

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED**  
**FEDERAL AID HIGHWAY**

**F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)**  
**SECTION 2324.6-1P-I-5**

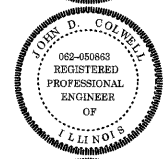
**SOUTHBOUND KNEE WALLS**  
**(33RD ST TO 31ST ST)**

**COOK COUNTY**  
**C-91-258-05**

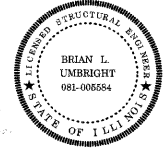
**DESIGN NUMBER**  
**D-91-417-01**



SIGNATURE *Jonitt D. Moses*  
DATE Feb. 7, 2008  
EXPIRES Nov. 30, 2009



SIGNATURE *John D. Corwell*  
DATE Feb. 7, 2008  
EXPIRES Nov. 30, 2009



SIGNATURE *Brian L. Umbright*  
DATE Feb. 7, 2008  
EXPIRES Nov. 30, 2008



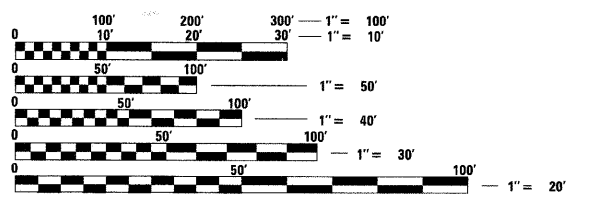
LOCATION OF SECTION INDICATED THUS: - ■ -

**PROJECT LOCATED IN CITY OF CHICAGO**

**DESIGN DESIGNATION**

WENTWORTH AVE: 8275 (20) URBAN COLLECTOR

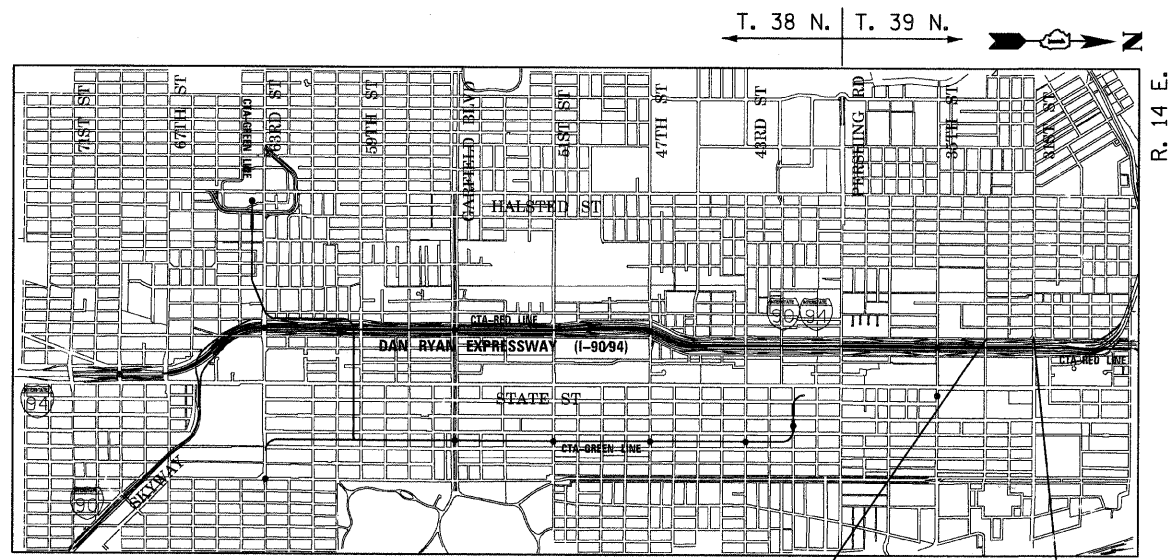
FRONTAGE ROAD:	ADT (2020)	DESIGN SPEED	POSTED SPEED
WENTWORTH AVE.	11,000	30	25



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

**BEFORE EXCAVATING CALL:**  
**CHICAGO UTILITY ALERT NETWORK**  
**(312) 744-7000**

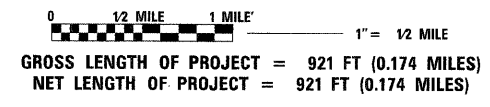
**CONTRACT NO. 60A00**



PROJECT BEGINS  
SB WENTWORTH  
STA 140+14

PROJECT ENDS  
SB WENTWORTH  
STA 149+35

**LOCATION MAP**



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED FEBRUARY 8, 20 08

*Diana M. O'Keefe* DE  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21, 20 08

*Eric E. Harrel* RE  
ENGINEER OF DESIGN AND ENVIRONMENT

March 21, 20 08

*Christine M. Reed* RE  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60A00

**GENERAL NOTES:**

- THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH:  
CONTRACT 60A05 - SB FENCE AND GATES FROM 47TH PLACE TO 31ST ST  
CONTRACT 62303 - RECONSTRUCTION OF SOUTHBOUND LOCAL LANES AND RAMPS BETWEEN GARFIELD BOULEVARD AND 31ST ST  
CONTRACT 62583 - LIGHTING AND SURVEILLANCE 31ST ST TO I-57 INTERCHANGE
- CONTRACTOR SHALL MATCH ALL WORK COMPLETED IN CONTRACT 62301
- THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR MUST CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY IMPACT THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE MUST BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION MUST BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ANY AND ALL SURFACE AND UNDERGROUND UTILITIES, EVEN THOUGH THEY MAY NOT BE IDENTIFIED ON THE PLANS.
- THE CONTRACTOR MUST COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES OF THE CITY OF CHICAGO. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR MUST CALL THE CHICAGO UTILITY ALERT NETWORK (C.U.A.N.) AT (312) 744-7000 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRICAL, TELEPHONE, CABLE, AND GAS FACILITIES (48 HOURS NOTIFICATION IS REQUIRED). THE CONTRACTOR MUST CONTACT THE CITY OF CHICAGO DEPARTMENT OF WATER MANAGEMENT, PERMIT SECTION AT (312) 747-7893 FOR WATER AND CITY SEWER LOCATIONS.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM IDOT.
- WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR MUST EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING COMMERCIAL AND RESIDENTIAL AREAS.
- USE NO. 6 EPOXY-COATED TIE BARS CONFORMING TO ARTICLE 1006.10(B)(2) OF THE STANDARD SPECIFICATIONS FOR TYING THE CURB AND GUTTER SECTIONS TO PAVEMENT AS SHOWN ON THE PLANS. THE TIE BARS WILL NOT BE PAID FOR SEPARATELY. TIE BARS USED WITH CURB AND GUTTER MUST BE INCLUDED IN THE COST OF THE COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED.
- CHAIN LINK FENCE REMOVAL MUST BE CONSIDERED AS PART OF CLEARING.
- IT MUST BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO GAP REMAINS BETWEEN PROPOSED KNEE WALLS OR WHERE PROPOSED KNEE WALL TERMINATES AND EXISTING FENCE REMAINS IN PLACE.
- THE CONTRACTOR MUST TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ADJUTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER MUST BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR MUST PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER OR AN AUTHORIZED SURVEYOR AGENT WILL WITNESS OR OTHERWISE REFERENCE AND RESET MONUMENTS AS NECESSARY. ALL PROPERTY CORNERS EXCEPT THOSE WITHIN AREAS WHERE THE SCHEDULE, IF PROVIDED, SHOWS PLACEMENT OF R.O.W. MARKERS MUST REMAIN UNDISTURBED.
- ALL ELEVATIONS IN THIS PLAN SET ARE BASED ON THE CHICAGO CITY DATUM. THE CONVERSION EQUATION FROM CCD TO NAVD 88 IS: NAVD 88 ELEVATION = CCD + 579.19.

**GENERAL NOTES: CITY OF CHICAGO**

- BARRICADES: THE CONTRACTOR MUST PROVIDE AND INSTALL TWO WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL. ALL TYPE III BARRICADES REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
- SUPERSTRUCTURE RATING COARSE AGGREGATE MUST BE USED IN THE CONCRETE BARRIER WALL CONCRETE MIXTURE.
- LOCATIONS OF ACCESS CONTROL FENCING AS SHOWN ON THE PLANS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO BETTER FIT FIELD CONDITIONS.
- THE LOCATION OF VARIOUS ITEMS SUCH AS PAVEMENT, BARRIER WALLS, ELECTRICAL SYSTEMS AND DRAINAGE STRUCTURES 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.
- CRUSHING PLANT AND CONCRETE PLANT LOCATIONS REQUIRE CITY OF CHICAGO APPROVAL.
- THE CONTRACTOR IS ALERTED THAT THERE ARE EXISTING CTA UTILITY FACILITIES WITHIN, ADJACENT TO, AND CROSSING UNDER THE EXPRESSWAY FROM THE FRONTAGE ROADS TO THE CTA OPERATING AREA. THE EXACT LOCATION OF THESE FACILITIES IS NOT KNOWN. THE CONTRACTOR MUST CONTACT THE CTA AT 312-681-3860 FOR LOCATIONS OF THESE FACILITIES BEFORE PROCEEDING WITH ANY WORK WITHIN OR ADJACENT TO THE CTA OPERATING AREA. FOR ADDITIONAL INFORMATION REGARDING BURIED CONDUITS, CONTACT MR. RICK STRAUBEL, MANAGER TECH SUPPORT, AT 312-922-0508.
- THE CONTRACTOR MUST USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- THE CONTRACTOR MUST MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR MUST PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR MUST PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. THE CONTRACTOR MUST PROVIDE AND MAINTAIN A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE INCLUDING PAVEMENT. THIS WORK MUST NOT BE PAID FOR SEPERATELY BUT MUST BE CONSIDERED INCLUDED IN THE COST OF THIS CONTRACT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- ALL RELOCATION OF EXISTING SIGNS IN CONFLICT WITH PROPOSED CONSTRUCTION SHALL CONFORM TO ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS. EXISTING SIGNS TO BE RELOCATED IN PROPOSED CONCRETE MEDIAN SURFACE SHALL BE INSTALLED USING A SLEEVE OR BY CORING THE CONCRETE MEDIAN SURFACE. THE SLEEVE AND CORING OPERATIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER. EXISTING SIGNS TO BE RELOCATED ONTO PROPOSED KNEE WALL FOOTINGS SHALL BE INSTALLED ACCORDING TO SECTIONS 728 AND 731 OF THE STANDARD SPECIFICATIONS. LABOR AND MATERIALS FOR RELOCATION OF EXISTING SIGNS WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE COST OF THE FLUTED KNEE WALL.
- THE INTENT OF THE CONTRACT DOCUMENTS IS TO CONSTRUCT THE FLUTED KNEE WALL BEHIND THE EXISTING CURB AND GUTTER. ANY DAMAGE TO THE EXISTING CURB AND GUTTER SHALL BE REPAIRED TO THE ORIGINAL CONDITION OF THE CURB AND GUTTER BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

- IN CASE OF DAMAGE TO CITY OF CHICAGO SEWERS, PRIVATE AND PUBLIC DRAINS, SEWER STRUCTURES AND/OR BENCH MONUMENTS, THE CONTRACTOR MUST IMMEDIATELY CONTACT THE DEPARTMENT OF WATER MANAGEMENT AT (312) 747-7892 OR (312) 747-7893.
- BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF WATER MANAGEMENT AT 333 SOUTH STATE STREET, SUITE 410, CHICAGO, IL 60604. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.
- 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.
- EXTREME CAUTION IS TO BE TAKEN TO ENSURE THAT NO FACILITY OWNED AND MAINTAINED BY THE DEPARTMENT OF WATER MANAGEMENT IS DAMAGED DURING CONSTRUCTION. IF ANY DAMAGE OCCURS TO ANY FACILITIES, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE COST OF REPAIRING OR REPLACING THEM.
- CITY OF CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES MUST NOT BE CLOSED, COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO DEPARTMENT OF WATER MANAGEMENT.
- THE CHICAGO TRANSIT AUTHORITY (CTA) HAS BUS OPERATIONS ALONG WENTWORTH AVENUE/WELLS STREET. THE CONTRACTOR MUST INFORM THE CTA REPRESENTATIVE MS. CHARLENE RIFFER (GENERAL MANAGER CONSTRUCTION) OF THE ON-GOING PROJECT SCHEDULE STARTING 28 DAYS BEFORE THE START OF CONSTRUCTION AT (312) 681-3851.

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

**GENERAL NOTES**

SCALE: NONE  
DATE: 02/08/08  
DRAWN BY: JDC  
CHECKED BY: RS

16660and040410129 SHEET 2 OF 25 3/5/08 PM

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY	100% STATE JOOO
20200100	EARTH EXCAVATION	CU YD	209	209
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3	3
21101645	TOPSOIL FURNISH AND PLACE, 12"	SQ YD	178	178
25000210	SEEDING, CLASS 2A	ACRE	0.09	0.09
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	8	8
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	8	8
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	8	8
25000800	GROUND PREPARATION FOR SEEDING	ACRE	0.06	0.06
25100630	EROSION CONTROL BLANKET	SQ YD	455	455
42001300	PROTECTIVE COAT	SQ YD	120	120
44004250	PAVED SHOULDER REMOVAL	SQ YD	166	166
50300225	CONCRETE STRUCTURES	CU YD	1.6	1.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.0	8.0
50300300	PROTECTIVE COAT	SQ YD	175	175
50300510	RUSTICATION FINISH	SQ FT	40	40
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	770	770
60618324	CONCRETE MEDIAN SURFACE, 6" (SPECIAL)	SQ FT	400	400
63200310	GUARDRAIL REMOVAL	FOOT	51	51
66400550	CHAIN LINK FENCE, 4' (SPECIAL)	FOOT	794	794
67100100	MOBILIZATION	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	26	26
X0323973	SEDIMENT CONTROL, SILT FENCE	FOOT	832	832
X0323974	SEDIMENT CONTROL, SILT FENCE MAINTENANCE	FOOT	208	208
X0324112	BARRIER BASE	FOOT	60	60
X0324640	FLUTED KNEE WALL	FOOT	825	825
X6065740	CONCRETE MEDIAN SURFACE, 5" (MODIFIED)	SQ FT	682	682
63700155	CONCRETE BARRIER, SINGLE FACE, 32" INCH HEIGHT	FOOT	60	60
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0029999	IMPACT ATTENUATOR REMOVAL	EACH	1	1
Z0030020	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1
<del>Z0076600</del>	<del>TRAINERS</del>	<del>HOUR</del>		
44002300	CURB REMOVAL (PARTIAL)	FOOT	150	150

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60A00

INDEX OF SHEETS

SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND PROJECT COMMITMENTS
3	SUMMARY OF QUANTITIES / INDEX / HIGHWAY STANDARDS
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5-9	ALIGNMENT PLANS, SURVEY TIES AND CONTROL POINTS
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13-15A	STRUCTURAL DETAILS
16	BD-51 DISTRICT 1, BENCHING DETAIL FOR EMBANKMENT WIDENING
17	TC-10 DISTRICT 1, TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS & DRIVEWAYS
18	TC-17 DISTRICT 1, TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES
19	TC-18 DISTRICT 1, SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
20	TC-22 DISTRICT 1, ARTERIAL ROAD INFORMATION SIGN
21-25	CROSS SECTIONS

IDOT HIGHWAY STANDARDS

SHEET	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
664001-01	CHAIN LINK FENCE
701601-05	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-03	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE, for speeds < 45 mph
701901	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
728001	TELESCOPING STEEL SIGN SUPPORT
731001	BASE FOR TELESCOPING STEEL SIGN SUPPORT

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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD TO 31ST ST)  
SUMMARY OF QUANTITIES  
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HIGHWAY STANDARDS

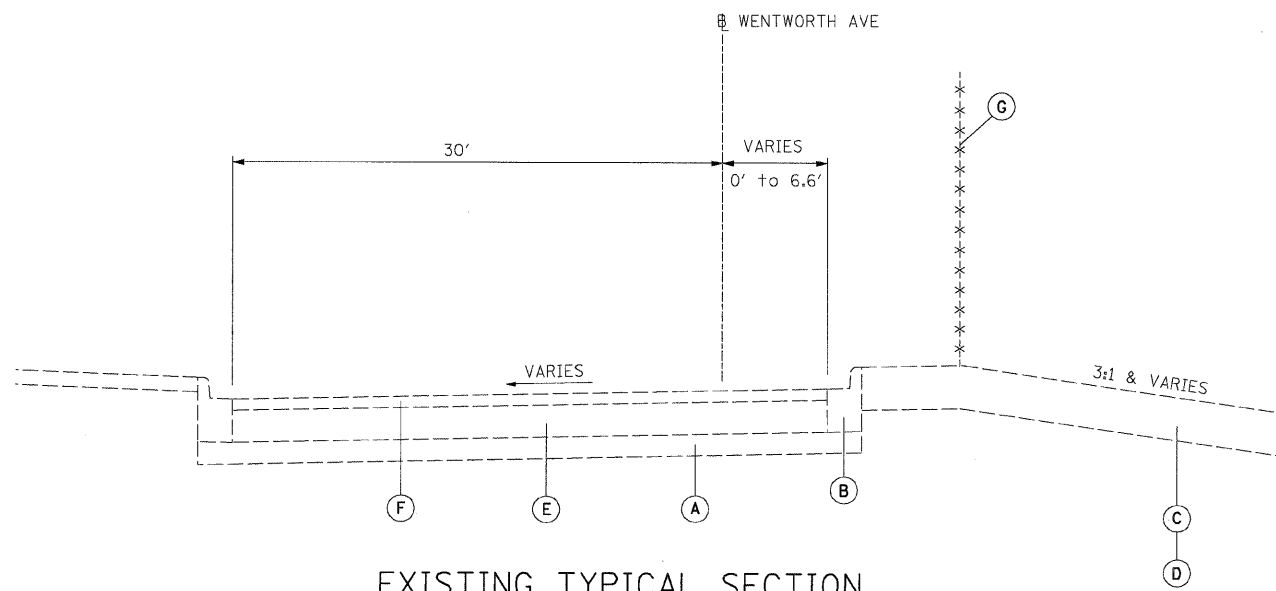
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DATE: 02/08/08

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CHECKED BY: DDM

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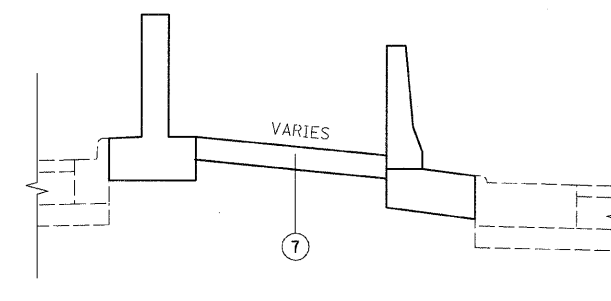
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	25	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A00		2324.6-1P-1-5		



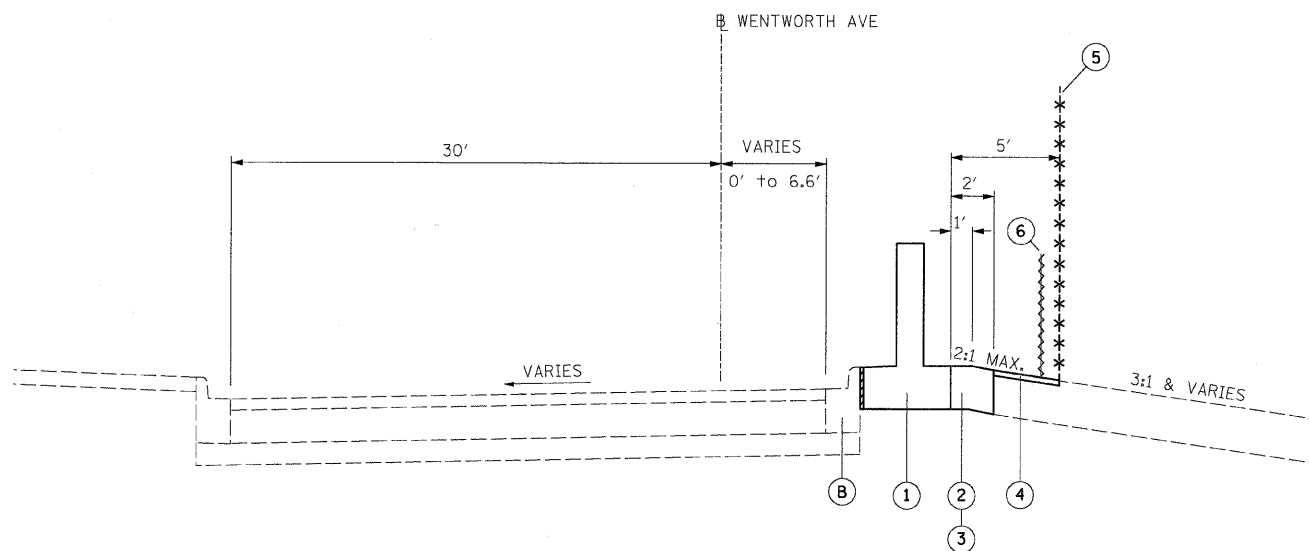
**EXISTING TYPICAL SECTION**  
STA. 140+25 to 149+26

**EXISTING LEGEND**

- (A) GRANULAR MATERIAL, 6"
- (B) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (C) TOPSOIL, 4"
- (D) TOPSOIL, 12"
- (E) PORTLAND CEMENT CONCRETE PAVEMENT, 9"
- (F) BITUMINOUS CONCRETE, 3"
- (G) CHAIN LINK FENCE, 4'



**TYPICAL MEDIAN TREATMENT**  
STA. 148+42 to 148+76



**PROPOSED TYPICAL SECTION**  
STA. 140+25 to 149+26

**PROPOSED LEGEND**

- (1) FLUTED KNEE WALL
- (2) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 4" / EROSION CONTROL BLANKET
- (3) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 12" / EROSION CONTROL BLANKET
- (4) SEEDING, CLASS 2A / GROUND PREPARATION FOR SEEDING / EROSION CONTROL BLANKET
- (5) CHAIN LINK FENCE, 4' (SPECIAL)
- (6) SEDIMENT CONTROL, SILT FENCE (TO BE REMOVED AT PROJECT COMPLETION)

**NOTES:**

1. THICKNESS OF EXISTING PAVEMENT AND GRANULAR MATERIAL ARE TAKEN FROM RECORD DRAWING PLANS.
2. TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.

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REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

**TYPICAL SECTIONS**

SCALE: NTS  
DATE: 03/06/08  
DRAWN BY: JDC  
CHECKED BY: RS

TYP-1

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4/6/08 4:08 PM 3/6/2008

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60A00 • 2324.6-1P-1-5

**PROP. CURVE SBDR10**  
P.I. STA = 1539+47.07  
N<sub>1</sub> = 1,874,803.43  
E<sub>1</sub> = 1,175,912.56  
Δ = 25° 26' 39" (LT)  
D = 3° 49' 11"  
R = 1,500.00'  
T = 338.65'  
L = 666.13'  
E = 37.75'  
e = 5.9%  
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 1537+03.93  
T.R. = 68.20'  
S.E. RUN = 315.00'  
S.R. = STA 1541+69.55 TO STA 1545+52.75  
P.C. STA = 1536+08.42  
N<sub>1</sub> = 1,874,493.81  
E<sub>1</sub> = 1,175,775.38  
P.T. STA = 1542+74.55  
N<sub>2</sub> = 1,875,141.96  
E<sub>2</sub> = 1,175,903.41

**PROP. CURVE SBLOC06**  
P.I. STA = 3539+38.89  
N<sub>1</sub> = 1,874,807.75  
E<sub>1</sub> = 1,175,816.77  
Δ = 22° 47' 56" (LT)  
D = 3° 23' 54"  
R = 1,686.00'  
T = 339.94'  
L = 670.88'  
E = 33.93'  
e = 5.7%  
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 3537+00.25  
T.R. = 68.79'  
S.E. RUN = 380.00'  
S.R. = STA 3541+43.17 TO STA 3545+91.96  
P.C. STA = 3535+98.96  
N<sub>1</sub> = 1,874,493.12  
E<sub>1</sub> = 1,175,688.05  
P.T. STA = 3542+69.84  
N<sub>2</sub> = 1,875,147.67  
E<sub>2</sub> = 1,175,813.52

**PROP. CURVE B4700**  
P.I. STA = 6065+87.40  
N<sub>1</sub> = 1,874,784.51  
E<sub>1</sub> = 1,176,124.85  
Δ = 24° 04' 19" (LT)  
D = 4° 24' 27"  
R = 1,300.00'  
T = 277.18'  
L = 546.17'  
E = 29.22'  
e = 4.9%  
S.A. = STA 6061+55.16 TO 6063+58.24  
S.R. = STA 6068+08.40 TO 4546+51.92  
P.C. STA = 6063+10.23  
N<sub>1</sub> = 1,874,525.73  
E<sub>1</sub> = 1,176,025.56  
P.T. STA = 6068+56.40  
N<sub>2</sub> = 1,875,061.29  
E<sub>2</sub> = 1,176,109.94

**PROP. CURVE EL4300**  
P.C. STA = 714+54.39  
N<sub>1</sub> = 1,875,675.42  
E<sub>1</sub> = 1,175,825.74  
Δ = 0° 54' 33" (LT)  
D = 0° 31' 15"  
R = 1,500.00'  
T = 87.27'  
L = 174.54'  
E = 0.35'  
e = 5.9%  
P.C. STA = 713+67.12  
N<sub>1</sub> = 1,875,762.70  
E<sub>1</sub> = 1,175,826.31  
P.T. STA = 715+41.66  
N<sub>2</sub> = 1,875,588.15  
E<sub>2</sub> = 1,175,826.55

**PROP. CURVE NBLOC07**  
P.I. STA = 4539+56.47  
N<sub>1</sub> = 1,874,785.65  
E<sub>1</sub> = 1,176,076.72  
Δ = 28° 53' 07" (LT)  
D = 3° 52' 17"  
R = 1,480.00'  
T = 381.17'  
L = 746.13'  
E = 48.30'  
e = 5.9%  
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 4536+66.66  
T.R. = 68.49'  
S.E. RUN = 393.00'  
S.R. = STA 4541+90.43 TO STA 4546+51.92  
P.C. STA = 4535+75.30  
N<sub>1</sub> = 1,874,442.48  
E<sub>1</sub> = 1,175,910.80  
P.T. STA = 4543+21.43  
N<sub>2</sub> = 1,875,166.27  
E<sub>2</sub> = 1,176,056.22

**PROP. CURVE BL\_WW-1**  
P.I. STA = 211+05.58  
N<sub>1</sub> = 1,873,849.12  
E<sub>1</sub> = 1,175,736.29  
Δ = 27° 13' 24" (RT)  
D = 9° 44' 58"  
R = 587.69'  
T = 142.30'  
L = 279.23'  
E = 16.98'  
e = 4.9%  
T.R. = MATCH EXISTING  
S.E. RUN = MATCH EXISTING  
P.C. STA = 209+63.28  
N<sub>1</sub> = 1,873,706.87  
E<sub>1</sub> = 1,175,740.12  
P.T. STA = 212+42.51  
N<sub>2</sub> = 1,874,487.21  
E<sub>2</sub> = 1,175,797.95

**PROP. CURVE SWTH1**  
P.I. STA = 13+21.89  
N<sub>1</sub> = 1,874,747.97  
E<sub>1</sub> = 1,175,711.50  
Δ = 28° 04' 24" (LT)  
D = 4° 27' 01"  
R = 1,287.50'  
T = 321.89'  
L = 630.84'  
E = 39.63'  
e = 5.9%  
T.R. = MATCH EXISTING  
S.E. RUN = MATCH EXISTING  
P.C. STA = 10+00.00  
N<sub>1</sub> = 1,874,459.70  
E<sub>1</sub> = 1,175,568.28  
P.T. STA = 16+30.84  
N<sub>2</sub> = 1,875,069.72  
E<sub>2</sub> = 1,175,702.20

**PROP. CURVE EL4301**  
P.I. STA = 723+10.32  
N<sub>1</sub> = 1,874,819.53  
E<sub>1</sub> = 1,175,832.74  
Δ = 23° 55' 56" (RT)  
D = 3° 49' 11"  
R = 1,500.00'  
T = 317.91'  
L = 626.54'  
E = 33.32'  
e = 5.9%  
S.A. = STA 719+00.06 TO STA 720+38.59  
S.R. = STA 725+72.77 TO 727+63.41 (1.83%)  
P.C. STA = 719+92.41  
N<sub>1</sub> = 1,875,137.42  
E<sub>1</sub> = 1,175,830.77  
P.T. STA = 726+18.95  
N<sub>2</sub> = 1,874,527.76  
E<sub>2</sub> = 1,175,707.50

**PROP. CURVE LE4301**  
P.I. STA = 813+31.25  
N<sub>1</sub> = 1,874,769.76  
E<sub>1</sub> = 1,176,048.87  
Δ = 25° 32' 57" (LT)  
D = 3° 55' 18"  
R = 1,461.00'  
T = 331.25'  
L = 651.48'  
E = 37.08'  
e = 5.9%  
S.A. = STA 810+00.00 (4.45%) TO 810+67.35  
T.R. = 71.04'  
S.E. RUN = 208.68'  
S.R. = STA 815+81.92 TO STA 818+61.64  
P.C. STA = 810+00.00  
N<sub>1</sub> = 1,874,464.55  
E<sub>1</sub> = 1,175,920.15  
P.T. STA = 816+51.48  
N<sub>2</sub> = 1,875,100.65  
E<sub>2</sub> = 1,176,033.38

**PROP. CURVE A4701**  
P.I. STA = 5072+36.79  
N<sub>1</sub> = 1,874,030.16  
E<sub>1</sub> = 1,175,360.65  
Δ = 14° 54' 56" (LT)  
D = 4° 11' 07"  
R = 1,369.00'  
T = 179.20'  
L = 356.38'  
E = 11.68'  
e = 5.9%  
T.R. = MATCH EXISTING  
S.E. RUN = MATCH EXISTING  
P.C. STA = 5070+57.59  
N<sub>1</sub> = 1,874,189.71  
E<sub>1</sub> = 1,175,442.25  
P.T. STA = 5074+13.97  
N<sub>2</sub> = 1,873,854.99  
E<sub>2</sub> = 1,175,322.86

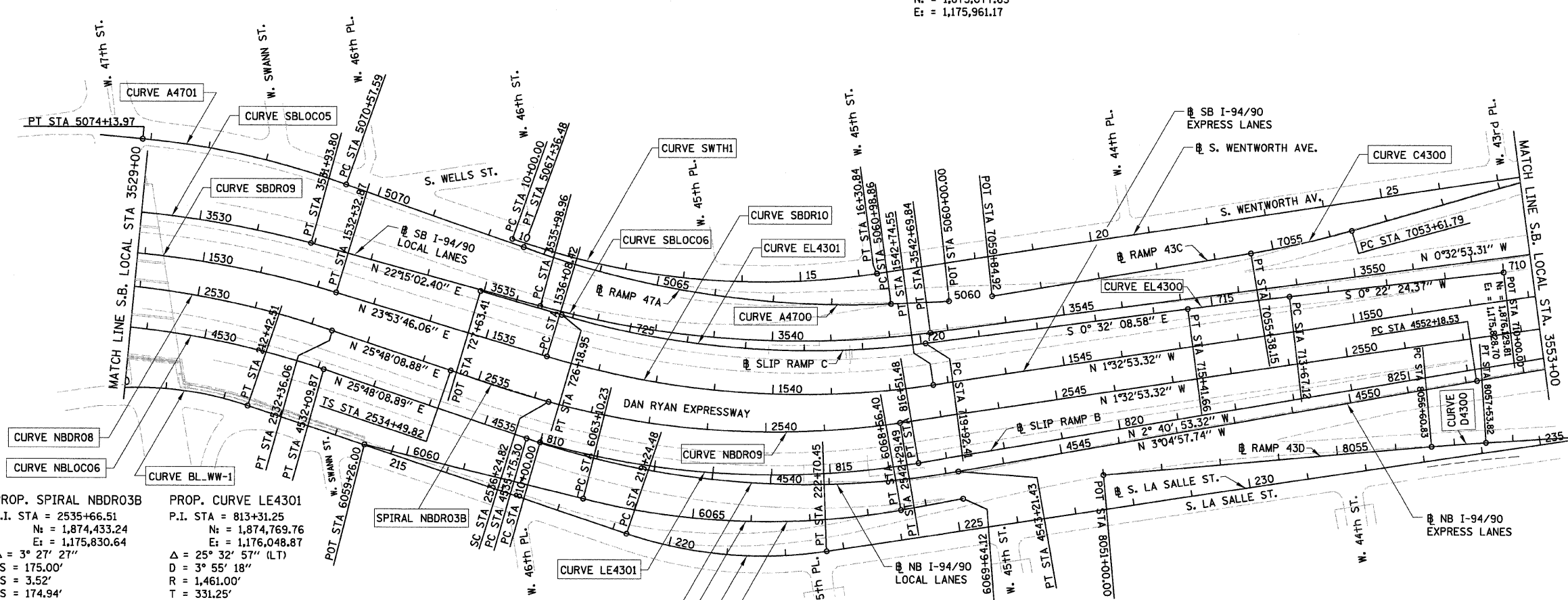
**PROP. CURVE A4700**  
P.I. STA = 5064+21.82  
N<sub>1</sub> = 1,874,765.22  
E<sub>1</sub> = 1,175,731.41  
Δ = 22° 28' 55" (RT)  
D = 3° 31' 33"  
R = 1,625.00'  
T = 322.97'  
L = 637.62'  
E = 31.78'  
e = 4.4%  
S.A. = STA 5060+00 (3.58%) TO 5061+21.86  
S.R. = STA 5067+13.48 TO 5067+83.48  
P.C. STA = 5060+98.86  
N<sub>1</sub> = 1,875,087.21  
E<sub>1</sub> = 1,175,756.48  
P.T. STA = 5067+36.48  
N<sub>2</sub> = 1,874,477.28  
E<sub>2</sub> = 1,175,585.12

**PROP. CURVE LSA1**  
P.I. STA = 221+00.82  
N<sub>1</sub> = 1,874,750.89  
E<sub>1</sub> = 1,176,169.92  
Δ = 27° 20' 30" (LT)  
D = 7° 54' 10"  
R = 725.00'  
T = 176.34'  
L = 345.97'  
E = 21.14'  
e = 4.9%  
T.R. = MATCH EXISTING  
S.E. RUN = MATCH EXISTING  
P.C. STA = 219+24.48  
N<sub>1</sub> = 1,874,591.98  
E<sub>1</sub> = 1,176,093.48  
P.T. STA = 222+70.45  
N<sub>2</sub> = 1,874,927.16  
E<sub>2</sub> = 1,176,164.84

**PROP. CURVE C4300**  
P.I. STA = 7054+50.07  
N<sub>1</sub> = 1,875,794.51  
E<sub>1</sub> = 1,175,741.50  
Δ = 6° 44' 11" (RT)  
D = 3° 49' 11"  
R = 1,500.00'  
T = 88.28'  
L = 176.36'  
E = 2.60'  
e = 4.6%  
S.A. = STA 7053+09.79 TO 7053+87.79  
S.R. = STA 7055+12.15 TO 7055+90.15  
P.C. STA = 7053+61.79  
N<sub>1</sub> = 1,875,881.65  
E<sub>1</sub> = 1,175,727.39  
P.T. STA = 7055+38.15  
N<sub>2</sub> = 1,875,706.31  
E<sub>2</sub> = 1,175,745.28

**PROP. CURVE NBDR09**  
P.I. STA = 2539+31.62  
N<sub>1</sub> = 1,874,770.97  
E<sub>1</sub> = 1,175,969.46  
Δ = 23° 53' 35" (LT)  
D = 3° 57' 05"  
R = 1,450.00'  
T = 306.79'  
L = 604.67'  
E = 32.10'  
e = 6.0%  
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 2536+24.82  
T.R. = 33.10'  
S.E. RUN = 320.00'  
S.R. = STA 2541+22.82 TO STA 2544+75.92  
P.C. STA = 2536+24.82  
N<sub>1</sub> = 1,874,487.21  
E<sub>1</sub> = 1,175,852.82  
P.T. STA = 2542+29.49  
N<sub>2</sub> = 1,875,077.65  
E<sub>2</sub> = 1,175,961.17

**PROP. CURVE D4300**  
P.I. STA = 8057+07.33  
N<sub>1</sub> = 1,876,018.11  
E<sub>1</sub> = 1,176,112.42  
Δ = 1° 19' 55" (RT)  
D = 1° 25' 57"  
R = 4,000.00'  
T = 46.49'  
L = 92.99'  
E = 0.27'  
e = 2.3%  
S.A. = STA 8056+54.83 TO 8056+63.83  
S.R. = STA 8057+50.82 TO 8057+59.82  
P.C. STA = 8056+60.83  
N<sub>1</sub> = 1,875,971.65  
E<sub>1</sub> = 1,176,110.86  
P.T. STA = 8057+53.82  
N<sub>2</sub> = 1,876,064.53  
E<sub>2</sub> = 1,176,115.06



- NOTES:**
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
  2. FOR BENCH MARK INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.
  3. FOR RAMP P.O.T. INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE
REVISOR	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)  
**ALIGNMENT PLAN**

SCALE: 1"=100'  
DATE: 03/06/08  
DRAWN BY: JDC  
CHECKED BY: RS

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
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3/6/2008 12:41:56 PM

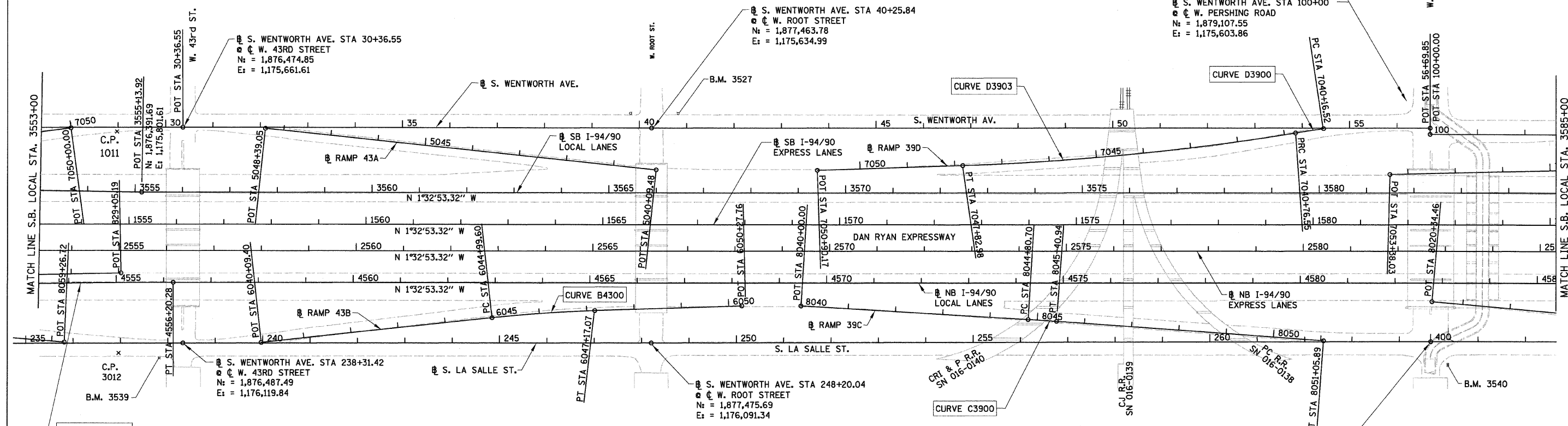
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A00	2324.6-1P-1-5			

PROP. CURVE D3903  
P.I. STA = 7044+30.25  
N: = 1,878,475.96  
E: = 1,175,675.24  
 $\Delta$  = 7° 22' 41" (RT)  
D = 1° 02' 40"  
R = 5,486.00'  
T = 353.70'  
L = 706.43'  
E = 11.39'  
P.C. STA = 7040+76.55  
N: = 1,878,823.36  
E: = 1,175,608.75  
P.T. STA = 7047+82.98  
N: = 1,878,122.90  
E: = 1,175,696.57

PROP. CURVE D3900  
P.I. STA = 7040+46.54  
N: = 1,878,852.84  
E: = 1,175,603.11  
 $\Delta$  = 0° 47' 26" (LT)  
D = 1° 19' 02"  
R = 4,350.00'  
T = 30.02'  
L = 60.03'  
E = 0.10'  
P.C. STA = 7040+16.52  
N: = 1,878,882.40  
E: = 1,175,597.87  
P.T. STA = 7040+76.55  
N: = 1,878,823.36  
E: = 1,175,608.75

S. WENTWORTH AVE. STA 56+69.85  
W. PERSHING ROAD  
N: = 1,879,107.55  
E: = 1,175,590.76

S. WENTWORTH AVE. STA 100+00  
W. PERSHING ROAD  
N: = 1,879,107.55  
E: = 1,175,603.86



PROP. CURVE NBLOC08  
P.I. STA = 4554+19.42  
N: = 1,876,262.66  
E: = 1,175,997.17  
 $\Delta$  = 1° 32' 04" (RT)  
D = 0° 22' 55"  
R = 15,000.00'  
T = 200.89'  
L = 401.75'  
E = 1.35'  
P.C. STA = 4552+18.53  
N: = 1,876,062.07  
E: = 1,176,007.97  
P.T. STA = 4556+20.28  
N: = 1,876,463.47  
E: = 1,175,991.74

PROP. CURVE B4300  
P.I. STA = 6046+08.39  
N: = 1,877,246.14  
E: = 1,176,032.59  
 $\Delta$  = 4° 21' 02" (RT)  
D = 2° 00' 02"  
R = 2,864.00'  
T = 108.79'  
L = 217.47'  
E = 2.07'  
e = 3.0%  
S.A. = STA 6044+79.60  
TO 6045+09.60  
S.R. = STA 6047+07.07  
TO 6047+37.07  
P.C. STA = 6044+99.60  
N: = 1,877,138.36  
E: = 1,176,047.37  
P.T. STA = 6047+17.07  
N: = 1,877,354.72  
E: = 1,176,026.03

PROP. CURVE C3900  
P.I. STA = 8045+10.82  
N: = 1,878,300.35  
E: = 1,176,021.08  
 $\Delta$  = 0° 41' 25" (RT)  
D = 1° 08' 45"  
R = 5,000.00'  
T = 30.12'  
L = 60.24'  
E = 0.09'  
P.C. STA = 8044+80.70  
N: = 1,878,270.25  
E: = 1,176,020.07  
P.T. STA = 8045+40.94  
N: = 1,878,330.44  
E: = 1,176,022.46

S. LASALLE ST. STA 400+00.00 AH  
STA 264+66.03 BK  
W. PERSHING ROAD  
N: = 1,879,121.00  
E: = 1,176,043.89

- NOTES:
- AVERAGE GRID TO GROUND CONVERSION  
FACTOR = 1.000010988654360
  - FOR BENCH MARK INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.
  - FOR RAMP P.O.T. INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.

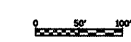
REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

ALIGNMENT PLAN

SCALE: 1"=100'  
DATE: 03/06/08  
DRAWN BY: JDC  
CHECKED BY: RS

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
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3/6/2008 12:42:18 PM  
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A00	2324.6-1P-1-5			

PROP. CURVE DT3500  
P.I. STA = 7044+22.81  
N<sub>c</sub> = 1,879,939.16  
E = 1,175,643.87  
Δ = 5° 14' 38" (RT)  
D = 3° 38' 16"  
R = 1,575.00'  
T = 72.13'  
L = 144.15'  
E = 1.65'  
e = 3.6%  
S.A. = STA 7043+14.68  
TO 7043+59.68  
S.R. = STA 7044+85.83  
TO 7045+30.83  
P.C. STA = 7043+50.68  
N<sub>c</sub> = 1,880,010.54  
E<sub>c</sub> = 1,175,633.56  
P.T. STA = 7044+94.83  
N<sub>c</sub> = 1,879,867.13  
E<sub>c</sub> = 1,175,647.62

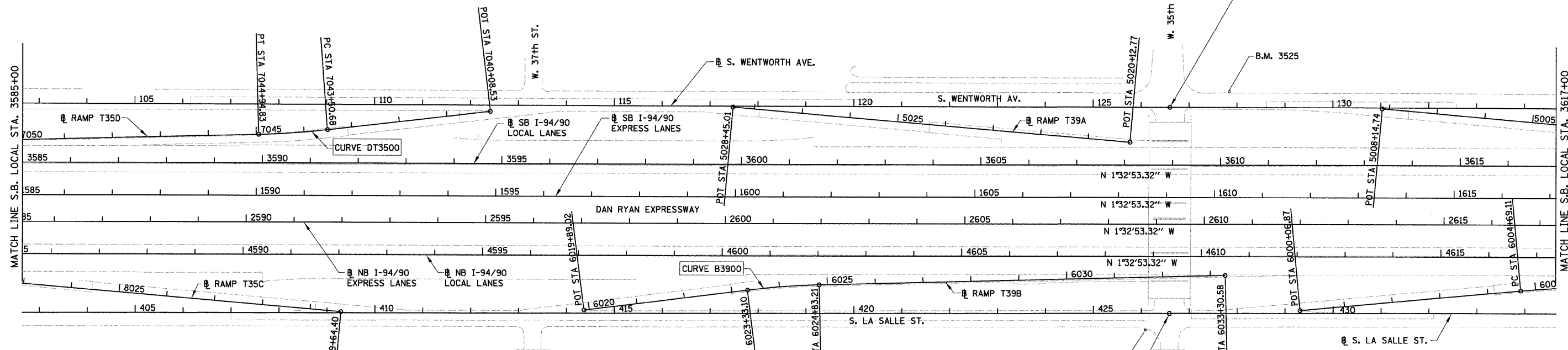
PROP. CURVE B3900  
P.I. STA = 6024+08.22  
N<sub>c</sub> = 1,880,970.99  
E = 1,175,932.00  
Δ = 5° 47' 44" (RT)  
D = 3° 51' 39"  
R = 1,484.00'  
T = 75.12'  
L = 150.11'  
E = 1.90'  
e = 3.7%  
S.A. = STA 6022+97.10  
TO 6023+42.10  
S.R. = STA 6024+74.21  
TO 6025+19.21  
P.C. STA = 6023+33.10  
N<sub>c</sub> = 1,880,896.76  
E<sub>c</sub> = 1,175,943.46  
P.T. STA = 6024+83.21  
N<sub>c</sub> = 1,881,046.01  
E<sub>c</sub> = 1,175,928.09

S. LASALLE ST. STA 426+58.57  
@ W. 35TH STREET  
N<sub>c</sub> = 1,881,778.46  
E<sub>c</sub> = 1,175,967.25

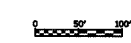
- NOTES:
- AVERAGE GRID TO GROUND CONVERSION  
FACTOR = 1.000010988654360
  - FOR BENCH MARK INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.
  - FOR RAMP P.O.T. INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)  
ALIGNMENT PLAN  
SCALE: 1"=100'  
DATE: 03/06/08  
DRAWN BY: JJC  
CHECKED BY: RS



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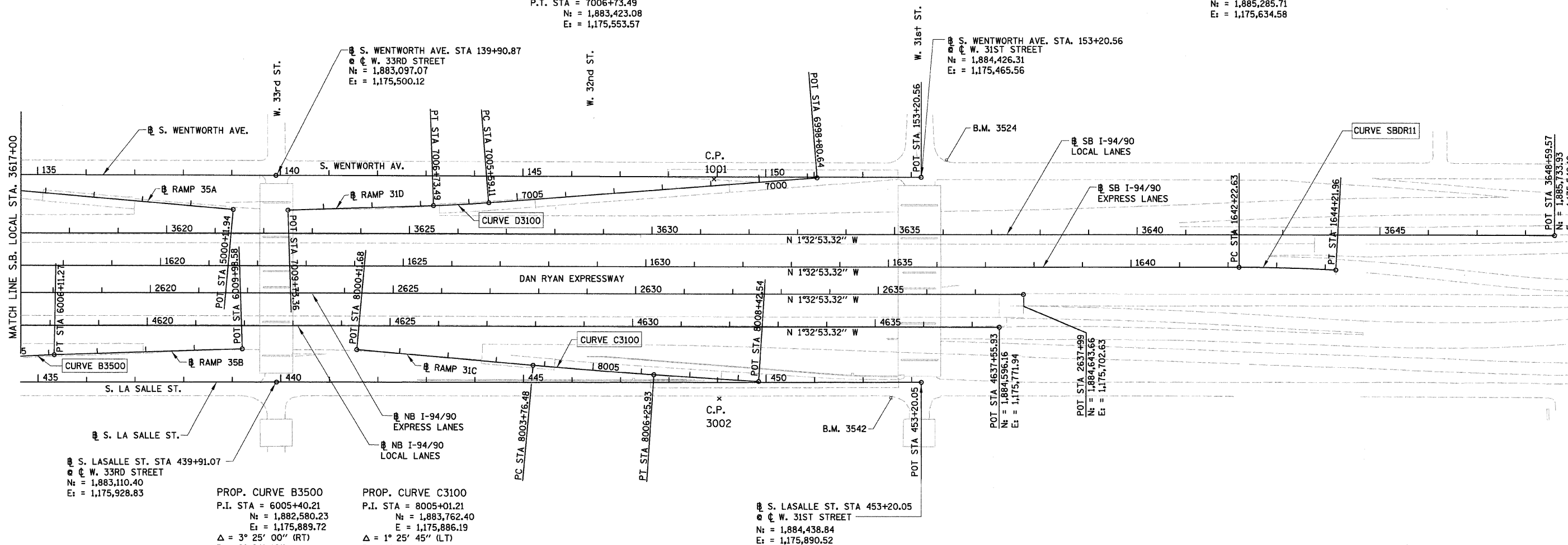


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3/16/2008

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A00		2324.6-1P-1-5		

PROP. CURVE D3100  
P.I. STA = 7006+16.31  
Nt = 1,883,480.18  
E = 1,175,550.12  
 $\Delta = 2^\circ 35' 11''$  (RT)  
D =  $2^\circ 15' 40''$   
R = 2,534.00'  
T = 57.20'  
L = 114.38'  
E = 0.65'  
e = 2.6%  
S.A. = STA 7005+43.11  
TO 7005+63.11  
S.R. = STA 7006+69.49  
TO 7006+89.49  
P.C. STA = 7005+59.11  
Nt = 1,883,537.06  
E = 1,175,544.09  
P.T. STA = 7006+73.49  
Nt = 1,883,423.08  
E = 1,175,553.57

PROP. CURVE SBDR11  
P.I. STA = 1643+22.32  
Nt = 1,885,186.06  
E = 1,175,631.95  
 $\Delta = 3^\circ 03' 18''$  (RT)  
D =  $1^\circ 31' 57''$   
R = 3,738.57'  
T = 99.69'  
L = 199.33'  
E = 1.33'  
e =  $\pm 2.5\%$  (MATCH EXISTING)  
S.A. = STA 1641+95.99  
TO 1642+35.95  
S.R. = N/A  
P.C. STA = 1642+22.63  
Nt = 1,885,086.40  
E = 1,175,634.65  
P.T. STA = 1644+21.96  
Nt = 1,885,285.71  
E = 1,175,634.58



S. LASALLE ST. STA 439+91.07  
W. 33RD STREET  
Nt = 1,883,110.40  
E = 1,175,928.83

PROP. CURVE B3500  
P.I. STA = 6005+40.21  
Nt = 1,882,580.23  
E = 1,175,889.72  
 $\Delta = 3^\circ 25' 00''$  (RT)  
D =  $2^\circ 24' 12''$   
R = 2,384.00'  
T = 71.10'  
L = 142.16'  
E = 1.06'  
e = 2.7%  
S.A. = STA 6004+53.11  
TO 6004+73.11  
S.R. = STA 6006+07.27  
TO 6006+27.27  
P.C. STA = 6004+69.11  
Nt = 1,882,509.63  
E = 1,175,898.23  
P.T. STA = 6006+11.27  
Nt = 1,882,651.20  
E = 1,175,885.43

PROP. CURVE C3100  
P.I. STA = 8005+01.21  
Nt = 1,883,762.40  
E = 1,175,886.19  
 $\Delta = 1^\circ 25' 45''$  (LT)  
D =  $0^\circ 34' 23''$   
R = 10,000.00'  
T = 124.73'  
L = 249.45'  
E = 0.78'  
P.C. STA = 8003+76.48  
Nt = 1,883,637.89  
E = 1,175,878.68  
P.T. STA = 8006+25.93  
Nt = 1,883,887.05  
E = 1,175,890.60

S. LASALLE ST. STA 453+20.05  
W. 31ST STREET  
Nt = 1,884,438.84  
E = 1,175,890.52

- NOTES:
1. AVERAGE GRID TO GROUND CONVERSION  
FACTOR = 1.000010988654360
  2. FOR BENCH MARK INFORMATION, SEE SHEET ALT-16 OF  
ALIGNMENT PLAN SHEETS.
  3. FOR RAMP P.O.T. INFORMATION, SEE SHEET ALT-16 OF  
ALIGNMENT PLAN SHEETS.

REVISIONS		DATE
NAME	REVISION	
		3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

ALIGNMENT PLAN

SCALE: 1"=100'  
DATE: 03/06/08

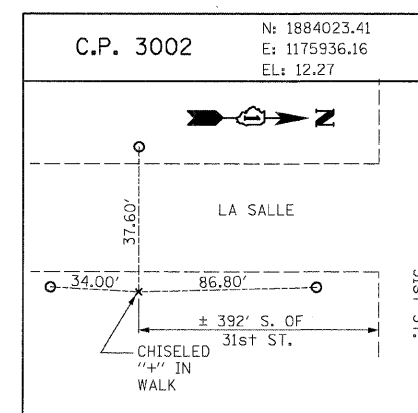
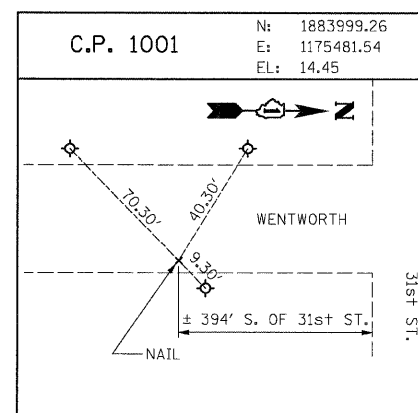
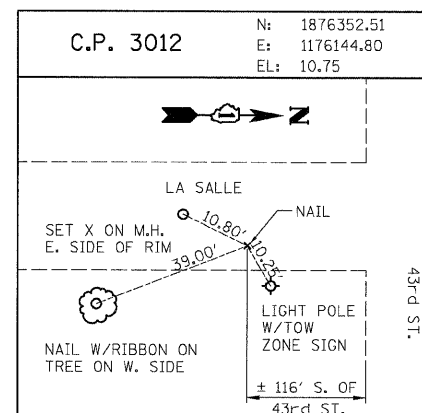
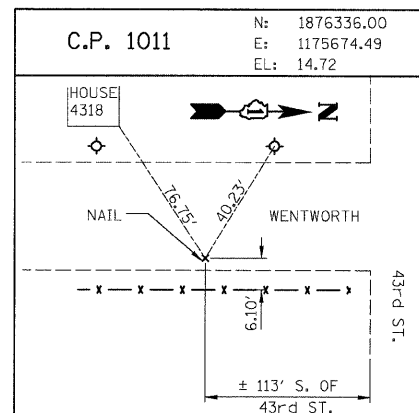
DRAWN BY: JDC  
CHECKED BY: RS

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ALT-04

12/4/07 PM  
3/6/2008





RAMP P.O.T. COORDINATE INFORMATION

POINT	DESCRIPTION	STATION	NORTH	EAST
BEGIN	RAMP 47A	5060+00.00	1,875,185.77	1,175,764.15
END	RAMP 47A	5074+13.97	1,873,854.99	1,175,322.86
BEGIN	RAMP 47B	6059+26.00	1,874,166.99	1,175,887.94
END	RAMP 47B	6069+64.12	1,875,168.85	1,176,104.15
BEGIN	RAMP 43C	7050+00.00	1,876,238.80	1,175,669.59
END	RAMP 43C	7059+84.92	1,875,259.95	1,175,764.44
BEGIN	RAMP 43D	8051+00.00	1,875,411.12	1,176,092.10
END	RAMP 43D	8059+26.72	1,876,237.16	1,176,124.86
BEGIN	RAMP 43A	5040+09.48	1,877,475.98	1,175,723.30
END	RAMP 43A	5048+39.05	1,876,648.91	1,175,658.90
BEGIN	RAMP 43B	6040+09.40	1,876,652.70	1,176,113.96
END	RAMP 43B	6050+27.76	1,877,664.85	1,176,007.29
BEGIN	RAMP 39D	7040+16.52	1,878,882.40	1,175,597.87
END	RAMP 39D	7050+90.17	1,877,816.27	1,175,715.09
BEGIN	RAMP 39C	8040+00.00	1,877,789.82	1,176,003.91
END	RAMP 39C	8051+05.89	1,878,894.81	1,176,048.24

POINT	DESCRIPTION	STATION	NORTH	EAST
BEGIN	RAMP T35D	7040+08.53	1,880,349.18	1,175,584.62
END	RAMP T35D	7053+38.03	1,879,025.07	1,175,691.43
BEGIN	RAMP T35C	8020+34.46	1,879,121.15	1,175,958.93
END	RAMP T35C	8029+64.40	1,880,049.40	1,176,014.92
BEGIN	RAMP T39A	5020+12.77	1,881,685.70	1,175,610.45
END	RAMP T39A	5028+45.01	1,880,854.96	1,175,560.34
BEGIN	RAMP T39B	6019+89.02	1,880,556.70	1,175,995.95
END	RAMP T39B	6033+30.58	1,881,892.23	1,175,884.04
BEGIN	RAMP 35A	5000+11.94	1,883,011.02	1,175,573.65
END	RAMP 35A	5008+14.74	1,882,209.69	1,175,525.14
BEGIN	RAMP 35B	6000+06.87	1,882,050.72	1,175,953.56
END	RAMP 35B	6009+98.58	1,883,037.81	1,175,862.08
BEGIN	RAMP 31D	6998+80.64	1,884,211.76	1,175,472.66
END	RAMP 31D	7009+73.36	1,883,123.75	1,175,571.65
BEGIN	RAMP 31C	8000+11.68	1,883,273.75	1,175,856.72
END	RAMP 31C	8008+42.54	1,884,103.52	1,175,898.24

BENCH MARK NO. 3524 ELEV. 15.17

DESCRIPTION:  
CROSS CUT ON NORTH FLANGE BOLT OF FIRE HYDRANT AT THE NORTHWEST CORNER OF 31st ST. AND WENTWORTH AVE.

BENCH MARK NO. 3525 ELEV. 16.93

DESCRIPTION:  
CROSS CUT ON NORTHWEST FLANGE BOLT OF FIRE HYDRANT AT THE NORTHWEST CORNER OF 35th ST. AND WENTWORTH AVE.

BENCH MARK NO. 3526 ELEV. 17.37

DESCRIPTION:  
CROSS CUT ON NORTHWEST FLANGE BOLT OF FIRE HYDRANT AT THE WENTWORTH GARDEN OFFICE ALONG THE WEST SIDE OF WENTWORTH AVE.

BENCH MARK NO. 3527 ELEV. 15.63

DESCRIPTION:  
CROSS CUT ON NORTHERLY FLANGE BOLT OF FIRE HYDRANT AT THE NORTHWEST CORNER OF ROOT ST. AND WENTWORTH AVE.

BENCH MARK NO. 3539 ELEV. 13.10

DESCRIPTION:  
CROSS CUT ON EASTERLY BOLT OF LIGHT POLE BASE AT THE SOUTHEAST CORNER OF 43rd ST. AND LA SALLE ST.

BENCH MARK NO. 3540 ELEV. 12.33

DESCRIPTION:  
SQUARE CUT ON THE SOUTHWEST CORNER OF THE TRAFFIC CONTROL BOX AT THE NORTHEAST CORNER OF 39th ST. AND LA SALLE ST.

BENCH MARK NO. 3541 ELEV. 14.78

DESCRIPTION:  
CROSS CUT ON THE SOUTHWEST BOLT OF LIGHT POLE BASE AT THE SOUTH EAST CORNER OF 35th ST. AND LA SALLE ST.

BENCH MARK NO. 3542 ELEV. 13.57

DESCRIPTION:  
CROSS CUT ON THE EASTERLY FLANGE BOLT OF THE FIRE HYDRANT AT THE INTERSECTION OF 31st ST. AND LA SALLE ST.

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REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

**ALIGNMENT PLAN**

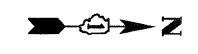
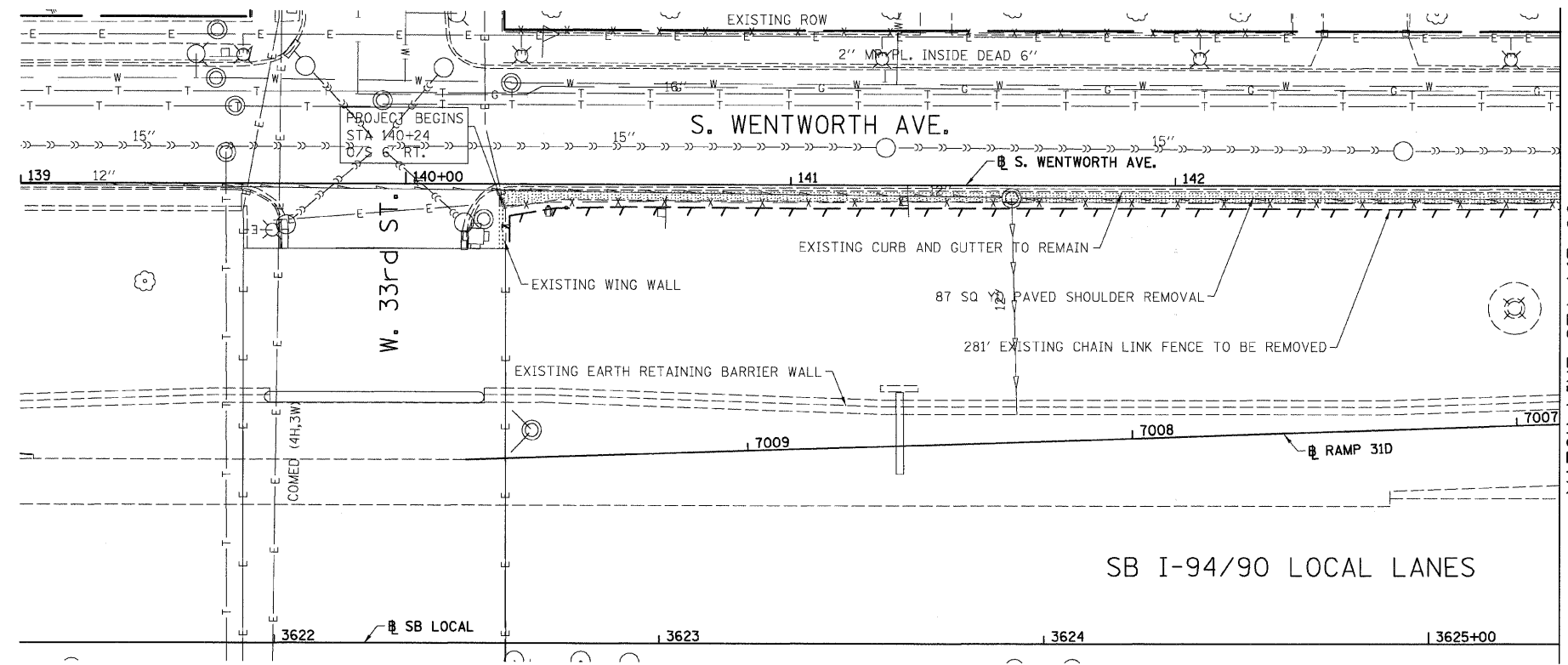
SCALE: 1"=100'  
DATE: 03/06/08

DRAWN BY: JDC  
CHECKED BY: RS

N:\600\road\94\90\32F\SHEETS\660\_32F\CALTO\align

12/4/2008 3:16:28 PM

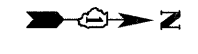
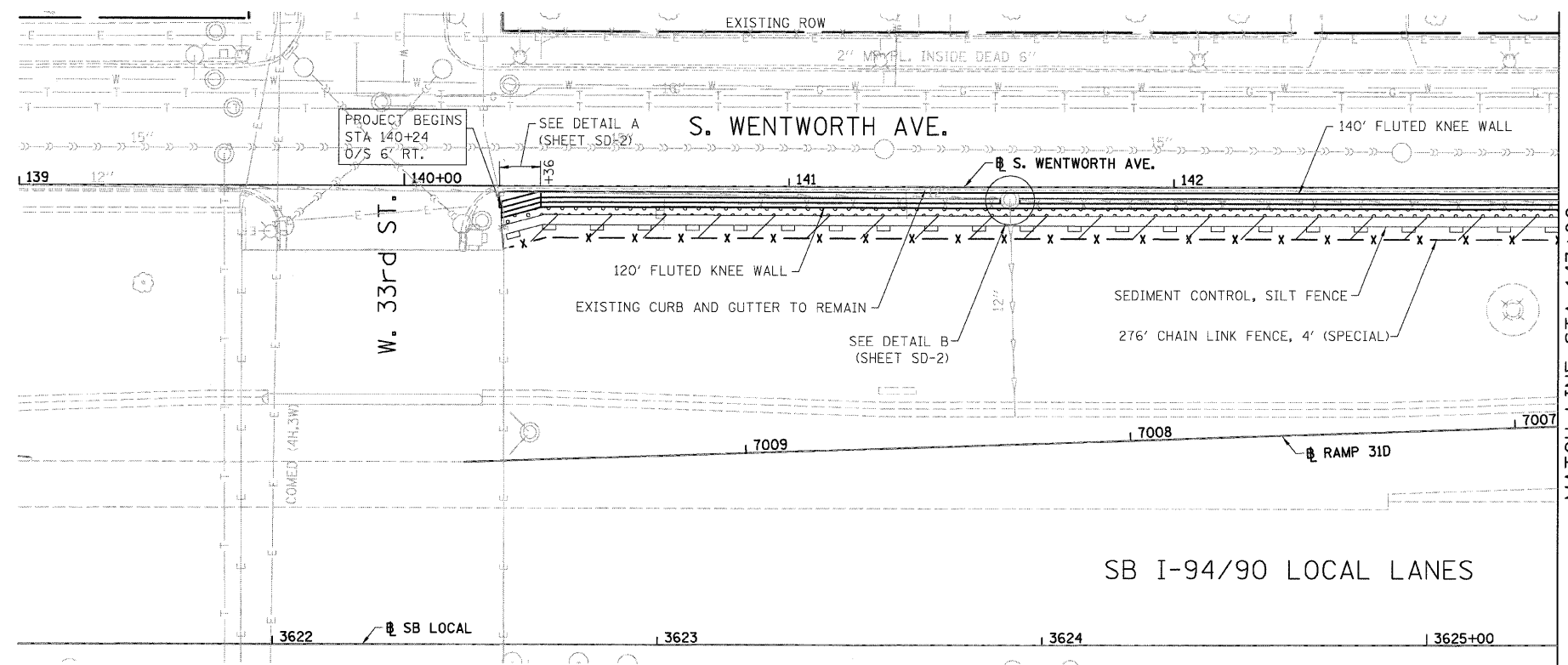
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
60A00		2324.6-1P-1-5		



- LEGEND:
- PAVED SHOULDER REMOVAL
  - LINEAR REMOVALS

MATCH LINE STA 143+00

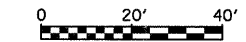
EXISTING CONDITIONS AND REMOVAL  
PROPOSED IMPROVEMENTS



- LEGEND:
- GROUND PREPARATION FOR SEEDING, CLASS 2A  
EROSION CONTROL BLANKET
  - TOPSOIL FURNISH AND PLACE, 4\"/>

- NOTES:
- SEE STRUCTURAL DETAIL FOR FLUTED KNEE WALL DETAILS.
  - ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.

MATCH LINE STA 143+00



REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

**EXISTING AND PROPOSED  
KNEE WALL PLANS**

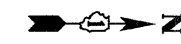
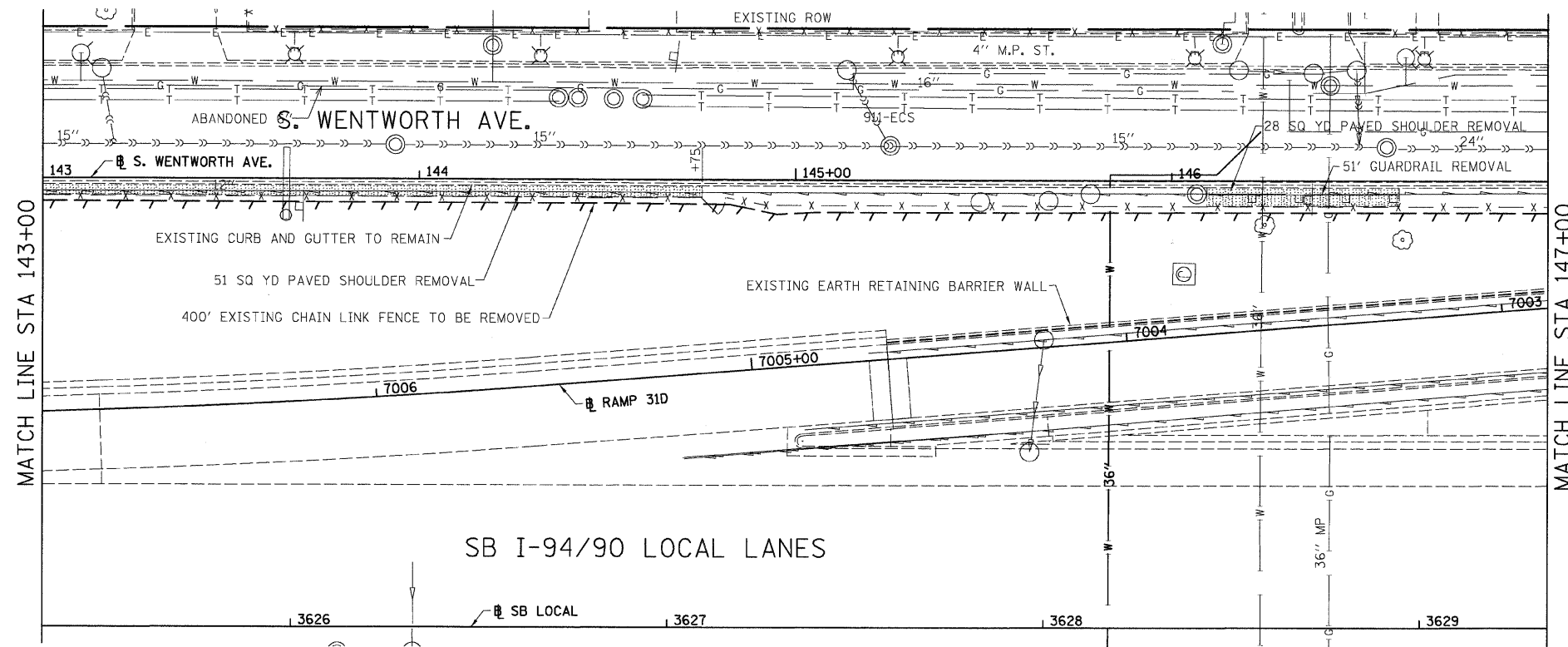
SCALE: 1"=20'  
DATE: 03/06/08

DRAWN BY: JDC  
CHECKED BY: ODM

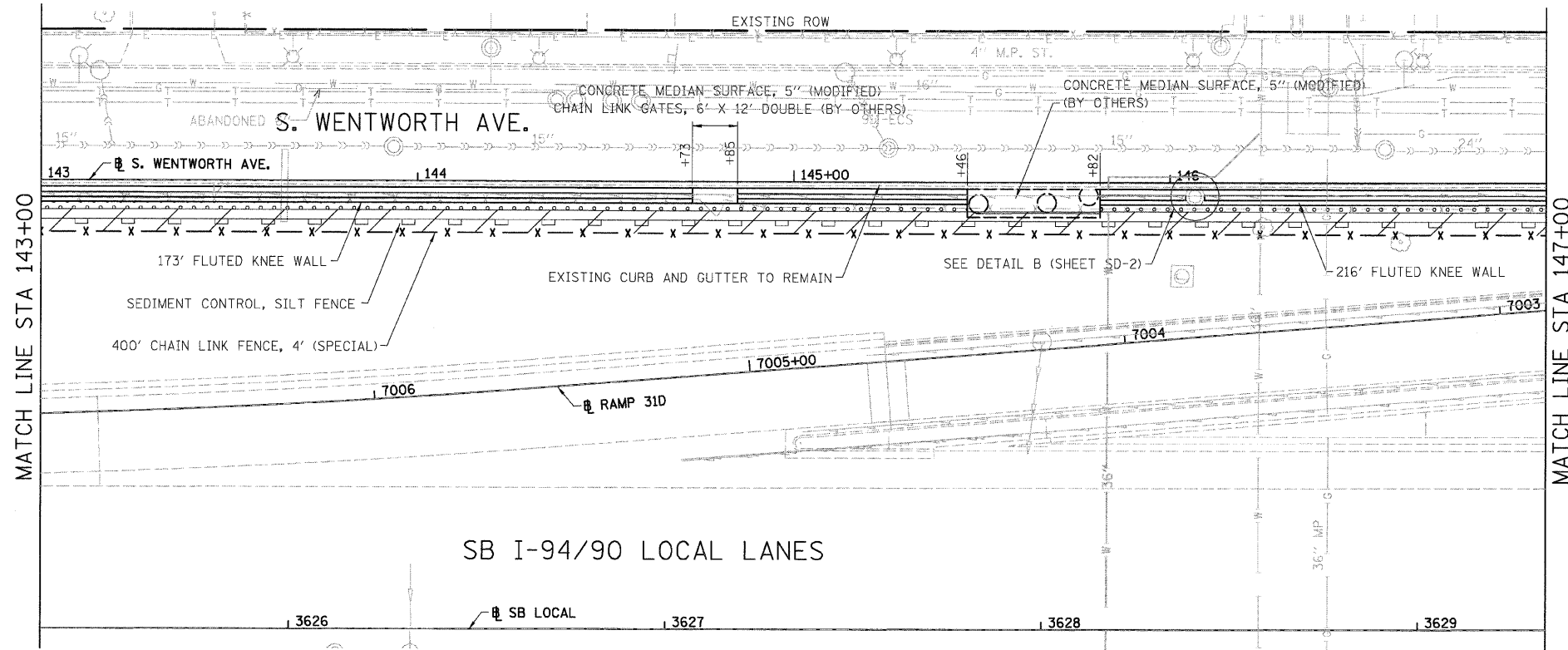
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PL-1 7/22/08 3/6/2008

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A00	• 2324.6-1P-1-5			

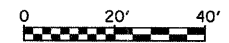


- LEGEND:
- PAVED SHOULDER REMOVAL
  - LINEAR REMOVALS



- LEGEND:
- GROUND PREPARATION FOR SEEDING, CLASS 2A  
EROSION CONTROL BLANKET
  - TOPSOIL FURNISH AND PLACE, 4\"/>

- NOTES:
1. SEE STRUCTURAL DETAIL FOR FLUTED KNEE WALL DETAILS.
  2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

**EXISTING AND PROPOSED  
 KNEE WALL PLANS**

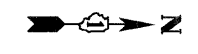
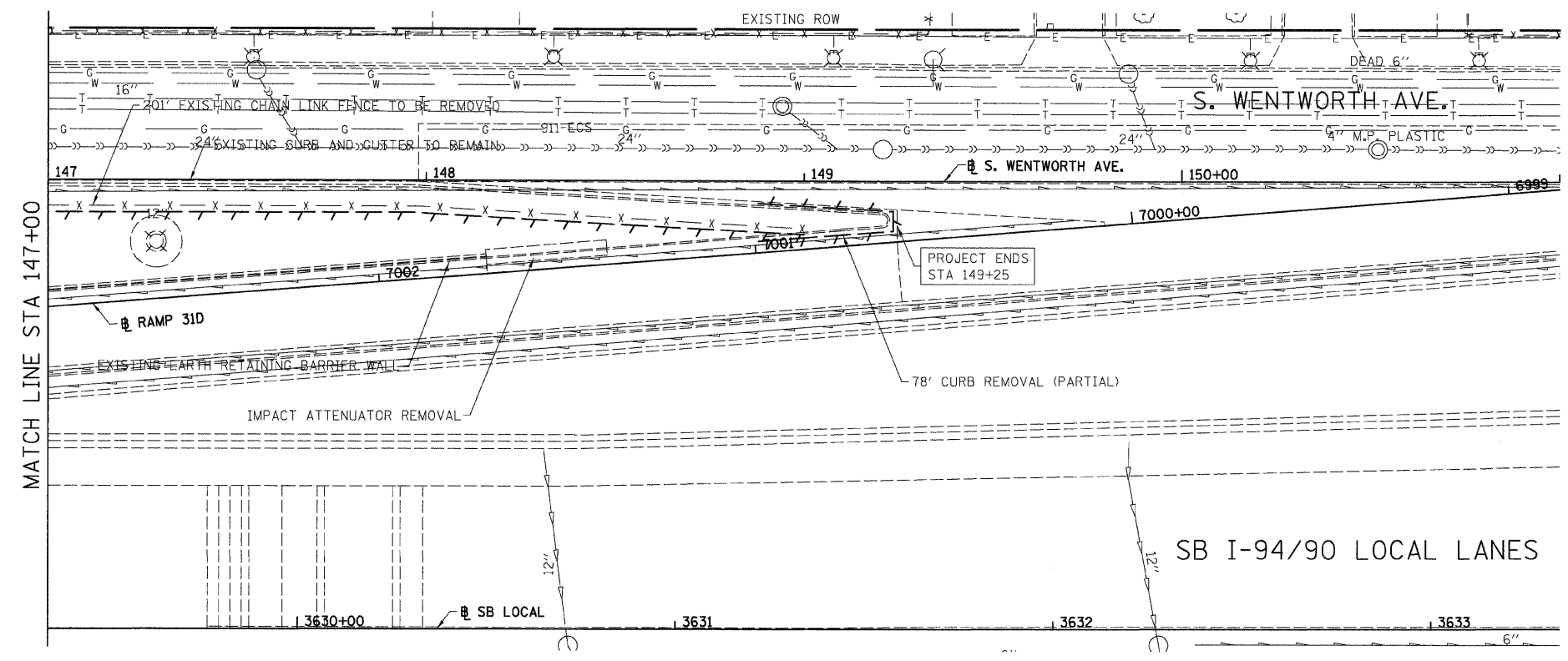
SCALE: 1"=20'  
 DATE: 03/06/08



DRAWN BY: JDC  
 CHECKED BY: ODM

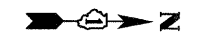
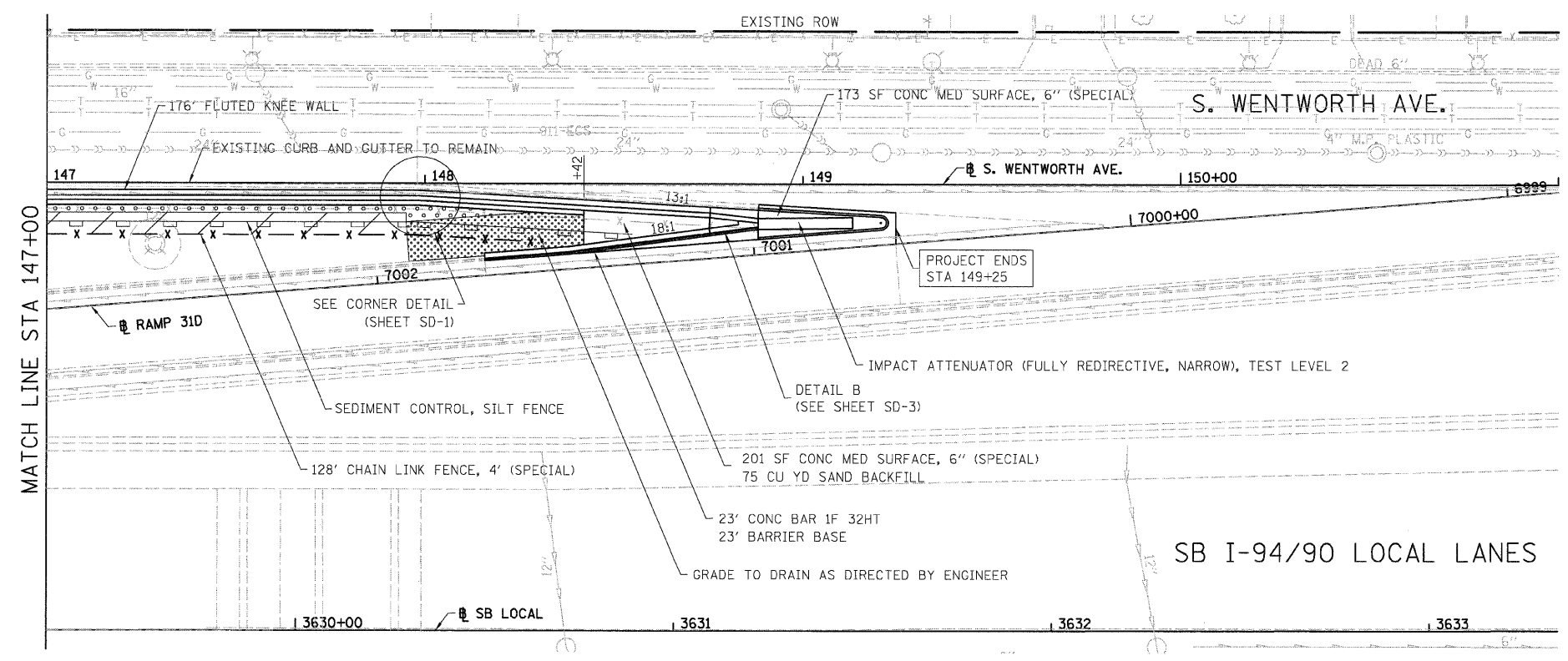
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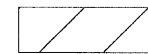

PL-2  
3/16/2008 7:16:37 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
60A00		• 2324.6-1P-1-5		

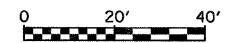


- LEGEND:
-  PAVED SHOULDER REMOVAL
  -  LINEAR REMOVALS



- LEGEND:
-  GROUND PREPARATION FOR SEEDING, CLASS 2A  
EROSION CONTROL BLANKET
  -  TOPSOIL FURNISH AND PLACE, 4\"/>

- NOTES:
1. SEE STRUCTURAL DETAIL FOR FLUTED KNEE WALL DETAILS.
  2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.



REVISIONS	
NAME	DATE
REVISED	3-6-08

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)  
**EXISTING AND PROPOSED  
 KNEE WALL PLANS**  
 SCALE: 1"=20'  
 DATE: 03/06/08  
 DRAWN BY: JDC  
 CHECKED BY: DDM

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PL-3  
3/16/2008 7:15:52 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	•	COOK	25	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
60A00	• 2324.6-1P-1-5			

**BILL OF MATERIAL**



Item	Unit	Qty.*
Concrete Structures	Cu. Yd.	0.15
Concrete Superstructure	Cu. Yd.	0.13
Reinforcement Bars, Epoxy Coated	Pound	22.69
Rustication Finish	Sq. Ft.	1.83
Protective Coat	Sq. Yd.	0.62

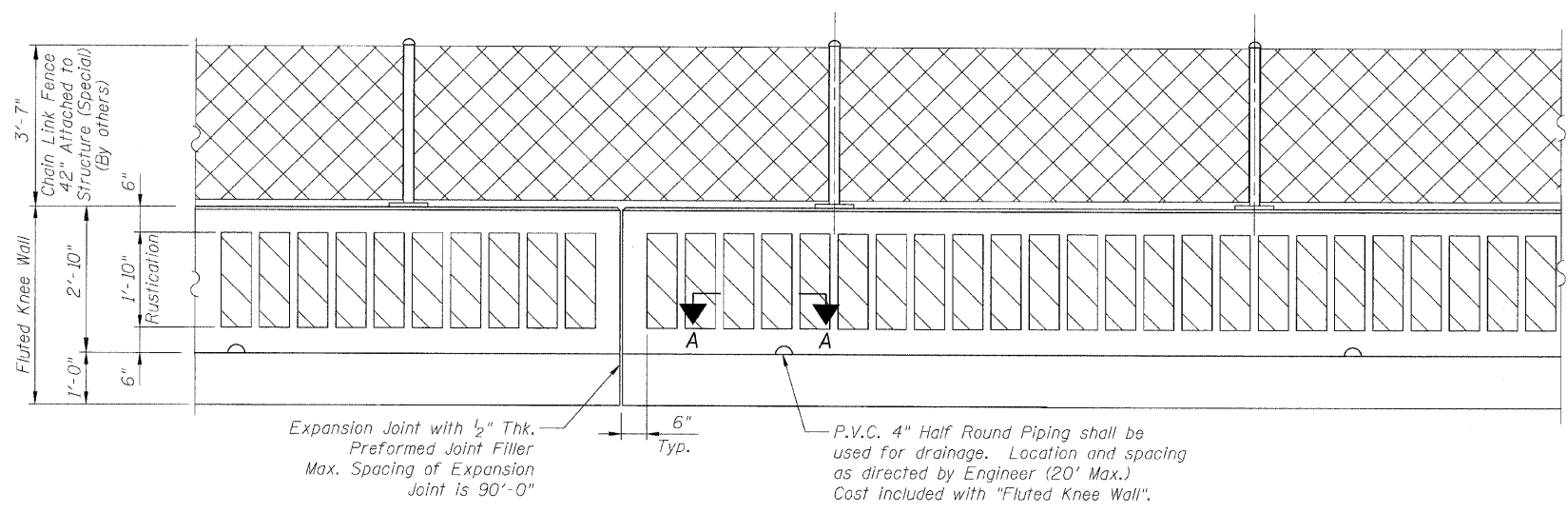
\* Quantities are per foot of Fluted Knee Wall and are provided for estimating purposes only. See Note 5.

**NOTES:**

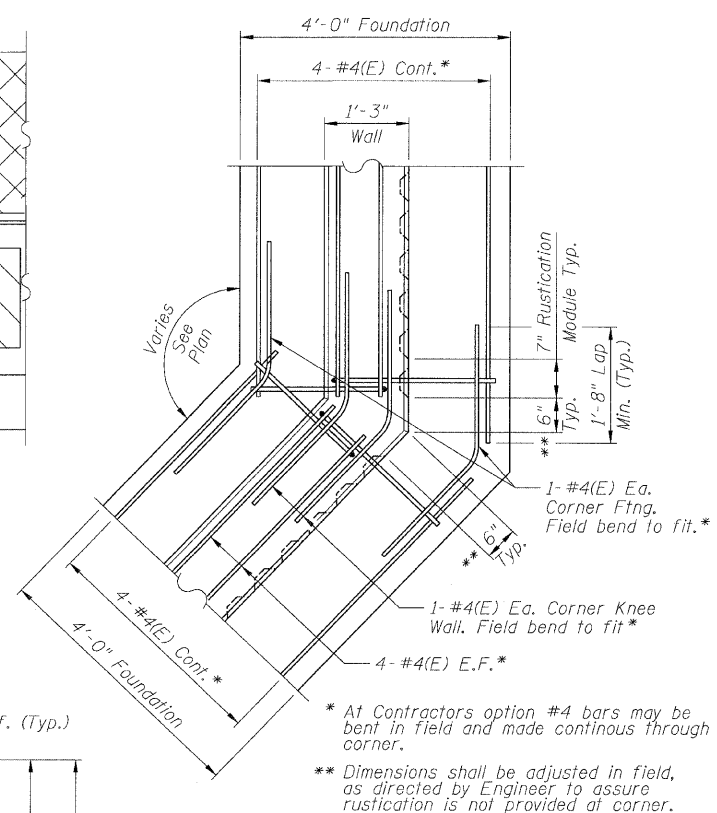
- Back Face is face adjacent to Frontage Rd. and Front Face is face adjacent to Expressway.
- Concrete:  $f'c = 3500$  psi
- Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details. Cost included with "Fluted Knee Wall".
- At locations where Fluted Knee Wall abuts a rigid Structure, a  $\frac{1}{2}$ " thick Preformed Expansion Joint Filler conforming to the shape of the Structure shall be installed between the Wall and the Structure.
- "Fluted Knee Wall" shall include Concrete Superstructure stem, Concrete Structures foundation, Reinforcement Bars, Epoxy Coated, all form liners for Rustication Finish, Protective Coat and Preformed Joint Filler (P.J.F.).
- Apply Protective Coat to top and front face of stem and top of Frontage Road side of foundation.
- Cost included with "Fluted Knee Wall."
- Chain Link Fence 42" Attached to Structure (Special) will not be paid for in this Contract, but shall be furnished and installed in a future Contract by others.
- See Roadway Plans for limits of excavation for Fluted Knee Wall.

**LEGEND:**

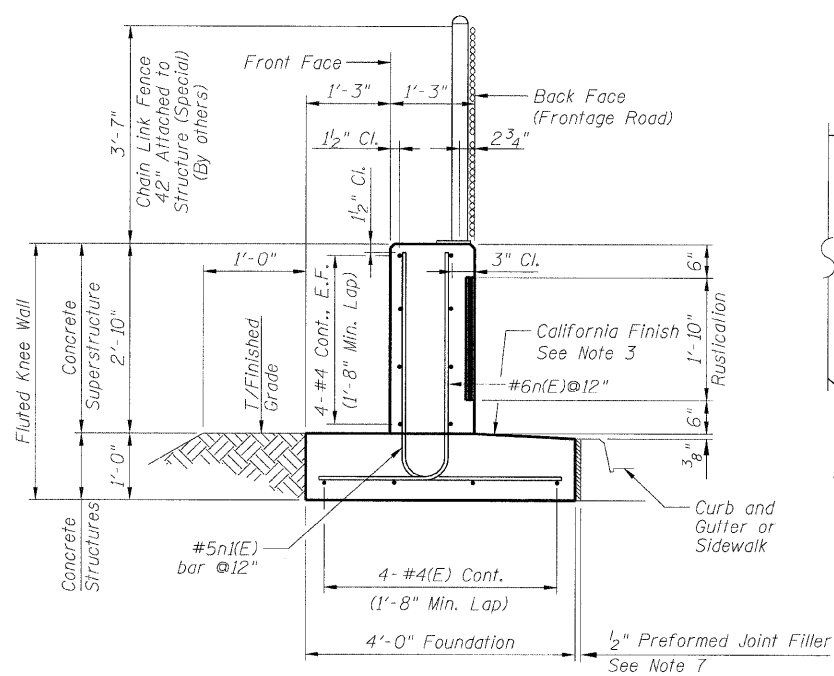
-  Chain Link Fabric
-  Rustication Finish
- E.F. = Each Face



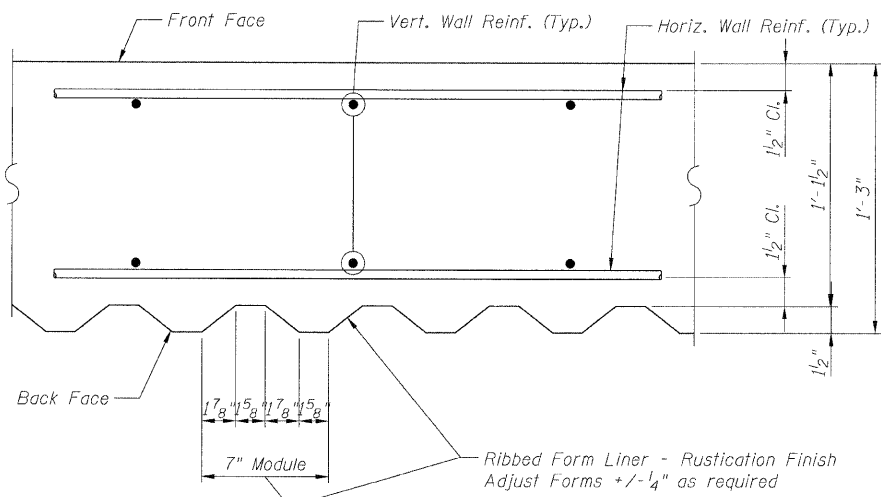
**BACK FACE ELEVATION - FLUTED KNEE WALL**



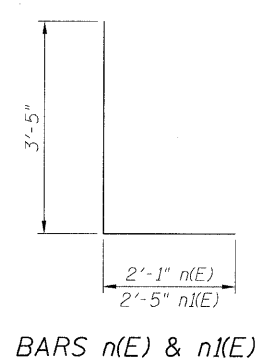
**TYPICAL FLUTED KNEE WALL CORNER DETAIL**



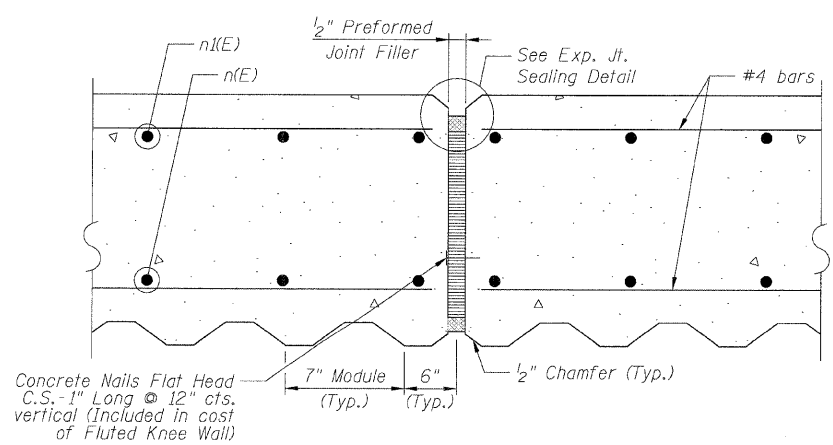
**TYPICAL SECTION FLUTED KNEE WALL**



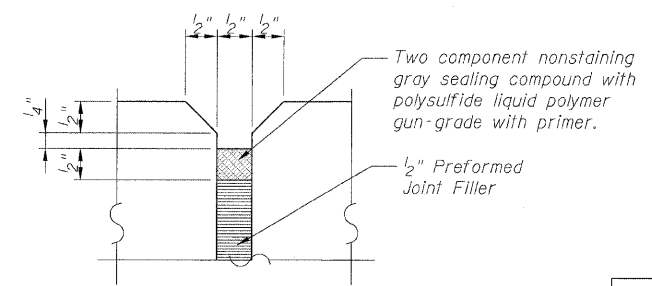
**SECTION A-A**



**BARS n(E) & n(E)**



**EXPANSION JOINT DETAIL**



**EXPANSION JOINT SEALING DETAIL**

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REVISIONS	
NAME	DATE
REVISED	3-6-08

SHEET SD-1

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (33RD ST TO 31ST ST)

FLUTED KNEE WALL

SCALE: N.T.S.      DRAWN BY: LAM  
DATE: 03/06/08      CHECKED BY: BLU

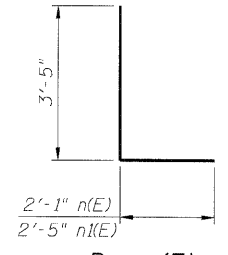
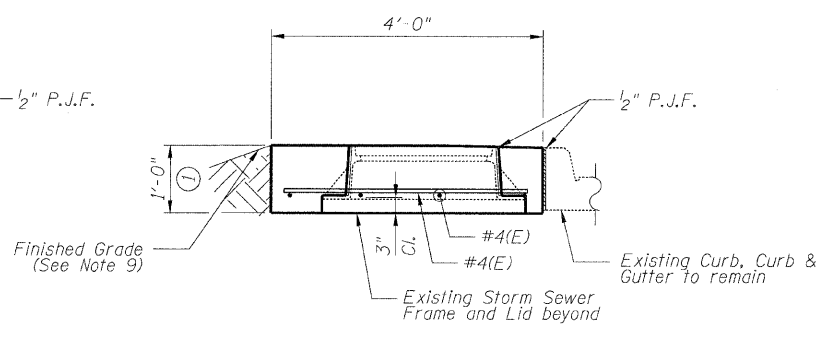
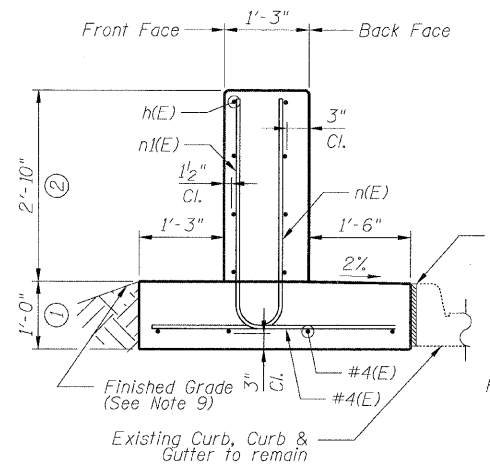
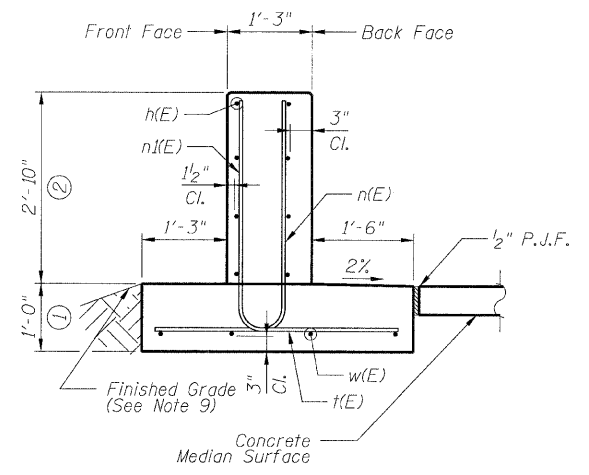
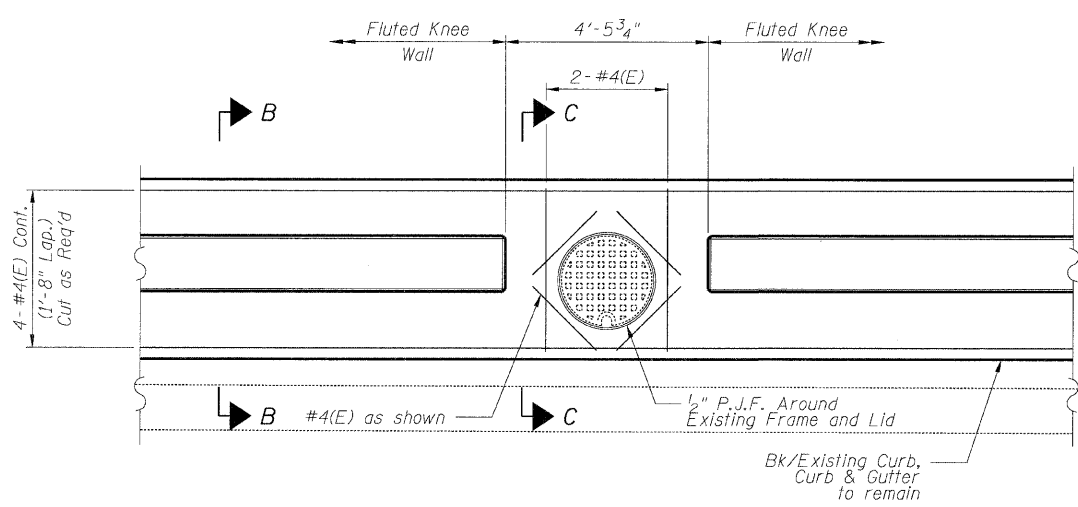
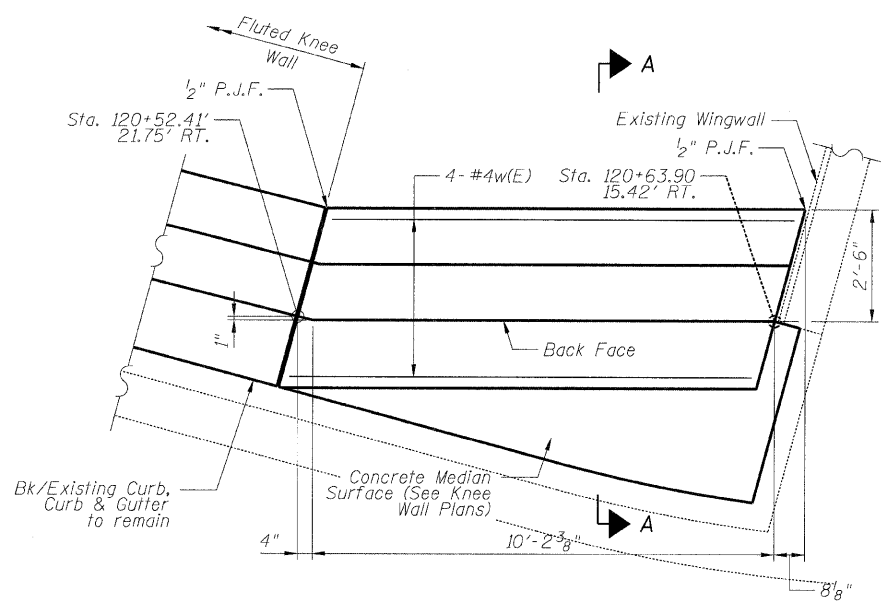
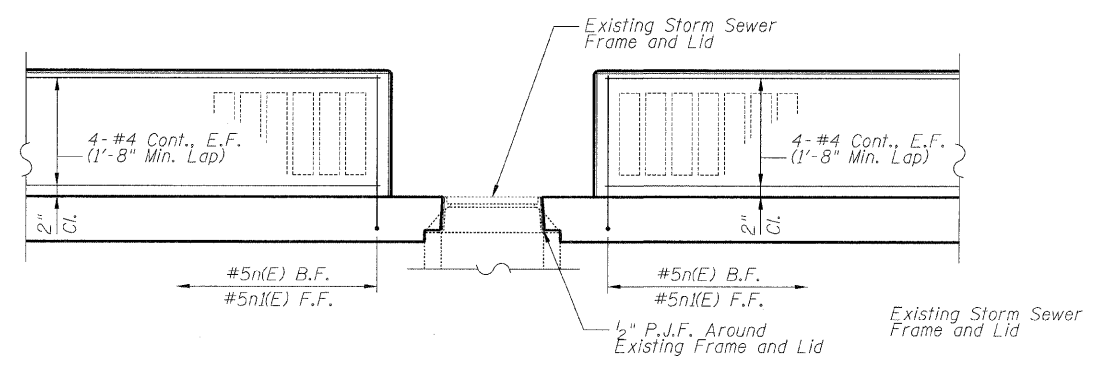
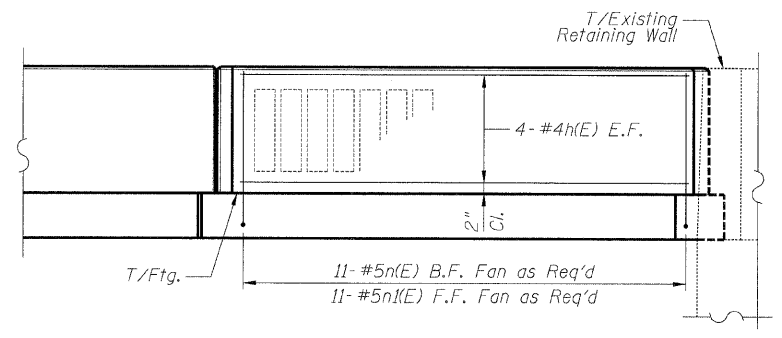
7-34/41 PM 3/6/2008

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	25	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

60A00

### DETAIL A REINFORCEMENT SCHEDULE AND BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n(E)	8	#4	10'-3"	—
n(E)	13	#5	5'-6"	L
n(E)	13	#5	5'-10"	L
w(E)	4	#4	10'-3"	—
Item	Unit	Qty.		
① Concrete Structures	Cu. Yd.	1.6		
② Concrete Superstructure	Cu. Yd.	1.1		
Reinforcement Bars, Epoxy Coated	Pound	240		
Rustication Finish	Sq. Ft.	17		
Protective Coat	Sq. Yd.	7		



Bar n(E) & n(E)

SECTION A-A

SECTION B-B

SECTION C-C

**NOTES:**

- All stations and offsets measured from S. Wentworth Ave. @.
- Concrete:  $f'c = 3500$  psi
- Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details
- At locations where Fluted Knee Wall abuts a rigid structure, a 1" thick Preformed Expansion Joint Filler conforming to the shape of the structure shall be installed between the wall and the structure.
- Apply Protective Coat to top and front face of stem and top of Frontage Road side of foundation.
- For Fluted Knee Wall standard details, see Sheet SD-1
- B.F. = Back Face  
F.F. = Front Face  
E.F. = Each Face
- Shape finished grade as required to match existing conditions.
- P.J.F. included in cost of concrete structures.

REVISIONS	
NAME	DATE

SHEET SD-2

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NORTHBOUND KNEE WALLS (35TH ST TO 33RD ST)

DETAIL A & DETAIL B

SCALE: N.T.S.      DRAWN BY: PAH  
DATE: 03/06/08      CHECKED BY: BLU

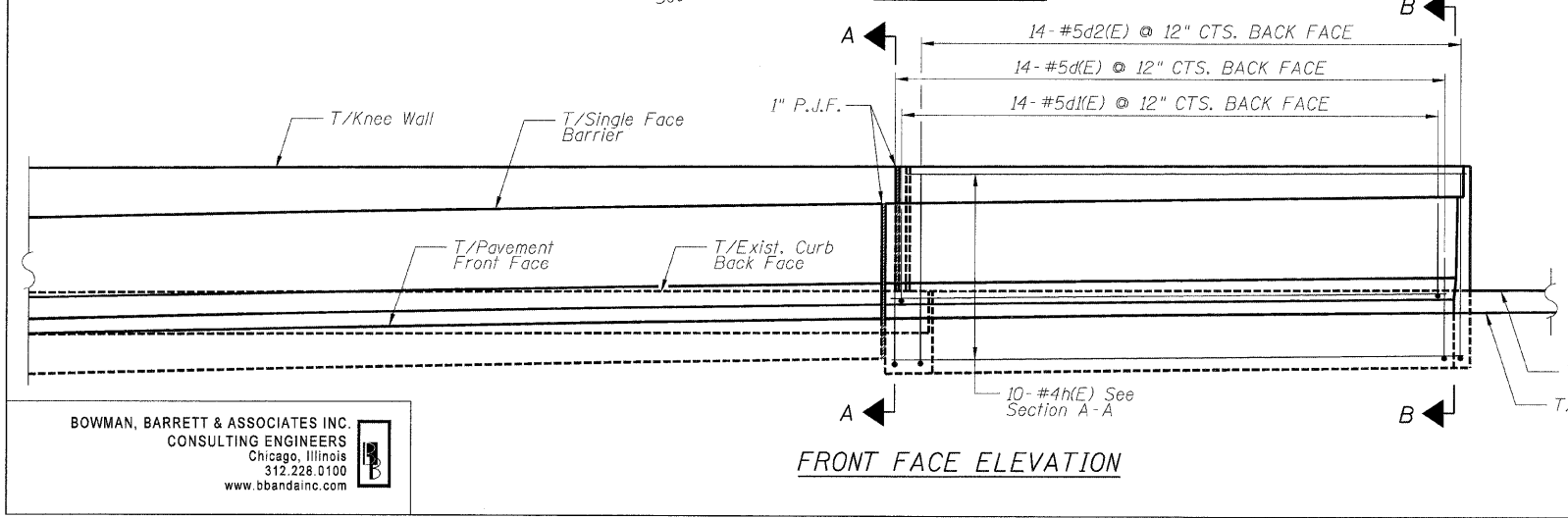
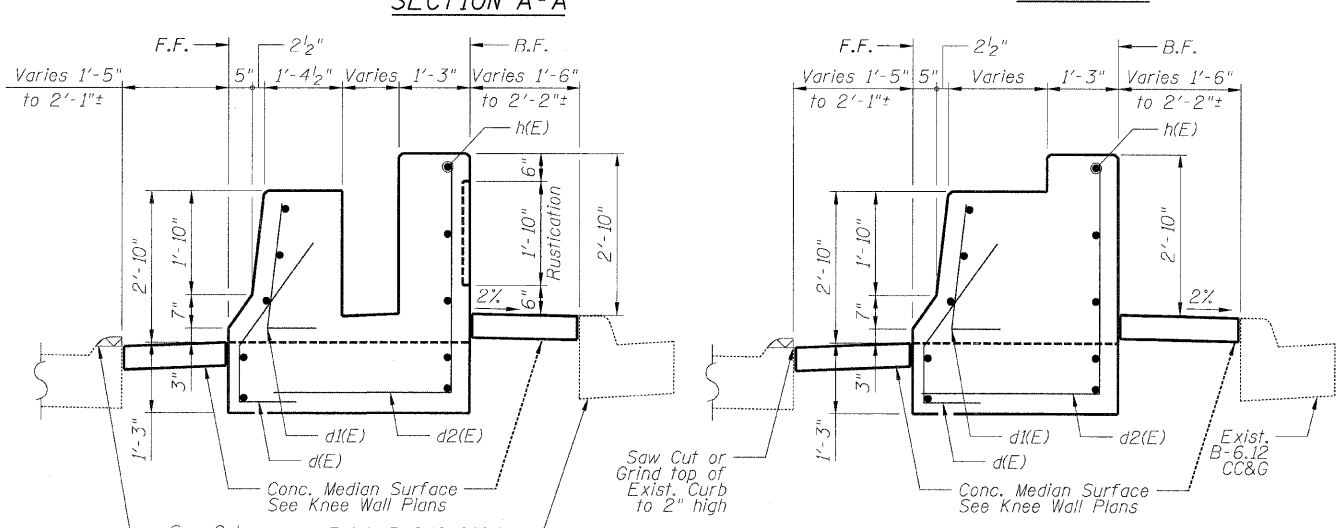
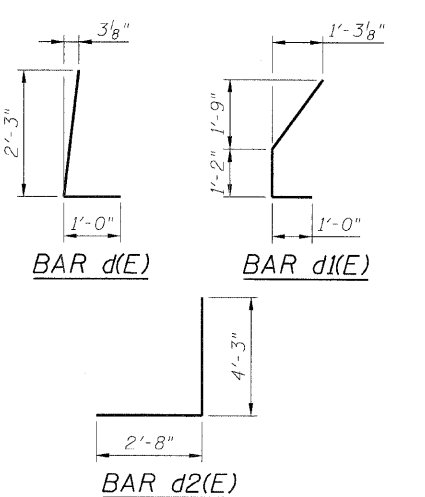
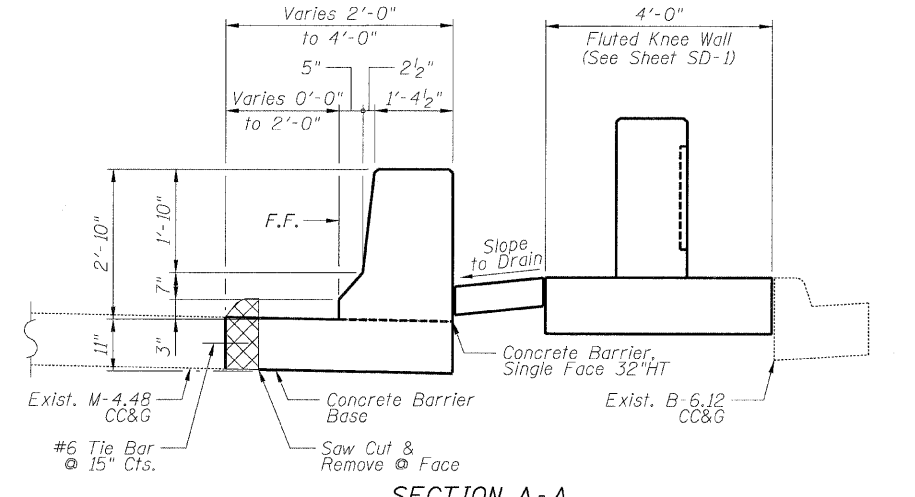
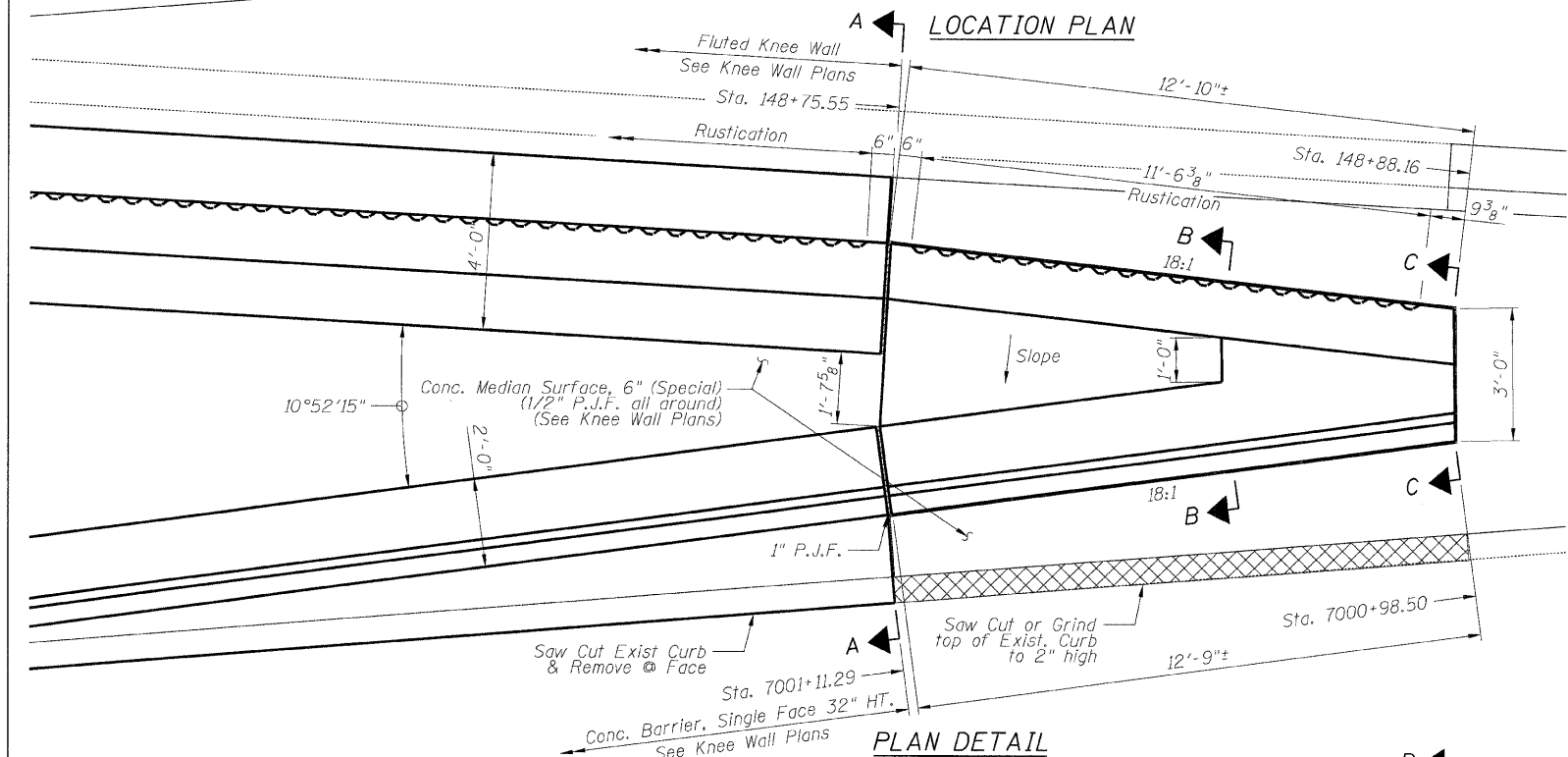
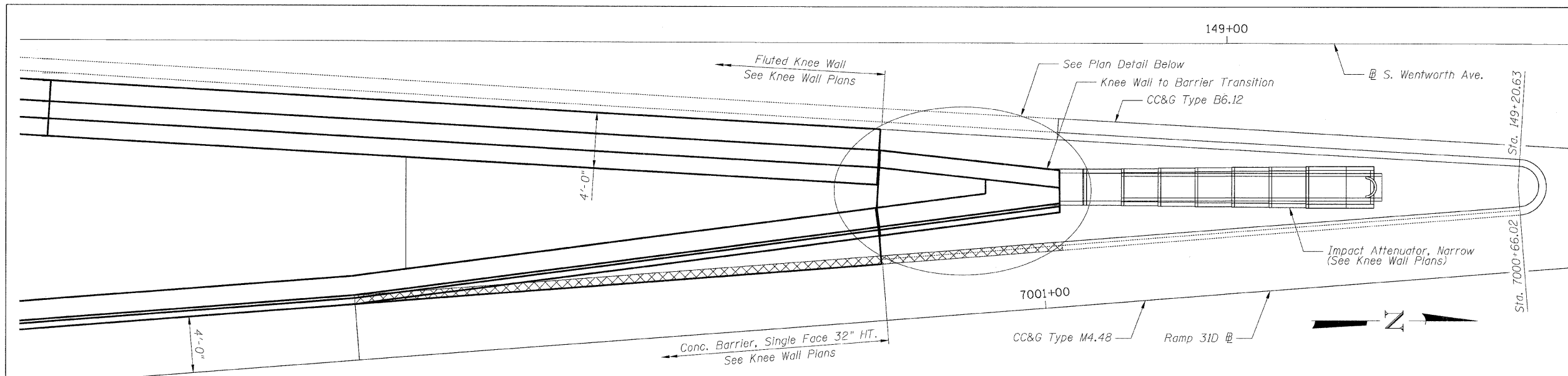
BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

W:\660\CONCRETE\35F\SHEETS\660\_32F\SWS02.dwg 7:26:00 PM 3/6/2008

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60A00  
**DETAIL B REINFORCEMENT  
 SCHEDULE AND  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d(E)	14	#5	3'-3"	#5
d1(E)	14	#5	4'-3"	#5
d2(E)	14	#5	7'-1"	#5
h(E)	10	#4	12'-5"	#4
Item	Unit	Qty.		
Concrete Superstructures	Cu. Yd.	6.4		
Reinforcement Bars, Epoxy Coated	Pound	1390		
Rustication Finish	Sq. Ft.	22		
Protective Coat	Sq. Yd.	14		



- NOTES:**
- F.F. and B.F. denote Front Face and Back Face of transition, respectively.
  - Knee Wall/Barrier Transition shall be Paid as "Concrete Superstructure", "Reinforcement Bars, Epoxy Coated", "Rustication Finish" and "Protective Coat".

REVISIONS	
NAME	DATE

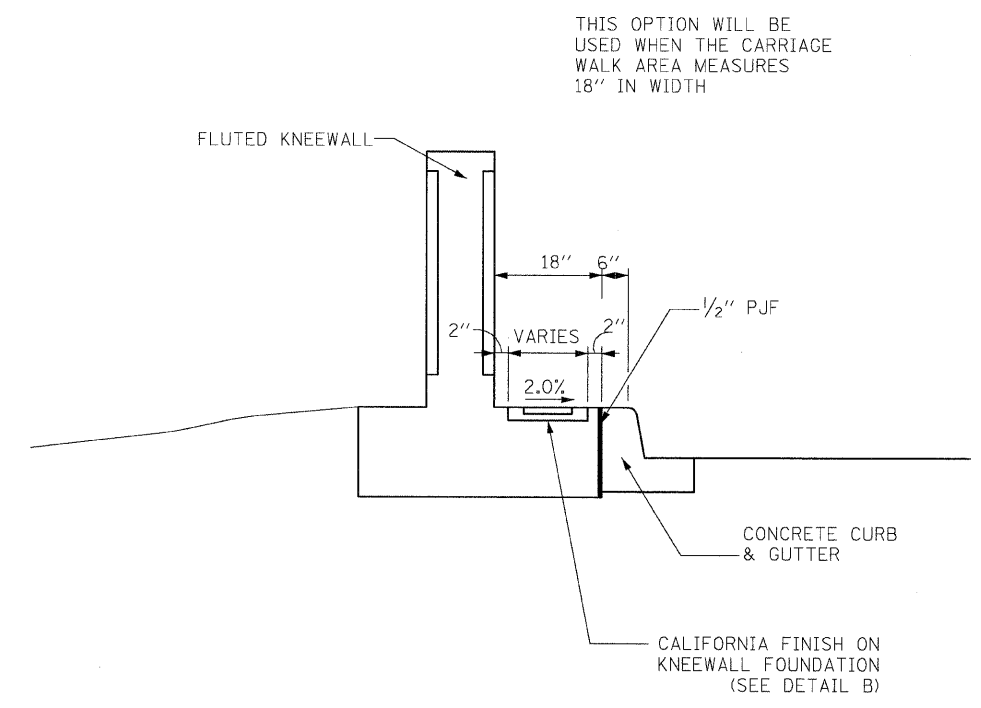
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NORTHBOUND KNEE WALLS (35TH ST TO 33RD ST)

SCALE: N.T.S.      DRAWN BY: PAH  
 DATE: 03/06/08      CHECKED BY: BLU

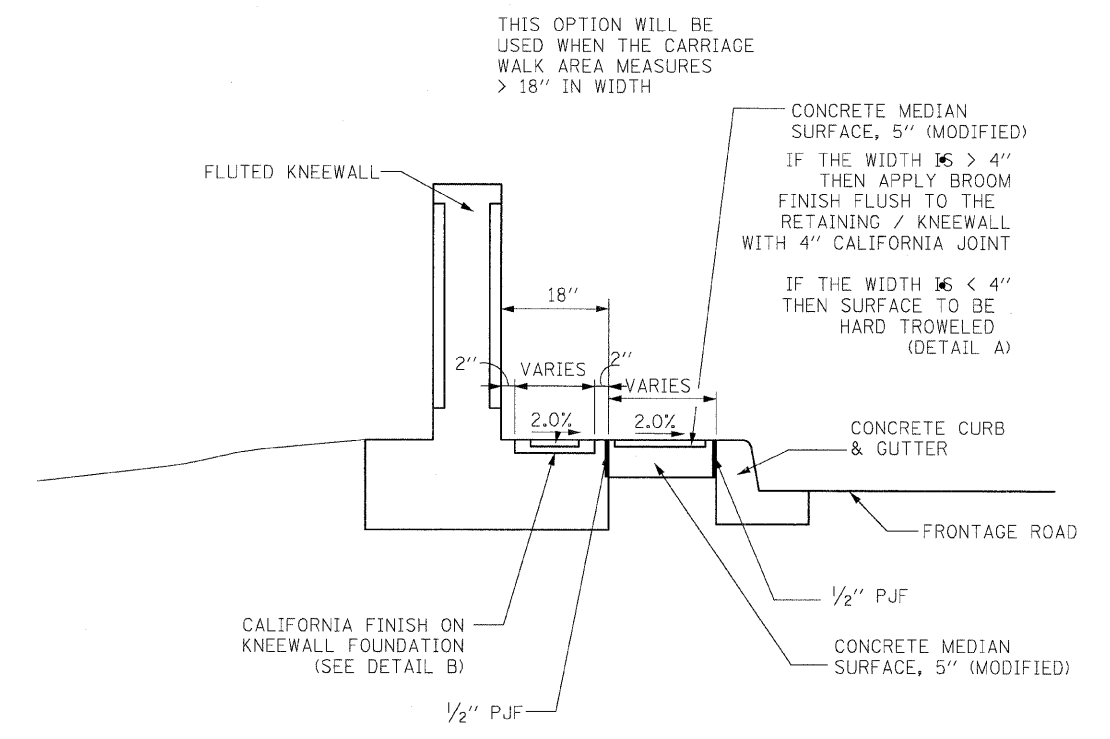
BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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3/16/2008

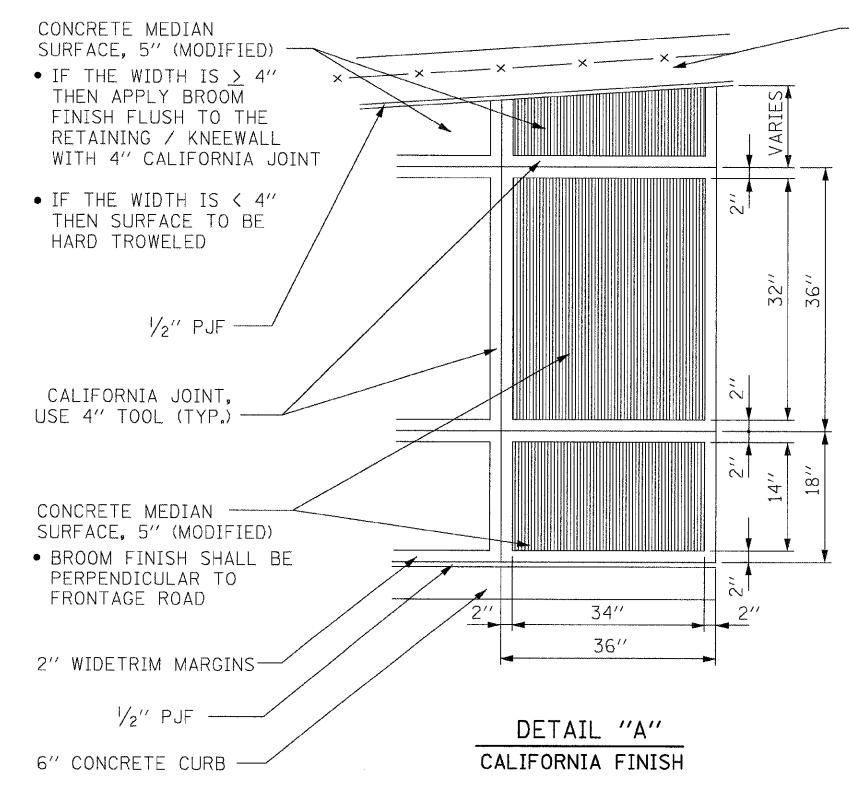
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	25	15A
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
60A00	2324.6-1P-1-5			



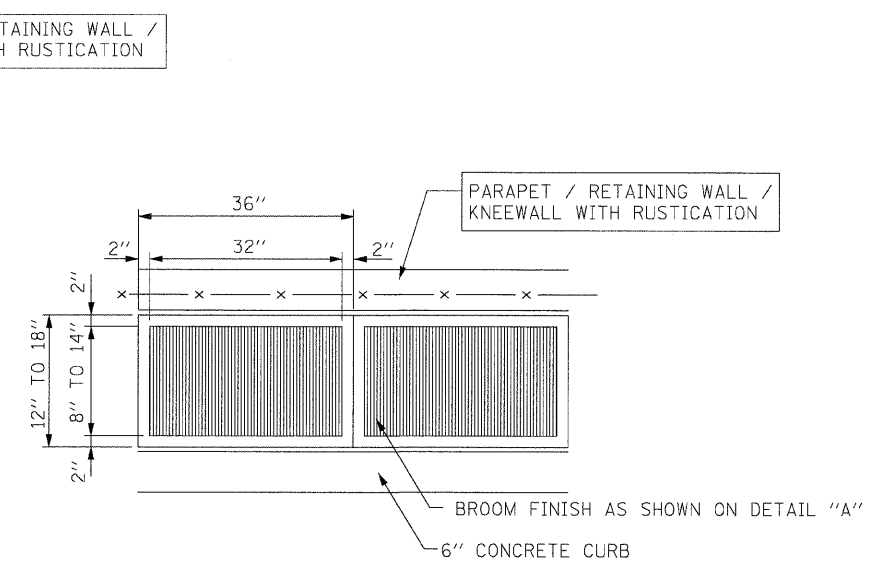
**CARRIAGE WALK**  
WIDTH = 18"



**CARRIAGE WALK**  
WIDTH > 18"



**DETAIL "A"**  
CALIFORNIA FINISH



**DETAIL "B"**  
CALIFORNIA FINISH

REVISIONS	
NAME	DATE
NEW SHEET	3-6-08

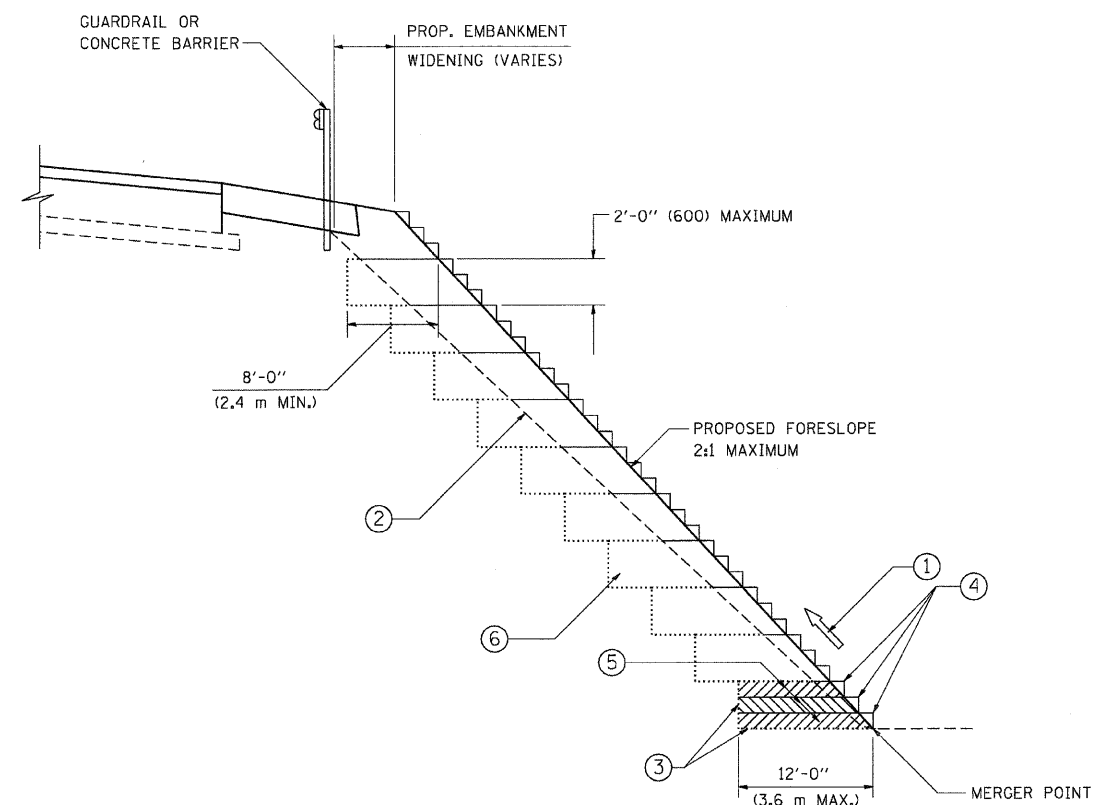
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)  
 ROADWAY DETAILS  
 CONCRETE MEDIAN SURFACE 5"  
 (MODIFIED) CALIFORNIA FINISH  
 SCALE: NONE  
 DATE: 03/06/08  
 DRAWN BY: CTE  
 CHECKED BY: JDC

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

N:\660\94090\94090\15A\32F\SHEETS\60A\_15A\_1.PDF - RDT-01.dwg  
 3/16/2008 6:30:49 PM



CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	25	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL  
FOR EMBANKMENT

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

REVISIONS	
NAME	DATE
	06/16/04

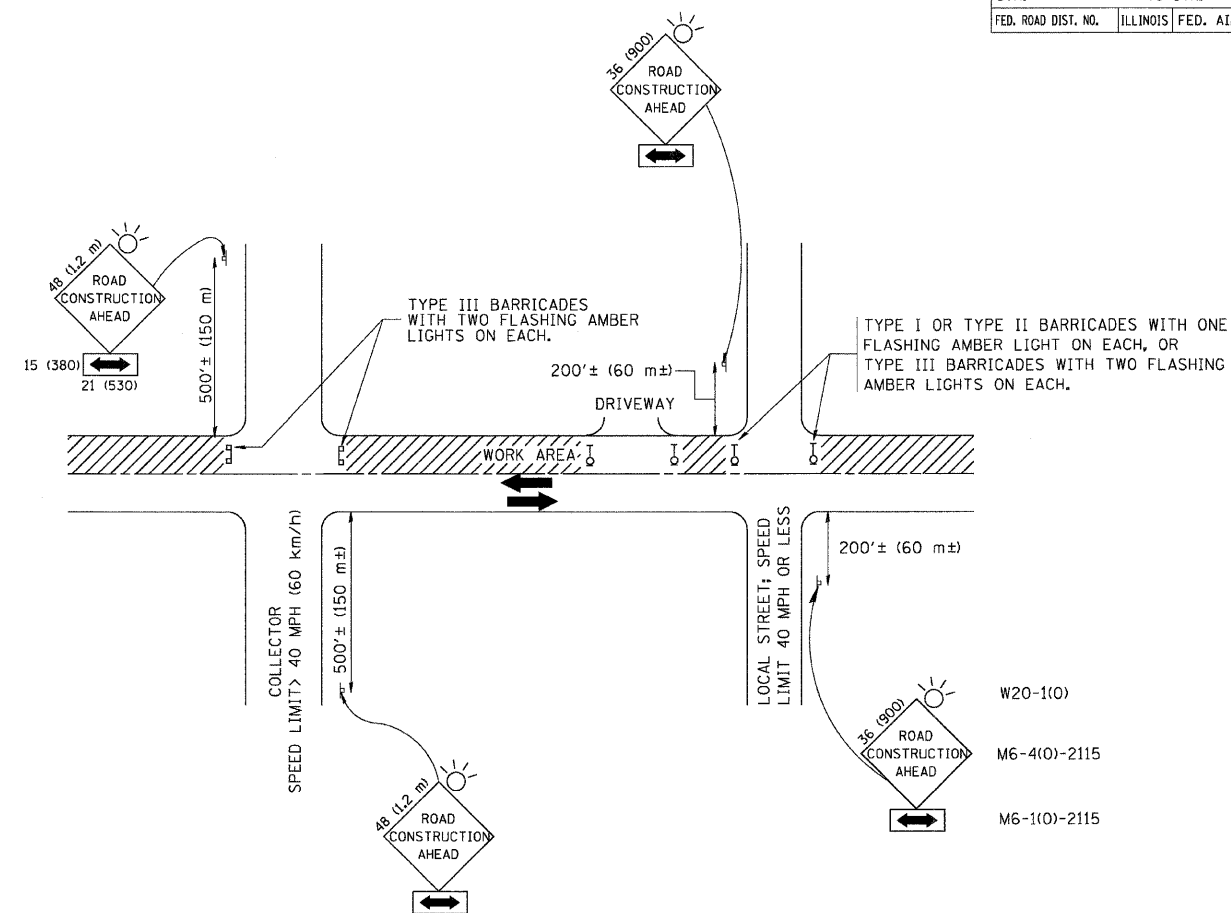
ILLINOIS DEPARTMENT OF TRANSPORTATION

**BENCHING DETAIL  
FOR EMBANKMENT  
WIDENING**

SCALE: VERT. NONE  
HORIZ.

DRAWN BY: CADD  
CHECKED BY: S.E.B.  
BD-51

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	25	17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL AND PROTECTION  
 FOR  
 SIDE ROADS, INTERSECTIONS, AND  
 DRIVEWAYS

SCALE: NONE

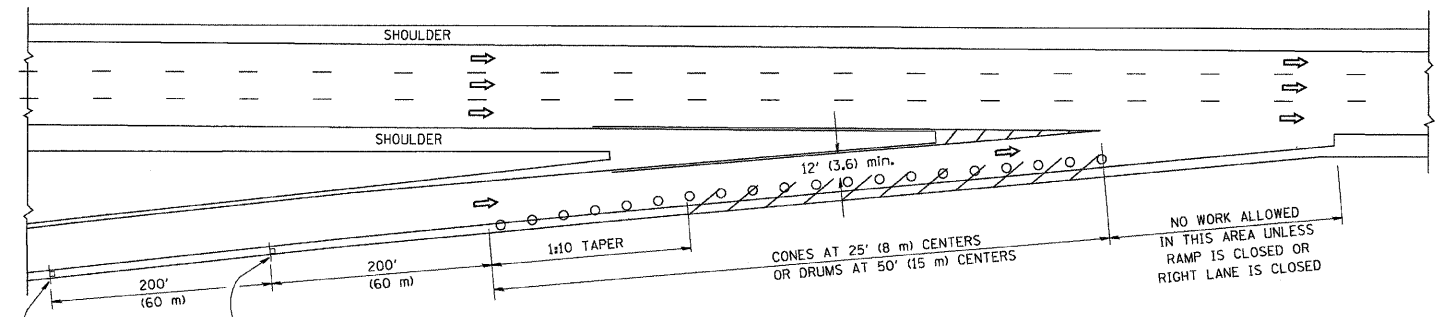
DRAWN BY  
 CHECKED BY

TC-10

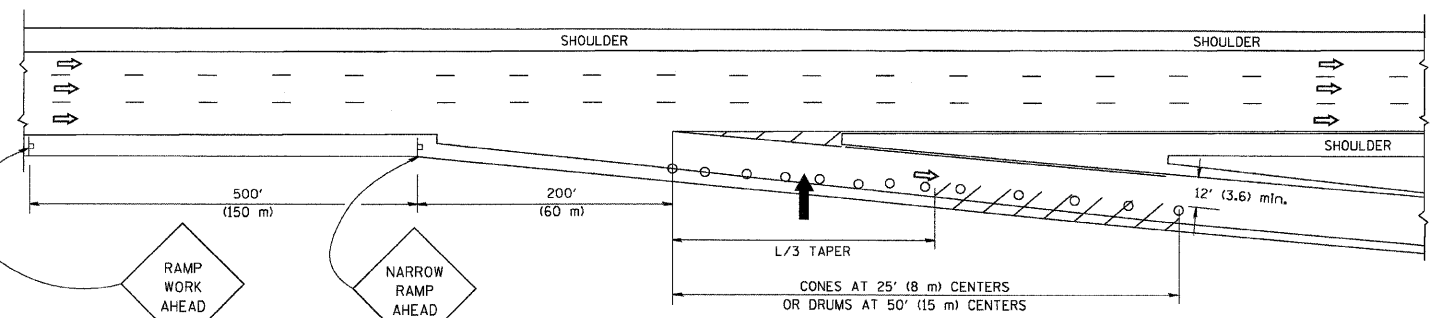
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

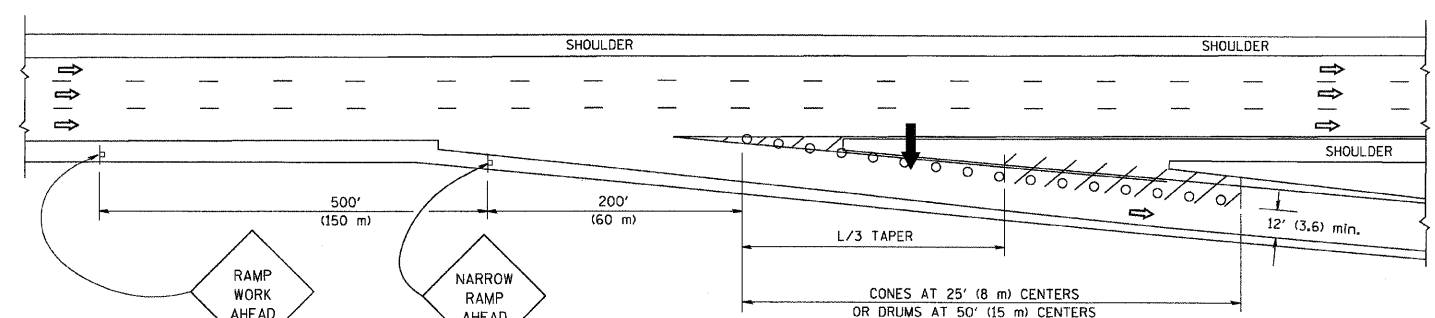
CONTRACT NO.		TOTAL SHEETS		SHEET NO.	
F.A. RTE.	SECTION	COUNTY	25	18	
94/90	*	COOK			
STA.	TO STA.				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

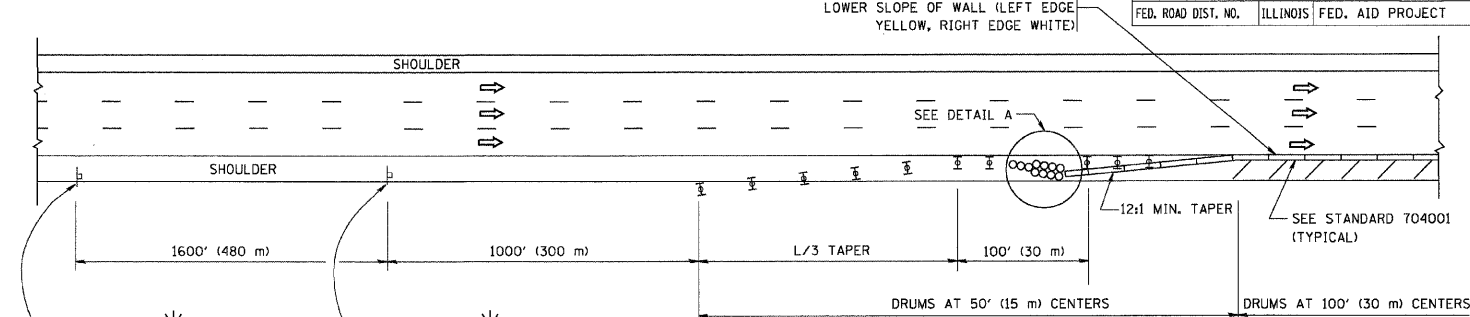
- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

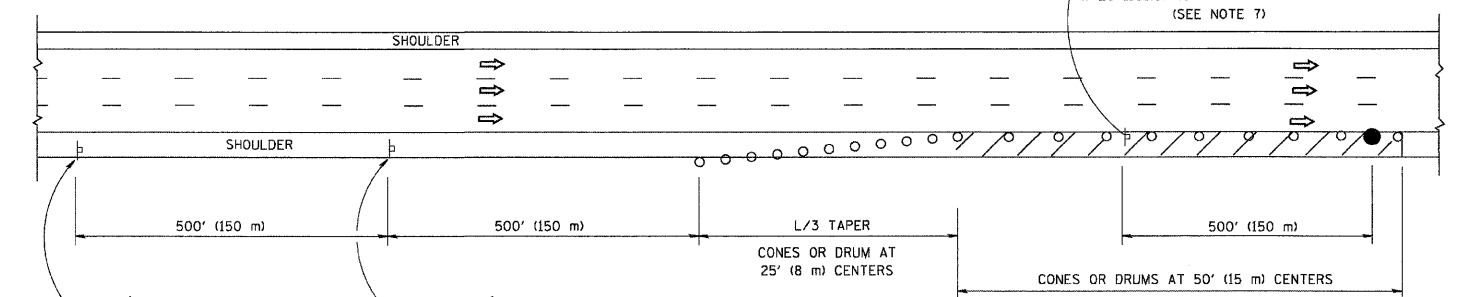
- THE "L" DISTANCE EQUALS:  

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

W = WIDTH OF OFFSET IN FEET (METERS)  
 S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

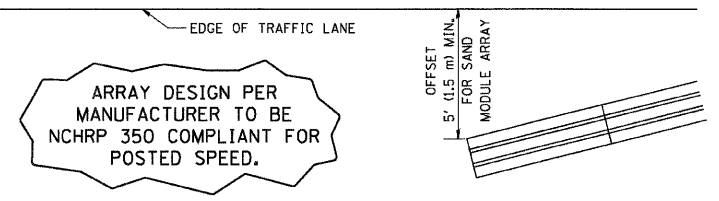


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

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



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

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

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

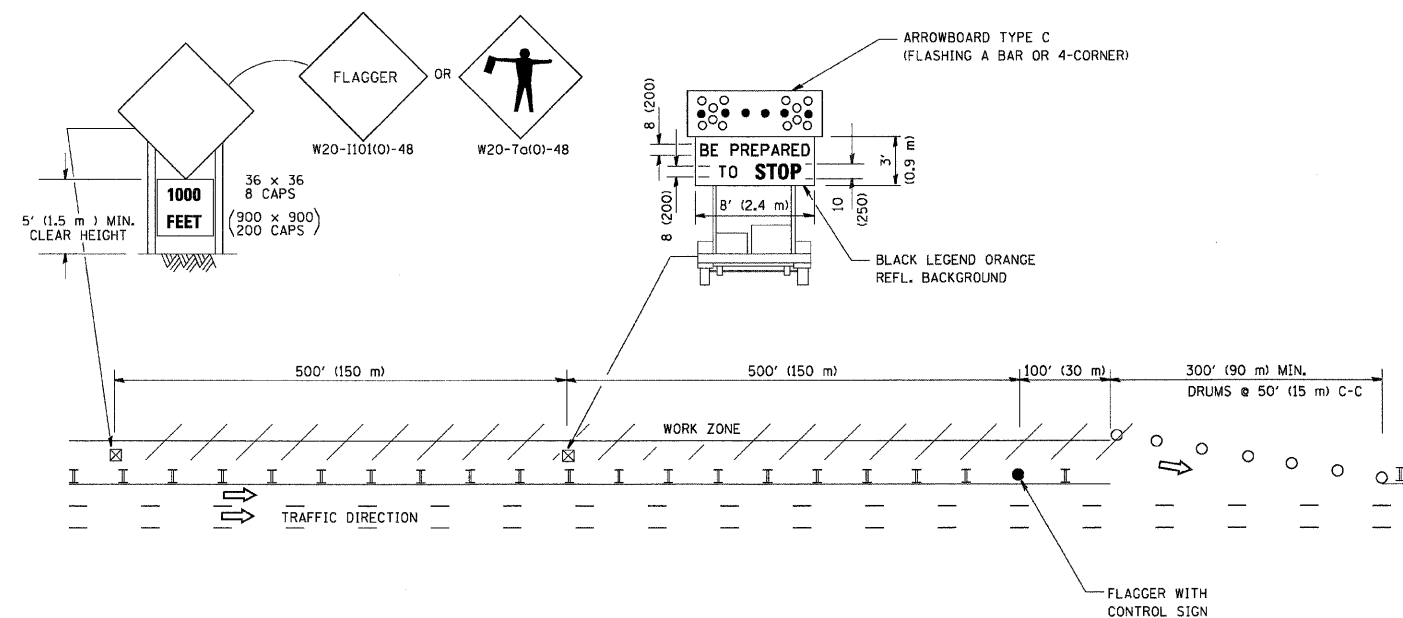
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL DETAILS  
 FOR FREEWAY  
 SHOULDER CLOSURES  
 PARTIAL RAMP CLOSURES**  
 DESIGNED BY: DWS  
 DRAWN BY  
 CHECKED BY  
 TC-17

PLOT DATE = 3/7/2007  
 FILE NAME = K:\vtd\std\vol17.dgn  
 PLOT SCALE = 50.0000 / 1 IN.  
 USER NAME = bawardl

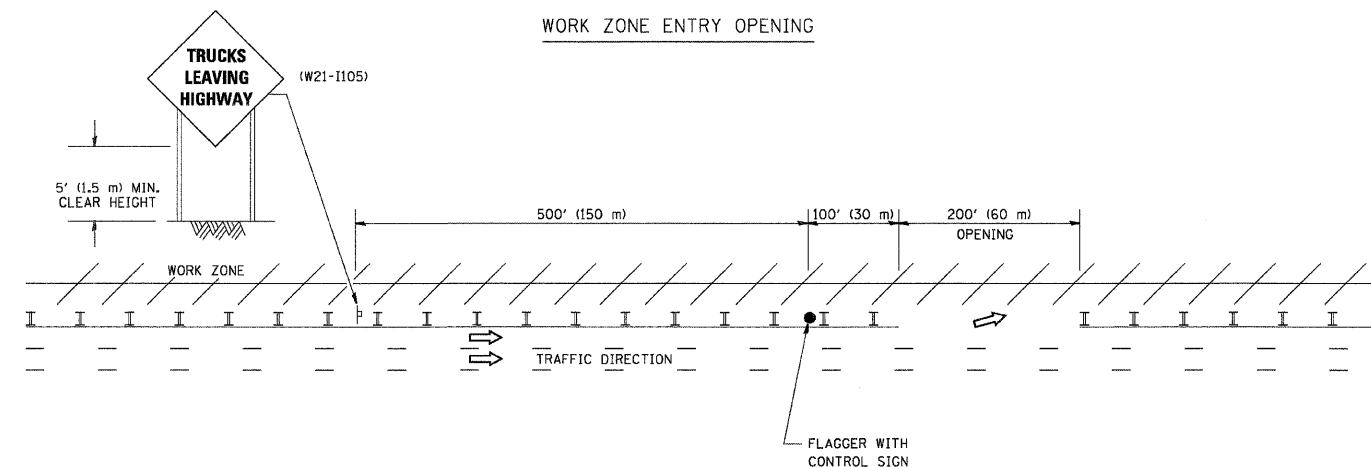
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	25	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

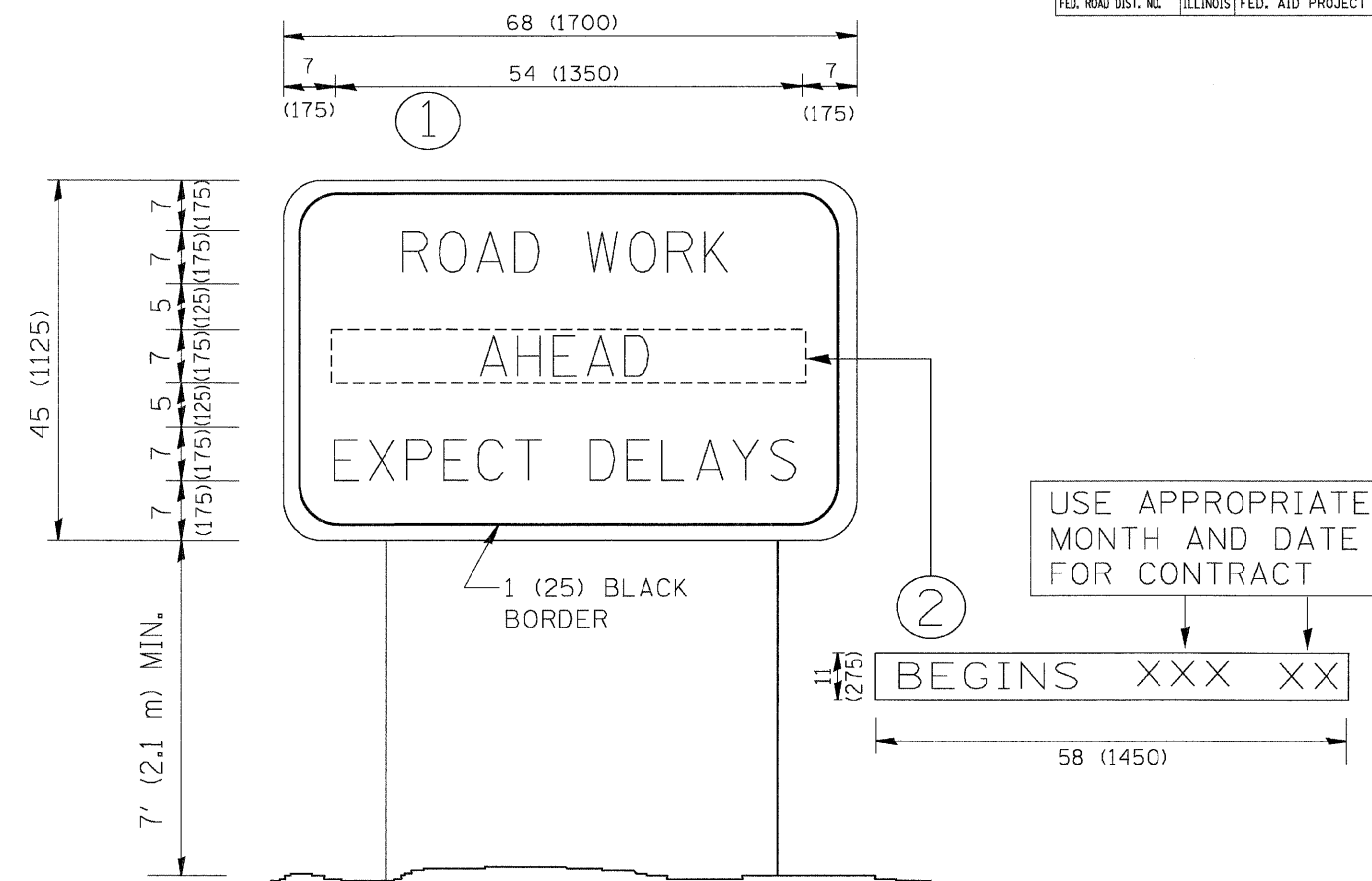
ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING FOR FLAGGING OPERATIONS  
AT WORK ZONE OPENINGS

SCALE: NONE

DRAWN BY CADD

CHECKED BY

TC-18



NOTES:

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

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD  
INFORMATION SIGN

SCALE: NONE

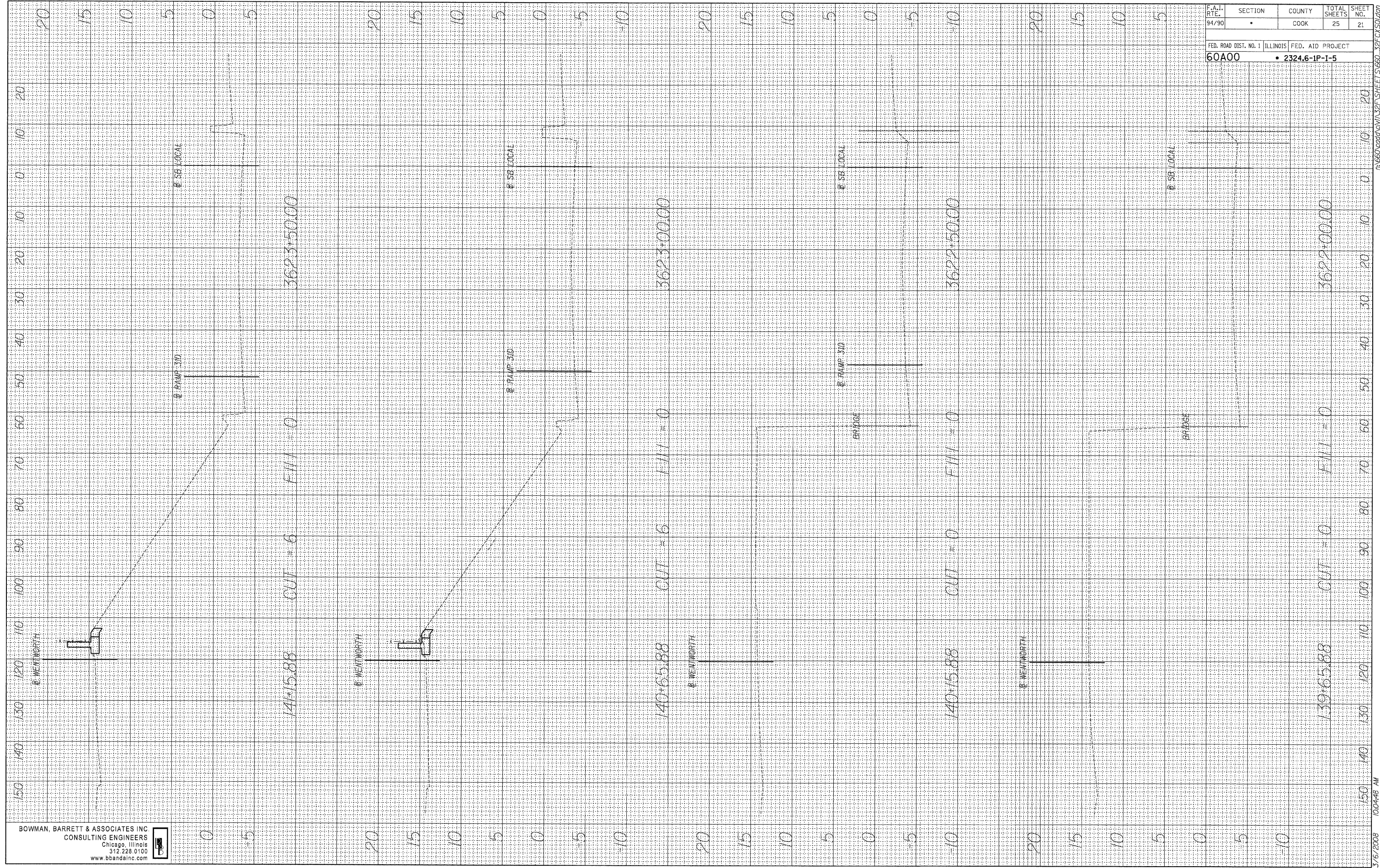
DRAWN BY DESIGN

CHECKED BY

TC22

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

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



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F.A.I. RTE. 94/90	SECTION •	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 21
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A00		• 2324.6-1P-1-5		

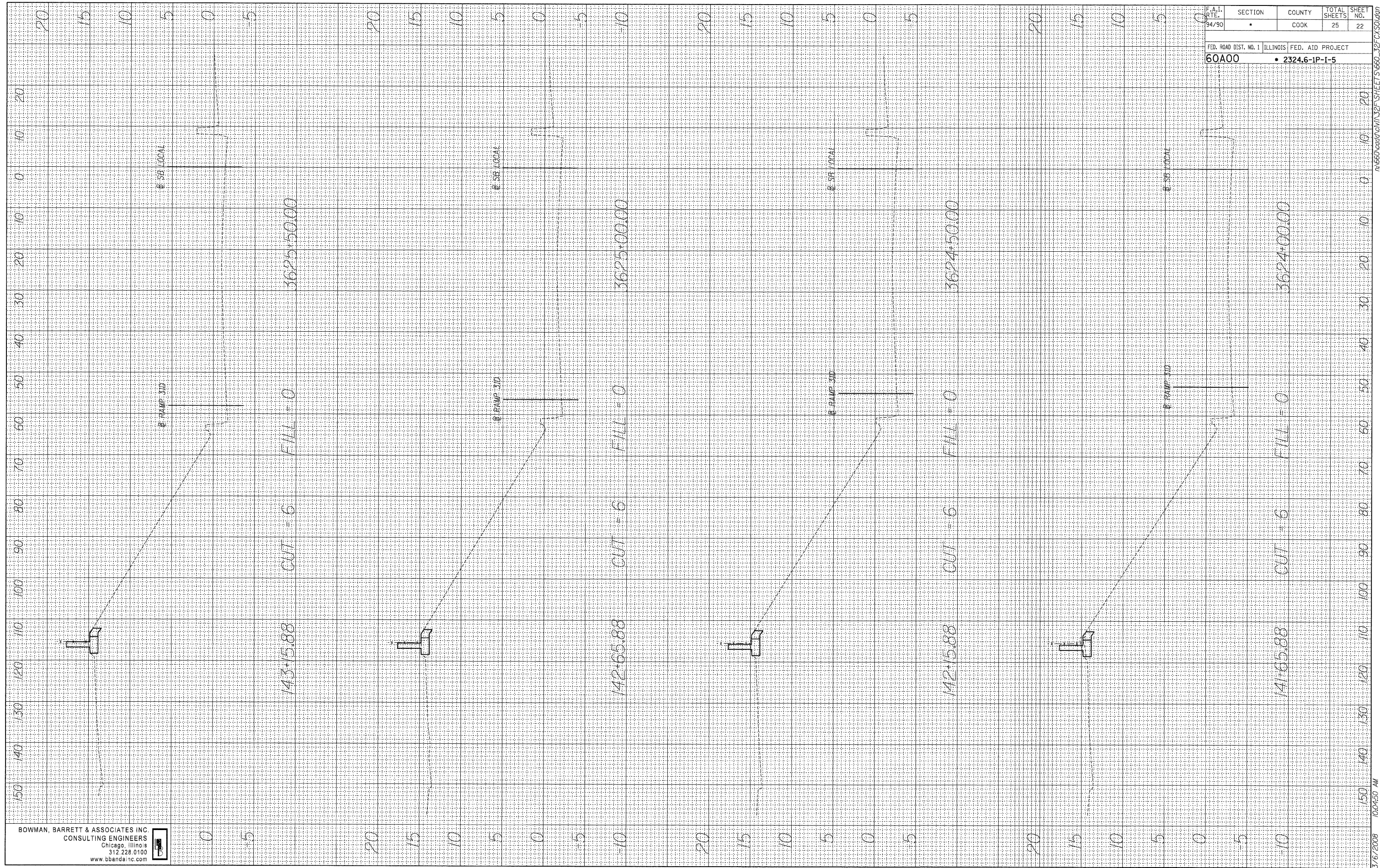
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FINAL SURVEY PLOTTED  
 NOTE BOOK AREAS CHECKED

ORIGINAL SURVEY PLOTTED  
 NOTE BOOK AREAS CHECKED

BY \_\_\_\_\_ DATE \_\_\_\_\_

BY \_\_\_\_\_ DATE \_\_\_\_\_



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F.A.I. R.T.E. 94/90	SECTION •	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 22
FED. ROAD DIST. NO. 1 60A00		ILLINOIS FED. AID PROJECT • 2324.6-1P-1-5		

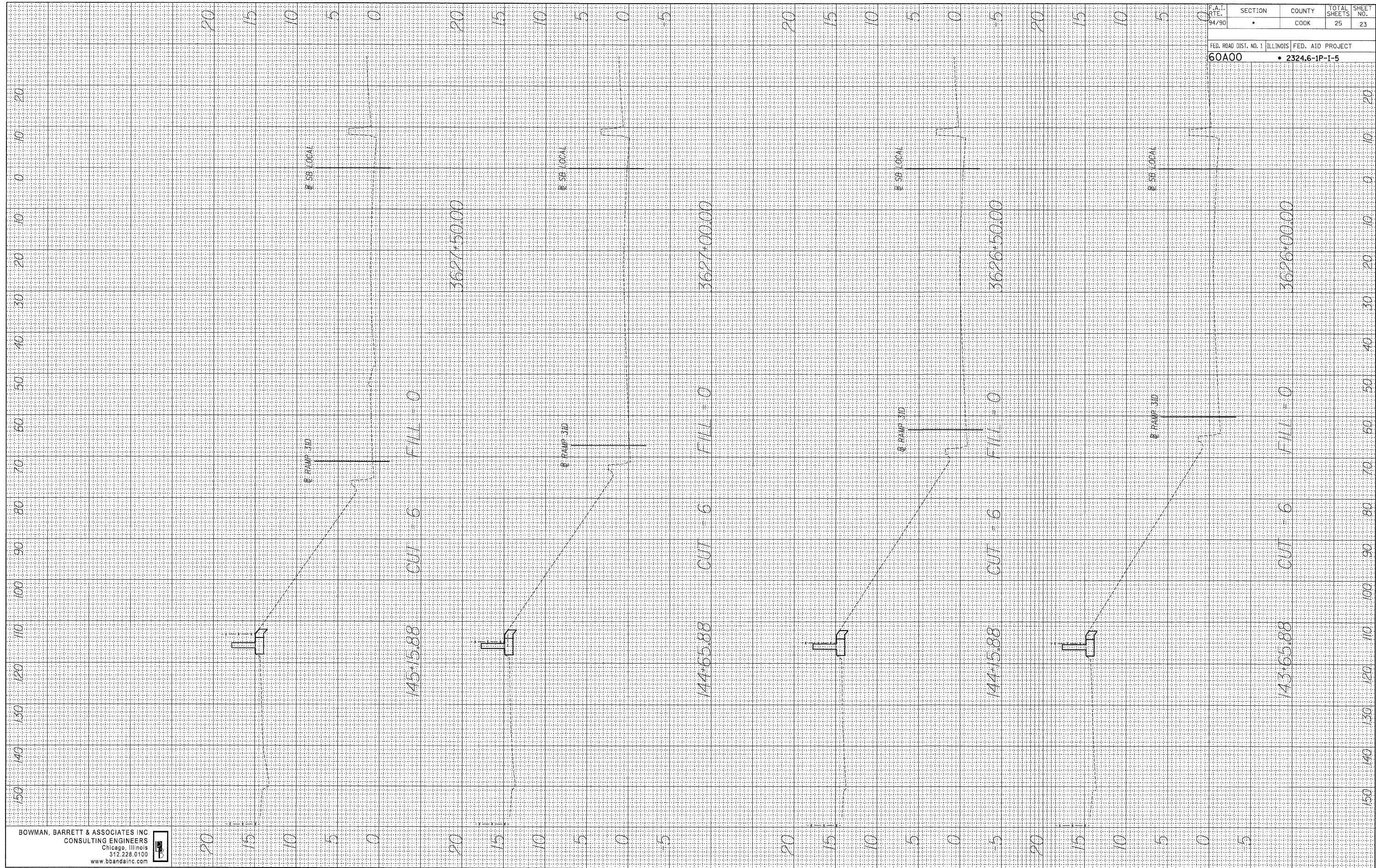
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FINAL SURVEY SURVEYED PLOTTED  
 NOTE BOOK TEMPLATE  
 NO. AREAS CHECKED

ORIGINAL SURVEY SURVEYED PLOTTED  
 NOTE BOOK TEMPLATE  
 NO. AREAS CHECKED

BY \_\_\_\_\_ DATE \_\_\_\_\_

BY \_\_\_\_\_ DATE \_\_\_\_\_



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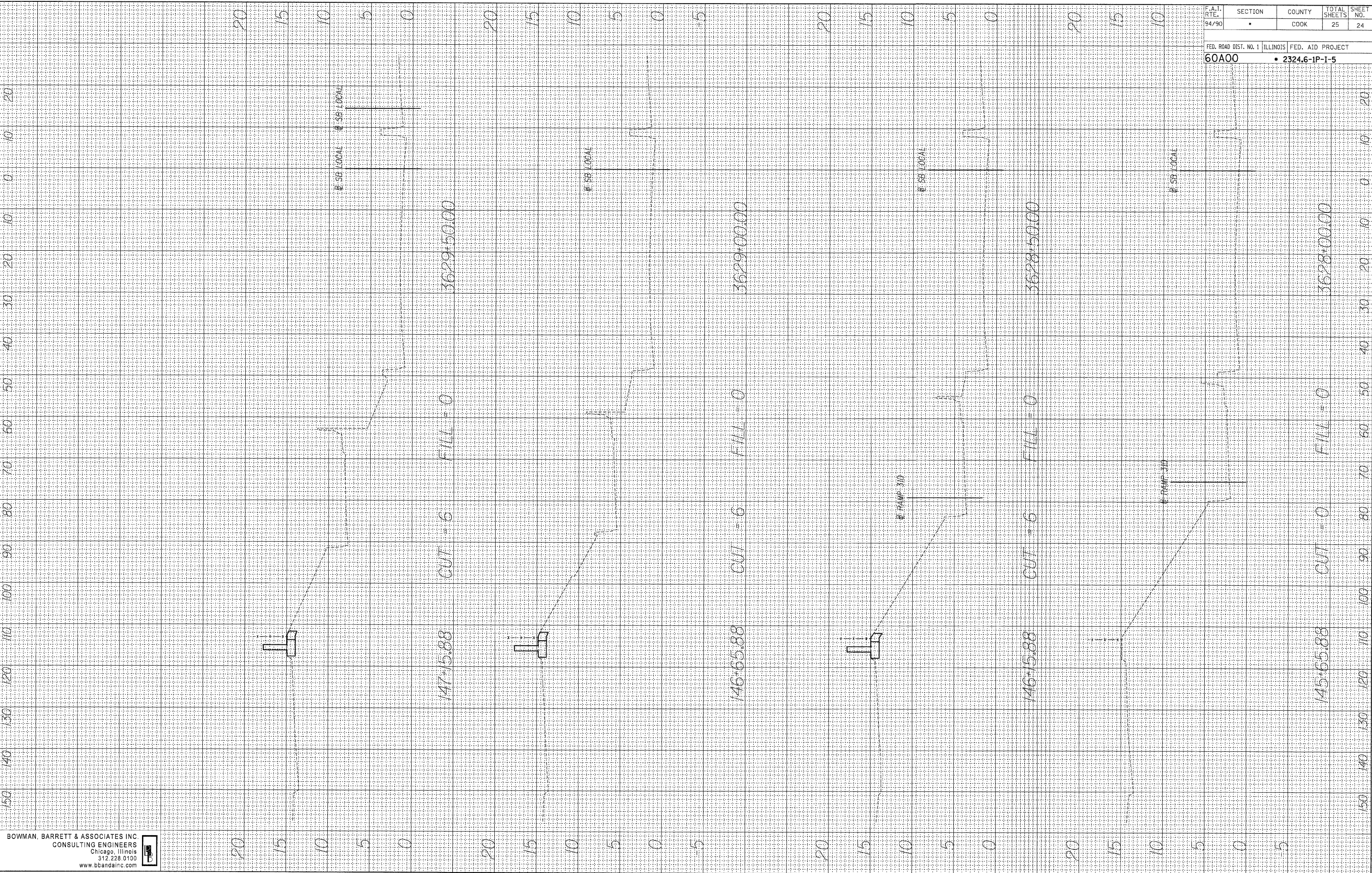
F.A.T. R.T.E. 94/90	SECTION •	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 23
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		
60A00		• 2324.6-1P-1-5		

3/6/2008 10:04:52 AM



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

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



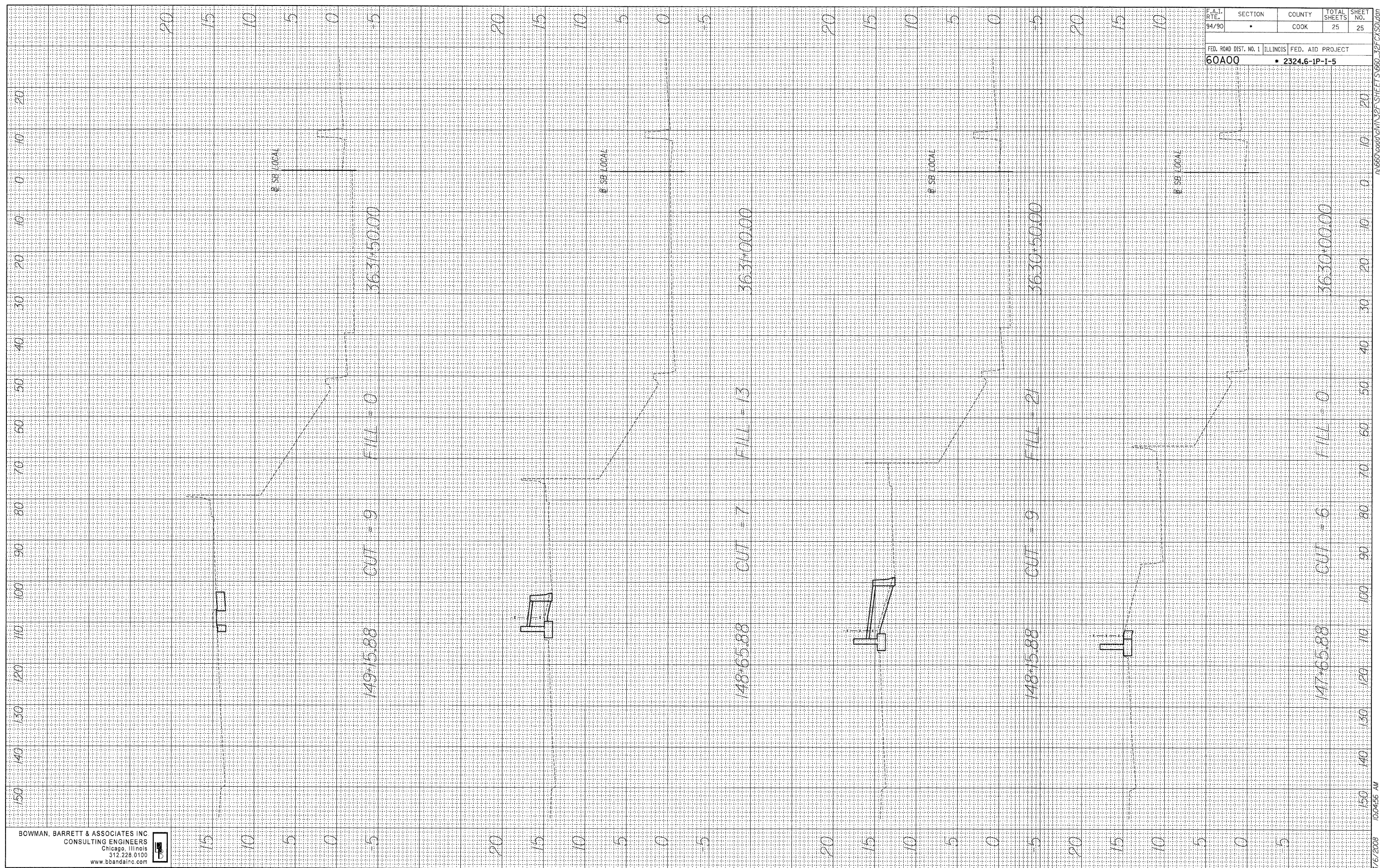
BOWMAN, BARRETT & ASSOCIATES INC  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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F.A.I. RTE. 94/90	SECTION •	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 24
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A00		• 2324.6-1P-1-5		

3/6/2008 10:04:54 AM

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

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



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 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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F.A.I. RITE 94/90	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	25	25
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT
60A00		2324.6-1P-1-5		

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