\Sel 11.dwg 06/24/2005 12:15:41 PM

BORING SEL-1



Illinois Department of Transportation
Division of Highway
AMERICAN GEOTECHNICAL ENGINEERING, INC.

SOIL BORING LOG

Page 1 of 1

Date 1/28/05

ROUTE F.A.I. 94/94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY R.P.

SECTION 1818, ETC, 2324.6-1PR-9 LOCATION Chicago, Illinois


COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	None	D	B	U	M	Surface Water Elev.	ft	D	B	U	M	Stream Bed Elev.	ft	D	B	U	M
BORING NO. SEL-1																	
Station 1412+41.27																	
Offset -31.40ft (SBDOR)																	
Ground Surface Elev. -0.41																	
Asphalt 2" -0.58																	
Concrete 12" -1.59																	
Sub Base, Gravel (FILL) -2.33																	
Very Stiff to Hard Gray SILTY CLAY LOAM																	
4 5.8 17.0																	
6 8 B																	
8 5.1 18.0																	
10 12 12.0																	
12 13 25.41																	
End of Boring																	
4 3.0 16.0																	
6 7 B																	
7 4.7 12.0																	
10 6 B																	
13 3.0 12.0																	
14 B,S																	
9 4.5 13.0																	
10 13 P																	
13 6.8 15.0																	
8 9 B																	
6 5.3 15.0																	
6 8 B																	

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

BBS, from 137 (Rev. 8-99)

BORING SEL-2



Illinois Department of Transportation
Division of Highway
AMERICAN GEOTECHNICAL ENGINEERING, INC.

SOIL BORING LOG

Page 1 of 1

Date 1/28/05

ROUTE F.A.I. 94/94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY R.P.

SECTION 1818, ETC, 2324.6-1PR-9 LOCATION Chicago, Illinois


COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	None	D	B	U	M	Surface Water Elev.	ft	D	B	U	M	Stream Bed Elev.	ft	D	B	U	M
BORING NO. SEL-2																	
Station 1414+93.47																	
Offset -34.12ft (SBDOR)																	
Ground Surface Elev. -0.03																	
Asphalt 3" -0.28																	
Concrete 9" -1.03																	
Sub Base, Gravel (FILL) -2.03																	
Very Stiff to Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)																	
5 3.4 17.0																	
6 11 B																	
Very Stiff Gray SILTY CLAY LOAM																	
6 5.3 17.0																	
6 6 B																	
7 3.4 17.0																	
9 9 B																	
End of Boring																	
Very Stiff to Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM																	
8 7.1 13.0																	
8 8 B																	
7 7.1 13.0																	
10 8 B																	
8 8.7 12.0																	
10 13 B																	
9 6.8 14.0																	
11 13 B																	
7 9.1 15.0																	
11 13 B																	

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

BBS, from 137 (Rev. 8-99)

BORING SEL-3



Illinois Department of Transportation
Division of Highway
AMERICAN GEOTECHNICAL ENGINEERING, INC.

SOIL BORING LOG

Page 1 of 1

Date 1/28/05

ROUTE F.A.I. 94/94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY R.P.

SECTION 1818, ETC, 2324.6-1PR-9 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	None	D	B	U	M	Surface Water Elev.	ft	D	B	U	M	Stream Bed Elev.	ft	D	B	U	M
BORING NO. SEL-3																	
Station 1415+90.63																	
Offset -39.04ft (SBDOR)																	
Ground Surface Elev. 0.30																	
Concrete 9" -0.45																	
Sub Base, Gravel (FILL) -0.76																	
Hard Gray SILTY CLAY LOAM / SILTY LOAM (continued)																	
5 6.8 15.0																	
8 8 B																	
Dense Gray SILTY CLAY LOAM																	
6 4.4 19.0																	
6 8 B																	
End of Boring																	
Hard / Dense Gray SILTY CLAY LOAM / SILTY LOAM																	
6 4.3 15.0																	
7 7 B																	
5 5.6 13.0																	
7 9 B																	
7 6.6 13.0																	
9 9 B																	
8 7.6 13.0																	
12 12 B,S																	
11 9.7 13.0																	
16 19 B,S																	
9 10.3 14.0																	
11 14 S																	

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

BBS, from 137 (Rev. 8-99)



REVISIONS	
NAME	DATE

SEL-12

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
RETAINING WALL SEL
SOIL BORINGS 1
SB STA. 1416+88.18 TO STA. 1421+97.41
STRUCTURE NO. NONE

SCALE: 0"=10'
DATE: 01/17/05
DRAWN BY: ABW
CHECKED BY: EL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	448
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		• (1818, ETC, 2324.6-1P)R-9		

BORING SEL-7



Illinois Department of Transportation
Division of Highway
AMERICAN GEOTECHNICAL ENGINEERING, INC.

SOIL BORING LOG

Page 1 of 1

Date 1/28/05

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY R.P.

SECTION 1818, ETC, 2324.6-1P)R-9 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.	None	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
Station	Wall-SEL	P	O	S	I	Stream Bed Elev.	ft	P	O	S	I
BORING NO.	SEL-7	T	W	S	T	Groundwater Elev.:		T	W	S	T
Station	1420+46.70	H	S	Q	T	First Encounter	Dry	H	S	Q	T
Offset	-38.39ft (SBDP)					Upon Completion	ft				
Ground Surface Elev.	2.63	ft	(ft)	(%)	(%)	After	Hrs	(ft)	(%)	(%)	(%)
Concrete 10"						Hard / Dense					
	1.81					Gray					
Sub Base, Gravel (FILL)	1.13	6				SILTY CLAY LOAM / SILTY LOAM (continued)		12			
Very Stiff to Hard Gray		7	B	4.2	14.0			19	4.5	10.0	
SILTY CLAY LOAM								19	P		
		5						10			
		6	2.8		12.0			15	10.9	11.0	
		8	P					19	S		
		6						-22.37	-25		
		6									
		5	2.7		19.0						
		8	B								
		5									
		7	3.6		15.0						
		10	B								
		5									
		6	3.9		14.0						
		8	B								
		5									
		5	3.6		13.0						
		8	B								
		11									
		10	7.6		13.0						
		14	B								
Hard / Dense Gray	-14.87										
SILTY CLAY LOAM / SILTY LOAM		9									
		12	8.5		13.0						
		15	B,S								
		20									

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

BBS, from 137 (Rev. 6-99)



REVISIONS		DATE
NAME		

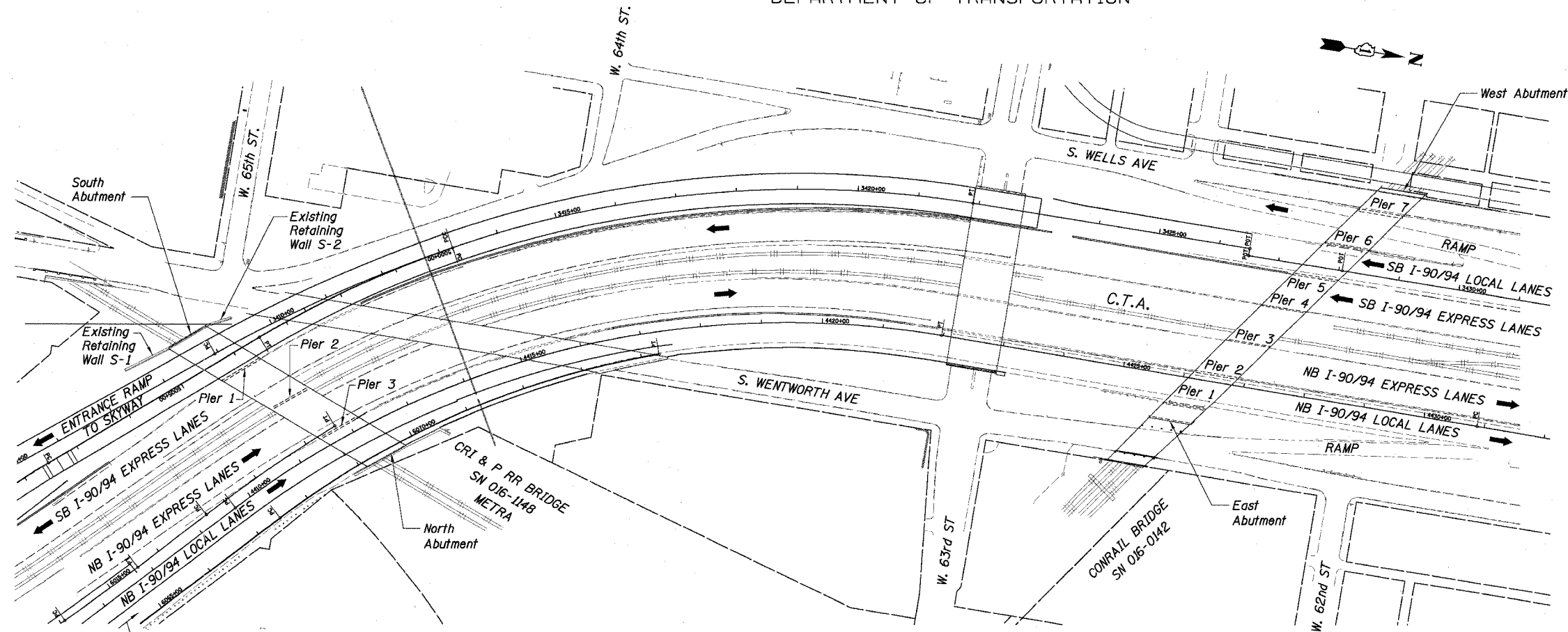
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
RETAINING WALL SEL
SOIL BORINGS 3
SB STA. 1416+88.18 TO STA. 1421+97.41
STRUCTURE NO. NONE

SCALE: 1" = 20'
DATE: 01/17/05
DRAWN BY: ABW
CHECKED BY: EL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	449
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* (1818, ETC, 2324.6-1)PR-9		62302		



PLAN

Item	Unit	Quantity
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	655
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	40
Epoxy Crack Sealing	LF	124
Railroad Protective Liability Insurance	LS	0.2
Protective Coat	Sq Yd	68

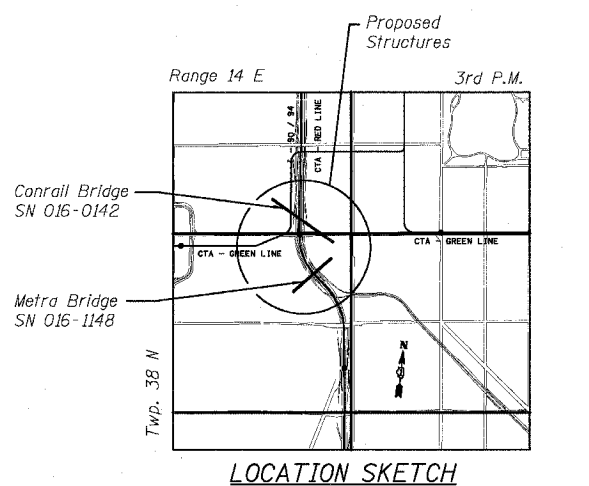
S1	General Plan
S2	Pier 1 - Plan and Elevation (SN 016-1148)
S3	Pier 4 - Plan and Elevation (SN 016-0142)
S4	Pier 5 - Plan and Elevation (SN 016-0142)

DESIGN SPECIFICATIONS
2002 AASHTO, Standard Specifications for Highway Bridges

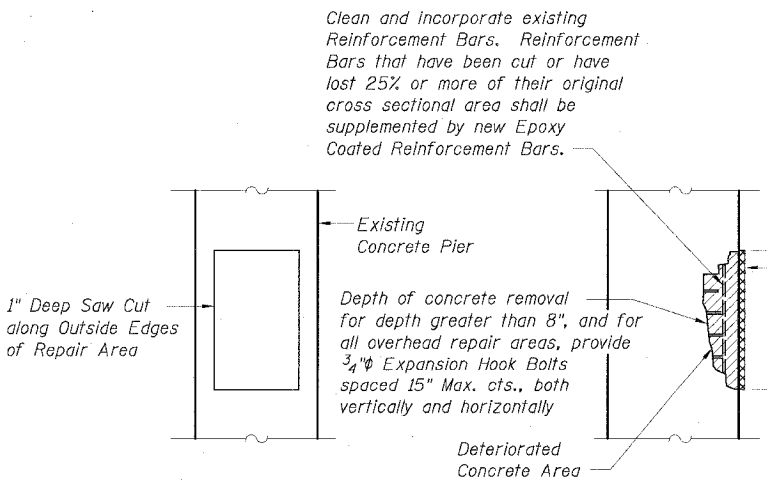
DESIGN STRESSES
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

- SUBSTRUCTURE REPAIR WORK ITEMS**
- Metra Railroad Bridge (SN 016-1148)
 - Pier 1 Repairs (North Face)
 - Conrail Railroad Bridge (SN 016-0142)
 - Pier 4 Repairs (West Face)
 - Pier 5 Repairs (East Face)

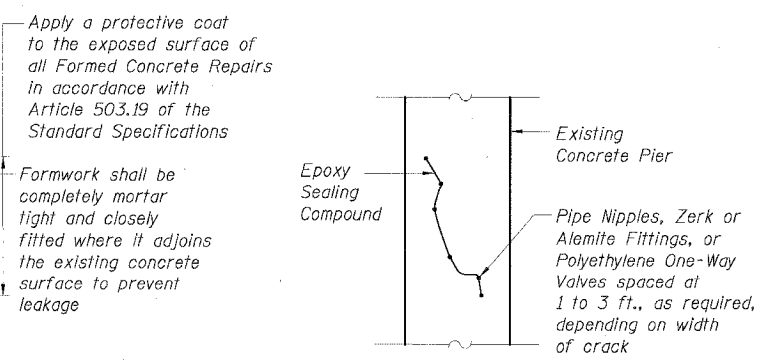
- GENERAL NOTES:**
- Pier Repair Locations and Quantities are estimated. The necessary adjustments based on current field conditions will be made at time of construction. However, such variations shall not be cause for additional compensation for a change in the Scope of Work; however, the Contractor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



LOCATION SKETCH



FORMED CONCRETE REPAIR DETAIL



EPOXY CRACK SEALING DETAIL

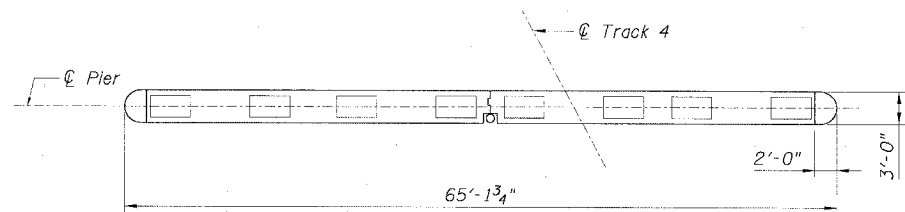
NAME	DATE

Sheet S1 of 4
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
DRAWN BY: CHD
CHECKED BY: MJP

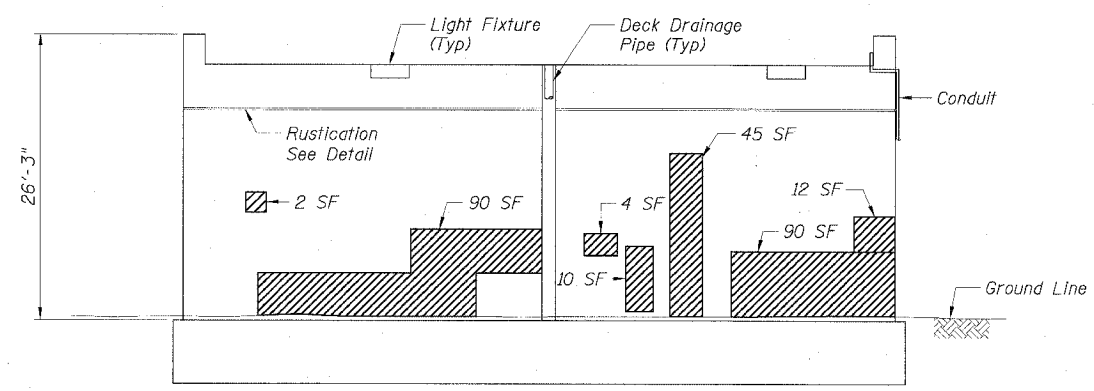
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

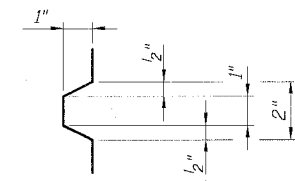
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90/94	*	COOK	598	450
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* 1818, ETC, 2324.6-1PIR-9			62302	



PLAN
PIER 1
(S.N. 016-1148)



ELEVATION
PIER 1 - NORTH FACE
(S.N. 016-1148)



DETAIL OF
RUSTICATION

LEGEND

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

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305 East Wacker Drive, Suite 600, Chicago, Illinois 60601-2276
T 312.495.2320 F 312.495.1153 www.cteaecom.com

BILL OF MATERIAL		
Item	Unit	Quantity
		Pier 1 North Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	253
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	
Epoxy Crack Sealing	LF	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
PIER 1 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
METRA BRIDGE (SN 016-1148)
COOK COUNTY

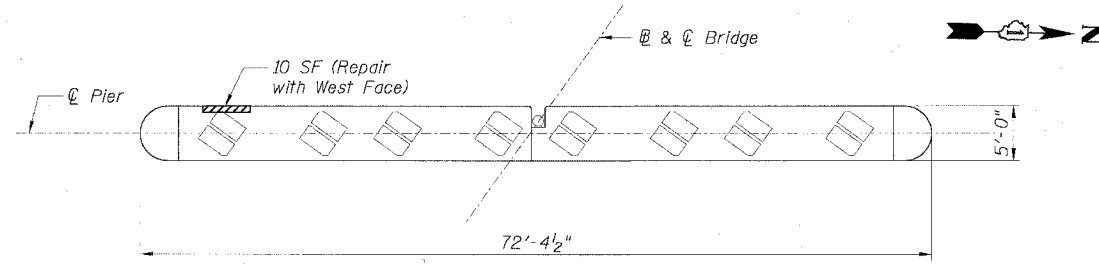
SCALE: None
DATE: JULY 7, 2005
DRAWN BY: CHD
CHECKED BY: MJP

Sheet S2 of 4

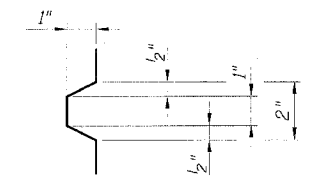
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

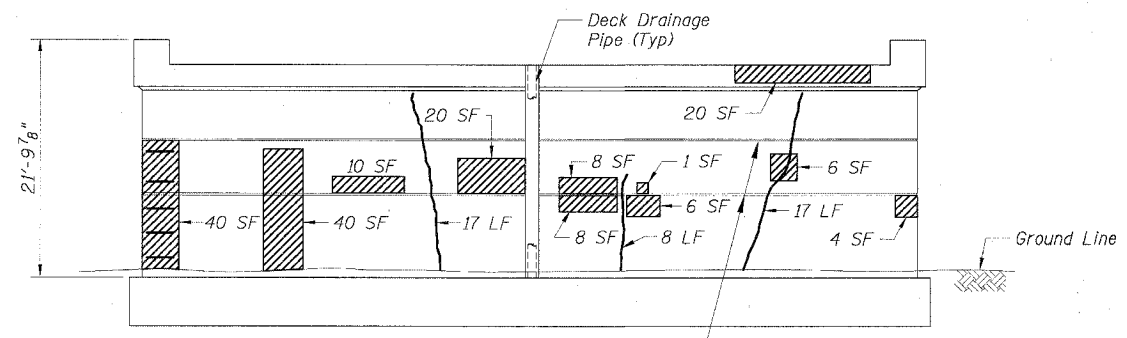
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
• (1818, ETC, 2324.6-1PR-9				62302



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



DETAIL OF
RUSTICATION



ELEVATION
PIER 4 - 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

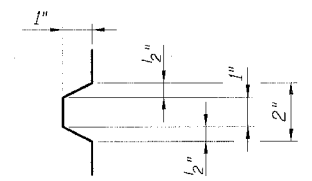
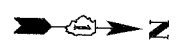
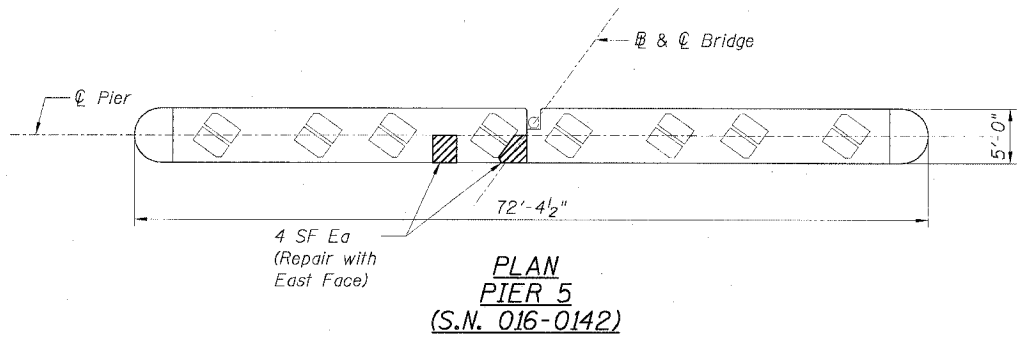
BILL OF MATERIAL		
Item	Unit	Quantity
		Pier 4 West Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	133
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	40
Epoxy Crack Sealing	LF	42

REVISIONS	
NAME	DATE

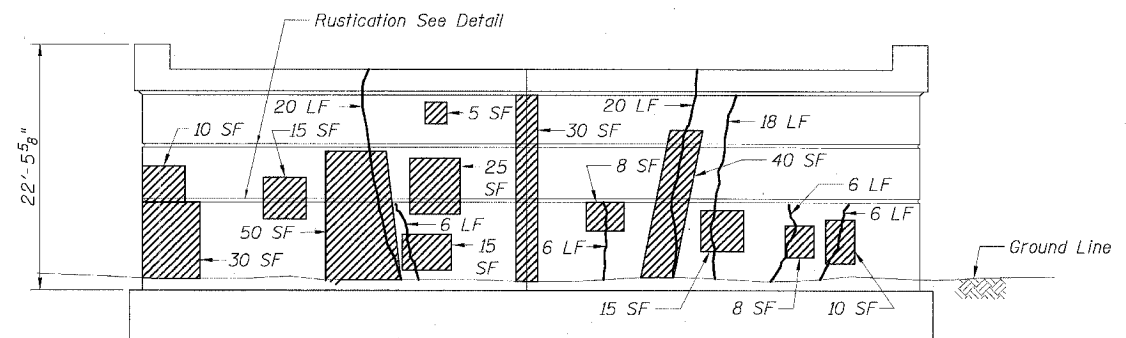
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**PIER 4 - PLAN AND ELEVATION
SUBSTRUCTURE REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY**
SCALE: None
DATE: JULY 7, 2005
DRAWN BY: CHD
CHECKED BY: MJP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	598	452
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
* (1818, ETC, 2324.6-1)PR-9		62302		



DETAIL OF
RUSTICATION



LEGEND

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

BILL OF MATERIAL		
Item	Unit	Quantity
		Pier 5 East Face
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	269
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft	
Epoxy Crack Sealing	LF	82

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**PIER 5 - 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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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	453
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		181B, ETC, 2324.6-1PJR-9		

62302

DESIGN SPECIFICATIONS

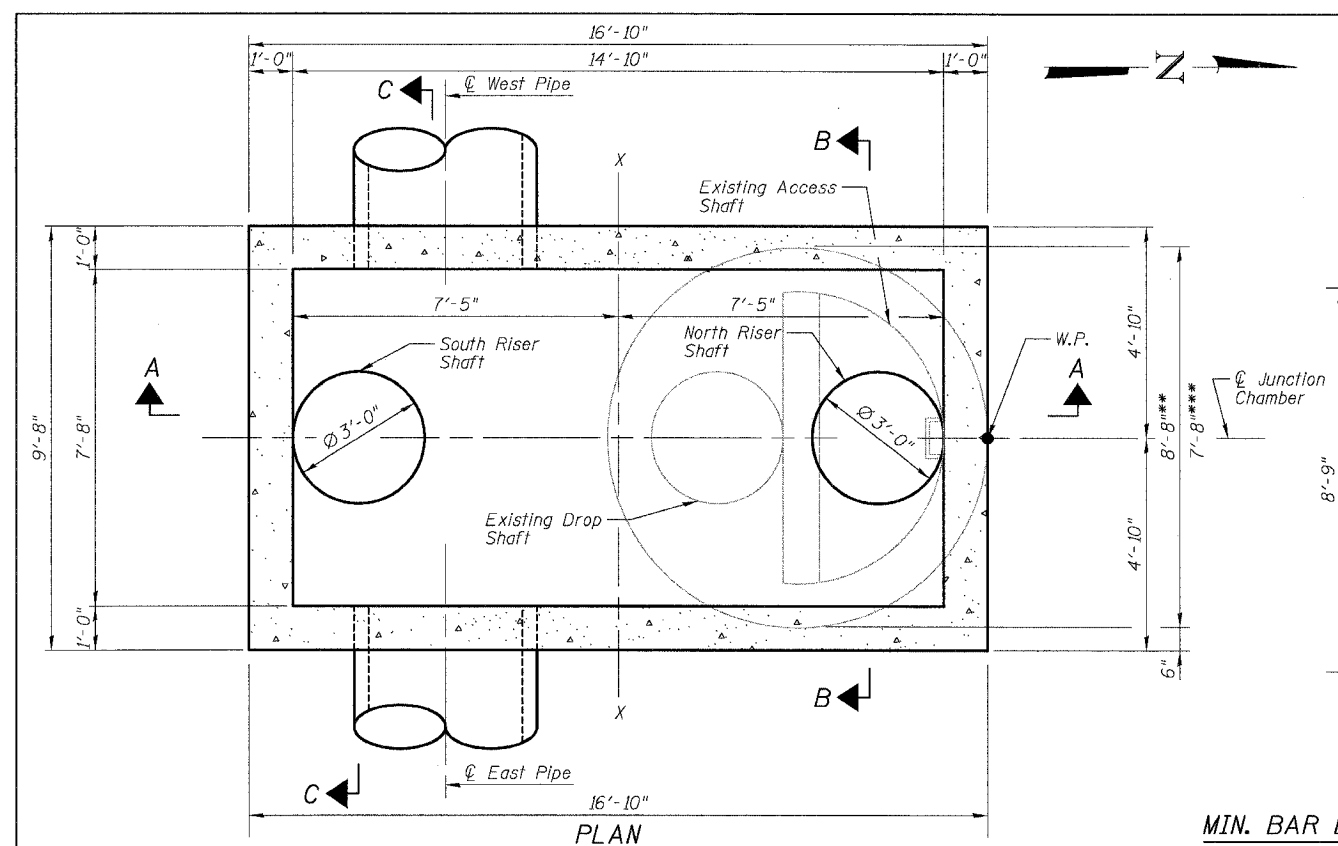
2002 AASHTO
DESIGN LOADING
 Live Load = HS20-44
 Future Wearing Surface = 50 psf
 Traffic Surcharge = 250 psf
 Equivalent Fluid Soil Pressure = 50 pcf
 Earth Load = 120 pcf

DESIGN STRESSES

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

NOTES:

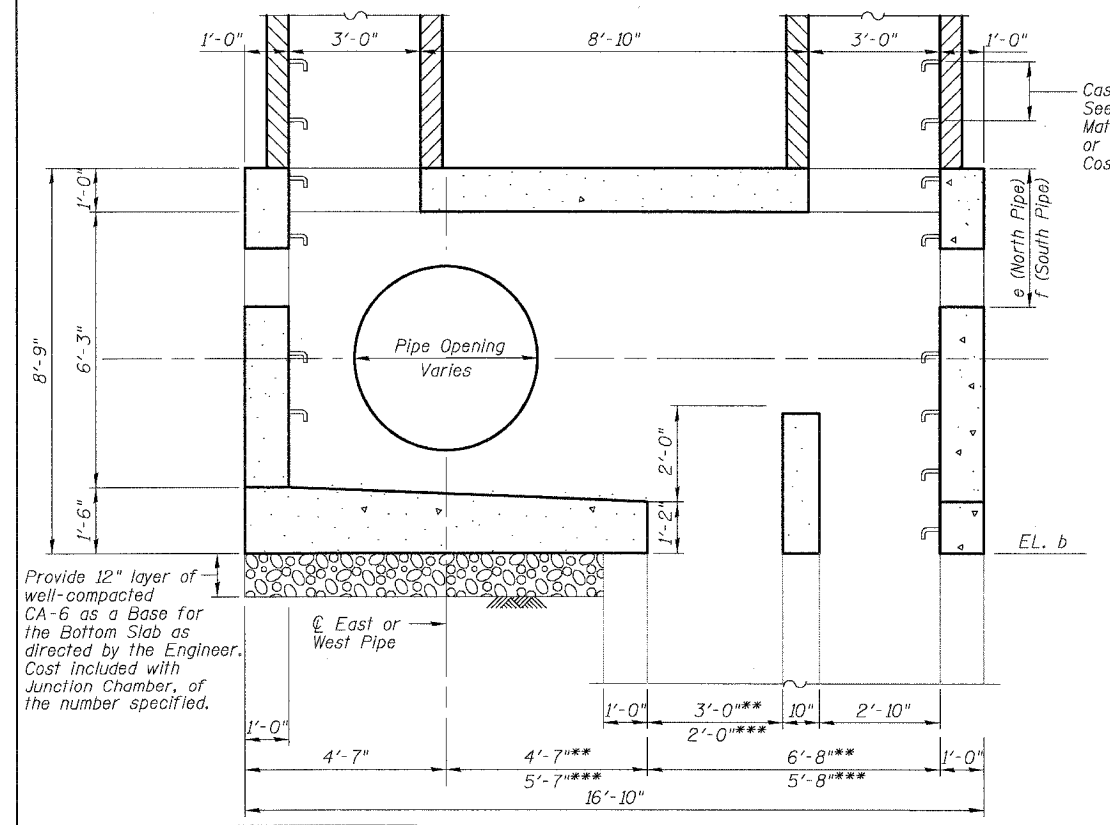
- For additional information, see Special Provisions.
- For reinforcement details, see Sheets JC-3, JC-4, & JC-5.
- Work point (W.P.) located at outside edge of existing drop manhole as shown. Mirror proposed Junction Chamber about line X-X when existing drop shaft is located north of existing access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



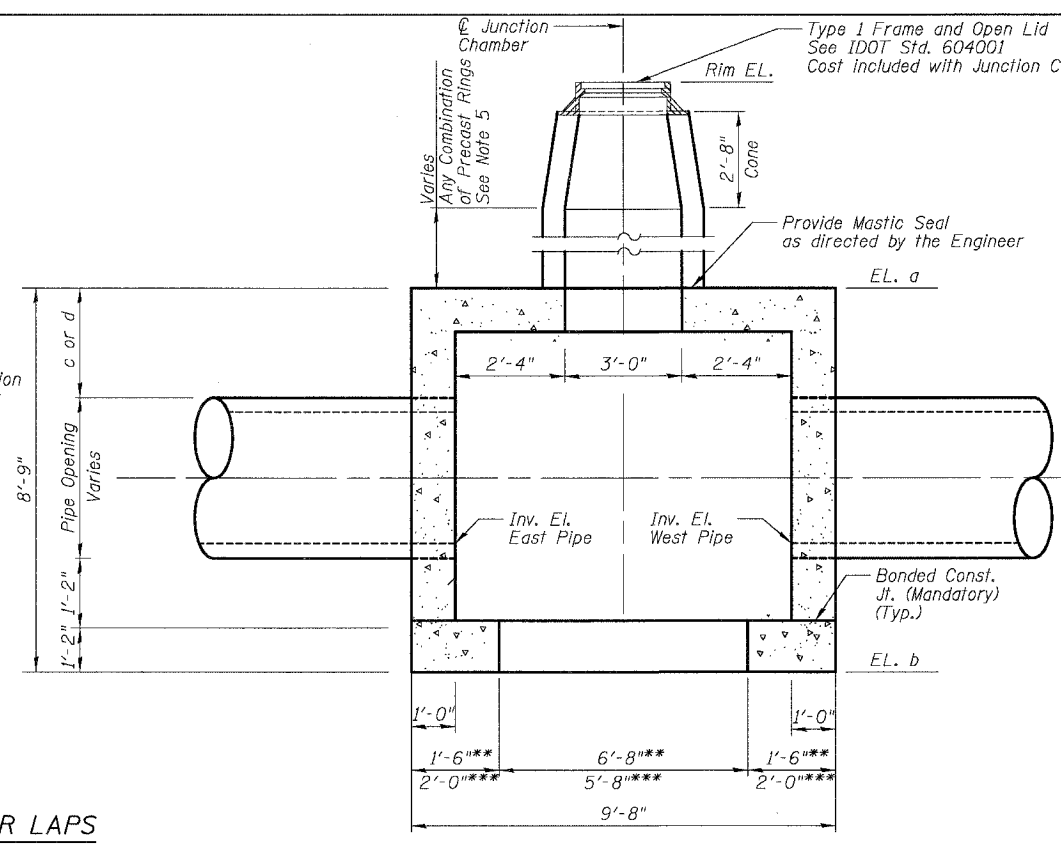
PLAN
 Showing situation with Drop Shaft oriented South, See Note 3 for North orientation

MIN. BAR LAPS

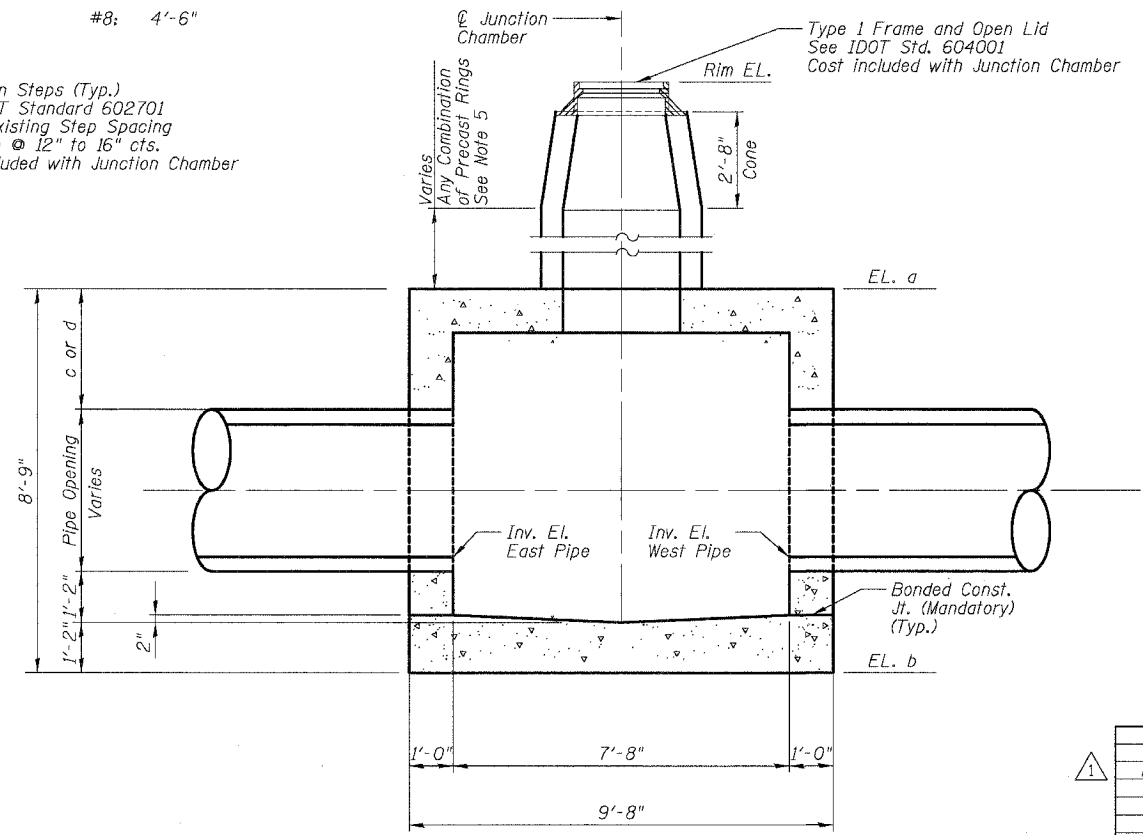
- #5: 2'-2"
- #6: 2'-7"
- #7: 3'-5"
- #8: 4'-6"



SECTION A-A



SECTION B-B



SECTION C-C

BILL OF MATERIAL

ITEM	UNIT	TOTAL
*** Junction Chamber, No. 1	Each	1
*** Junction Chamber, No. 2	Each	1
*** 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

SHEET JC-1 OF JC-22

REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

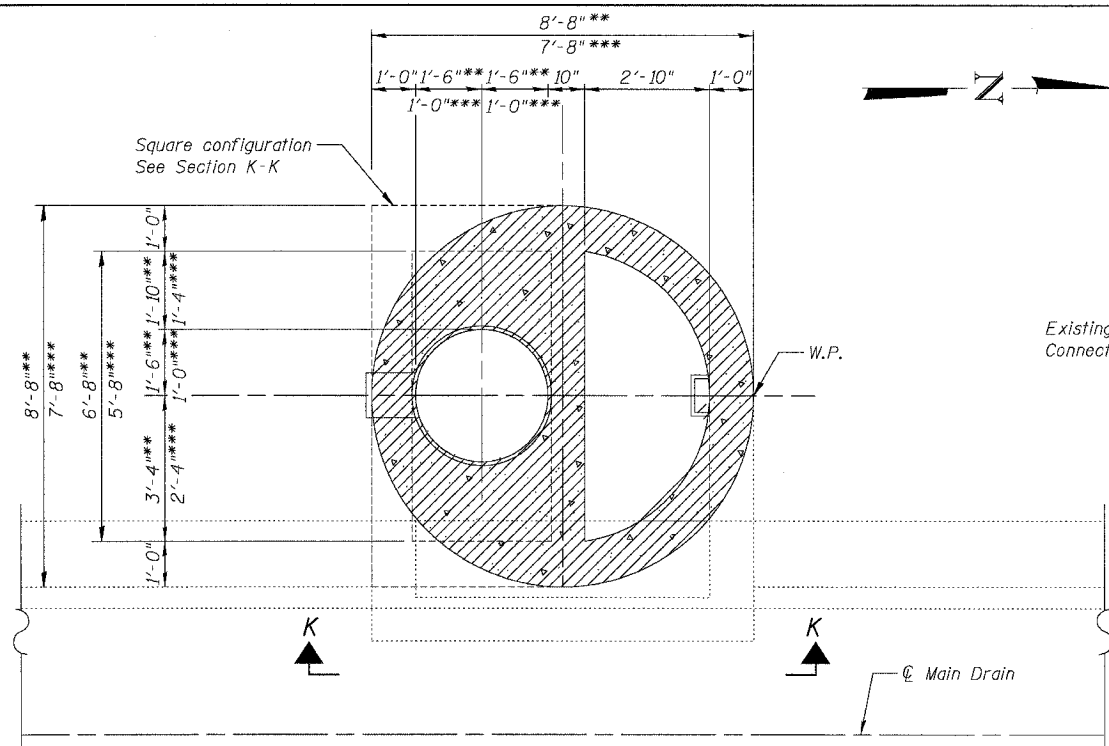
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBER, TYPE 2
 GENERAL PLAN AND ELEVATION

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

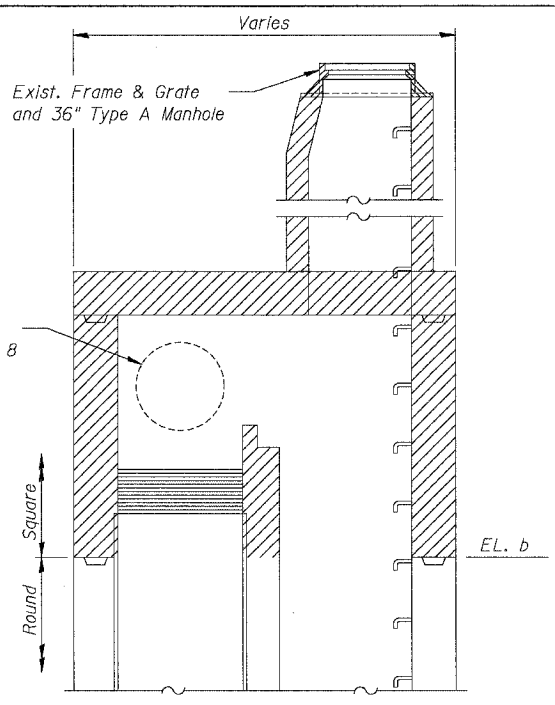
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 CONSULTING ENGINEERS
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 312.228.0100
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B-35251 AM 8/17/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	454
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	1816, ETC, 2324.6-1PR-9			



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



SECTION K-K

JC T2 19-01	***
JC T2 20-01	***
JC T2 23-01	***
JC T2 24-01	***
JC T2 28-01	**
JC T2 32-01	**
JC T2 35-02	**
JC T2 37-01	***
JC T2 38-01	**
JC T2 41-01	**
JC T2 44-01	**

LEGEND:
[Hatched Box] 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 Rlm. EL.	South Rlm. 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
1	JC T2 19-01	2473+21	-6.0	-	B24N	-1.37	-1.36	-6.17	-14.92	36"	44"	-12.25	2'-9"	36"	44"	-12.25	2'-9"	15"	20"	-9.13	2'-2"	2'-0"	12"	16"	-9.32	2'-4"	2'-0"
2	JC T2 20-01	2478+13	-5.0	-	B24S	2.34	2.31	-3.95	-12.70	42"	51"	-9.99	2'-2"	42"	51"	-9.99	2'-2"	-	-	-	-	-	12"	16"	-7.32	2'-6"	2'-0"
3	JC T2 23-01	2499+01	-6.0	-	B24S	1.55	1.80	-3.56	-12.31	42"	51"	-9.60	2'-2"	42"	51"	-9.60	2'-2"	-	-	-	-	-	12"	16"	-6.56	2'-2"	2'-0"
4	JC T2 24-01	2504+44	-7.0	-	B24S	-2.14	-2.31	-4.94	-13.69	42"	51"	-10.98	2'-2"	42"	51"	-10.98	2'-2"	-	-	-	-	-	15"	20"	-9.11	3'-4"	2'-0"
5	JC T2 28-01	2527+73	-7.0	-	B36S	-4.21	-4.11	-11.39	-20.14	48"	51"	-17.39	1'-7"	42"	51"	-17.39	2'-2"	-	-	-	-	-	-	-	-	-	-
6	JC T2 32-01	2554+05	-3.2	DMH-48	B36S	-3.30	-3.21	-8.46	-17.21	42"	51"	-14.50	2'-2"	42"	51"	-14.50	2'-2"	12"	16"	-10.96	1'-8"	1'-11"	12"	16"	-10.96	1'-8"	1'-11"
7	JC T2 35-01	2568+63	-3.7	DMH-51	B36S	-3.55	-3.61	-8.76	-17.51	42"	51"	-14.80	2'-2"	36"	44"	-14.80	2'-8"	-	-	-	-	-	12"	16"	-11.26	1'-8"	1'-11"
8	JC T2 37-01	2580+04	-4.2	DMH-53	B24S	-4.36	-4.19	-10.42	-19.17	36"	44"	-16.50	2'-9"	36"	44"	-16.50	2'-9"	-	-	-	-	-	-	-	-	-	-
9	JC T2 38-01	2584+42	-7.2	DMH-54	36"DR	-3.37	-3.59	-8.50	-17.25	48"	58"	-14.50	1'-7"	42"	51"	-14.50	2'-1"	12"	16"	-11.00	1'-8"	1'-11"	12"	16"	-11.00	1'-8"	1'-11"
10	JC T2 41-01	2607+79	-7.9	DMH-57	36"DR	-1.18	-1.12	-9.00	-17.75	48"	58"	-15.00	1'-7"	48"	58"	-15.00	1'-7"	-	-	-	-	-	-	-	-	-	-
11	JC T2 44-01	2620+94	-4.0	DMH-59	36"DR	-0.69	-0.56	-9.96	-18.71	42"	51"	-16.00	2'-2"	42"	51"	-16.00	2'-2"	-	-	-	-	-	-	-	-	-	-

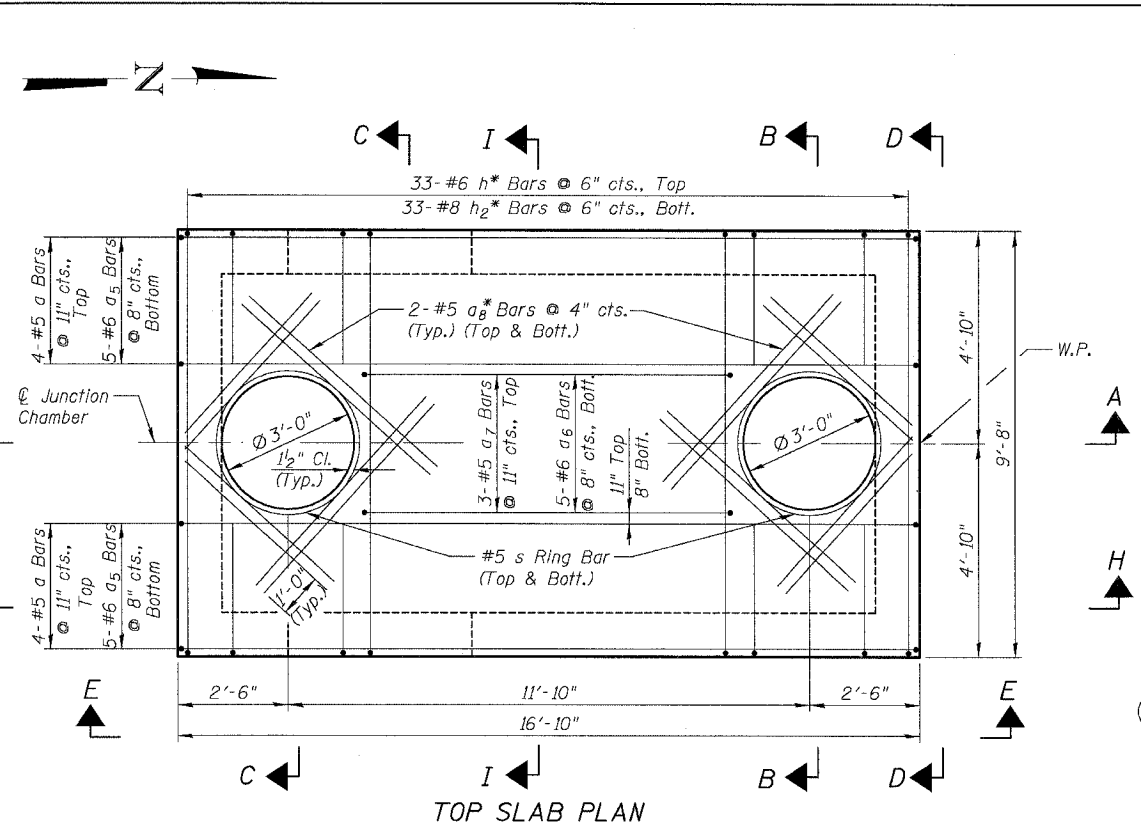
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Chicago, Illinois
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REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

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

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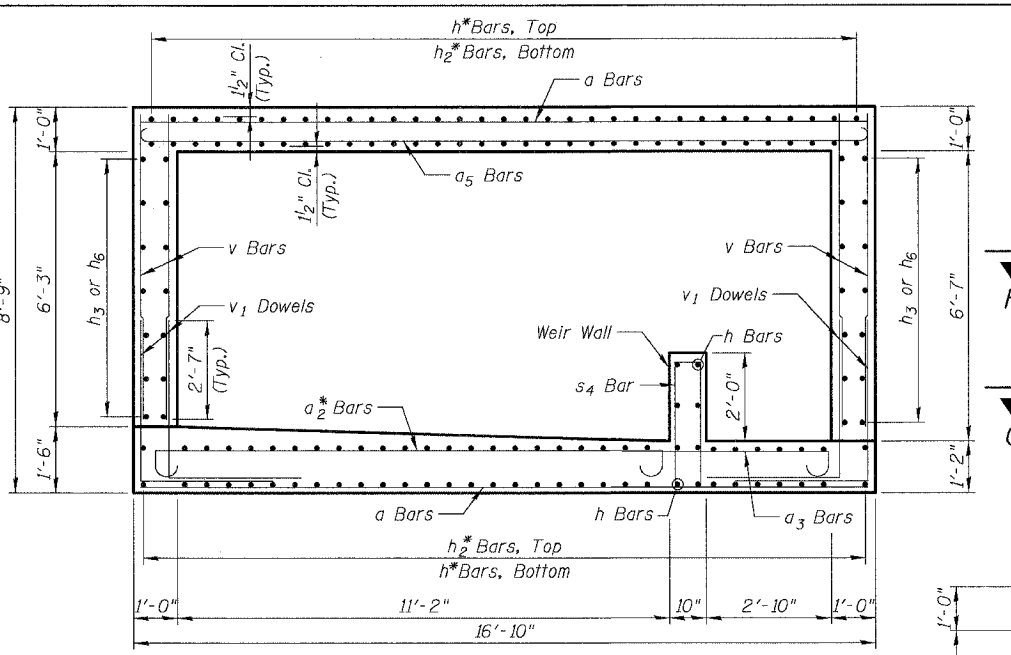
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	455
STA.		TO STA.		
62302		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		* (1818, ETC, 2324, 6-1P1R-9		



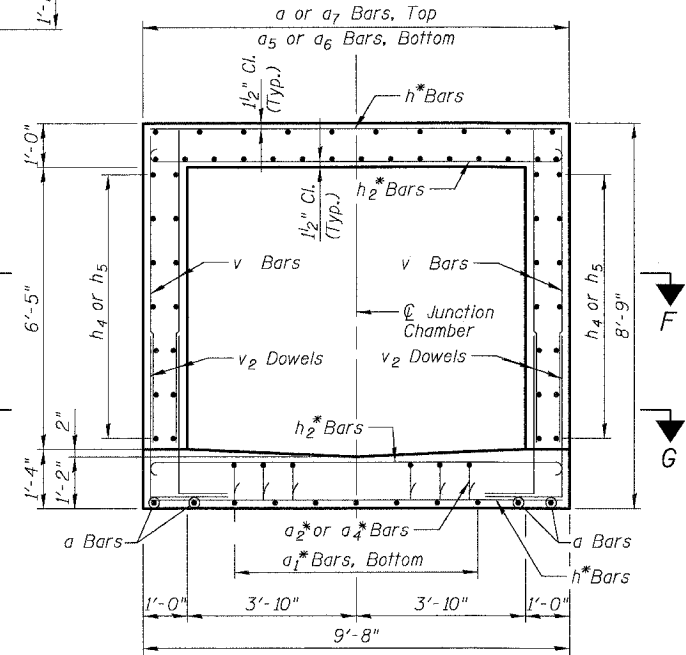
TOP SLAB PLAN

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

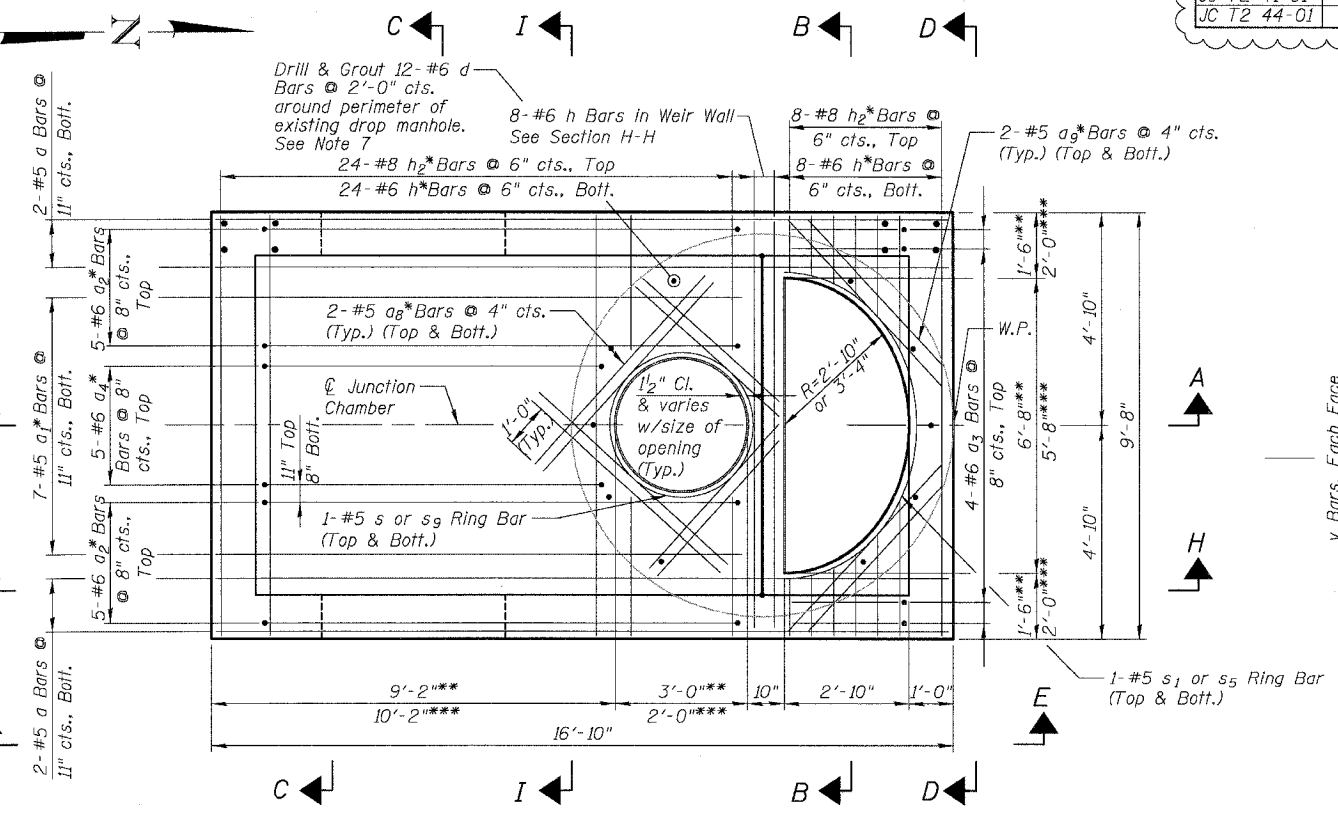
JC T2 19-01	***
JC T2 20-01	***
JC T2 23-01	***
JC T2 24-01	***
JC T2 28-01	**
JC T2 32-01	**
JC T2 35-02	**
JC T2 37-01	***
JC T2 38-01	**
JC T2 41-01	**
JC T2 44-01	**



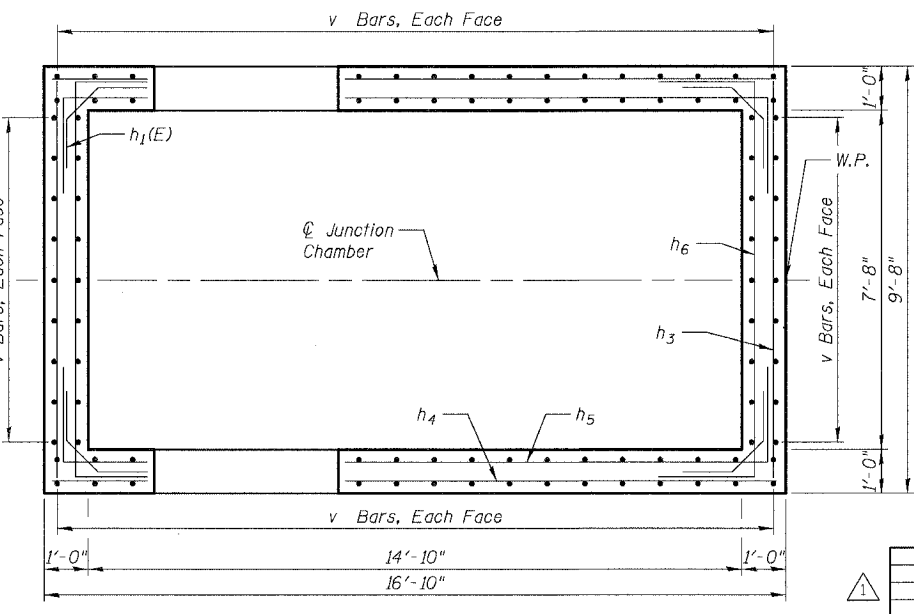
SECTION H-H



SECTION I-I



BOTTOM SLAB PLAN



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 fit.

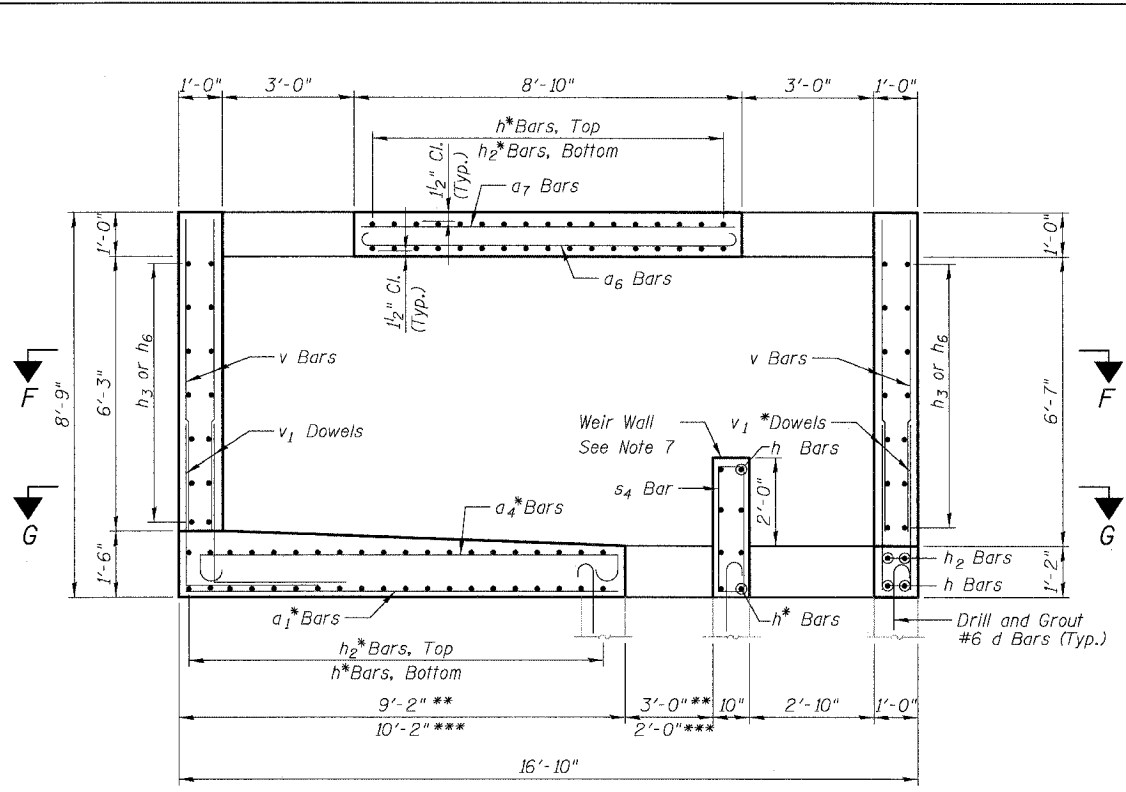
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CONSULTING ENGINEERS
Chicago, Illinois
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REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

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

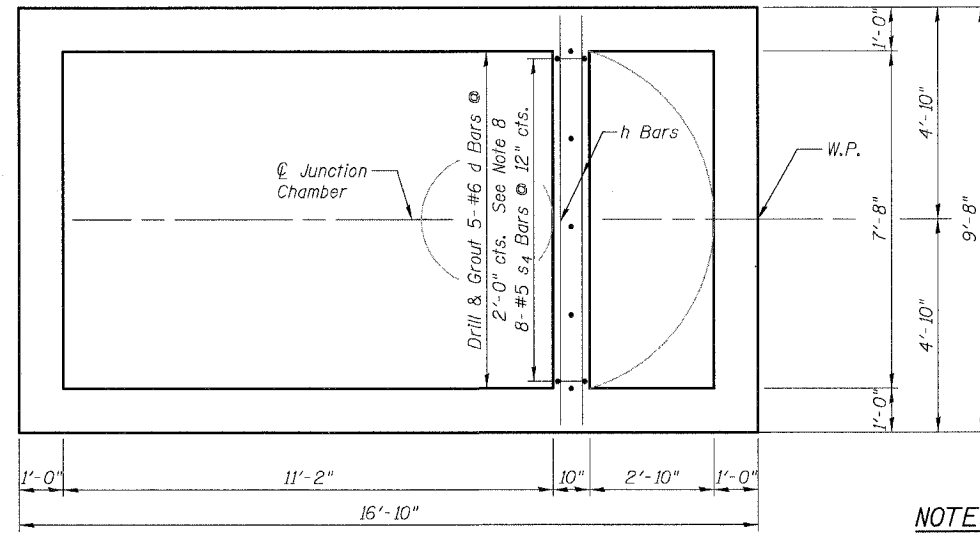
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	456
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		* (1818, ETC, 2324.6-1)IR-9		



SECTION A-A

JC T2 19-01	***
JC T2 20-01	***
JC T2 23-01	***
JC T2 24-01	***
JC T2 28-01	**
JC T2 32-01	**
JC T2 35-02	**
JC T2 37-01	***
JC T2 38-01	**
JC T2 41-01	**
JC T2 44-01	**



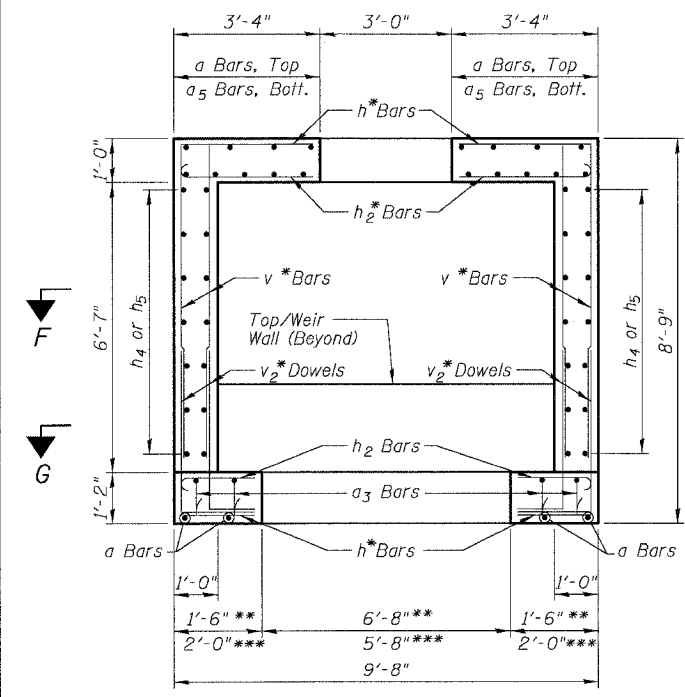
SECTIONAL PLAN G-G

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

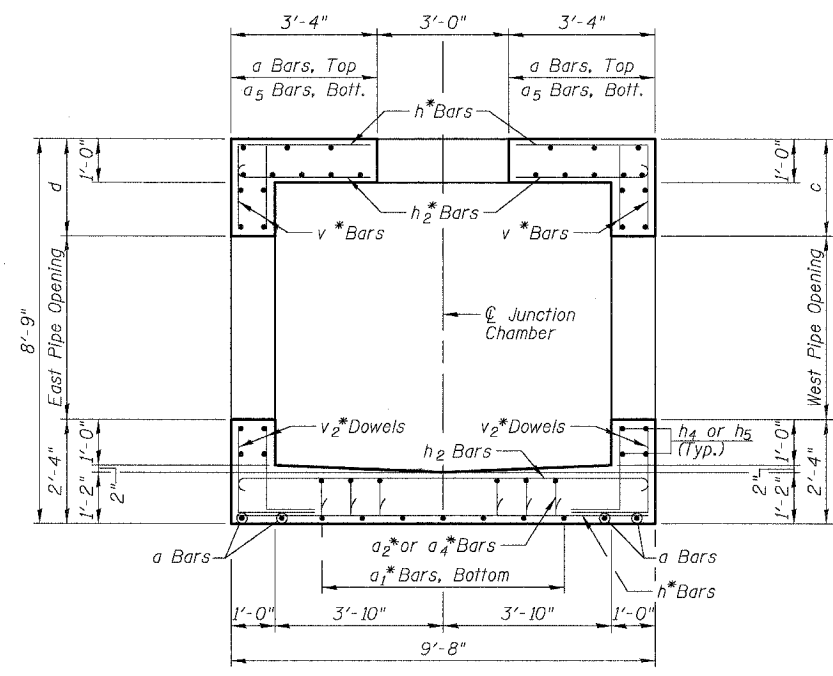
NOTES:

- 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..

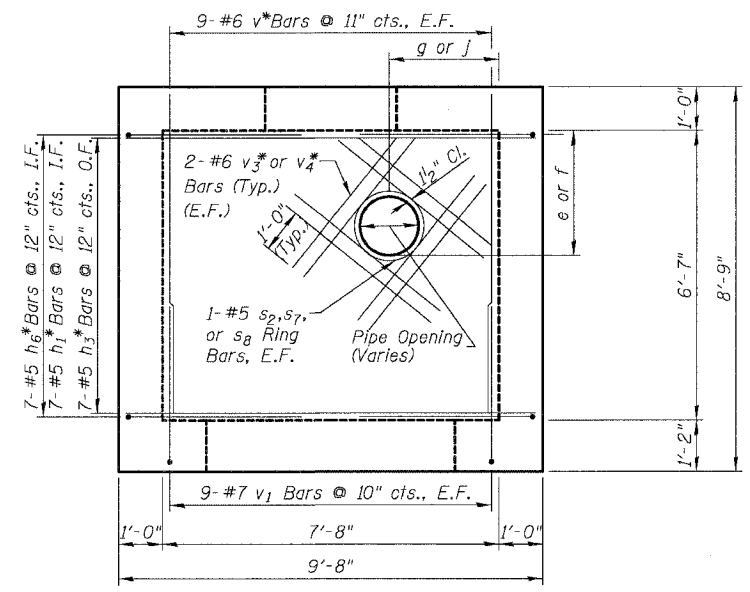
* - Cut bars to fit in field.
E.F. - denotes Each Face
E.S. - denotes Each Side
I.F. - denotes Inside Face
O.F. - denotes Outside Face



SECTION B-B



SECTION C-C



SECTION D-D

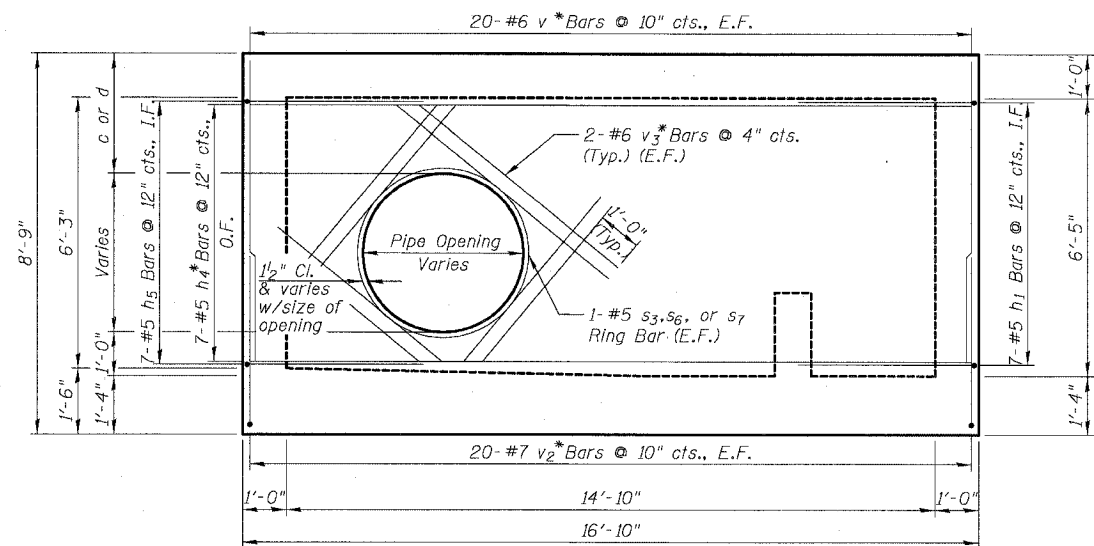
(Opposite Wall Typical)

REVISIONS		
NAME	DATE	
ADDENDUM 1	8/12/05	

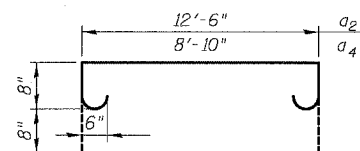
SHEET JC-4 OF JC-22
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER, TYPE 2
REINFORCEMENT DETAILS 2
SCALE: N.T.S. DRAWN BY: DJM
DATE: 07/07/05 CHECKED BY: BLU

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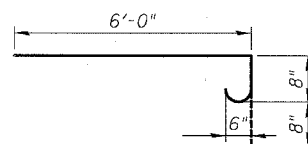
B-3650 8/11/2005



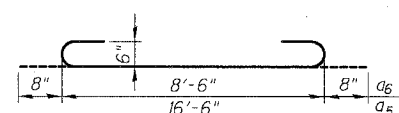
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(Opposite Wall Typical)



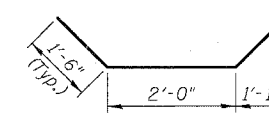
BARS a₂ and a₄



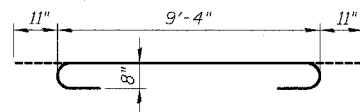
BAR a₃



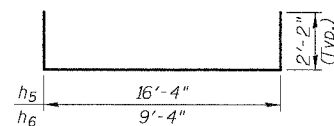
BARS a₅ and a₆



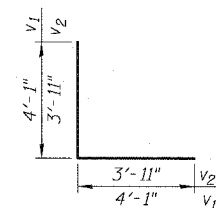
BAR h₁



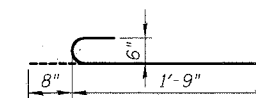
BAR h₂



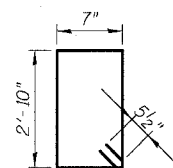
BARS h₅ and h₆



BARS v₁ and v₂



BAR d

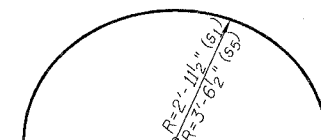


BAR s₄



BARS s, s₂, s₃, s₆, s₇, s₈, and s₉

Pipe Sizes	Opening Size	φ	Bar
-	36"	39"	s
15"	20"	23"	s ₂
48"	58"	61"	s ₃
36"	44"	47"	s ₆
42"	51"	54"	s ₇
12"	16"	19"	s ₈
-	24"	27"	s ₉



BARS s₁ and s₅

NOTES:

- For Pipe Openings and dimensions c and d, see "Table of Junction Chamber Information" on Sheet JC-2.
- All dimensions and elevations shall be field verified prior to construction.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs and any inserts installation shall be coordinated with Drainage Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.
- v₃ Bars are for pipes 36"φ or larger. v₄ Bars are for 12"φ and 15"φ pipes.
- Any annular space left between the pipes and the Junction Chamber walls shall be filled with an approved non-shrink grout as directed by the Engineer.
- All lap splices marked on the drawings are minimum.
- Cut bars in field to fit pipe openings as necessary.
- The Concrete Structures and Reinforcement Bars quantities shown are for estimating purposes only. Quantity for concrete is calculated based on 3"φ Drop Shaft but without subtracting volume removed due to pipe openings in walls.

JUNCTION CHAMBER
BAR SCHEDULE

Bar	No.	Size	Length	Shape
a	12	#5	16'-6"	—
a ₁	7	#5	9'-10"	—
a ₂	10	#6	15'-2"	⌌
a ₃	4	#6	7'-4"	⌌
a ₄	5	#6	11'-6"	⌌
a ₅	10	#6	17'-10"	⌌
a ₆	5	#6	9'-10"	⌌
a ₇	3	#5	8'-6"	—
a ₈	48	#5	5'-11"	—
a ₉	8	#5	6'-0"	—
d	17	#6	2'-5"	⌌
h	73	#6	9'-4"	—
h ₁	28	#5	5'-0"	—
h ₂	65	#8	11'-2"	⌌
h ₃	14	#5	9'-4"	—
h ₄	14	#5	16'-4"	—
h ₅	14	#5	20'-8"	⌌
h ₆	14	#5	13'-8"	⌌
s	62	#5	12'-4"	○
s ₁	10	#5	9'-3"	○
s ₂	4	#5	7'-0"	○
s ₃	8	#5	17'-1"	○
s ₄	8	#5	7'-9"	□
s ₅	14	#5	11'-2"	○
s ₆	12	#5	13'-4"	○
s ₇	28	#5	15'-3"	○
s ₈	18	#5	6'-1"	○
s ₉	10	#5	8'-2"	○
v	116	#6	7'-0"	—
v ₁	36	#7	8'-2"	⌌
v ₂	80	#7	7'-10"	⌌
v ₃	384	#6	8'-0"	—
v ₄	176	#6	4'-3"	—
Concrete Structures		Cu. Yd.	24.3	
Reinforcement Bars		Pound	9,300	

① Bars indicated are for all Junction Chambers. Use Bar at appropriate opening. Weight of Reinforcement Bars Indicated is for JC T2 19-01.

- * - 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

SHEET JC-5 OF JC-22

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBER, TYPE 2
REINFORCEMENT DETAILS 3

SCALE: N.T.S. DRAWN BY: DJM
DATE: 01/07/05 CHECKED BY: BLU

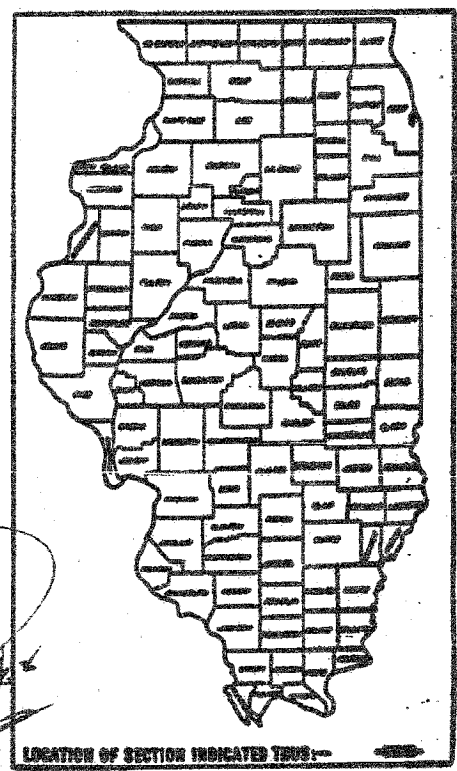
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DR #11

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

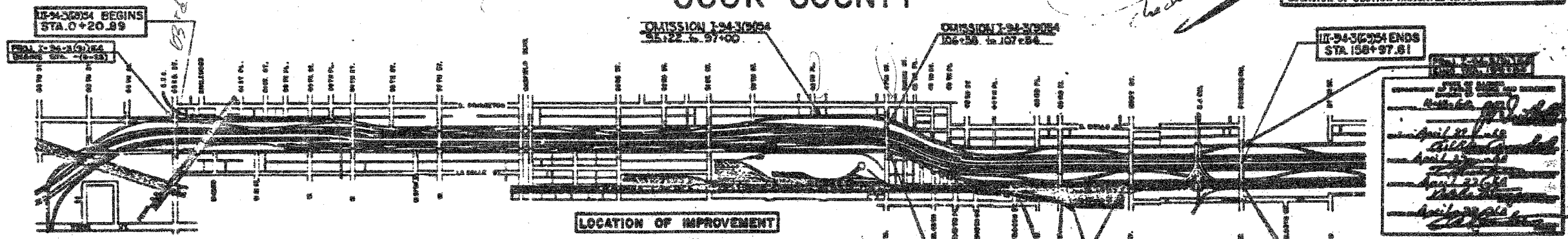
PROJECT UI-94-3(69)54 &
PROJECT I-94-3(91)54
COOK COUNTY



DESCRIPTION OF PROJECT

SECTION 2022-932T
THIS 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 VERMONT 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.



PREPARED BY: *H. J. E. W.*
 EXAMINED BY: *[Signature]*
 EXAMINED BY: *[Signature]*
 ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY BY: *[Signature]*
 Job No. 20908

LENGTH OF MAIN DRAIN STORM SEWER 15,876.72 FEET (3.007 MILES) (PROJECT I-94-3(91)54)
 LENGTH WL FRONTAGE ROAD STORM SEWERS 15,713 FEET 2.976 MILES (PROJECT I-94-3(91)54)
 PLANS PREPARED BY: DE LUW GATNER & CO ENGINEERS CHICAGO

DEPARTMENT OF COMMERCE
 BOARD OF PUBLIC WORKS
 APPROVED: _____
 DATE: _____

Consultants' name please checked 7/1/07

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	458
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62302		*1818, ETC. 2324.6-1PR-9		

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REVISIONS	NAME	DATE

SHEET JC- 6 OF JC-22
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB 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	598	459
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		*(1818, ETC, 23246-1)PR-9		

GENERAL NOTES

CONTRACTOR AND SUB-CONTRACTORS ARE WARNED THAT NO SEWER CARRYING LIVE SEWAGE MAY BE DESTROYED OR INTERRUPTED IN ANYWAY UNTIL PROVISION IS MADE FOR ITS FLOW ACCEPTABLE TO THE BUREAU OF SEWERS, CITY OF CHICAGO.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH THE SEWERS ARE BUILT AND IN SERVICE AND ACCEPTED BY THE BUREAU OF SEWERS. THE WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

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

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

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

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

WHERE THE INVERT ELEVATION OF A SEWER IS NOT SHOWN THE PIPE SHALL BE LAID ON A SLOPE OF 1% (PER CENT)

A DEDUCTION OF 4 FT. OR 5 FT. OF STORM SEWER HAS BEEN MADE AT EACH TYPE A MANHOLE, AND A DEDUCTION OF 5 FT. AND 10 FT. OF SEMI-ELLIPTICAL STORM SEWER HAS BEEN MADE RESPECTIVELY AT EACH TYPE B OR TYPE C MANHOLE, AND A DEDUCTION OF 6 FT. HAS BEEN MADE AT EACH TYPE D MANHOLE AND A DEDUCTION OF CONSTRUCTED LENGTH HAS BEEN MADE AT EACH CONNECTION AND AT EACH TYPE "E" MANHOLE.

LARGER SIZES SHALL BE INCLUDED IN ALL MANHOLES.

MAIN DRAIN SEWER NOTES

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR ROCK EXCAVATION FOR ONLY THE ROCK ACTUALLY ENCOUNTERED WITHIN THE AREA ENCOMPASSED BY THE "HEAT LINE" AS SHOWN ON THE DETAIL SHEETS FOR SEMI-ELLIPTICAL CONCRETE 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 WILL NOT BE PERMITTED TO BREAK UP ROCK BY BLASTING BETWEEN STATIONS 81+00 TO 82+00. ROCK SHALL BE BROKEN BY MECHANICAL MEANS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY BRACES, SHORING AND SUPPORTS TO MAINTAIN EXISTING 18" x 20" SEMI-ELLIPTICAL SEWER ON GARFIELD BLVD. AT STATION 82+10.01 & CONSTRUCTION. SEE SPECIAL PROVISIONS.

MANHOLE MANHOLES:

- SEAL MANHOLE BELOW EXISTING GROUND TO PREVENT FOREIGN MATERIALS FROM ENTERING SEWER.
- EXCAVATION FROM SEWER TO PROPOSED TOP OF MANHOLE SHALL BE BACKFILLED WITH TRENCH BACKFILL.
- PLACE 2"x2" WOOD MARKERS ON TOP OF MANHOLE AND EXTEND 3 FEET ABOVE EXISTING GROUND. THE EXTENDED PORTION OF MARKER IS TO BE PAINTED YELLOW, WITH THE LETTERS M.S. AND THE STATION OF MANHOLE SUPERIMPOSED IN BLACK PAINT.
- THE COST OF THE 2"x2" WOOD MARKERS, TRENCH BACKFILL AND BACKFILL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLE.

FRONTAGE ROAD SEWER NOTES

ALL SEWERS ON CITY STREETS AND FRONTAGE ROADS, 27" DIAMETER AND SMALLER SHALL BE OF VITRIFIED CLAY PIPE, CONFORMING TO A.S.T.M. DESIGNATION C200-571. ALL SEWERS LARGER THAN 27 INCHES DIAMETER SHALL BE OF REINFORCED CONCRETE IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.

REINFORCING OF SEWERS AS CALLED FOR ON THE PLANS WILL BE ACCOMPLISHED AS CALLED FOR IN THE SPECIAL PROVISIONS "PLUMBING EXISTING DRAINS & SEWERS" AND PAYMENT WILL BE MADE FOR PLUMBING EXISTING DRAINS & SEWERS (12" OR LESS) OR PLUMBING EXISTING DRAINS AND SEWERS (OVER 12").

PROPOSED STOPS FOR FUTURE CONNECTIONS SHALL BE SEALED WITH A STOPPER. THE COST OF THE STOPPER SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION SHALL BE ALLOWED.

TYPE "A" CATCH BASINS SHALL HAVE CONCENTRIC CORNER. UNIT HALF-TAPS ON TYPE "A" CATCH BASIN.

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

1" CONNECTION FITTINGS SHALL BE INSTALLED IN PROPOSED SEWER LINES TO CONNECT EACH DOMESTIC AND INDUSTRIAL DRAINS AND STREET SEWERS THAT ARE ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS OF THIS IMPROVEMENT. PROVIDED THE 1" CONNECTION FITTING SHALL BE INCIDENTAL TO THE WORK AND PAYMENT SHALL BE INCLUDED IN THE PRICE FOR LOCAL PORT OF THE SEWERS.

WHEN A CONNECTION IS MADE TO AN EXISTING SEWER 27 INCHES OR LESS IN DIAMETER A LENGTH OF EXISTING PIPE SHALL BE REMOVED AND REPLACED WITH A 1" CONNECTION FITTING. THE REMOVAL OF EXISTING PIPE AND FURNISHING THE 1" CONNECTION FITTING SHALL BE INCIDENTAL TO THE WORK AND PAYMENT SHALL BE INCLUDED IN THE PRICE FOR LOCAL PORT OF THE SEWERS.

(CONTINUED)

REMOVAL & REPLACEMENT OF EXISTING PAVEMENT SHALL BE REQUIRED WHEN REMOVED DUE TO PROPOSED SEWER CONSTRUCTION, AND SUBSEQUENTLY SUBJECT TO TRAFFIC, WILL BE PAID FOR RESPECTIVELY AS PAVEMENT REPLACEMENT-ENTIRE OR PAVEMENT REMOVAL AND REPLACEMENT, SPECIAL (107)

REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK SHALL BE REQUIRED WHEN REMOVED DUE TO PROPOSED SEWER CONSTRUCTION, AND SUBSEQUENTLY SUBJECT TO TRAFFIC, WILL BE PAID FOR RESPECTIVELY AS:

- a) SIDEWALK REMOVAL AND
- b) PORTLAND CEMENT CONCRETE SIDEWALK 2 INCH AT LOCATIONS SHOWN ON PLANS WHERE SIDEWALK WILL BE REMOVED ON SUBSEQUENT CONTRACTS.
- OR c) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH AT LOCATIONS SHOWN ON PLANS.

REMOVAL AND REPLACEMENT OF EXISTING CURBS OR CURB & GUTTER SHALL BE REQUIRED WHEN REMOVED DUE TO PROPOSED SEWER CONSTRUCTION, AND SUBSEQUENTLY SUBJECT TO TRAFFIC WILL BE PAID FOR RESPECTIVELY AS:

- a) CURB REMOVAL AND
- b) CONCRETE CURB TYPE B AT LOCATIONS SHOWN ON PLANS WHERE CURBS WILL BE REMOVED ON SUBSEQUENT CONTRACTS
- OR c) COMBINATION CONCRETE CURB AND GUTTER TYPE 3 AT LOCATIONS SHOWN ON PLANS

Two (2) Standard 2134-S signs shall be erected at locations as directed by the Engineer.

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	GENERAL NOTES & INDEX OF SHEETS
3	SUMMARY OF QUANTITIES
4-7	TYPICAL SECTIONS
8-9	ALIGNMENT TIES & BENCH MARKS
10-20	MAIN DRAIN - PLAN & PROFILE
21-31	WEST FRONTAGE ROAD SEWER - PLAN & PROFILE
32-39	EAST FRONTAGE ROAD SEWER - PLAN & PROFILE
40-47	EXISTING UTILITIES
48	DETAIL - REINFORCING AT CROSS STREET & AT DRIVEWAYS
49	SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR TYPE B & C MANHOLES
50	SPECIAL MANHOLE TYPE 600B
51	SPECIAL MANHOLE TYPE 600C
52	REINFORCING-SPECIAL MANHOLE TYPE 600 - 7'-0" x 8'-0"
53	REINFORCING-SPECIAL MANHOLE TYPE 600 - 8'-0" x 8'-0"
54	REINFORCING-SPECIAL MANHOLE TYPE 600 - 8'-0" x 10'-0"
55	SPECIAL MANHOLE TYPE 600B
56	SPECIAL MANHOLE TYPE 600C
57	REINFORCING-SPECIAL MANHOLE TYPE 600 - 7'-0" x 8'-0"
58	REINFORCING-SPECIAL MANHOLE TYPE 600 - 8'-0" x 8'-0"
59	REINFORCING-SPECIAL MANHOLE TYPE 600 - 8'-0" x 10'-0"
60	SPECIAL MANHOLE TYPE C
61	SEMI-ELLIPTICAL SEWER - 7'-0" x 8'-0"
62	SEMI-ELLIPTICAL SEWER - 8'-0" x 8'-0"
63	SEMI-ELLIPTICAL SEWER - 8'-0" x 10'-0"
64	DETAIL OF TRANSITION 7'-0" x 8'-0" TO 8'-0" x 8'-0" SEMI-ELLIPTICAL SEWERS
65	DETAIL OF TRANSITION 8'-0" x 8'-0" TO 8'-0" x 10'-0" SEMI-ELLIPTICAL SEWERS
66	MANHOLE TYPE D, TRENCH BACKFILL AND PAVEMENT REPLACEMENT - ENTIRE CONCRETE PAVEMENT
67	REINFORCING - TYPE D MANHOLE
68	CONNECTION - GARFIELD BLVD. AND WEST FRONTAGE ROAD
69	REINFORCING - CONNECTION AT GARFIELD BLVD. AND WEST FRONTAGE ROAD
70	MANHOLE, SPECIAL, TYPE E - STA. 82+10.00 WEST FRONTAGE ROAD
71	MANHOLE, SPECIAL, TYPE E - STA. 100+00 EAST FRONTAGE ROAD
72	MANHOLE, SPECIAL, TYPE E - STA. 100+00 EAST FRONTAGE ROAD
73	MANHOLE, SPECIAL, TYPE E - STA. 100+00.10 WEST FRONTAGE ROAD
74	MANHOLE, SPECIAL, TYPE E - STA. 100+00.01 EAST FRONTAGE ROAD
75	CONN. 30" TO 30" R.C.P. SEWER - 50+00 STREET & WEST FRONTAGE ROAD
76	SEWER CONNECTION - 30" TO 30" - 87+00 STREET & EAST FRONTAGE ROAD
77	CONN. 30" TO 30" SEWER - WEST FRONTAGE ROAD AT SWANN STREET
78	CONNECTION - 30" TO 30" SEWER - EAST FRONTAGE ROAD AT SWANN STREET
79	CONNECTION - 30" TO 30" - STA. 120+71.57 & EAST FRONTAGE ROAD
80	CONNECTION - 30" TO 24" R.C.P. SEWER - WEST STREET & EAST FRONTAGE ROAD
81	CONN. 30" TO 30" SEWER AT PRINCETON & WEST PLACE
82	DETAILS - PLACEMENT OF STRUCTURES & CONNECTIONS TO SEWERS
83-85	SOILS PROFILE, AREA DATA
86	STANDARDS: 1000-1; 1510
87	STANDARDS: 1007-1; 10-20; 1810
88	STANDARDS: 1700-1; 1000-1; 2110
89	STANDARDS: 1071-1; 1072-1; 1073-2
90	STANDARDS: 1100-1; 10-20-100; 10-20-100

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

SHEET JC- 7 OF JC-22

REVISIONS	
NAME	DATE

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

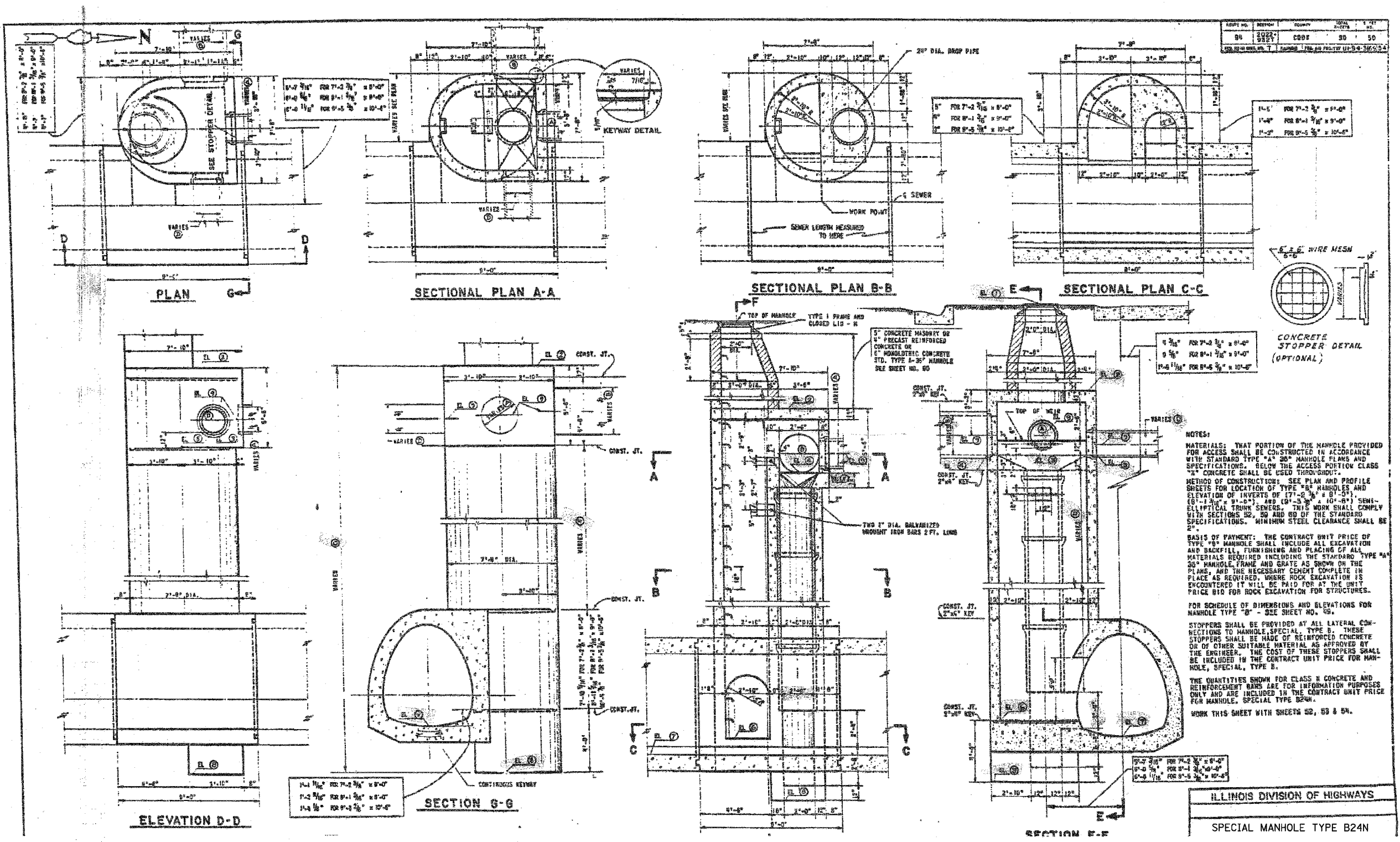
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DATE: 07/07/05
DRAWN BY: BDC
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CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbairc.com

11/58/00 AM 6/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	461
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	*1818, ETC, 2324.6-1PR-9			



NOTES:

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" 26" MANHOLE PLANS AND SPECIFICATIONS. BELOW THE ACCESS PORTION CLASS "B" 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'-0" DIA. x 8'-0") (8'-0" DIA. x 9'-0") AND (9'-0" DIA. x 10'-0") SEMI-ELLIPTICAL TRUNK SEWERS. THIS WORK SHALL COMPLY WITH SECTIONS 82, 83 AND 84 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, FURNISHING AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "A" 26" MANHOLE FRAME AND GRATE AS SHOWN ON THE PLANS, AND THE NECESSARY CEMENT COMPLETE IN PLACE AS REQUIRED, WHERE ROCK EXCAVATION IS ENCOUNTERED IT WILL BE PAID FOR AT THE UNIT PRICE B10 FOR ROCK EXCAVATION FOR STRUCTURES.

FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" - SEE SHEET NO. 48.

STOPPERS SHALL BE PROVIDED BY 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 B CONCRETE AND REINFORCEMENT BARS ARE FOR INFORMATION PURPOSES ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL TYPE B24N.

WORK THIS SHEET WITH SHEETS 52, 53 & 54.

ILLINOIS DIVISION OF HIGHWAYS
SPECIAL MANHOLE TYPE B24N

SHEET JC- 9 OF JC-22

FOR INFORMATION ONLY

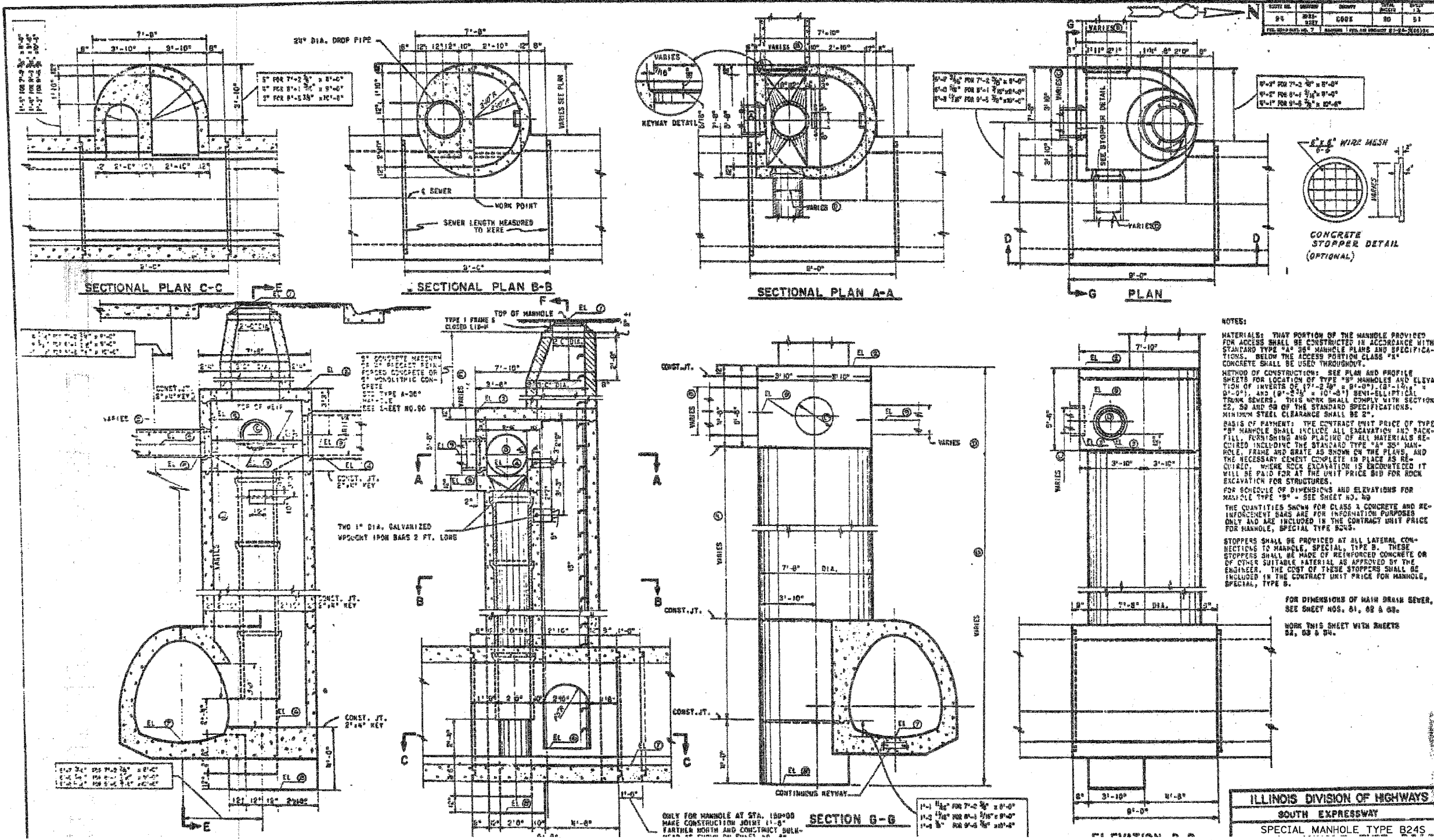
REVISIONS	
NAME	DATE

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

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

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

6/28/2005 10:02:58 AM



NOTES:

MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "A" 24" MANHOLE PLANS AND SPECIFICATIONS. BELOW THE ACCESS PORTION CLASS "B" CONCRETE SHALL BE USED THROUGHOUT.

METHOD OF CONSTRUCTION: SEE PLAN AND PROFILE SHEETS FOR LOCATION OF TYPE "B" MANHOLES AND ELEVATION OF INVERTS OF 17'-2 1/2", 14'-0", 12'-0", 9'-0", 6'-0", AND (8'-0" x 10'-0") SEMI-ELLIPTICAL TRUNK SEWERS. THIS WORK SHALL COMPLY WITH SECTIONS 52, 53 AND 58 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 BACK-FILL FURNISHING AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "A" 24" MANHOLE FRAME AND GRATE AS SHOWN ON THE PLANS, AND THE NECESSARY CEMENT COMPLETE IN PLACE AS REQUIRED. WHERE ROCK EXCAVATION IS ENCOUNTERED IT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ROCK EXCAVATION FOR STRUCTURES.

FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" - SEE SHEET NO. 49

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

STOPPERS SHALL BE PROVIDED BY 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.

FOR DIMENSIONS OF MAIN DRAIN SEWER, SEE SHEET NOS. 81, 82 & 83.

WORK THIS SHEET WITH SHEETS 82, 83 & 84.

REVISIONS	NAME	DATE

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

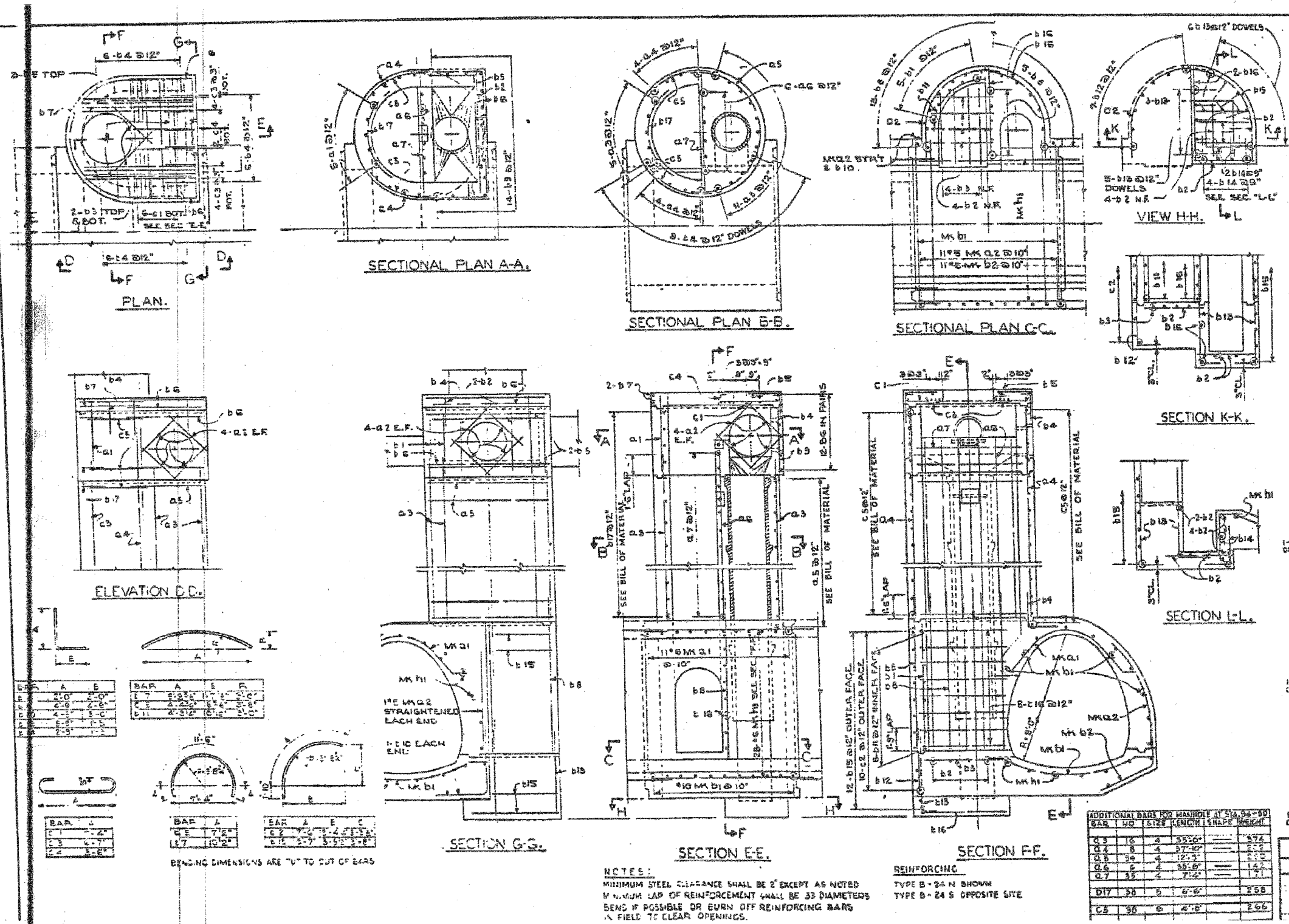
SCALE: NTS
DATE: 07/07/05

DRAWN BY: BDC
CHECKED BY: BLU

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CONSULTING ENGINEERS
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BILL OF MATERIAL
 BARS TYPICAL OF ALL TYPE B HOLES

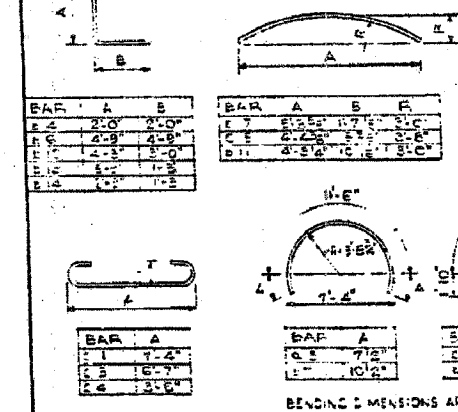
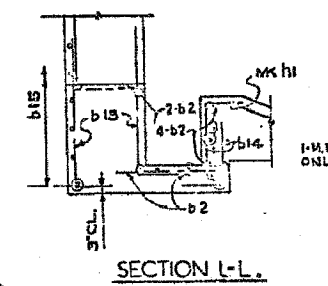
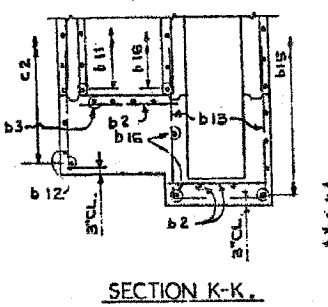
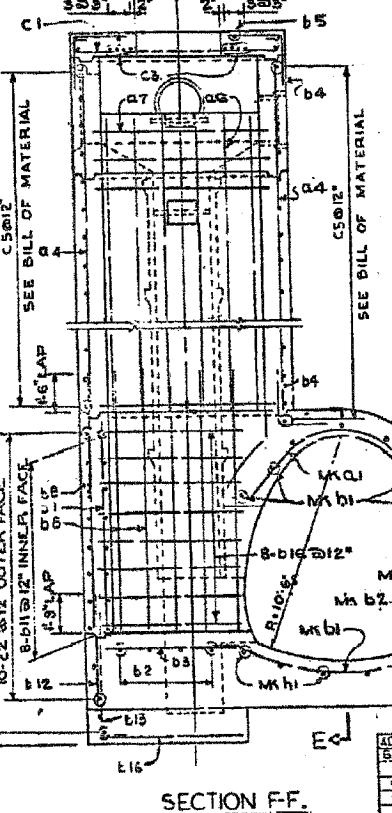
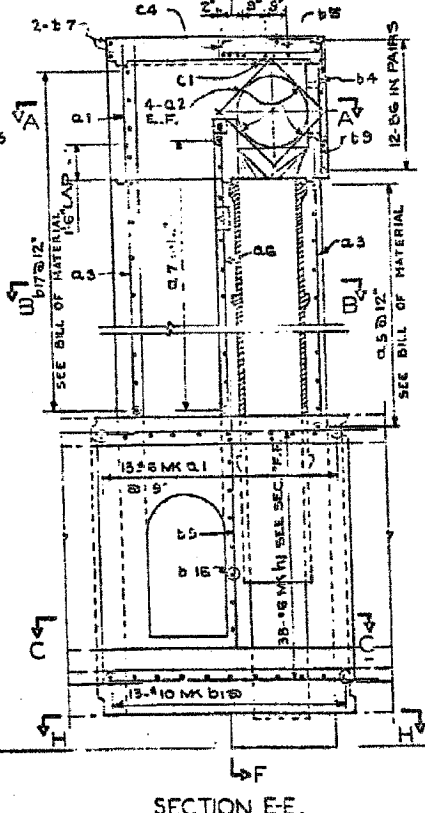
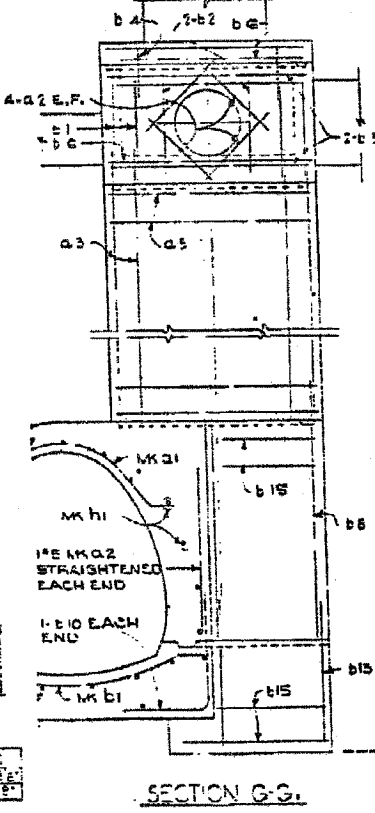
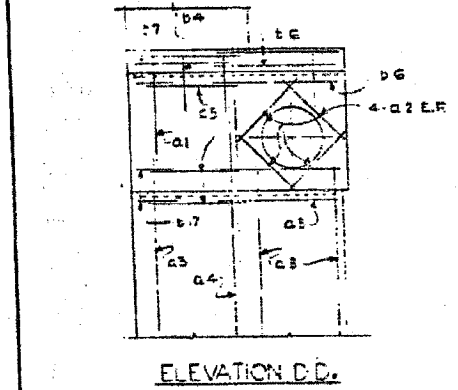
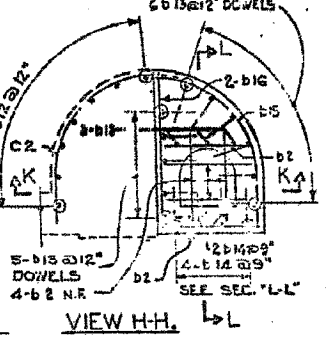
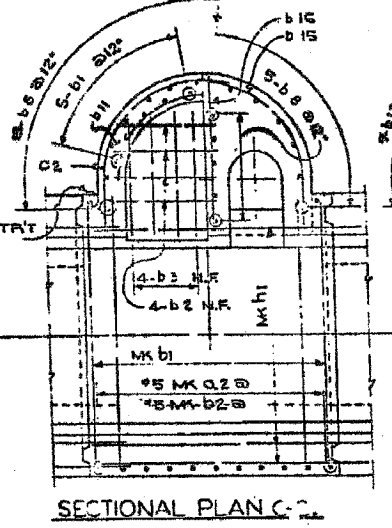
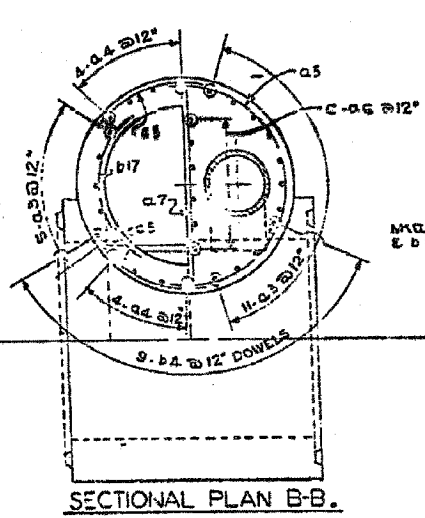
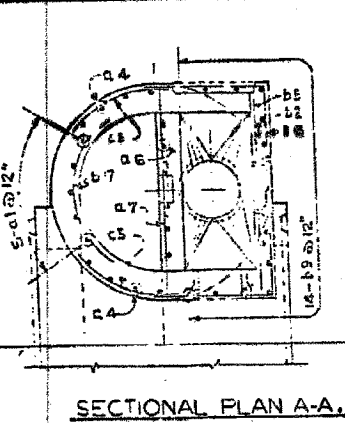
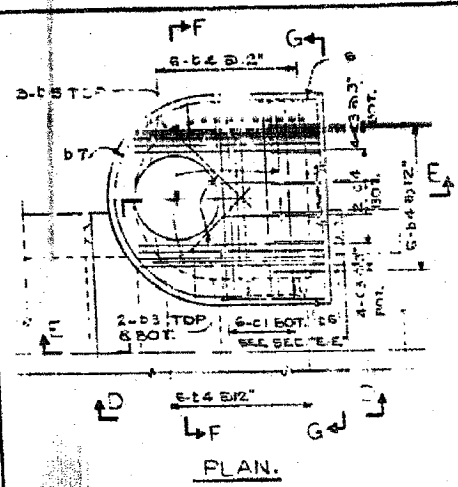
BAR NO	SIZE	LENGTH	SHAPE	WEIGHT
B1	5	7'-2"		4.0
B2	8	4'-0"		3.8
B3	8	4'-0"		3.8
B4	8	4'-0"		3.8
B5	8	4'-0"		3.8
B6	12	6'-0"		11.9
B7	2	13'-11"		1.1
B8	16	13'-2"		17.8
B9	16	4'-2"		6.1
B10	7	7'-3"		7.6
B11	2	4'-8"		4.3
B12	7	7'-0"		3.7
B13	7	7'-0"		3.7
B14	10	5'-0"		9.3
B15	10	5'-0"		9.3
B16	10	5'-0"		9.3
B17	28	5'-6"		21.7
B18	28	5'-6"		21.7
B19	28	5'-6"		21.7
B20	28	5'-6"		21.7
B21	28	5'-6"		21.7
B22	28	5'-6"		21.7
B23	28	5'-6"		21.7
B24	28	5'-6"		21.7
B25	28	5'-6"		21.7
B26	28	5'-6"		21.7
B27	28	5'-6"		21.7
B28	28	5'-6"		21.7
B29	28	5'-6"		21.7
B30	28	5'-6"		21.7
B31	28	5'-6"		21.7
B32	28	5'-6"		21.7
B33	28	5'-6"		21.7
B34	28	5'-6"		21.7
B35	28	5'-6"		21.7
B36	28	5'-6"		21.7
B37	28	5'-6"		21.7
B38	28	5'-6"		21.7
B39	28	5'-6"		21.7
B40	28	5'-6"		21.7
B41	28	5'-6"		21.7
B42	28	5'-6"		21.7
B43	28	5'-6"		21.7
B44	28	5'-6"		21.7
B45	28	5'-6"		21.7
B46	28	5'-6"		21.7
B47	28	5'-6"		21.7
B48	28	5'-6"		21.7
B49	28	5'-6"		21.7
B50	28	5'-6"		21.7
B51	28	5'-6"		21.7
B52	28	5'-6"		21.7
B53	28	5'-6"		21.7
B54	28	5'-6"		21.7
B55	28	5'-6"		21.7
B56	28	5'-6"		21.7
B57	28	5'-6"		21.7
B58	28	5'-6"		21.7
B59	28	5'-6"		21.7
B60	28	5'-6"		21.7
B61	28	5'-6"		21.7
B62	28	5'-6"		21.7
B63	28	5'-6"		21.7
B64	28	5'-6"		21.7
B65	28	5'-6"		21.7
B66	28	5'-6"		21.7
B67	28	5'-6"		21.7
B68	28	5'-6"		21.7
B69	28	5'-6"		21.7
B70	28	5'-6"		21.7
B71	28	5'-6"		21.7
B72	28	5'-6"		21.7
B73	28	5'-6"		21.7
B74	28	5'-6"		21.7
B75	28	5'-6"		21.7
B76	28	5'-6"		21.7
B77	28	5'-6"		21.7
B78	28	5'-6"		21.7
B79	28	5'-6"		21.7
B80	28	5'-6"		21.7
B81	28	5'-6"		21.7
B82	28	5'-6"		21.7
B83	28	5'-6"		21.7
B84	28	5'-6"		21.7
B85	28	5'-6"		21.7
B86	28	5'-6"		21.7
B87	28	5'-6"		21.7
B88	28	5'-6"		21.7
B89	28	5'-6"		21.7
B90	28	5'-6"		21.7
B91	28	5'-6"		21.7
B92	28	5'-6"		21.7
B93	28	5'-6"		21.7
B94	28	5'-6"		21.7
B95	28	5'-6"		21.7
B96	28	5'-6"		21.7
B97	28	5'-6"		21.7
B98	28	5'-6"		21.7
B99	28	5'-6"		21.7
B100	28	5'-6"		21.7

ADDITIONAL BARS FOR MANHOLES AT STATIONS
 71+20 & 76+00

BAR NO	SIZE	LENGTH	SHAPE	WEIGHT
D1	16	4	24'-6"	7.62
D2	8	4	27'-4"	1.6
D3	28	4	12'-9"	26.4
D4	6	4	25'-0"	1.00
D5	28	4	7'-4"	12.2
D6	28	5	6'-6"	19.0
D7	28	6	4'-4"	19.6
D8	28	6	4'-4"	19.6
D9	28	6	4'-4"	19.6
D10	28	6	4'-4"	19.6
D11	28	6	4'-4"	19.6
D12	28	6	4'-4"	19.6
D13	28	6	4'-4"	19.6
D14	28	6	4'-4"	19.6
D15	28	6	4'-4"	19.6
D16	28	6	4'-4"	19.6
D17	28	6	4'-4"	19.6
D18	28	6	4'-4"	19.6
D19	28	6	4'-4"	19.6
D20	28	6	4'-4"	19.6
D21	28	6	4'-4"	19.6
D22	28	6	4'-4"	19.6
D23	28	6	4'-4"	19.6
D24	28	6	4'-4"	19.6
D25	28	6	4'-4"	19.6
D26	28	6	4'-4"	19.6
D27	28	6	4'-4"	19.6
D28	28	6	4'-4"	19.6
D29	28	6	4'-4"	19.6
D30	28	6	4'-4"	19.6
D31	28	6	4'-4"	19.6
D32	28	6	4'-4"	19.6
D33	28	6	4'-4"	19.6
D34	28	6	4'-4"	19.6
D35	28	6	4'-4"	19.6
D36	28	6	4'-4"	19.6
D37	28	6	4'-4"	19.6
D38	28	6	4'-4"	19.6
D39	28	6	4'-4"	19.6
D40	28	6	4'-4"	19.6
D41	28	6	4'-4"	19.6
D42	28	6	4'-4"	19.6
D43	28	6	4'-4"	19.6
D44	28	6	4'-4"	19.6
D45	28	6	4'-4"	19.6
D46	28	6	4'-4"	19.6
D47	28	6	4'-4"	19.6
D48	28	6	4'-4"	19.6
D49	28	6	4'-4"	19.6
D50	28	6	4'-4"	19.6
D51	28	6	4'-4"	19.6
D52	28	6	4'-4"	19.6
D53	28	6	4'-4"	19.6
D54	28	6	4'-4"	19.6
D55	28	6	4'-4"	19.6
D56	28	6	4'-4"	19.6
D57	28	6	4'-4"	19.6
D58	28	6	4'-4"	19.6
D59	28	6	4'-4"	19.6
D60	28	6	4'-4"	19.6
D61	28	6	4'-4"	19.6
D62	28	6	4'-4"	19.6
D63	28	6	4'-4"	19.6
D64	28	6	4'-4"	19.6
D65	28	6	4'-4"	19.6
D66	28	6	4'-4"	19.6
D67	28	6	4'-4"	19.6
D68	28	6	4'-4"	19.6
D69	28	6	4'-4"	19.6
D70	28	6	4'-4"	19.6
D71	28	6	4'-4"	19.6
D72	28	6	4'-4"	19.6
D73	28	6	4'-4"	19.6
D74	28	6	4'-4"	19.6
D75	28	6	4'-4"	19.6
D76	28	6	4'-4"	19.6
D77	28	6	4'-4"	19.6
D78	28	6	4'-4"	19.6
D79	28	6	4'-4"	19.6
D80	28	6	4'-4"	19.6
D81	28	6	4'-4"	19.6
D82	28	6	4'-4"	19.6
D83	28	6	4'-4"	19.6
D84	28	6	4'-4"	19.6
D85	28	6	4'-4"	19.6
D86	28	6	4'-4"	19.6
D87	28	6	4'-4"	19.6
D88	28	6	4'-4"	19.6
D89	28	6	4'-4"	19.6
D90	28	6	4'-4"	19.6
D91	28	6	4'-4"	19.6
D92	28	6	4'-4"	19.6
D93	28	6	4'-4"	19.6
D94	28	6	4'-4"	19.6
D95	28	6	4'-4"	19.6
D96	28	6	4'-4"	19.6
D97	28	6	4'-4"	19.6
D98	28	6	4'-4"	19.6
D99	28	6	4'-4"	19.6
D100	28	6	4'-4"	19.6

ADDITIONAL BARS FOR MANHOLE AT STA. 94+00

BAR NO	SIZE	LENGTH	SHAPE	WEIGHT
G1	16	4	22'-9"	7.23
G2	8	4	25'-7"	1.6
G3	28	4	12'-9"	26.4
G4	6	4	25'-0"	1.00
G5	28	4	7'-4"	12.2
G6	28	5	6'-6"	17.6
G7	28	6	4'-4"	18.2
G8	28	6	4'-4"	18.2
G9	28	6	4'-4"	18.2
G10	28	6	4'-4"	18.2
G11	28	6	4'-4"	18.2
G12	28	6	4'-4"	18.2
G13	28	6	4'-4"	18.2
G14	28	6	4'-4"	18.2
G15	28	6	4'-4"	18.2
G16	28	6	4'-4"	18.2
G17	28	6	4'-4"	18.2
G18	28	6	4'-4"	18.2
G19	28	6	4'-4"	18.2
G20	28	6	4'-4"	18.2
G21	28	6	4'-4"	18.2
G22	28	6	4'-4"	18.2
G23	28	6	4'-4"	18.2
G24	28	6	4'-4"	18.2
G25	28	6	4'-4"	18.2
G26	28	6	4'-4"	18.2
G27	28	6	4'-4"	18.2
G28	28	6	4'-4"	18.2
G29	28	6	4'-4"	18.2
G30	28	6	4'-4"	18.2
G31	28	6	4'-4"	18.2
G32	28	6	4'-4"	18.2
G33	28	6	4'-4"	18.2
G34	28	6	4'-4"	18.2
G35	28	6	4'-4"	18.2
G36	28	6	4'-4"	18.2
G37	28	6	4'-4"	18.2
G38	28	6	4'-4"	18.2
G39	28	6	4'-4"	18.2
G40	28	6	4'-4"	18.2
G41	28	6	4'-4"	18.2
G42	28	6	4'-4"	18.2
G43	28	6	4'-4"	18.2
G44	28	6	4'-4"	18.2
G45	28	6	4'-4"	18.2
G46	28	6	4'-4"	18.2
G47	28	6	4'-4"	18.2
G48	28	6	4'-4"	18.2
G49	28	6	4'-4"	18.2
G50	28	6	4'-4"	18.2
G51	28	6	4'-4"	18.2
G52	28	6	4'-4"	18.2
G53	28	6	4'-4"	18.2
G54	28	6	4'-4"	18.2
G55	28	6	4'-4"	18.2
G56	28	6	4'-4"	18.2
G57	28	6	4'-4"	18.2
G58	28	6	4'-4"	18.2
G59	28	6	4'-4"	18.2
G60	28	6	4'-4"	18.2
G61	28	6	4'-4"	18.2
G62	28	6	4'-4"	18.2
G63	28	6	4'-4"	18.2
G64	28	6	4'-4"	18.2
G65	28	6	4'-4"	18.2
G66	28	6	4'-4"	18.2
G67	28	6	4'-4"	18.2
G68	28	6	4'-4"	18.2
G69	28	6	4'-4"	18.2
G70	28	6	4'-4"	18.2
G71	28	6	4'-4"	18.2
G72	28	6	4'-4"	18.2
G73	28	6	4'-4"	18.2
G74	28	6	4'-4"	18.2
G75	28	6	4'-4"	18.2
G76	28	6	4'-4"	18.2
G77	28	6		



NOTES:
 MINIMUM STEEL CLEARANCE SHALL BE 2" EXCEPT AS NOTED
 MINIMUM LAP OF REINFORCEMENT SHALL BE 33 DIAMETERS
 RING IF POSSIBLE OR BURN OFF REINFORCING BARS

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

BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
Q3	16	4	28'-6"	273
Q4	8	4	28'-4"	151
Q5	25	4	12'-9"	213
Q6	6	4	28'-10"	104
Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
C8	29	6	4'-8"	203

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	94/90	COOK	598	465

BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
D1	5	5	7'-	40
D2	14	5	5'-	17
D3	8	8	2'-	56
F2	27	4	2'-0"	118
D5	5	5	10'-6"	15
D6	12	4	13'-2"	63
D8	16	4	13'-2"	173
D9	14	4	4'-2"	61
D10	2	7	7'-	25
F1	8	4	2'-	27
D13	4	9	9'-2"	102
L14	4	4	2'-2"	28
L15	16	1	7'-5"	33
D16	10	5	8'-6"	57
C1	6	6	2'-5"	78
C2	10	6	9'-	145
C3	6	6	9'-	35
C4	2	6	5'-2"	11

BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
MK Q1	13	7	15'-1"	348
MK Q2	15	5	9'-1"	144
MK B1	13	11	13'-0"	888
MK D2	13	8	7'-6"	102
MK H1	38	8	11'-0"	678

BILL OF MATERIAL				
BARS TYPICAL OF ALL TYPE "B" MANHOLES				
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT

ADDITIONAL BARS FOR MANHOLE AT STATION:				
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
D3	16	4	28'-0"	246
Q4	8	4	28'-10"	156
Q5	25	4	12'-9"	213
Q6	6	4	28'-10"	104
Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
C8	29	6	4'-8"	203

ADDITIONAL BARS FOR MANHOLE AT STATION:				
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
D3	16	4	28'-0"	246
Q4	8	4	28'-10"	156
Q5	25	4	12'-9"	213
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Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
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ADDITIONAL BARS FOR MANHOLE AT STATION:				
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
D3	16	4	28'-0"	246
Q4	8	4	28'-10"	156
Q5	25	4	12'-9"	213
Q6	6	4	28'-10"	104
Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
C8	29	6	4'-8"	203

ADDITIONAL BARS FOR MANHOLE AT STATION:				
BAR NO.	SIZE	LENGTH	SHAPE	WEIGHT
D3	16	4	28'-0"	246
Q4	8	4	28'-10"	156
Q5	25	4	12'-9"	213
Q6	6	4	28'-10"	104
Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
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ADDITIONAL BARS FOR MANHOLE AT STATION:				
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D3	16	4	28'-0"	246
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ADDITIONAL BARS FOR MANHOLE AT STATION:				
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D3	16	4	28'-0"	246
Q4	8	4	28'-10"	156
Q5	25	4	12'-9"	213
Q6	6	4	28'-10"	104
Q7	26	4	7'-6"	127
D17	29	5	6'-6"	196
C8	29	6	4'-8"	203

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

REVISIONS	DATE
NAME	

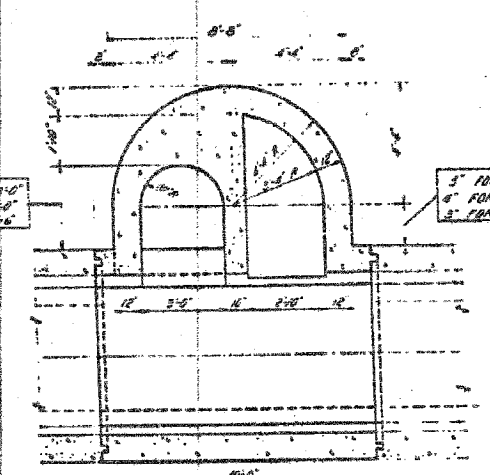
SHEET JC-13 OF JC-22
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS
 SCALE: NTS
 DATE: 07/07/05
 DRAWN BY: BDC
 CHECKED BY: BLU

FOR INFORMATION ONLY

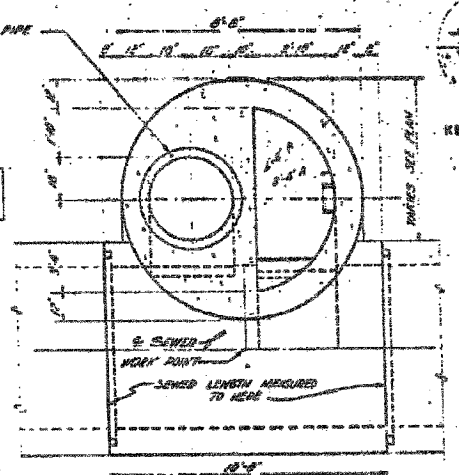
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	467
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		*1818, ETC. 2324.6-1PR-9		

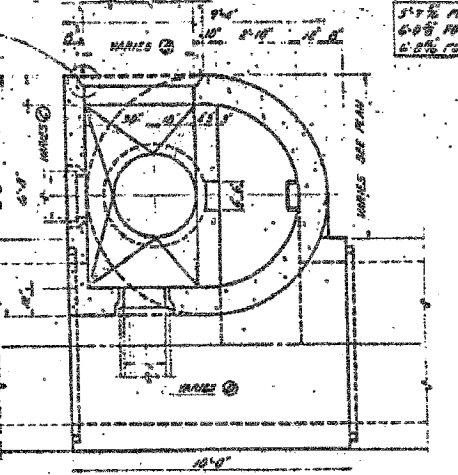
ROUTE NO.	SECTION	SUBDIV.	LEGAL SURVEY	DATE
94	2025	0000	SD	SS



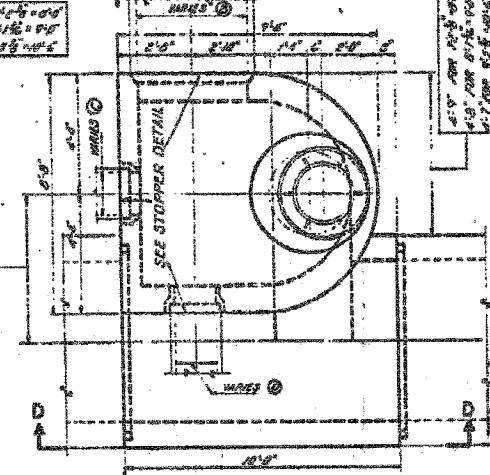
SECTIONAL PLAN C-C



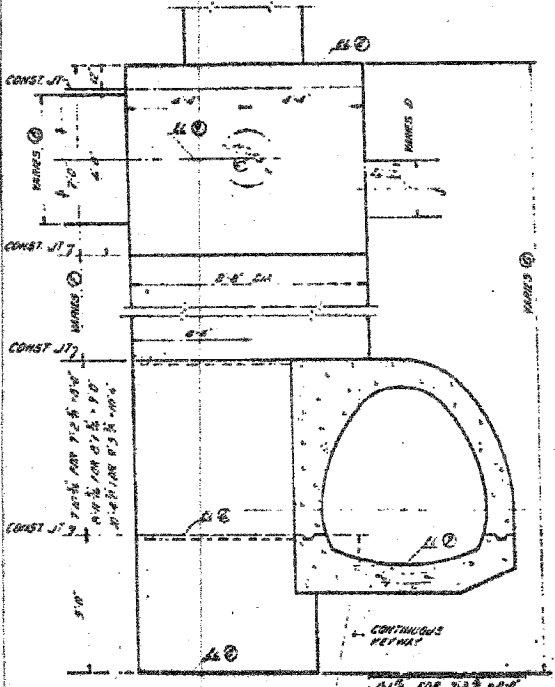
SECTIONAL PLAN B-B



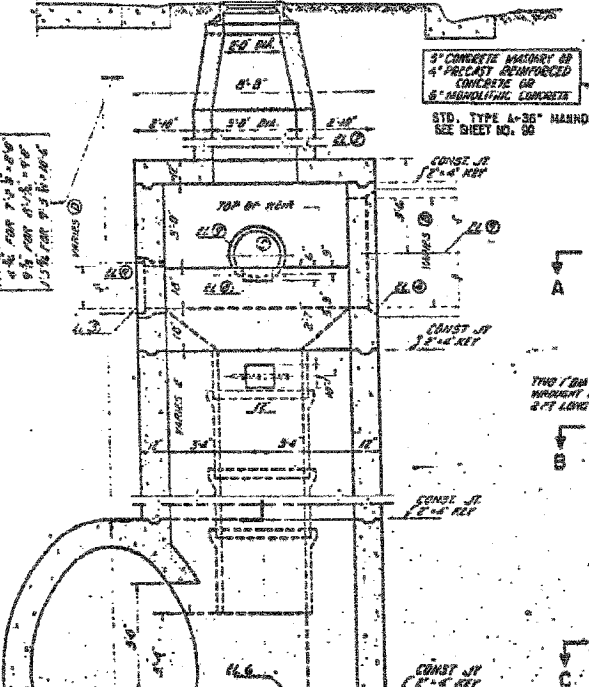
SECTIONAL PLAN A-A



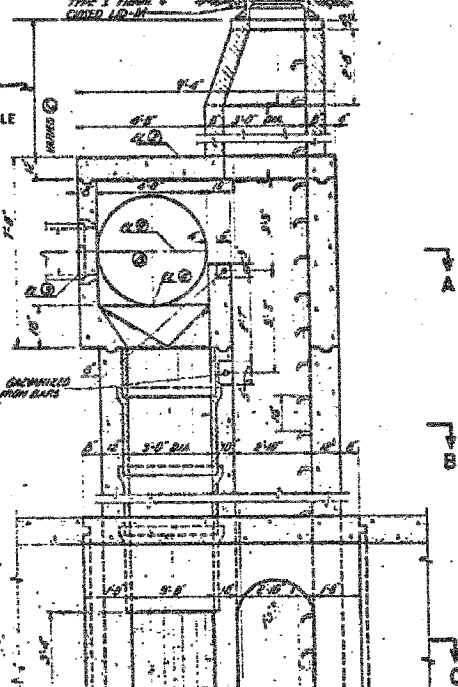
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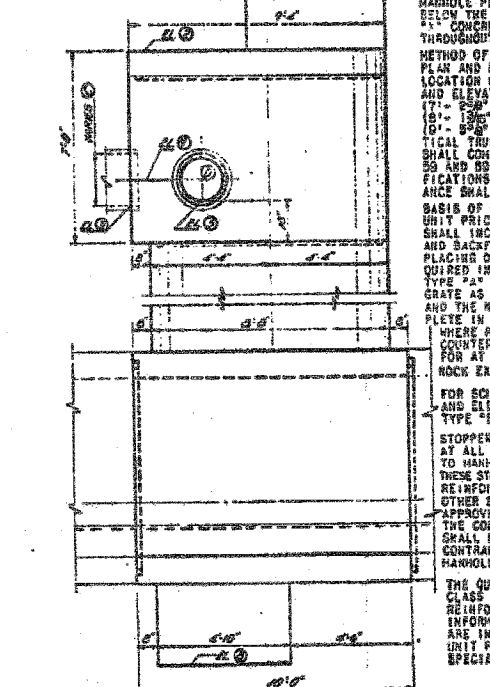
SECTION G-G



SECTION E-E



SECTION A-A



SECTION D-D

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 ACCESS 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 (1) 36" x 36" x 8'-0" AND (2) 36" x 36" x 10'-0" SEMI-ELLIPTICAL TRUNK SENSORS. THIS WORK SHALL COMPLY WITH SECTIONS 22.50 AND 22.51 OF THE STANDARD SPECIFICATIONS. MINIMUM STEEL CLEARANCE SHALL BE 2".
 BASIS OF PAYMENT: THE CONTRACT UNIT PRICE OF TYPE "A" MANHOLE SHALL INCLUDE ALL EXCAVATION AND BACKFILL, FURNISHING AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "A" 36" MANHOLE FRAME AND GRATE AS SHOWN ON THE PLANS AND THE NECESSARY CEMENT COMPLETE IN PLACE AS REQUIRED. WHERE ROCK EXCAVATION IS ENCOUNTERED IT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ROCK EXCAVATION FOR STRUCTURES.
 FOR SCHEDULE OF DIMENSIONS AND ELEVATIONS FOR MANHOLE TYPE "B" SEE SHEET NO. 48.
 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 BARS ARE FOR INFORMATION PURPOSES ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE B.

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

SHEET JC-15 OF JC-22

FOR INFORMATION ONLY

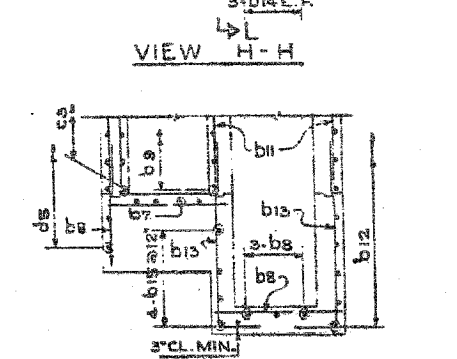
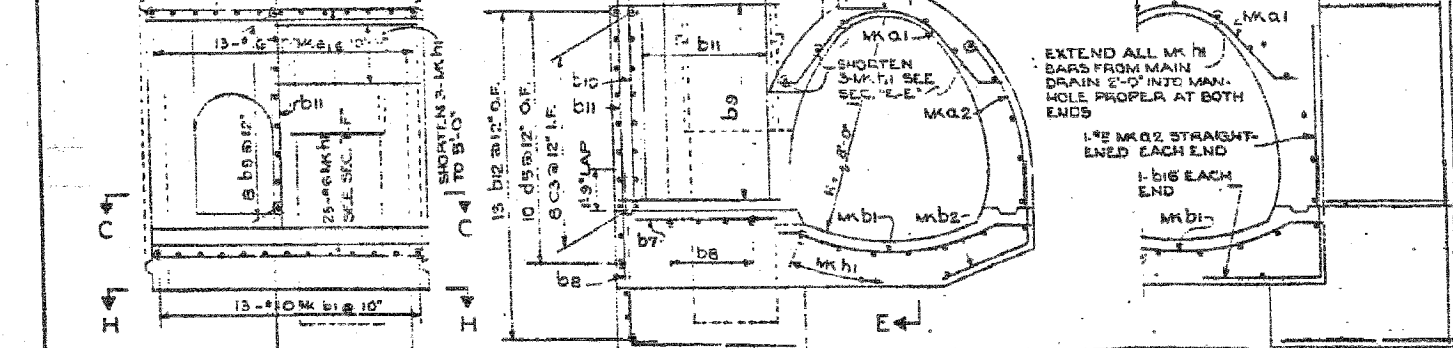
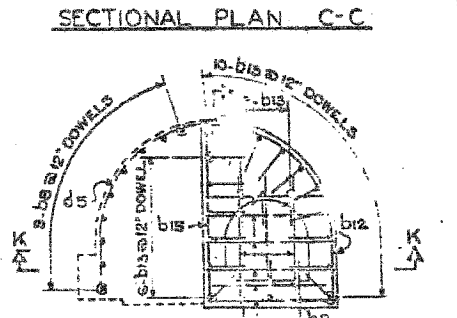
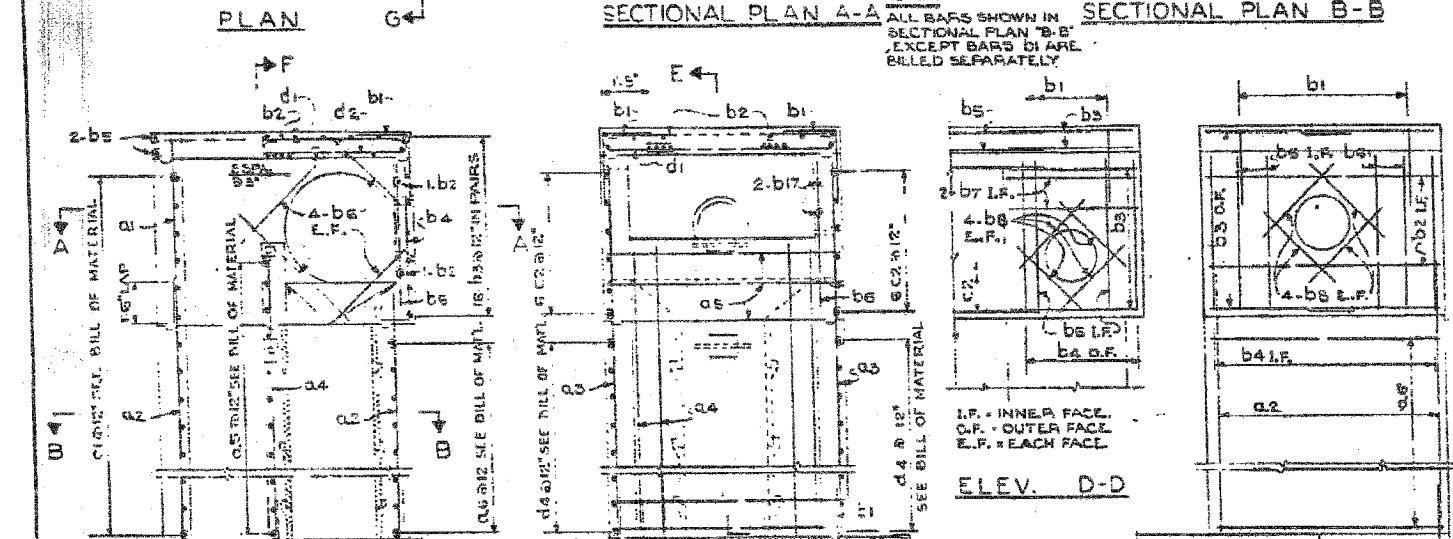
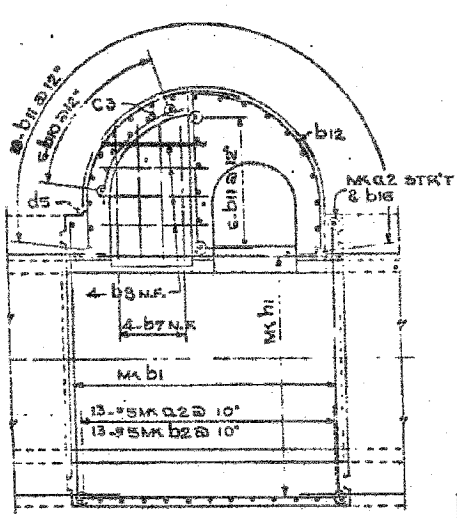
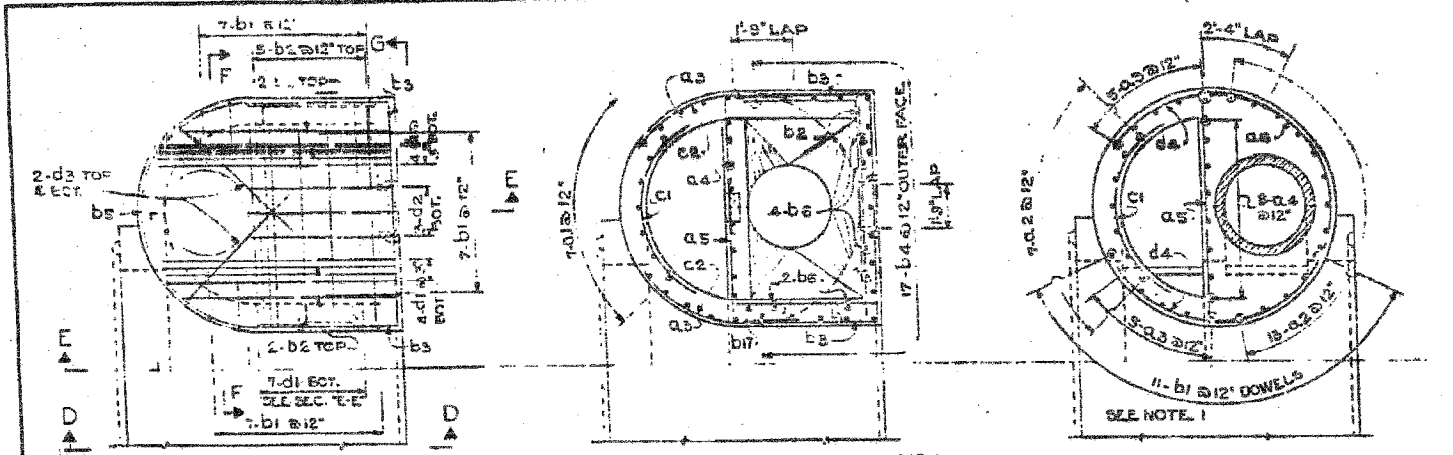
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB 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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NOTES:
 MINIMUM STEEL CLEARANCE SHALL BE 2" EXCEPT AS NOTED
 MINIMUM LAP OF REINFORCEMENT SHALL BE 33 DIAMETERS
 BEND IF POSSIBLE OR BURN OFF REINFORCING BARS IN
 FIELD TO CLEAR OPENINGS.

REINFORCING:
 TYPE B-36 N SHOWN
 TYPE B-36 S OPPOSITE HAND

EXTEND ALL MK #1
 BARS FROM MAIN
 DRAIN 2'-0" INTO MAIN
 HOLE PROPER AT BOTH
 ENDS
 1" BARS EACH
 END
 MK #1

REV.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2022-1	COOK	598	57

BAR NO.	SIZE	LENGTH	SHAPE	NO. OF
a1	7	4	B-10	52
b1	3/4	3	4-3	47
b2	1/2	3	4-3	108
b3	1/2	3	4-3	127
b4	1/2	3	4-3	32
b5	1/2	3	4-3	98
b6	1/2	3	4-3	25
b7	1/2	3	4-3	188
b8	1/2	3	4-3	26
b9	1/2	3	4-3	48
b10	1/2	3	4-3	12
b11	1/2	3	4-3	162
b12	1/2	3	4-3	35
b13	1/2	3	4-3	26
b14	1/2	3	4-3	18
b15	1/2	3	4-3	10
b16	1/2	3	4-3	108
b17	1/2	3	4-3	60

BAR NO.	SIZE	LENGTH	SHAPE	NO. OF
d1	15	7	8-0	299
d2	8	7	8-0	39
d3	4	7	8-0	47
d4	10	7	8-0	220

BAR NO.	SIZE	LENGTH	SHAPE	NO. OF
e1	5-8M	1'-6"	3'-0"	
e2	4-6M	10'	3'-0"	
e3	7-1"	2'-0"	4'-2"	

BAR NO.	SIZE	LENGTH	SHAPE	NO. OF
f1	24	6	8-8	308
f2	37	7	8-8	516

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

REV.	NAME	DATE

SHEET JC-16 OF JC-22
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS
 SCALE: NTS
 DATE: 07/07/05
 DRAWN BY: BDC
 CHECKED BY: BLU

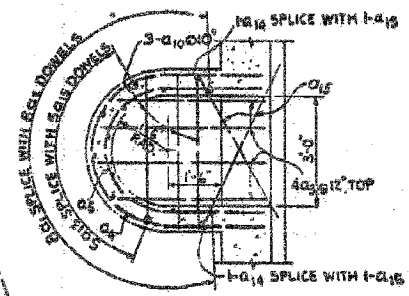
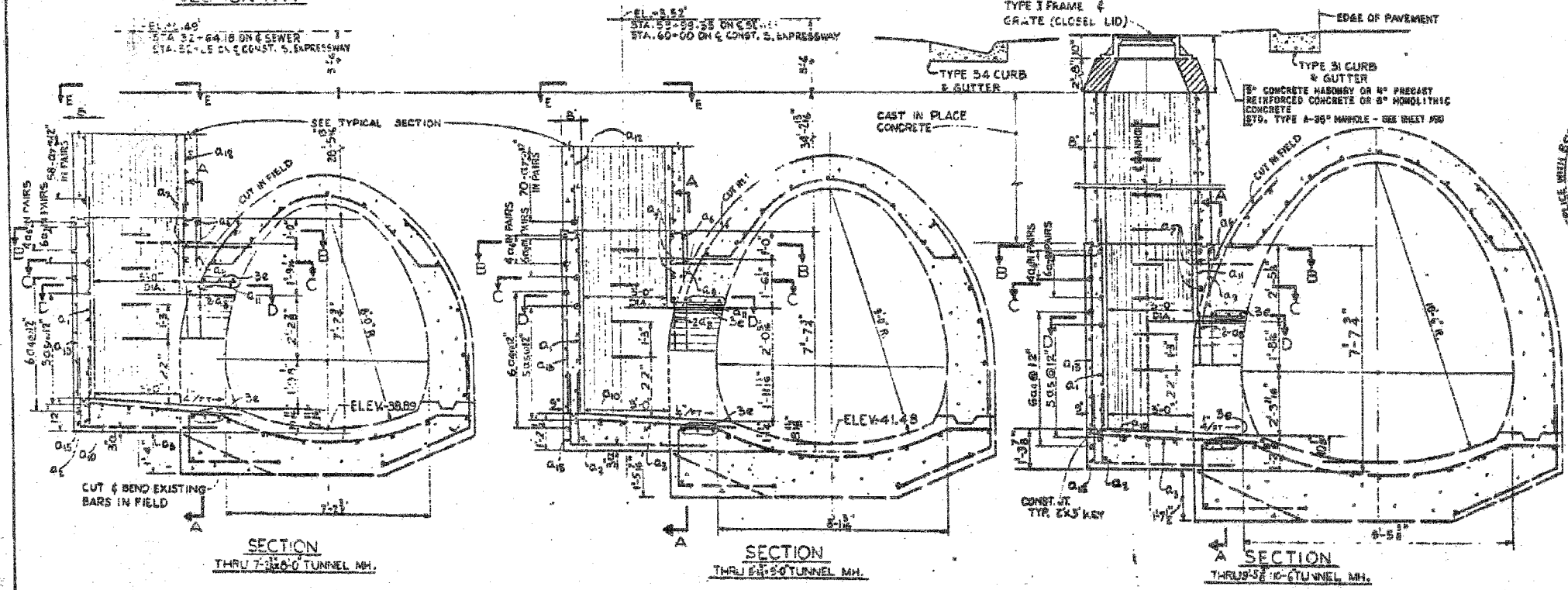
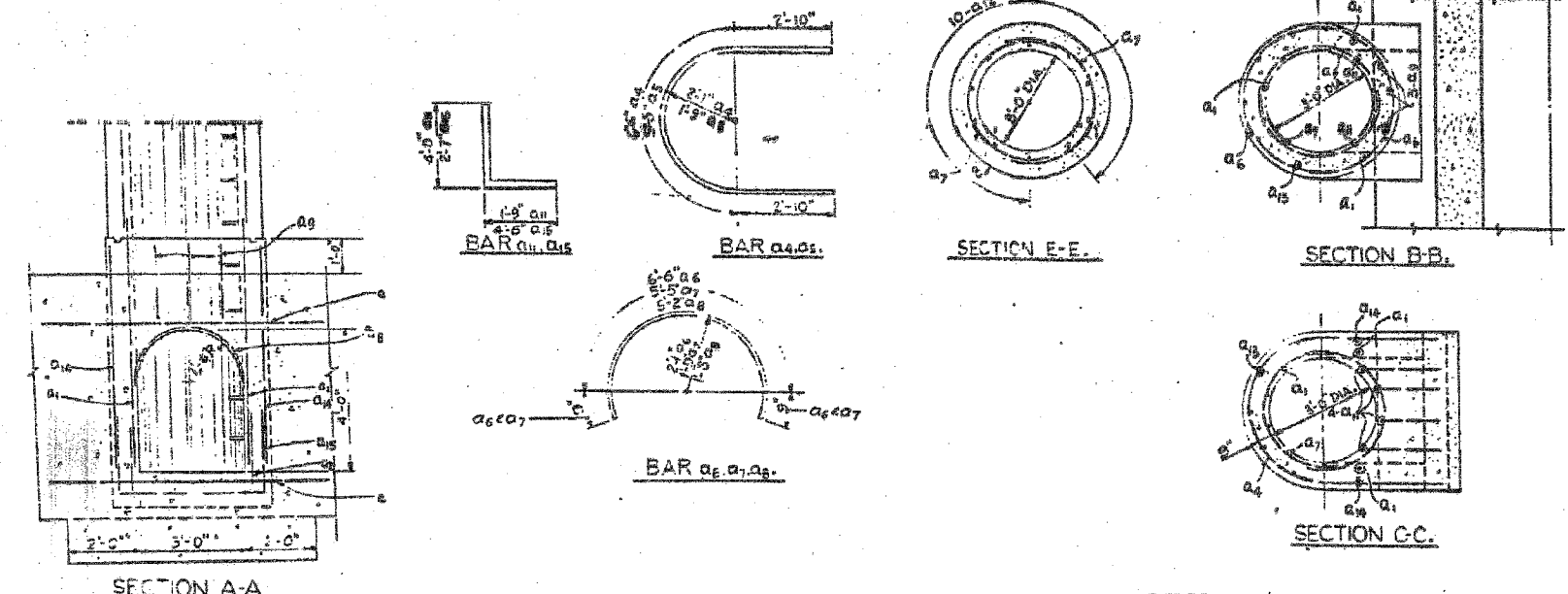
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	94/90	COOK	598	471

BAR SIZE	NO.	SHAPE	LGTH	WT.
a1	4	—	8'-0"	88
a2	4	—	2'-8"	14
a3	4	—	5'-3"	14
a4	6	—	12'-2"	49
a5	5	—	11'-1"	37
a6	4	—	8'-0"	21
a7	2	—	5'-2"	7
a8	3	—	2'-0"	4
a9	3	—	2'-0"	4
a10	4	—	5'-3"	15
a11	3	—	6'-3"	21
a12	2	—	5'-3"	7
a13	4	—	7'-1"	33
a14	6	—	8'-6"	136
a15	4	6A	6'-11"	256
a16	3	10	28'-0"	197
WT. OF BARS M.H. STA. 32+64.18				
882				
VOL. OF CONC. M.H. STA. 32+64.18				
11.5				
a17	4	76	2'-11"	352
a18	4	10	33'-8"	223
WT. OF BARS M.H. STA. 59+99.55				
886				
VOL. OF CONC. M.H. STA. 59+99.55				
13.0				

NOTE: VOLUME OF CONCRETE FOR M.H. DOES NOT INCLUDE MAIN DRAIN.



NOTES:
 MATERIALS: THAT PORTION OF THE MANHOLE PROVIDED FOR ACCESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD TYPE "30" MANHOLE PLANS AND SPECIFICATIONS BELOW THE ACCESS PORTION CLASS "1" CONCRETE SHALL BE USED THROUGHOUT.
 METHOD OF CONSTRUCTION: SEE PLAN AND PROFILE SHEETS FOR LOCATION OF TYPE "30" MANHOLES AND ELEVATION OF INVERTS OF SEMI-ELLIPTICAL TROUGH BOXES. THIS WORK SHALL COMPLY WITH SECTIONS 52, 53 & 60 OF THE STANDARD SPECIFICATIONS HIGHWAY STRUCTURE SHALL BE 3".
 BASIS OF PAYMENT: THE CONTRACT UNIT PRICE OF TYPE "30" MANHOLE SHALL INCLUDE ALL EXCAVATION AND BACKFILL, FORMWORK AND PLACING OF ALL MATERIALS REQUIRED INCLUDING THE STANDARD TYPE "30" MANHOLE, FRAME & GRATE AS SHOWN ON THE PLANS & THE NECESSARY CEMENT COMPLETE IN PLACE AS REQUIRED HEREIN AND EXCAVATION IS EXCEPTED. IT WILL BE PAID FOR AT THE UNIT PRICE BID FOR SUCH EXCAVATION STRUCTURES.
 THE QUANTITIES SHOWN FOR CLASS 2 CONCRETE AND REINFORCEMENT BARS ARE FOR INFORMATION PURPOSES ONLY AND ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE, SPECIAL, TYPE C.

NOTE: BENDING DIMENSIONS OUT TO OUT OF BARS.

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

NAME	DATE

SHEET JC-19 OF JC-22
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBERS
 EXISTING DROP MANHOLE PLANS

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

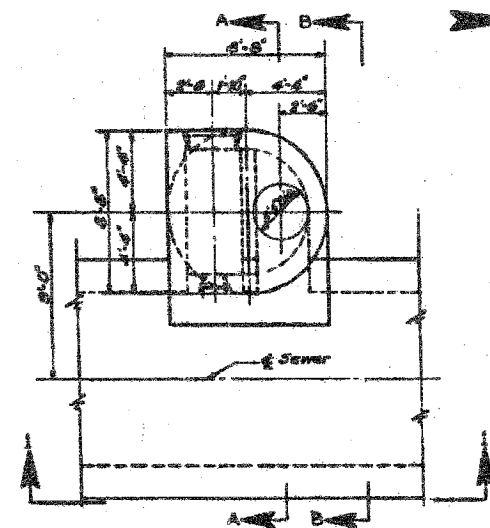
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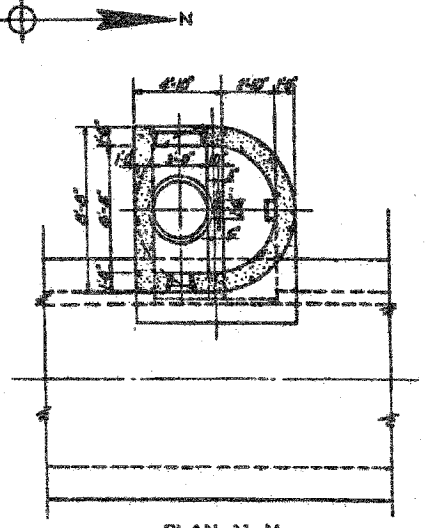
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	473
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		*1818, ETC, 2324.6-1PIR-9		

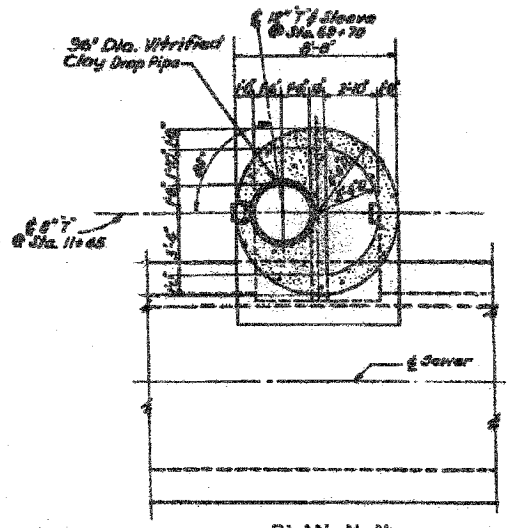
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 94	S-2324.6	COOK	598	473
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		*1818, ETC, 2324.6-1PIR-9		



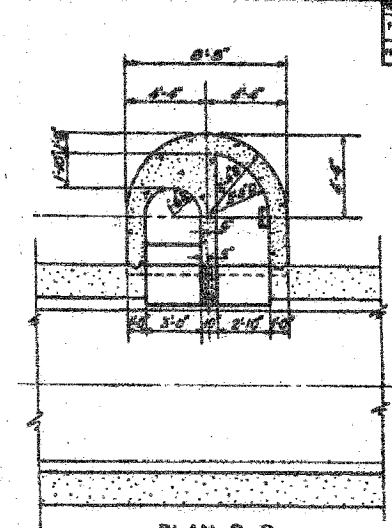
TOP PLAN
Item 2



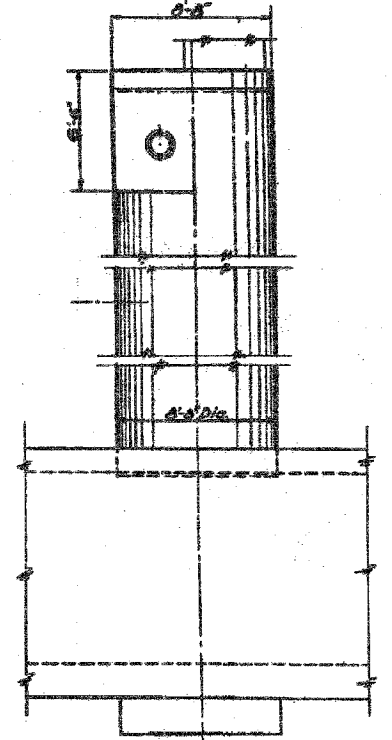
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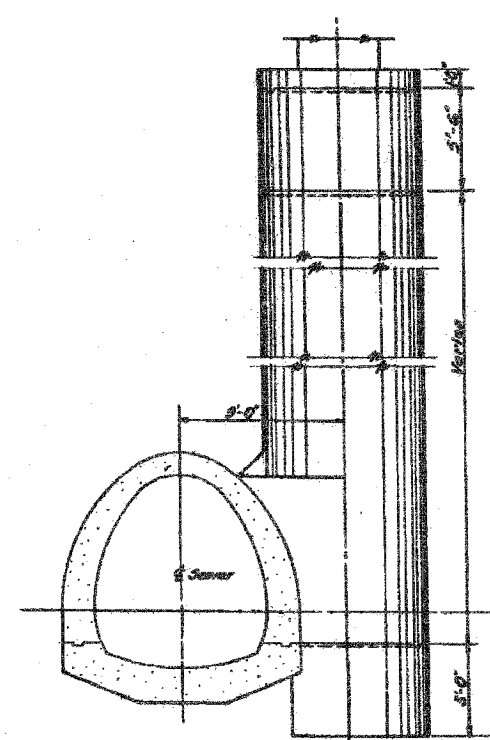
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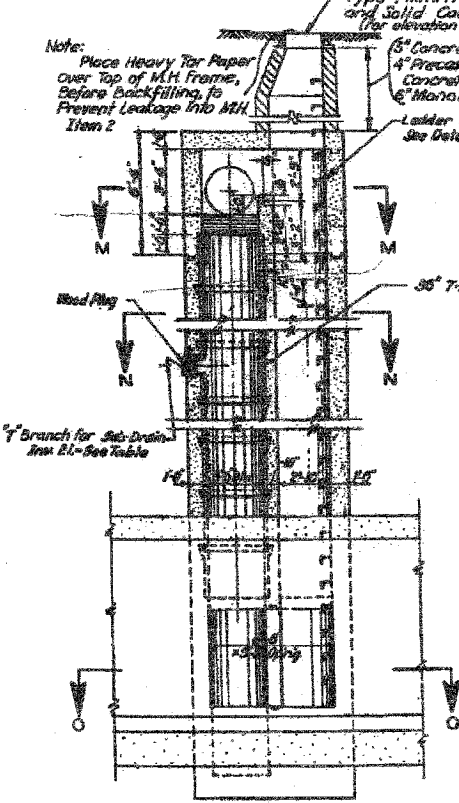
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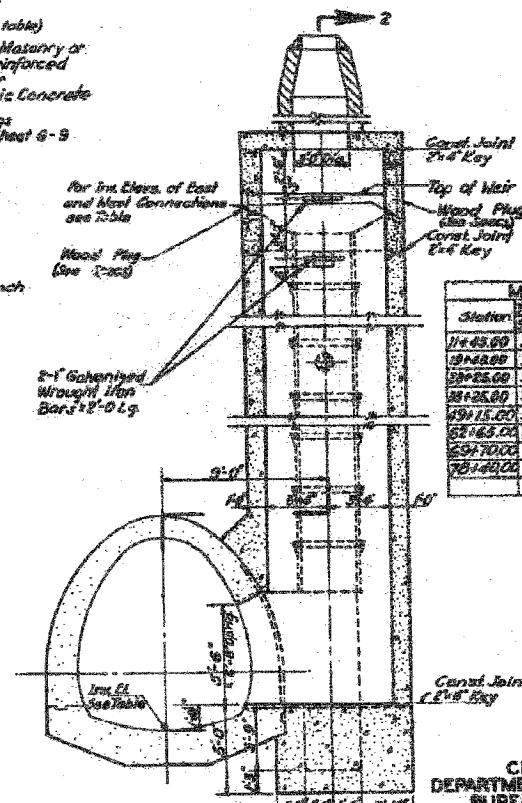
ELEVATION 1-1



SECTION B-B



SECTION 2-2



SECTION A-A

Note: Place Heavy Tar Paper over Top of M.H. Frame, Before Backfilling, to Prevent Leakage into M.H. Item 2

Note: 1" Branch for Sub-Drain, Inv. 21'-00" table

Note: Connection to 8" x 10" Sewer as shown. For Type I M.H. Frame see Sheet G-7. For location of Manholes see Sheets G-2 to G-7 incl. For Reinforcement Details see Sheet S-11

Station	8" x 10" Sewer	12" x 15" Sewer	18" x 24" Sewer	Main Drain
11+45.00	36"	48"	60"	-4.75
11+48.00	36"	48"	60"	-4.15
11+52.00	36"	48"	60"	-4.00
11+55.00	36"	48"	60"	-4.34
11+58.00	36"	48"	60"	-4.58
12+00.00	36"	48"	60"	-5.50
12+05.00	36"	48"	60"	-6.05
12+10.00	36"	48"	60"	-6.10

Station	Elevation
11+45.00	-4.15
11+48.00	+8.88
11+52.00	+8.92
11+55.00	-1.72
11+58.00	-2.45
12+00.00	-4.57
12+05.00	+6.51
12+10.00	+1.30

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 3-2324.6-1D
MAIN DRAIN
MANHOLE DETAILS

SCALE 1/4"=1'-0"

MARCH 1981

SHEET NO. G-8 OF 25 SHEETS

Drawn by: A.C. Haffarick
Checked by: P.H. Ruffalo
Approved by: [Signature]

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REVISIONS	
NAME	DATE

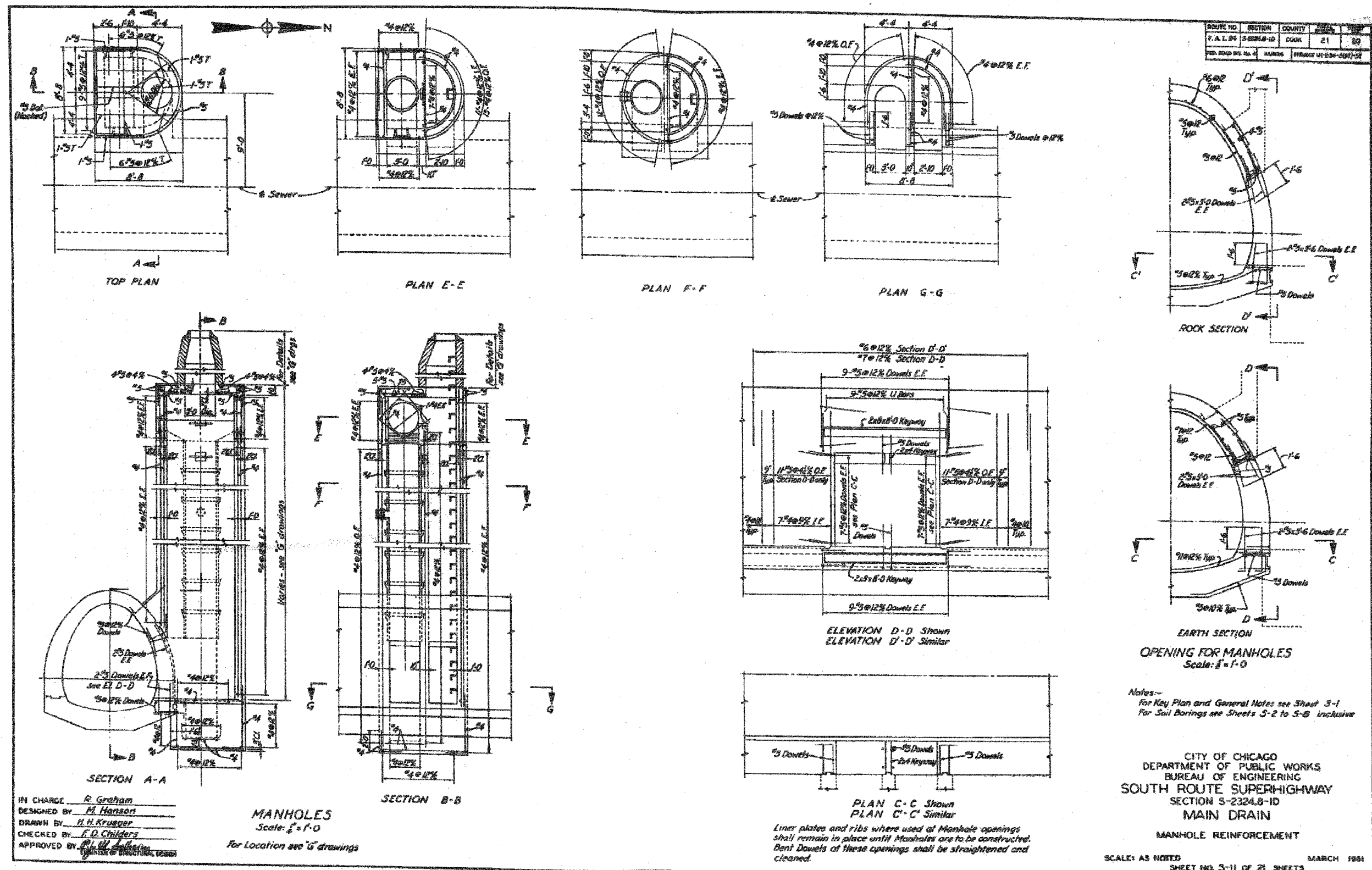
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
JUNCTION CHAMBERS
EXISTING DROP MANHOLE PLANS

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

SHEET JC-21 OF JC-22

6/24/2005 10:52:39 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	474
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62302		*181B, ETC, 2324.6-1PIR-9		



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

MANHOLES
 Scale: 1" = 1'-0"
 For Location see "G" drawings

ELEVATION D-D Shown
 ELEVATION D'-D Similar
 PLAN C-C Shown
 PLAN C'-C Similar
 Liner plates and ribs where used at Manhole openings shall remain in place until Manholes are to be 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
 SHEET NO. S-11 OF 21 SHEETS
 MARCH 1981

SHEET JC-22 OF JC-22

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB 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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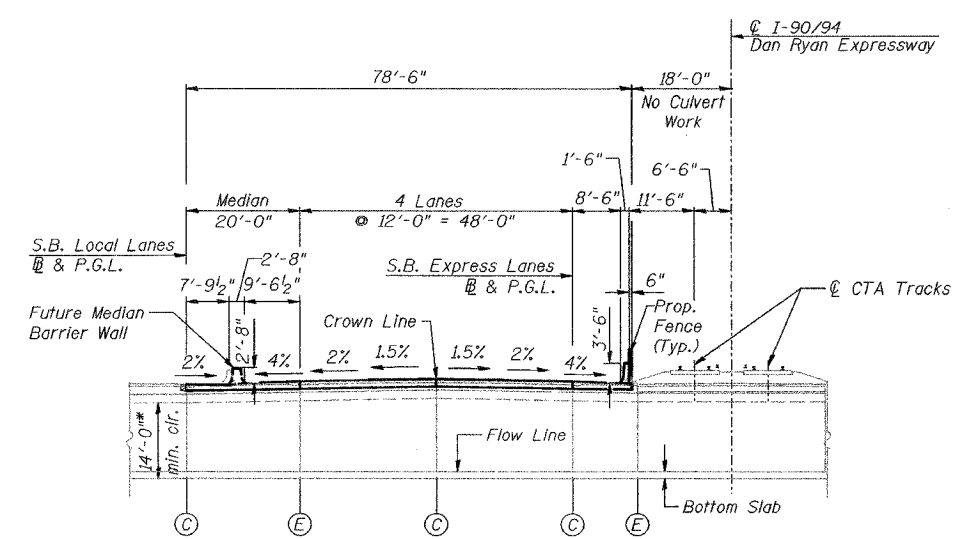
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	475
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	• (1818, ETC, 2324.6-IPR-9			

Benchmark: BM No. 3540

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

Existing Structure: The existing structure was built in 1962 under Section S-2323.2-4B and is identified as S.N. 016-2625. The structure is a 12'-0" clear span by 14'-0" clear height double barrel reinforced concrete box culvert. It conveys sanitary and storm water under the Dan Ryan Expressway for the MWRDGC. The length of culvert under the expressway is 325'-0" and the culvert transitions horizontally, vertically and in cross section to connect to an existing circular brick sewer under the centerline of 39th Street. The top slab of the culvert is the expressway pavement and consists of a minimum of 1'-3" of reinforced concrete with an approximately 5" thick overlay (either concrete or bituminous). The centerline of the culvert has no skew relative to the Dan Ryan baselines. There are 20'-6" long approach slabs on each side of the culvert over the 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.	452
Bituminous Surface Removal, 5"	Sq. Yd.	143
Bituminous Surface Removal (Variable Depth)	Sq. Yd.	82
Approach Slab Removal	Sq. Yd.	219
Concrete Superstructure	Cu. Yd.	112.2
Bridge Deck Grooving	Sq. Yd.	218
Protective Coat	Sq. Yd.	265
Reinforcement Bars, Epoxy Coated	Pound	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)

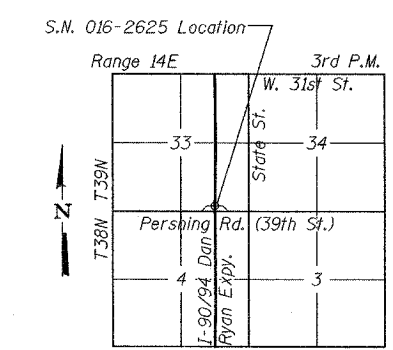
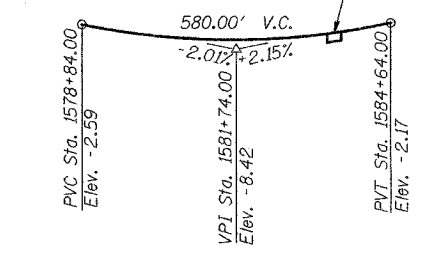
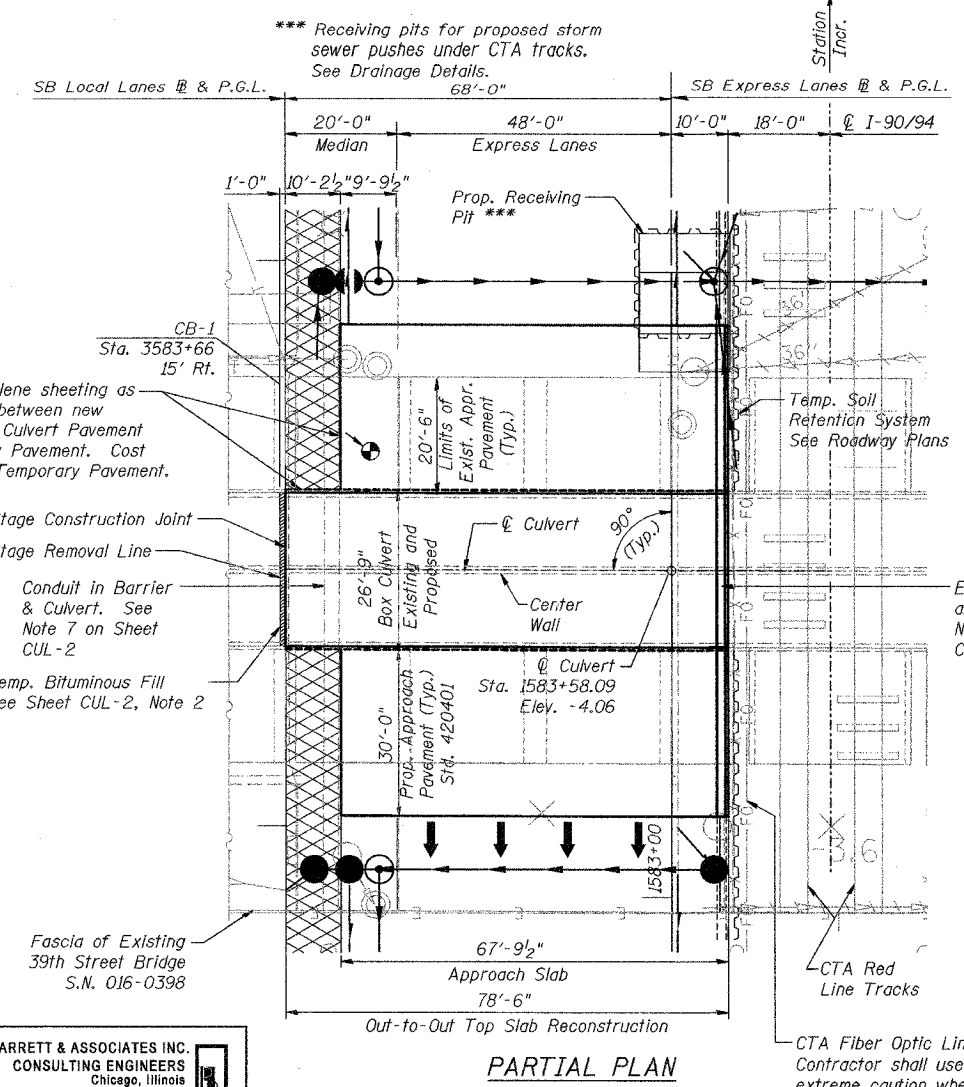
Existing:
 f'c = 3,500 psi
 fy = 40,000 psi (Reinforcement)

LEGEND

- CB-1 = 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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Ralph E. Adams
 ENGINEER OF BRIDGES AND STRUCTURES



Brian L. Umbright
 Date: July 7, 2005
 License Expires: November 30, 2006

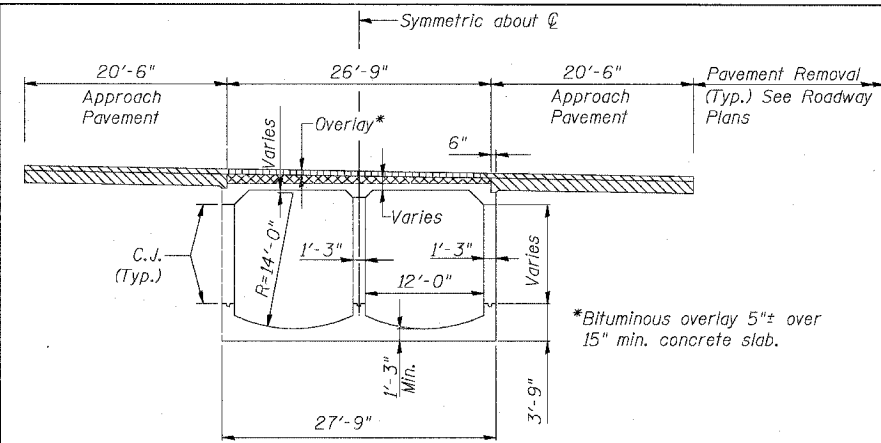
REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/09

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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
 SB EXPRESS LANE RECONSTRUCTION
 MWRD CULVERT, N. OF 39TH ST.,
 COOK COUNTY, S.N. 016-2625
 GENERAL PLAN

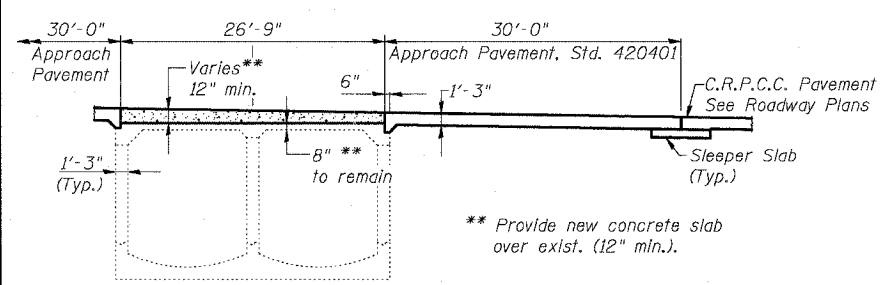
SCALE: N.T.S.
 DATE: 07/07/05
 DRAWN BY: DJM
 CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	476
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	*1818, ETC. 2324.6-1PJR-9			



EXISTING SECTION THRU CULVERT

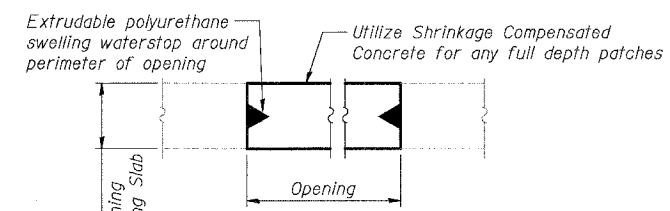
Exist. vertical, diagonal, and partially embedded horizontal reinforcement bars to be cleaned, straightened and incorporated into new concrete slab. Horizontal reinforcement bars that are not partially embedded in exist. slab shall be removed.



PROPOSED SECTION THRU CULVERT

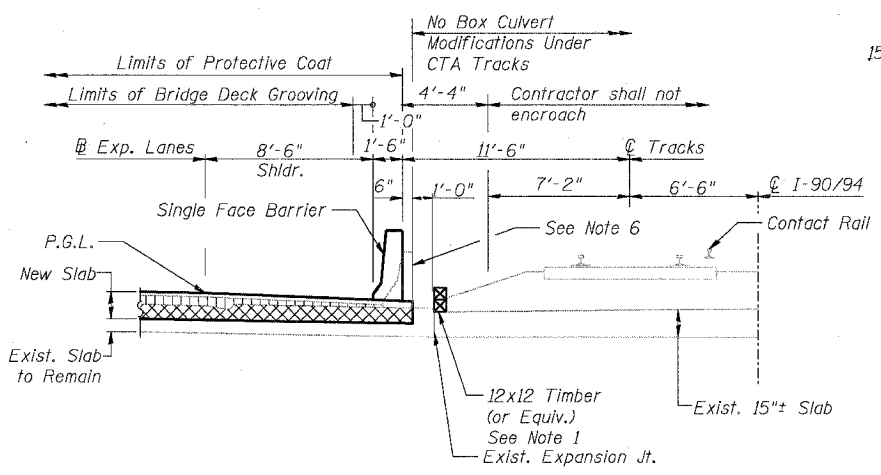
ANTICIPATED SEQUENCE OF CONSTRUCTION:

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



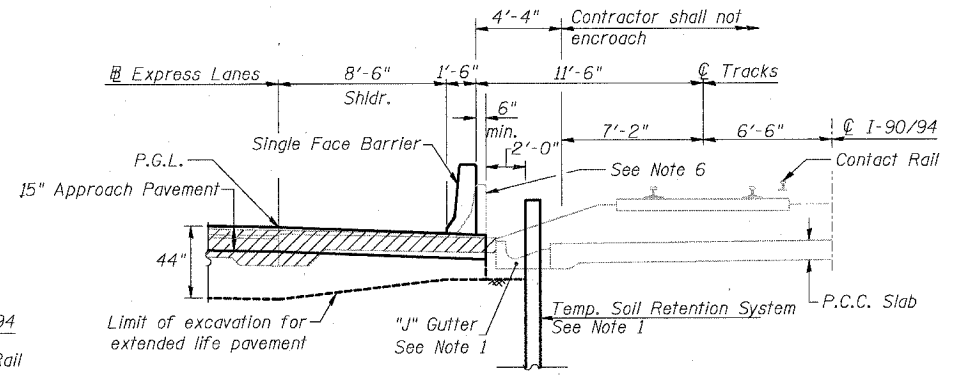
WATER SEAL DETAIL

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



SECTION AT (CULVERT SLAB)

See Note 4



SECTION AT CTA (APPROACH PAVEMENT)

See Note 4

NOTES

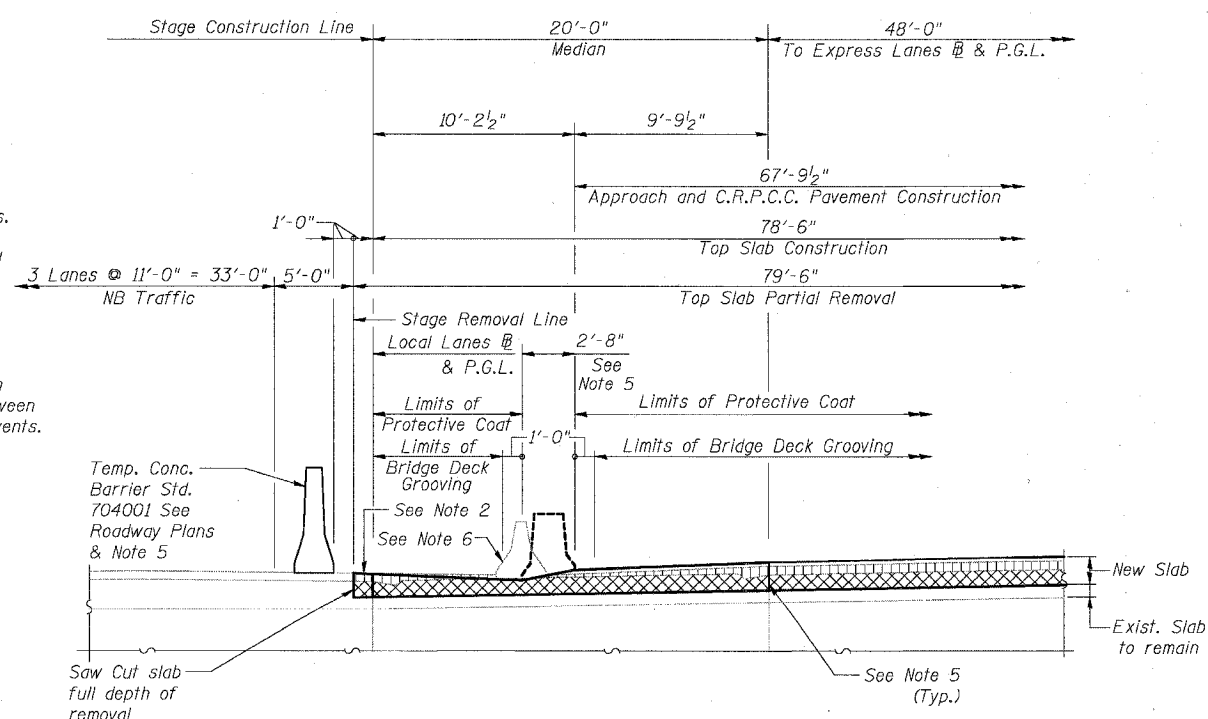
1. See Roadway Plans and Special Provisions for details and limits on either side of culvert. Do not damage PCC slab to remain under CTA tracks when installing or removing system.
2. Provide temporary pavement as a water seal to be removed by others. Provide polyethylene sheeting as indicated on Sheet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

LEGEND

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

ABBREVIATIONS

C.J. = Construction Joint



STAGING DETAILS @ EXPRESS/LOCAL LANES MEDIAN

See Longitudinal Section for Dimensions not shown

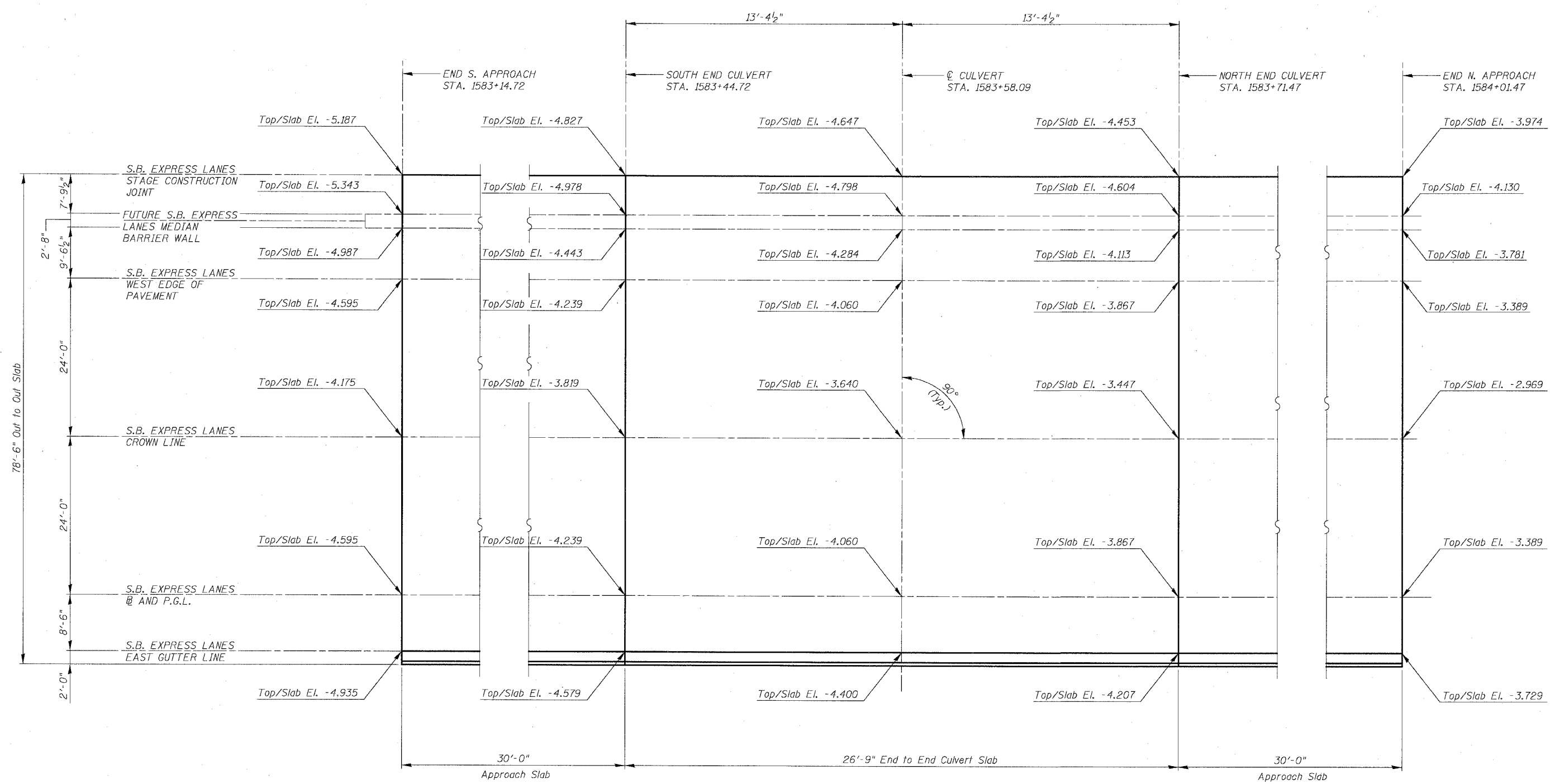
REVISIONS	NAME	DATE

SHEET CUL-2 OF CUL-14
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB 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	598	477
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		*1818, ETC, 2324.6-IPJR-9		

62302



PLAN

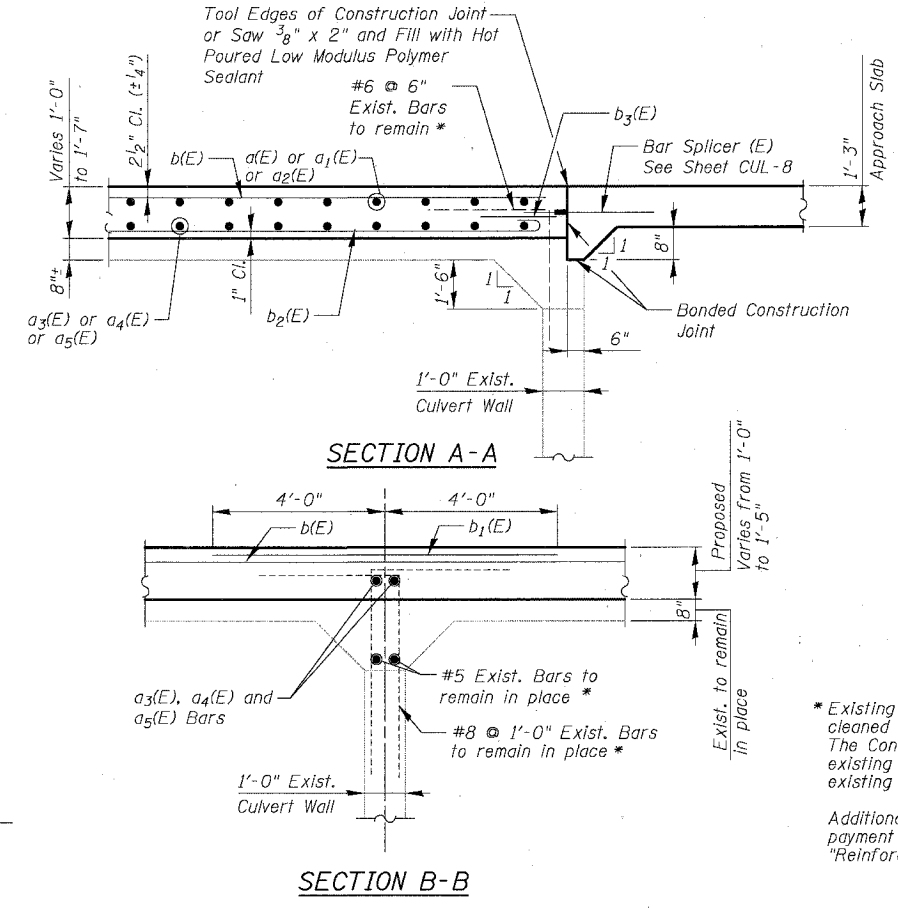
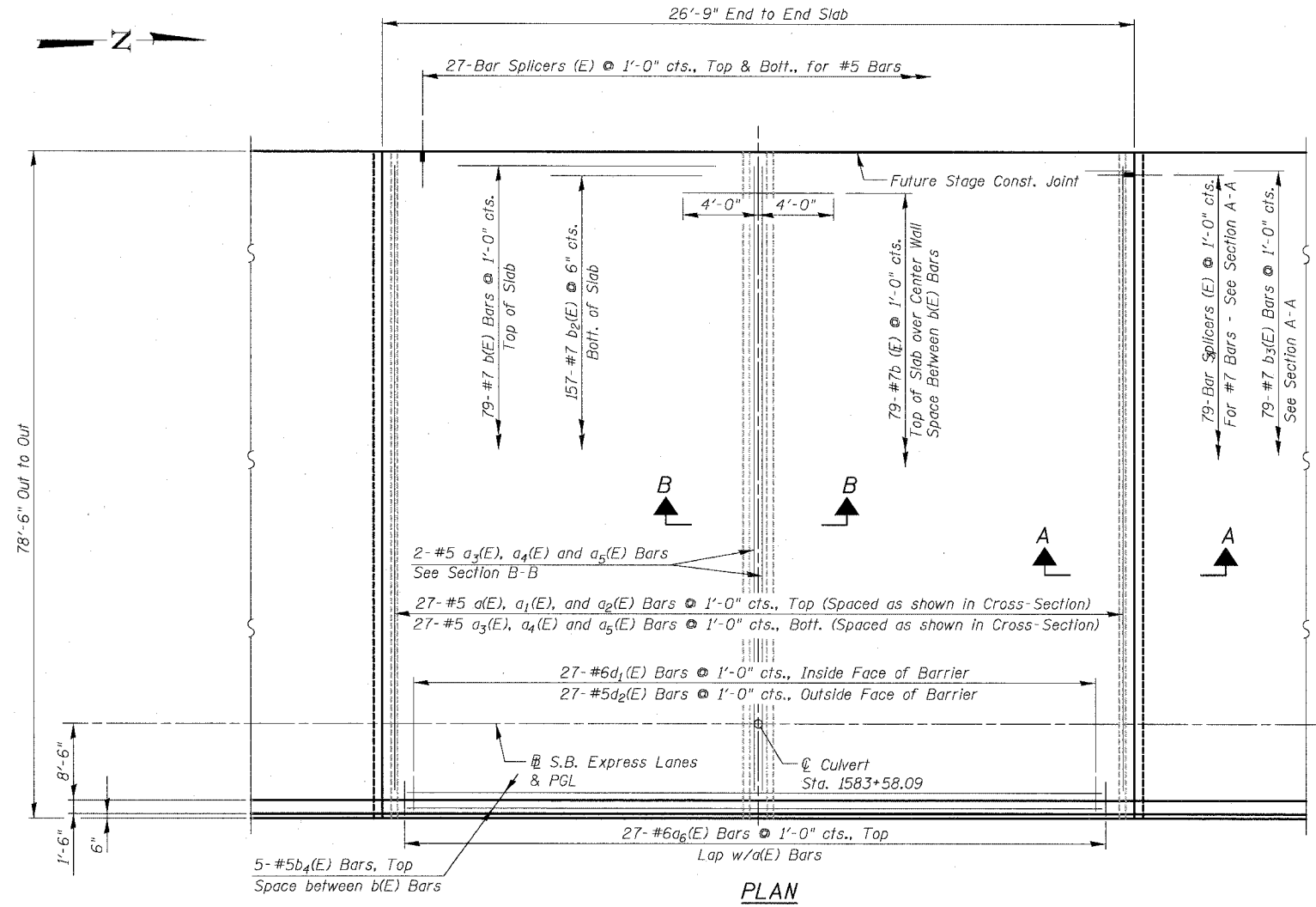
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REVISIONS	
NAME	DATE

SHEET CUL-3 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB 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

12/15/07 PM 07/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	478
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		*(1816, ETC., 2324.6-1PIR-9		



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

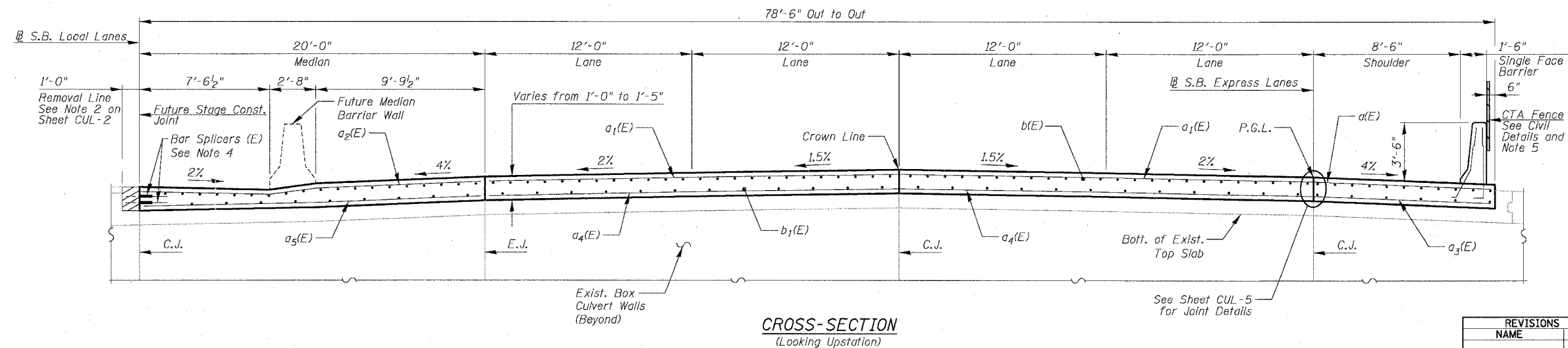
Additional reinforcement shall not be measured for payment but shall be included in the cost of "Reinforcement Bars, Epoxy Coated".

NOTES

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

ABBREVIATIONS

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



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REVISIONS	
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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
SB 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

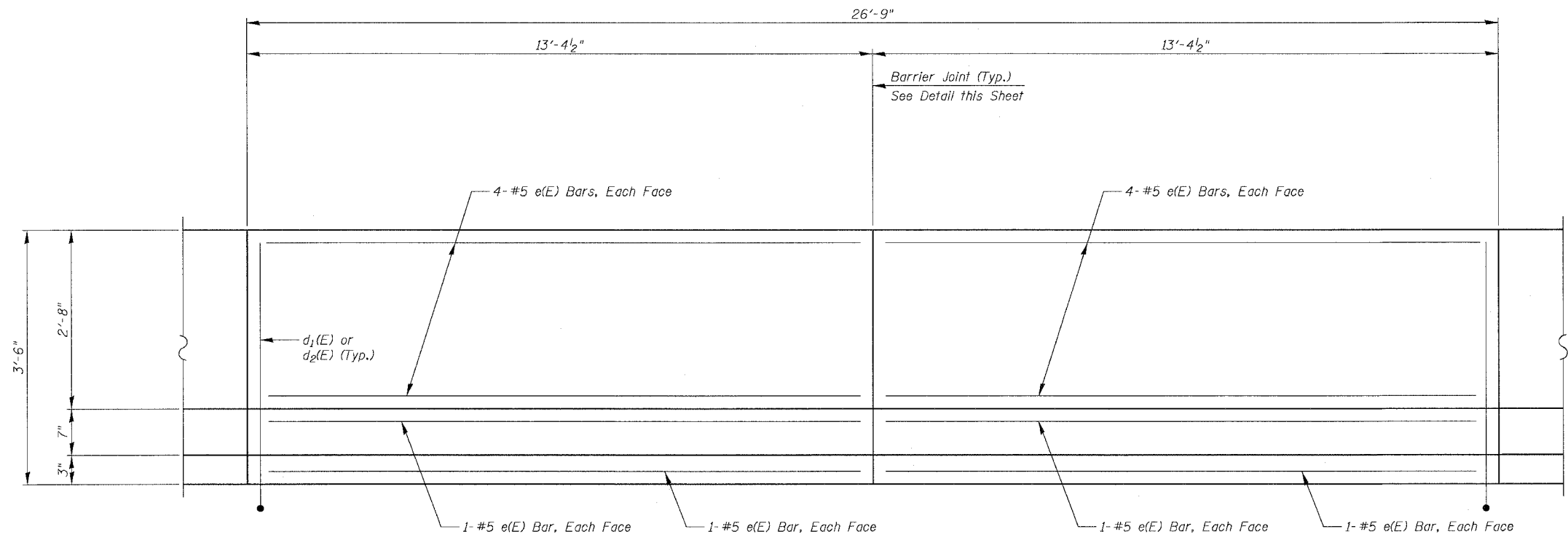
12/25/08 FM 5/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	479
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		*1818, ETC, 2324.6-1PIR-9		

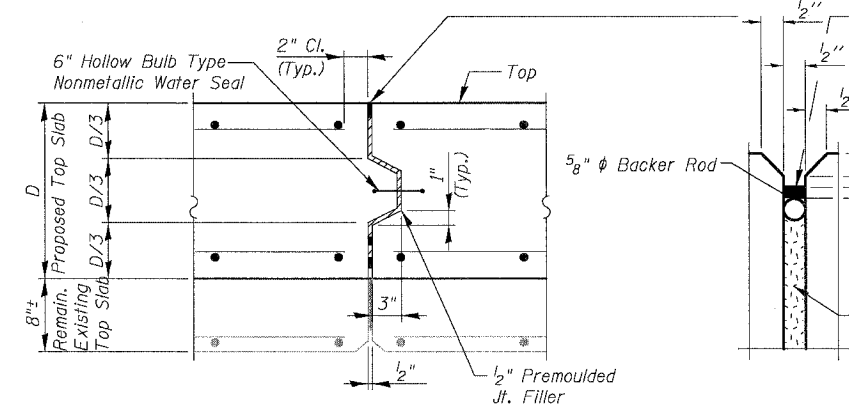
**TOP SLAB
BILL OF MATERIAL**

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

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



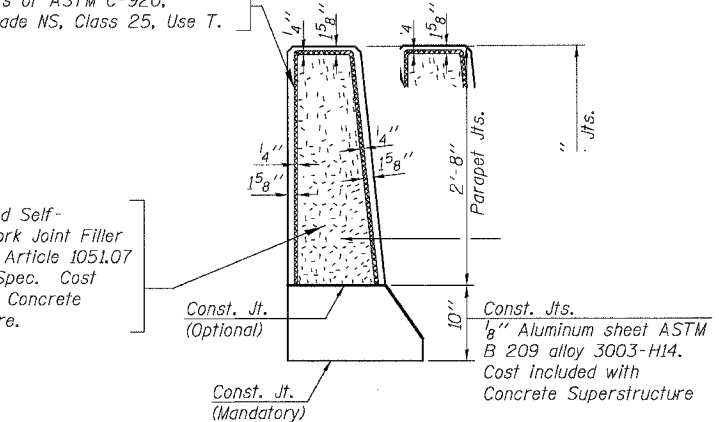
INSIDE ELEVATION OF SINGLE FACE BARRIER



Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use T.

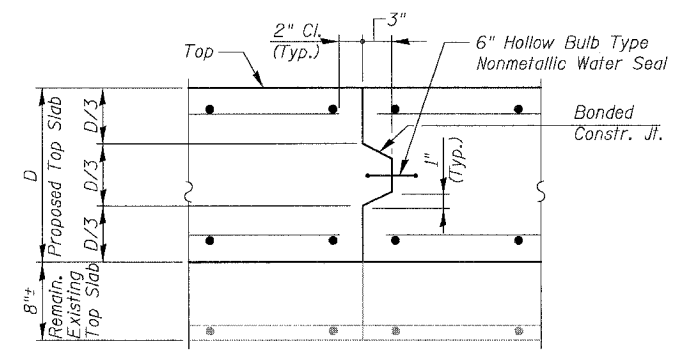
1/2" Preformed Self-Expanding Cork Joint Filler according to Article 105.107 of the Std. Spec. Cost included with Concrete Superstructure.

BARRIER JOINT DETAILS

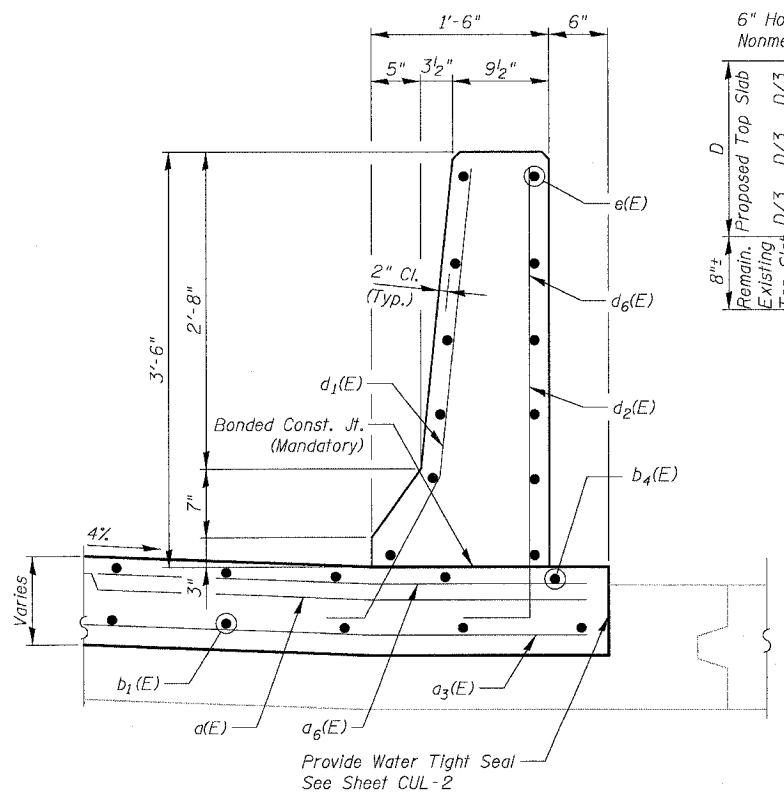
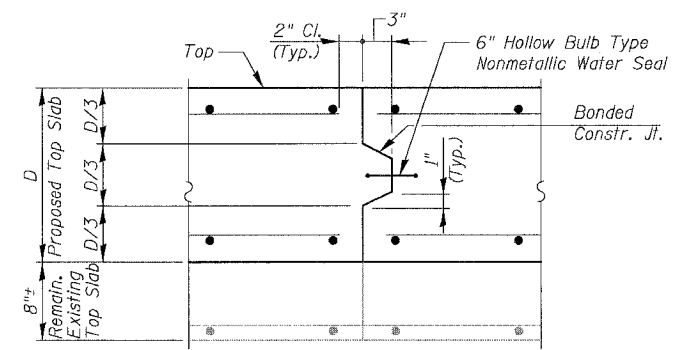


CULVERT EXPANSION JOINT

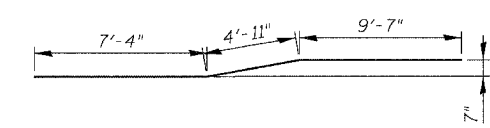
Do not seal until after grooving operations



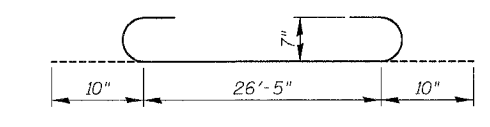
CULVERT CONSTRUCTION JOINT



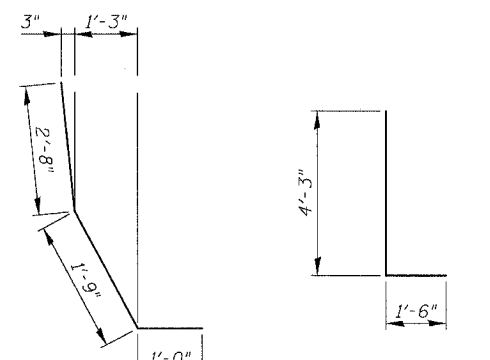
SECTION THRU SINGLE FACE BARRIER



BAR a₂(E)



BAR b₂(E)



BAR d₁(E)

BAR d₂(E)

REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

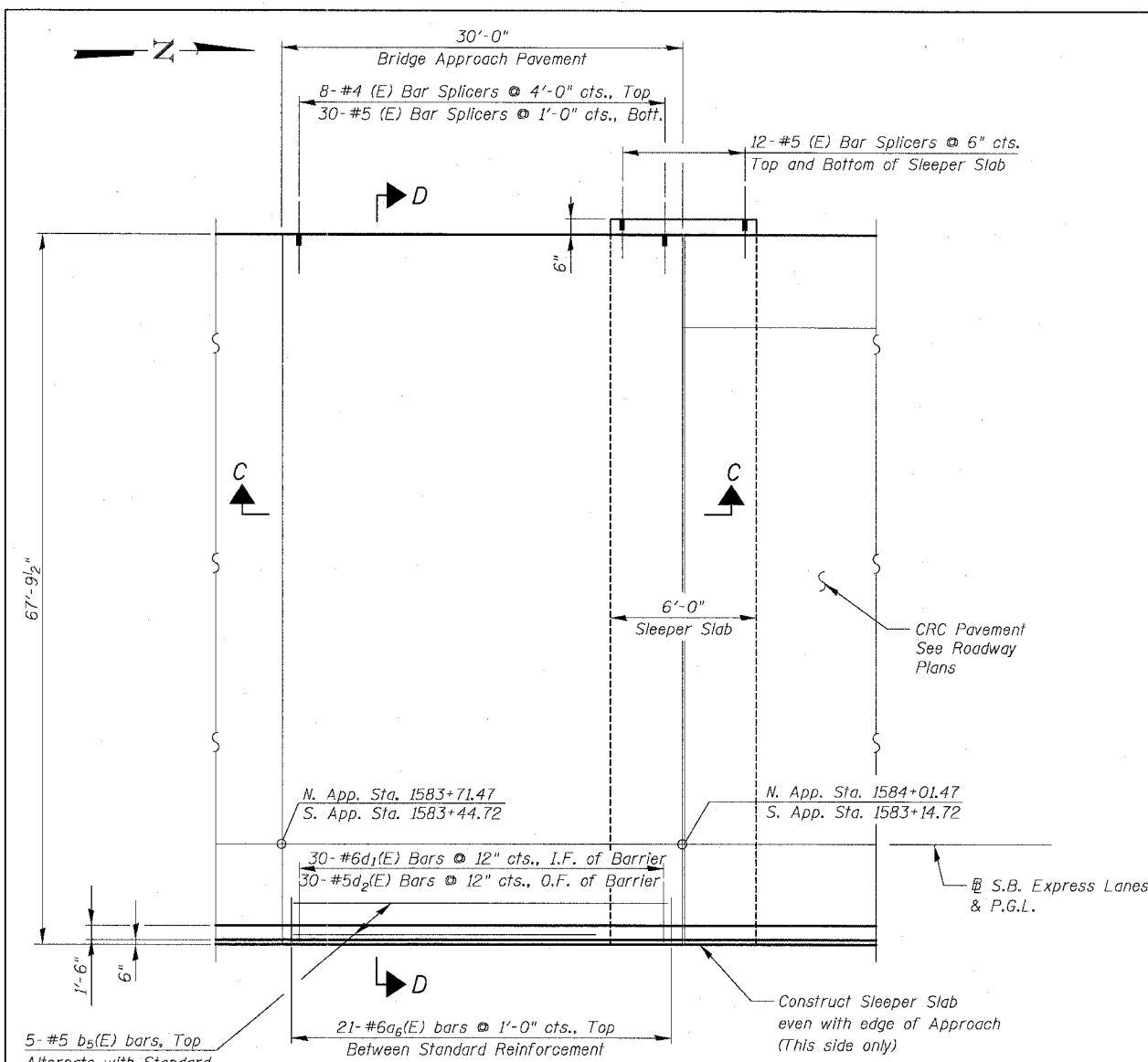
SHEET CUL-5 OF CUL-14

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

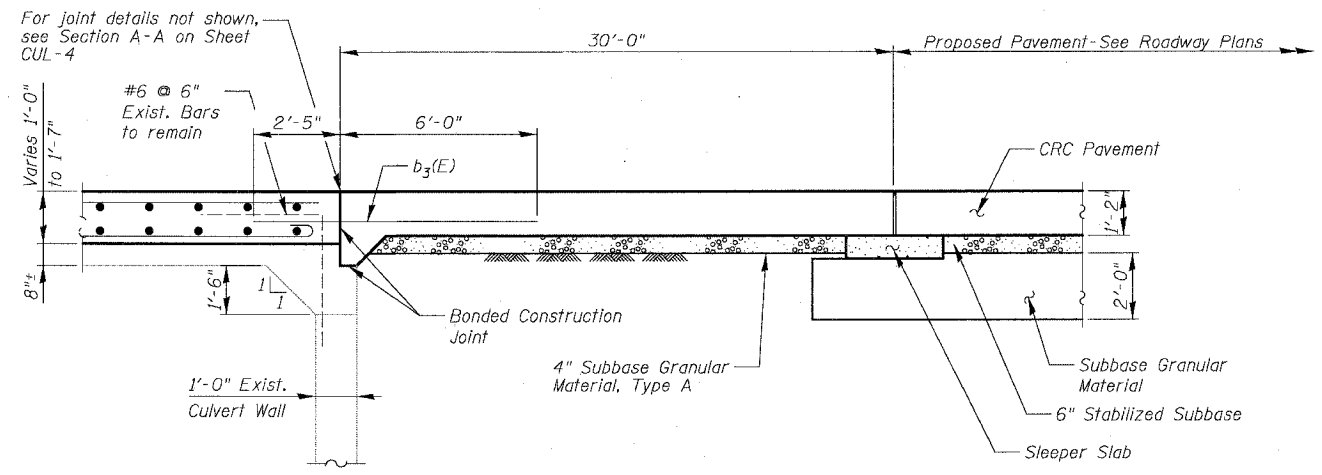
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	480
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	*181B, ETC. 2324.6-1PIR-9			



PARTIAL PLAN
North Approach Shown
South Approach Similar

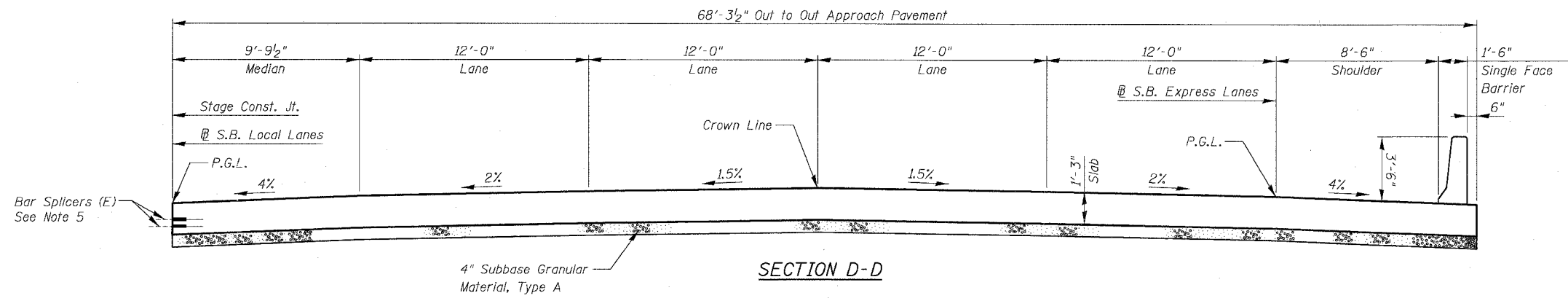


SECTION C-C

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
SB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
APPROACH SLAB DETAILS 1
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

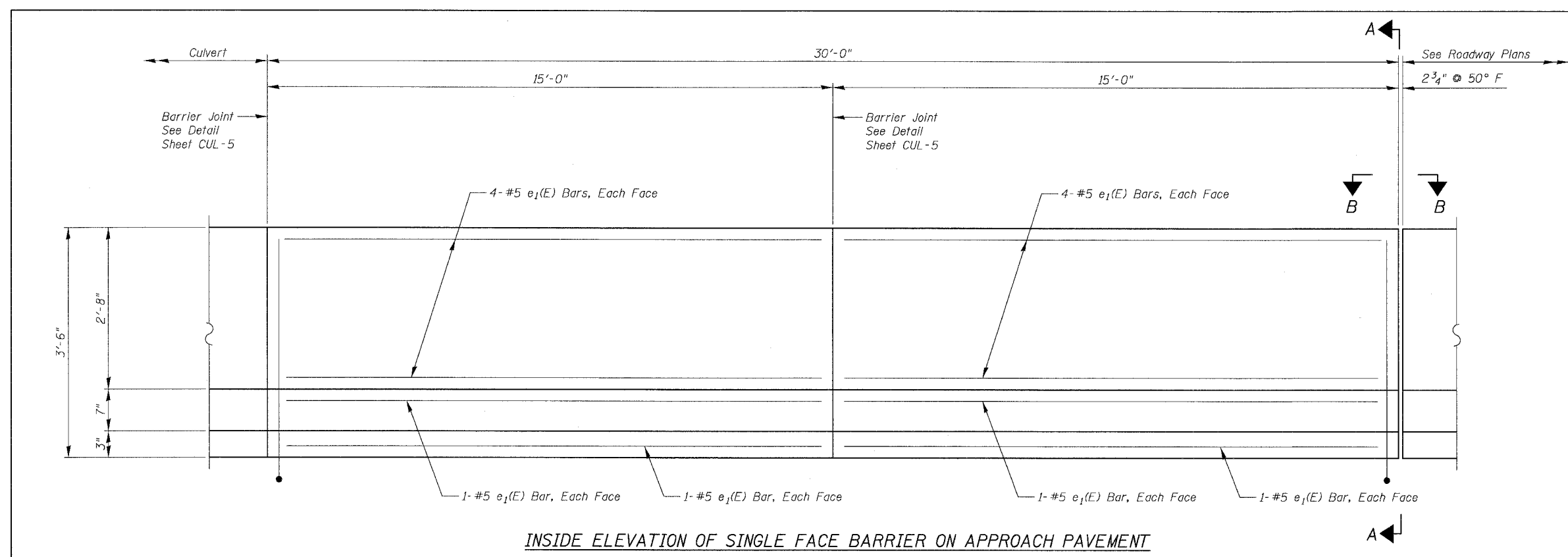
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	-	COOK	598	481
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62302	*1818, ETC, 2324.6-1P1R-9			

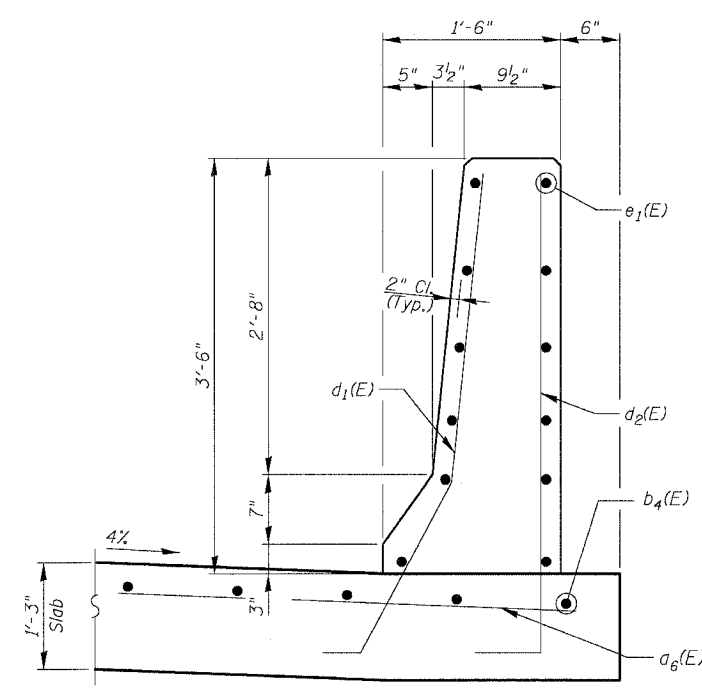
**APPROACH PAVEMENT
BILL OF MATERIAL
TOTAL FOR 2 APPROACH SLABS**

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.	452
Concrete Superstructure			Cu. Yd.	8.1
Protective Coat			Sq. Yd.	30
Reinforcement Bars, Epoxy Coated			Pound	2,190
Bar Splicers			Each	124
CTA Fence			Foot	60

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

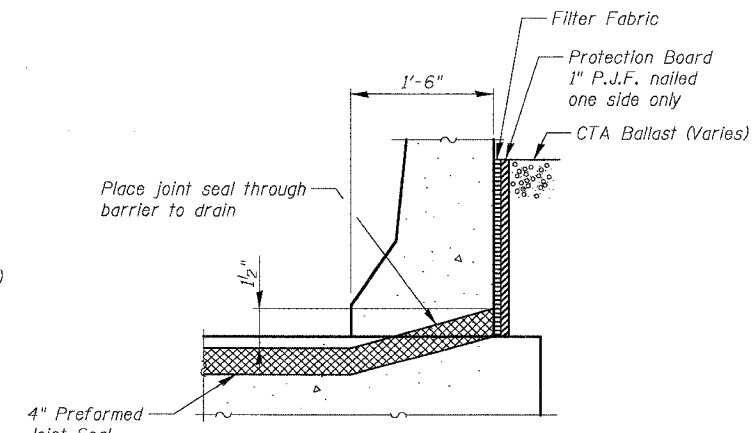


INSIDE ELEVATION OF SINGLE FACE BARRIER ON APPROACH PAVEMENT

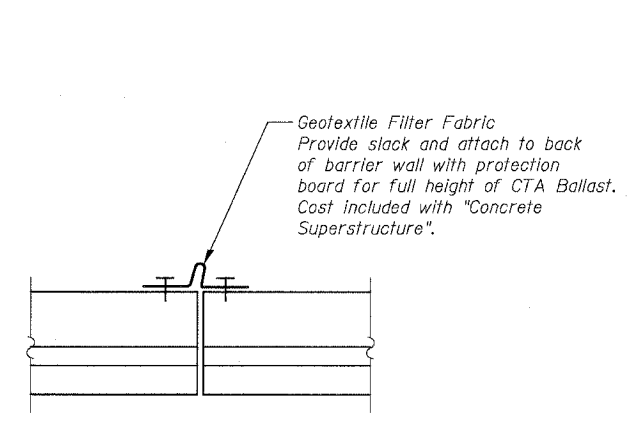


SECTION THRU SINGLE FACE BARRIER

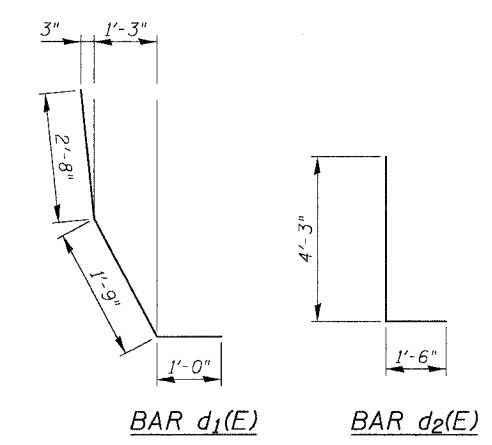
Note: Standard Approach Pavement reinforcement not shown for clarity



SECTION A-A



VIEW B-B



BAR $d_1(E)$

BAR $d_2(E)$

REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

SHEET CUL-7 OF CUL-14

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
APPROACH SLAB DETAILS 2

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

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	482
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		62302	
	*181B, ETC, 2324.6-1P1R-9			

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:

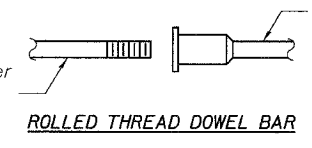
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$

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."

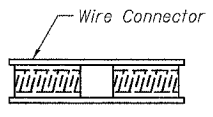
The diameter of this part is the same as the diameter of the bar spliced.



ROLLED THREAD DOWEL BAR



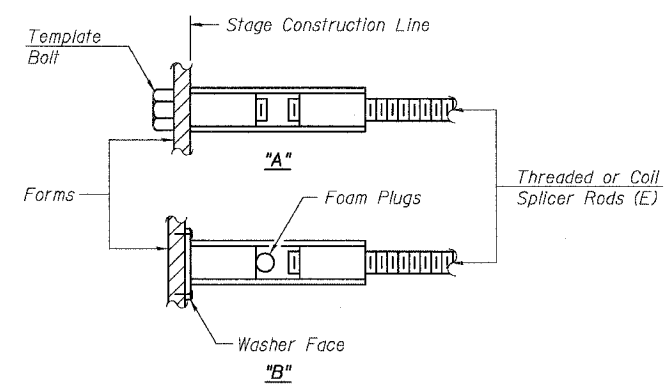
**** ONE PIECE**



WELDED SECTIONS

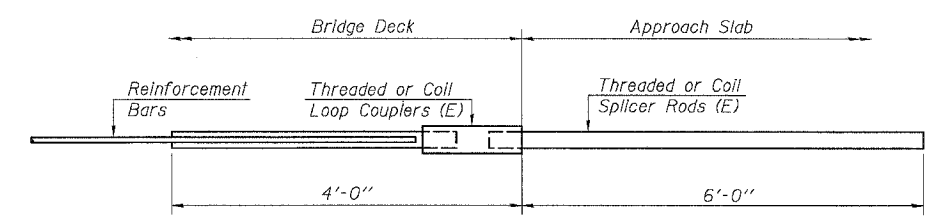
BAR SPLICER ASSEMBLY ALTERNATIVES

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



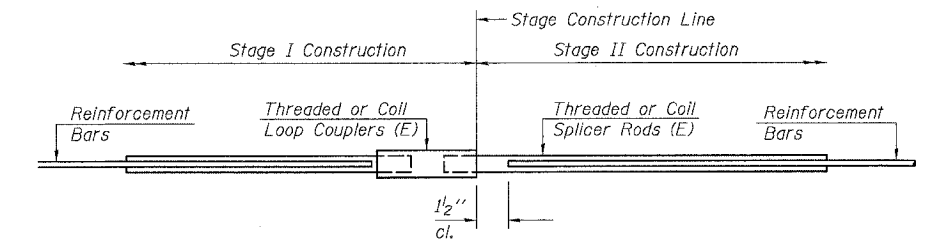
INSTALLATION AND SETTING METHODS

"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 BOX CULVERT

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



STANDARD

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

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BSD-1 9-01-03

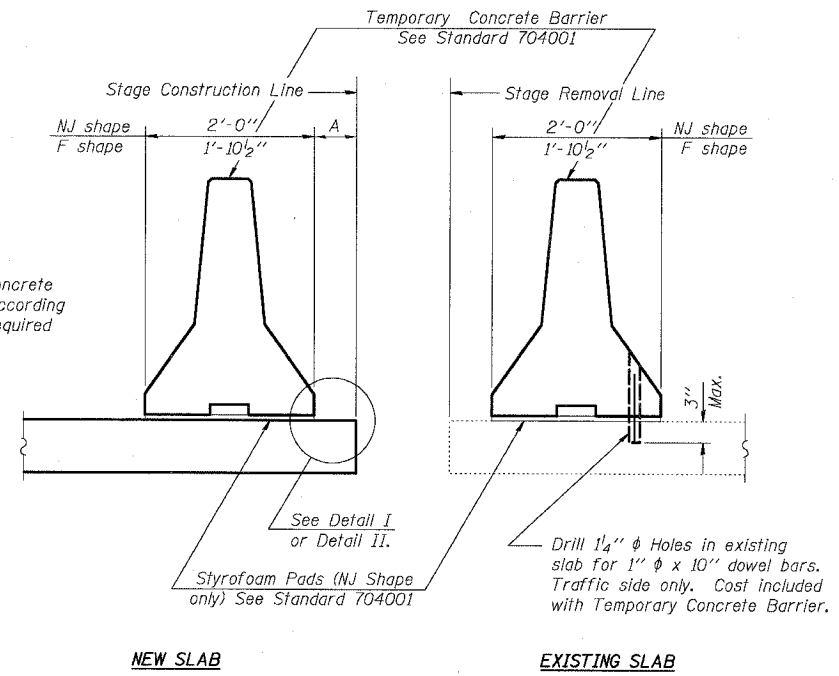
REVISIONS	
NAME	DATE
ADDENDUM 1	8/12/05

SHEET CUL-8 OF CUL-14
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 MWRD CULVERT, N. OF 39TH ST.
 COOK COUNTY, S.N. 016-2625
 BAR SPLICER DETAILS
 SCALE: N.T.S. DRAWN BY: MTR
 DATE: 07/07/05 CHECKED BY: BLU

8/11/2005 8:34:29 AM in:\60\road\Culvert\94\90\Culvert_14\std\cgr

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	483
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	*1818, ETC, 2324.6-1PIR-9			

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



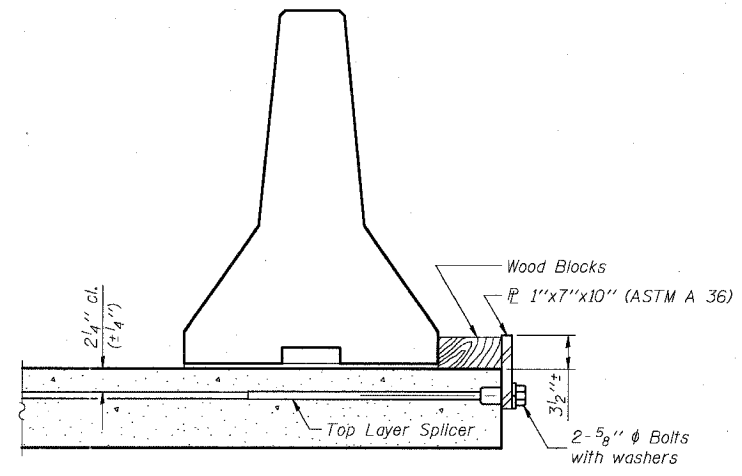
SECTIONS THRU SLAB

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" phi bolts screwed to coupler at approximate CL of each barrier panel.

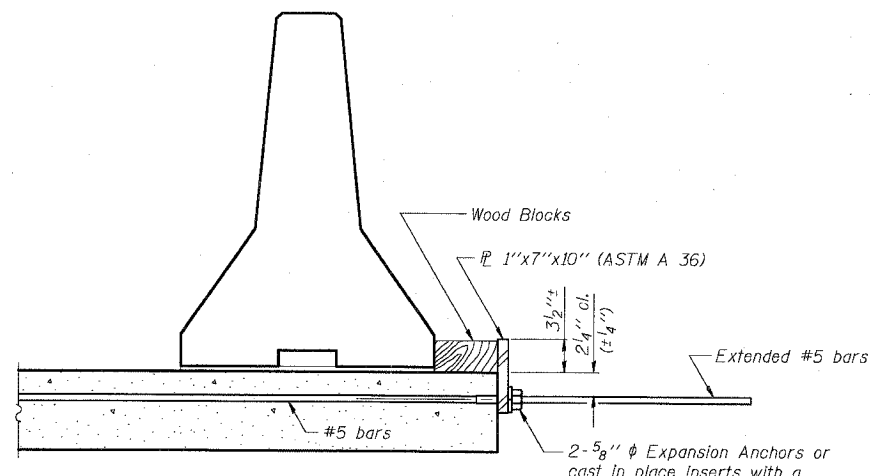
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" phi Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate CL of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.



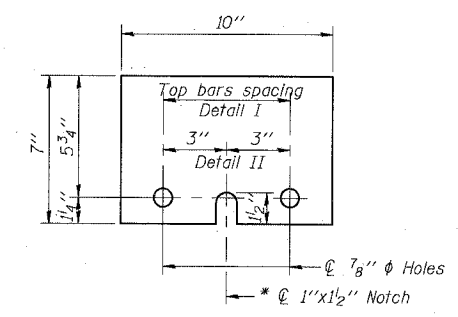
DETAIL I

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



DETAIL II

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



1"x7"x10"

* Required only with Detail II

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REVISIONS	
NAME	DATE

SHEET CUL-9 OF CUL-14

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB 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

12/8/07 PM
6/24/2005

Everest Engineering Company
STRUCTURE BORING LOG

Page 1 of 1
Date 6/3/03

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	484
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62302		*1818, ETC, 2324.6-1P1R-9		

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.	DEPTH	DESCRIPTION	Qu	W	Surface Water Elev.	DEPTH	DESCRIPTION	Qu	W
Station	ft		tsf	%		ft		tsf	%
CB-1									
3583+66 (SB LOCAL)									
Offset 15.0ft RT. OF SB LOCAL									
Surface Elev. -2.80 ft									
ASPHALT PAVEMENT	-3.05								
CONCRETE	-4.30								
CRUSHED STONE		15	4						
some- sand		10							
		9							
		10	5						
		4							
FILL	-8.30	5							
Medium Stiff to Stiff, Gray									
SILTY CLAY		2	0.5	23					
trace- sand and gravel		2	P						
		3							
		1	0.9	21					
		2	B						
		2							
		1	0.7	23					
		1	B						
		2							
		1	0.4	24					
		1	B						
		1							
		2	1.24	19					
		3	B						
		4							
Very Stiff to Hard, Gray	-21.30								
SILTY CLAY LOAM		2	2.8	15					
trace- sand and gravel		3	B						
		3							
		24	4.5+	10					
		26	P						
		26							
		50/5'	4.5+	10					
			P						

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

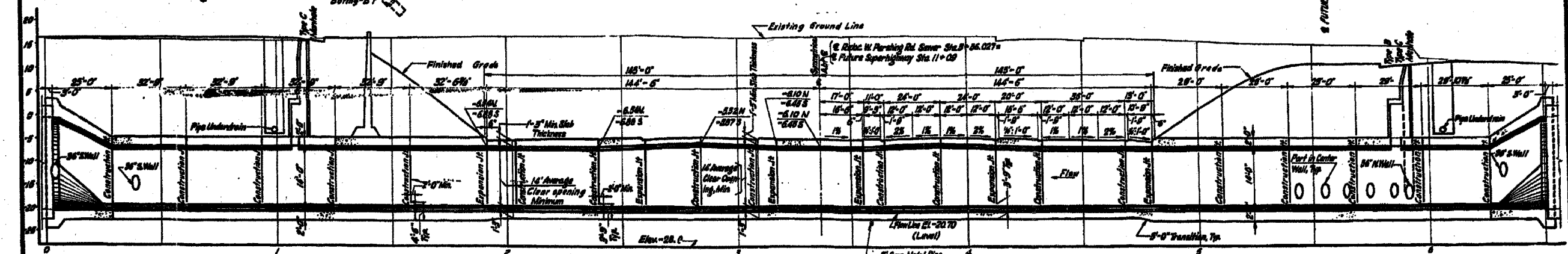
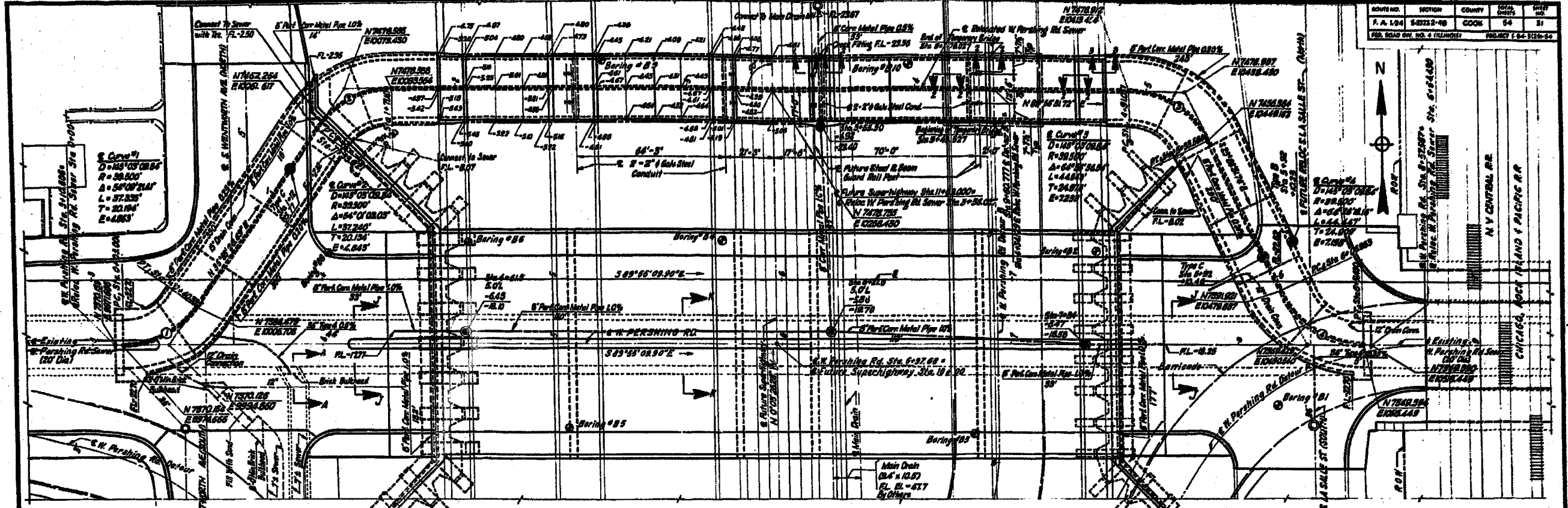
BORING CB-1

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REVISIONS	
NAME	DATE

SHEET CUL-10 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB 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

6/24/2005 12:24 PM



GENERAL NOTES
 Design Specifications: AASHTO 1987 Modified AREA 1988 Modified State of Illinois Division of Highways 1988.
 Design Lane Loading: AASHTO HS20-44 or Alternate designated in PPM 20-4, Sec 4c; and Chicago Transit Authority, April 22, 1982.

NOTES
 1. Sewer flow shall be 1+0.00 to 4+0.00 ft/s will be reasonable of future.
 2. For Soil Boring Data, see also S-1 & S-4.

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

SHEET CUL-11 OF CUL-14

REVISIONS	
NAME	DATE

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

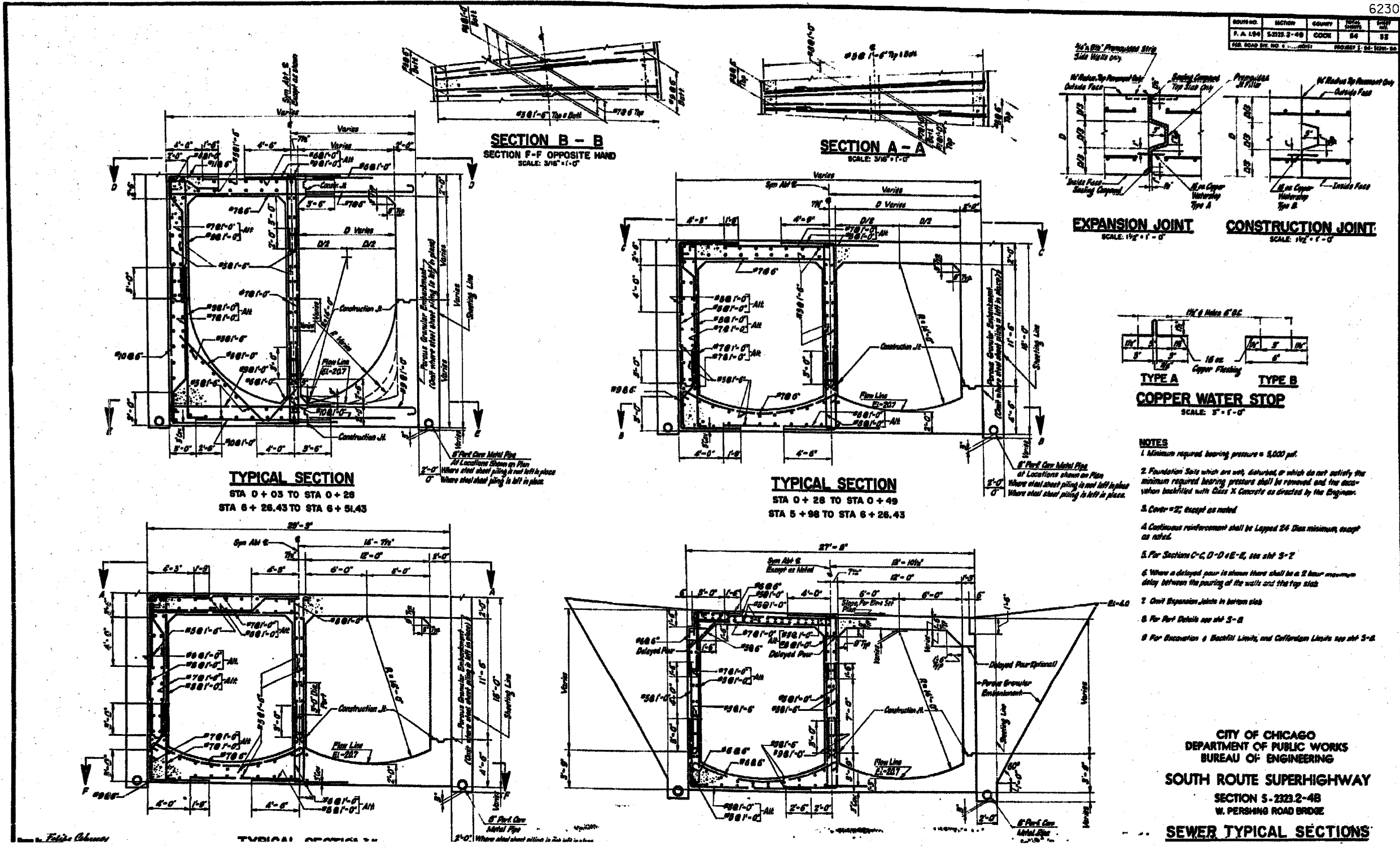
SCALE: NTS
 DATE: 07/07/05
 DRAWN BY: BDC
 CHECKED BY: BLU

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62302-45
 02/24/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	486
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		*1818, ETC, 2324.6-1PR-9		



OWNER NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	2324.2-4B	COOK	54	53
FED. ROAD DIST. NO. 62302 PROJECT 1-24-1001-53				

- NOTES**
1. Minimum required bearing pressure = 5,000 psf.
 2. Foundation Soils which are wet, disturbed, or which do not satisfy the minimum required bearing pressure shall be removed and the excavation backfilled with Class X Concrete as directed by the Engineer.
 3. Cover = 2'; except as noted.
 4. Continuous reinforcement shall be Lapped 24" Dia minimum, except as noted.
 5. For Sections C-C, D-D & E-E, see sht S-2.
 6. Where a delayed pour is shown there shall be a 2 hour maximum delay between the pouring of the walls and the top slab.
 7. Curb Expansion Joints in bottom slab.
 8. For Part Details see sht S-2.
 9. For Excavation & Backfill Limits, and Cofferdam Limits see sht S-3.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 5-2324.2-4B
W. PERSHING ROAD BRIDGE
SEWER TYPICAL SECTIONS

SHEET CUL-12 OF CUL-14

FOR INFORMATION ONLY

REVISIONS	DATE
NAME	

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

SCALE: NTS
DATE: 07/07/05

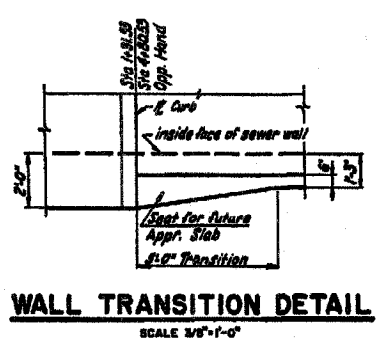
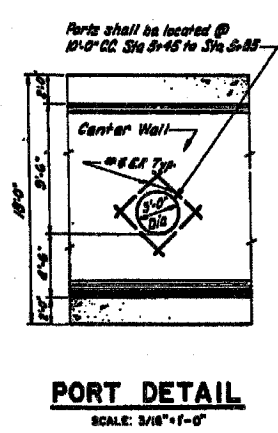
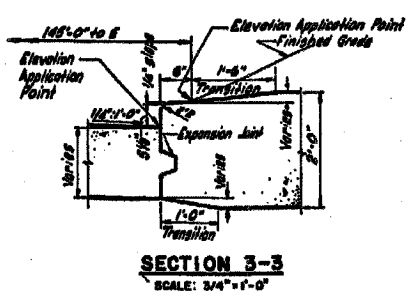
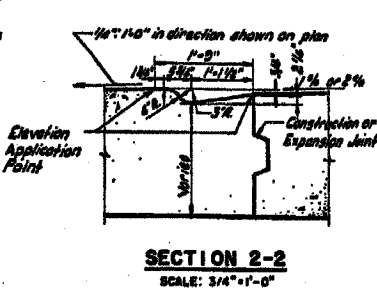
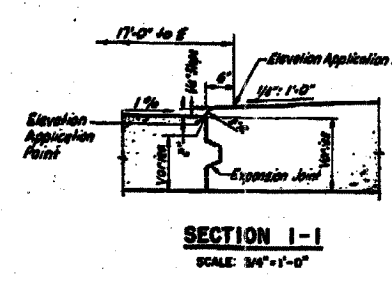
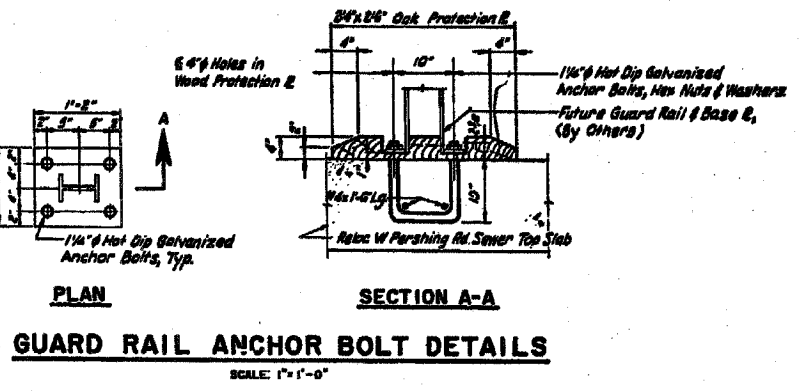
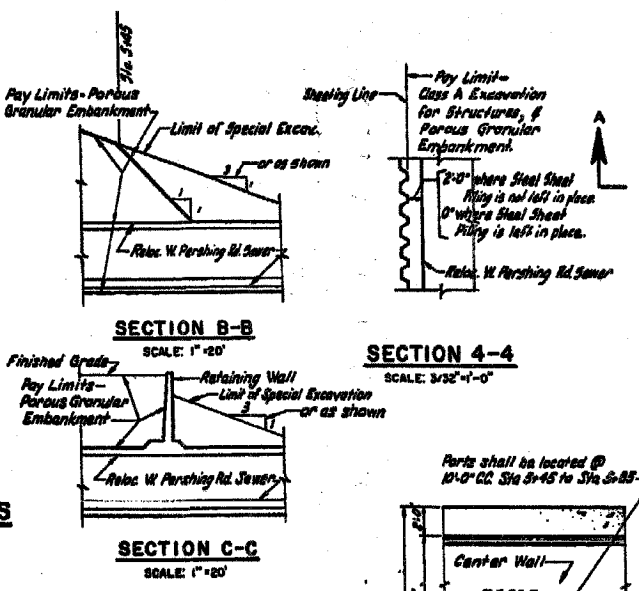
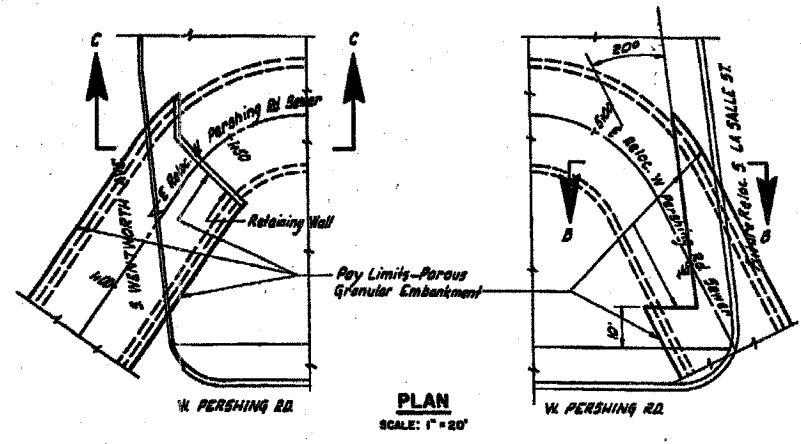
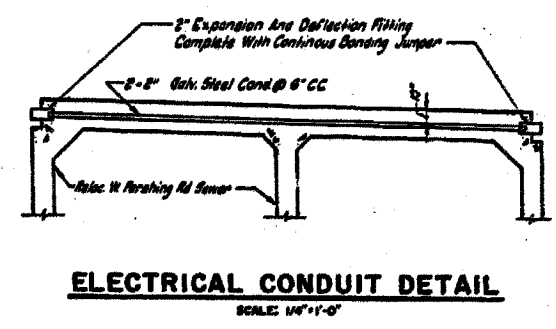
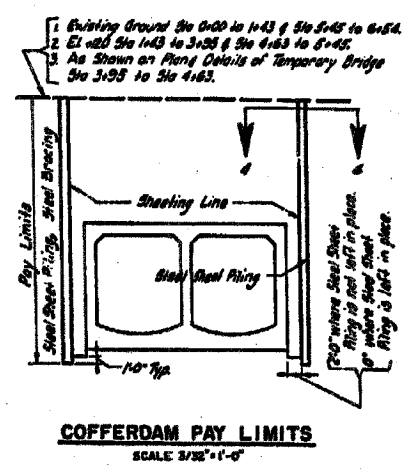
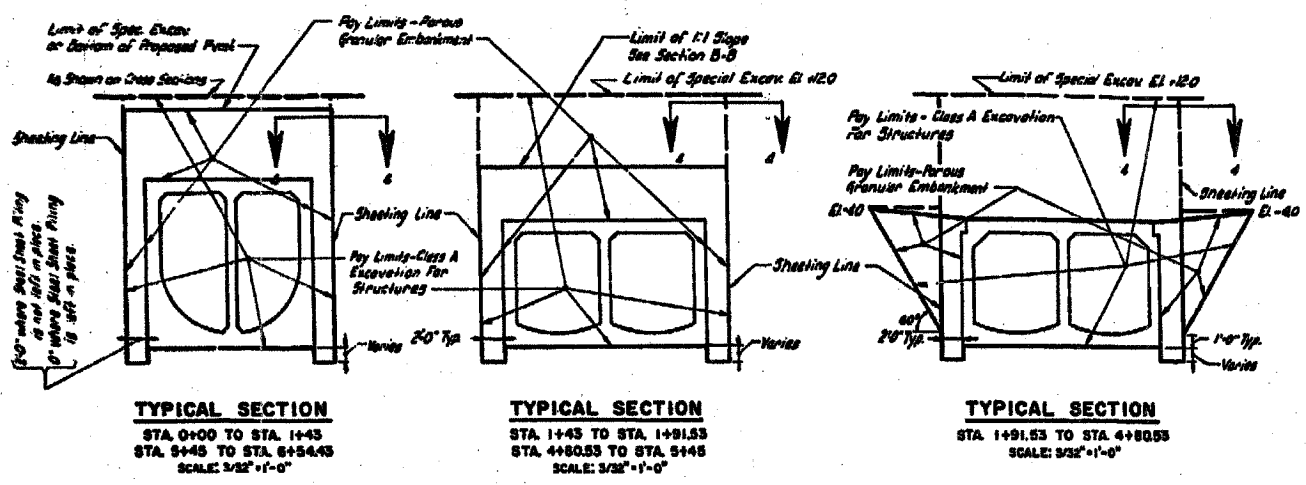
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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	487
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62302		*1816, ETC, 2324.6-1PIR-9		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 194	5-2322-48	COOK	54	54
FED. ROAD DIST. NO. 9 ILLINOIS		PROJECT I-55-1120-24		



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

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 5-2322-48
W PERSHING ROAD BRIDGE
SEWER MISCELLANEOUS
DETAILS

SHEET CUL-13 OF CUL-14

REVISIONS	
NAME	DATE

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

SCALE: NTS
DATE: 07/07/05

DRAWN BY: BDC
CHECKED BY: BLU

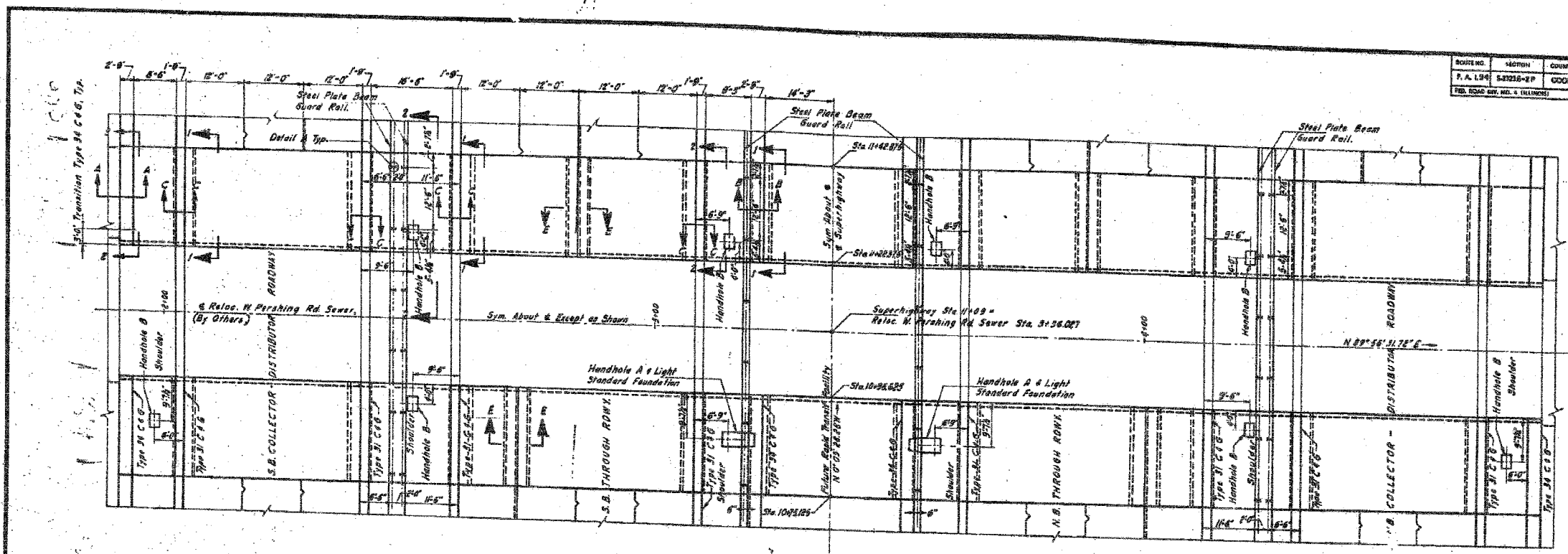
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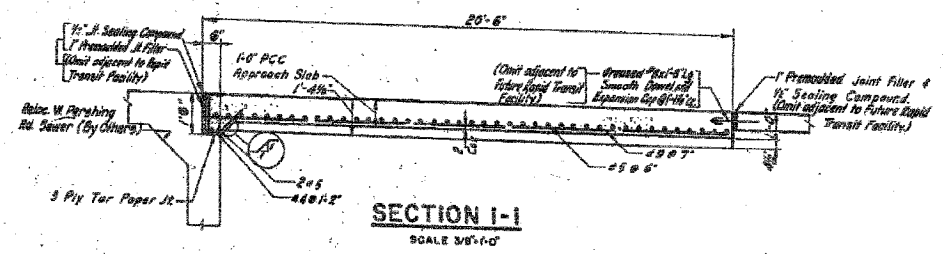
ANSI Z39.18-1997 PERMANENT PAPER REPRODUCTION PROCEDURE

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	488
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62302		*1818, ETC., 2324.6-1PIR-9		

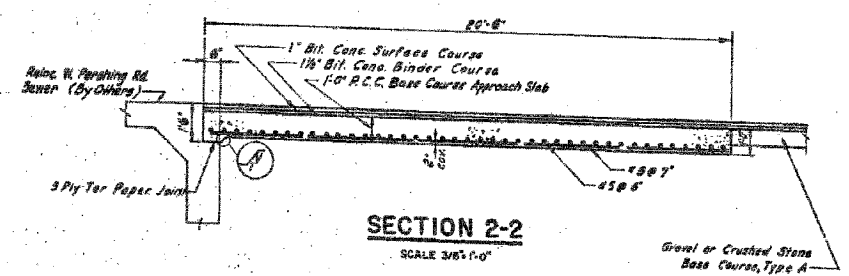
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 94	52226-2P	COOK	112	77
FED. ROAD DIST. NO. 4 (ILLINOIS) PROJECT 1-94-2324-94				



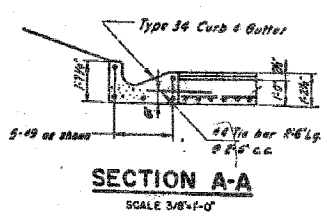
APPROACH SLAB PLAN
SCALE 1"=10'



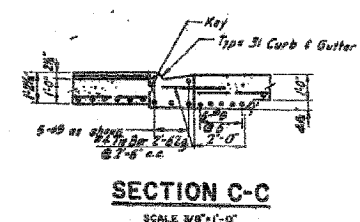
SECTION 1-1
SCALE 3/8"=1'-0"



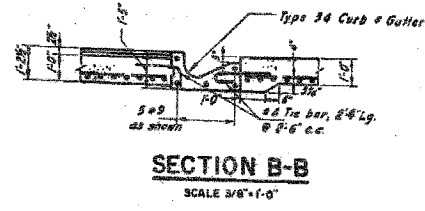
SECTION 2-2
SCALE 3/8"=1'-0"



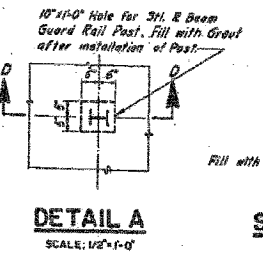
SECTION A-A
SCALE 3/8"=1'-0"



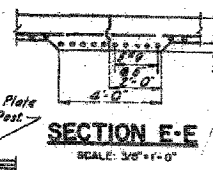
SECTION C-C
SCALE 3/8"=1'-0"



SECTION B-B
SCALE 3/8"=1'-0"



DETAIL A
SCALE 1/2"=1'-0"



SECTION D-D
SCALE 1/2"=1'-0"

- NOTES**
1. Reinforcement bar cover = 2" except as noted.
 2. For Details of Type 31 & Type 34 Curb & Gutter, see Sheet 6-77.
 3. For Details of Construction Joint, see Sheet 6-81.
 4. For Details of Handhole A & B, and Light Standard Foundation, see Sheet 6-8.

SECTION E-E
SCALE 3/8"=1'-0"

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BUREAU OF ENGINEERING
SOUTH ROUTE SUPERHIGHWAY
SECTION 5-2226-2P
GRADING, PAVING & DRAINAGE, W. PERSHING RD. TO W. 35TH ST.
APPROACH SLAB
GOODKIND & O'DEA, INC.
CONSULTING ENGINEERS, CHICAGO, ILL.
SCALE AS NOTED
SEPTEMBER 1961
SHEET NO. 6-77 OF 112 SHEETS

Drawn by: [Signature]
Traced by: [Signature]
Checked by: [Signature]
Approved by: [Signature]

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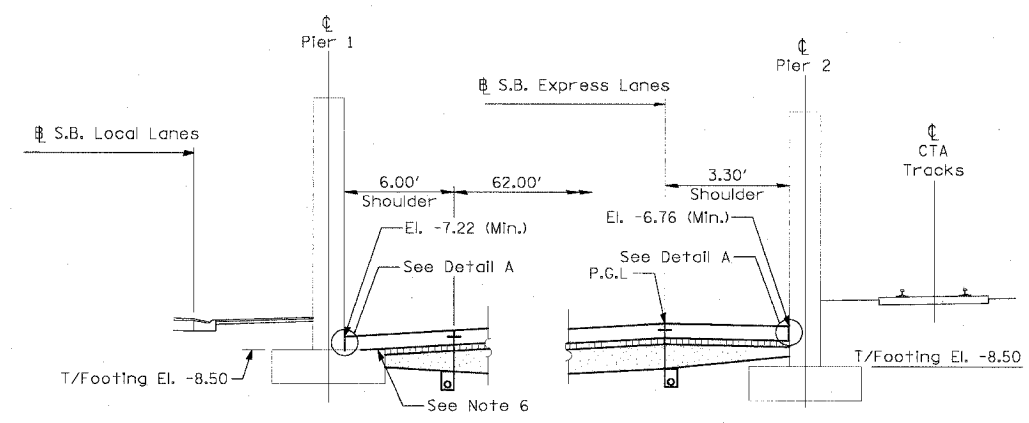
FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

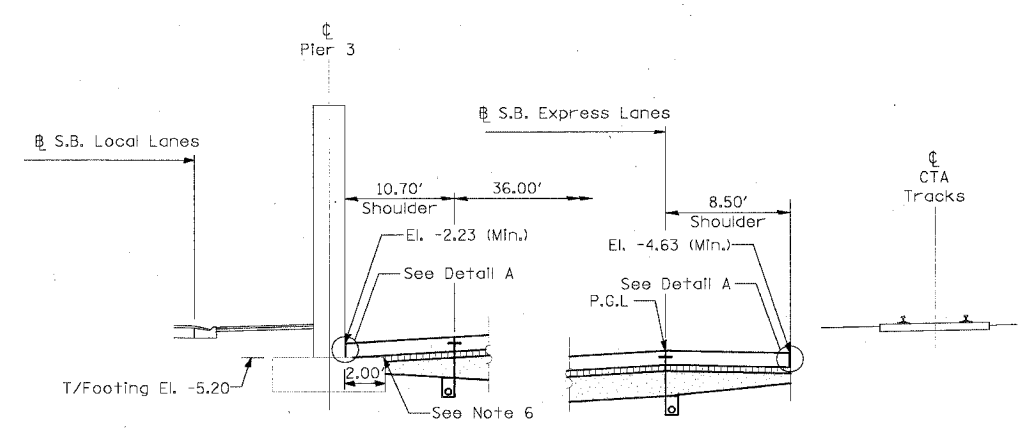
SHEET CUL-14 OF CUL-14
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
MWRD CULVERT, N. OF 39TH ST.,
COOK COUNTY, S.N. 016-2625
EXISTING APPROACH SLAB DETAILS
SCALE: NTS
DATE: 07/07/05
DRAWN BY: BDC
CHECKED BY: BLU

ANSI Z39-18-1997 (Permanently Aligned) 12/29/05 6/24/2005

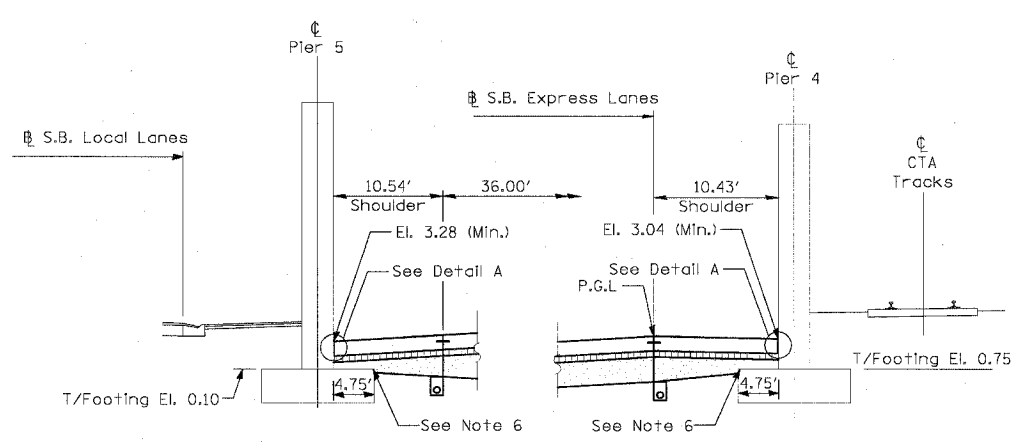
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	489
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302	1818, ETC, 2324.6-1P/R-9			



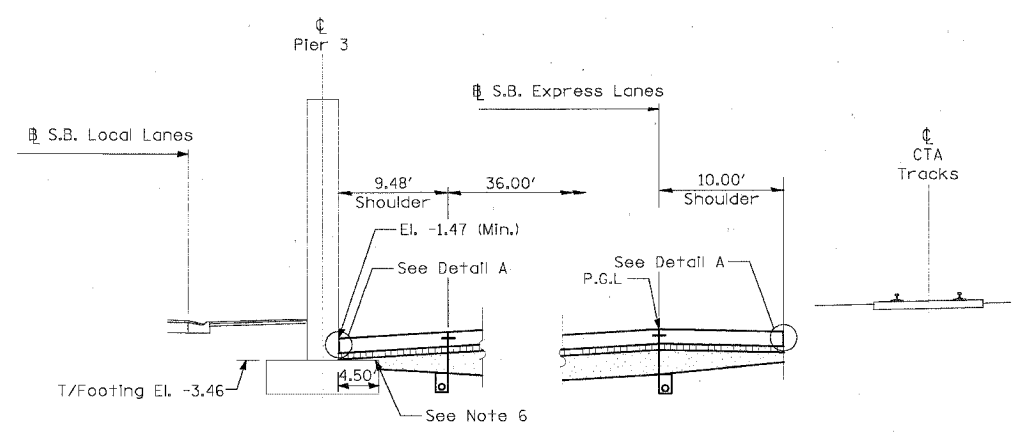
SHOULDER DETAIL AT 69th STREET (S.N. 016-0189)



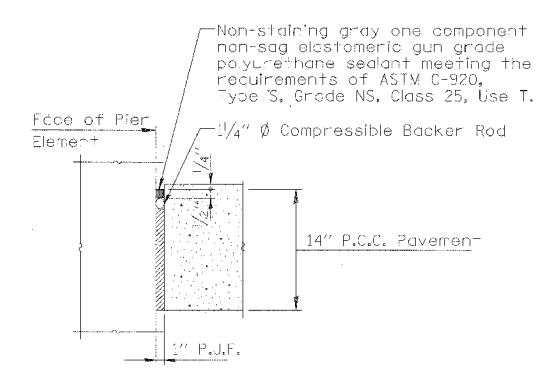
SHOULDER DETAIL AT WENTWORTH AVENUE



SHOULDER DETAIL AT CONRAIL RAILROAD

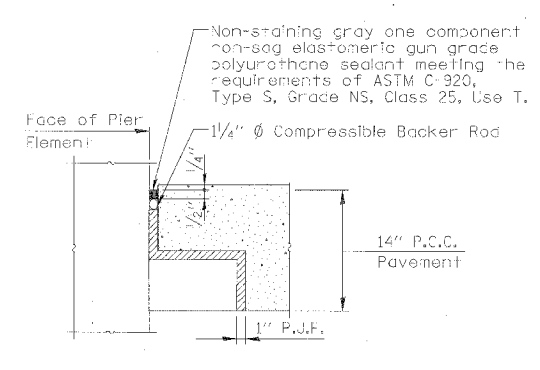


SHOULDER DETAIL AT ROCK ISLAND RAILROAD



DETAIL A

Cost of P.J.F., Backer Rod and sealing compound included with 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-1 OF SDET-4

REVISIONS	NAME	DATE

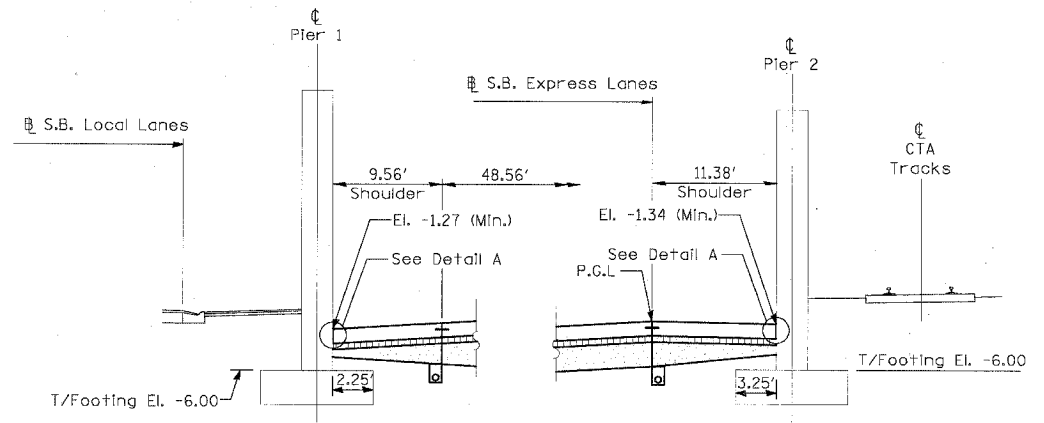
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES

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

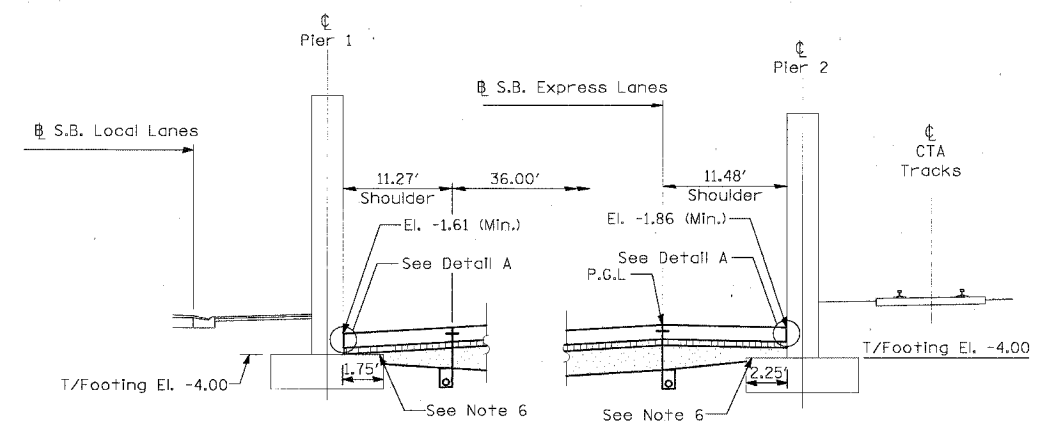
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

P:\03\009\035\Con 48\45\CADD\53\53150022637

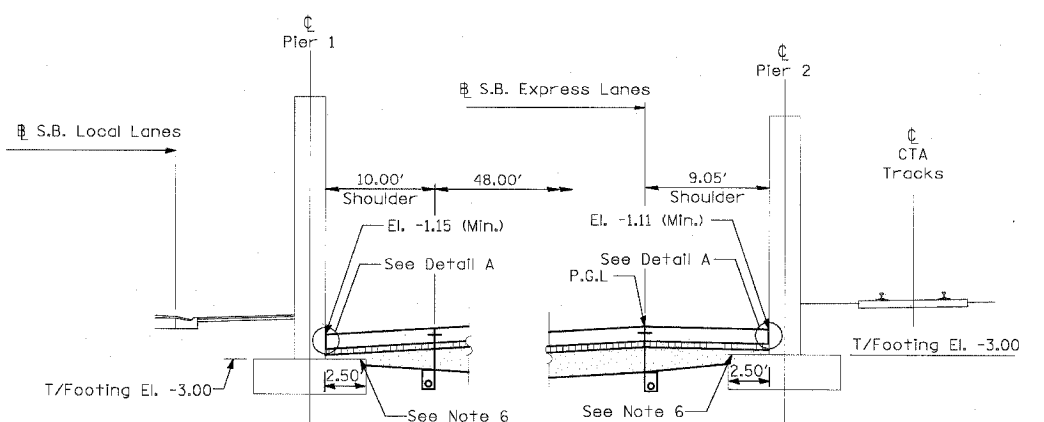
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	490
STA.		TO STA.		
62302		1818, ETC, 2324.6-1PR-9		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



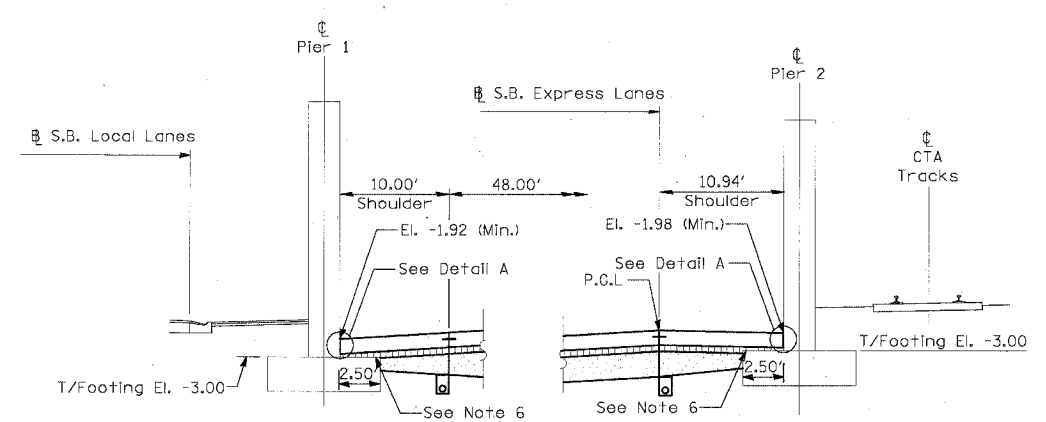
SHOULDER DETAIL AT 57th STREET (S.N. 016-1151)



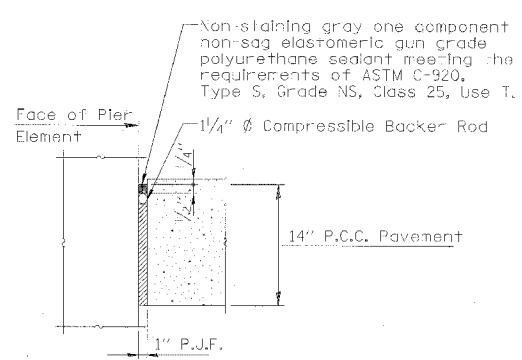
SHOULDER DETAIL AT 59th STREET (S.N. 016-1150)



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

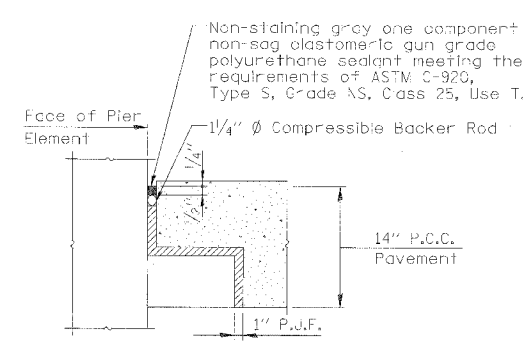


SHOULDER DETAIL AT 55th STREET (SOUTH) (S.N. 016-1152)



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-2 OF SDET-4

REVISIONS	
NAME	DATE

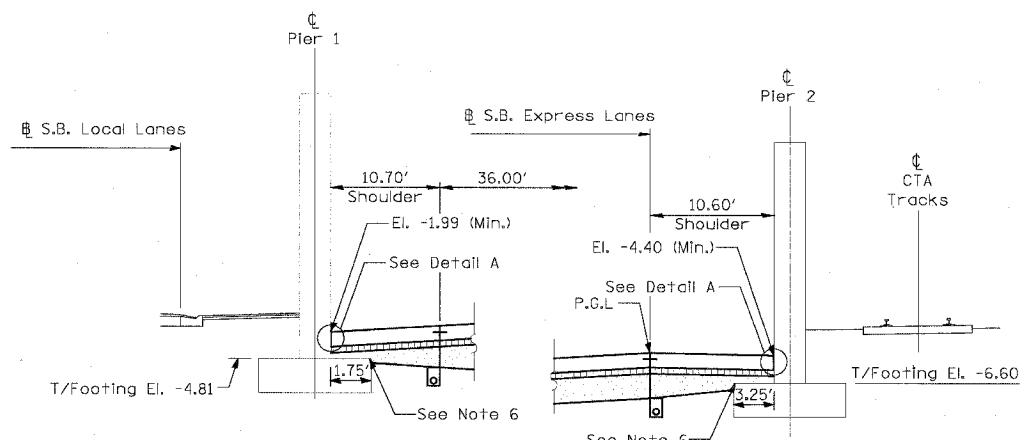
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES

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

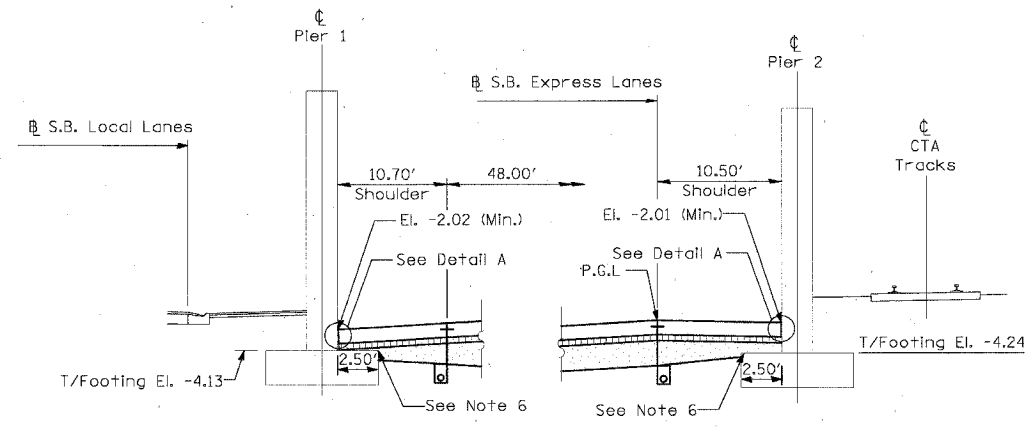
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

06/24/2005 09:48 PM

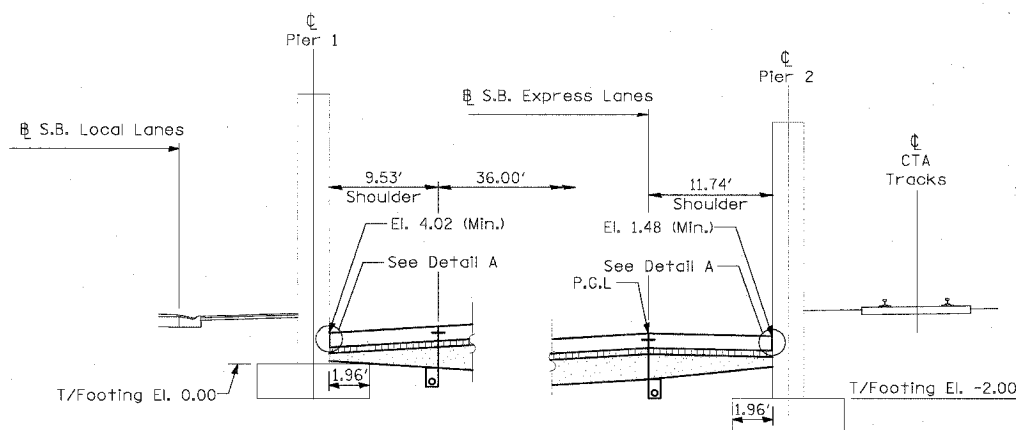
F.A.I. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	491
STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
		62302 • 1818, ETC, 2324.6-IPR-9		



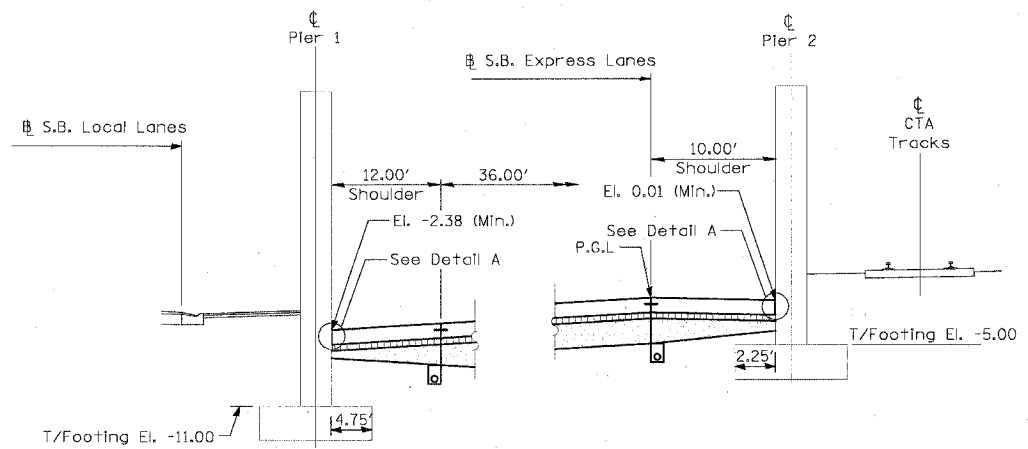
SHOULDER DETAIL AT 47th STREET (S.N. 016-1156)



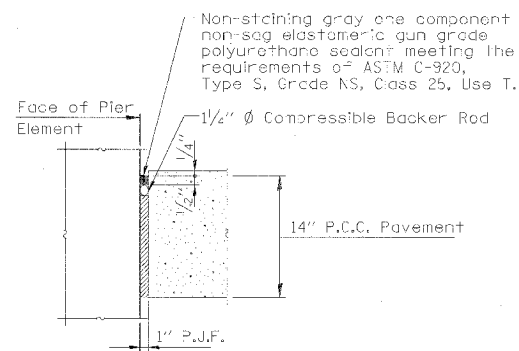
SHOULDER DETAIL AT 51st STREET (S.N. 016-1157)



SHOULDER DETAIL AT 63rd STREET

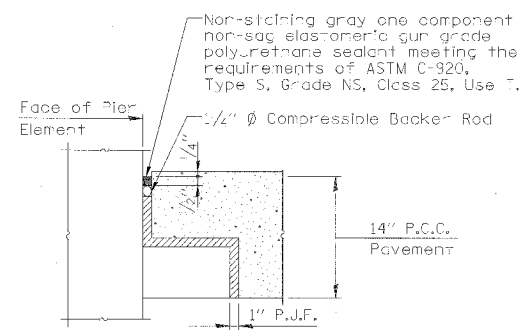


SHOULDER DETAIL AT 67th STREET (S.N. 016-1147)



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.

SHEET SDET-3 OF SDET-4

REVISIONS	
NAME	DATE

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

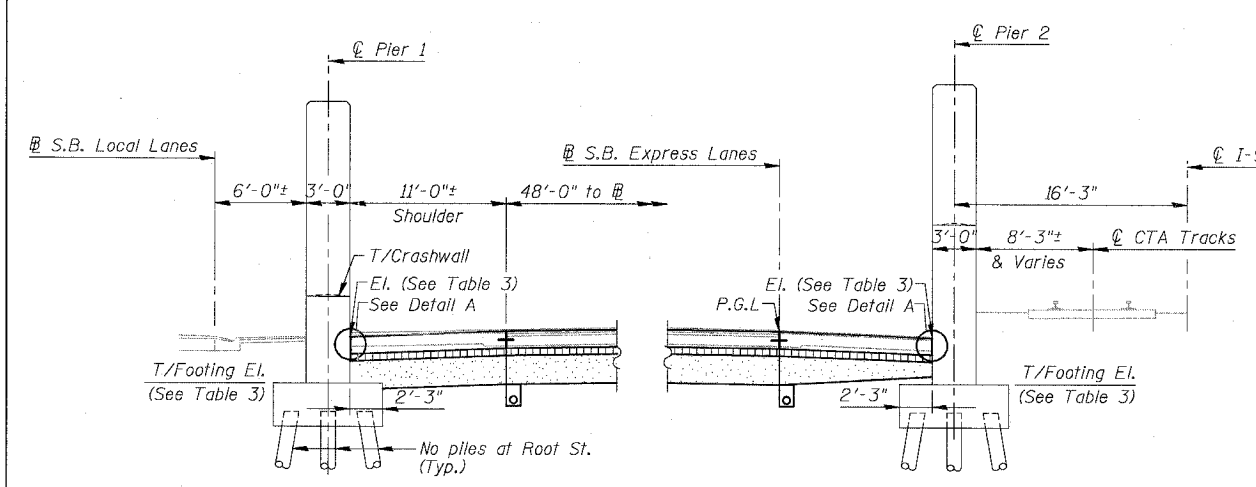
SCALE: NONE
 DATE: 7/7/05

DRAWN BY: MJP
 CHECKED BY: TAI

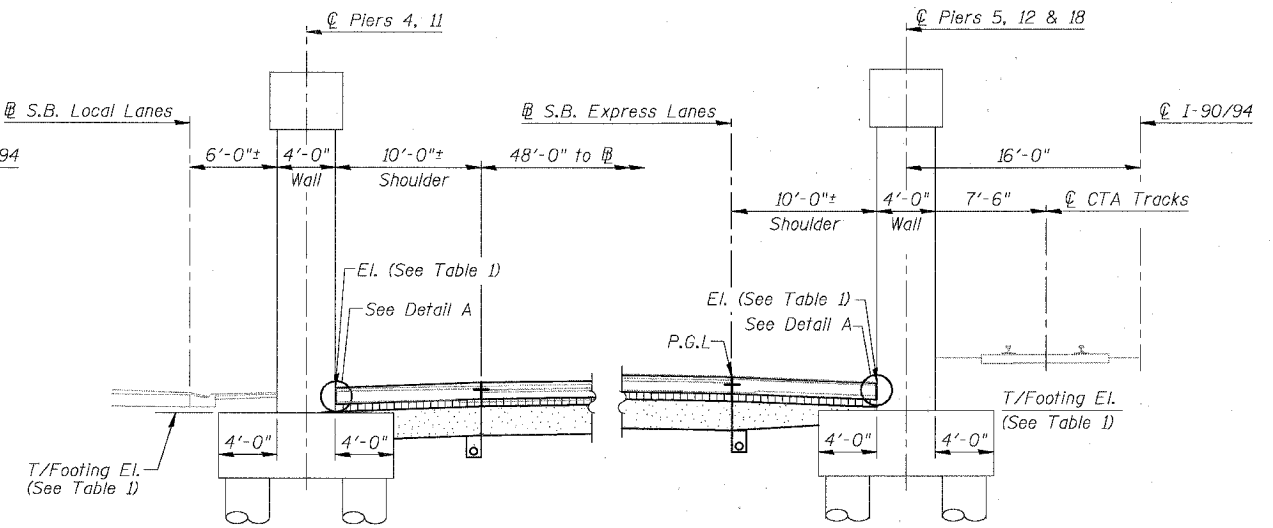
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

06/24/2005 04:53 PM

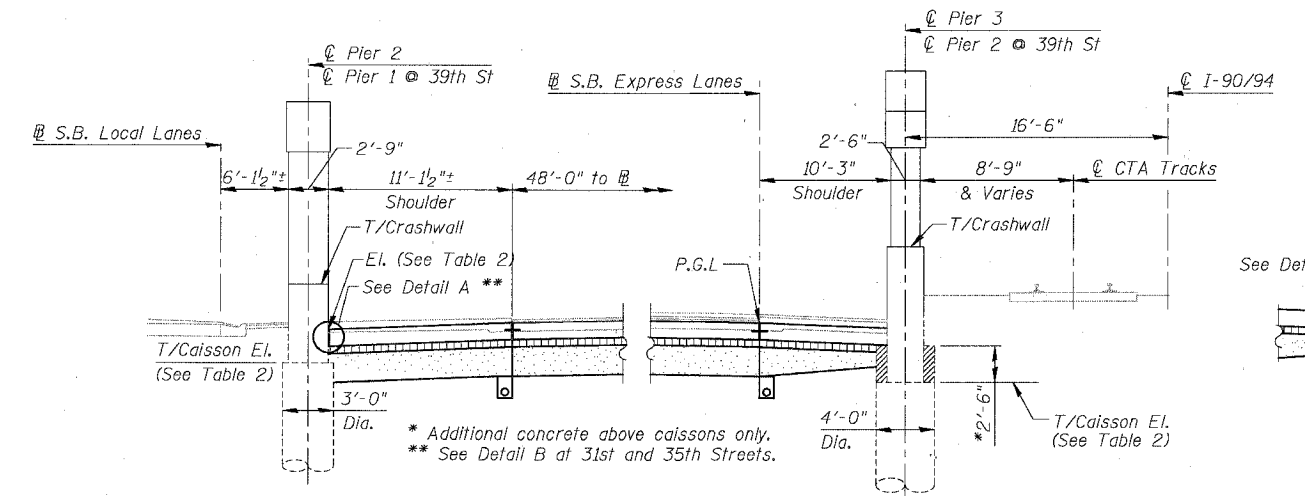
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	598	492
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		11818, ETC, 2324.6-1P1R-9		



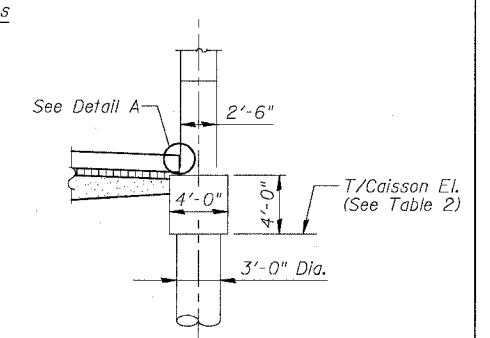
SHOULDER DETAIL AT 43rd STREET (S.N. 016-1155)
 Root Street (S.N. 016-1154) Similar as noted



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



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 1 & 2

TABLE 1

PIER	T/FOOTING EL.	T/SHOULDER EL.	
		MAX.	MIN.
4	-1.13	1.24	0.84
5	-0.93	1.24	1.07
11	-1.09	1.71	1.51
12	-0.43	1.72	1.51
18	-1.61	0.83	0.60

TABLE 2

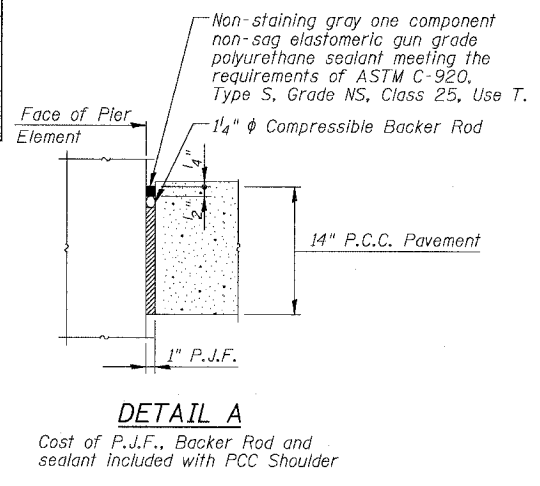
LOCATION	PIER	T/CAISSON EL.	T/SHOULDER EL.	
			MAX.	MIN.
31st St.	2	-6.44	-4.28	-4.53
33rd St.	2	-5.36	-2.23	-2.38
35th St.	2	-6.26	-2.18	-2.35
	3	-3.89	-0.83	-1.28
	3	-4.71	-0.75	-1.27
39th St.	1	-11.30	-5.28	-5.79
	2	-11.30	-5.25	-5.75

TABLE 3

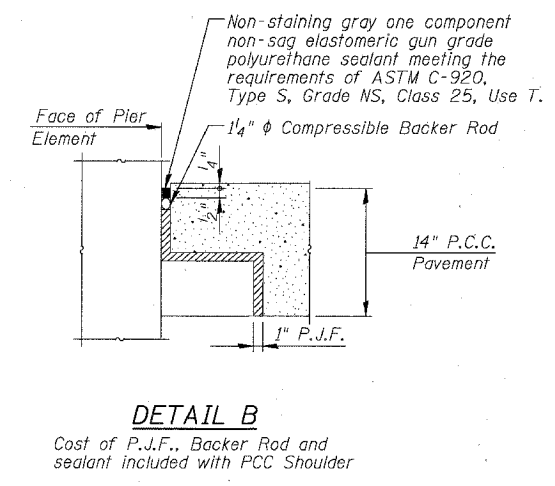
LOCATION	PIER	T/FOOTING EL.	T/SHOULDER EL.	
			MAX.	MIN.
Root St.	1	-9.5	-3.4	-3.5
	2	-9.5	-2.7	-3.5
43rd St.	1	-7.0	-3.4	-3.9
	2	-7.0	-3.4	-3.9

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 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.

REVISIONS

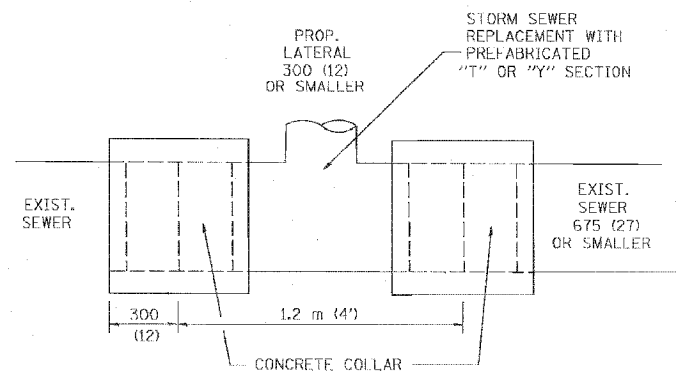
NAME	DATE

SHEET SDET-4 OF SDET-4

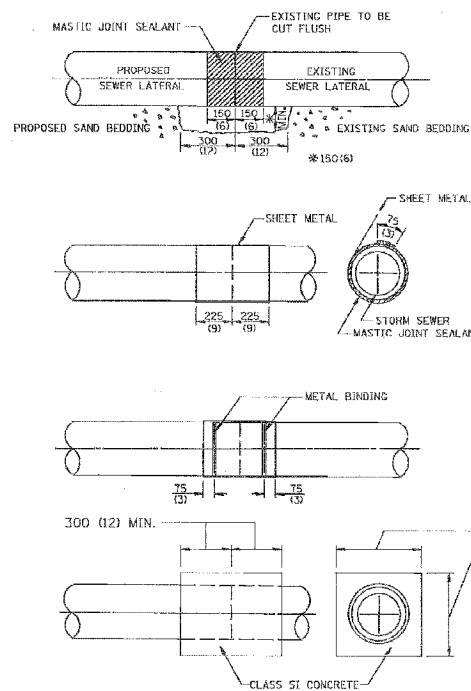
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 SB EXPRESS LANE RECONSTRUCTION
 PAVEMENT DETAILS AT
 CROSS STREET BRIDGES

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

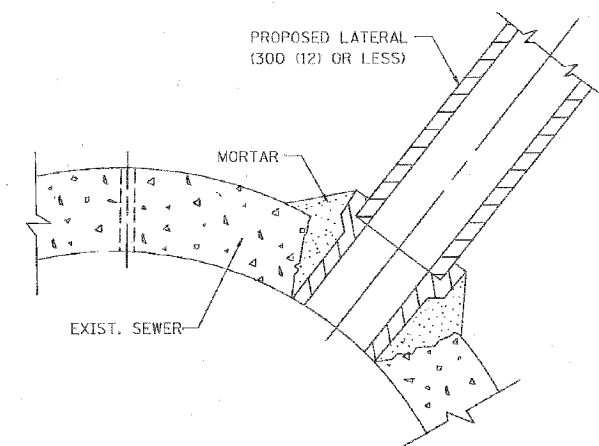
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com



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



DETAIL "B"
CLASS SI CONCRETE COLLAR



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

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 x 150 (12 x 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 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.
- WRAP THE SHEET METAL AROUND THE PIPES, 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.

NOTES

MATERIAL

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

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "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

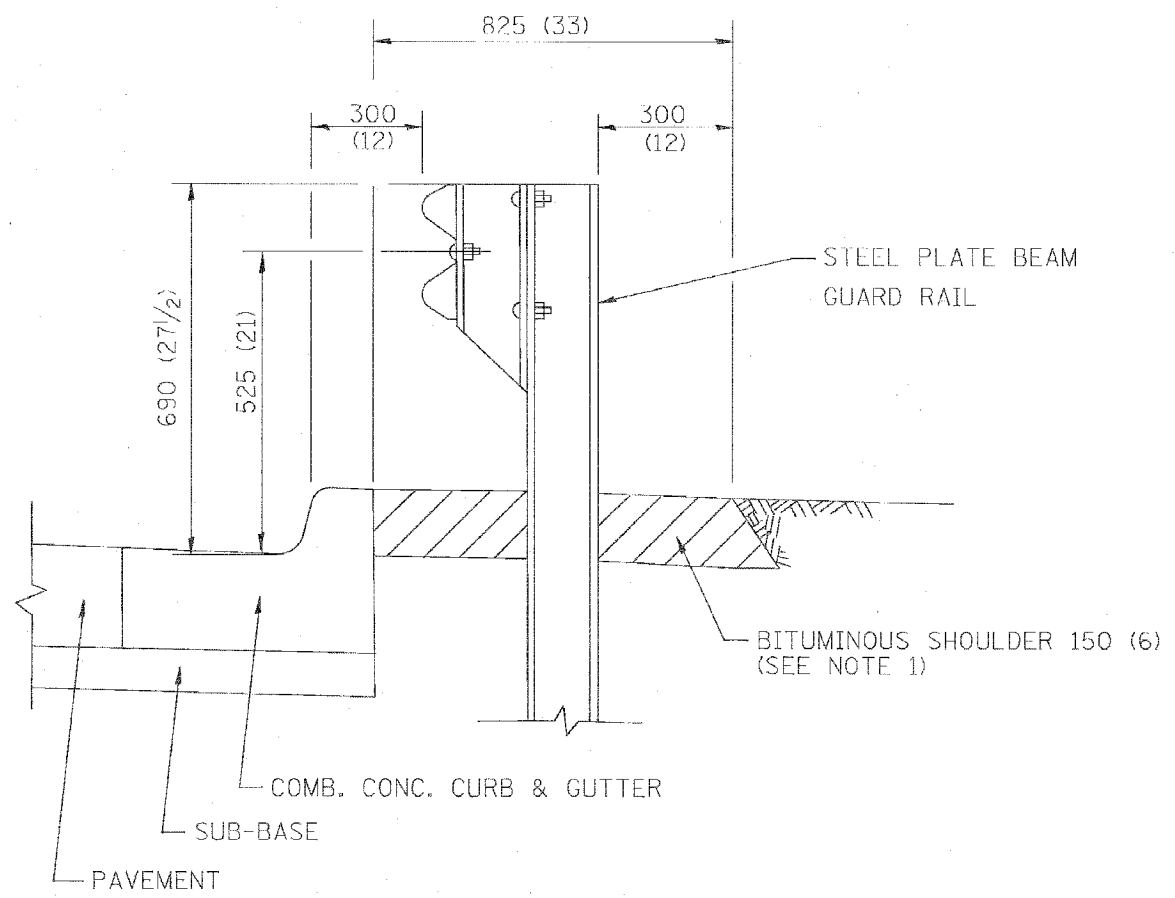
SCALE: NONE
DATE 10/18/2002

DRAWN BY CADD
CHECKED BY

BD500-01 (BD-7)

REVISION DATE: 06/12/96

F. & S. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	495
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

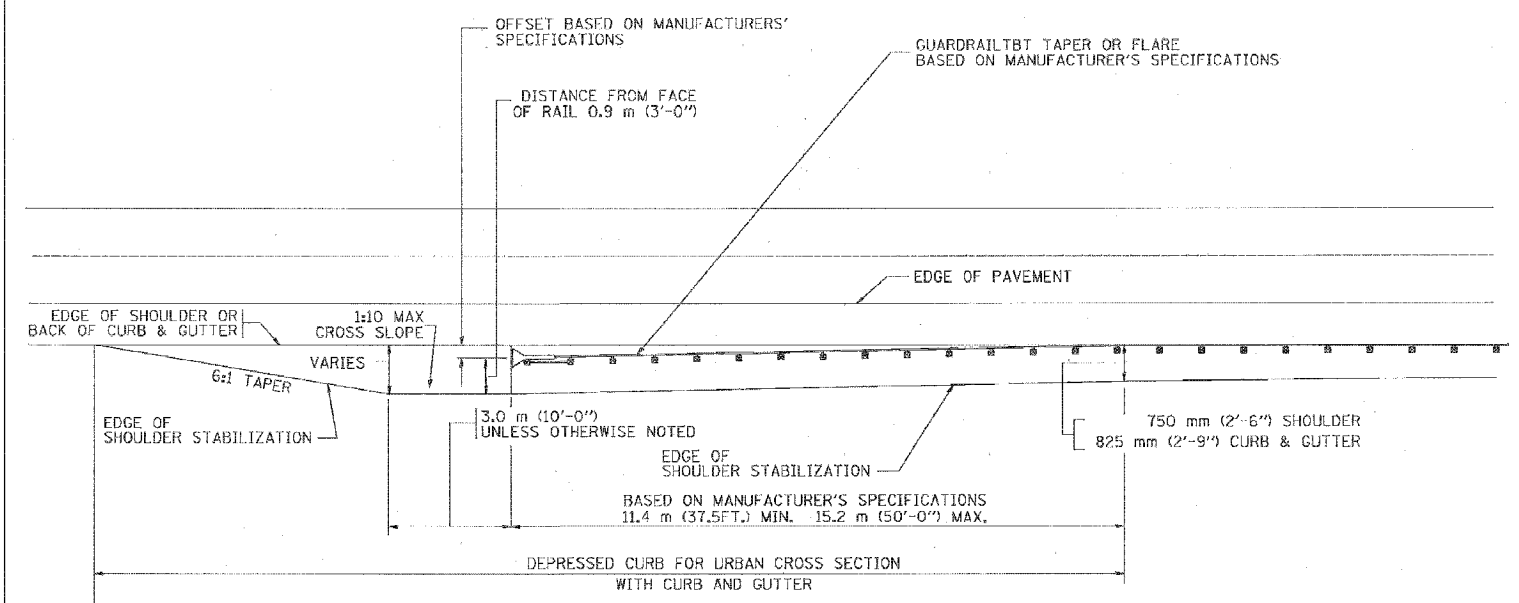


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: BITUMINOUS SHOULDER 150 (6) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER m² (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.

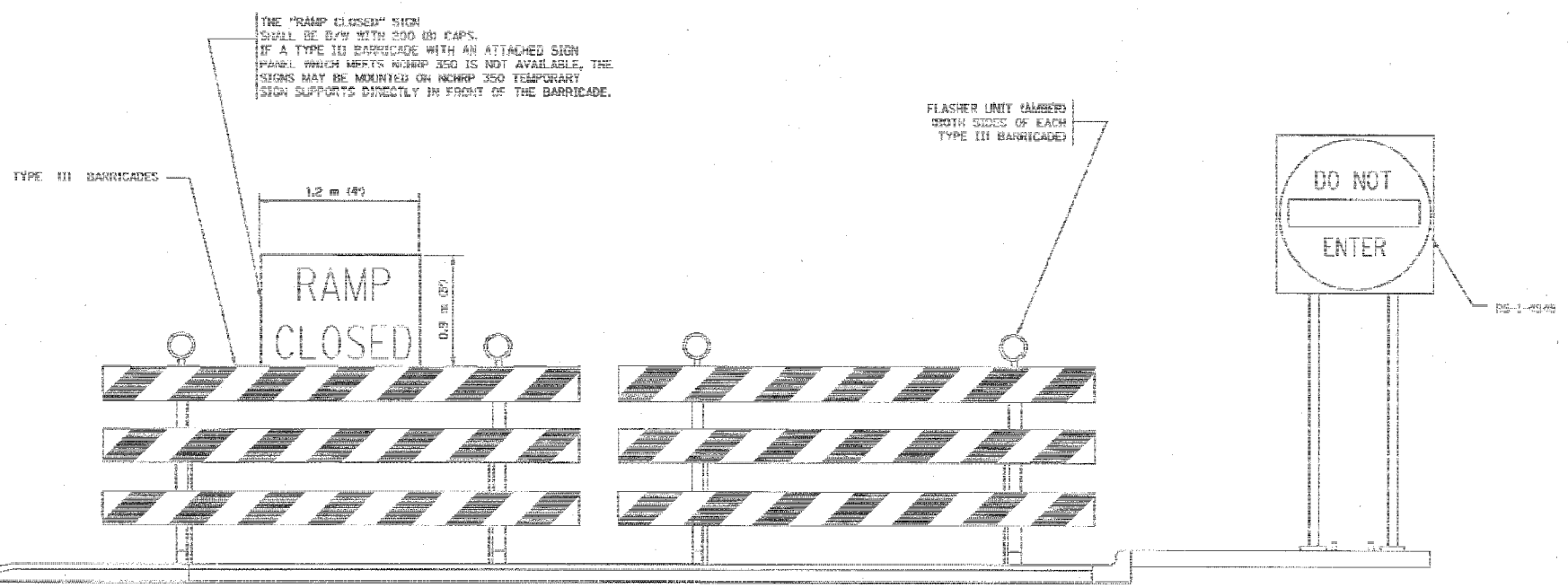
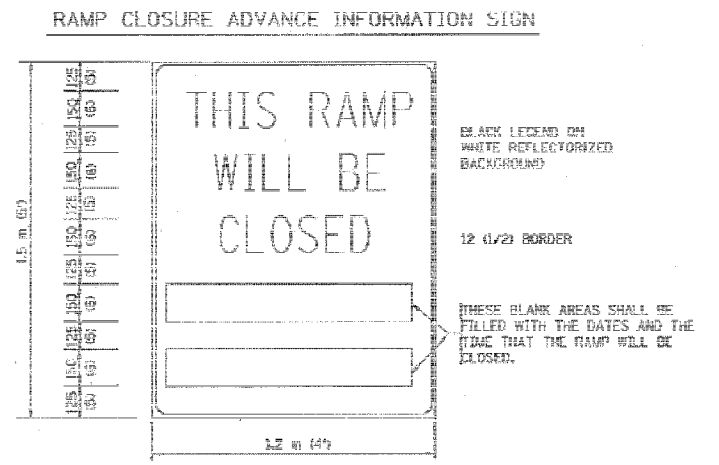
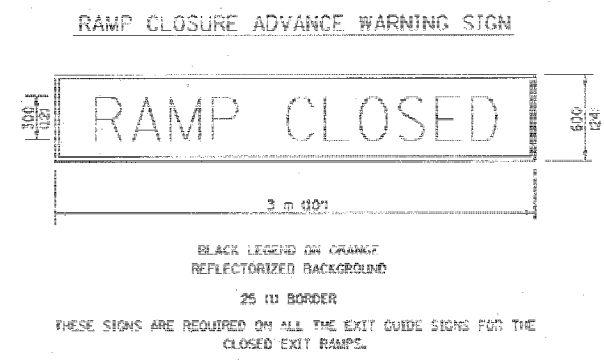
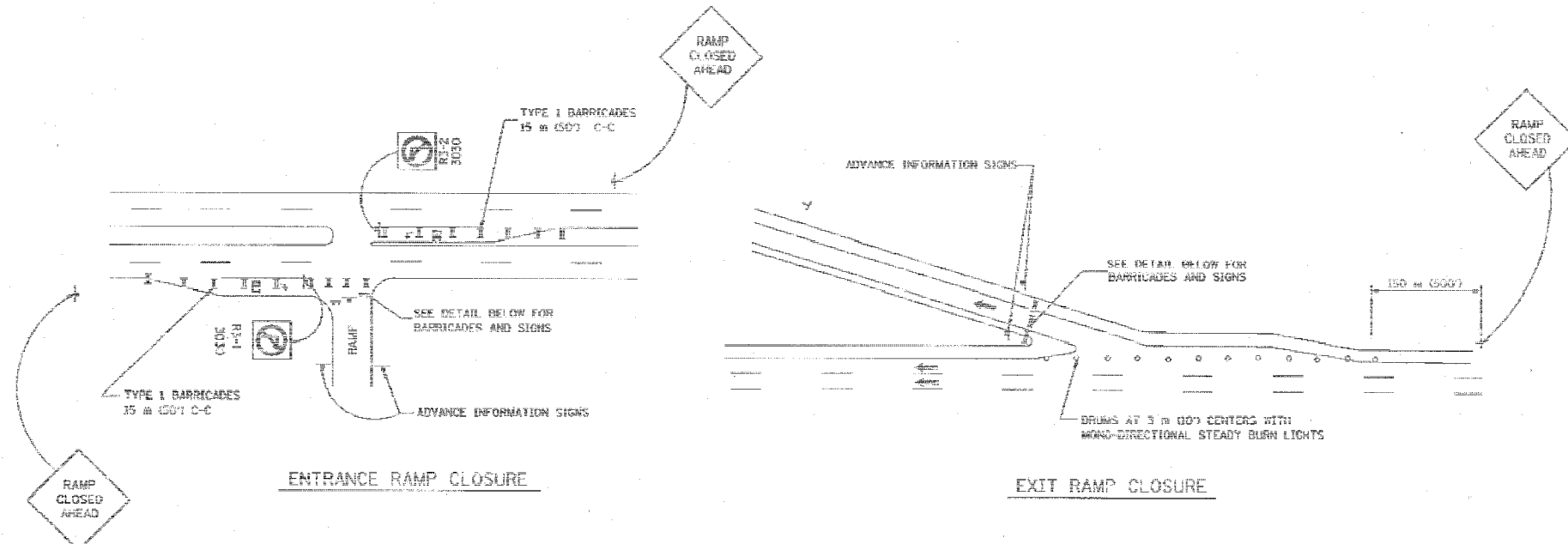
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

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: 10/18/2002
 DRAWN BY: jls
 CHECKED BY:
 BD600-10 (BD 34)

F. & R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	496
STA.		TO STA.		
FIB. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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

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

REVISIONS	
NAME	DATE
DWS	2/83
DWS	1/90
DWS	4/94
DWS	3/2/94
DWS/JAF	12/02
Revise devices to meet NCHRP 350	4/03

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

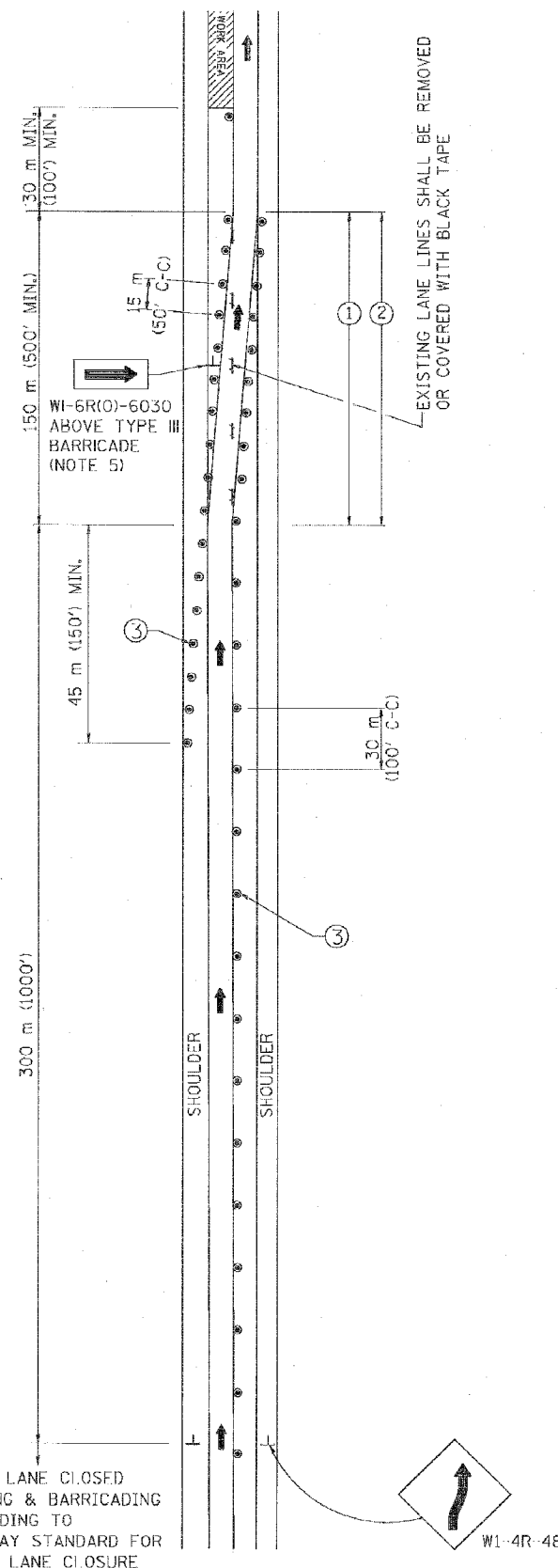
ILLINOIS DEPARTMENT OF TRANSPORTATION

FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

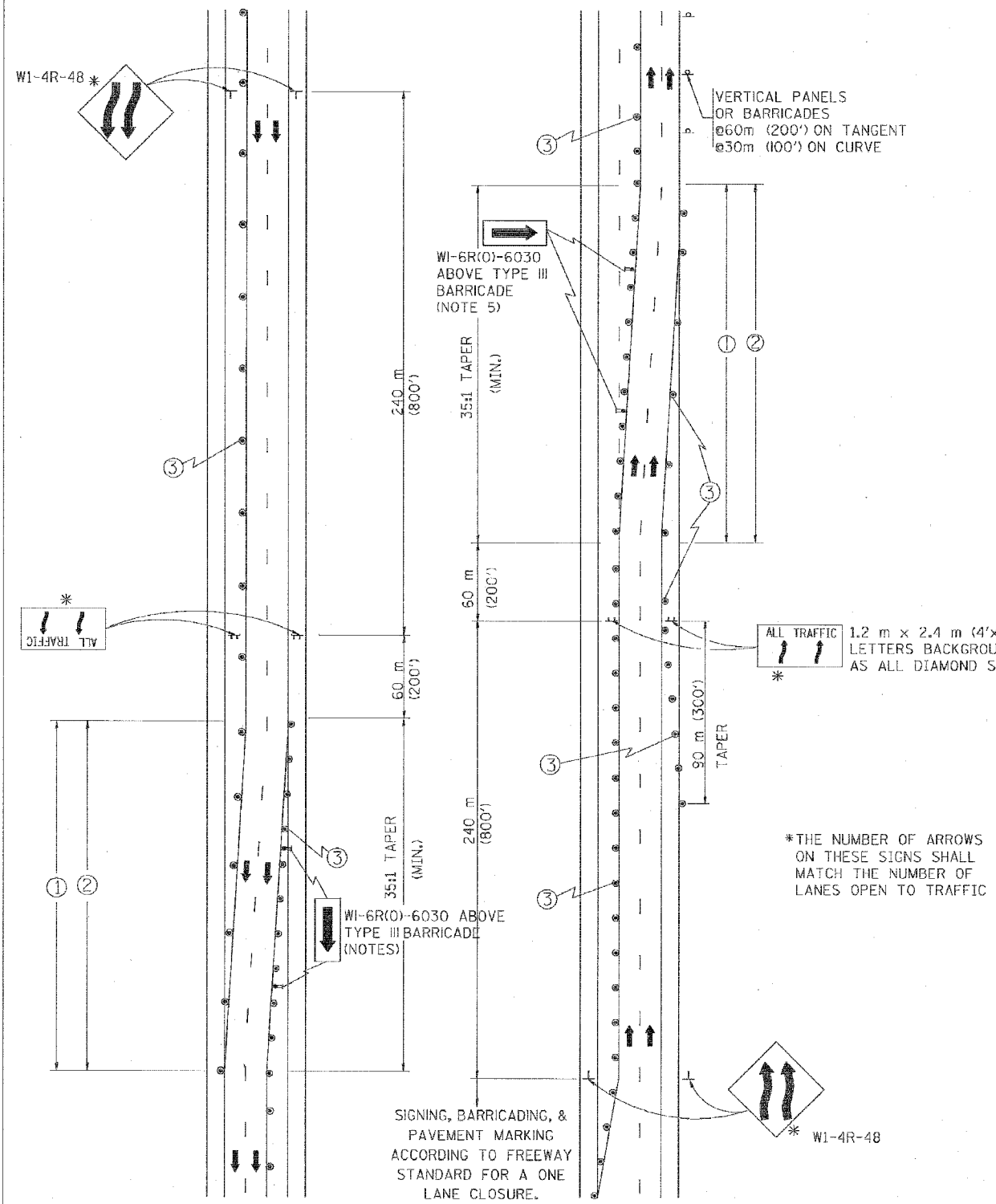
SCALE: NONE
DATE: 05/06/2003

DRAWN BY: [blank]
CHECKED BY: TC-B
REVISION DATE: 04/05/03

SINGLE LANE WEAVE



MULTI-LANE WEAVE



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

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

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

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

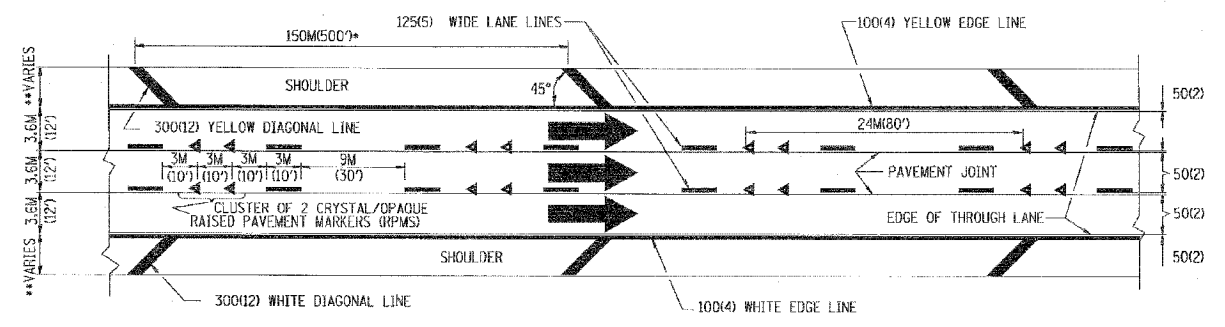
REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/96
JAF	4/03

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	497
STA. _____ TO STA. _____				
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

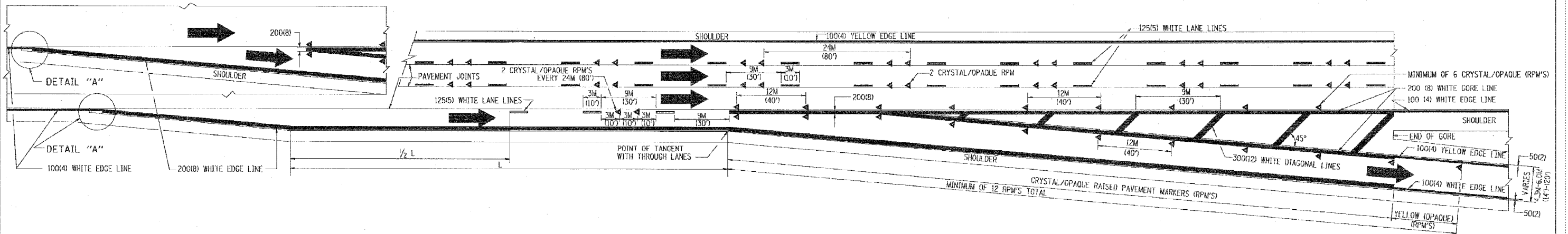
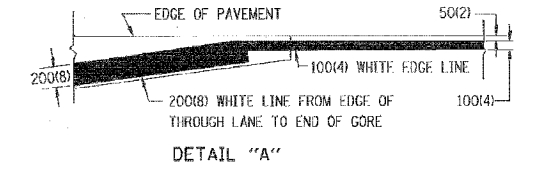
F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	498
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

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

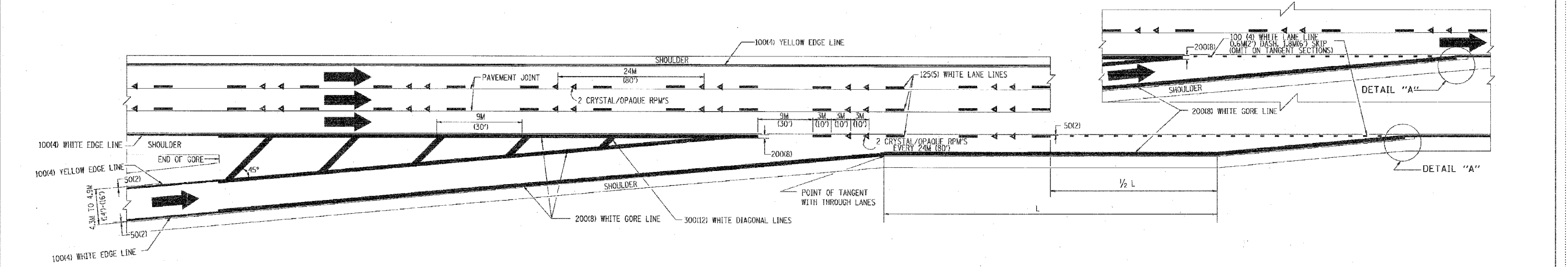


TYPICAL EDGE LINES & LANE LINES

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



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

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

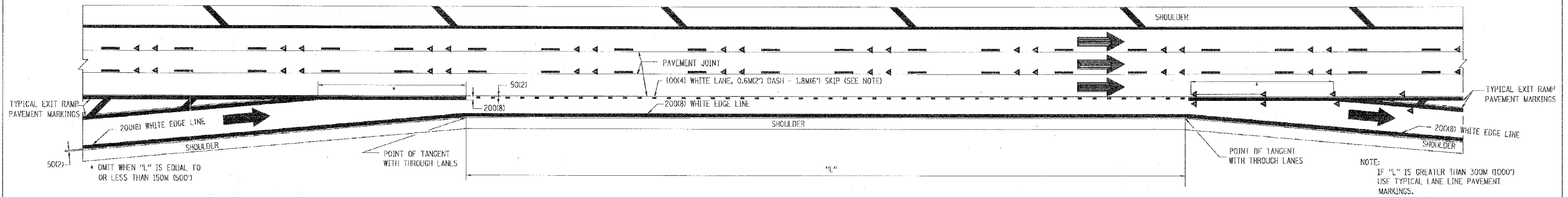
ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

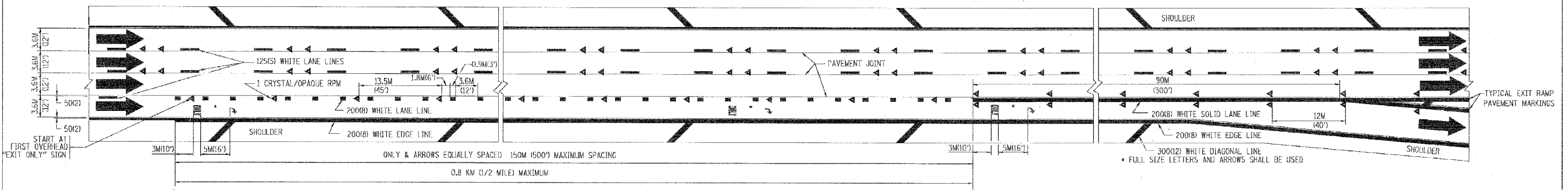
SCALE: NONE
DATE: 10/18/2002

DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 1 OF 2
REVISION DATE: 01/01/96

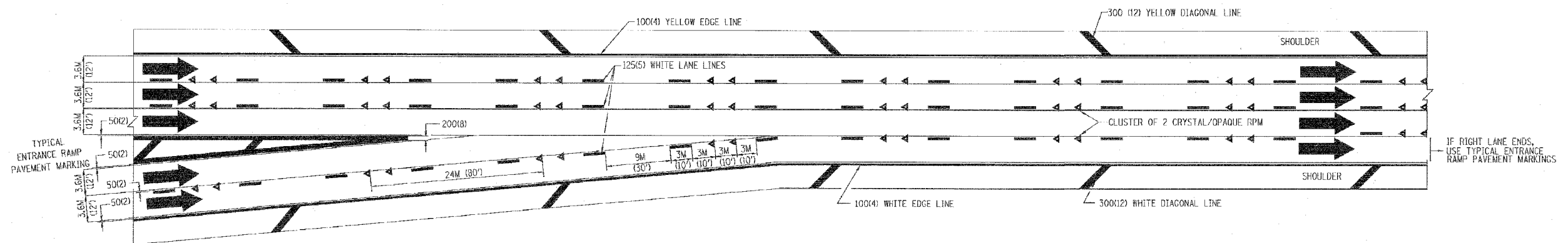
P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	499
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJ. NO.		



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

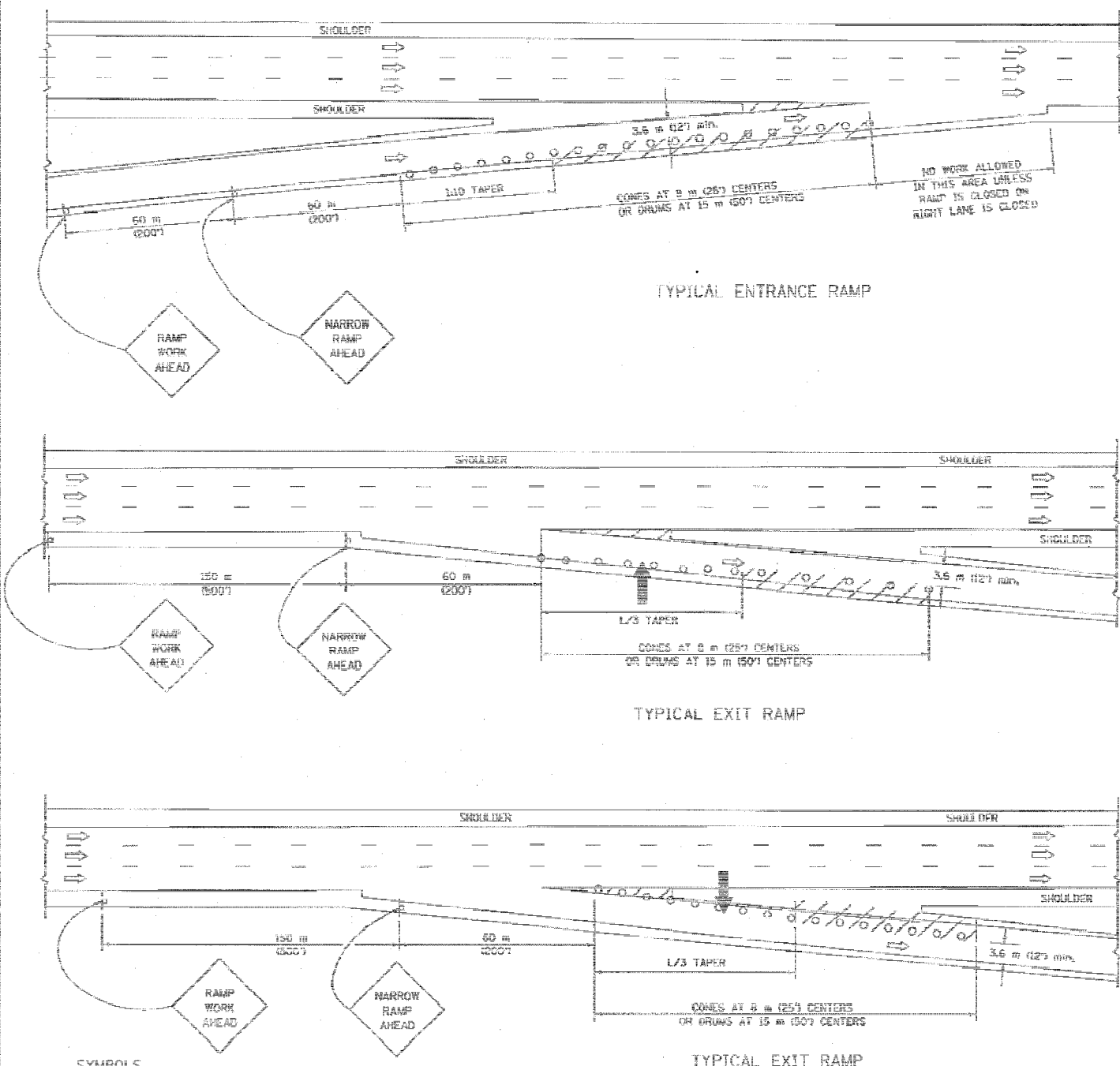
ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

SCALE: NONE
DATE: 10/18/2002

DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 2 OF 2
REVISION DATE: 01/01/96

PARTIAL RAMP CLOSURE DETAILS



SYMBOLS

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

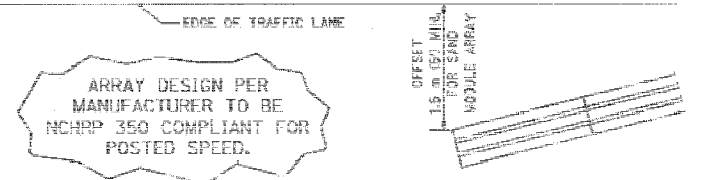
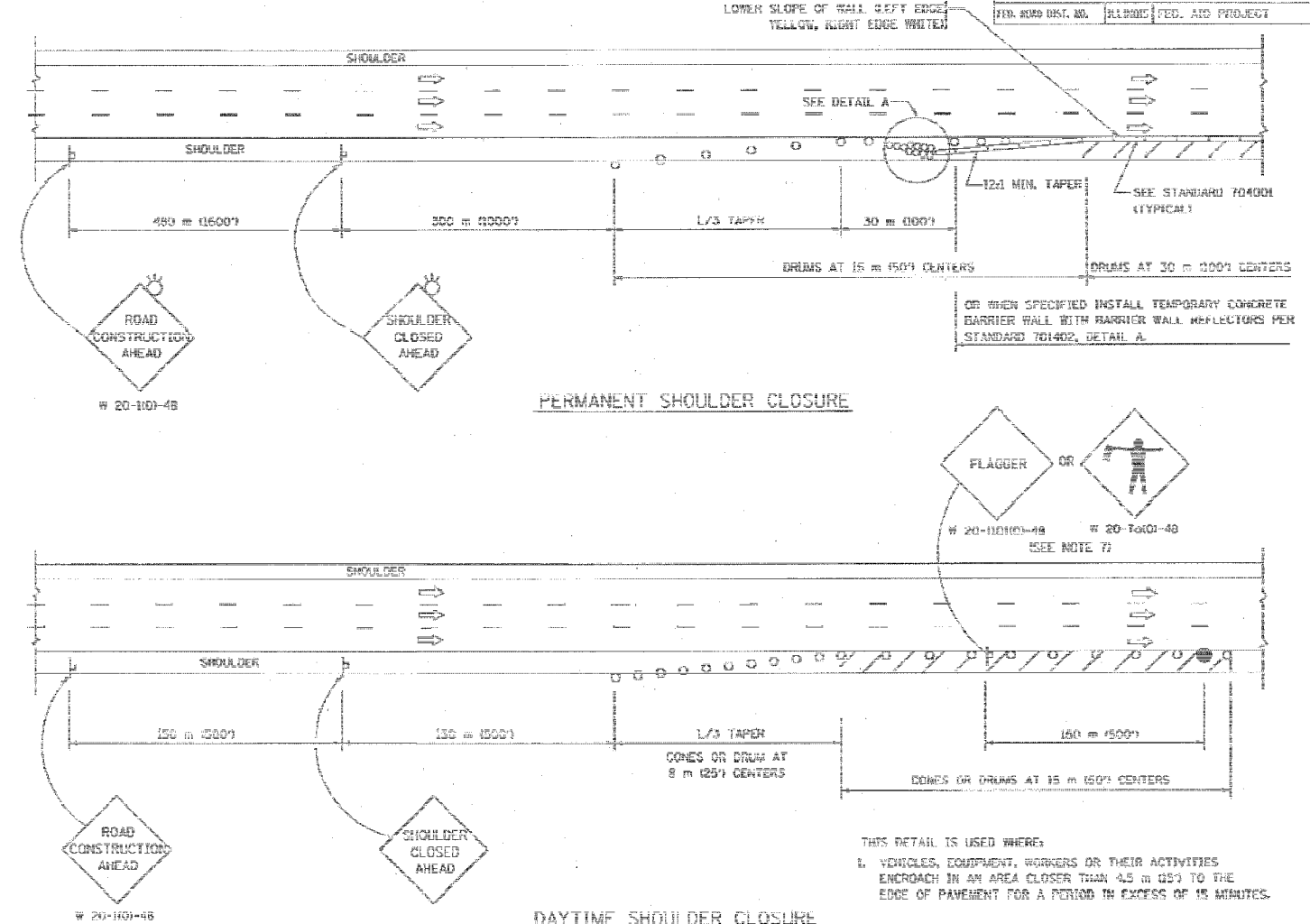
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
30 km/h (19 mph) OR GREATER:	METRIC: $L = 0.85WS$
	ENGLISH: $L = WS$

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



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

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

P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			598	500
STA.	TO STA.			
FED. ROAD DIST. NO.	ALIGNED	FED. AID PROJECT		

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 300	04/03

SCALE: NONE
 DATE: 05/05/2003
 DRAWN BY: DWS
 DESIGNED BY: DWS
 CHECKED BY: TC 17