



PROP. CURVE PR.LINE.F2
 PI STA. = 918+09.31
 N: 1,839,137.6763 E: 1,188,005.8911
 $\Delta = 44^\circ 00' 23''$ (RT)
 D = 5° 55' 16"
 R = 967.66'
 T = 391.02'
 L = 743.22'
 E = 76.02'
 e = 6.0%
 T.R. = N/A
 S.E. RUN = 128'
 S.R. STA 920+97.5 TO
 STA 922+25.5
 P.C. STA = 914+18.29
 N: 1,839,417.5709 E: 1,188,278.9425
 P.T. STA = 921+61.50
 N: 1,839,126.0579 E: 1,187,615.0420
 DS = 50 MPH

PROP. CURVE PR.LINE.E-1
 PI STA. = 209+14.04
 N: 1,839,089.8391 E: 1,188,079.3914
 $\Delta = 23^\circ 52' 31''$ (LT)
 D = 6° 46' 37"
 R = 845.47'
 T = 178.75'
 L = 352.31'
 E = 18.69'
 e = 5.8%
 T.R. = N/A
 S.E. RUN = 112.48
 S.A. STA 206+80.04 TO
 STA 207+92.52
 P.C. STA = 207+35.29
 N: 1,839,084.5279 E: 1,187,900.7216
 P.T. STA = 210+87.60
 N: 1,839,167.0120 E: 1,188,240.6225
 DS = 45 MPH

SUPERELEVATION DATA	ROTATION @ BASELINE	
	STA	RAMP LANE
ALIGNMENT: PROP @ LINE F		
NORMAL CROWN	908+28.25	2.0%
FULL SUPER OBTAINED	909+46.30	6.0%
END FULL SUPER	920+97.50	6.0%
NORMAL CROWN	922+25.50	2.0%

MATCHLINE "D"
 SEE SHEET 5 OF 5
 FOR CONTINUATION

SUPERELEVATION DATA	ROTATION @ CENTER LINE		
	STA	INSIDE LANE	OUTSIDE LANE
ALIGNMENT: PROP @ LINE E			
NORMAL CROWN	925+95.45	2.0%	-2.0%
REMOVE CROWN	925+44.33	0.0%	-2.0%
REVERSE CROWN	924+93.21	-2.0%	-2.0%

SUPERELEVATION DATA	ROTATION @ BASELINE	
	STA	RAMP LANE
ALIGNMENT: PROP @ LINE E		
NORMAL CROWN	206+80.04	-2.0%
BEGIN FULL SUPER	207+07.48	-5.8%
FULL SUPER TRANSITION	210+84.64	-5.8%
FULL SUPER OBTAINED	210+90.56	-5.6%
FULL SUPER TRANSITION	219+36.21	-5.6%
FULL SUPER OBTAINED	219+48.13	-6.0%
END FULL SUPER	222+51.14	-6.0%
REMOVE CROWN	222+28.74	0.0%
NORMAL CROWN	224+87.94	MEET EXISTING

SUPERELEVATION DATA	ROTATION @ BASELINE	
	STA	RAMP LANE
ALIGNMENT: PROP @ RAMP R		
NORMAL CROWN	606+03.09	2.0%
BEGIN FULL SUPER	607+20.95	6.0%

SUPERELEVATION DATA	ROTATION @ BASELINE	
	STA	RAMP LANE
ALIGNMENT: PROP @ RAMP F1		
NORMAL CROWN	2213+65.0	-2.0%
REMOVE CROWN	2214+20.0	0.0%
REVERSE	2214+75.0	2.0%

NOTES:
 T.R. = TANGENT RUNOUT
 S.E. RUN = SUPERELEVATION RUNOFF
 S.A. (SUPERELEVATION OBTAINED) IS THE SUM OF T.R. AND S.E. RUN
 S.R. (SUPERELEVATION REMOVED) IS THE SUM OF T.R. AND S.E. RUN

PROP. CURVE PR.RAMP.R-1
 PI STA. = 609+18.46
 N: 1,839,050.1022
 E: 1,188,087.4843
 $\Delta = 45^\circ 33' 07''$ (RT)
 D = 9° 22' 51"
 R = 610.77'
 T = 256.44'
 L = 485.58'
 E = 51.65'
 e = 6.0%
 T.R. = N/A
 S.E. RUN = 117.86'
 S.A. STA 606+03.09 TO
 STA 607+20.95
 P.C. STA = 606+62.02
 N: 1,839,052.6997
 E: 1,187,831.0533
 P.T. STA = 611+47.60
 N: 1,838,865.2213
 E: 1,188,265.1993
 DS = 40 MPH

PROP. CURVE PR.RAMP.O-1
 PI STA. = 1702+59.24
 N: 1,838,142.1479
 E: 1,188,738.3937
 $\Delta = 3^\circ 06' 08''$ (RT)
 D = 1° 21' 51"
 R = 4,200.00'
 T = 113.73'
 L = 227.40'
 E = 1.54'
 e = 2.0%
 T.R. = N/A
 S.E. RUN = N/A
 P.C. STA = 1701+45.51
 N: 1,838,028.4310
 E: 1,188,736.6824
 P.T. STA = 1703+72.91
 N: 1,838,255.6055
 E: 1,188,746.2565
 DS = 40 MPH

PROP. CURVE PR.RAMP.O-2
 PI STA. = 1718+26.06
 N: 1,839,705.2746
 E: 1,188,846.7215
 $\Delta = 118^\circ 54' 55''$ (LT)
 D = 9° 58' 31"
 R = 574.38'
 T = 973.45'
 L = 1,192.10'
 E = 555.90'
 e = 6.0%
 T.R. = 56.67'
 S.E. RUN = 170'
 S.A. STA 1706+82.58 TO
 STA 1709+09.28
 S.R. STA 1719+88.04 TO
 STA 1722+14.74
 P.C. STA = 1708+52.61
 N: 1,838,734.1497
 E: 1,188,779.4206
 P.T. STA = 1720+44.71
 N: 1,839,294.6292
 E: 1,187,964.1212
 DS = 40 MPH

EXIST. CURVE EX.RAMP.R2
 PI STA. = 619+66.20
 $\Delta = 89^\circ 54' 07''$ (RT)
 D = 6° 59' 14"
 R = 820.00'
 T = 818.60'
 L = 1,286.65'
 E = 338.66'
 e = ----
 T.R. = ----
 S.E. RUN = ----
 P.C. STA. = 611+47.60
 N: 1,838,865.2213
 E: 1,188,265.1993
 P.T. STA. = 624+34.25
 N: 1,837,706.7661
 E: 1,188,243.2967
 DS = 45 MPH

PROP. CURVE PR.RAMP.O-3
 PI STA. = 1723+70.03
 N: 1,839,157.3941
 E: 1,187,669.1616
 $\Delta = 21^\circ 19' 54''$ (RT)
 D = 10° 48' 38"
 R = 530.00'
 T = 99.82'
 L = 197.32'
 E = 9.32'
 e = 6.0%
 T.R. = N/A
 S.E. RUN = 110.47' AND 110'
 S.A. STA 1723+25.21 PLANE KEEPS
 ROTATING FROM PREVIOUS CURVE
 S.R. STA 1724+12.53 TO
 STA 1725+22.53
 P.C. STA = 1722+70.21
 N: 1,839,199.5013
 E: 1,187,759.6625
 P.T. STA = 1724+67.53
 N: 1,839,151.0928
 E: 1,187,569.5436
 DS = 40 MPH

PROP. CURVE PR.LINE.E-2
 PI STA. = 215+44.60
 N: 1,839,364.3149 E: 1,188,652.8312
 $\Delta = 50^\circ 17' 52''$ (LT)
 D = 5° 53' 10"
 R = 973.42'
 T = 457.00'
 L = 854.53'
 E = 101.94'
 e = 5.6%
 T.R. = N/A
 S.E. RUN = 5.92' & 11.84'
 P.C. STA = 210+87.60
 N: 1,839,167.0120 E: 1,188,240.6225
 P.T. STA = 219+42.13
 N: 1,839,807.4945 E: 1,188,764.3492
 DS = 45 MPH

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

FILE NAME =	USER NAME = default	DESIGNED - JG	REVISED -
#FILE#		DRAWN - JG	REVISED -
		CHECKED - OC	REVISED -
		DATE - 03/29/2013	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES, AND BENCHMARKS

SCALE: 1"=100' SHEET NO. 4 OF 6 SHEETS STA. N/A TO STA. N/A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-059-BR	COOK	631	41
CONTRACT NO. 60J12				
ILLINOIS FED. AID PROJECT				

S:\1072-05-CADD\10680112-Sheet\10680112-sh1-cv-b04.dgn