

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	598	46
STA.		TO STA. 3553+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62302		(1818, ETC. 2324.6-1P1R-9		

PROP. CURVE SBLOC05
P.I. STA = 3528+43.63
N_i = 1,873,784.42
E_i = 1,175,398.10
Δ = 23° 47' 11" (RT)
D = 3° 20' 48"
R = 1,712.00'
T = 360.56'
L = 710.73'
E = 37.56'
e = 5.7%

PROP. CURVE SBDR09
P.I. STA = 1528+34.60
N_i = 1,873,771.86
E_i = 1,175,455.52
Δ = 27° 22' 45" (RT)
D = 3° 22' 13"
R = 1,700.00'
T = 414.09'
L = 812.35'
E = 49.71'
e = 5.7%

PROP. CURVE SBLOC06
P.I. STA = 3539+38.89
N_i = 1,874,807.75
E_i = 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%

PROP. CURVE SBDR10
P.I. STA = 1539+47.07
N_i = 1,874,803.43
E_i = 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%

PROP. CURVE EL4300
P.I. STA = 714+54.39
N_i = 1,875,675.42
E_i = 1,175,825.74
Δ = 0° 54' 33" (LT)
D = 0° 31' 15"
R = 11,000.00'
T = 87.27'
L = 174.54'
E = 0.35'
P.C. STA = 713+67.12
N_i = 1,875,762.70
E_i = 1,175,826.31
P.T. STA = 715+41.66
N_i = 1,875,588.15
E_i = 1,175,826.55

PROP. CURVE EL4301
P.I. STA = 723+10.32
N_i = 1,874,819.53
E_i = 1,175,833.74
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 3522+04.49 TO STA 3526+01.07
T.R. = 42.58' (ATTAINMENT TRANSITION ONLY)
S.E. RUN = 354.00' (ATTAINMENT TRANSITION ONLY)
S.R. = CONTINUOUSLY ROTATING PLANE BEGINS AT STA 3530+92.51
P.C. STA = 3524+83.07
N_i = 1,873,423.99
E_i = 1,175,407.76
P.T. STA = 3531+93.80
N_i = 1,874,118.14
E_i = 1,175,534.63

S.A. = STA 1521+84.22 TO STA 1525+21.75
T.R. = 33.53' (ATTAINMENT TRANSITION ONLY)
S.E. RUN = 304.00' (ATTAINMENT TRANSITION ONLY)
S.R. = CONTINUOUSLY ROTATING PLANE BEGINS AT STA 1531+40.60
P.C. STA = 1524+20.52
N_i = 1,873,358.54
E_i = 1,175,480.67
P.T. STA = 1532+32.87
N_i = 1,874,150.45
E_i = 1,175,623.26

S.A. = CONTINUOUSLY ROTATING PLANE ENDS AT STA 3537+00.25
T.R. = 68.79' (REMOVAL TRANSITION ONLY)
S.E. RUN = 380.00' (REMOVAL TRANSITION ONLY)
S.R. = STA 3541+43.17 TO STA 3545+91.96
P.C. STA = 3535+98.96
N_i = 1,874,493.12
E_i = 1,175,688.05
P.T. STA = 3542+69.84
N_i = 1,875,147.67
E_i = 1,175,813.52

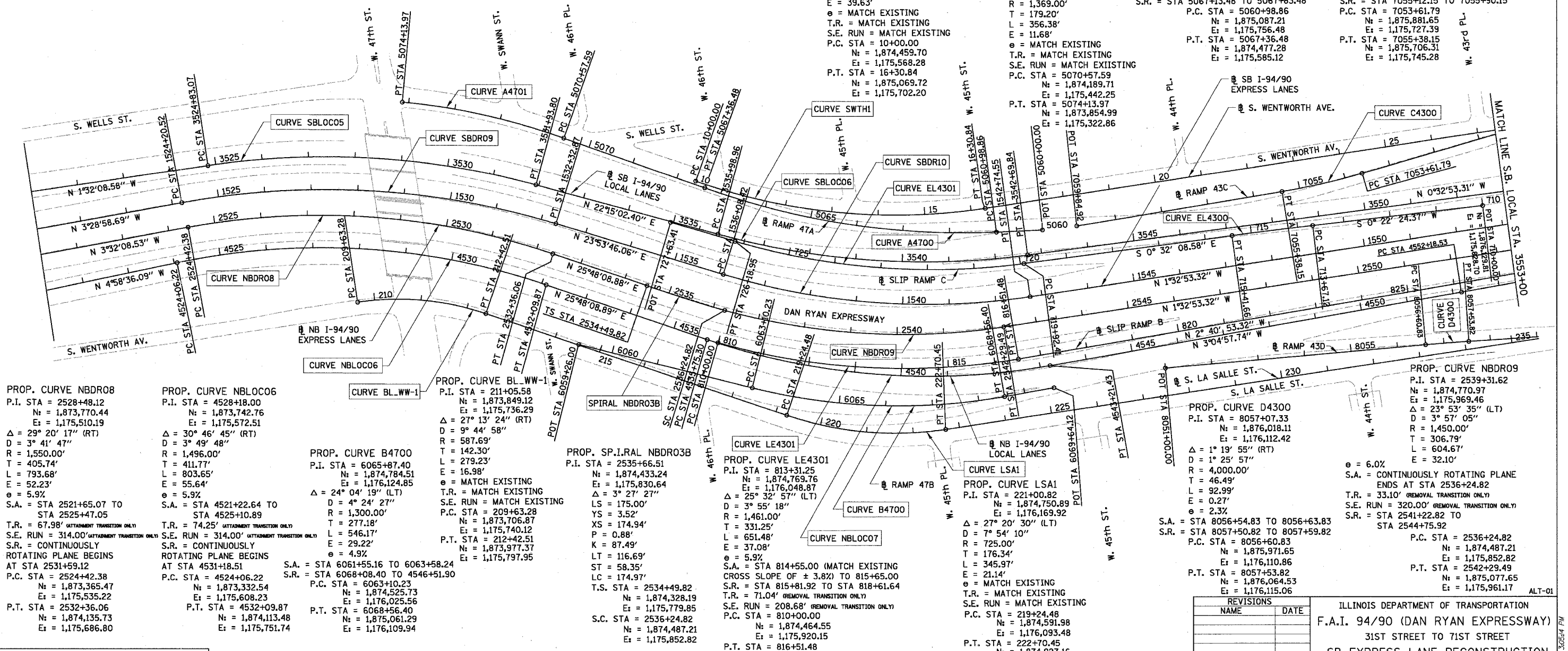
S.A. = CONTINUOUSLY ROTATING PLANE ENDS AT STA 1537+03.93
T.R. = 68.20' (REMOVAL TRANSITION ONLY)
S.E. RUN = 315.00' (REMOVAL TRANSITION ONLY)
S.R. = STA 1541+69.55 TO STA 1545+52.75
P.C. STA = 1536+08.42
N_i = 1,874,493.81
E_i = 1,175,775.38
P.T. STA = 1542+74.55
N_i = 1,875,141.96
E_i = 1,175,903.41

PROP. CURVE SWTH1
P.I. STA = 13+21.89
N_i = 1,874,747.97
E_i = 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 = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 10+00.00
N_i = 1,874,459.70
E_i = 1,175,568.28
P.T. STA = 16+30.84
N_i = 1,875,069.72
E_i = 1,175,702.20

PROP. CURVE A4701
P.I. STA = 5072+36.79
N_i = 1,874,030.16
E_i = 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 = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 5070+57.59
N_i = 1,874,189.71
E_i = 1,175,442.25
P.T. STA = 5074+13.97
N_i = 1,873,854.99
E_i = 1,175,322.86

PROP. CURVE A4700
P.I. STA = 5064+21.82
N_i = 1,874,765.22
E_i = 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%

PROP. CURVE C4300
P.I. STA = 7054+50.07
N_i = 1,875,794.51
E_i = 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%



PROP. CURVE NBDRO8
P.I. STA = 2528+48.12
N_i = 1,873,770.44
E_i = 1,175,510.19
Δ = 29° 20' 17" (RT)
D = 3° 41' 47"
R = 1,550.00'
T = 405.74'
L = 793.68'
E = 52.23'
e = 5.9%

PROP. CURVE NBLOC06
P.I. STA = 4528+18.00
N_i = 1,873,742.76
E_i = 1,175,572.51
Δ = 30° 46' 45" (RT)
D = 3° 49' 48"
R = 1,496.00'
T = 411.77'
L = 803.65'
E = 55.64'
e = 5.9%

PROP. CURVE BL.WW-1
P.I. STA = 211+05.58
N_i = 1,873,849.12
E_i = 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'

PROP. SP.I.RAL NBDRO3B
P.I. STA = 2535+66.51
N_i = 1,874,433.24
E_i = 1,175,830.64
Δ = 3° 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'

PROP. CURVE LE4301
P.I. STA = 813+31.25
N_i = 1,874,769.76
E_i = 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%

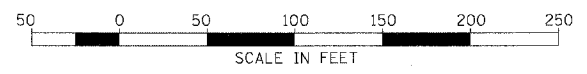
PROP. CURVE LSA1
P.I. STA = 221+00.82
N_i = 1,874,750.89
E_i = 1,176,169.92
Δ = 27° 20' 30" (LT)
D = 7° 54' 10"
R = 725.00'
T = 176.34'
L = 345.97'
E = 21.14'

PROP. CURVE D4300
P.I. STA = 8057+07.33
N_i = 1,876,018.11
E_i = 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%

PROP. CURVE NBDRO9
P.I. STA = 2539+31.62
N_i = 1,874,770.97
E_i = 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'

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

NOTE: ALL COORDINATES ARE GIVEN IN STATE PLANE (GRID) COORDINATES. GRID TO GROUND CONVERSION FACTOR = 1.000010988654360



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
SB EXPRESS LANE RECONSTRUCTION
ALIGNMENT, TIES, AND BENCHMARKS
SCALE: 1"=100'
DATE: 07/07/05
DRAWN BY: JDC
CHECKED BY: RS

6/21/2005 3:05:44 PM