SUPERELEVATION TRANSITION				
SIMPLE CURVE CONFIGURATION	2-0E, 202-9E, F	-IGURE 202-10	E, FIGURE 301-3B AND FIGURE 301-3C	_
Designer name:	DCL			
Curve name:	PCLE90-6			UEET
What emax table would you like to use?	0.060 MAX		CLEAR S	
	60	mph	(design speed, mph)	
Dc =	1.75		(degree of curve of alignment)	
Radius =	3,274.04	feet	(radius of curve of alingment)	
e <sub>d</sub> =	= 0.041		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve to	the left or right (in the direction of stationing)?	
	right	Will the depen	dent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.188	feet of paveme	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.375	feet of paveme	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	YES	Divided roadw	ay?	
P.C. ROTATION DATA				
	1.60%	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	36	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	60			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	327.6720	feet	(Superelevation Runoff Length to flat)	
L(t) =	127.8720	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	0.00%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NO	C, etc.)
Width of rotating pavement @ PT =	36	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	60		/ H / . /	
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	327.6720	feet	(Superelevation Runoff Length to flat)	
L(t) =	127.0720	leel	(Tangent Ruhout Length)	
	404-20 2050		Descent of super to ophicus at D.C.2	CC C70/
P.C. Station	194+30.2030	la i	Percent of super to achieve at P.C.?	00.07%
	NO	15	ne roadway rotating past hat at the F.C. transition?	NO
P.T. Station	200+37.9213		Percent of super to achieve at P.T.?	72.10%
Is there a spiral for this curve?	NO	ls	the roadway rotating past flat at the P.T. transition?	NO

P.C. SUPER INFORMATION				<b>Curve Informat</b>	ion		
	Station	Super Rate		I	Full super length =	400.98 ft.	
normal crown =	193+45.7098	-0.016			Slope at PC =	-0.0273	
					P.C. L(r) =	199.80	
				G-v	alue of P.C. $L(r) =$	222	
full super =	195+45.5098	-0.041					
					Slope at PT =	-0.0296	
P.T. SUPER INFORMATION					P.T. L(r) =	327.67	
	Station	Super Rate		G-\	alue of P.T. L(r) =	222	
full super =	199+46,4912	-0.041					
normal crown =	201+46,2912	-0.016					
		0.010			Curve length is	10.03	times design spee
				1	time at full super =	4.56	seconds
cross slope rotating to =	202+74.1632	0.000					
SHOULDER INFORMATION FOR CURVI	=						
		Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve	194+57,5978	-0.0300	-0.0400		195+37.5178	-0.0400	-0.0400
	195+45.5098	-0.0410	-0.0290		195+45.5098	-0.0410	-0.0410
P.T. part of curve	199+46.4912	-0.0410	-0.0290		199+46.4912	-0.0410	-0.0410
	200+34.4032	-0.0300	-0.0400		199+54.4832	-0.0400	-0.0400
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		
		·			•		

MPLE CURVE CONFIGURATION	202,202 32,11						
Designer name:	DCL						
Curve name: What emm table would you like to use?	PCLE90-7					SHEET	
V =	60	mph	(design speed,	mph)			
Dc =	4.25		(degree of curve	e of alignment)			
Radius =	1,348.45	feet	(radius of curve	of alingment)			
e <sub>d</sub> :	= 0.060		(design superel	evation rate)			
normal crown (e <sub>NC</sub> ) =	0.016	1- 4h 4-	4h - 1-44 / / - /	- 411141			
	RIGHT	Will the depen	dent geopak sha	pes be to the lef	t stationing)?	eline?	
urve widening NOT required for WB-50.	0.875	feet of paveme	ent widening per	lane (for 12' lane	and WB-50 desig	n vehicle; L&E	D Fig. 301-5b)
Curve widening required for WB-62.	1.125	feet of paveme	ent widening per	lane (for 12' lane	e and WB-62 desig	n vehicle; L&E	D Fig. 301-5c)
	TES	Divided roadw	ay?				
C. ROTATION DATA							
	0.00%	From what cro	ss slope is the ro	adway being rot	ated? (i.e. 1.6% for	NC, etc.)	
Width of rotating pavement @ PC =	36	feet	(do not include	curve widening,	gore areas or entra	nce and exit I	anes)
besign speed of r o transition = b(w) =	1		(adjustment fact	tor for number of	f lanes rotated)		
% =	0.45		(maximum relati	ve gradient)	,		
G =	222	6	(maximum relati	ve slope)	- (1-4)		
L(r) =	479.5200	reet	(Superelevation	Runott Length t	o nat)		
L(t) =	121.0120	1001	(rangent Runot	ir Lengul)			
ROTATION DATA							
	1.60%	To what cross	slope is the road	way being rotate	ed? (i.e. 1.6% for N	C, etc.)	
vviath of rotating pavement @ PT = Design speed of PT transition =	24 60	reet	(ao not include )	curve widening,	gore areas or entra	nce and exit I	anes)
b(w) =	1		(adjustment fac	tor for number of	f lanes rotated)		
% =	0.45		(maximum relati	ve gradient)			
G =	222	faat	(maximum relation	ve slope)	(a flat)		
L(t) = L(t)	85.2480	feet	(Tangent Runou	it Length)	.0 11at)		
				0 /			
P.C. Station	207-04 1622						
Is there a spiral for this curve?	207+94.1632 YES	ls	the roadway rota	ting past flat at t	he P.C. transition?	NO	
What is the length of the spiral?	520.00'	10	0 . 10 .	, , , , , , , , , , , , , , , , , , ,			. 05 mm
P.T. Station Is there a spiral for this curve?	221+32.4248 YES	Is	Spiral G-value	e and correspond	ding design speed: the P.T. transition?	241 YES	; 65-mpn
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length	221+32.4248 YES 520.00' n recalculated to	Is match the g-va	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	and correspond ating past flat at t and correspond YES	ding design speed: the P.T. transition? ding design speed: New L(t) =	YES 361 138.6240	; 65-mpn ; 70-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length	221+32.4248 YES 520.00' n recalculated to	Is match the g-va	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	and correspond ating past flat at f and correspond YES	ding design speed: the P.T. transition? ding design speed: New L(t) =	YES 361 138.6240	; 65-mpn I; 70-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length	221+32.4248 YES 520.00' n recalculated to Station	Is match the g-va Super Rate	Spiral G-value the roadway rote Spiral G-value lue of the spiral?	e and correspond ating past flat at t e and correspond YES Curve Informat	ding design speed: the P.T. transition? ding design speed: New L(t) = <b>tion</b> Full super length =	YES 361 138.6240 1338.26 ft.	; 65-mpn 1; 70-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from =	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632	Is match the g-va Super Rate 0.000	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ating past flat at t e and correspond YES Curve Informat	the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = C Scient L = c.t.	YES 361 138.6240 1338.26 ft. 0.0600 520.002	; 65-mpn  ; 70-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION	221+32.4248 YES 520.00' recalculated to Station 202+74.1632	Is match the g-va Super Rate 0.000	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ting past flat at t e and correspond YES Curve Informat	the P.T. transition? ding design speed: New L(t) = Vion Full super length = Slope at PC = .C. Spiral Length = .C. Spiral Length =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from =	221+32.4248 YES 520.00'n recalculated to Station 202+74.1632	Is match the g-va Super Rate 0.000	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ting past flat at t e and correspond YES Curve Informat P G-val	the P.T. transition? ding design speed: New L(t) = New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length <b>C. SUPER INFORMATION</b> cross slope rotating from = full super =	221+32.4248 YES 520.00' recalculated to Station 202+74.1632	Is match the g-va Super Rate 0.000	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat G-val	the P.T. transition? ding design speed: New L(t) = New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super =	221+32.4248 YES 520.00' recalculated to Station 202+74.1632	ls match the g-va Super Rate 0.000	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat G-val P	the P.T. transition? ting design speed: New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = Slope at PT = .T. Spiral Length =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super =	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632 207+94.1632	Is match the g-va Super Rate 0.000 0.060 Super Rate	Spiral G-value the roadway rota Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat G-val P G-val	the P.T. transition? ding design speed: New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = Slope at PT = .T. Spiral Length = lue of P.T. Spiral =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = f. SUPER INFORMATION full super =	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632 207+94.1632 Station 221+32.4248	Is match the g-val Super Rate 0.000 0.060 Super Rate 0.060	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va	the P.T. transition? ting design speed: New L(t) = Slope at PC = I.C. Spiral Length = lue of P.C. Spiral = Slope at PT = I.T. Spiral Length = lue of P.T. Spiral = P.T. L(t) = P.T. L(t) =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62	; 65-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = f. SUPER INFORMATION full super = fiat =	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248	Is match the g-val Super Rate 0.000 0.060 Super Rate 0.060 0.000	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va	the P.T. transition? ding design speed: New L(t) = New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = I.T. Spiral Length = lue of P.T. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length =	YES 361 138.6240 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30	; co-mph
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = f. SUPER INFORMATION full super = flat =	221+32.4248 YES 520.00' n recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248	Is match the g-va Super Rate 0.000 0.060 Super Rate 0.060 0.000	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va G-va	the P.T. transition? ding design speed: New L(t) = Slope at PC = C. Spiral Length = lue of P.C. Spiral = P.T. Spiral Length = lue of P.T. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21	times design spo
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = f. SUPER INFORMATION full super = flat = normal crown =	221+32.4248 YES 520.00' nrecalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248	Is match the g-val Super Rate 0.000 0.060 Super Rate 0.060 0.000 -0.016	Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va G-va	the P.T. transition? ding design speed: New L(t) = Slope at PC = C. Spiral Length = lue of P.C. Spiral = P.T. Spiral Length = lue of P.T. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 241 138.62 361 138.62 361 22.30 15.21	times design spa
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = full super = flat = normal crown =	221+32.4248 YES 520.00' or recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248	Is match the g-va Super Rate 0.000 0.060 Super Rate 0.060 0.000 -0.016	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va G-va	the P.T. transition? ding design speed: New L(t) = Slope at PC = C. Spiral Length = Iue of P.C. Spiral = Uue of P.C. Spiral = P.T. Spiral Length = Iue of P.T. Spiral = P.T. L(t) = Curve length is time at full super =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 138.62 361 22.30 15.21	; co-mph ; 70-mph times design spe seconds
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = full super = flat = normal crown =	221+32.4248 YES 520.00' or recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248	Is match the g-va Super Rate 0.000 0.060 Super Rate 0.060 0.000 -0.016 Mainline	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at f e and correspond YES Curve Informat P G-val P G-va G-va	ting design speed: the P.T. transition? ding design speed: New L(t) = Slope at PC = C. Spiral Length = Lue of P.C. Spiral = P.T. Spiral Length = Lue of P.T. Spiral = P.T. L(t) = Curve length is time at full super =	YES 361 138.6240 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 241 0.0600 520.00 361 138.62 361 138.62 361 22.30 15.21 <b>Mainline</b>	times design spo seconds
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = fat = normal crown =	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 227+91.0488	Is match the g-val Super Rate 0.060 0.060 0.000 -0.016 Mainline Super Rate	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va	the P.T. transition? ding design speed: New L(t) = New L(t) = tion Full super length = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super =	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate	times design speseconds
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = fat = normal crown = COULDER INFORMATION FOR CURVE	221+32.4248 YES 520.00' nrecalculated to 202+74.1632 207+94.1632 207+94.1632 221+32.4248 226+52.4248 227+91.0488 227+91.0488	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral?	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-va G-va G-va	the P.T. transition? ding design speed: New L(t) = tion Full super length = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207-94 1632	YES 361 138.6240 138.6240 138.6240 138.6240 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600	times design spo seconds Right Shoulde Super Rate -0.0400 -0.0100
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length <b>C. SUPER INFORMATION</b> cross slope rotating from = full super = <b>T. SUPER INFORMATION</b> full super = fat = normal crown = <b>IOULDER INFORMATION FOR CURVE</b> 2. part of curve	221+32.4248 YES 520.00' nrecalculated to 202+74.1632 207+94.1632 21+32.4248 221+32.4248 222+52.4248 227+91.0488 227+91.0488 Station 206+20.8299 207+94.1632	Is match the g-val Super Rate 0.060 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G-va G-va	the P.T. transition? ding design speed: New L(t) = New L(t) = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = .T. Spiral Length = lue of P.T. L(t) = .T. Curve length is time at full super = Station 205+34.1632 207+94.1632	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600	times design spo seconds Right Shoulder Super Rate -0.0400 -0.0100
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION Cross slope rotating from = full super = full super = flat = normal crown = COULDER INFORMATION FOR CURVE C. part of curve	221+32.4248 YES 520.00' nrecalculated to Station 202+74.1632 207+94.1632 21+32.4248 221+32.4248 227+91.0488 Station 206+20.8299 207+94.1632 221+32.4248 222+132.4248	Is match the g-val Super Rate 0.000 0.060 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G-va G-va	the P.T. transition? ding design speed: New L(t) = New L(t) = Slope at PC = C. Spiral Length = Use of P.C. Spiral = P.T. L(t) = V.T. Spiral Length = Iue of P.T. Spiral = value of P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207+94.1632	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0600	times design spo seconds Right Shoulde Super Rate -0.0400 -0.0100
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = fat = normal crown = CULDER INFORMATION FOR CURVE 2. part of curve	221+32.4248 YES 520.00' nrecalculated to Station 202+74.1632 207+94.1632 21+32.4248 221+32.4248 227+91.0488 227+91.0488 Station 206+20.8299 207+94.1632 207+94.1632	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0600 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0400	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G-	ding design speed: the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = C. Spiral Length = lue of P.C. Spiral = P.T. Spiral Length = lue of P.T. Spiral = P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207+94.1632 221+32.4248 223+92.4248	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0300	times design spo seconds Right Shoulde Super Rate -0.0400 -0.0100 -0.0400
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION Cross slope rotating from = full super = full super = fat = normal crown = COLLDER INFORMATION FOR CURVE C. part of curve	221+32.4248 YES 520.00' n recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248 227+91.0488 Station 206+20.8299 207+94.1632 221+32.4248 223+05.7582	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0600 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0400	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G-val G-val	ding design speed: the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Curve longth s time at full super = Station 205+34.1632 207+94.1632 221+32.4248 223+92.4248	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0300	times design spi seconds Right Shoulde Super Rate -0.0400 -0.0100 -0.0100 -0.0400
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION Cross slope rotating from = full super = full super = fat = normal crown = COLLDER INFORMATION FOR CURVE C. part of curve T. part of curve	221+32.4248 YES 520.00' n recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248 227+91.0488 Station 206+20.8299 207+94.1632 221+32.4248 223+05.7582	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0600 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0400 -0.0400	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G-val G-	ding design speed: the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207+94.1632 221+32.4248 223+92.4248 Bight Shoulder	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0300	times design spo seconds Right Shoulde Super Rate -0.0400 -0.0100 -0.0100 -0.0400
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION Cross slope rotating from = full super = full super = full super = flat = normal crown = COULDER INFORMATION FOR CURVE C. part of curve T. part of curve	221+32.4248 YES 520.00' n recalculated to Station 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248 226+52.4248 226+52.4248 227+91.0488 226+52.4248 227+91.0488	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0400 -0.0400 -0.0400 -0.0400	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G- G- Val	ding design speed: the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super = <b>Station</b> 205+34.1632 207+94.1632 221+32.4248 223+92.4248 Right Shoulder Super Rate	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0300	times design spe seconds Right Shoulder Super Rate -0.0400 -0.0100 -0.0100
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION Cross slope rotating from = full super = full super = full super = fat = normal crown = COULDER INFORMATION FOR CURVE C. part of curve f. part of curve ATION INFORMATION	221+32.4248 YES 520.00' recalculated to 202+74.1632 207+94.1632 Station 221+32.4248 226+52.4248 226+52.4248 227+91.0488 226+52.4248 227+91.0488 220+92.8299 207+94.1632 221+32.4248 223+05.7582	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0600 0.0400	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0600 -0.0400 % of e(d) Achieved 26.67%	e and correspond ting past flat at 1 e and correspond YES Curve Informat P G-val P G-val G- Val Curve Informat Curve Informat P G-val Curve Informat Curve Informat P G-val Curve Informat Curve Informat P G-val Curve Informat Curve Informat P G-val Curve Informat Curve Infor	ding design speed: the P.T. transition? ding design speed: New L(t) = Full super length = Slope at PC = .C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Value of P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207+94.1632 221+32.4248 223+92.4248 Right Shoulder Super Rate -0.0400	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 22.30 15.21 Mainline Super Rate 0.0300 0.0600 0.0300	times design spe seconds Right Shoulder Super Rate -0.0400 -0.0100 -0.0100
P.T. Station Is there a spiral for this curve? What is the length of the spiral? Do you want the tangent runout length C. SUPER INFORMATION cross slope rotating from = full super = full super = full super = full super = fat = normal crown = COULDER INFORMATION FOR CURVE 2. part of curve ATION INFORMATION	221+32.4248 YES 520.00' or recalculated to 202+74.1632 207+94.1632 207+94.1632 221+32.4248 222+52.4248 222+91.0488 222+91.0488 206+20.8299 207+94.1632 221+32.4248 223+05.7582 223+05.7582	Is match the g-val Super Rate 0.000 0.060 0.000 -0.016 Mainline Super Rate 0.0400 0.0600 0.0400 0.0600	Spiral G-value Spiral G-value Spiral G-value lue of the spiral? Left Shoulder Super Rate -0.0400 -0.0600 -0.0600 -0.0400 % of e(d) Achieved 26.67%	e and correspond ting past flat at f e and correspond YES Curve Informat P G-val G- G- G- Curve Informat P G-val G- Va G- G- Va G- Va G- Va G- Va G- VA G- VA G- Va G- VA G- VA G- VA G- VA G- VA G- VA G- VA G- CO VA G- VA G- VA G- CO VA G- VA G- VA CO VA G- CO VA G- CO CO CO CO CO CO CO CO CO CO CO CO CO	ding design speed: the P.T. transition? ding design speed: New L(t) = Slope at PC = I.C. Spiral Length = lue of P.C. Spiral = P.T. L(t) = Value of P.T. Spiral = P.T. L(t) = Curve length is time at full super = Station 205+34.1632 207+94.1632 221+32.4248 223+92.4248 Right Shoulder Super Rate -0.0400	YES 361 138.6240 1338.26 ft. 0.0600 520.00 241 0.0600 520.00 361 138.62 361 138.62 361 138.62 361 138.62 361 138.62 361 0.0600 0.0600 0.0300	times design spo seconds Right Shoulder Super Rate -0.0400 -0.0100 -0.0400

## CROSS SLOPE INFORMATION

	Station in	Station in P.T.
Super Rate	P.C. Area	Area
0.0160	204+12.8299	225+13.7335
0.0530	207+33.4965	221+93.0876

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CURVE CONFIGURATION	2-0E, 202-9E, F	-IGURE 202-10	E, FIGURE 301-3B AND FIGURE 301-3C	
Designer name:	DCL			
Curve name:	PCLE90-8			UEET
What emay table would you like to use?	0.060 MAX		CLEAR S	
	60	mph	(design speed mph)	
Dc =	1.00	mpn	(degree of curve of alignment)	
Radius =	5,729.58	feet	(radius of curve of alingment)	
e <sub>d</sub> =	- 0.027		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	LEFT	Is the curve to	the left or right (in the direction of stationing)?	
	RIGHT	Will the dependent	dent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.000	feet of paveme	nt widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.000	feet of paveme	nt widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	YES	Divided roadwa	ay?	
P.C. ROTATION DATA				
	1.60%	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	60		(	,
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	143.8560	feet	(Superelevation Runoff Length to flat)	
L(t) =	85.2480	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	1.60%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NC	C, etc.)
Width of rotating pavement @ PT =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	60			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	143.8560	feet	(Superelevation Runoff Length to flat)	
L(t) =	85.2480	feet	(Tangent Runout Length)	
P.C. Station	247+95.6471		Percent of super to achieve at P.C.?	<b>66.67%</b>
Is there a spiral for this curve?	NO	ls t	he roadway rotating past flat at the P.C. transition?	YES
P.T. Station	254+35.2641		Percent of super to achieve at P.T.?	59.26%
Is there a spiral for this curve?	NO	ls f	he roadway rotating past flat at the P.T. transition?	YES

P.C. SUPER INFORMATION				<b>Curve Informat</b>	ion		
	Station	Super Rate		I	Full super length =	533.06 ft.	
normal crown =	246+14.4951	-0.016			Slope at PC =	#N/A	
					P.C. L(r) =	143.86	
flat =	246+99.7431	0.000		G-v	alue of P.C. L(r) =	222	
reverse crown =	247+84.9911	0.016			P.C. L(t) =	85.25	
full super =	248+43.5991	0.027		G-v	alue of P.C. L(t) =	222	
					Slope at PT =	0.0160	
P.T. SUPER INFORMATION					P.T. L(r) =	143.86	
	Station	Super Rate		G-v	alue of P.T. L(r) =	222	
full super =	253+76.6561	0.027			P.T. L(t) =	85.25	
reverse crown =	254+35.2641	0.016		G-\	alue of P.T. L(t) =	222	
flat =	255+20.5121	0.000			Curve length is	10.66	times design spee
				1	ime at full super =	6.06	seconds
normal crown =	256+05.7601	-0.016					
SHOULDER INFORMATION FOR CURVE							
		Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve							
P.T. part of curve							
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		

SIMPLE CURVE CONFIGURATION			
Designer name:	DCL		
Curve name:	TRE90CHE-1		CLEAR SHEET
what emax table would you like to use?	0.060 MAX		
V =	60 1508.05	mph	(design speed, mph)
	3.58	ieet	(degree of curve of alignment)
	0.059		(degree of edite of alignment)
$e_d =$	0.056		(design superelevation rate)
normal crown (e <sub>NC</sub> ) =	0.010	Is the curve to	the left or right (in the direction of stationing)?
		Will the depen	ndent geopak shapes be to the left or right of the baseline?
Curve widening NOT required for WB-50.	0.646	feet of pavem	ent widening per lane (for 12' lane and WB-50 design vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.896	feet of pavem	ent widening per lane (for 12' lane and WB-62 design vehicle; L&D Fig. 301-5c)
		Divided roady	vay?
P.C. ROTATION DATA		From what or	$\frac{1}{100}$
Width of rotating payament @ BC -		From what ch	(de pet include ourse widening, gare areas or entrance and exit lance)
Design speed of PC transition =		ieet	(do not include curve widening, gore areas of entrance and exit lanes)
b(w) =	#N/A		(adjustment factor for number of lanes rotated)
% =	#N/A		(maximum relative gradient)
G =	#N/A		(maximum relative slope)
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)
L(t) =	#N/A	feet	(Tangent Runout Length)
P.T. ROTATION DATA		To what areas	a along in the reactive view reteted 2 (i.e. 1. COV for NC at a)
Width of rotating payement @ PT -		foot	(do not include curve widening, gore areas or entrance and exit lanes)
Design speed of PT transition =		ieet	(do not include curve widening, gore areas or entrance and exit lanes)
b(w) =	#N/A		(adjustment factor for number of lanes rotated)
% =	#N/A		(maximum relative gradient)
G =	#N/A		(maximum relative slope)
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)
L(t) =	#N/A	feet	(Tangent Runout Length)
P.C. Station		la.	the reactive retating past flat at the D.C. transition?
is there a spiral for this curve?		15	the roadway rotating past hat at the P.C. transition?
P.T. Station			
Is there a spiral for this curve?		Is	the roadway rotating past flat at the P.T. transition?

P.C. SUPER INFORMATION				Curve Informat	ion		
	Station	Super Rate		I	Full super length =	#N/A	
cross slope rotating from =	#N/A	0.000			Slope at PC =	#N/A	
					P.C. L(r) =	#N/A	
				G-v	alue of P.C. L(r) =	#N/A	
normal crown =	#N/A	-0.016			P.C. L(t) =	#VALUE!	
full super =	#N/A	-0.058		G-v	alue of P.C. L(t) =	#VALUE!	
					Slope at PT =	#N/A	
P.T. SUPER INFORMATION					P.T. L(r) =	#VALUE!	
	Station	Super Rate		G-\	alue of P.T. L(r) =	#VALUE!	
full super =	#N/A	-0.058			P.T. L(t) =	#N/A	
normal crown =	#N/A	-0.016		G-\	alue of P.T. L(t) =	#N/A	
					Curve length is	0.00	times design spee
				1	time at full super =	#N/A	seconds
cross slope rotating to =	#N/A	0.000					
SHOULDER INFORMATION FOR CURVI	E						
		Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve		-					
	#N/A	FALSE	FALSE		#N/A	FALSE	FALSE
P.T. part of curve	#N/A	FALSE	FALSE		#N/A	FALSE	FALSE
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CURVE CONFIGURATION	12-8E, 202-9E, F	-IGURE 202-10	JE, FIGURE 301-5B AND FIGURE 301-5C	
Designer name:	DCL			
Curve name:	TRE90CHE-2			UEET
What emax table would you like to use?	0.060 MAX		CLEAR 3	
V =	50	mph	(design speed, mph)	
Dc =	3.50		(degree of curve of alignment)	
Radius =	1,637.02	feet	(radius of curve of alingment)	
e <sub>d</sub> =	= 0.048		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	LEFT	Is the curve to	o the left or right (in the direction of stationing)?	
	left	Will the depe	ndent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.625	feet of paver	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.875	feet of paver	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	YES	Divided road	vay?	
P.C. ROTATION DATA				
	6.00%	From what cr	oss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	60			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	255.7440	feet	(Superelevation Runoff Length to flat)	
L(t) =	85.2480	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	5.50%	To what cros	s slope is the roadway being rotated? (i.e. 1.6% for N	C, etc.)
Width of rotating pavement @ PT =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	50			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.5		(maximum relative gradient)	
G =	200		(maximum relative slope)	
L(r) =	230.4000	feet	(Superelevation Runoff Length to flat)	
L(t) =	76.8000	feet	(Tangent Runout Length)	
P.C. Station	908+64.1376		Percent of super to achieve at P.C.?	100.00%
Is there a spiral for this curve?	NO	IS	the roadway rotating past flat at the P.C. transition?	no
PT Station	911+76 8849		Percent of super to achieve at P T 2	100.00%
Is there a spiral for this curve?	NO	ls	the roadway rotating past flat at the P.T. transition?	no

P.C. SUPER INFORMATION Curve Inform Super Rate Station Full super length = 312.75 ft. cross slope rotating from = 908+00.2016 Slope at PC = -0.0480 -0.060 P.C. L(r) =G-value of P.C. L(r) =63.94 222 full super = 908+64.1376 -0.048 Slope at PT = -0.0480 P.T. L(r) =G-value of P.T. L(r) = P.T. SUPER INFORMATION 33.60 Super Rate Station 200 full super = 911+76.8849 -0.048 Curve length is 6.25 times design spee time at full super = 4.26 seconds cross slope rotating to = 912+10.4849 -0.055 SHOULDER INFORMATION FOR CURVE Mainline Left Shoulder Mainline **Right Shoulder** Station Super Rate Super Rate Station Super Rate Super Rate P.C. part of curve 909+28.0736 -0.0600 -0.0600 909+28.0736 -0.0600 -0.0100 908+64.1376 -0.0480 -0.0480 908+64.1376 -0.0480 -0.0220 P.T. part of curve 911+76.8849 -0.0480 -0.0480 911+76.8849 -0.0480 -0.0220 911+43.2849 -0.0550 -0.0550 911+43.2849 -0.0550 -0.0150 STATION INFORMATION % of e(d) Left Shoulder Right Shoulder Station Super Rate Achieved Super Rate Super Rate

SUPERELEVATION TRANSITION				
SIMPLE CURVE CONFIGURATION	)2-6E, 202-9E, F	-IGURE 202-10	E, FIGURE 301-3B AND FIGURE 301-3C	
Designer name:	DCL			
Curve name:	TRE90CHE-3			исст
What emax table would you like to use?	0.060 MAX		OLLAR S	
V =	45	mph	(design speed, mph)	
Dc =	6.00		(degree of curve of alignment)	
Radius =	954.93	feet	(radius of curve of alingment)	
e <sub>d</sub> =	= 0.055		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	LEFT	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depend	dent geopak shapes be to the left or right of the base	line?
Curve widening required for WB-50.	1.000	feet of paveme	nt widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening required for WB-62.	1.250	feet of paveme	int widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	TES	Divided roadw	ay ?	
.C. ROTATION DATA				
	4.80%	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	50			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.5		(maximum relative gradient)	
G =	200		(maximum relative slope)	
L(r) =	264.0000	feet	(Superelevation Runoff Length to flat)	
L(t) =	76.8000	feet	(Tangent Runout Length)	
.T. ROTATION DATA				
	1.60%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NC	C, etc.)
Width of rotating pavement @ PT =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	45			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.54		(maximum relative gradient)	
G =	185	6	(maximum relative slope)	
L(r) =	244.2000	feet	(Superelevation Runoff Length to flat)	
L(t) =	71.0400	leel	(Tangent Kunout Length)	
P.C. Station	011+76 99/0		Porcent of super to achieve at $P \cap 2$	97 27%
F.C. Station	911+70.0049 NO	le t	he ready way rotating past flat at the P.C. transition?	01.21%
	NO	15 1	ne roadway rotaung past nat at the F.C. transition:	10
P.T. Station	915+02.0688		Percent of super to achieve at P.T.?	66.67%
Is there a spiral for this curve?	NO	ls t	he roadway rotating past flat at the P.T. transition?	no

Is there a spiral for this curve?	NO
-----------------------------------	----

Percent of super to achieve at P.1.?	66.67%
roadway rotating past flat at the P.T. transition?	no

P.C. SUPER INFORMATION				Curve Informat	ion		
	Station	Super Rate		-	-ull super length =	210.18 ft.	
cross slope rotating from =	911+76.8849	-0.048			Slope at PC =	-0.0480	
					P.C. L(r) =	33.60	
				G-v	alue of P.C. L(r) =	200	
full supor –	012+10 4840	-0.055					
Tui super –	512+10.4045	-0.035			Slope at PT -	-0.0367	
						173 16	
F.I. SUPER INFORMATION	Station	Supor Pato		G	F.I.L(I) =	195	
6.11				6-1	alue of P.1. L(I) =	165	
full super =	914+20.6688	-0.055					
					Currie length is	7.00	times design anas
					time at full super -	7.23	umes design spee
	045.02.0200	0.016			ime at fuil super =	3.10	seconds
normai crown =	915+93.0200	-0.016					
SHOULDER INFORMATION FOR CURVI	E						
		Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve	911+76.8849	-0.0480	-0.0480		911+76.8849	-0.0480	-0.0220
	912+10.4849	-0.0550	-0.0550		912+10.4849	-0.0550	-0.0150
P.T. part of curve	914+20.6688	-0.0550	-0.0550		914+20.6688	-0.0550	-0.0150
	914+87.2688	-0.0400	-0.0400		915+31.6688	-0.0300	-0.0400
STATION INFORMATION							
STATION INFORMATION			% of o(d)	Loft Shouldor	Dight Shouldor		
	Station	Super Rate	Achieved	Super Rate	Super Rate		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CUPVE CONFIGURATION	12-0E, 202-9E, F	-IGURE 202-10	E, FIGURE 301-5B AND FIGURE 301-5C	
Designer name:	DCL			
Curve name:	TRE90CHE-4			UEET
What emax table would you like to use?	0.060 MAX		CLEAR S	
V =	40	mph	(design speed mph)	
Dc =	2.00		(degree of curve of alignment)	
Radius =	2,864.79	feet	(radius of curve of alingment)	
e <sub>d</sub> =	= 0.025		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depen	dent geopak shapes be to the left or right of the base	eline?
Curve widening NOT required for WB-50.	0.250	feet of pavem	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.500	feet of pavem	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	yes	Divided roadw	ray?	
P.C. ROTATION DATA				
	1.60%	From what cro	oss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	45			,
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.54		(maximum relative gradient)	
G =	185		(maximum relative slope)	
L(r) =	111.0000	feet	(Superelevation Runoff Length to flat)	
L(t) =	71.0400	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	1.04%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NO	C, etc.)
Width of rotating pavement @ PT =	24	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	40			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.58		(maximum relative gradient)	
G =	172		(maximum relative slope)	
L(r) =	103.2000	feet	(Superelevation Runoff Length to flat)	
L(t) =	66.0480	feet	(Tangent Runout Length)	
P.C. Station	917+23.3849		Percent of super to achieve at P.C.?	52.72%
Is there a spiral for this curve?	no	Is	the roadway rotating past flat at the P.C. transition?	yes
P.T. Station	919+80.9440		Percent of super to achieve at P.T.?	66.67%
Is there a spiral for this curve?	no	ls	the roadway rotating past flat at the P.T. transition?	no

P.C. SUPER INFORMATION				Curve Informat	ion		
	Station	Super Rate		F	Full super length =	170.68 ft.	
normal crown =	915+93.8288	-0.016			Slope at PC =	0.0207	
					P.C. L(r) =	111.00	
flat =	916+64.8688	0.000		G-v	alue of P.C. L(r) =	185	
reverse crown =	917+35.9088	0.016			P.C. L(t) =	71.04	
full super =	917+75.8688	0.025		G-v	alue of P.C. L(t) =	185	
					Slope at PT =	0.0167	
P.T. SUPER INFORMATION					P.T. L(r) =	60.27	
	Station	Super Rate		G-v	alue of P.T. L(r) =	172	
full super =	919+46.5440	0.025					
normal crown =	919+83.6960	0.016					
					Curve length is	6.44	times design spee
				t	ime at full super =	2.91	seconds
cross slope rotating to =	920+06.8128	0.010					
SHOULDER INFORMATION FOR CURVE							
		Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve							
P.T. part of curve							
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CUPVE CONFIGURATION	J2-6E, 2U2-9E, F	IGURE 202-10	E, FIGURE 301-56 AND FIGURE 301-5C	
Designer name:	DCL			
Curve name:	TRE90SUP-1			UEET
What emax table would you like to use?	0.060 MAX		CLEAR 3	
V =	60	mph	(design speed, mph)	
Dc =	2.75		(degree of curve of alignment)	
Radius =	2,083.48	feet	(radius of curve of alingment)	
e <sub>d</sub> :	= 0.053		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	left	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depen	dent geopak shapes be to the left or right of the base	eline?
Curve widening NOT required for WB-50.	0.438	feet of paveme	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.688	feet of paveme	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	yes	Divided roadw	ay?	
P.C. ROTATION DATA				
	6.00%	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC = Design speed of PC transition =		feet	(do not include curve widening, gore areas or entran	nce and exit lanes)
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	#N/A		(maximum relative gradient)	
G =	#N/A		(maximum relative slope)	
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)	
L(t) =	#N/A	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	1.60%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for No	C, etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entrain	nce and exit lanes)
Design speed of PT transition =	60			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	188.2560	feet	(Superelevation Runoff Length to flat)	
L(t) =	56.8320	feet	(Tangent Runout Length)	
P.C. Station	1000+00-0000		Percent of super to achieve at $P \cap 2$	113 21%
F.C. Station	1000+00.0000	le t	he ready over rotating past flat at the D.C. transition?	113.21%
	10	15 1	ne roauway rotating past hat at the P.C. transition?	10
P.T. Station	1002+59.0802		Percent of super to achieve at P.T.?	70.00%
Is there a spiral for this curve?	no	ls t	the roadway rotating past flat at the P.T. transition?	yes

Is the roadway rotating past flat at the P.T. transition? yes

P.C. SUPER INFORMATION				Curve Informat	ion		
	Station	Super Rate		F	Full super length =	#N/A	
cross slope rotating from =	#N/A	-0.060			Slope at PC =	#N/A	
					P.C. L(r) =	#N/A	
				G-v	alue of P.C. L(r) =	#N/A	
full super =	#N/A	-0.053					
					Slope at PT =	-0.0371	
P.T. SUPER INFORMATION					P.T. L(r) =	188.26	
	Station	Super Rate		G-v	alue of P.T. L(r) =	222	
full super =	1002+02.6034	-0.053			P.T.L(t) =	56.83	
reverse crown =	1003+34.0274	-0.016		G-\	alue of P T I (t) =	222	
flat =	1003+90.8594	0.000			Curve length is	4.32	times design spee
nat –	1000100.0004	0.000		t	time at full super =	#N/A	seconds
normal crown =	1004+47,6914	0.016			and at fail oup of -		oooonao
		0.010					
SHOULDER INFORMATION FOR CURVE	-						
SHOULDER INFORMATION FOR CORVI	<b>-</b>	Mainlina				Mainlina	
	Otation	Mainine	Len Shoulder		01-11-11	wainine	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve	#N/A	-0.0600	-0.0600		#N/A	-0.0600	-0.0100
	#N/A	-0.0530	-0.0530		#N/A	-0.0530	-0.0170
P.T. part of curve	1002+02.6034	-0.0530	-0.0530		1002+02.6034	-0.0530	-0.0170
	1002+48.7794	-0.0400	-0.0400		1002+84.2994	-0.0300	-0.0400
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CUPVE CONFIGURATION	J2-6E, 2U2-9E, F	IGURE 202-10	E, FIGURE 301-36 AND FIGURE 301-3C	_
Designer name:	DCL			
Curve name:	TRE90SUP-2			UEET
What emay table would you like to use?	0.060 MAX		CLEAR S	
	50	mph	(design speed mph)	
Dc =	2.50	mpn	(degree of curve of alignment)	
Radius =	2.291.83	feet	(radius of curve of alingment)	
e <sub>d</sub> -	= 0.040		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depen	dent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.375	feet of pavem	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.625	feet of pavem	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	yes	Divided roadw	ay?	
	1.60%	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC. etc.)
Width of rotating pavement @ PC =	16	feet	(do not include curve widening, gore areas or entrar	ice and exit lanes)
Design speed of PC transition =	60			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.45		(maximum relative gradient)	
G =	222		(maximum relative slope)	
L(r) =	142.0800	feet	(Superelevation Runoff Length to flat)	
L(t) =	56.8320	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	1.60%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NO	C. etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entrar	ice and exit lanes)
Design speed of PT transition =	50		(	,
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.5		(maximum relative gradient)	
G =	200		(maximum relative slope)	
L(r) =	128.0000	feet	(Superelevation Runoff Length to flat)	
L(t) =				
	51.2000	feet	(Tangent Runout Length)	
	51.2000	feet	(Tangent Runout Length)	
P.C. Station	51.2000 1006+54.0174	feet	(Tangent Runout Length) Percent of super to achieve at P.C.?	70.00%
P.C. Station Is there a spiral for this curve?	51.2000 1006+54.0174 no	feet	Percent of super to achieve at P.C.? the roadway rotating past flat at the P.C. transition?	70.00% no
P.C. Station Is there a spiral for this curve?	51.2000 1006+54.0174 no	feet	(Tangent Runout Length) Percent of super to achieve at P.C.? the roadway rotating past flat at the P.C. transition?	70.00% no
P.C. Station Is there a spiral for this curve? P.T. Station	51.2000 1006+54.0174 no 1008+72.4401	feet	(Tangent Runout Length) Percent of super to achieve at P.C.? the roadway rotating past flat at the P.C. transition? Percent of super to achieve at P.T.?	70.00% no 66.67%

P.C. SUPER INFORMATION				<b>Curve Informat</b>	ion		
	Station	Super Rate		I	Full super length =	133.13 ft.	
normal crown =	1006+11.3934	0.016			Slope at PC =	0.0280	
					P.C. L(r) =	85.25	
				G-v	alue of P.C. L(r) =	222	
<i></i>							
full super =	1006+96.6414	0.040				a aaa <del>a</del>	
					Slope at PT =	0.0267	
P.I. SUPER INFORMATION	Otatian	Comer Date		0.	P.I.L(r) =	128.00	
<i>.</i>	Station	Super Rate		G-1	alue of P.T.L(r) =	200	
tull super =	1008+29.7734	0.040		_	P.I. L(t) =	51.20	
reverse crown =	1009+06.5734	0.016		G-\	alue of P.T. L(t) =	200	
flat =	1009+57.7734	0.000			Curve length is	4.37	times design spee
				1	time at full super =	1.82	seconds
normal crown =	1010+08.9734	-0.016					
SHOULDER INFORMATION FOR CURV	F						
	-	Mainline	Left Shoulder			Mainline	Right Shoulder
	Station	Super Rate	Super Rate		Station	Super Rate	Super Rate
P.C. part of curve	1006+61,1214	0.0300	-0.0400		1006+96.6414	0.0400	-0.0400
i loi partoi barto	1006+96.6414	0.0400	-0.0300			0.0100	0.0.00
P.T. part of curve	1008+29.7734	0.0400	-0.0300				
	1008+61.7734	0.0300	-0.0400		1008+29.7734	0.0400	-0.0400
STATION INFORMATION							
			% of e(d)	Left Shoulder	Right Shoulder		
	Station	Super Rate	Achieved	Super Rate	Super Rate		
	1006+54.7099	0.0282	70.49%	-0.0400	-0.0400		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CUPVE CONFIGURATION	J2-6E, 2U2-9E, F	IGURE 202-10	, FIGURE 301-5B AND FIGURE 301-5C	
Designer name:	DCL			
Curve name:	TRE90SUP-3			UCCT
What emax table would you like to use?	0.060 MAX		CLEAR S	
V =	45	mph	(design speed, mph)	
Dc =	4.00		(degree of curve of alignment)	
Radius =	1,432.39	feet	(radius of curve of alingment)	
e <sub>d</sub> :	= 0.046		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	left	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depend	dent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.500	feet of paveme	nt widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.750	feet of paveme	nt widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	yes	Divided roadwa	ay?	
P.C. ROTATION DATA				
	1.60%	From what cros	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	16	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	50			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.5		(maximum relative gradient)	
G =	200		(maximum relative slope)	
L(r) =	147.2000	feet	(Superelevation Runoff Length to flat)	
L(t) =	51.2000	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	<b>1.60%</b>	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NC	C, etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	45			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.54		(maximum relative gradient)	
G =	185		(maximum relative slope)	
L(r) =	136.1600	feet	(Superelevation Runotf Length to flat)	
L(t) =	47.3000	leet	(Tangent Ruhout Length)	
	4044 - 72 0225		Descent of ourses to achieve at D.C.2	CC C70/
P.C. Station	1011+73.9325	la fi	Percent of super to achieve at P.C.?	00.07%
is there a spiral for this curve?	no	is u	The readway relating past hat at the P.C. transition?	no
P.T. Station	1015+50.2525		Percent of super to achieve at P.T.?	66.67%
Is there a spiral for this curve?	no	ls t	he roadway rotating past flat at the P.T. transition?	yes

						_
P.C. SUPER INFORMATION				Curve Information		
	Station	Super Rate		Full super length =	281.87 ft.	
normal crown =	1011+26.9991	-0.016		Slope at PC =	-0.0307	
				P.C. L(r) =	96.00	
				G-value of P.C. L(r) =	200	
full super =	1012+22.9991	-0.046				
				Slope at PT =	-0.0307	
P.T. SUPER INFORMATION				P.T. L(r) =	136.16	
	Station	Super Rate		G-value of P.T. L(r) =	185	
full super =	1015+04.8658	-0.046		P.T.L(t) =	47.36	
reverse crown =	1015+93.6658	-0.016		G-value of P T I (t) =	185	
flat =	1016+41 0258	0.000		Curve length is	8 36	times design spee
nat –	1010141.0200	0.000		time at full super =	4 27	seconds
normal crown =	1016+88 3858	0.016			4.27	00001100
normal orown =	1010100.0000	0.010				
SHOULDED INFORMATION FOR CURVE	-					
SHOULDER INFORMATION FOR CORVI	2	Mainlina			Mainlina	Diabt Chaulden
	Otatian	Mainine	Left Shoulder	Otation	wainine	Right Shoulder
	Station	Super Rate	Super Rate	Station	Super Rate	Super Rate
P.C. part of curve	1012+03.7991	-0.0400	-0.0400	1011+71.7991	-0.0300	-0.0400
	1012+22.9991	-0.0460	-0.0460	1012+22.9991	-0.0460	-0.0240
P.T. part of curve	1015+04.8658	-0.0460	-0.0460	1015+04.8658	-0.0460	-0.0240
	1015+22.6258	-0.0400	-0.0400	1015+52.2258	-0.0300	-0.0400

% of e(d)

Achieved

# STATION INFORMATION

Station Super Rate

Left Shoulder Right Shoulder Super Rate Super Rate

SUPERELEVATION TRANSITION	LENGTH			
ODOT L&D VOL. 1 - FIGURES 202-7E, 20	)2-8E, 202-9E, F	IGURE 202-10	E, FIGURE 301-5B AND FIGURE 301-5C	_
Designer name:	DCI			
Curve name:	TRE90SUP-4			
What emay table would you like to use?	0.060 MAX		CLEAR S	
V -	45	mph	(design speed mph)	
Dc =	1.50	mpri	(degree of curve of alignment)	
Radius =	3,819.72	feet	(radius of curve of alingment)	
e <sub>d</sub> :	= 0.024		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the depen	dent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.125	feet of paveme	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.250	feet of paveme	ent widening per lane (for 12' lane and WB-62 design	vehicle; L&D Fig. 301-5c)
	yes	Divided roadw	ay?	
P.C. ROTATION DATA				
	<b>1.60%</b>	From what cro	ss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	16	feet	(do not include curve widening, gore areas or entrar	ice and exit lanes)
Design speed of PC transition =	45			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.54		(maximum relative gradient)	
G =	185	6	(maximum relative slope)	
L(f) =	71.0400	reet		
L(t) =	47.3600	teet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	1.60%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for $\overline{\text{NC}}$	C, etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entrar	ice and exit lanes)
Design speed of PT transition =	45		( ) , , , , , , , , , , , , , , , , , ,	
D(W) =	1		(adjustment factor for number of lanes rotated)	
% =	0.54		(maximum relative gradient)	
G =	185	f	(maximum relative slope)	
L(r) =	/1.0400	feet	(Superelevation Runoff Length to flat)	
L(I) =	47.3000	leel		
B.C. Station	1010.76 2102		Percent of super to achieve at $P \in C_2$	66 679/
F.C. Station	1019+70.2193		the ready over rotating past flat at the B.C. transition?	00.07 %
	10	15	The roadway rotating past hat at the F.C. transition:	no
P.T. Station	1024+45.1246		Percent of super to achieve at P.T.?	66.67%
Is there a spiral for this curve?	no	ls	the roadway rotating past flat at the P.T. transition?	no

Fercent of super to achieve at F.1.? 00.0	1 70
e roadway rotating past flat at the P.T. transition? no	)

P.C. SUPER INFORMATION				Curve Informat	ion		
St	ation	Super Rate		1	Full super length =	421.55 ft.	
normal crown = 1019-	F76.2193	0.016			Slope at PC =	0.0160	
					P.C. L(r) =	23.68	
				G-v	alue of P.C. L(r) =	185	
					()		
full super = 1019-	99.8993	0.024					
					Slope at PT =	#N/A	
P.T. SUPER INFORMATION					$PT \downarrow (r) =$	23.68	
St	ation	Super Rate		G-\	value of P T L (r) =	185	
full super 4024	24 4446			0-1		105	
	1.4440	0.024					
					Ourse law oth is	40.40	
					Curve length is	10.42	times design spee
		0.040		1	ime at full super =	6.39	seconds
normal crown = 1024	45.1246	0.016					
SHOULDER INFORMATION FOR CURVE							
		Mainline	Left Shoulder			Mainline	Right Shoulder
St	ation	Super Rate	Super Rate		Station	Super Rate	Super Rate
B.C. part of gunya	ation	Super Nate	Super Nate		otation	Super Nate	Super Nate
P.C. part of curve							
P.I. part of curve							
STATION INFORMATION							
STATION INFORMATION			0/ - ( - ( -1)				
	ation	Sumar Data	% or e(d)	Left Shoulder	Right Shoulder		
St	ation	Super Rate	Achieved	Super Rate	Super Rate		

SUPERELEVATION TRANSITION	LENGTH	IGURE 202	10E FIGURE 301-5B AND FIGURE 301-5C	
SIMPLE CURVE CONFIGURATION	2 02, 202 02, 1	ICONE 202		
Designer name:	DCL			
Curve name:	TRE90E30-1			HEET
What emax table would you like to use?	0.060 MAX		CLEAR OF	
V =	45	mph	(design speed, mph)	
Dc =	2.00	•	(degree of curve of alignment)	
Radius =	2,864.79	feet	(radius of curve of alingment)	
e <sub>d</sub> =	= 0.030		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve	e to the left or right (in the direction of stationing)?	
	left	Will the de	pendent geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.250	feet of pav	ement widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.500	Divided rec	ement widening per lane (for 12 lane and WB-62 design	venicie; L&D Fig. 301-5c)
	yes	Divided 10a	auway ?	
P.C. ROTATION DATA				
	1.60%	From what	cross slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	16	feet	(do not include curve widening, gore areas or entran	ce and exit lanes)
Design speed of PC transition =	45			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% = G =	0.54		(maximum relative gradient)	
(r) =	88 8000	feet	(Superelevation Runoff Length to flat)	
_(;) = L(t) =	47.3600	feet	(Tangent Runout Length)	
-0			(	
P.T. ROTATION DATA				
	1.60%	To what cr	oss slope is the roadway being rotated? (i.e. 1.6% for NC	C, etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entran	ice and exit lanes)
besign speed of PT transition =	<b>4</b> 5 1		(adjustment factor for number of lanes rotated)	
S(W) = %=	0.54		(maximum relative gradient)	
	185		(maximum relative slope)	
U(r) =	88.8000	feet	(Superelevation Runoff Length to flat)	
L(t) =	47.3600	feet	(Tangent Runout Length)	
P.C. Station	1200+00.0000		Percent of super to achieve at P.C.?	<b>66.67%</b>
Is there a spiral for this curve?	no		Is the roadway rotating past flat at the P.C. transition?	no
P.T. Station	1203+13.6844		Percent of super to achieve at P.T.?	<b>66.67%</b>

1.1.014001	1203113.0044	
Is there a spiral for this curve?	no	Is the roadw

Fercent of super to achieve at F.T.?	00.07
roadway rotating past flat at the P.T. transition?	no

P.C. SUPER INFORMATION				Curve Informat	ion		
normal crown =	Station	Super Rate		I	Full super length = Slope at PC =	254.48 ft. 0.0200	
normal oronna		0.010			P.C. L(r) =	41.44	
				G-v	alue of P.C. L(r) =	185	
full super =	1200+29.6000	0.030					
					Slope at PT =	0.0200	
P.I. SUPER INFORMATION	Station	Super Rate		G-\	value of P.T. L(r) =	41.44	
full super =	1202+84.0844	0.030					
					Curve length is	6.97	times design spee
				t	time at full super =	3.86	seconds
normal crown =	1203+25.5244	0.016					
SHOULDER INFORMATION FOR CURV	E						
	Station	Mainline Super Pate	Left Shoulder		Station	Mainline Supor Pate	Right Shoulder
P.C. part of curve	1200+29.6000	0.0300	-0.0400		Station	Super Kale	Super Kale
P.T. part of curve							
	1202+84.0844	0.0300	-0.0400				
STATION INFORMATION							
	Station	Super Rate	% of e(d) Achieved	Left Shoulder Super Rate	Right Shoulder Super Rate		
		- april fund		euper nuie	euper nuite		

SUPERELEVATION TRANSITION	LENGTH			
SIMPLE CURVE CONFIGURATION	JZ-6E, 202-9E, F	1GURE 202-10	E, FIGURE 301-3B AND FIGURE 301-3C	
Designer name:	DCL			
Curve name:	TRE90E30-2			HEET
What emax table would you like to use?	0.060 MAX		OLLAR O	
V =	25	mph	(design speed, mph)	
Dc =	28.00		(degree of curve of alignment)	
Radius =	204.63	feet	(radius of curve of alingment)	
e <sub>d</sub> :	= 0.057		(design superelevation rate)	
normal crown (e <sub>NC</sub> ) =	0.016			
	right	Is the curve to	the left or right (in the direction of stationing)?	
	left	Will the deper	ident geopak shapes be to the left or right of the base	line?
Curve widening NOT required for WB-50.	0.000	feet of pavem	ent widening per lane (for 12' lane and WB-50 design	vehicle; L&D Fig. 301-5b)
Curve widening NOT required for WB-62.	0.000	Divided roadw	ent widening per lane (for 12 lane and WB-62 design	venicie; L&D Fig. 301-50)
	yes	Divided Ioadw	ay :	
P.C. ROTATION DATA				
	1.60%	From what cro	oss slope is the roadway being rotated? (i.e. 1.6% for	NC, etc.)
Width of rotating pavement @ PC =	16	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PC transition =	30			
b(w) =	1		(adjustment factor for number of lanes rotated)	
% =	0.66		(maximum relative gradient)	
G =	152		(maximum relative slope)	
L(r) =	138.6240	feet	(Superelevation Runoff Length to flat)	
L(t) =	38.9120	feet	(Tangent Runout Length)	
P.T. ROTATION DATA				
	0.39%	To what cross	slope is the roadway being rotated? (i.e. 1.6% for NC	C, etc.)
Width of rotating pavement @ PT =	16	feet	(do not include curve widening, gore areas or entrar	nce and exit lanes)
Design speed of PT transition =	25			
D(W) =	1		(adjustment factor for number of lanes rotated)	
% =	0.7		(maximum relative gradient)	
G =	143	6	(maximum relative slope)	
L(r) =	130.4160	feet	(Superelevation Runoff Length to flat)	
L(I) =	30.0000	leel		
P.C. Station	1206+68 4536		Percent of super to achieve at P.C.2	66 67%
Is there a spiral for this curve?	no	ls	the roadway rotating past flat at the P.C. transition?	no
P.T. Station	1209+23.7981		Percent of super to achieve at P.T.?	66.67%
Is there a spiral for this curve?	no	ls	the roadway rotating past flat at the P.T. transition?	yes

						_
P.C. SUPER INFORMATION				Curve Information		
	Station	Super Rate		Full super length =	165.66 ft.	
normal crown =	1206+14.9496	0.016		Slope at PC =	0.0380	
				P.C. L(r) =	99.71	
				G-value of P.C. L(r) =	152	
full super =	1207+14.6616	0.057				
				Slope at PT =	0.0380	
P.T. SUPER INFORMATION				P.T. L(r) =	130.42	
	Station	Super Rate		G-value of P.T. L(r) =	143	
full super =	1208+80.3261	0.057		P.T. L(t) =	8.92	
reverse crown =	1209+74.1341	0.016		G-value of P.T. L(t) =	143	
flat =	1210+10.7421	0.000		Curve length is	10.21	times design spee
				time at full super =	4.52	seconds
cross slope rotating to =	1210+19.6653	-0.004				
SHOULDER INFORMATION FOR CURVI						
		Mainline	Left Shoulder		Mainline	Right Shoulder
	Station	Super Rate	Super Rate	Station	Super Rate	Super Rate
P.C. part of curve	1206+48.9976	0.0300	-0.0400	1206+73.3176	0.0400	-0.0400
	1207+14.6616	0.0570	-0.0130	<mark>1207+14.6616</mark>	0.0570	-0.0570

% of e(d)

Achieved

### 1208+80.3261 1209+42.1021 P.T. part of curve 0.0570 -0.0130 0.0300 -0.0400

## STATION INFORMATION

Station Super Rate Left Shoulder Right Shoulder Super Rate

Super Rate

1208+80.3261 1209+19.2221

0.0570

0.0400

-0.0570

-0.0400

#### SUPERELEVATION TRANSITION LENGTH ODOT L&D VOL. 1 - FIGURES 202-7E, 202-8E, 202-9E, FIGURE 202-10E, FIGURE 301-5B AND FIGURE 301-5C SIMPLE CURVE CONFIGURATION DCL Designer name: Curve name: TRCHEE90-1 CLEAR SHEET What e<sub>max</sub> table would you like to use? 0.060 MAX (design speed, mph) V = 40 mph (degree of curve of alignment) 1.00 Dc = 5 729 58 (radius of curve of alingment) Radius = feet 0.016 (design superelevation rate) e., = normal crown (e<sub>NC</sub>) = Is the curve to the left or right (in the direction of stationing)? right Will the dependent geopak shapes be to the left or right of the baseline? Curve widening NOT required for WB-50. 0.000 feet of pavement widening per lane (for 12' lane and WB-50 design vehicle; L&D Fig. 301-5b) Curve widening NOT required for WB-62. feet of pavement widening per lane (for 12' lane and WB-62 design vehicle; L&D Fig. 301-5c) 0.000 Divided roadway? P.C. ROTATION DATA From what cross slope is the roadway being rotated? (i.e. 1.6% for NC, etc.) Width of rotating pavement @ PC = (do not include curve widening, gore areas or entrance and exit lanes) feet Design speed of PC transition = b(w) = #N/A (adjustment factor for number of lanes rotated) % = #N/A (maximum relative gradient) G = #N/A (maximum relative slope) #N/A (Superelevation Runoff Length to flat) L(r) = feet L(t) = #N/A (Tangent Runout Length) feet P.T. ROTATION DATA To what cross slope is the roadway being rotated? (i.e. 1.6% for NC, etc.) Width of rotating pavement @ PT = feet (do not include curve widening, gore areas or entrance and exit lanes) Design speed of PT transition = (adjustment factor for number of lanes rotated) #N/A b(w) =% = #N/A (maximum relative gradient) G = #N/A (maximum relative slope) #N/A (Superelevation Runoff Length to flat) L(r) = feet #N/A (Tangent Runout Length) L(t) = feet P.C. Station Is the roadway rotating past flat at the P.C. transition? Is there a spiral for this curve? P.T. Station

Is there a spiral for this curve?

Is the roadway rotating past flat at the P.T. transition?



SUPERELEVATION TRANSITION	LENGTH	IGURE 202	-10E FIGURE 301-5B AND FIGURE 301-5C
SIMPLE CURVE CONFIGURATION	2 02, 202 02, 1	TOORE 202	
Designer name:	DCL		
Curve name:	TRCHEE90-2		CLEAR SHEET
What emax table would you like to use?	0.060 MAX		OLEAR SHEET
V =	50	mph	(design speed, mph)
Dc =	0.75		(degree of curve of alignment)
Radius =	7,639.44	feet	(radius of curve of alingment)
e <sub>d</sub> =	= 0.016		(design superelevation rate)
normal crown (e <sub>NC</sub> ) =			
	left	Is the curv Will the de	e to the left or right (in the direction of stationing)? pendent geopak shapes be to the left or right of the baseline?
CHECK CURVE WIDENING BY HAND.	#N/A	feet of pav	ement widening per lane (for 12' lane and WB-50 design vehicle; L&D Fig. 301-5b)
CHECK CURVE WIDENING BY HAND.	#N/A	feet of pav	ement widening per lane (for 12' lane and WB-62 design vehicle; L&D Fig. 301-5c)
		Divided for	uunuj.
P.C. ROTATION DATA			
		From what	t cross slope is the roadway being rotated? (i.e. 1.6% for NC, etc.)
Width of rotating pavement @ PC = Design speed of PC transition =		feet	(do not include curve widening, gore areas or entrance and exit lanes)
b(w) =	#N/A		(adjustment factor for number of lanes rotated)
%=	#N/A		(maximum relative gradient)
G =	#N/A		(maximum relative slope)
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)
L(t) =	#N/A	feet	(Tangent Runout Length)
P.T. ROTATION DATA			
		To what cr	oss slope is the roadway being rotated? (i.e. 1.6% for NC, etc.)
Width of rotating pavement @ PT = Design speed of PT transition =		feet	(do not include curve widening, gore areas or entrance and exit lanes)
b(w) =	#N/A		(adjustment factor for number of lanes rotated)
% =	#N/A		(maximum relative gradient)
G =	#N/A		(maximum relative slope)
L(r) = L(t) =	#N/A #N/A	feet feet	(Superelevation Runoff Length to flat) (Tangent Runout Length)
P.C. Station			
Is there a spiral for this curve?			Is the roadway rotating past flat at the P.C. transition?
DT Station			
F.I. Station			Is the roadway rotating past flat at the P.T. transition?
			to the reading retaining past hat at the ran transition:



SUPERELEVATION TRANSITION			
ODOT L&D VOL 1 - FIGURES 202-7E 20	2-8E 202-9E F	IGURE 202-10	E FIGURE 301-5B AND FIGURE 301-5C
SIMPLE CURVE CONFIGURATION	2 02, 202 02, 1	ICONE 202 10	
Designer name:	DCL		
Curve name:	TRCHEE90-3		CLEAR SHEET
What emax table would you like to use?	0.060 MAX		
V =	50	mph	(design speed, mph)
Dc =	0.75		(degree of curve of alignment)
Radius =	7,639.44	feet	(radius of curve of alingment)
e <sub>d</sub> =	= 0.016		(design superelevation rate)
normal crown (e <sub>NC</sub> ) =			
	right	Is the curve to	the left or right (in the direction of stationing)?
	45176	will the depen	Ident geopak shapes be to the left or right of the baseline?
CHECK CURVE WIDENING BY HAND.	#N/A #N/A	feet of paverni	ent widening per lane (for 12 lane and WB-50 design vehicle; L&D Fig. 301-50)
CHECK CONVE HIDENING BY HARD.	#14/A	Divided roadw	av?
P.C. ROTATION DATA			
		From what cro	oss slope is the roadway being rotated? (i.e. 1.6% for NC, etc.)
Width of rotating pavement @ PC =		feet	(do not include curve widening, gore areas or entrance and exit lanes)
Design speed of PC transition =			
D(W) =	#IN/A #N/A		(adjustment factor for number of lanes rotated)
% = G =	#N/A #N/A		(maximum relative slope)
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)
L(t) =	#N/A	feet	(Tangent Runout Length)
P.T. ROTATION DATA			
		To what cross	slope is the roadway being rotated? (i.e. 1.6% for NC, etc.)
Width of rotating pavement @ PT =		feet	(do not include curve widening, gore areas or entrance and exit lanes)
besign speed of FT transition = b(w) =	#N/A		(adjustment factor for number of lanes rotated)
%=	#N/A		(maximum relative gradient)
G =	#N/A		(maximum relative slope)
L(r) =	#N/A	feet	(Superelevation Runoff Length to flat)
L(t) =	#N/A	feet	(Tangent Runout Length)
D.C. Station			
P.C. Station		la .	the readius is retating part flat at the D.C. transition?
is there a spiral for this curve?		15	the roadway rotating past hat at the P.C. transition?
_			
P.T. Station			
is there a spiral for this curve?		Is	the roadway rotating past flat at the P.I. transition?

