

EXISTING I-24 CURVE DATA

MEDIAN

CURVE 6
PI STA. = 385+79.99
 Δ = 28° 34' 14" (LT)
D = 0° 59' 54"
R = 5,738.75'
T = 1,461.21'
L = 2,861.62'
E = 183.11'
S.E. = 2.9%
P.C. STA. = 371+18.78
P.T. STA. = 399+80.39

MEDIAN

CURVE 7
PI STA. = 429+96.60
 Δ = 20° 00' 49" (RT)
D = 0° 30' 08"
R = 11,408.69'
T = 2,013.05'
L = 3,985.08'
E = 176.24'
S.E. = REMOVE CROWN
P.C. STA. = 409+83.55
P.T. STA. = 449+68.63

FOR ATTAINING AND REMOVING SUPERELEVATION SEE TABLE BELOW

MEDIAN

CURVE 5
PI STA. = 484+84.38
 Δ = 23° 53' 06" (LT)
D = 0° 49' 49"
R = 6,899.88'
T = 1,459.38'
L = 2,876.37'
E = 152.65'
S.E. = 2.3%
P.C. STA. = 470+25.00
P.T. STA. = 499+01.37

MEDIAN

CURVE 4
PI STA. = 85+27.02
 Δ = 10° 32' 11" (LT)
D = 0° 49' 49"
R = 6,899.88'
T = 636.22'
L = 1,268.85'
E = 29.27'
S.E. = 2.3%
P.C. STA. = 78+90.80
P.T. STA. = 91+59.65

FOR ATTAINING AND REMOVING SUPERELEVATION SEE TABLE BELOW

EASTBOUND

CURVE 2
PI STA. = 254+98.35
 Δ = 8° 04' 38" (RT)
D = 0° 14' 56"
R = 23,011.35'
T = 1,624.70'
L = 3,244.01'
E = 57.28'
S.E. = NORMAL CROWN
P.C. STA. = 238+73.65
P.T. STA. = 271+17.67

WESTBOUND

CURVE 100
PI STA. = 657+08.77
 Δ = 12° 06' 31" (RT)
D = 0° 14' 55"
R = 23,039.64'
T = 2,443.63'
L = 4,869.06'
E = 129.23'
S.E. = NORMAL CROWN
P.C. STA. = 632+65.14
P.T. STA. = 681+34.20

FOR ATTAINING AND REMOVING SUPERELEVATION SEE TABLE BELOW

WESTBOUND

CURVE 101
PI STA. = 753+25.43
 Δ = 39° 25' 18" (RT)
D = 1° 27' 42"
R = 3,919.53'
T = 1,404.24'
L = 2,696.79'
E = 243.95'
S.E. = 4.2%
P.C. STA. = 739+21.19
P.T. STA. = 766+17.98

EASTBOUND

CURVE 3
PI STA. = 389+82.56
 Δ = 43° 27' 06" (RT)
D = 1° 30' 03"
R = 3,817.30'
T = 1,521.08'
L = 2,894.94'
E = 291.89'
S.E. = 4.2%
P.C. STA. = 374+61.48
P.T. STA. = 403+56.42

FOR ATTAINING AND REMOVING SUPERELEVATION SEE TABLE BELOW

MEDIAN

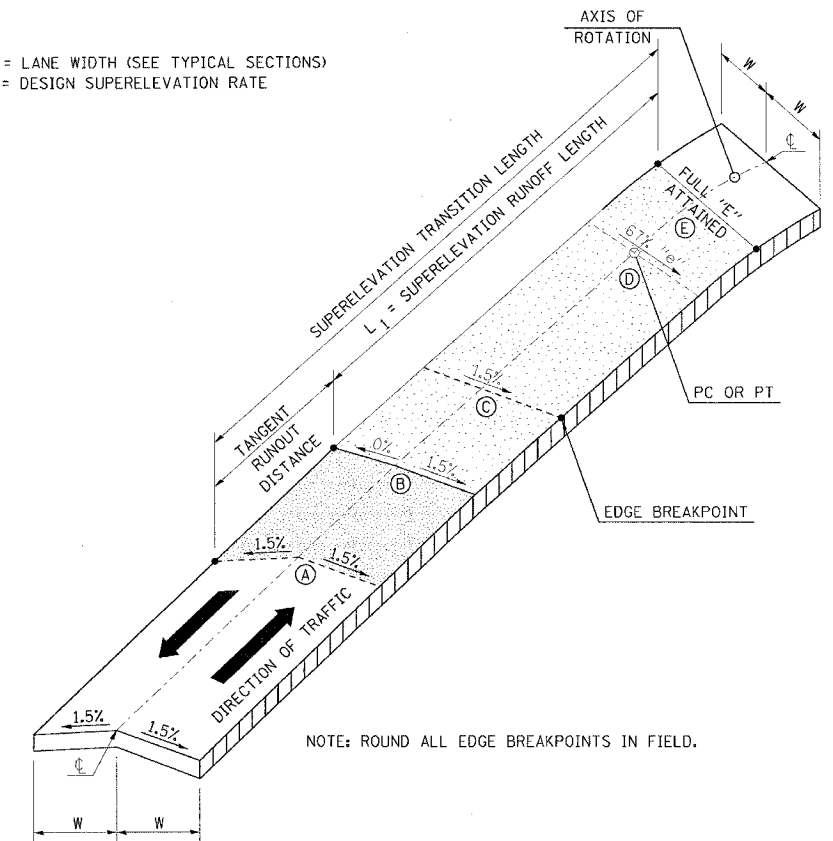
CURVE 1
PI STA. = 434+84.24
 Δ = 48° 20' 06" (LT)
D = 1° 29' 55"
R = 3,823.47'
T = 1,715.73'
L = 3,225.49'
E = 367.31'
S.E. = 4.2%
P.C. STA. = 417+68.51
P.T. STA. = 449+94.00

FOR ATTAINING AND REMOVING SUPERELEVATION SEE TABLE BELOW

ATTAINING SUPERELEVATION

ALIGNMENT	CURVE NAME FULL SUPER. RATE	STA. (A)		STA. (B)		STA. (C)		STA. (D)		STA. (E)	
		LT.	RT.	LT.	RT.	LT.	RT.	LT.	RT.	LT.	RT.
FAI 24	CURVE 6 I-24 ϕ MEDIAN PI STA. 385+79.99 (MP 14.6) S.E. = 2.9%	369+39.45		370+17.45		370+95.45		371+18.78		371+69.45	
		-1.5%	-1.5%	-1.5%	0%	-1.5%	+1.5%	-1.9%	+1.9%	-2.9%	+2.9%
	CURVE 7 I-24 ϕ MEDIAN PI STA. 429+96.60 (MP 15.4) S.E. = REMOVE CROWN	407+91.88		409+06.88		410+21.88		409+83.55		410+21.88	
		-1.5%	-1.5%	0%	-1.5%	+1.5%	-1.5%	+1.0%	-1.5%	+1.5%	-1.5%
	CURVE 5 I-24 ϕ MEDIAN PI STA. 484+84.38 (MP 16.5) S.E. = 2.3%	468+41.33		469+32.33		470+23.33		470+25.00		470+71.33	
		-1.5%	-1.5%	-1.5%	0%	-1.5%	+1.5%	-1.5%	+1.5%	-2.3%	+2.3%
	CURVE 2 I-24 ϕ EB LANES PI STA. 254+98.35 (MP 20.1) S.E. = NORMAL CROWN	NORMAL CROWN									
	CURVE 100 I-24 ϕ WB LANES PI STA. 657+08.77 (MP 20.9) S.E. = NORMAL CROWN	NORMAL CROWN									
	CURVE 101 I-24 ϕ WB LANES PI STA. 753+25.43 (MP 22.6) S.E. = 4.2%	737+47.52		738+08.52		738+69.52		739+21.19		739+77.52	
		-1.5%	-1.5%	0%	-1.5%	+1.5%	-1.5%	+2.8%	-2.8%	+4.2%	-4.2%
CURVE 3 I-24 ϕ EB LANES PI STA. 389+82.56 (MP 22.5) S.E. = 4.2%	372+87.81		373+48.81		374+09.81		374+61.48		375+17.81		
	-1.5%	-1.5%	0%	-1.5%	+1.5%	-1.5%	+2.8%	-2.8%	+4.2%	-4.2%	
CURVE 1 I-24 ϕ MEDIAN PI STA. 434+84.24 (MP 22.6) S.E. = 4.2%	415+94.84		416+55.84		417+16.84		417+68.51		418+24.84		
	-1.5%	-1.5%	-1.5%	0%	-1.5%	+1.5%	-2.8%	+2.8%	-4.2%	+4.2%	

W = LANE WIDTH (SEE TYPICAL SECTIONS)
E = DESIGN SUPERELEVATION RATE



NOTE: ROUND ALL EDGE BREAKPOINTS IN FIELD.

REMOVING SUPERELEVATION

ALIGNMENT	CURVE NAME FULL SUPER. RATE	STA. (E)		STA. (D)		STA. (C)		STA. (B)		STA. (A)	
		LT.	RT.	LT.	RT.	LT.	RT.	LT.	RT.	LT.	RT.
FAI 24	CURVE 6 I-24 ϕ MEDIAN PI STA. 385+79.99 (MP 14.6) S.E. = 2.9%	399+29.72		399+80.39		400+03.72		400+81.72		401+59.72	
		-2.9%	+2.9%	-1.9%	+1.9%	-1.5%	+1.5%	-1.5%	0%	-1.5%	-1.5%
	CURVE 7 I-24 ϕ MEDIAN PI STA. 429+96.60 (MP 15.4) S.E. = REMOVE CROWN	449+30.30		449+68.63		449+30.30		450+45.30		451+60.30	
		+1.5%	-1.5%	+1.0%	-1.5%	+1.5%	-1.5%	0%	-1.5%	-1.5%	-1.5%
	CURVE 4 I-24 ϕ MEDIAN PI STA. 85+27.02 (MP 16.8) S.E. = 2.3%	91+13.32		91+59.65		91+61.32		92+52.32		93+43.32	
		-2.3%	+2.3%	-1.5%	+1.5%	-1.5%	+1.5%	-1.5%	0%	-1.5%	-1.5%
	CURVE 2 I-24 ϕ EB LANES PI STA. 254+98.35 (MP 20.1) S.E. = NORMAL CROWN	NORMAL CROWN									
	CURVE 100 I-24 ϕ WB LANES PI STA. 657+08.77 (MP 20.9) S.E. = NORMAL CROWN	NORMAL CROWN									
	CURVE 101 I-24 ϕ WB LANES PI STA. 753+25.43 (MP 22.6) S.E. = 4.2%	765+61.65		766+17.98		766+69.65		767+30.65		767+91.65	
		+4.2%	-4.2%	+2.8%	-2.8%	+1.5%	-1.5%	0%	-1.5%	-1.5%	-1.5%
CURVE 3 I-24 ϕ EB LANES PI STA. 389+82.56 (MP 22.5) S.E. = 4.2%	403+00.09		403+56.42		404+08.09		404+69.09		405+30.09		
	+4.2%	-4.2%	+2.8%	-2.8%	+1.5%	-1.5%	0%	-1.5%	-1.5%	-1.5%	
CURVE 1 I-24 ϕ MEDIAN PI STA. 434+84.24 (MP 22.6) S.E. = 4.2%	449+37.67		449+94.00		450+45.67		451+06.67		451+67.67		
	-4.2%	+4.2%	-2.8%	+2.8%	-1.5%	+1.5%	-1.5%	0%	-1.5%	-1.5%	

EXISTING F.A.I.-24 CURVE DATA

P. A. L. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24	*	JOHNSON	150	56

STA. TO STA.

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

* (44-5,6)RS, BSMART FY04-3
98836