

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		

62988

7/24/2009 4:53:22 PM

PROP. CURVE SBDR10
P.I. STA = 1539+47.07
Nt = 1,874,803.43
Et = 1,175,912.56
 $\Delta = 25^\circ 26' 39''$ (LT)
D = 3° 49' 11"
R = 1,500.00'
T = 338.65'
L = 666.13'
E = 37.75'
 $\theta = 5.9\%$
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
Nt = 1,874,493.81
Et = 1,175,775.38
P.T. STA = 1542+74.55
Nt = 1,875,141.96
Et = 1,175,903.41

PROP. CURVE EL4300
P.C. STA = 714+54.39
Nt = 1,875,675.42
Et = 1,175,825.74
 $\Delta = 0^\circ 54' 33''$ (LT)
D = 0° 31' 15"
R = 11,000.00'
T = 87.27'
L = 174.54'
E = 0.35'
 $\theta = 5.9\%$
P.C. STA = 713+67.12
Nt = 1,875,762.70
Et = 1,175,826.31
P.T. STA = 715+41.66
Nt = 1,875,588.15
Et = 1,175,826.55

PROP. CURVE SWTH1
P.I. STA = 13+21.89
Nt = 1,874,747.97
Et = 1,175,711.50
 $\Delta = 28^\circ 04' 24''$ (LT)
D = 4° 27' 01"
R = 1,287.50'
T = 321.89'
L = 630.84'
E = 39.63'
 $\theta = 5.9\%$
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 10+00.00
Nt = 1,874,459.70
Et = 1,175,568.28
P.T. STA = 16+30.84
Nt = 1,875,069.72
Et = 1,175,702.20

PROP. CURVE EL4301
P.I. STA = 723+10.32
Nt = 1,874,819.53
Et = 1,175,833.74
 $\Delta = 23^\circ 55' 56''$ (RT)
D = 3° 49' 11"
R = 1,500.00'
T = 317.91'
L = 626.54'
E = 33.32'
 $\theta = 5.9\%$
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
Nt = 1,875,137.42
Et = 1,175,830.77
P.T. STA = 726+18.95
Nt = 1,874,527.76
Et = 1,175,707.50

PROP. CURVE A4701
P.I. STA = 5072+36.79
Nt = 1,874,030.16
Et = 1,175,362.65
 $\Delta = 14^\circ 54' 56''$ (LT)
D = 4° 11' 07"
R = 1,369.00'
T = 179.20'
L = 356.38'
E = 11.68'
 $\theta = 5.9\%$
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 5070+57.59
Nt = 1,874,189.71
Et = 1,175,442.25
P.T. STA = 5074+13.97
Nt = 1,873,854.99
Et = 1,175,322.86

PROP. CURVE A4700
P.I. STA = 5064+21.82
Nt = 1,874,765.22
Et = 1,175,731.41
 $\Delta = 22^\circ 28' 55''$ (RT)
D = 3° 31' 33"
R = 1,625.00'
T = 322.97'
L = 637.62'
E = 31.78'
 $\theta = 4.4\%$
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
Nt = 1,875,087.21
Et = 1,175,756.48
P.T. STA = 5067+36.48
Nt = 1,874,477.28
Et = 1,175,585.12

PROP. CURVE C4300
P.I. STA = 7054+50.07
Nt = 1,875,794.51
Et = 1,175,741.50
 $\Delta = 6^\circ 44' 11''$ (RT)
D = 3° 49' 11"
R = 1,500.00'
T = 88.28'
L = 176.36'
E = 2.60'
 $\theta = 4.6\%$
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
Nt = 1,875,881.65
Et = 1,175,727.39
P.T. STA = 7055+38.15
Nt = 1,875,706.31
Et = 1,175,745.28

PROP. CURVE NBDR09
P.I. STA = 2539+31.62
Nt = 1,874,770.97
Et = 1,175,969.46
 $\Delta = 23^\circ 53' 35''$ (LT)
D = 3° 57' 05"
R = 1,450.00'
T = 306.79'
L = 604.67'
E = 32.10'
 $\theta = 6.0\%$
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
Nt = 1,874,487.21
Et = 1,175,852.82
P.T. STA = 2542+29.49
Nt = 1,875,077.65
Et = 1,175,961.17

PROP. CURVE SBLOC06
P.I. STA = 3539+38.89
Nt = 1,874,807.75
Et = 1,175,816.77
 $\Delta = 22^\circ 47' 56''$ (LT)
D = 3° 23' 54"
R = 1,686.00'
T = 339.94'
L = 670.88'
E = 33.93'
 $\theta = 5.7\%$
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
Nt = 1,874,493.12
Et = 1,175,688.05
P.T. STA = 3542+69.84
Nt = 1,875,147.67
Et = 1,175,813.52

PROP. CURVE NBLOC07
P.I. STA = 4539+56.47
Nt = 1,874,785.65
Et = 1,176,076.72
 $\Delta = 28^\circ 53' 07''$ (LT)
D = 3° 52' 17"
R = 1,480.00'
T = 381.17'
L = 746.13'
E = 48.30'
 $\theta = 5.9\%$
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
Nt = 1,874,442.48
Et = 1,175,910.80
P.T. STA = 4543+21.43
Nt = 1,875,166.27
Et = 1,176,056.22

PROP. CURVE B4700
P.I. STA = 6065+87.40
Nt = 1,874,784.51
Et = 1,176,124.85
 $\Delta = 24^\circ 04' 19''$ (LT)
D = 4° 24' 27"
R = 1,300.00'
T = 277.18'
L = 546.17'
E = 29.22'
 $\theta = 4.9\%$
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
Nt = 1,874,525.73
Et = 1,176,025.56
P.T. STA = 6068+56.40
Nt = 1,875,061.29
Et = 1,176,109.94

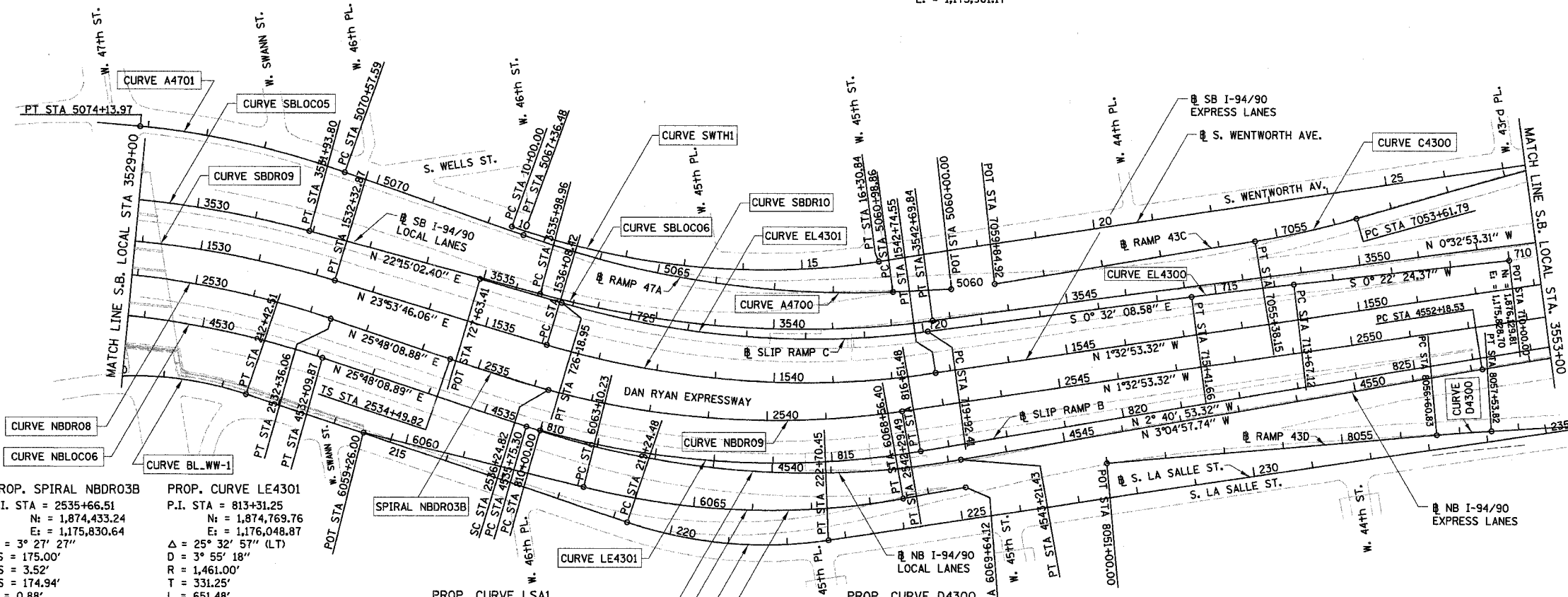
PROP. CURVE BL_WW-1
P.I. STA = 211+05.58
Nt = 1,873,849.12
Et = 1,175,736.29
 $\Delta = 27^\circ 13' 24''$ (RT)
D = 9° 44' 58"
R = 587.69'
T = 142.30'
L = 279.23'
E = 16.98'
 $\theta = 5.9\%$
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 209+63.28
Nt = 1,873,706.87
Et = 1,175,740.12
P.T. STA = 212+42.51
Nt = 1,873,977.37
Et = 1,175,797.95

PROP. SPIRAL NBDR03B
P.I. STA = 2535+66.51
Nt = 1,874,433.24
Et = 1,175,830.64
 $\Delta = 3^\circ 27' 27''$
LS = 175.00'
YS = 3.52'
XS = 174.94'
P = 0.88'
K = 87.49'
LT = 116.69'
ST = 58.35'
LC = 174.97'
T.S. STA = 2534+49.82
Nt = 1,874,328.19
Et = 1,175,779.85
S.C. STA = 2536+24.82
Nt = 1,874,487.21
Et = 1,175,852.82

PROP. CURVE LE4301
P.I. STA = 813+31.25
Nt = 1,874,769.76
Et = 1,176,048.87
 $\Delta = 25^\circ 32' 57''$ (LT)
D = 3° 55' 18"
R = 1,461.00'
T = 331.25'
L = 651.48'
E = 37.08'
 $\theta = 5.9\%$
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
Nt = 1,874,464.55
Et = 1,175,920.15
P.T. STA = 816+51.48
Nt = 1,875,100.65
Et = 1,176,033.38

PROP. CURVE LSA1
P.I. STA = 221+00.82
Nt = 1,874,750.89
Et = 1,176,169.92
 $\Delta = 27^\circ 20' 30''$ (LT)
D = 7° 54' 10"
R = 725.00'
T = 176.34'
L = 345.97'
E = 21.14'
 $\theta = 5.9\%$
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 219+24.48
Nt = 1,874,591.98
Et = 1,176,093.48
P.T. STA = 222+70.45
Nt = 1,874,927.16
Et = 1,176,164.84

PROP. CURVE D4300
P.I. STA = 8057+07.33
Nt = 1,876,018.11
Et = 1,176,112.42
 $\Delta = 1^\circ 19' 55''$ (RT)
D = 1° 25' 57"
R = 4,000.00'
T = 46.49'
L = 92.99'
E = 0.27'
 $\theta = 2.3\%$
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
Nt = 1,875,971.65
Et = 1,176,110.86
P.T. STA = 8057+53.82
Nt = 1,876,064.53
Et = 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.

ALT-01

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
NORTHBOUND KNEE WALLS (47TH ST TO 45TH ST)

ALIGNMENT PLAN

SCALE: 1"=100'
DATE: 04/25/08
DRAWN BY: JDC
CHECKED BY: RS

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