

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	32	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PROP. CURVE SBDR10  
P.I. STA = 1539+47.07  
Nt = 1,874,803.43  
Et = 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  
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  
Δ = 0° 54' 33" (LT)  
D = 0° 31' 15"  
R = 11,000.00'  
T = 87.27'  
L = 174.54'  
E = 0.35'  
e = 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  
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  
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  
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.E. RUN = MATCH EXISTING  
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 = 1,175,360.65  
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  
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  
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.E. RUN = MATCH EXISTING  
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

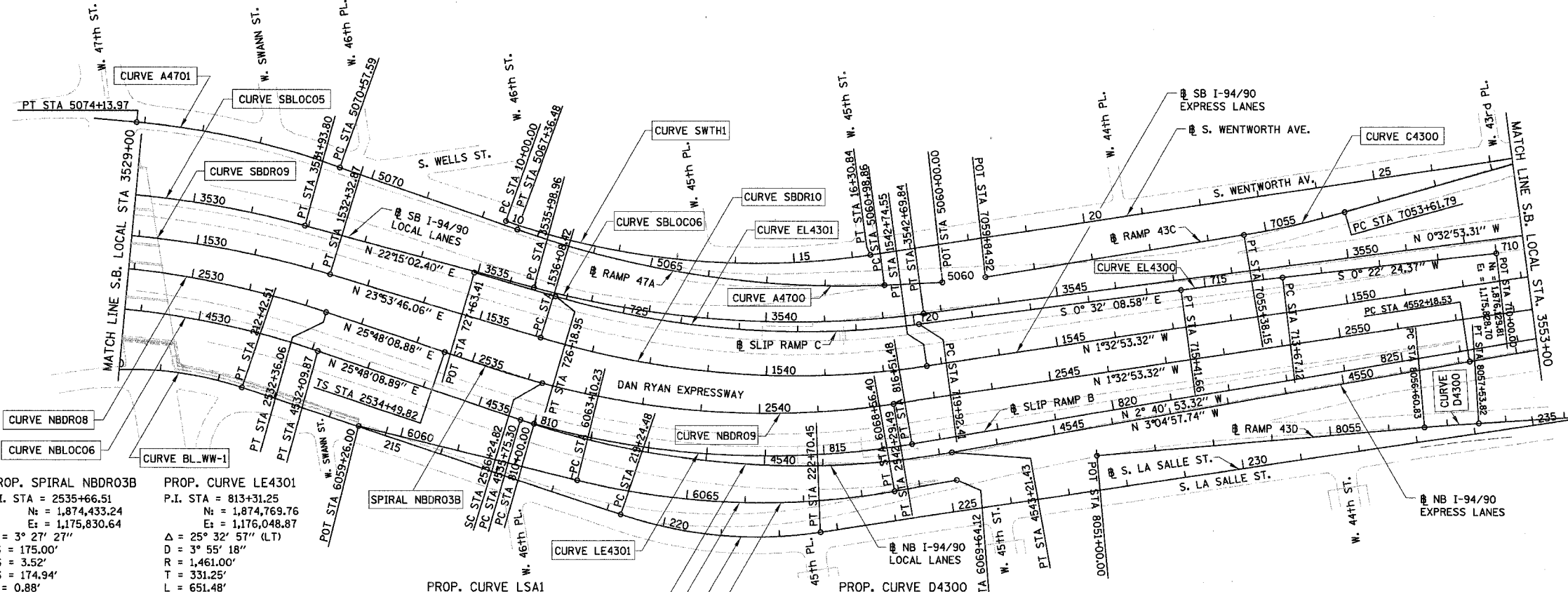
PROP. CURVE C4300  
P.I. STA = 7054+50.07  
Nt = 1,875,794.51  
Et = 1,175,741.50  
Δ = 6° 44' 11" (RT)  
D = 3° 49' 11"  
R = 1,500.00'  
T = 88.28'  
L = 176.36'  
E = 2.60'  
e = 4.6%  
S.A. = STA 7053+09.79  
TO 7053+87.79  
S.E. RUN = MATCH EXISTING  
S.R. = STA 7055+12.15  
TO 7055+90.15  
P.C. 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 NBDRO9  
P.I. STA = 2539+31.62  
Nt = 1,874,770.97  
Et = 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  
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  
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  
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  
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+98.96  
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  
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  
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  
Δ = 27° 13' 24" (RT)  
D = 9° 44' 58"  
R = 587.69'  
T = 142.30'  
L = 279.23'  
E = 16.98'  
e = MATCH EXISTING  
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 NBDRO3B  
P.I. STA = 2535+66.51  
Nt = 1,874,433.24  
Et = 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'  
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  
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  
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  
Δ = 27° 20' 30" (LT)  
D = 7° 54' 10"  
R = 725.00'  
T = 176.34'  
L = 345.97'  
E = 21.14'  
e = MATCH EXISTING  
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  
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  
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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
SOUTHBOUND KNEE WALLS (ROOT ST TO PERSHWAY RD)  
**ALIGNMENT PLAN**  
SCALE: 1"=100'  
DATE: 04/25/08  
DRAWN BY: JDC  
CHECKED BY: RS