

	GENERAL NOTES	CURVE DATA
1	Required additional length of L above the 600' minimum shall be added to the length of this parallel lane segment. (Example: If required L = 720', then this parallel lane segment length = 420'). See tables	△ = 3°00'00" R = 2864.79' T = 75.02'
	on Standard Drawing E 401-REBS-04.	L = 150.0'
2	Ear construction type A: 2 lines of #5 bars required (Est. weight = 255 lb). Transverse sawed and sealed joint, in line with pavement contraction joint, shall extend through ear construction. The #5 bars shall be discontinued at such joints.	E = 0.98'

3. See Standard Drawing E 401-REBS-03 for Section B-B.

See Detail B-B.









					ACCE	LERATIO	N LENG	TH, L (ft)			-
				ENTRANCE CURVE DESIGN SPEED (mph)							4	
Н	IGHWAY		STOP CONDITION	15	20	25	30	35	40	45	50	
DESIGN SPEED	SPEED	REACHED				INTIAL	SPEED (mph)				
(mph)	(m	ıph)	0	14	18	22	25	30	36	40	44	
30		23	190		_	_	_	_			_	
40 50	:	31	380	320 700	250 620	220 580	140 500			_	_	
50 60		39 47	1170	1120	1070	1000	910	360 800	590	400	170	
70	ļ	53	1590	1540	1500	1410	1330	1230	1010	830	580	
		MINIMUM	ACCELERATION L (Flat grades <u>T</u> A	ENGTHS H of 2 perc ABLE	FOR ENT: cent or <u>A</u>	RANCE TE less)	RMINALS					
ESIGN SPEED		Ratio of Design	ACCEI length of g speed of tu	ERATIO rade to irning	N LAN lengt roadwa	E .h of le ay curv	vel for e (mph)	1				
(mpn)	20	30	40	50		-	ALL SF	PEEDS				
	2.01 to 4	percent	upgrade		:	2.01 to	4 perce	nt dow	ngrade			
40	1.3	1.3	<u> </u>	_			0.7	_				
50 60	1.3	1.4	1.4	16			0.0	ю				
70	1.5	1.6	1.7	1.8			0.6					
	4.01 to 6	5 percent	upgrade			4.01 to	6 perce	nt dow	ngrade			
40	1.5	1.5					0.6	-				INDIANA DEPARTMENT OF TRANSPORTATI
50 I	1.5 1.7	1.7 1.9	2.2 2.2	22			0.5 0.5	0				
50 60	2.0	2.2	2.6	3.0			0.5					RAMP TERMINAL TABLES
50 60 70												JUNE 1996
50 60 70												CTANDADD DDAWING NO F 401 DEDC
50 60 70 1) Ratio from this	s table multipli	ed by leng	th in Table A g	jives leng	gth of s	peed char	nge lane	on grade.				STANDARD DRAWING NO. E 401-REBS-







TRANSITION DESIGN

New PCCP Thickness is Greater Than or Equal to That of 3" Thick HMA + Existing PCCP





TRANSITION DESIGN

New PCCP to Existing PCCP

 $d > d_{e_1}$ (New PCCP Thicker Than Existing)

 $d < d_{e_2}$ (New PCCP Thinner Than Existing)





- 4. See tables on Standard Drawing E 401-REBS-04.
- 5. See Standard Drawing E 401-REBS-03 for Section B-B.







NOTES:





(1) Transverse joints spaced at 8'-0" without dowels. Saw cut 1/8" wide and 1" deep.

2. See Standard Drawing series E 604-NVUF for HMA pavement sections.

LEGEND

1 4" of PCCP

2 4" Compacted Aggregate No. 53, Base

3 Earth Shoulder

4 Subgrade Treatment III, 6" of Soil Compacted to the Density and Moisture Requirement

5 Width and Cross Slope as Required

INDIANA DEPARTMENT OF TRANSPORTATION

NON-MOTORIZED VEHICLE USE FACILITY PCCP PAVEMENT SECTION

SEPTEMBER 2015

STANDARD DRAWING NO. E 502-NVUF-01

THW. PHI		
REGISTERED	/s/Elizabeth W. Phillips	03/09/15
No. \هُ آ	DESIGN STANDARDS ENGINEER	DATE
10200124		
NDI ANA	/s/ Mark A. Miller	03/09/15
STONAL EN INT	CHIEF ENGINEER	DATE





(1) Terminal joint elevation shall match elevation of adjacent PCCP and RCBA. (2) Limits of polyethylene bond breaker.



NOTES

(3) RCBA thickness.

INDIANA DEPARTMENT OF TRANSPORTATION



DESIGN STANDARDS ENGINEER

R SIZES	
	Dowel Bar Diameter
	1"
	1 <mark>1</mark> " 1 <u>1</u> "

(1) For Type D-1 contraction joint sealant options, see Standard Drawing E 503-CCPJ-06.

INDIANA DEPARTMENT OF TRANSPORTATION TYPE D-1 CONTRACTION JOINT

SEPTEMBER 2007

STANDARD DRAWING NO. E 503-CCPJ-01

L. Van /s/ Richard L. VanCleave 9/4/07 DESIGN STANDARDS ENGINEER DATE ÊR '''''' ENG /s/ Mark A. Miller 9/4/07 CHIEF HIGHWAY ENGINEER DATE

TIE-BAR SIZES FOR LONGI

Pavement Thickness, D

Less than or equal to 9"

Greater than 9"



-	TUDINAL JOINT			
	Tie-Bar Size			
	#5			
	#6			

INDIANA DEPARTMENT OF TRANSPORTATION

LONGITUDINAL JOINT

SEPTEMBER 2012

STANDARD DRAWING NO. E 503-CCPJ-02







<u>NOTES</u>

1. See Standard Drawings E 503-CCPJ-01, -02, and -03 for sawed construction joint sealant options.







TIE-BAR SIZES FOR LONGITUDINAL CONSTRUCTION JOINT				
Pavement Thickness, D	Tie–Bar Size	Spacing		
Less than 9"	#5	3'-0'' с/с		
9" through 12"	#6	3'-0'' с/с		
Greater than 12"	#6	2'-0'' c/c		
Greater than 12	or #7	3'-0" с/с		



NOTES:

PAVEMENT THICKNESS, D	LONGITUDINAL CONSTRUCTION JOINT Retrofit Tie-bars at 3'-0" c/c				
	TIE-BAR SIZE	MIN. LENGTH OF EMBEDMENT, le			
Less than or equal to 9"	#5	1'-0"			
Greater than 9"	#6	1'-0"			



RETROFIT CONSTRUCTION TIE-BAR EMBEDMENT DETAIL

PROF

1 Diameter of drilled hole (d) shall be in accordance with the chemical anchor system manufacturer's instructions.

INDIANA DEPARTMENT OF TRANSPORTATION

LONGITUDINAL CONSTRUCTION JOINT

SEPTEMBER 2011

STANDARD DRAWING NO. E 503-CCPJ-08





NOTES:

