

INDEX OF SHEETS

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DESIGN NUMBER

D-91-245-05

IDOT HIGHWAY STANDARDS

STANDARD DESCRIPTION

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
664001-02	CHAIN LINK FENCE
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS

PROJECT LOCATED IN CITY OF CHICAGO

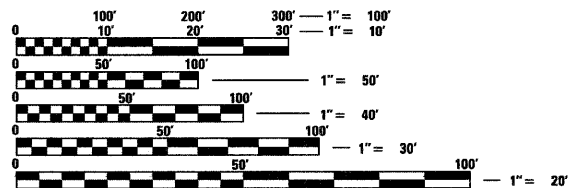
DESIGN DESIGNATION

WELLS ST: 8275 (20) URBAN COLLECTOR

ADT DESIGN POSTED
(2020) SPEED SPEED

FRONTAGE ROADS:

WELLS ST 15,000 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.

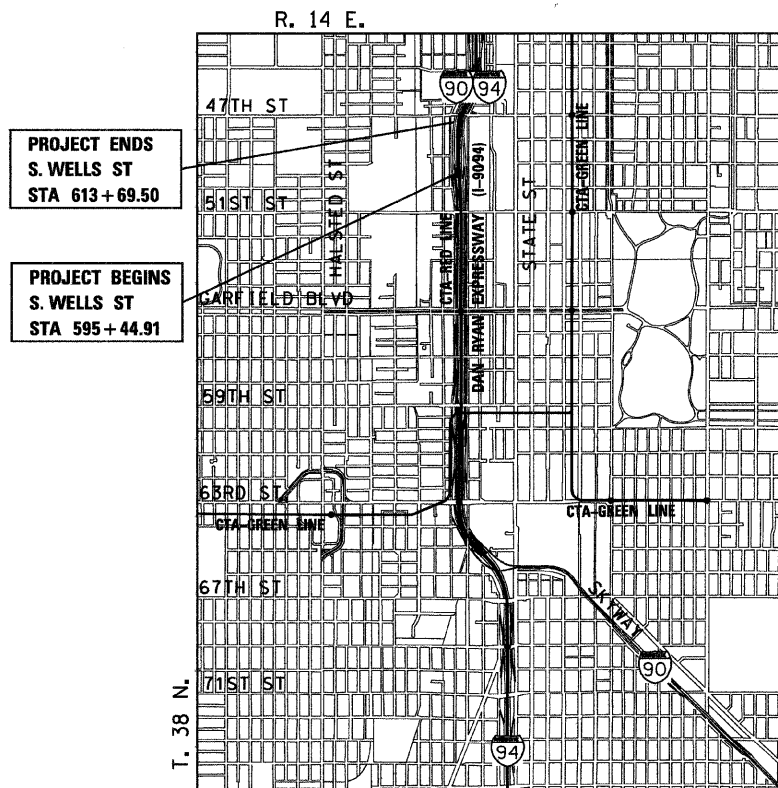
DIGGER:
CHICAGO UTILITY ALERT NETWORK
(312) 744-7000

CONTRACT NO. 62987

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 (2021-922 PT1 & 2122-921 PT1) I-2
INSTALLATION OF FLUTED KNEE WALL ALONG WELLS
STREET FROM 50th STREET TO 47th STREET
COOK COUNTY
C-91-245-05



LOCATION MAP

0 1/2 MILE 1 MILE
1" = 1/2 MILE
GROSS LENGTH OF PROJECT = 1,825 FT (0.346 MILES)
NET LENGTH OF PROJECT = 1,825 FT (0.346 MILES)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	1

* (2021-922 PT1 & 2122-921 PT1) I-2 **62987**



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

SUBMITTED JANUARY 8, 2009

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

May 8, 2009
Charles J. Ingersoll *RD*
ENGINEER OF DESIGN AND ENVIRONMENT

May 8, 2009
Christine M. Red *RD*
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
• (2021-922 PT1 & 2122-921 PT1) I-2		62987		

GENERAL NOTES:

1. ALL WORK IN THIS CONTRACT SHALL BE COMPLETED WITHIN 35 WORKING DAYS.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
3. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ABUTTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
5. THIS CONTRACT DOES NOT INCLUDE QUANTITIES FOR THE PAY ITEMS "SOIL STABILIZERS" AND "APPLYING DUST SUPPRESSION AGENTS". IT HAS BEEN DETERMINED THAT THESE ITEMS ARE NOT NEEDED FOR THE WORK ASSOCIATED WITH THIS CONTRACT. IF THE ENGINEER DETERMINES THAT THIS WORK IS NECESSARY, PAYMENT SHALL BE MADE IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH:

CONTRACT 62583 - LIGHTING AND SURVEILLANCE 31ST ST TO I-57 INTERCHANGE

CONTRACT 60A03 - INSTALLATION OF FENCING AND GATING (63RD ST TO 47TH ST)

CONTRACT 62303 - SOUTHBOUND LOCAL LANES (GARFIELD BOULEVARD TO 31ST STREET)

CONTRACT 60A73 - ROADSIDE EMBANKMENT LANDSCAPING

CONTRACT 60A78 - GATEWAY LANDSCAPING AND IRRIGATION
7. THE LOCATION OF VARIOUS ITEMS SUCH AS PAVEMENT, RETAINING WALLS, 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.
8. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER OR AND 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 SHALL REMAIN UNDISTURBED.
9. 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.
10. 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.
11. 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. THE SLEEVES AND CORING WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE COST OF THE CONCRETE MEDIAN SURFACE.
12. 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 BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
13. CONTRACTOR SHALL MATCH ALL WORK COMPLETED IN CONTRACT 62586.
14. TRAFFIC CONTROL ALONG THE FRONTAGE ROADS AND RAMPS SHALL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (SPECIAL).
15. THE CONTRACTOR SHALL PROTECT ALL BLUNT ENDS OF THE KNEE WALL FOR TRAFFIC SAFETY. ALL TEMPORARY PROTECTION DEVICES USED FOR THIS PURPOSE SHALL BE NCHRP 350 COMPLIANT AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).
16. CHAIN LINK FENCE, 4' (SPECIAL) SHALL BE INSTALLED AT ALL LOCATIONS WHERE THE EXISTING CHAIN LINK FENCE IS REMOVED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
17. 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 HOUR 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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)

59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

GENERAL NOTES AND PROJECT COMMITMENTS

SCALE: NONE

DATE: JANUARY 14, 2009

DRAWN BY: NJH

CHECKED BY: RMC

SUMMARY OF QUANTITIES

100%
STATE

CODE NO.	ITEM	UNIT	QUANTITY	URBAN ROADWAY J000
20200100	EARTH EXCAVATION	CU YD	78	78
21101645	TOPSOIL FURNISH AND PLACE, 12"	SO YD	292	292
25000210	SEEDING, CLASS 2A	ACRE	0.06	0.06
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	6	6
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	6	6
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	6	6
25100630	EROSION CONTROL BLANKET	SO YD	292	292
28000510	INLET FILTERS	EACH	19	19
42001300	PROTECTIVE COAT	SO YD	88	88
44004250	PAVED SHOULDER REMOVAL	SO YD	851	851
50300225	CONCRETE STRUCTURES	CU YD	9.9	9.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.6	7.6
50300300	PROTECTIVE COAT	SO YD	64	64
50300510	RUSTICATION FINISH	SO FT	105	105
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,380	1,380
60618324	CONCRETE MEDIAN SURFACE, 6" (SPECIAL)	SO FT	217	217
66400550	CHAIN LINK FENCE, 4' (SPECIAL)	FOOT	1,542	1,542
66410300	CHAIN LINK FENCE REMOVAL	FOOT	1,587	1,587
67100100	MOBILIZATION	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	4
* 01000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	15	15
* 01200120	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	3	3
* 01300200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	13	13
* 09502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	260	260
X0322256	TEMPORARY INFORMATION SIGNING	SO FT	26	26
* X0323363	ELECTRIC CABLE IN CONDUIT, NO. 12 3/C	FOOT	260	260
X0324640	FLUTED KNEEWALL	FOOT	1,528	1,528
X6065740	CONCRETE MEDIAN SURFACE, 5" (MODIFIED)	SO FT	577	577
X7040650	REMOVE TEMPORARY CONCRETE BARRIER	FOOT	1,593	1,593
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
* X0326312	TRAFFIC SIGNAL POST, PAINTED STEEL (SPECIAL) (7 FT.)	EACH	1	1

*Specialty Items

AECOM

Rev.

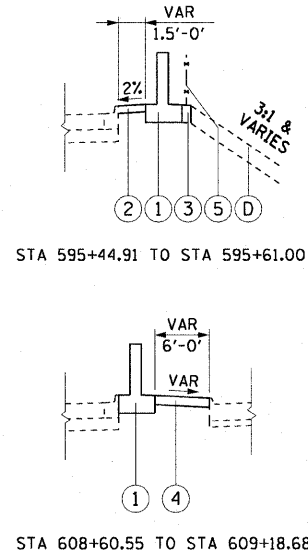
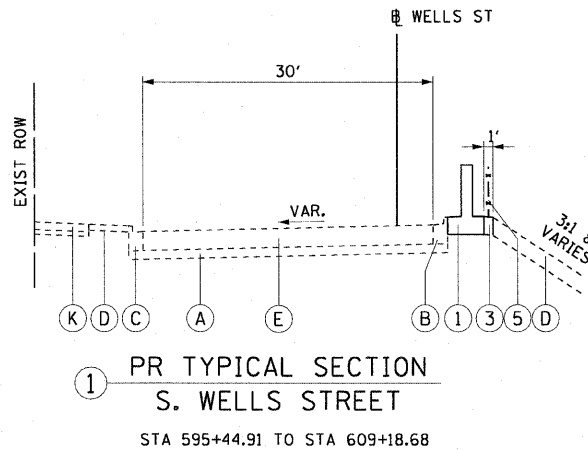
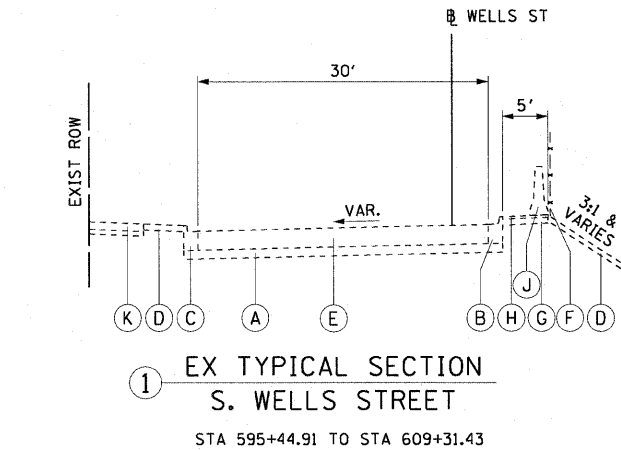
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

SUMMARY OF QUANTITIES

SCALE: NONE
DATE: JANUARY 14, 2009

DRAWN BY: NJH
CHECKED BY: RMG

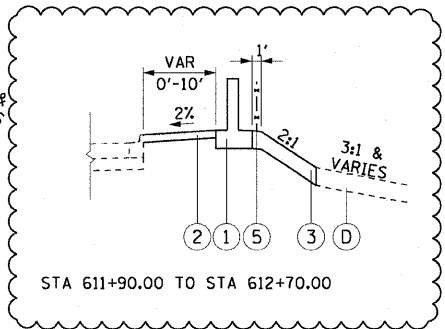
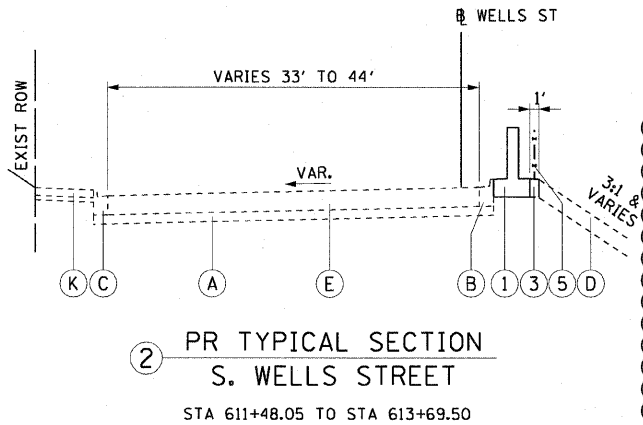
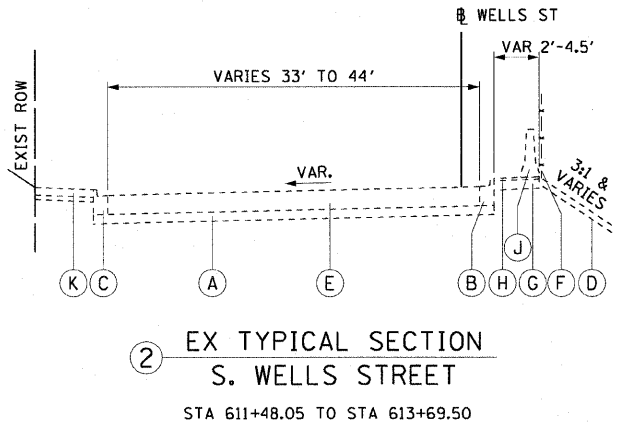


EXISTING LEGEND:

- (A) SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
- (B) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED)
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V.12
- (D) GRASS AREA
- (E) PORTLAND CEMENT CONCRETE PAVEMENT, 10" (JOINTED)
- (F) CHAIN LINK FENCE, 4'
- (G) AGGREGATE BASE COURSE, TYPE B, 4"
- (H) BITUMINOUS SHOULDERS, 1 1/2"
- (J) TEMPORARY CONCRETE BARRIER
- (K) P.C.C. SIDEWALK, 5" AND SAND CUSHION, 3"

PROPOSED LEGEND:

- (1) FLUTED KNEE WALL
- (2) CONCRETE MEDIAN SURFACE, 5" (MODIFIED)
- (3) SEEDING, CLASS 2A / TOPSOIL FURNISH AND PLACE, 12" / EROSION CONTROL BLANKET
- (4) CONCRETE MEDIAN SURFACE, 6 INCH (SPECIAL)
- (5) CHAIN LINK FENCE, 4' (SPECIAL)



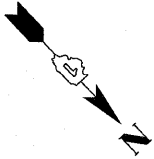
NOTES:

- EXISTING PAVEMENT INFORMATION TAKEN FROM DAN RYAN DESIGN PLANS OR RECORD DRAWINGS.
- THERE ARE STRUCTURAL DETAILS FOR THE FLUTED KNEE WALL FROM STATION 608+60.55 TO STATION 609+18.68, THIS PORTION OF KNEE WALL WILL NOT BE PAID FOR AS THE STANDARD FLUTED KNEE WALL BUT WILL BE PAID AS DESCRIBED AND SHOWN IN STRUCTURAL DETAIL 1.
- THERE ARE STRUCTURAL DETAILS FOR THE FLUTED KNEE WALL FROM STATION 611+48.05 TO STATION 611+88.35, THIS PORTION OF KNEE WALL WILL NOT BE PAID FOR AS THE STANDARD FLUTED KNEE WALL BUT WILL BE PAID AS DESCRIBED AND SHOWN IN STRUCTURAL DETAIL 2.

EARTHWORK SCHEDULE

EARTH EXCAVATION (CUYD)	EARTH EXCAVATION ADJUSTED FOR SHINKAGE	FILL (CUYD)	EARTHWORK BALANCE (CUYD)
273.84	273.84	78.00	+127.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
(2021-922 PT1 & 2122-921 PT1) I-2		62987		



CURVE EKWELLO1
P.I. STA= 9+04.39
N= 1,861,874.35
E= 1,176,076.45
Δ= 10° 52' 16"
D= 5° 40' 05"
R= 1,010.83'
T= 96.18'
L= 191.79'
E= 4.56'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 8+08.21
N= 1,861,778.19
E= 1,176,078.94
P.T. STA= 10+00.00
N= 1,861,968.30
E= 1,176,055.87

CURVE EKWELLO2
P.I. STA= 10+99.36
N= 1,862,065.35
E= 1,176,034.61
Δ= 23° 41' 58"
D= 21° 47' 07"
R= 263.00'
T= 55.18'
L= 108.78'
E= 4.56'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 10+44.17
N= 1,862,011.45
E= 1,176,002.13
P.T. STA= 11+52.96
N= 1,862,109.97
E= 1,176,002.13

CURVE EKWELLO3
P.I. STA= 12+18.75
N= 1,862,163.15
E= 1,175,963.41
Δ= 2° 58' 46"
D= 2° 15' 54"
R= 2,529.60'
T= 65.78'
L= 131.54'
E= 0.85'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 11+52.96
N= 1,862,109.97
E= 1,176,002.13
P.T. STA= 12+84.51
N= 1,862,218.28
E= 1,175,927.50

CURVE EKWELLO4
P.I. STA= 13+72.28
N= 1,862,291.83
E= 1,175,879.60
Δ= 5° 48' 38"
D= 3° 18' 45"
R= 1,729.58'
T= 87.77'
L= 175.40'
E= 2.22'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 12+84.51
N= 1,862,218.28
E= 1,175,927.50
P.T. STA= 14+59.61
N= 1,862,369.86
E= 1,175,839.39

CURVE EKWELLO5
P.I. STA= 19+10.50
N= 1,862,770.39
E= 1,175,632.97
Δ= 12° 45' 31"
D= 6° 11' 38"
R= 925.00'
T= 103.41'
L= 205.97'
E= 5.76'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 18+07.09
N= 1,862,678.46
E= 1,175,680.34
P.T. STA= 20+13.07
N= 1,862,870.51
E= 1,175,607.06

CURVE EKWELLO6
P.I. STA= 21+01.89
N= 1,862,957.45
E= 1,175,589.82
Δ= 5° 16' 59"
D= 6° 48' 23"
R= 841.78'
T= 38.83'
L= 77.62'
E= 0.89'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 20+63.05
N= 1,862,918.90
E= 1,175,594.54
P.T. STA= 21+40.67
N= 1,862,996.27
E= 1,175,588.66

BENCH MARK NO. 3528 ELEV. 16.20
DESCRIPTION:
CROSS CUT ON NORTHWESTERLY BOLT OF FIRE HYDRANT
AT THE NORTHWEST CORNER OF 45TH ST AND WENTWORTH AVE

BENCH MARK NO. 3530 ELEV. 18.18
DESCRIPTION:
CROSS CUT ON SOUTHEAST BOLT OF LIGHT POLE BASE
AT THE NORTHWEST CORNER OF 51ST ST AND WELLS ST

BENCH MARK NO. 3531 ELEV. 17.55
DESCRIPTION:
CROSS CUT ON NORTHEASTERLY FLANGE BOLT OF FIRE HYDRANT
AT THE NORTHEAST CORNER OF GARFIELD BLVD AND WELLS ST

BENCH MARK NO. 3532 ELEV. 18.84
DESCRIPTION:
HORIZONTAL BOLT ON CTA "EL" STRUCTURE, EAST SIDE OF
WELLS ST ABOUT 50 FEET NORTH OF 59TH PL.

BENCH MARK NO. 3533 ELEV. 19.71
DESCRIPTION:
BRASS DISK (CTA MONUMENT) AT THE SOUTHWEST CORNER
OF 63RD ST AND HARVARD ST

BENCH MARK NO. 3535 ELEV. 19.31
DESCRIPTION:
FOUND CROSS CUT ON SOUTHERLY FLANGE BOLT OF FIRE HYDRANT
AT THE NORTHEAST CORNER OF 59TH ST AND WENTWORTH AVE

BENCH MARK NO. 3536 ELEV. 18.37
DESCRIPTION:
CROSS CUT ON SOUTHEASTERLY FLANGE BOLT OF FIRE HYDRANT
AT THE SOUTHEAST CORNER OF GARFIELD BLVD AND WENTWORTH AVE

BENCH MARK NO. 3537 ELEV. 17.71
DESCRIPTION:
CROSS CUT ON NORTHEASTERLY FLANGE BOLT OF FIRE HYDRANT
AT THE NORTHEAST CORNER OF 51ST ST AND WENTWORTH AVE

BENCH MARK NO. 3538 ELEV. 17.31
DESCRIPTION:
CROSS CUT ON EASTERLY FLANGE BOLT OF FIRE HYDRANT
AT THE NORTHEAST CORNER OF 47TH ST AND LASALLE ST

NOTES:
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360

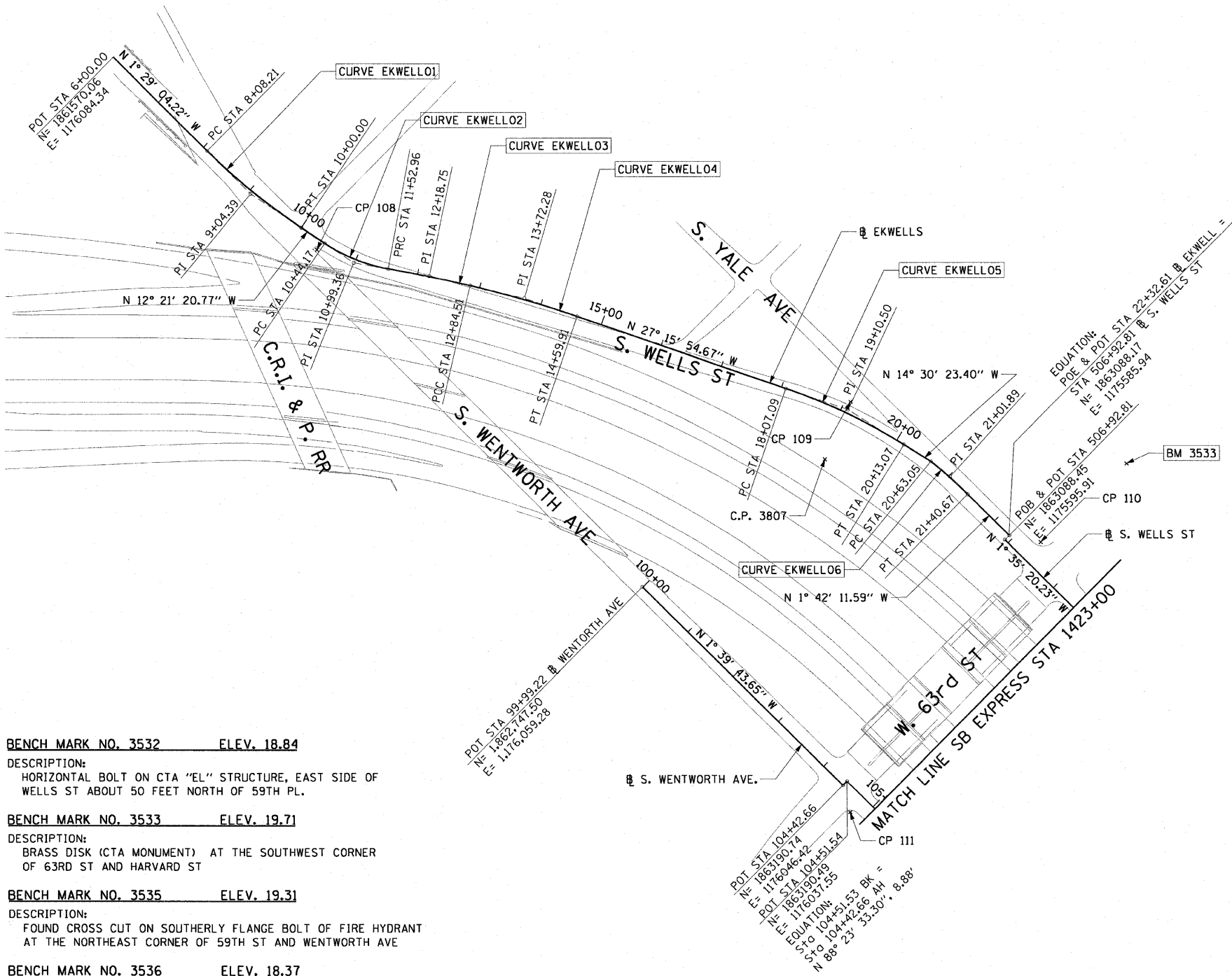
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

ALIGNMENT PLAN

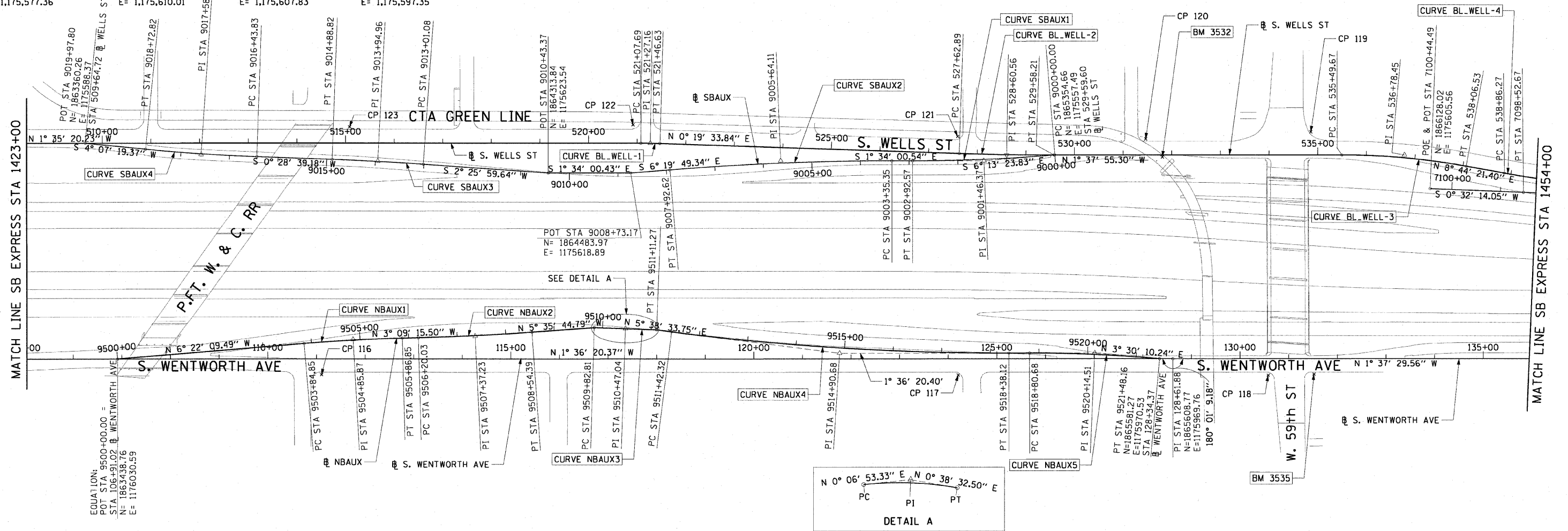
SCALE: 1"=100'
DATE: JANUARY 14, 2009

DRAWN BY: NJH
CHECKED BY: RMG



CURVE SBAUX1	CURVE SBAUX2	CURVE SBAUX3	CURVE SBAUX4
P.I. STA= 9001+46.37 N= 1,865,209.16 E= 1,175,573.36 Δ= 4° 39' 23" D= 1° 35' 30" R= 3600.00' T= 146.37' L= 292.57' E= 2.97' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9000+00.00 N= 1,865,354.66 E= 1,175,557.49 P.T. STA= 9002+92.57 N= 1,865,062.84 E= 1,175,577.36	P.I. STA= 9005+64.11 N= 1,864,791.41 E= 1,175,584.78 Δ= 4° 45' 49" D= 1° 02' 30" R= 5500.00' T= 228.77' L= 457.27' E= 4.76' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9003+35.35 N= 1,865,020.09 E= 1,175,578.53 P.T. STA= 9007+92.62 N= 1,864,564.03 E= 1,175,610.01	P.I. STA= 9013+94.96 N= 1,863,962.56 E= 1,175,608.62 Δ= 1° 57' 20" D= 1° 02' 30" R= 5500.00' T= 93.88' L= 187.72' E= 0.80' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9013+01.08 N= 1,864,056.35 E= 1,175,612.60 P.T. STA= 9014+88.82 N= 1,863,868.69 E= 1,175,607.83	P.I. STA= 9017+58.36 N= 1,863,599.16 E= 1,175,605.59 Δ= 3° 38' 40" D= 1° 35' 30" R= 3600.00' T= 114.53' L= 228.99' E= 1.82' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9016+43.83 N= 1,863,713.69 E= 1,175,606.54 P.T. STA= 9018+72.82 N= 1,863,484.92 E= 1,175,597.35

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	6
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (2021-922 PT1 & 2122-921 PT1) I-2				62987



CURVE NBAUX1	CURVE NBAUX2	CURVE NBAUX3	CURVE NBAUX4	CURVE NBAUX5	CURVE BL_WELL-1	CURVE BL_WELL-2	CURVE BL_WELL-3
P.I. STA= 9504+85.87 N= 1,863,921.64 E= 1,175,976.69 Δ= 3° 12' 54" D= 1° 35' 30" R= 3600.00' T= 101.03' L= 202.00' E= 1.42' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9503+84.85 N= 1,863,821.23 E= 1,175,987.89 P.T. STA= 9505+86.85 N= 1,864,022.51 E= 1,175,971.13	P.I. STA= 9507+37.23 N= 1,864,172.66 E= 1,175,962.85 Δ= 2° 26' 29" D= 1° 02' 30" R= 5500.00' T= 117.20' L= 234.36' E= 1.25' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9506+20.03 N= 1,864,055.64 E= 1,175,969.30 P.T. STA= 9508+54.39 N= 1,864,289.30 E= 1,175,951.42	P.I. STA= 9510+47.04 N= 1,864,481.34 E= 1,175,939.03 Δ= 0° 31' 39" D= 1° 02' 30" R= 13952.00' T= 64.23' L= 128.46' E= 0.15' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9509+82.81 N= 1,864,417.11 E= 1,175,938.90 P.T. STA= 9511+41.27 N= 1,864,545.57 E= 1,175,939.75	P.I. STA= 9514+90.68 N= 1,864,923.14 E= 1,175,977.06 Δ= 7° 14' 54" D= 1° 02' 30" R= 5500.00' T= 348.36' L= 695.79' E= 11.02' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 9511+42.32 N= 1,864,576.47 E= 1,175,942.80 P.T. STA= 9518+38.12 N= 1,865,271.36 E= 1,175,967.30	P.I. STA= 9520+14.51 N= 1,865,447.69 E= 1,175,962.35 Δ= 5° 06' 31" D= 1° 54' 35" R= 3000.00' T= 133.83' L= 267.48' E= 2.98' e= 2.4 T.R.= 11' (0') S.E. RUN= 66' (0') P.C. STA= 9518+80.68 N= 1,865,313.91 E= 1,175,966.10 P.T. STA= 9521+48.16 N= 1,865,581.27 E= 1,175,970.53	P.I. STA= 521+27.16 N= 1,864,522.25 E= 1,175,556.14 Δ= 1° 54' 54" D= 4° 55' 05" R= 1165.00' T= 19.47' L= 38.94' E= 0.16' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 521+07.69 N= 1,864,502.79 E= 1,175,556.68 P.T. STA= 521+46.63 N= 1,864,541.72 E= 1,175,556.25	P.I. STA= 528+60.56 N= 1,865,255.64 E= 1,175,560.31 Δ= 1° 57' 29" D= 1° 00' 09" R= 5715.00' T= 97.67' L= 195.31' E= 0.83' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 527+62.89 N= 1,865,157.98 E= 1,175,559.75 P.T. STA= 529+58.21 N= 1,865,353.27 E= 1,175,557.53	P.I. STA= 536+78.45 N= 1,866,073.22 E= 1,175,537.02 Δ= 10° 22' 17" D= 4° 02' 16" R= 1419.00' T= 128.78' L= 256.86' E= 5.83' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 535+49.67 N= 1,865,944.49 E= 1,175,540.68 P.T. STA= 538+06.53 N= 1,866,200.51 E= 1,175,556.58

NOTES:

1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

2 OF 5

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

ALIGNMENT PLAN

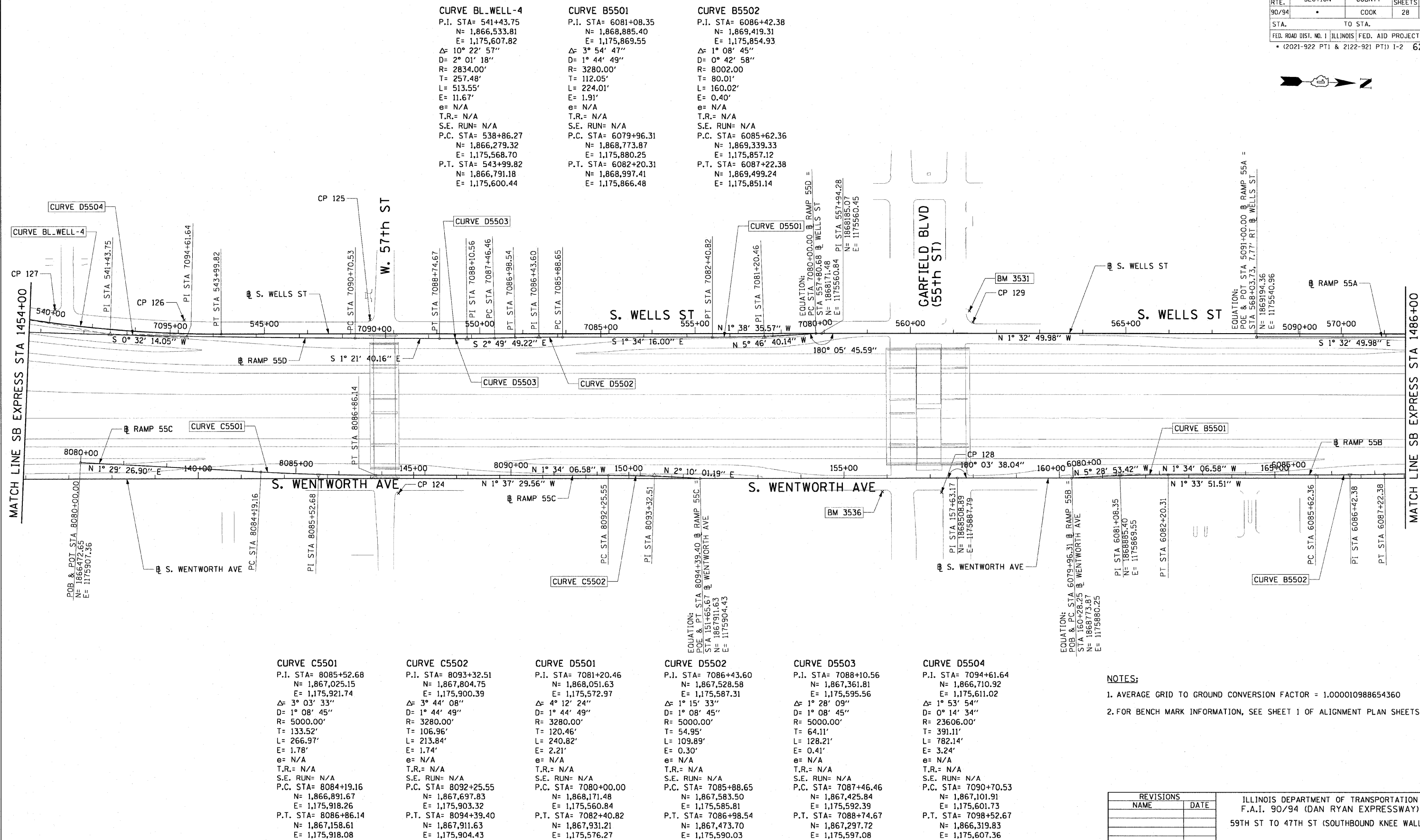
SCALE: 1"=100'
DATE: JANUARY 14, 2009

DRAWN BY: NJH
CHECKED BY: RMG

AECOM

1/13/2009 12:26:21 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	7
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (2021-922 PT1 & 2122-921 PT1) 1-2				62987



NOTES:

1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

ALIGNMENT PLAN

SCALE: 1"=100'
DATE: JANUARY 14, 2009

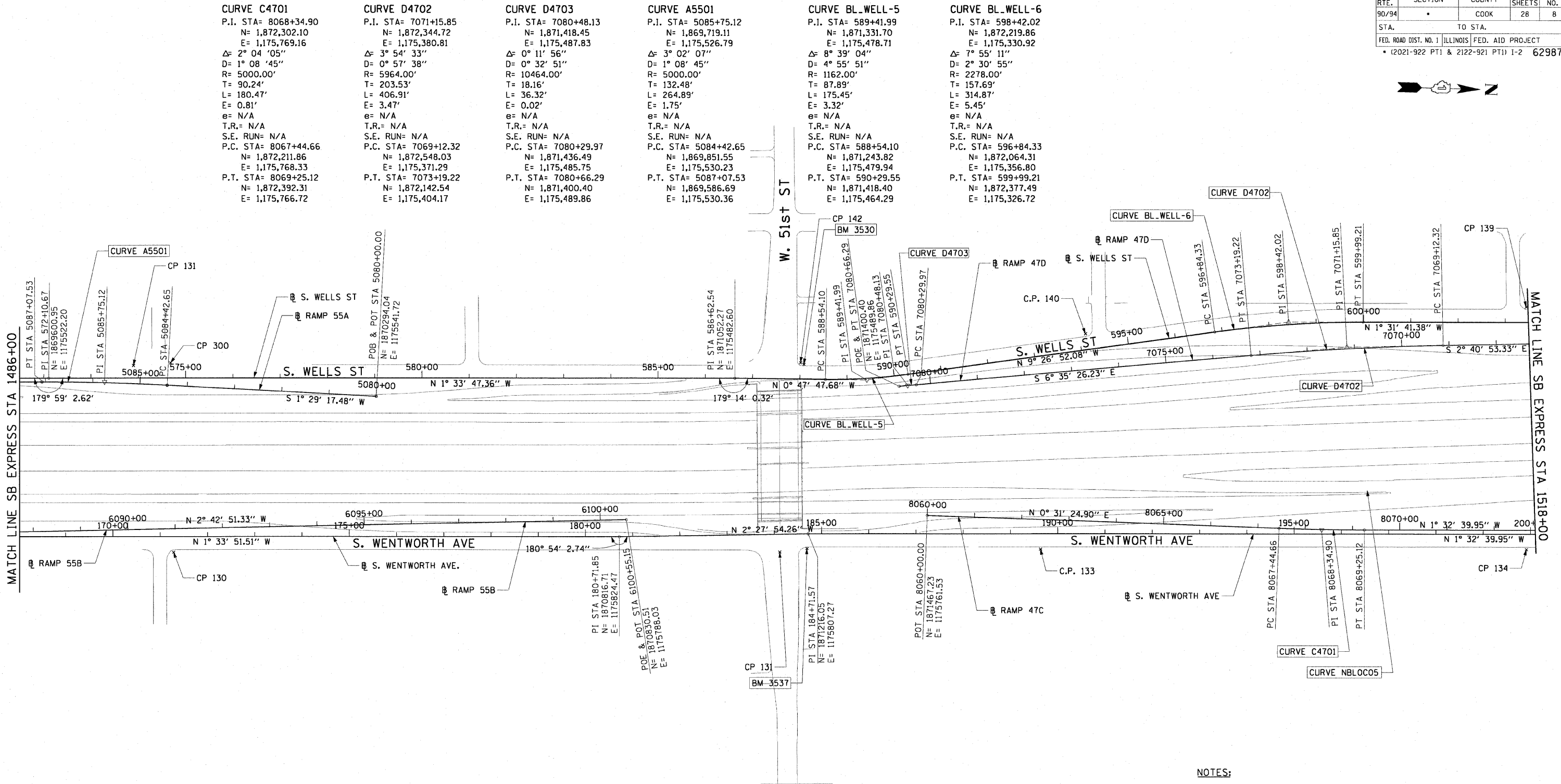
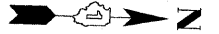
DRAWN BY: NJH
CHECKED BY: RMG

3 OF 5

AECOM

12/13/2009 12:26:21 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	8
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT
		(2021-922 PT1 & 2122-921 PT1) I-2		62987



- NOTES:
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

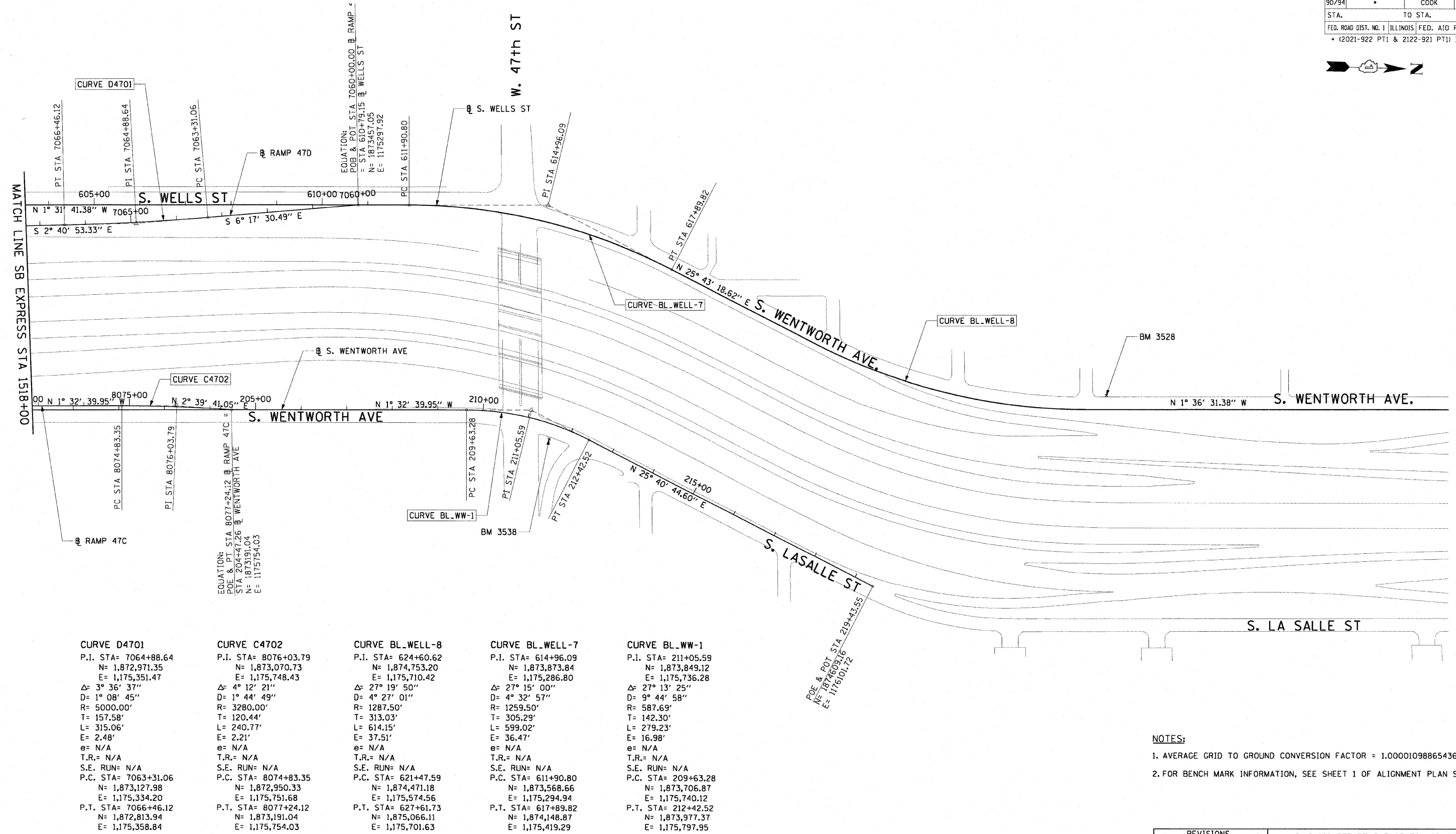
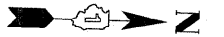
ALIGNMENT PLAN

SCALE: 1"=100'
DATE: JANUARY 14, 2009

DRAWN BY: NJH
CHECKED BY: RMG

AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	9
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-2 62987				



- NOTES:**
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

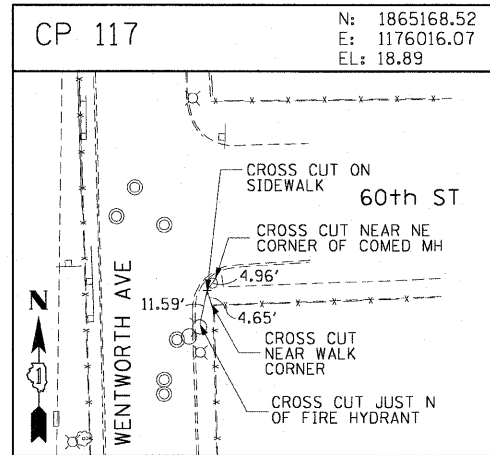
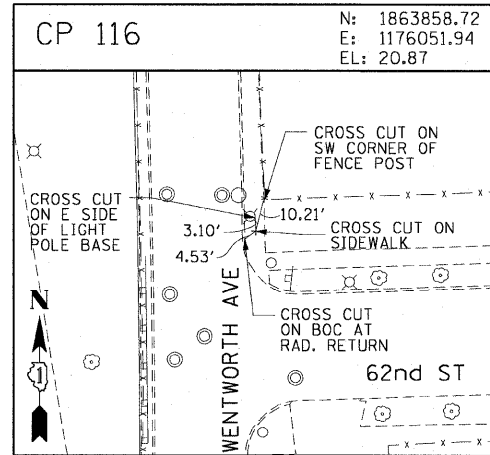
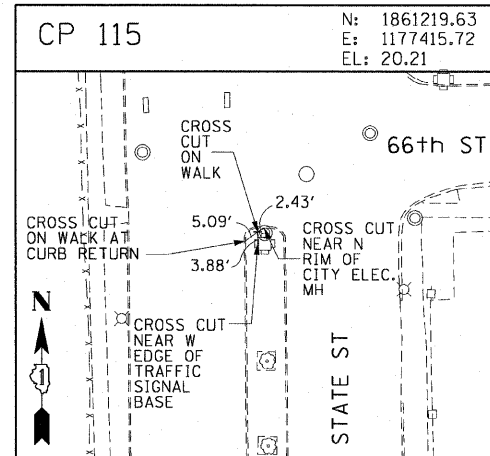
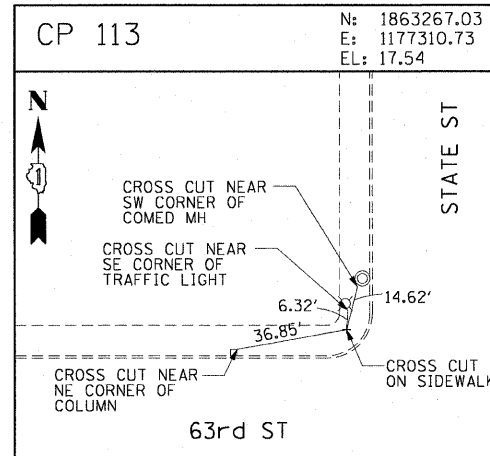
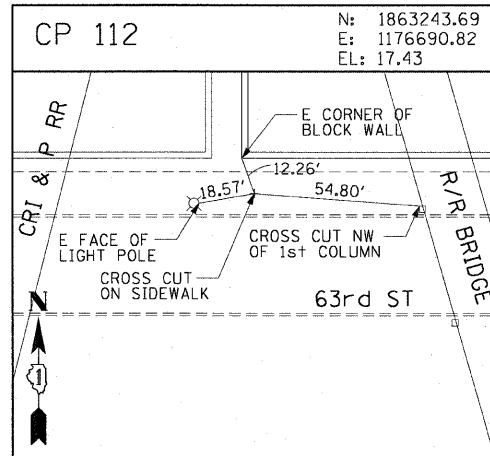
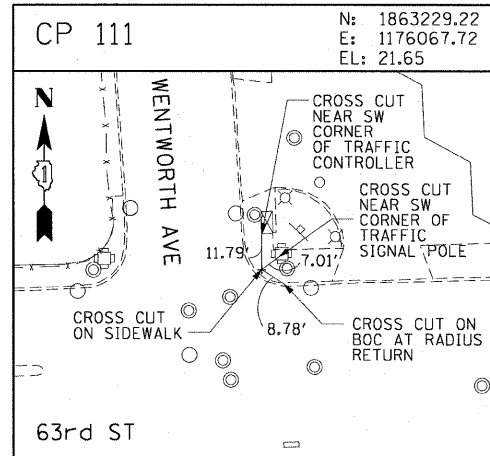
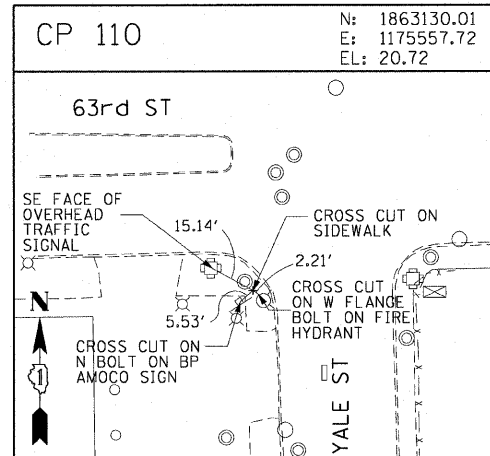
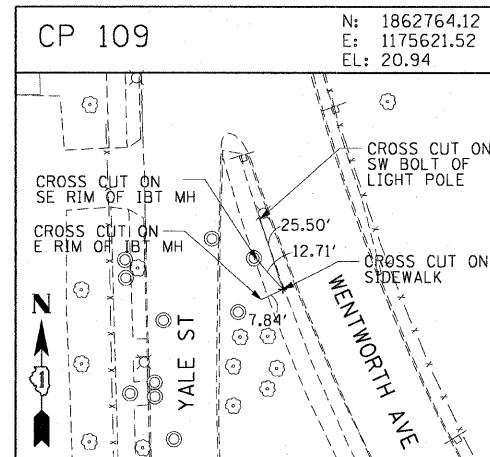
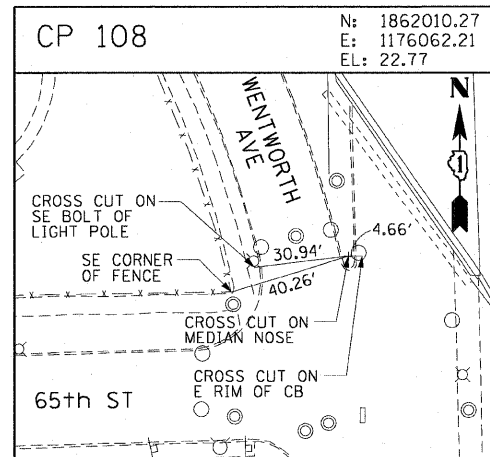
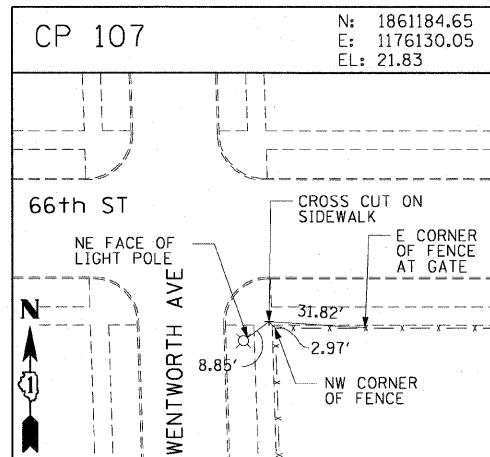
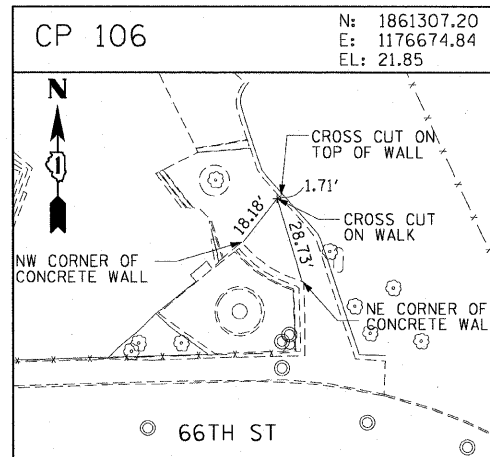
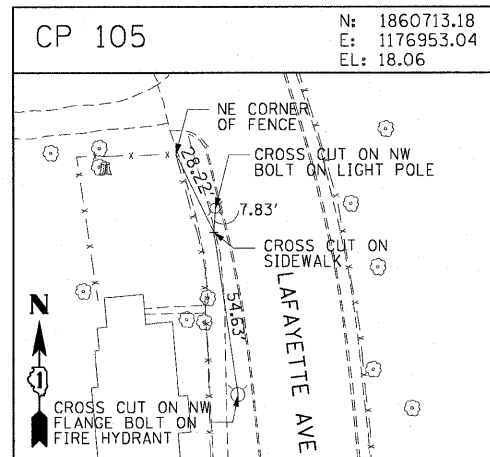
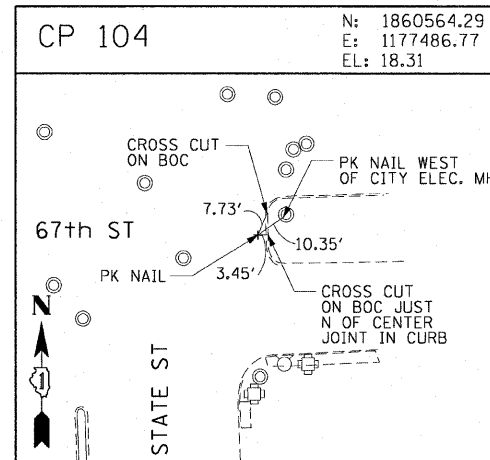
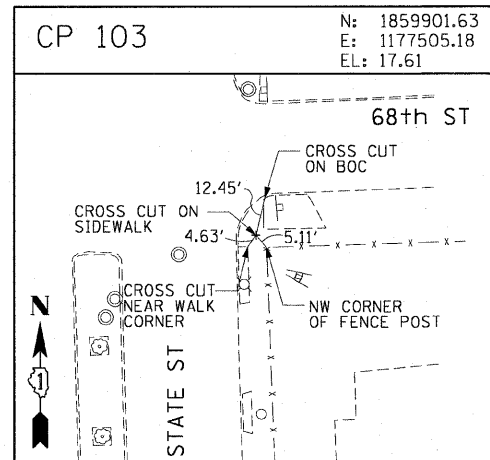
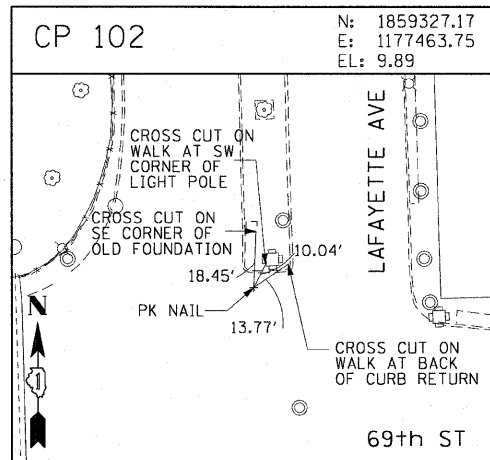
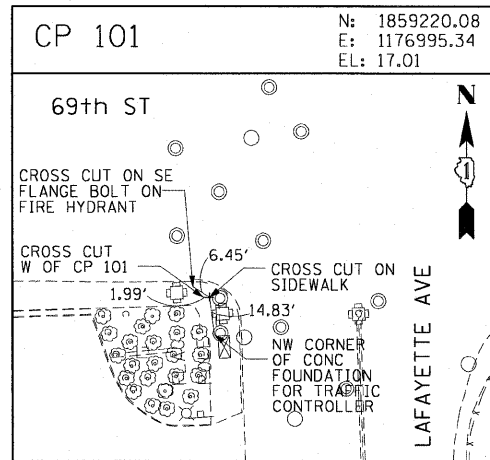
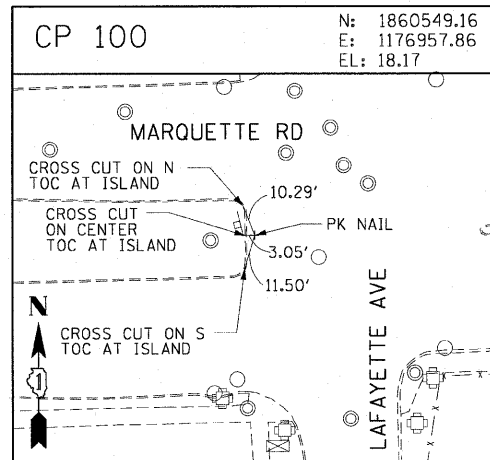
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

ALIGNMENT PLAN

SCALE: 1"=100'
DATE: JANUARY 14, 2009
DRAWN BY: NJH
CHECKED BY: RMG

AECOM



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	28	10
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-2 62987				

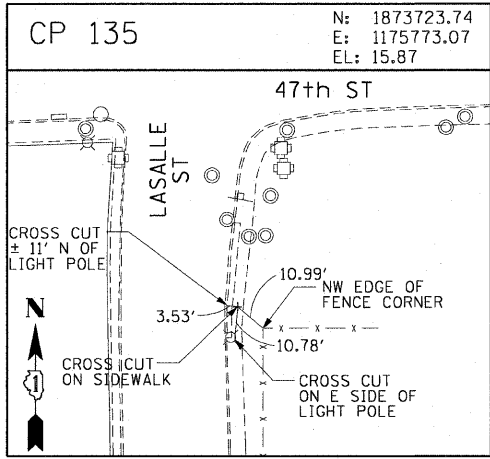
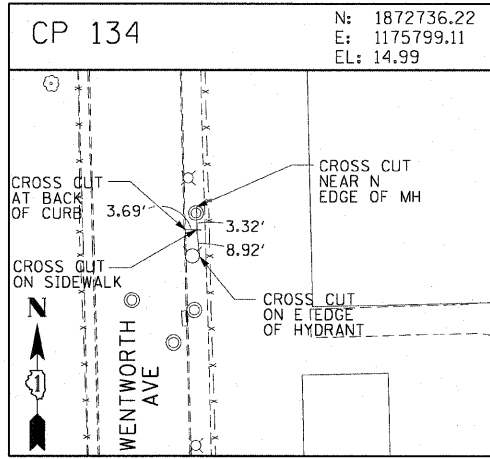
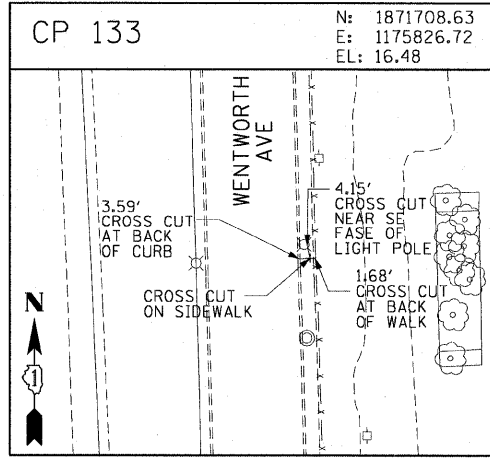
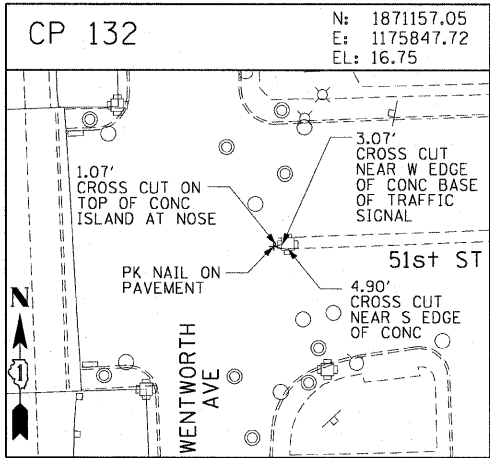
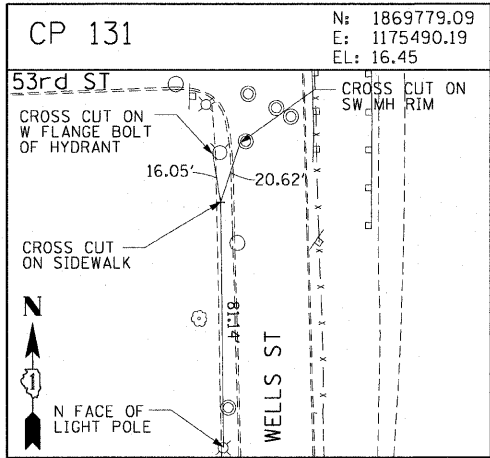
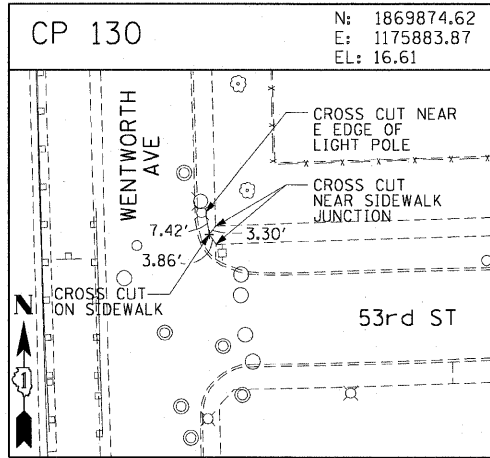
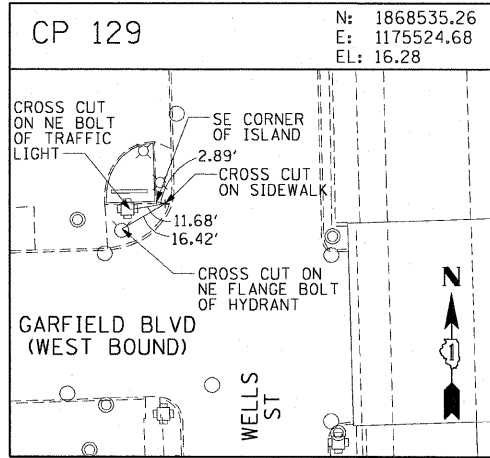
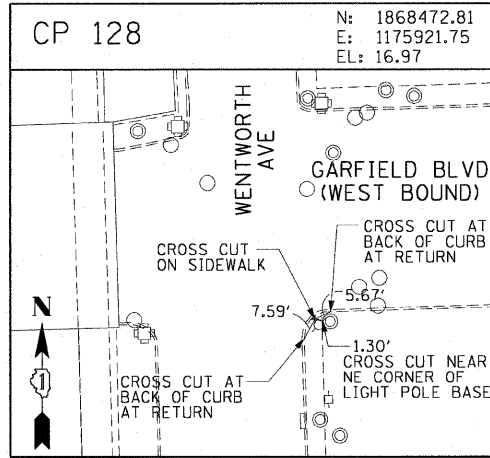
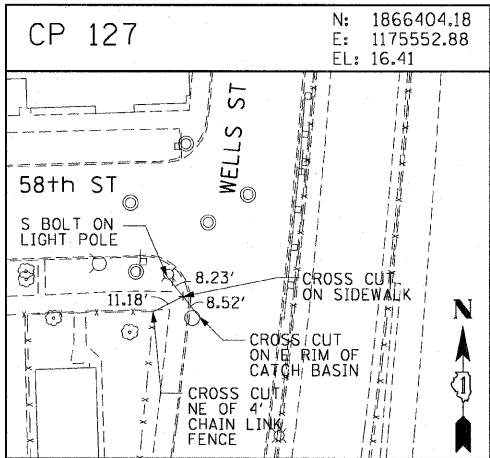
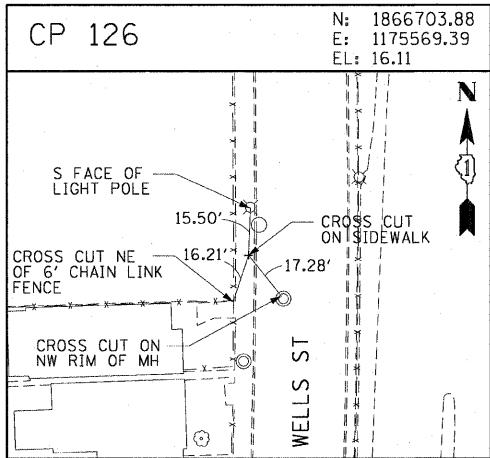
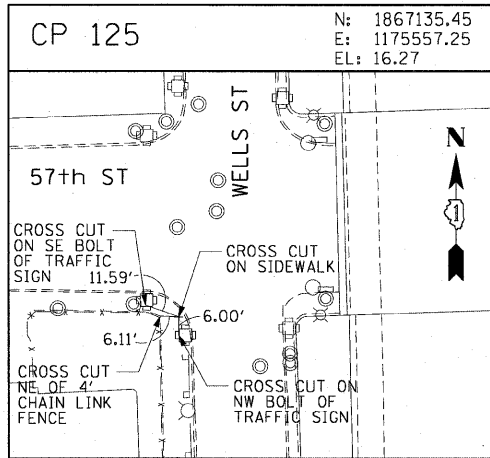
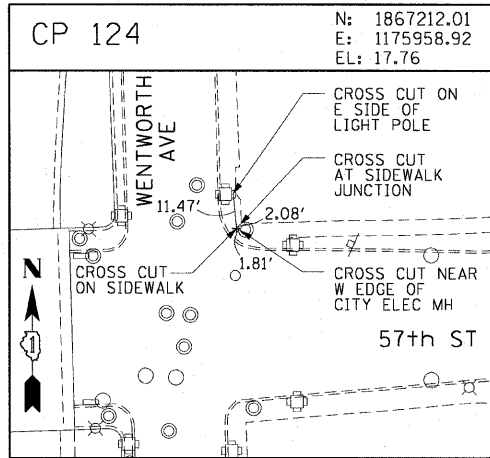
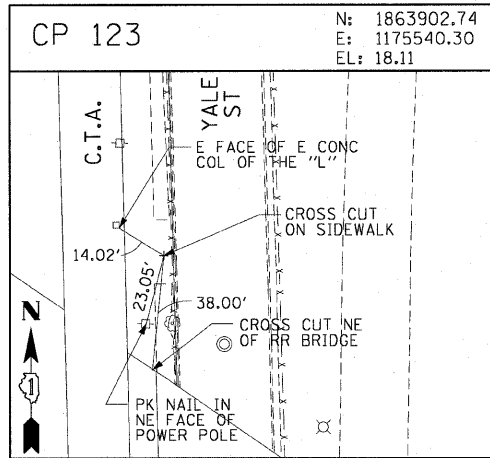
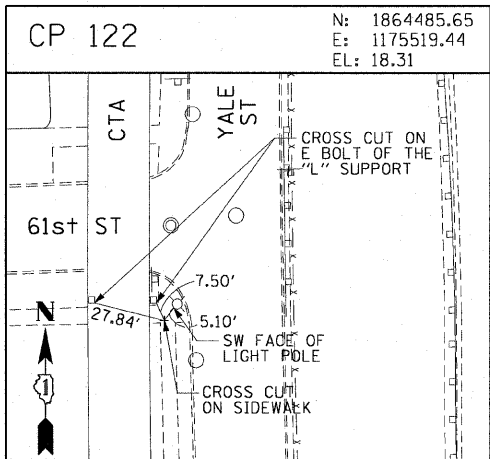
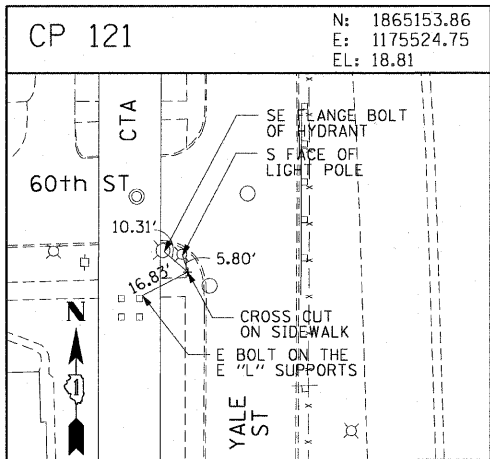
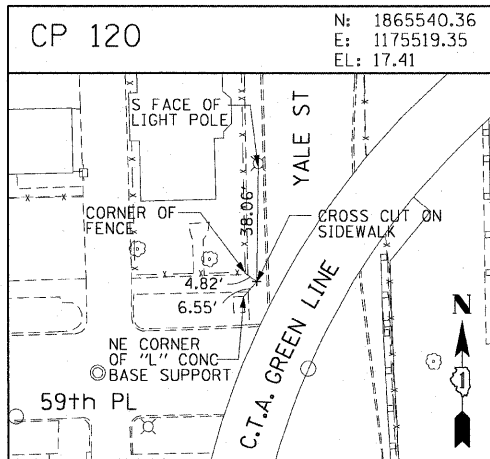
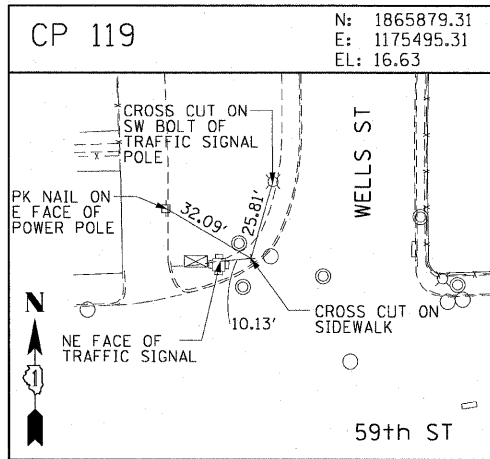
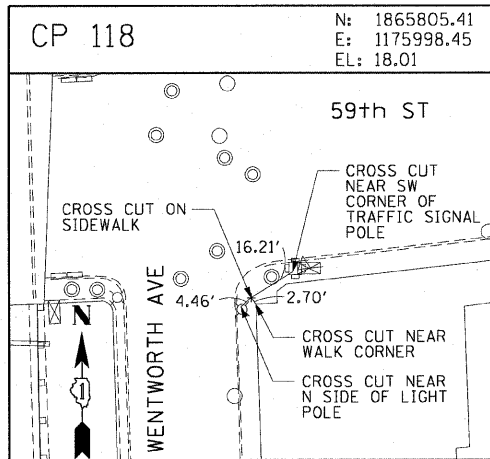
AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)
SURVEY TIES AND CONTROL POINTS
SCALE: 1"=30'
DATE: JANUARY 14, 2009
DRAWN BY: MRK
CHECKED BY: JAL

1/13/2009 12:26:24 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	11
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT) & 2122-921 PT) 1-2 62987				



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

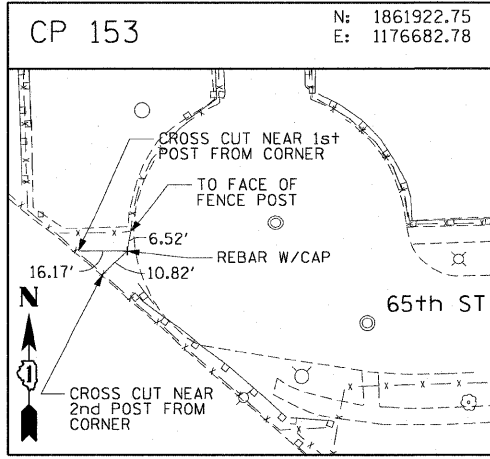
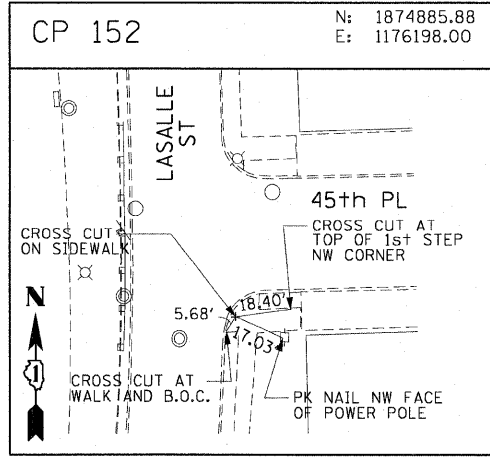
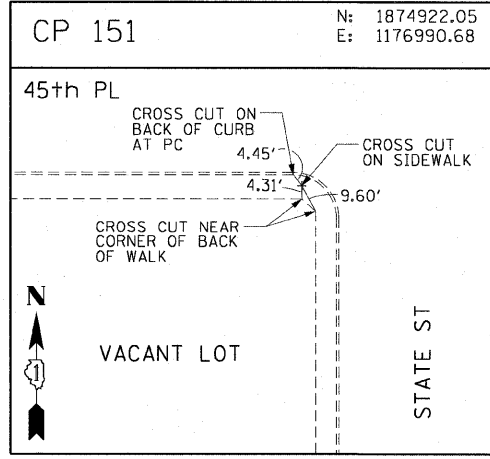
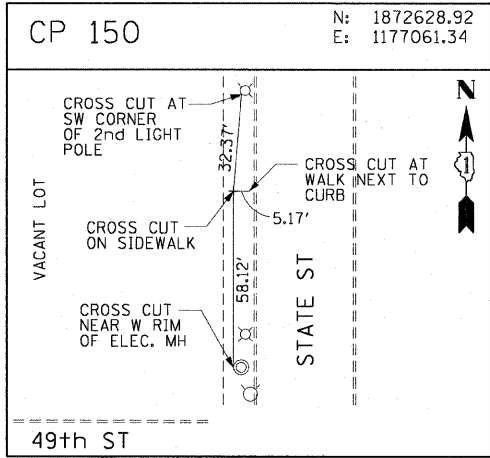
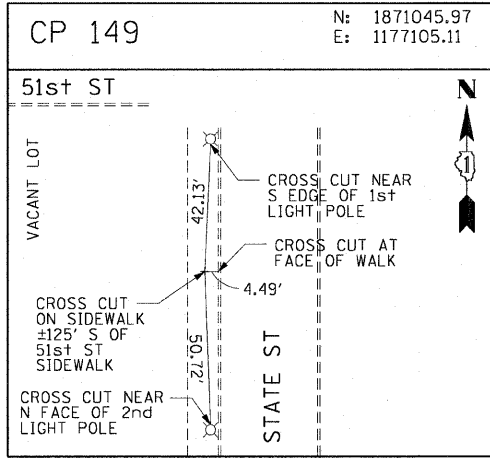
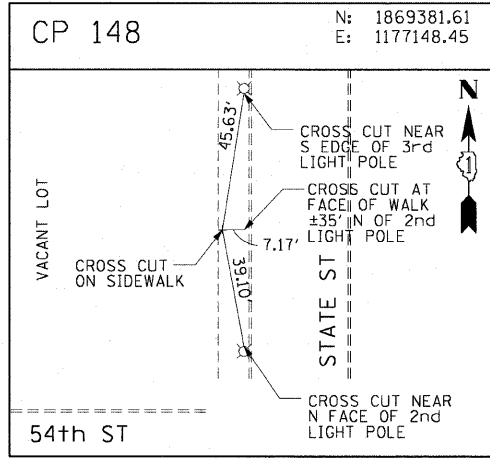
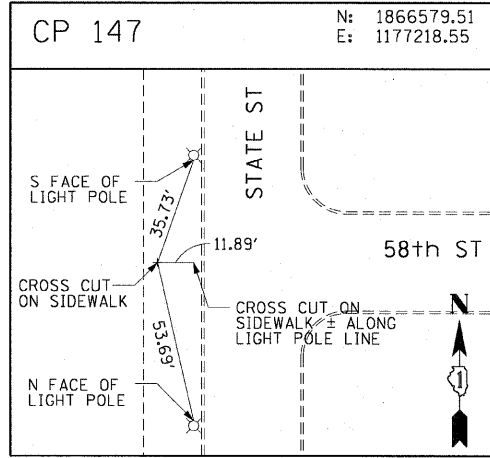
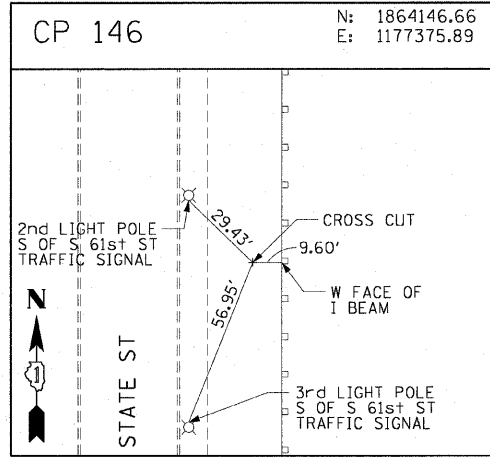
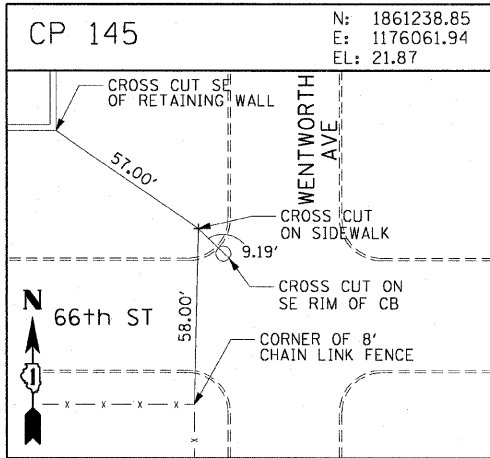
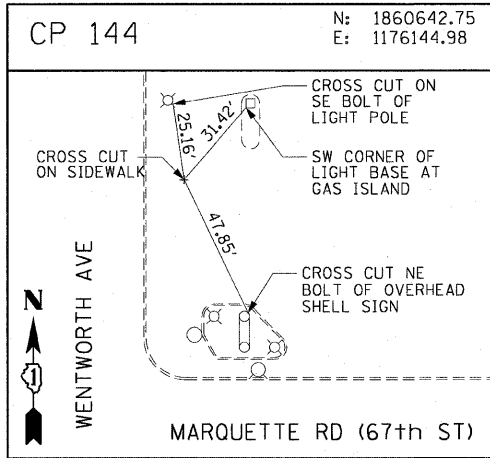
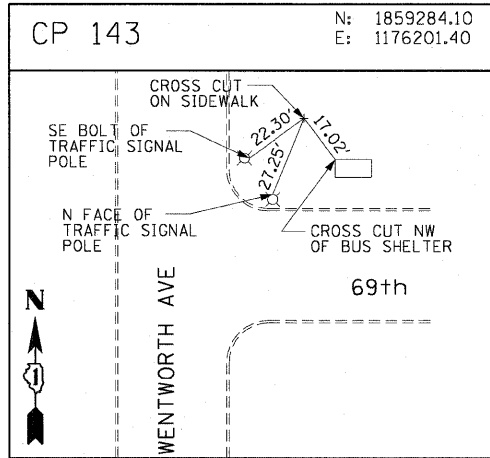
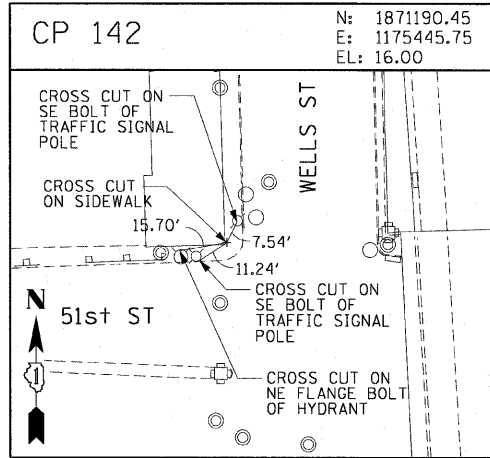
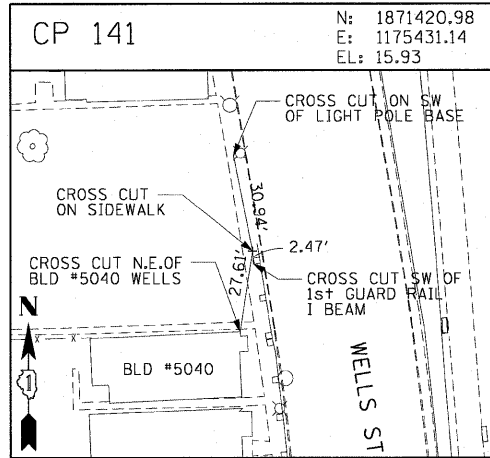
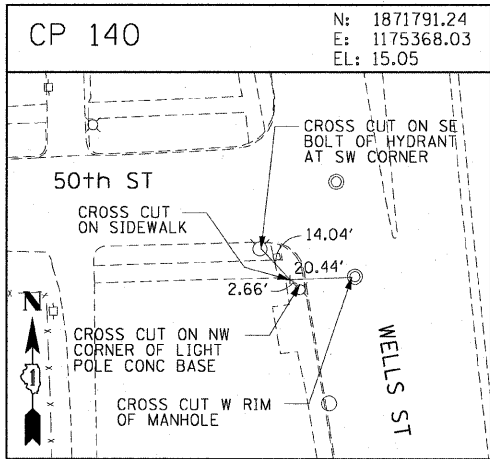
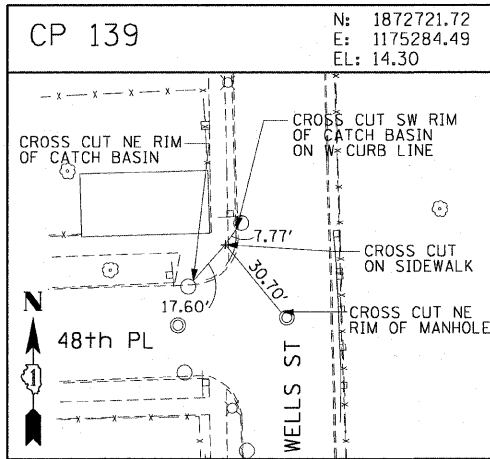
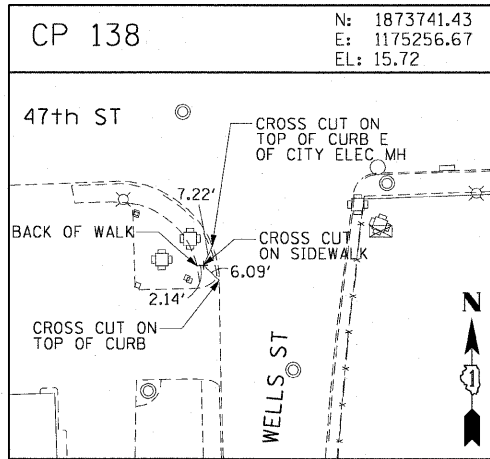
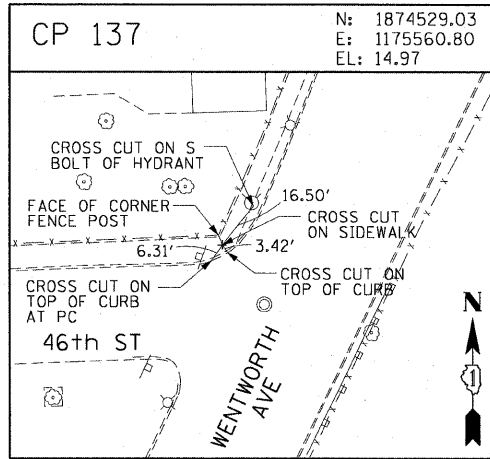
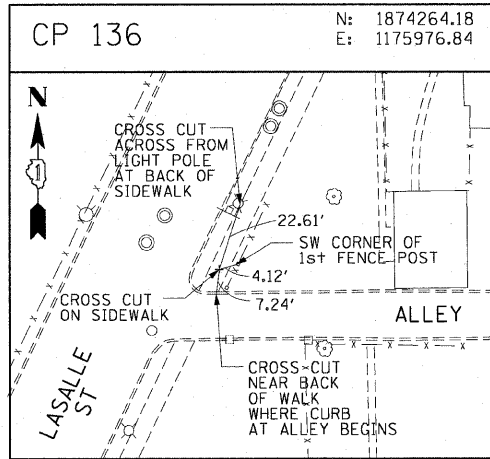
SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	12
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-2 62987				



REVISIONS	
NAME	DATE

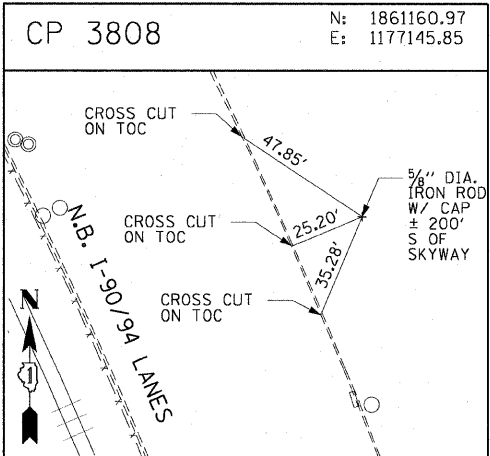
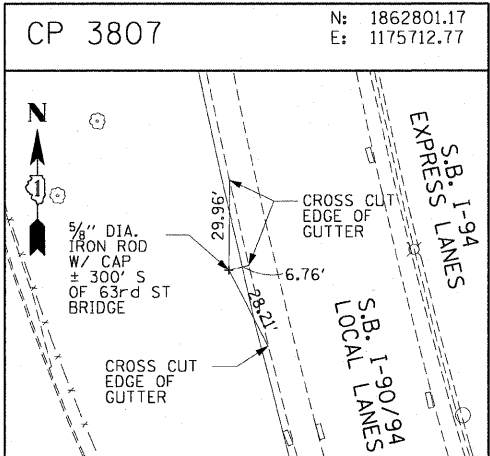
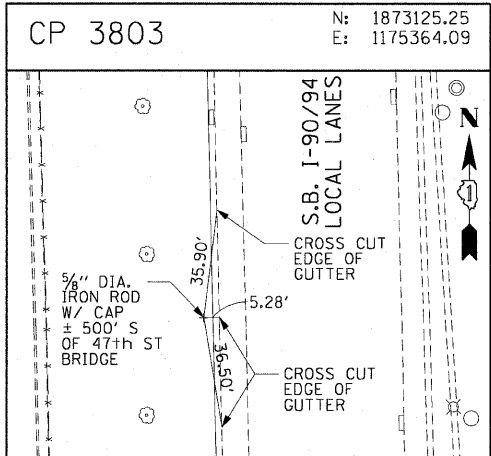
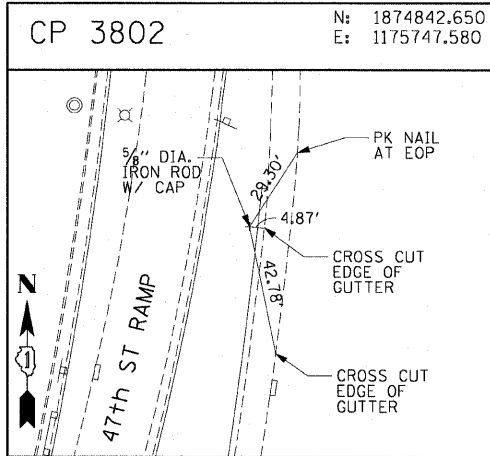
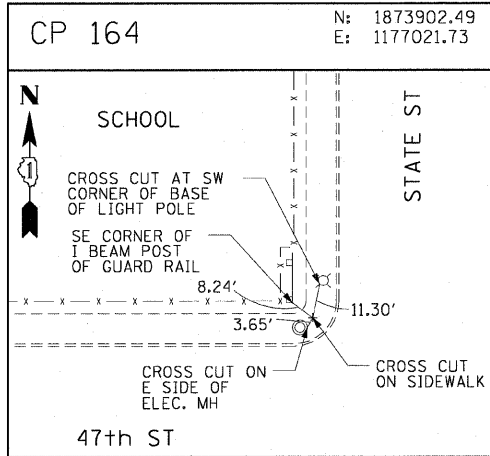
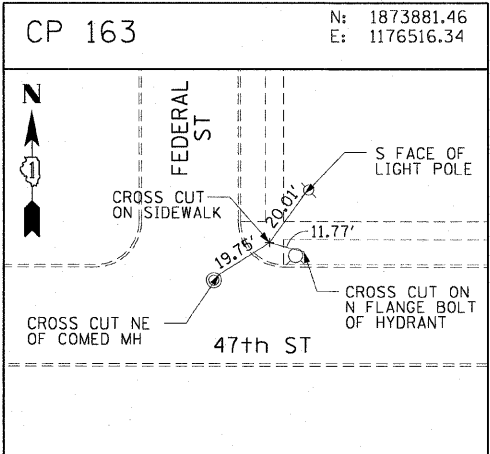
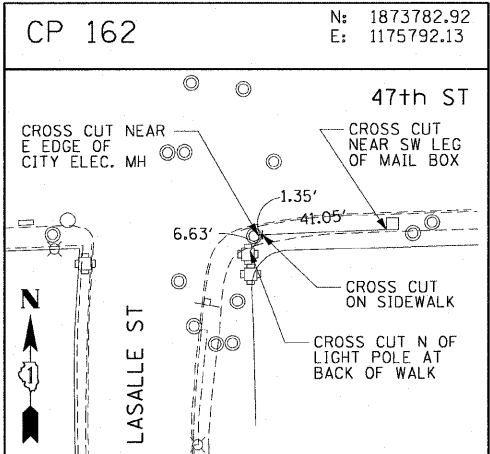
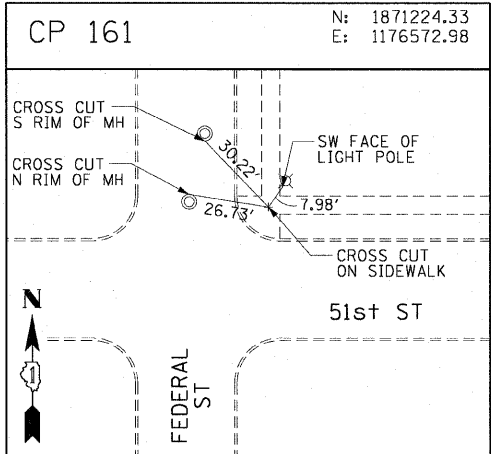
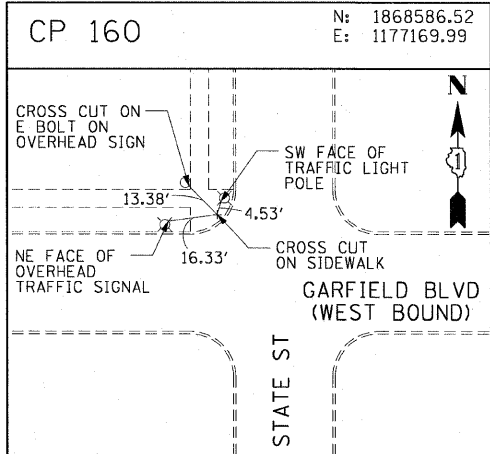
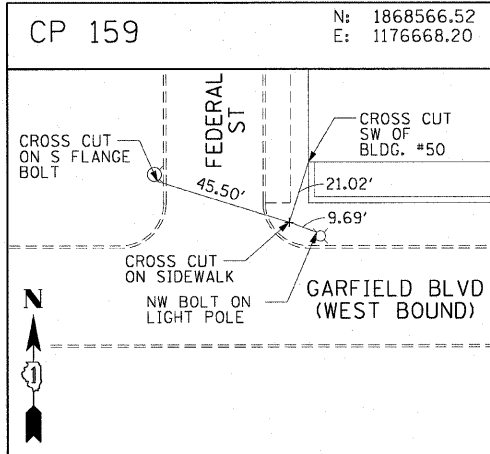
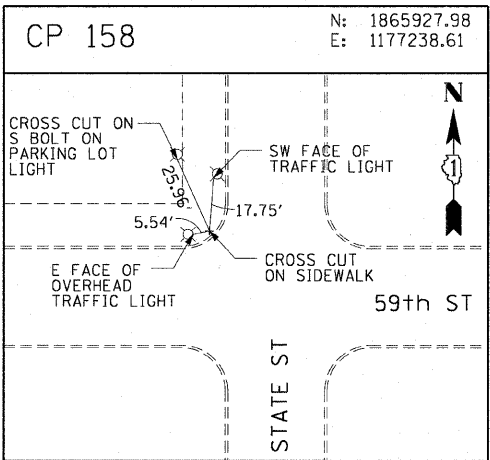
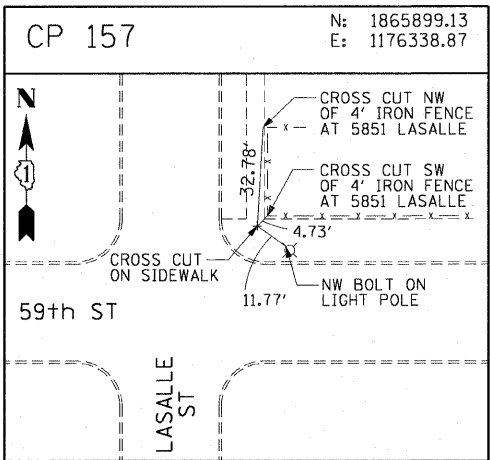
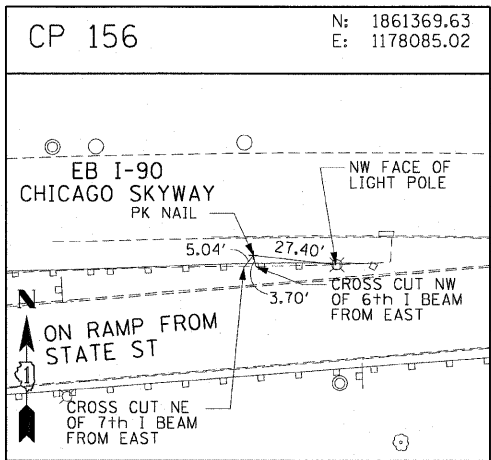
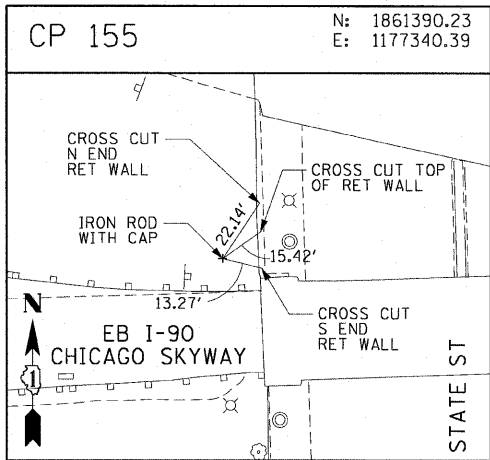
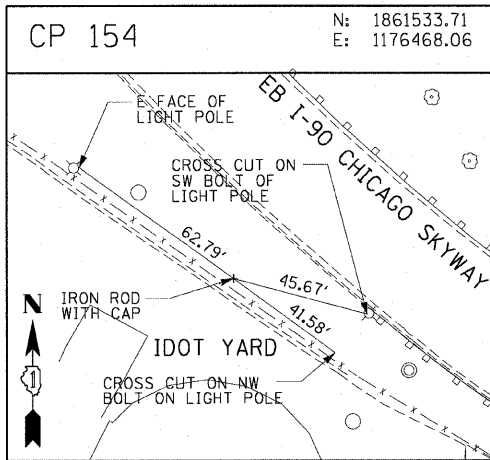
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

AECOM



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	13
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-2 62987				

AECOM

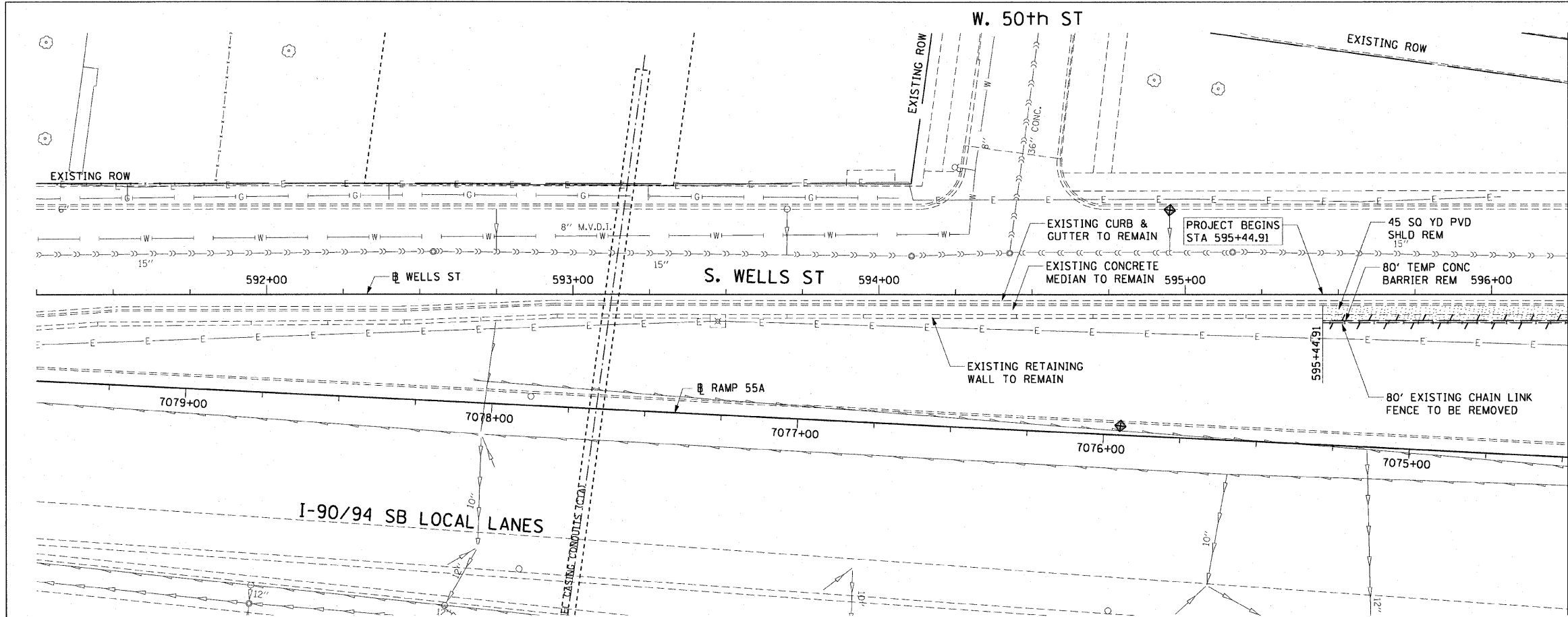
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)
SURVEY TIES AND CONTROL POINTS
SCALE: 1"=30'
DATE: JANUARY 14, 2009
DRAWN BY: MRK
CHECKED BY: JAL

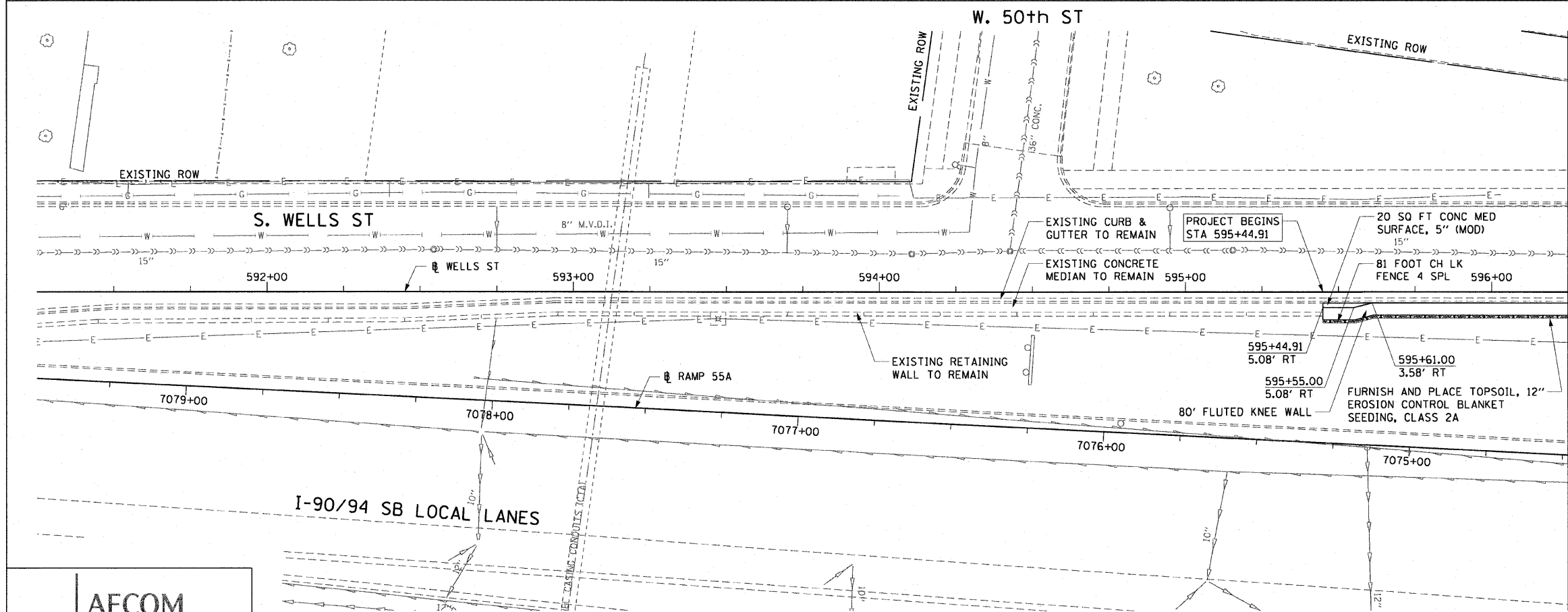
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	28	14
STA. 595+44.91 TO STA. 596+25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) 1-2 62987				

LEGEND:

- AREA REMOVALS
- LINEAR REMOVALS
- INLET FILTER

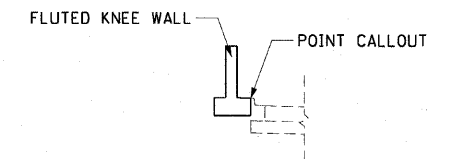


EXISTING CONDITIONS AND REMOVAL PROPOSED IMPROVEMENTS



NOTES:

- SEE STRUCTURAL DETAIL FOR FLUTED KNEE WALL DETAILS.
- ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE (SEE BELOW).
- SEE ROADWAY DETAILS FOR CONCRETE MEDIAN DETAIL.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

EXISTING AND PROPOSED ROADWAY PLANS
WELLS STREET

SCALE: 1"=20'
DATE: JANUARY 14, 2009
DRAWN BY: NJH
CHECKED BY: RMG

AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	15
STA. 596+25 TO STA. 601+25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-2 62987				

LEGEND:



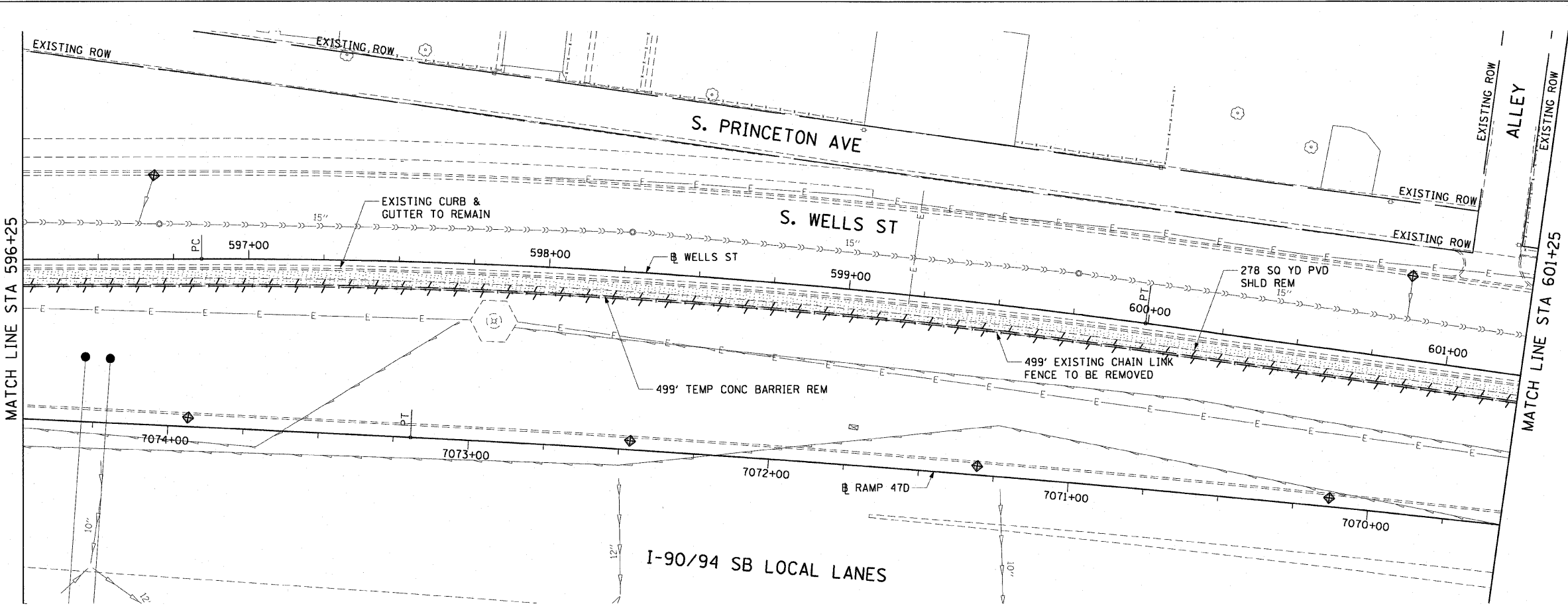
AREA REMOVALS



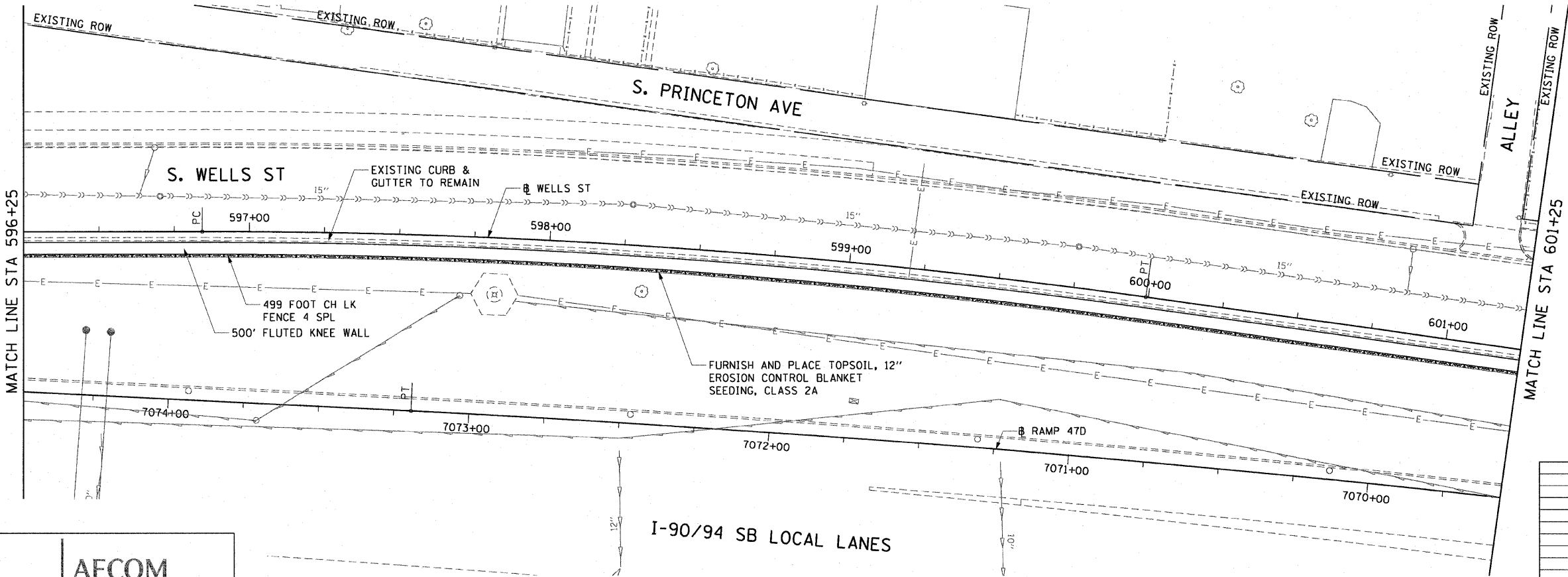
LINEAR REMOVALS



INLET FILTER



EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS



NOTES:

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

EXISTING AND PROPOSED ROADWAY PLANS
WELLS STREET

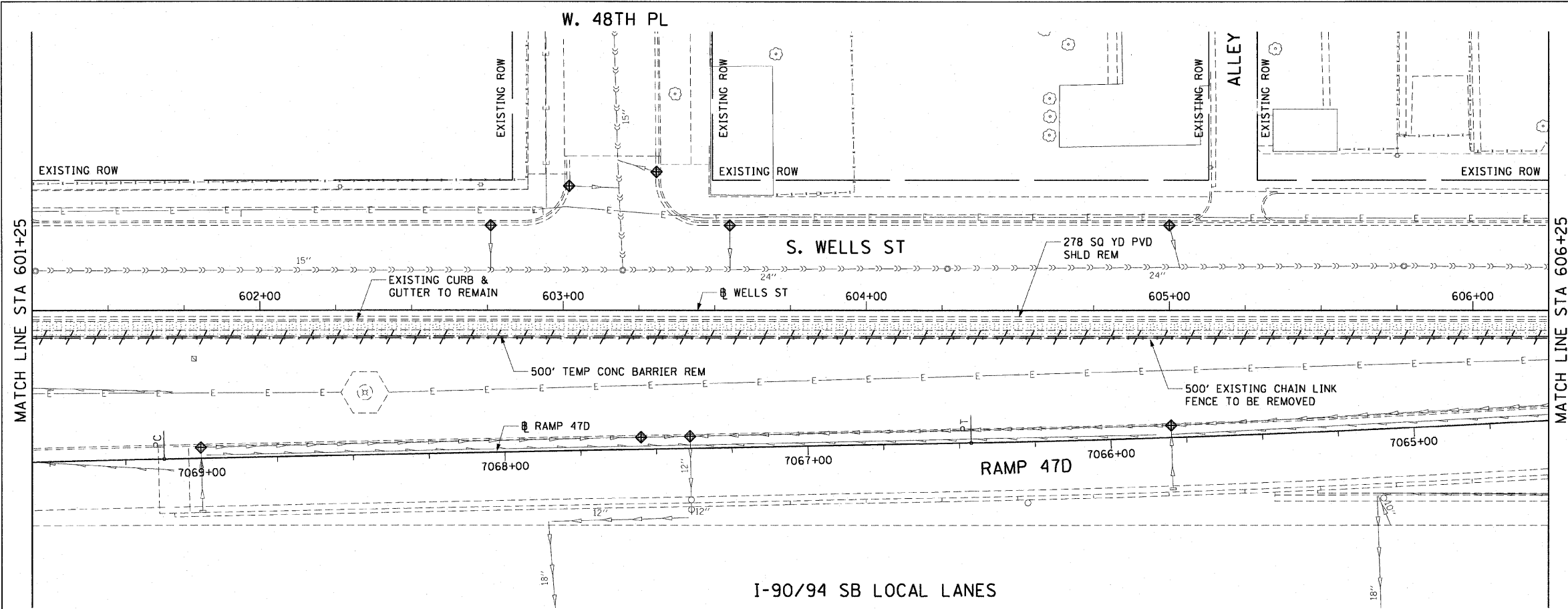
SCALE: 1"=20'
DATE: JANUARY 14, 2009
DRAWN BY: NJH
CHECKED BY: RMG

AECOM

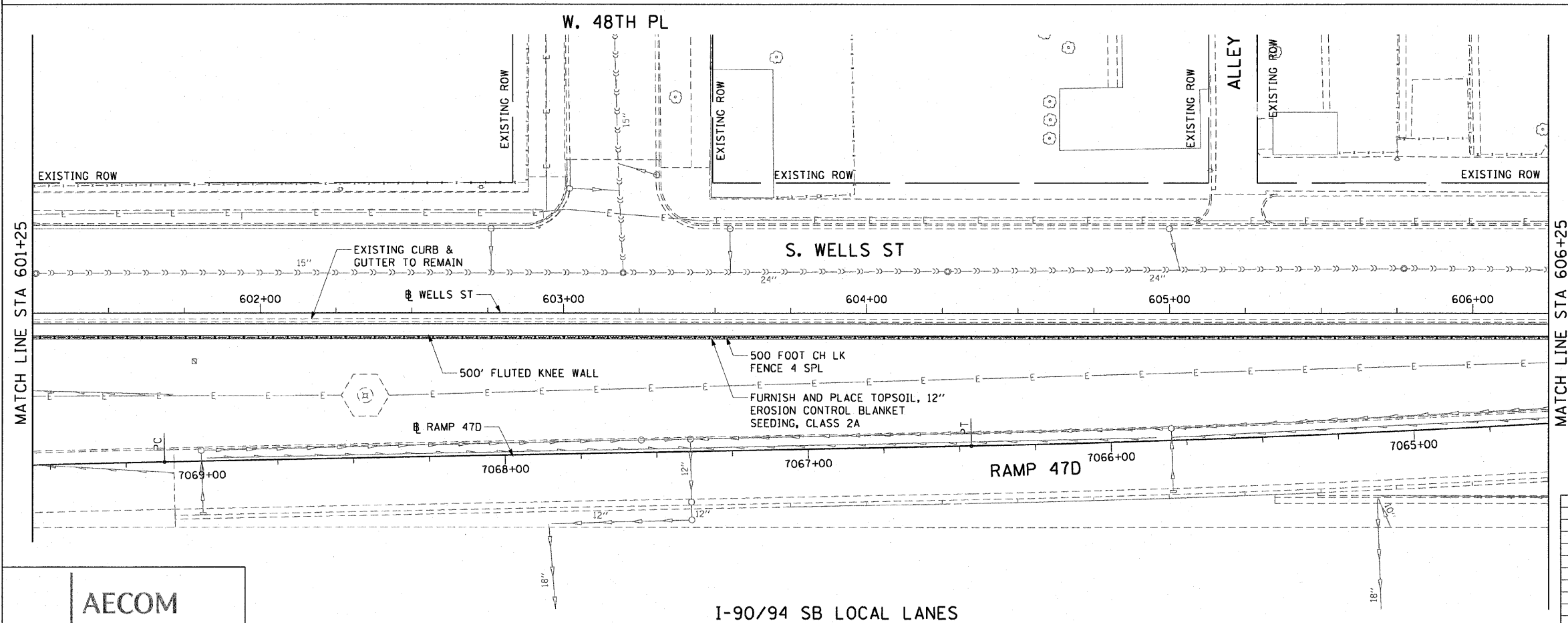
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	28	16
STA. 601+25 TO STA. 606+25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
(2021-922 PT1 & 2122-921 PT1) I-2 62987				

LEGEND:

-  AREA REMOVALS
-  LINEAR REMOVALS
-  INLET FILTER



EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS



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. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

EXISTING AND PROPOSED ROADWAY PLANS
WELLS STREET

SCALE: 1"=20'
DATE: JANUARY 14, 2009

DRAWN BY: NJH
CHECKED BY: RMG

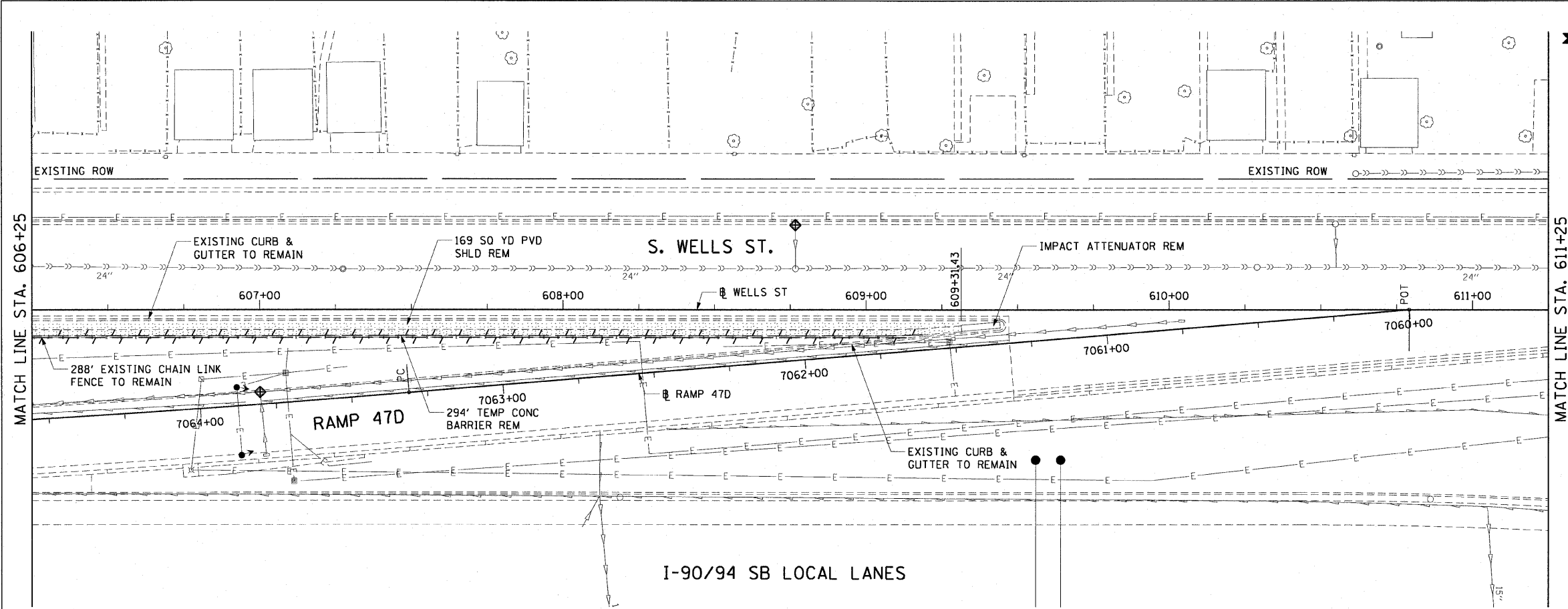
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I-90/94 SB LOCAL LANES

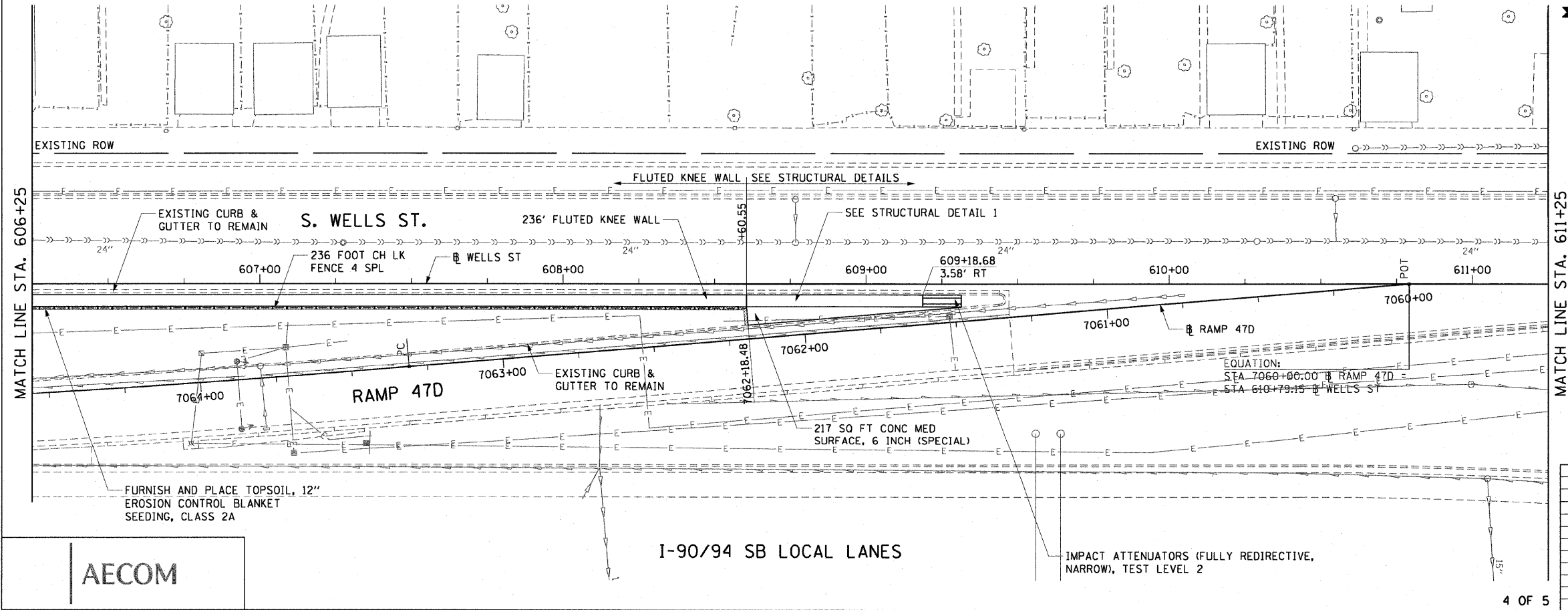
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	17
STA. 606+25 TO STA. 611+25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (2021-922 PT1 & 2122-921 PT1) I-2 62987				

LEGEND:

- AREA REMOVALS
- LINEAR REMOVALS
- INLET FILTER



EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS



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. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

EXISTING AND PROPOSED ROADWAY PLANS
WELLS STREET

SCALE: 1"=20'
DATE: JANUARY 14, 2009

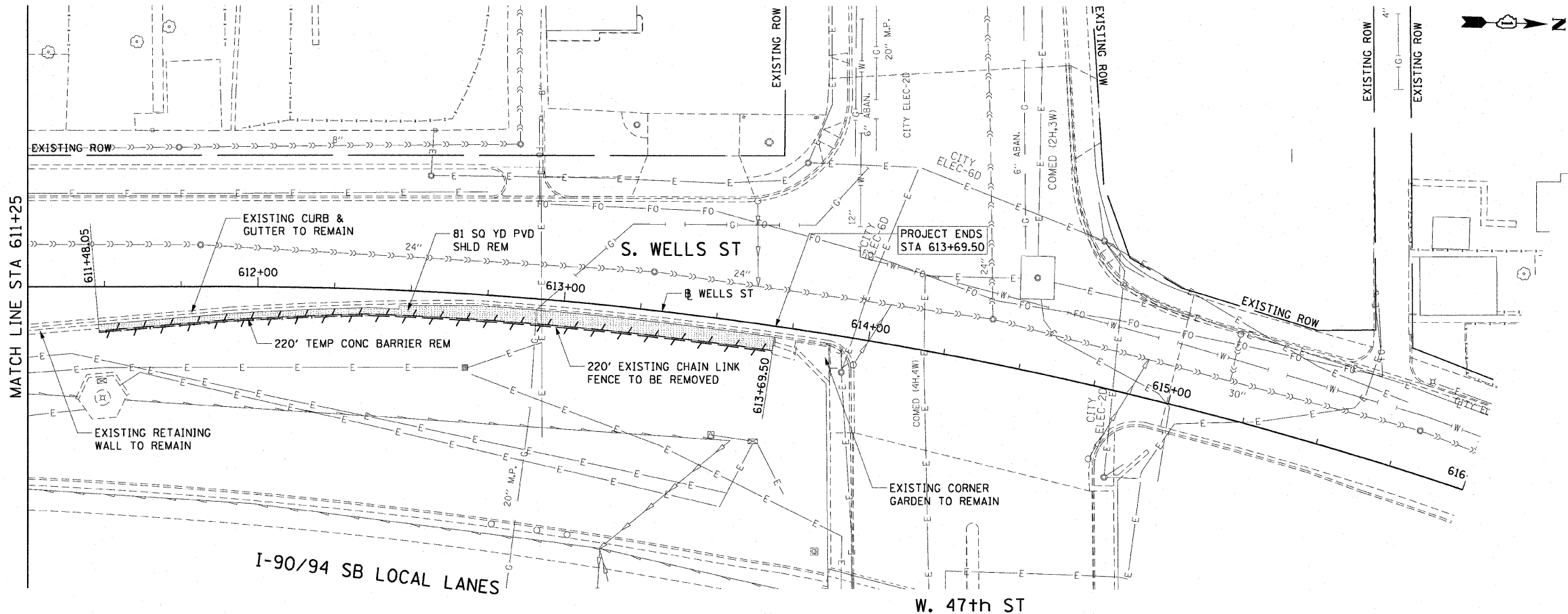
DRAWN BY: NJH
CHECKED BY: RMG

AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	18
STA. 611+25		TO STA. 613+69.50		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
* (2021-922 PT1 & 2122-921 PT1) 1-2				62987

LEGEND:

-  AREA REMOVALS
-  LINEAR REMOVALS
-  INLET FILTER



EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS

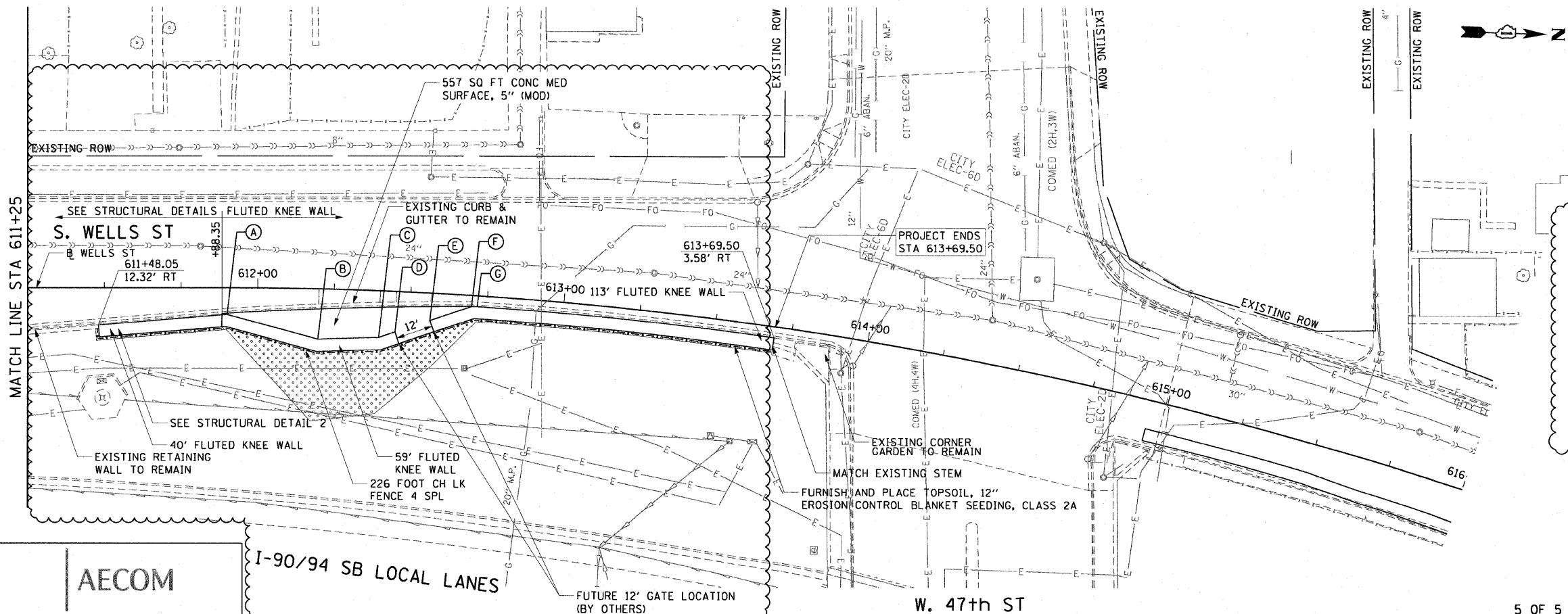
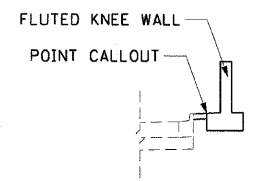
NOTES:

1. SEE STRUCTURAL DETAILS FOR FLUTED KNEE WALL DETAILS.
2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.
3. SEE ROADWAY DETAILS FOR CONCRETE MEDIAN AND CONCRETE CURB DETAILS.
4. HAND FINISH THE CONCRETE MEDIAN SURFACE AT THE FLUTED KNEE WALL OPENING (STA 612+98.09) SO THE GRADE OF THE SURFACE IS ZERO PERCENT.
5. SEE TABLE BELOW FOR POINT CALLOUT INFORMATION

POINT CALLOUT INFORMATION

PT	STATION	OFFSET	ELEVATION
(A)	611+90.00	8.83' RT	•
(B)	612+20.00	16.64' RT	16.85
(C)	612+40.00	15.47' RT	16.89
(D)	612+45.34	13.44' RT	16.86
(E)	612+56.62	9.06' RT	16.79
(F)	612+70.00	3.69' RT	•
(G)	612+71.85	3.58' RT	•

• ELEVATION IS EQUAL TO THE TOP OF CURB ELEVATION.



REVISIONS	NAME	DATE
1	KNEEWALL CHANGE	5/15/09

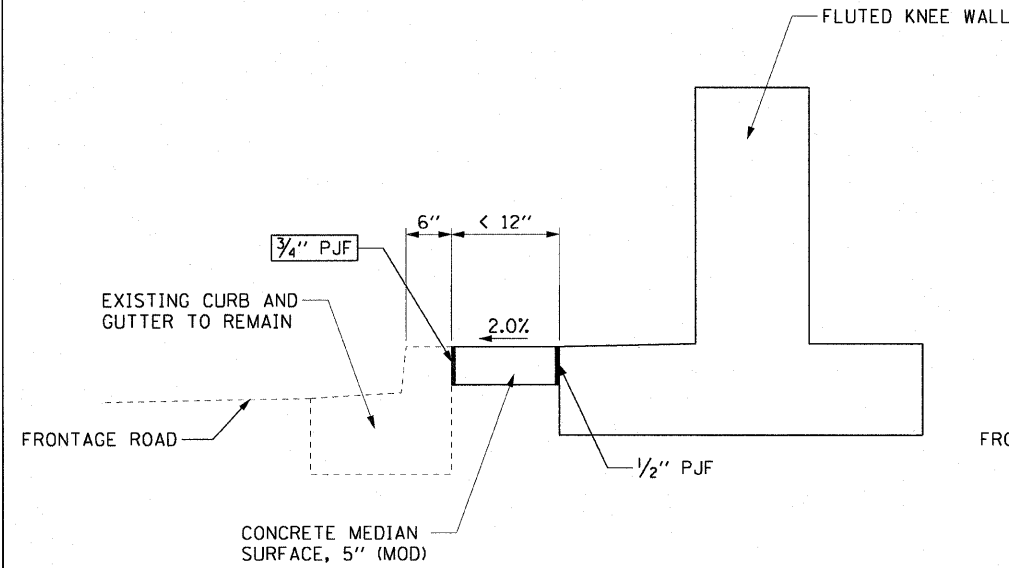
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

EXISTING AND PROPOSED ROADWAY PLANS
WELLS STREET

SCALE: 1"=20'
DATE: JANUARY 14, 2009

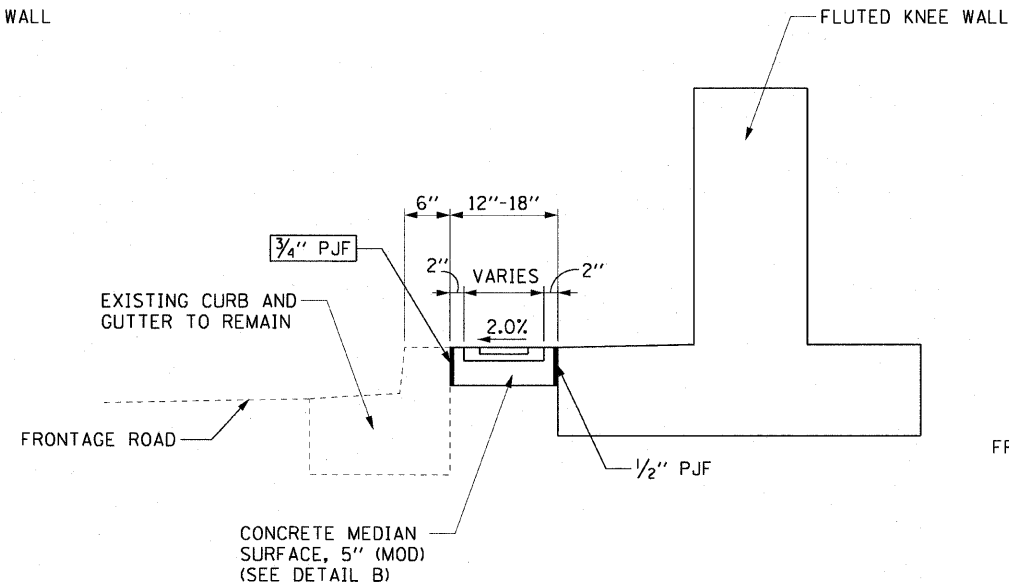
DRAWN BY: NJH
CHECKED BY: RMG

THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES < 12" IN WIDTH



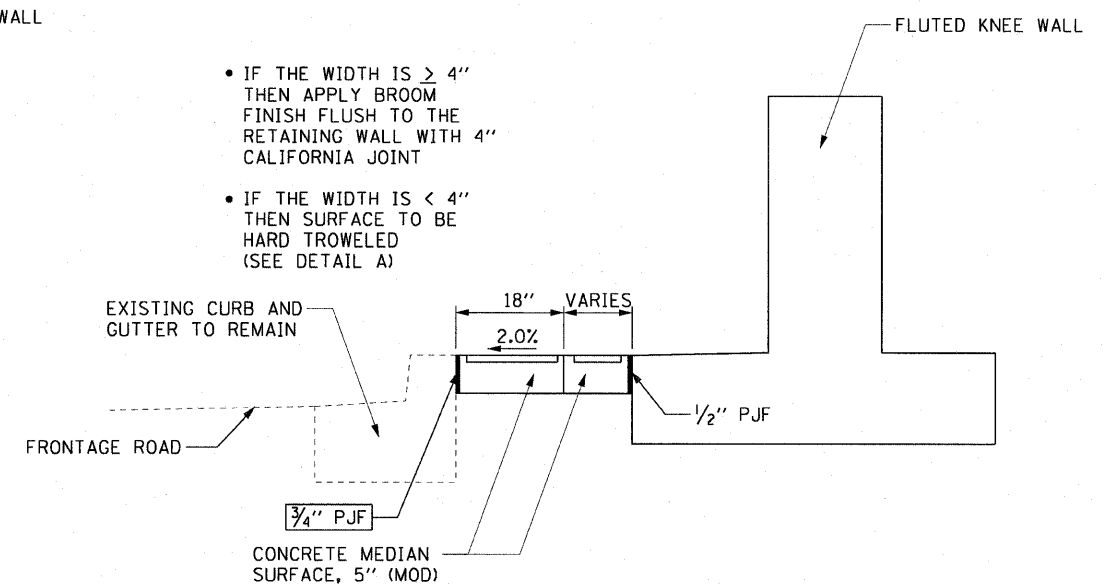
CARRIAGE WALK
AREA < 12" WIDE

THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES 12" TO 18" IN WIDTH

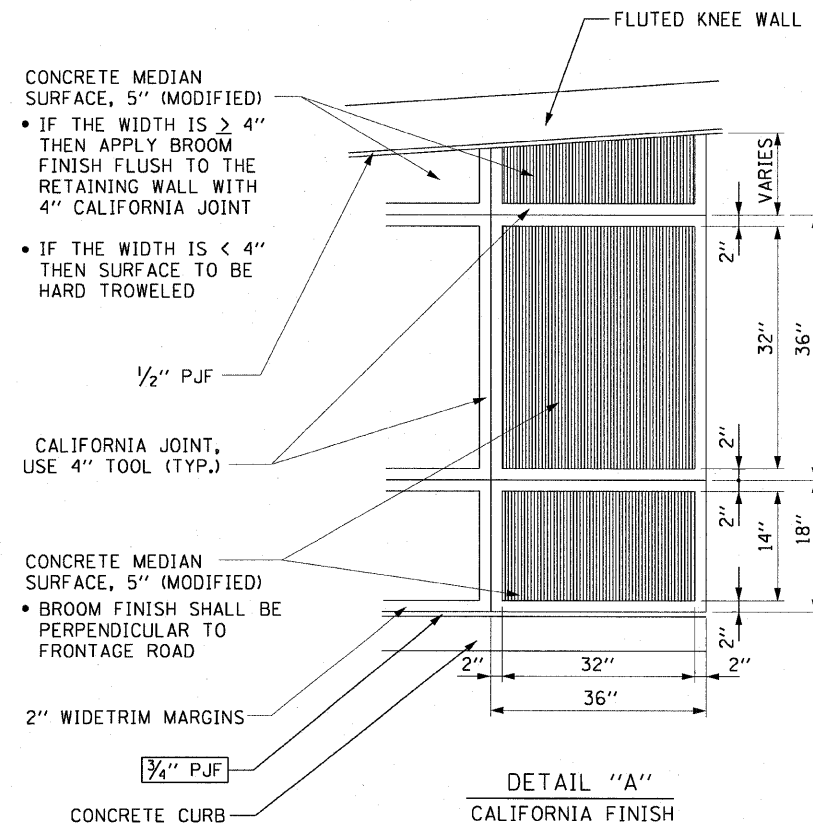


CARRIAGE WALK
AREA 12" TO 18" WIDE

THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES > 18" IN WIDTH



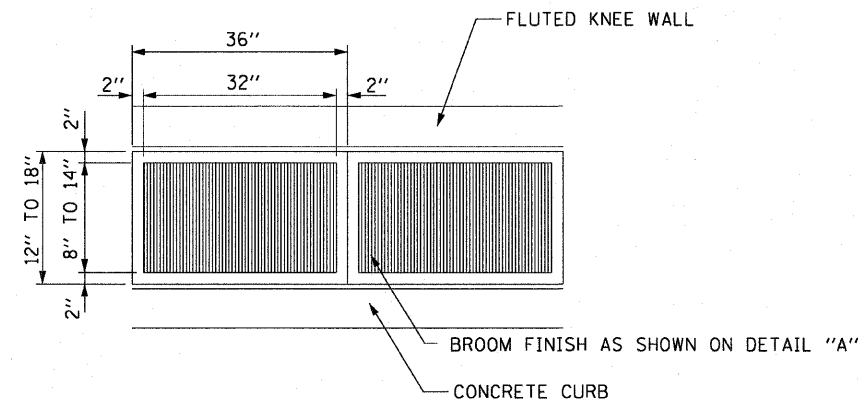
CARRIAGE WALK
AREA > 18" WIDE



DETAIL "A"
CALIFORNIA FINISH

NOTES:

3/4" PREFORMED JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE CONCRETE MEDIAN SURFACE, 5" (MODIFIED).



DETAIL "B"
CALIFORNIA FINISH

AECOM

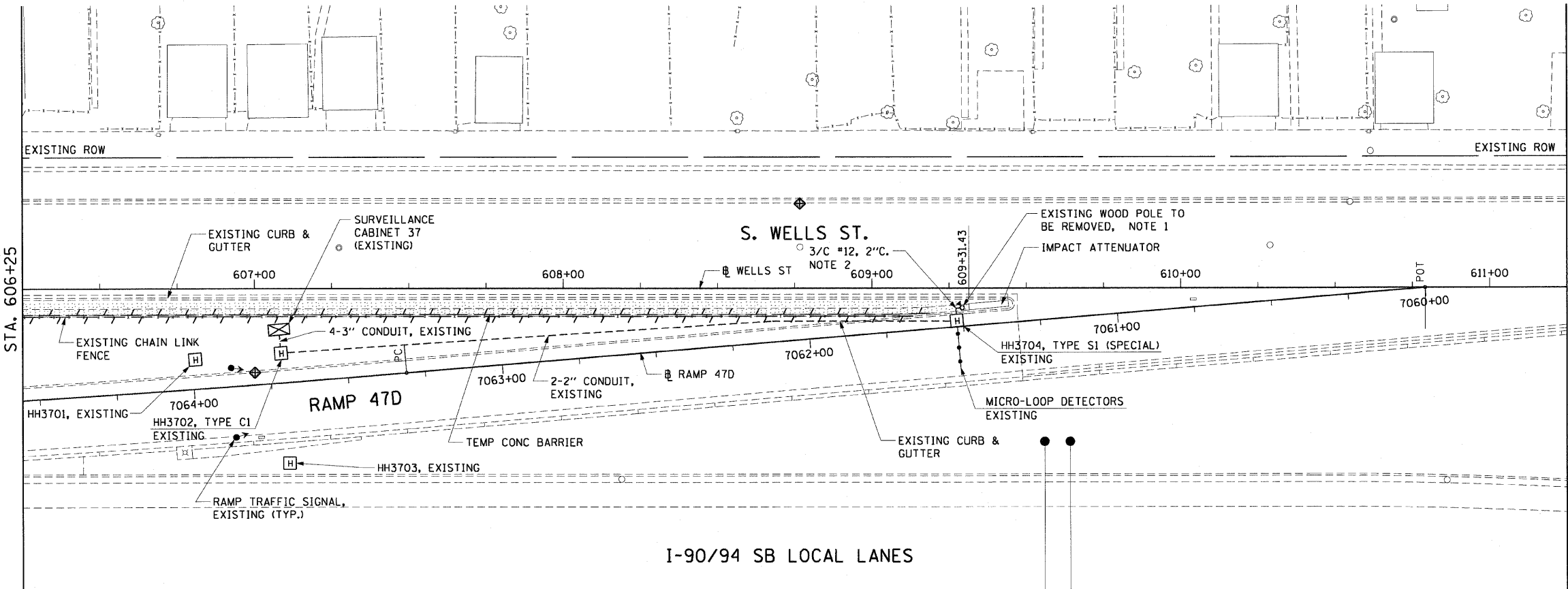
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)
ROADWAY DETAILS
CONCRETE MEDIAN SURFACE, 5" (MODIFIED)
CARRIAGE WALK AND CALIFORNIA FINISH DETAIL
SCALE: NONE
DATE: JANUARY 14, 2009
DRAWN BY: PHP
CHECKED BY: NJH

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	28	20
STA. 606+25 TO STA. 611+25		FED. AID PROJECT		
FED. ROAD DIST. NO. 1 ILLINOIS		I-2 62987		

NOTES:

- EXISTING WOOD POST TO BE REMOVED. EXISTING FLASHING BEACONS AND WARNING SIGN TO BE REMOVED FROM WOOD POST AND BE INSTALLED ON NEW STEEL POLE.
- EXISTING 3/C #12 TO BE PULLED BACK TO EXISTING SURVEILLANCE CABINET 37 AND REMOVED.



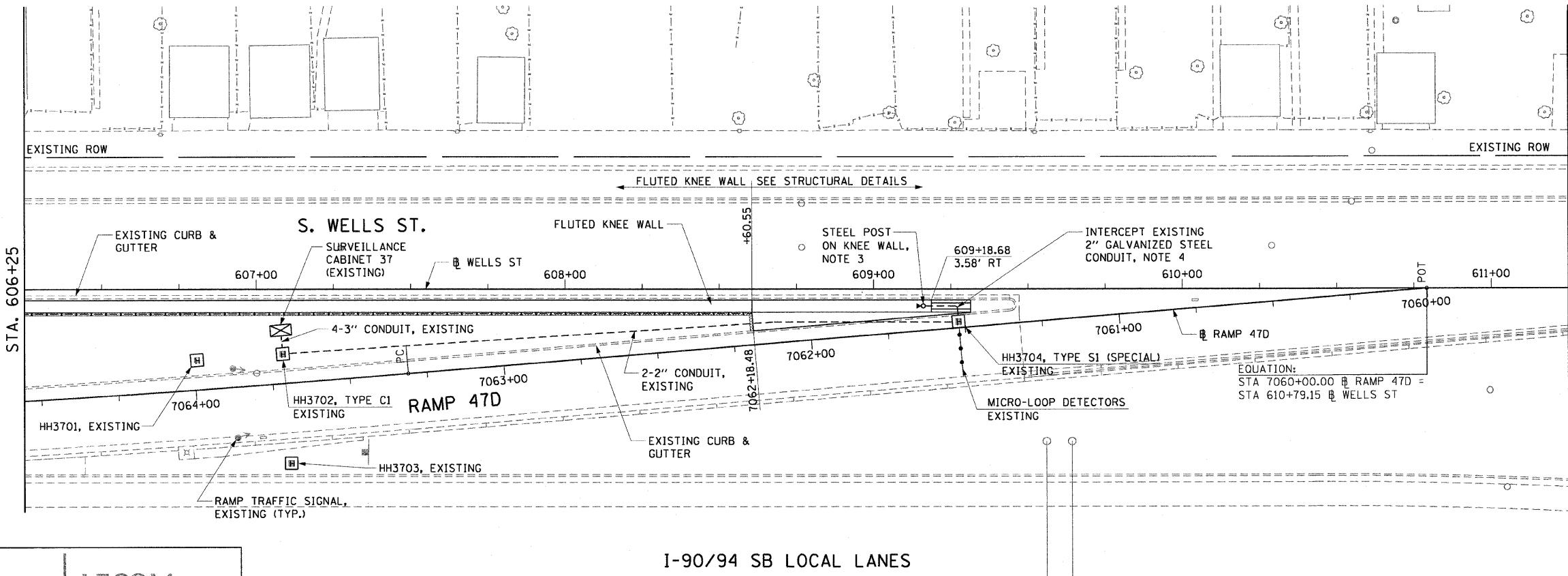
EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS

NOTES:

- NEW STEEL POLE TO BE INSTALLED AT END OF NEW KNEE WALL. EXISTING FLASHING BEACONS AND WARNING SIGN REMOVED FROM WOOD POST ARE TO BE INSTALLED ON NEW STEEL POLE. SEE DRAWING DT-35A FOR DETAILS.
- EXISTING 2\" GSC TO BE ROUTED TO NEW STEEL POLE BASE ON TOP OF NEW KNEE WALL. NEW 2\" GSC CONDUIT TO BE INSTALLED AS NEEDED TO FACILITATE CONNECTION BETWEEN NEW POLE AND HANDHOLE HH3704. NEW 3/C #12 CABLE TO BE INSTALLED AND CONNECTED BETWEEN BEACONS AND EXISTING CABINET 37. SEE STRUCTURAL DETAILS AND DRAWING DT-35A FOR CONDUIT DETAILS.

FOR INFORMATION ONLY

ALL ELECTRICAL WORK SHOWN ON THIS SHEET WILL BE DONE BY MEADE ELECTRIC UNDER CONTRACT 62583.



AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

ELECTRICAL PLAN

SCALE: 1\"=20'
DATE: JANUARY 14, 2009

DRAWN BY: HR
CHECKED BY: JPC

3/10/2009 2:35:03 PM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	22
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
• (2021-922 PT1 & 2122-921 PT1) 1-2		62987		

NOTES:

- Reinforcement bar shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Concrete: $f'_c = 3500$ psi
- Fluted knee wall shall be paid for per foot as "Fluted Knee Wall." Included in the cost of "Fluted Knee Wall" shall be "Concrete Superstructures" stem, "Concrete Structures" foundation, reinforcement bars (epoxy coated), rustication finish for fluted knee walls, protective coat, expansion joint filler and sealing compound.
- At locations where Fluted Knee Wall abuts a rigid structure, a $\frac{1}{2}$ " thick preformed expansion joint filler (PJF) conforming to the shape of the structure shall be installed between the wall and the structure. $\frac{3}{4}$ " PJF shall be installed where Fluted Knee Wall footing abuts curb and gutter. The cost shall be included in "Fluted Knee Wall".
- Quantities shown in "Bill of Material" are for one (1) foot of "Fluted Knee Wall".
- Chain Link Fence will not be paid for in this Contract, but shall be furnished and installed in Contract 63003.
- Unless noted otherwise, Protective Coat shall be applied according to Section 503.19 of the Standard Specifications to the top of stem and to the face of stem and top of footing on the Frontage Road side of the Knee Wall.
- Minimum lap length for #4 bars shall be 1'-8".
- BF = Back Face
EF = Each Face
FF = Front Face

LEGEND:

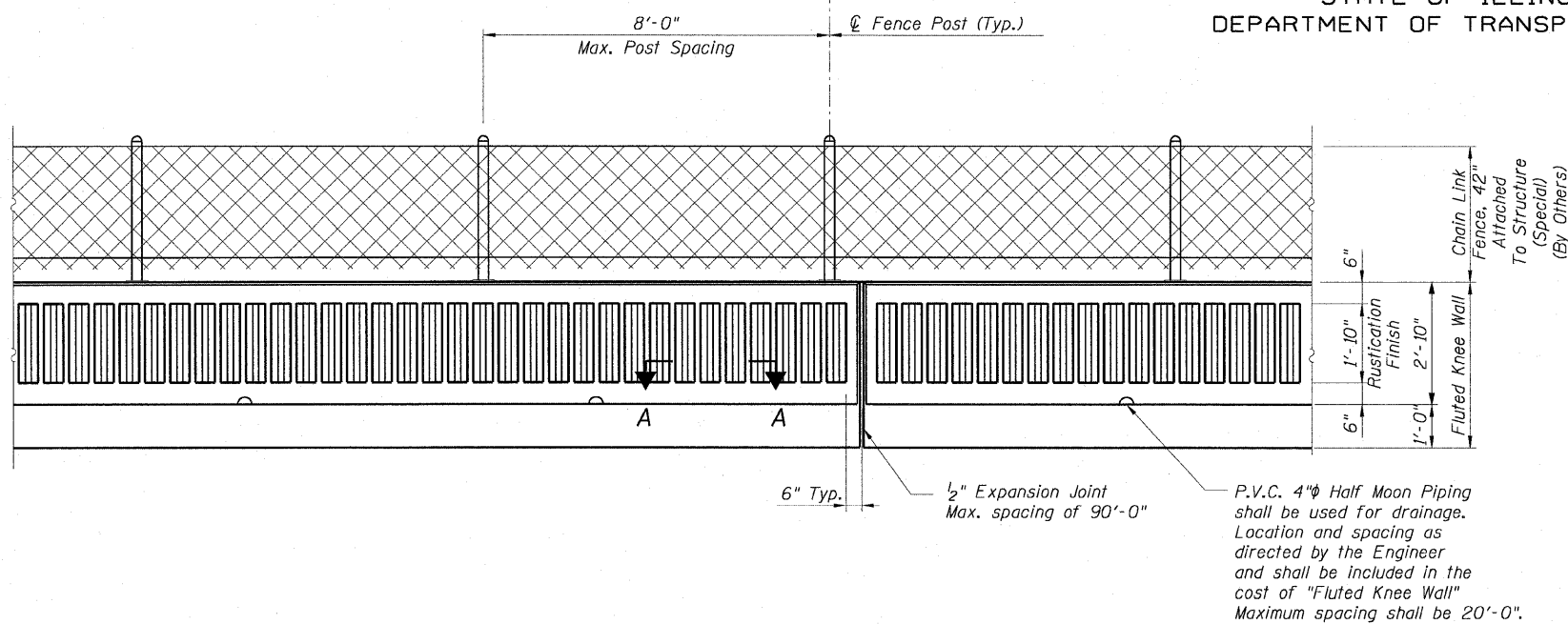
	Chain Link Fabric
	Rustication Finish
	Earth
	Concrete

Sheet SI of 3

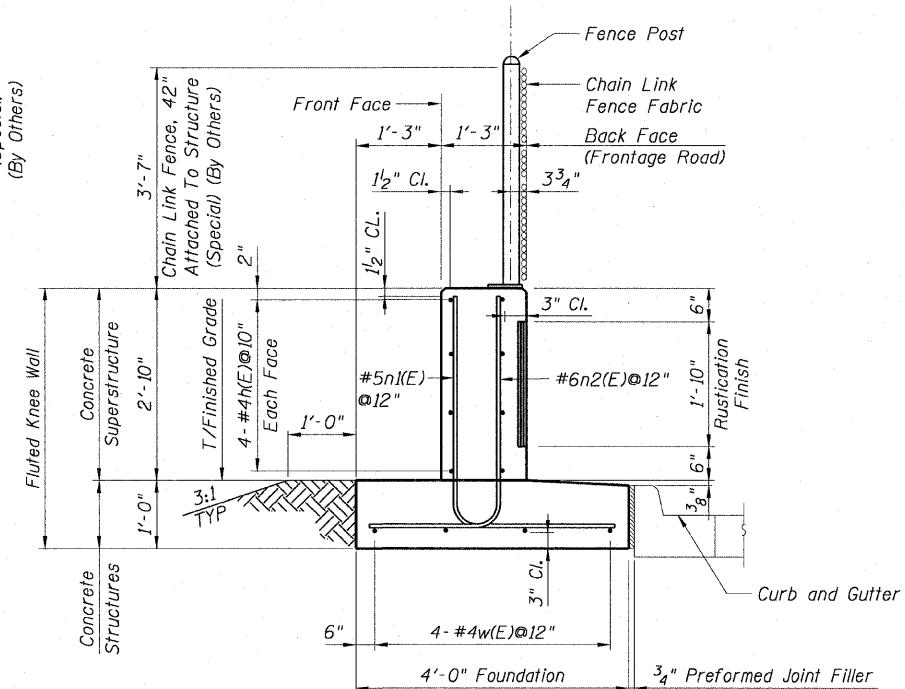
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)

FLUTED KNEE WALL STANDARD DETAILS

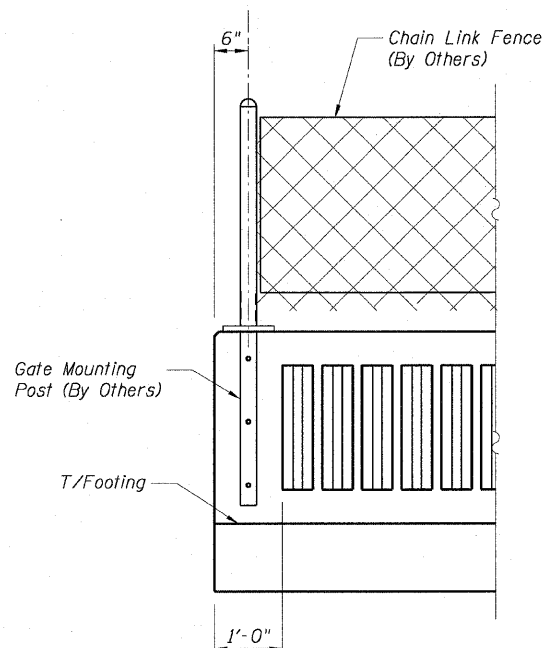
SCALE: None
DATE: JANUARY 14, 2009
DRAWN BY: CHD
CHECKED BY: MJP



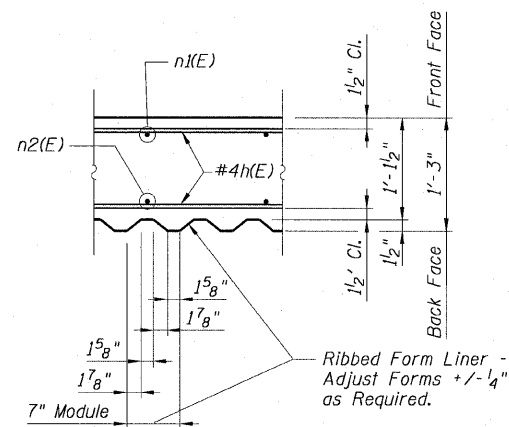
BACK FACE ELEVATION - FLUTED KNEE WALL AND CHAIN LINK FENCE



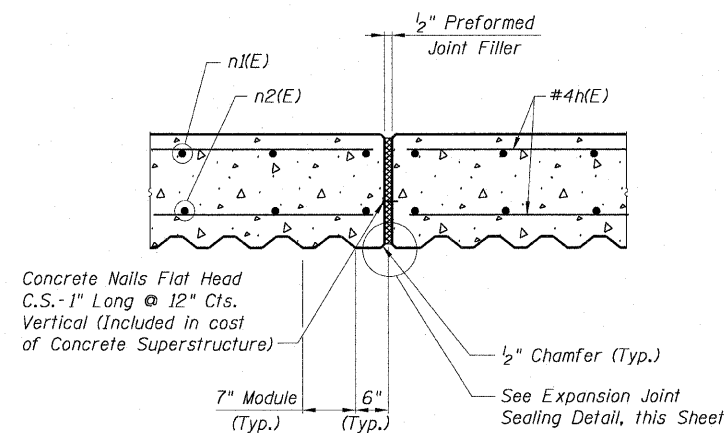
TYPICAL SECTION
FLUTED KNEE WALL



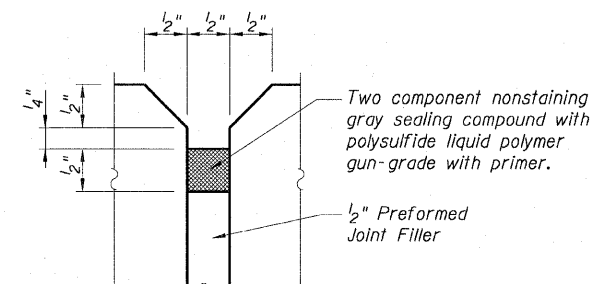
RUSTICATION DETAILS
AT GATE LOCATIONS



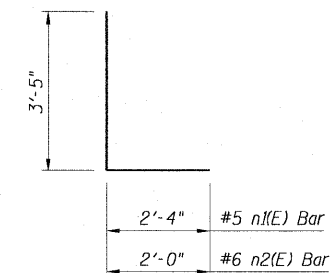
SECTION A-A



EXPANSION JOINT DETAIL



EXPANSION JOINT
SEALING DETAIL



BARS n1(E) and n2(E)

QUANTITIES PER FOOT - FLUTED KNEE WALL

ITEM	UNIT	QUANTITY
Reinforcement Bars, Epoxy Coated	Pound	23
Concrete Superstructure	Cu. Yd.	0.14
Concrete Structures	Cu. Yd.	0.15
Rustication Finish	Sq. Ft.	1.8
Protective Coat	Sq. Yd.	0.62

REVISIONS	
NAME	DATE

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	23
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
▪ (2021-922 PT1 & 2122-921 PT1) I-2				62987

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2(E)	16	#4	30'-0"	—
n3(E)	59	#5	6'-2"	—
n4(E)	59	#6	5'-10"	—
w2(E)	8	#4	30'-0"	—
Item		Unit	Quantity	
Concrete Structures		Cu. Yd.	9.9	
Concrete Superstructure		Cu. Yd.	7.6	
Reinforcement Bars, Epoxy Coated		Pound	1380	
Rustication Finish		Sq. Ft.	105	
Protective Coat		Sq. Yd.	64	

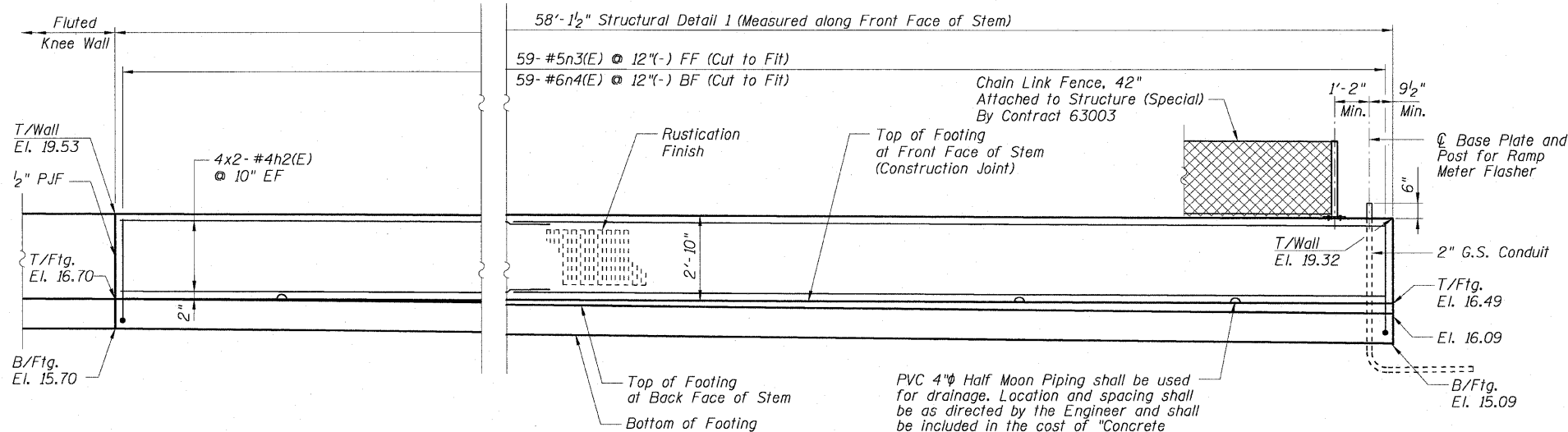
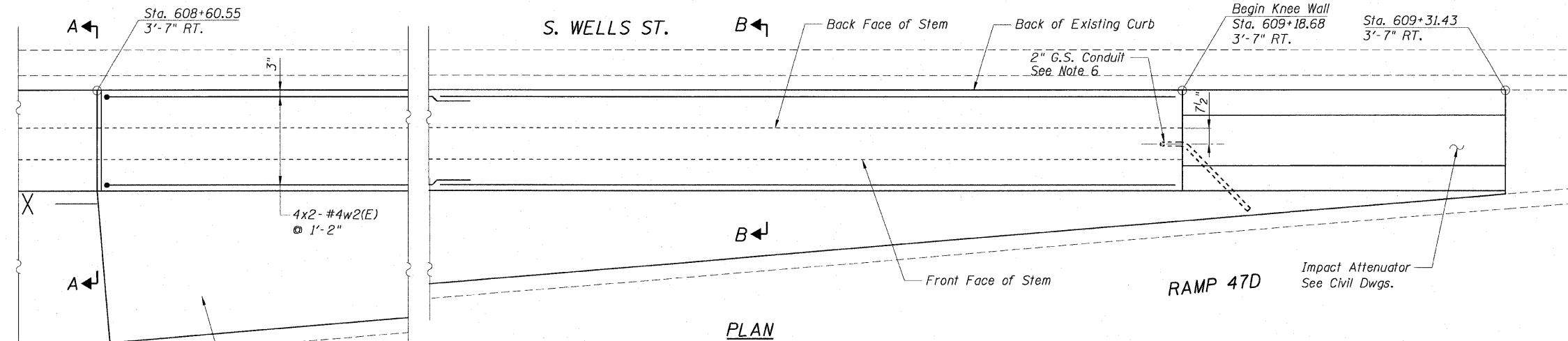
NOTES:

- For location of Fluted Knee Wall, see Civil Drawings. Stations and offsets are measured from the @ S. Wells St. to the Wells St. edge of the footing.
- Reinforcement bar shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Concrete: $f'c = 3500$ psi
- At locations where Fluted Knee Wall abuts a rigid structure, a $\frac{1}{2}$ " thick preformed expansion joint filler (PJF) conforming to the shape of the structure shall be installed between the wall and the structure. $\frac{3}{4}$ " PJF shall be installed where Fluted Knee Wall footing abuts curb and gutter. The cost shall be included in "Concrete Structures".
- A protective coat shall be applied according to Section 503.19 of the Standard Specifications to all concrete surfaces not in contact with soil for Structural Detail 1.
- 2" G.S. Conduit shall connect to existing handhole in shoulder. See Electrical drawings for details.
- Chain Link Fence will not be paid for in this Contract, but shall be furnished and installed in Contract 63003.
- For dimensions and details not shown in the sections, see Standard Knee Wall Details Sheet S1.
- Minimum lap for #4 bars shall be 1'-8".
- BF = Back Face
EF = Each Face
FF = Front Face

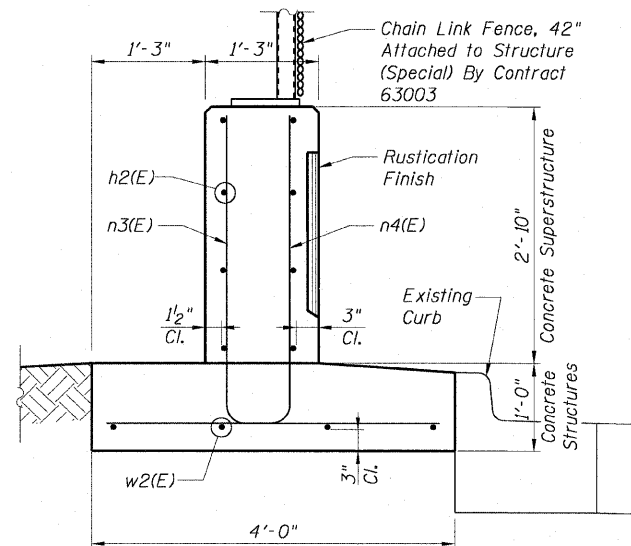
Sheet S2 of 3

REVISIONS	
NAME	DATE

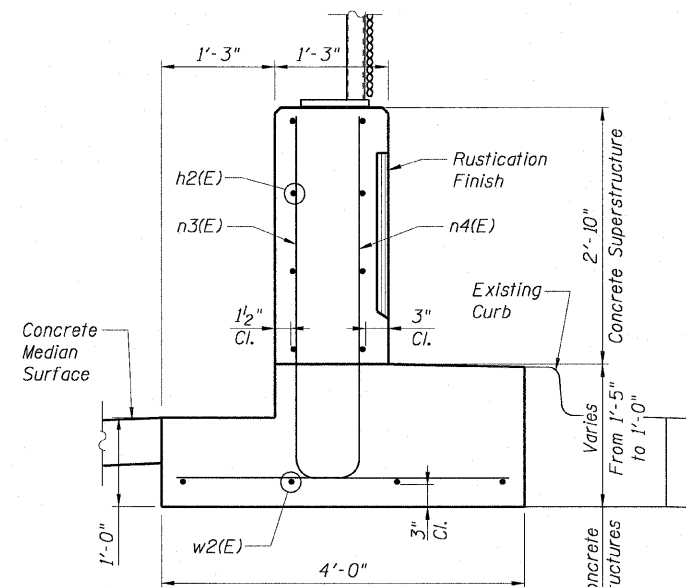
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)
STRUCTURAL DETAIL 1
RAMP 47D GORE
STA. 608+60.55 TO STA. 609+18.68
WELLS STREET
SCALE: None
DATE: JANUARY 14, 2009
DRAWN BY: CHD
CHECKED BY: MJP



ELEVATION



SECTION A-A



SECTION B-B

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	28	24
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
		• (2021-922 PT1 & 2122-921 PT1) 1-2 62987		

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	16	#4	21'-0"	—
n2(E)	41	#6	5'-5"	—
n5(E)	41	#5	4'-0"	—
t(E)	41	#6	3'-8"	—
w3(E)	8	#4	21'-0"	—

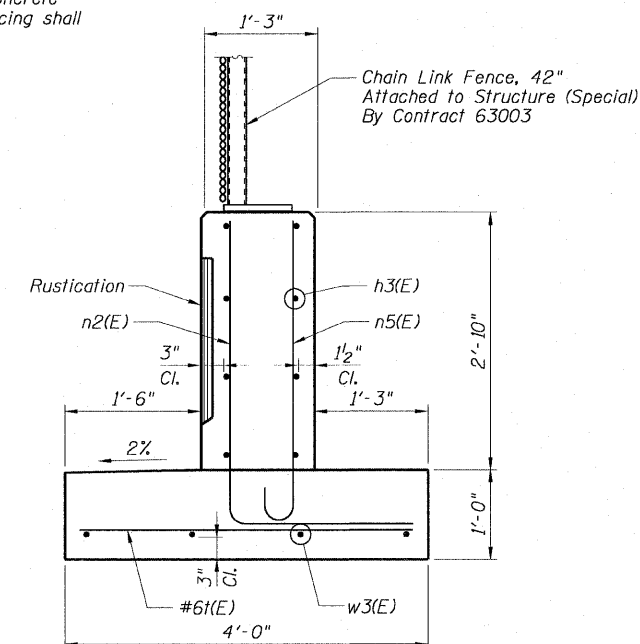
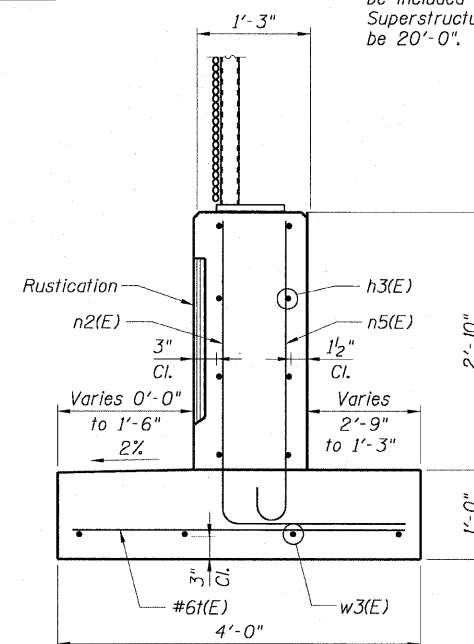
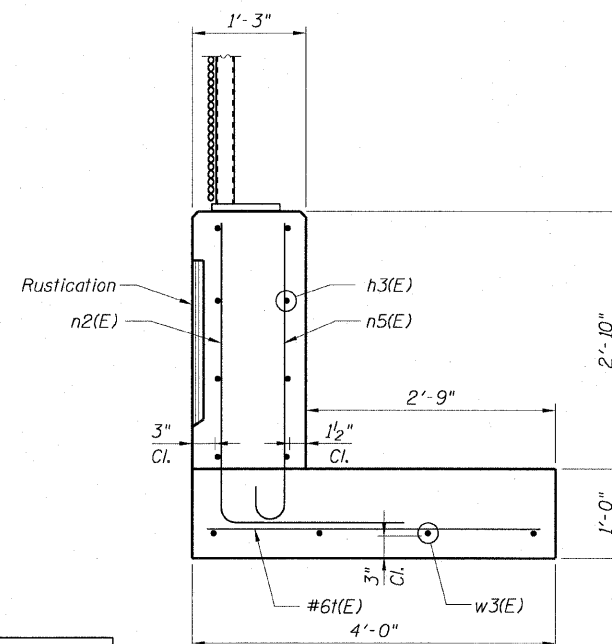
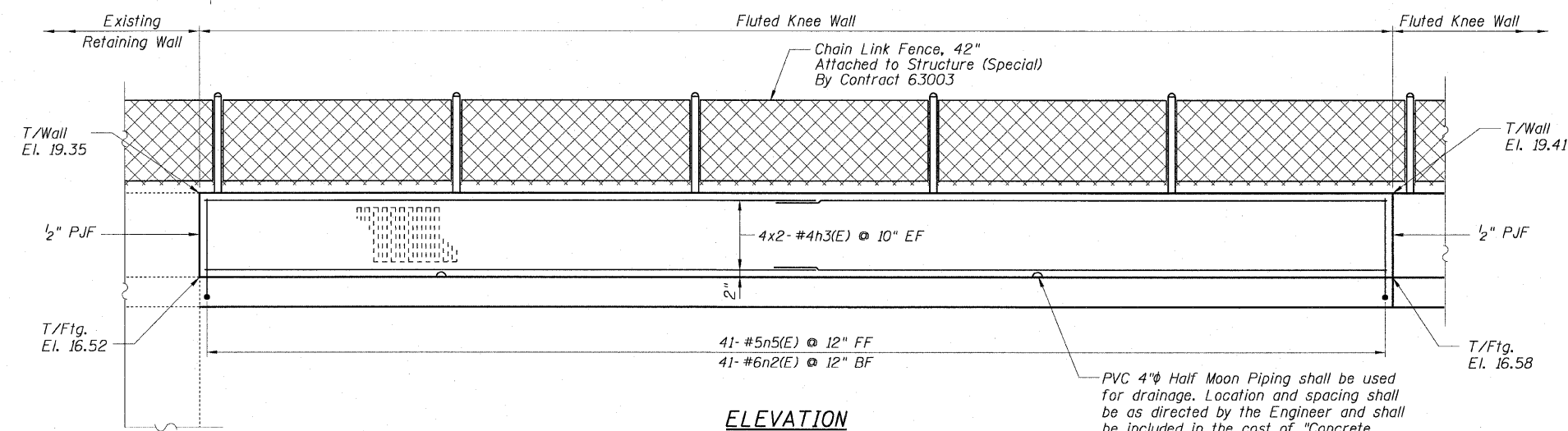
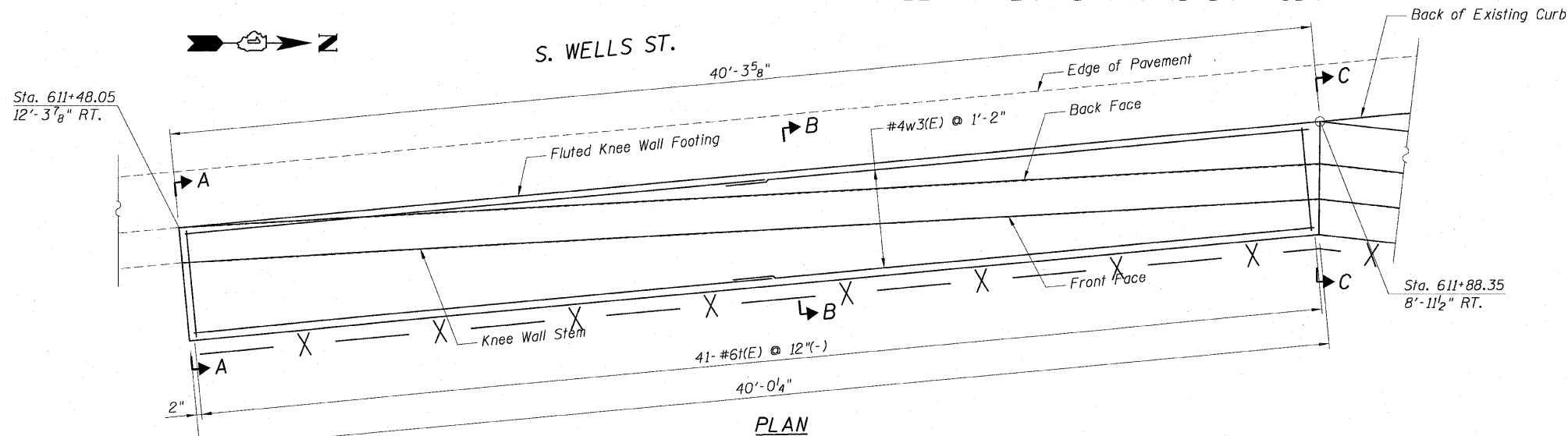
NOTES:

- For location of Fluted Knee Wall, see Civil Drawings. Stations and offset are measured from the S. Wells St. to the Wells St. edge of the footing.
- Reinforcement bar shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Concrete: $f'_c = 3500$ psi
- Fluted knee wall shall be paid for per foot as "Fluted Knee Wall". Included in the cost of "Fluted Knee Wall" shall be "Concrete Superstructures" stem, "Concrete Structures" foundation, reinforcement bars (epoxy coated), rustication finish, protective coat and expansion joint filler and sealing compound.
- At locations where Fluted Knee Wall abuts a rigid structure, a $\frac{1}{2}$ " thick preformed expansion joint filler (PJF) conforming to the shape of the structure shall be installed between the wall and the structure. $\frac{3}{4}$ " PJF shall be installed where Fluted Knee Wall footing abuts curb and gutter. The cost shall be included in "Concrete Structures".
- A protective coat shall be applied according to Section 503.19 of the Standard Specifications to the top of stem and to the face of stem and top of footing on the Frontage Road side of the Knee Wall for Structural Detail 2.
- Chain Link Fence will not be paid for in this Contract, but shall be furnished and installed in Contract 63003.
- For dimensions and details not shown in the sections, see Standard Knee Wall Details Sheet S1.
- For n2(E) details, see Sheet S1.
- Minimum lap for #4 bars shall be 1'-8".
- BF = Back Face
EF = Each Face
FF = Front Face

Sheet S3 of 3

REVISIONS	
NAME	DATE

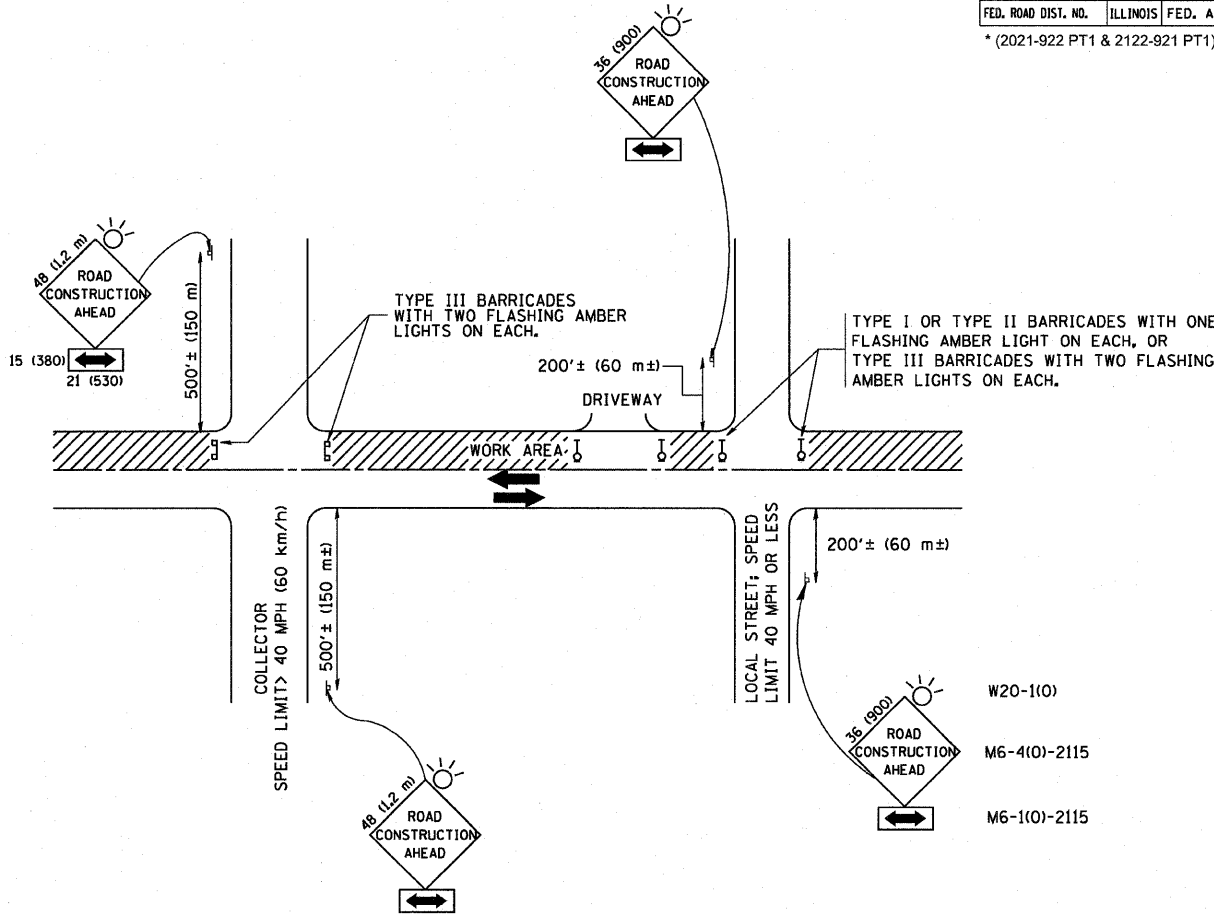
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (SOUTHBOUND KNEE WALLS)
STRUCTURAL DETAIL 2
47TH STREET STEM TRANSITION
STA. 611+48.05 TO STA. 611+88.32
WELLS STREET
SCALE: None
DATE: JANUARY 14, 2009
DRAWN BY: CHD
CHECKED BY: MJP



AECOM

PLOT DATE = 3/6/2007
FILE NAME = K:\distsd\1018.dgn
PLOT SCALE = 60.000' / IN.
USER NAME = bauerdt

CONTRACT NO. 62987				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (2021-922 PT1 & 2122-921 PT1) I-2				



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

NOTES:

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

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

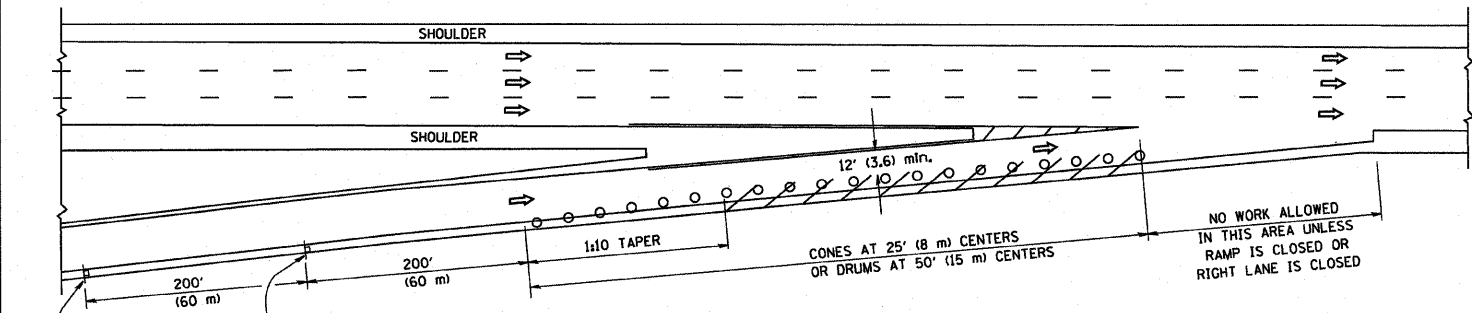
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

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

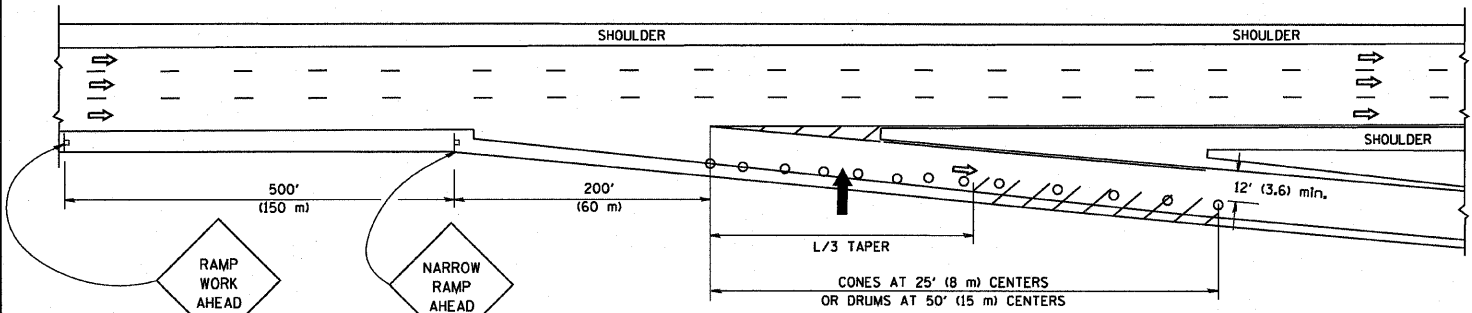
SCALE: NONE

DRAWN BY
CHECKED BY
TC-10

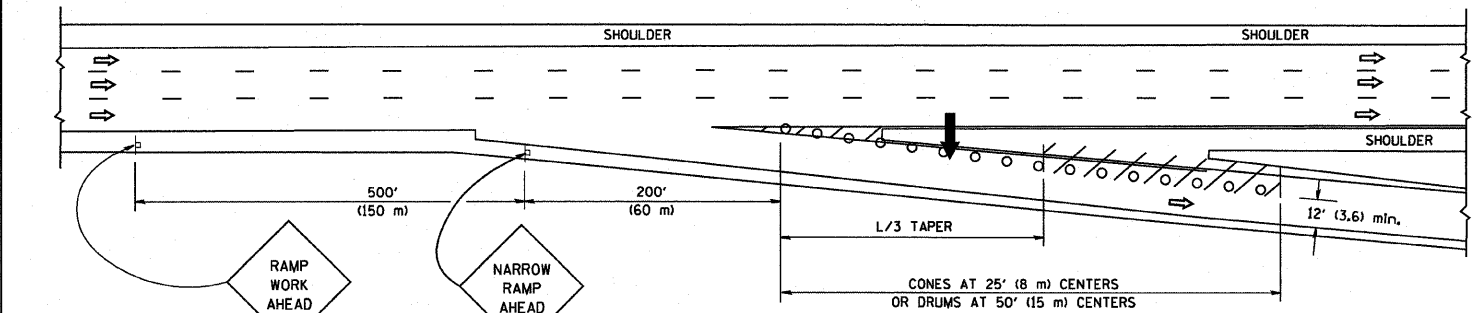
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

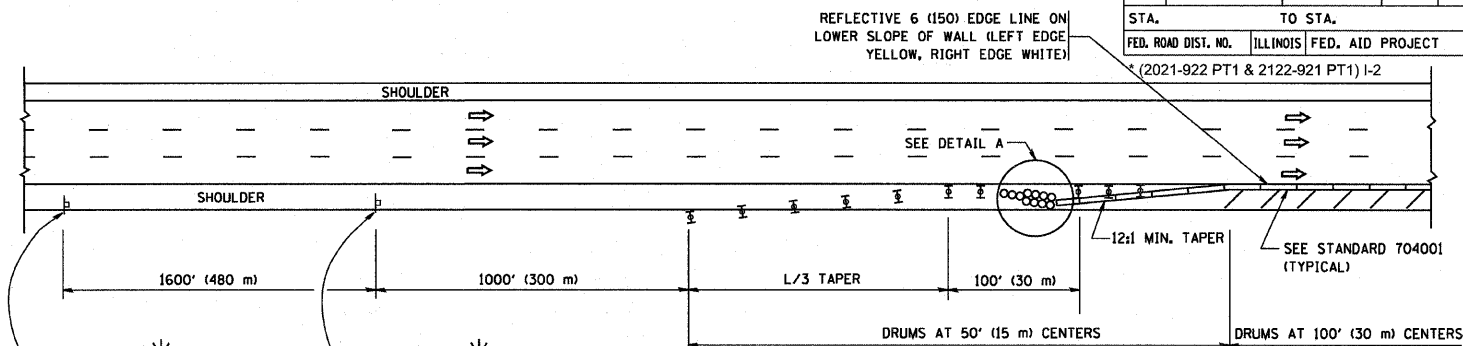
SYMBOLS

- 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

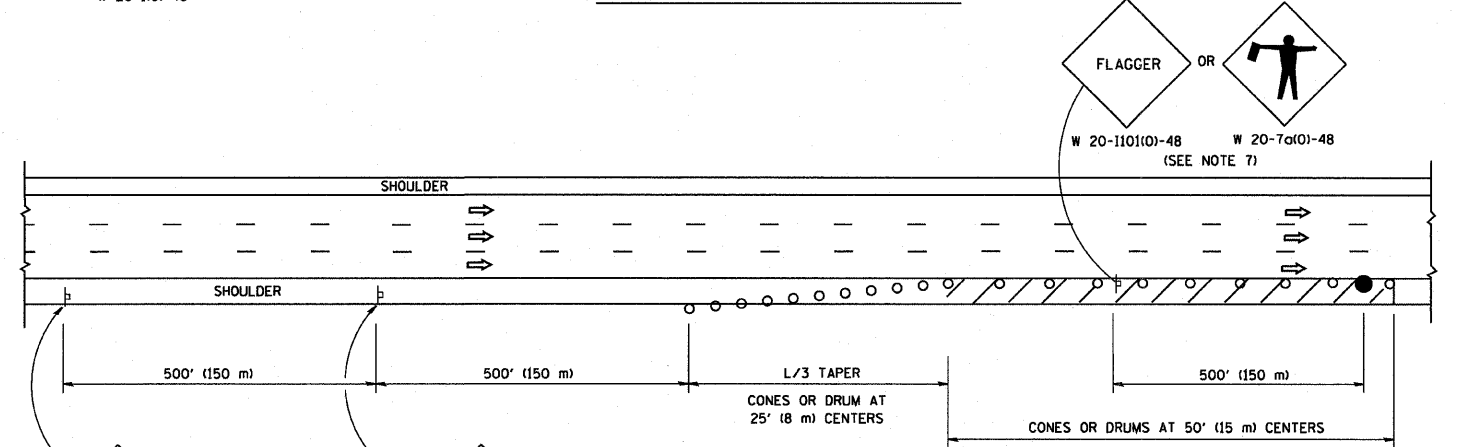
GENERAL NOTES

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

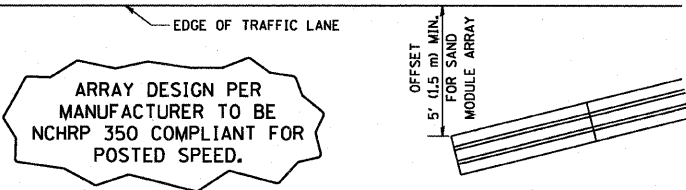
SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE



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

SCALE: NONE

DESIGNED BY: DWS
DRAWN BY
CHECKED BY
TC-17

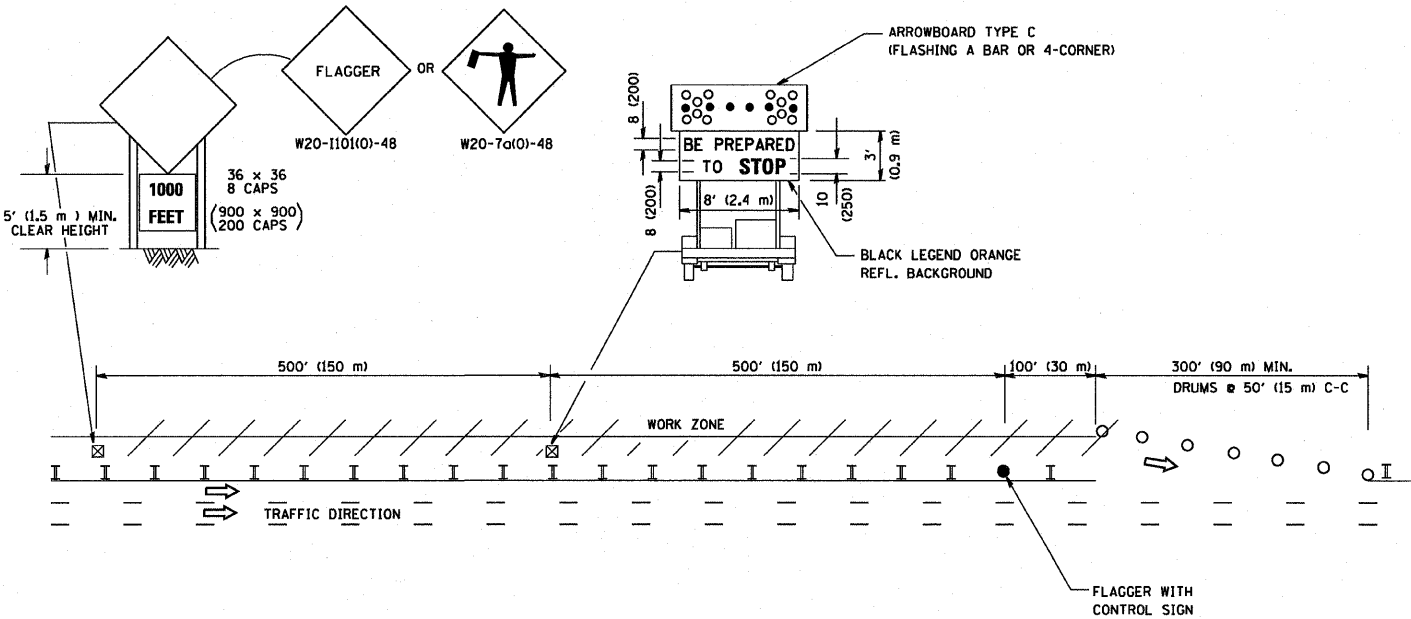
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	27

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

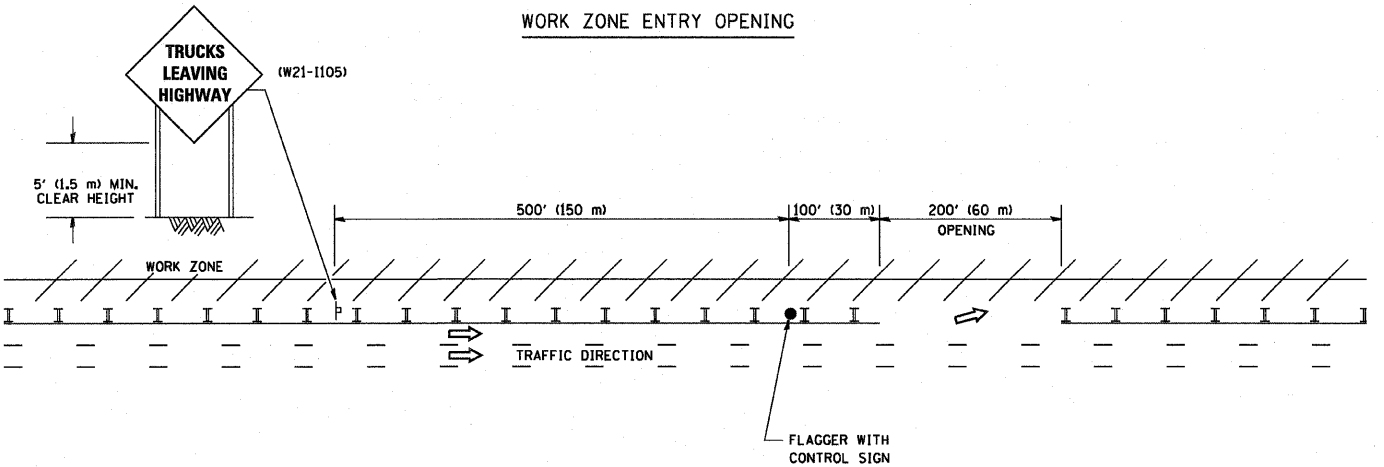
*(2021-922 PT1 & 2122-921 PT1) I-2

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

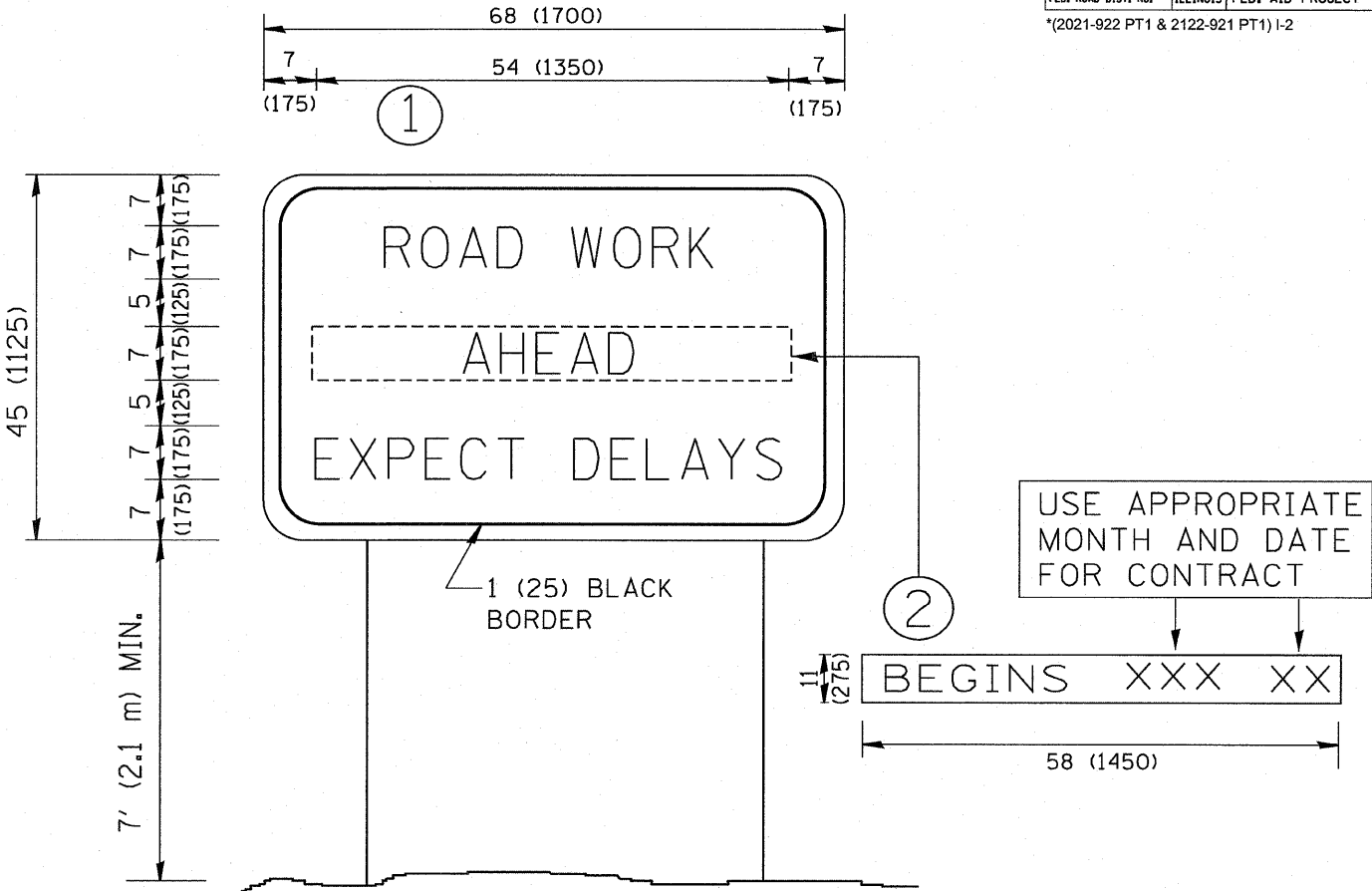
SCALE: NONE

DRAWN BY CADD

CHECKED BY

TC-18

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	28	28
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
*(2021-922 PT1 & 2122-921 PT1) I-2				



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.		ILLINOIS DEPARTMENT OF TRANSPORTATION	
REVISIONS		ARTERIAL ROAD INFORMATION SIGN	
NAME	DATE	SCALE: NONE	
R. MIRS	9-15-97		
R. MIRS	12-11-97		
T. RAMMACHER	2-2-99		
C. JUCIUS	1-31-07		
		DRAWN BY DESIGN	
		CHECKED BY	
		TC22	