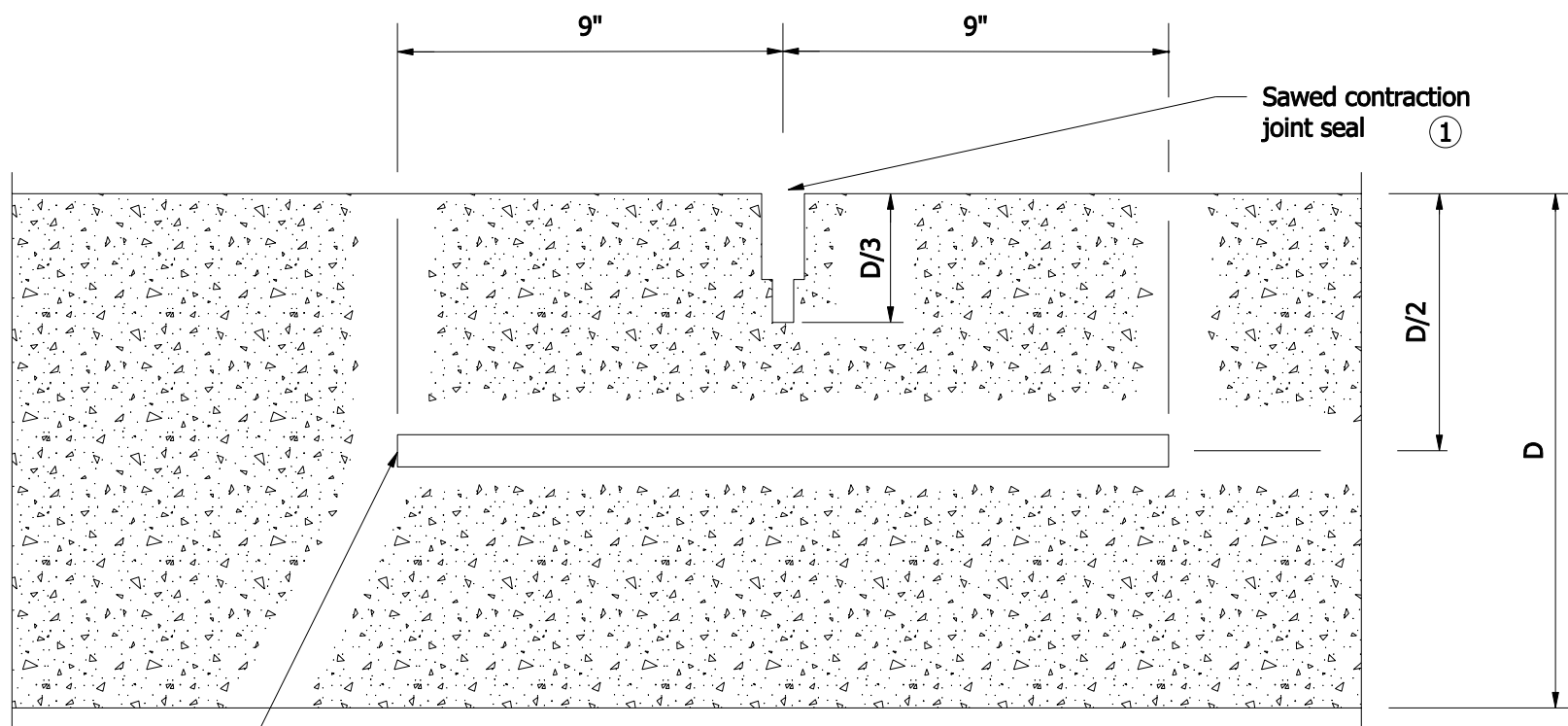


DOWEL BAR SIZES	
Pavement Thickness, D	Dowel Bar Diameter
Less than 9"	1"
9" through 12"	1 1/4"
Greater than 12"	1 1/2"



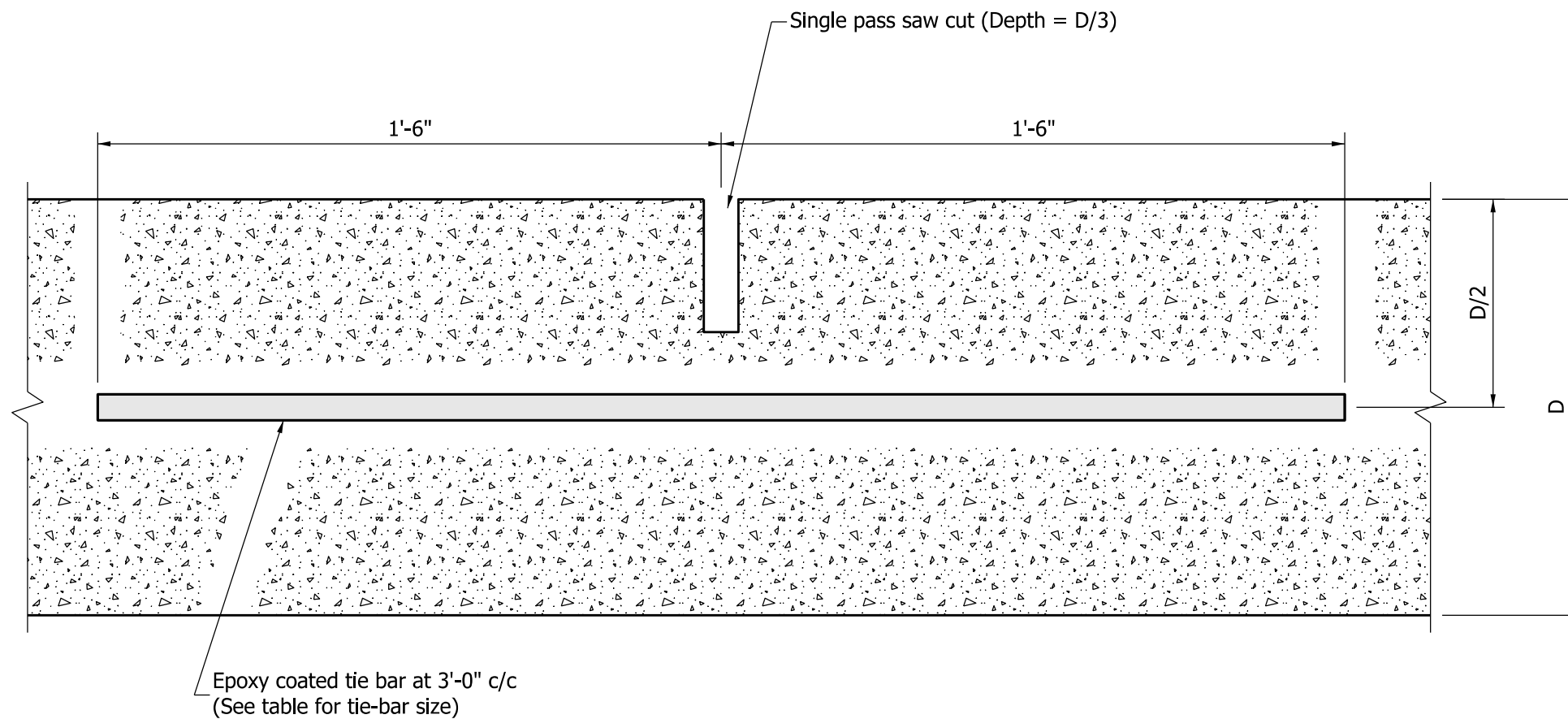
Epoxy coated dowel bars at 1'-0" c/c, at 6" min. from edge of PCCP
(See table for dowel bar diameter)

NOTES:

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

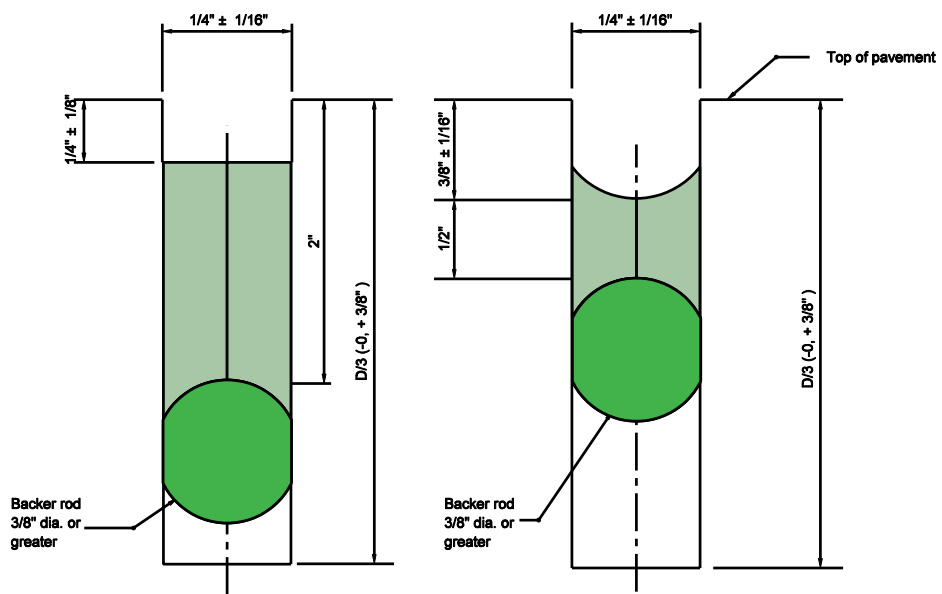
INDIANA DEPARTMENT OF TRANSPORTATION									
TYPE D-1 CONTRACTION JOINT									
SEPTEMBER 2007									
STANDARD DRAWING NO. E 503-CCPJ-01									
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; border-bottom: 1px solid black; text-align: right;"><i>/s/ Richard L. VanCleave</i></td> <td style="width: 30%; border-bottom: 1px solid black; text-align: right;">9/4/07</td> </tr> <tr> <td style="text-align: right;">DESIGN STANDARDS ENGINEER</td> <td style="text-align: right;">DATE</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: right;"><i>/s/ Mark A. Miller</i></td> <td style="border-bottom: 1px solid black; text-align: right;">9/4/07</td> </tr> <tr> <td style="text-align: right;">CHIEF HIGHWAY ENGINEER</td> <td style="text-align: right;">DATE</td> </tr> </table>	<i>/s/ Richard L. VanCleave</i>	9/4/07	DESIGN STANDARDS ENGINEER	DATE	<i>/s/ Mark A. Miller</i>	9/4/07	CHIEF HIGHWAY ENGINEER	DATE
<i>/s/ Richard L. VanCleave</i>	9/4/07								
DESIGN STANDARDS ENGINEER	DATE								
<i>/s/ Mark A. Miller</i>	9/4/07								
CHIEF HIGHWAY ENGINEER	DATE								
DESIGN STANDARDS ENGINEER									

TIE-BAR SIZES FOR LONGITUDINAL JOINT	
Pavement Thickness, D	Tie-Bar Size
Less than or equal to 9"	#5
Greater than 9"	#6



TRANSVERSE SECTION THROUGH PCCP

INDIANA DEPARTMENT OF TRANSPORTATION	
LONGITUDINAL JOINT	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E 503-CCPJ-02
	<i>/s/ Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	<i>/s/ Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE



HOT Poured JOINT SEALANT

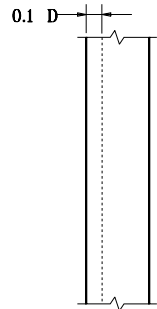
SILICONE JOINT SEALANT

SAWED LONGITUDINAL JOINT SEALANT OPTIONS

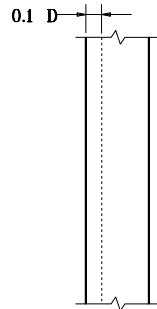
INDIANA DEPARTMENT OF TRANSPORTATION	
LONGITUDINAL JOINT	
MARCH 2004	
STANDARD DRAWING NO. E 503-CCPJ-03	
	<i>/s/ Richard L. VanCleave</i> 3-0-04 DESIGN STANDARDS ENGINEER DATE
	<i>/s/ Richard K. Smutzer</i> 3-0-04 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

NOTES

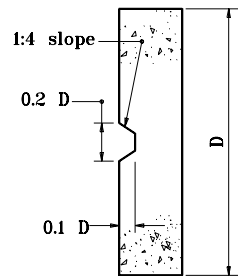
1. See Standard Drawings E 503-CCPJ-01, -02, and -03 for sawed construction joint sealant options.



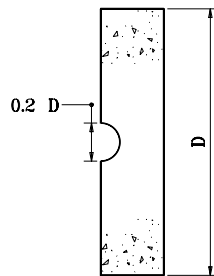
PLAN



PLAN



ELEVATION



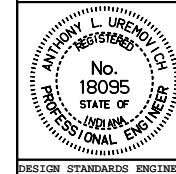
ELEVATION

INDIANA DEPARTMENT OF TRANSPORTATION

**LONGITUDINAL
KEYWAY JOINT**

SEPTEMBER 1999

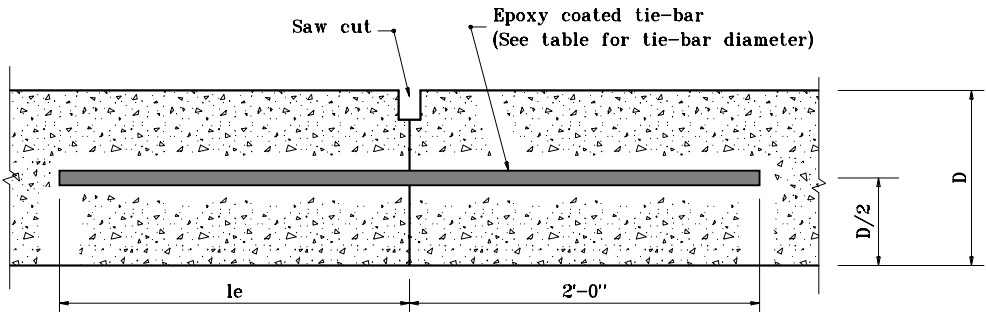
STANDARD DRAWING NO. **E 503-CCPJ-04**



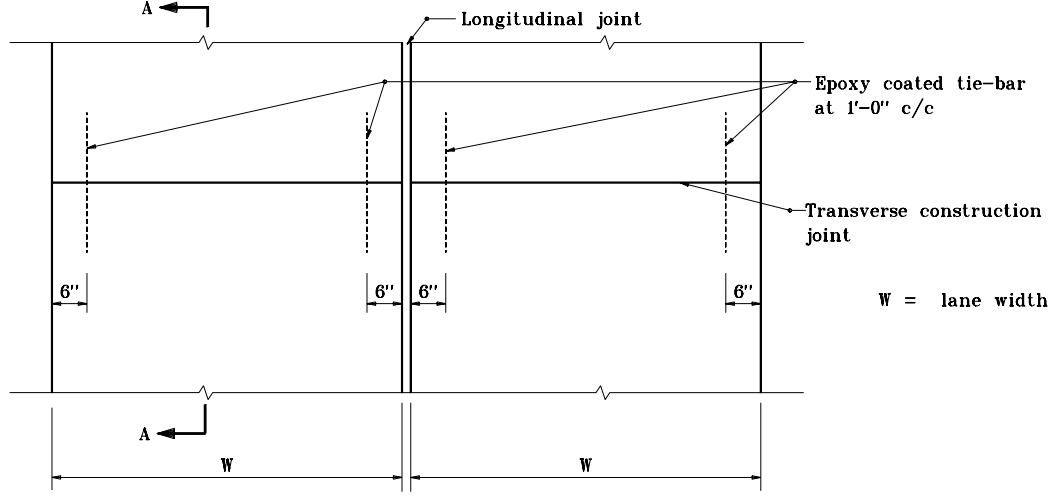
/s/ Anthony L. Urenovich 9-01-99
DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 9-01-99
CHIEF HIGHWAY ENGINEER DATE

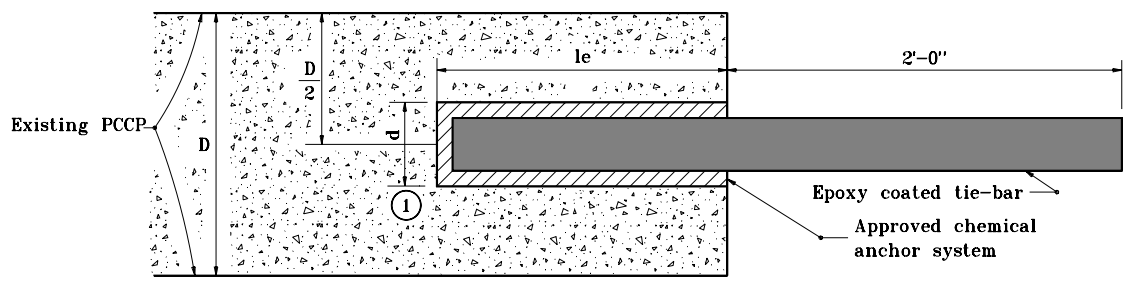
DESIGN STANDARDS ENGINEER



SECTION A-A



PLAN



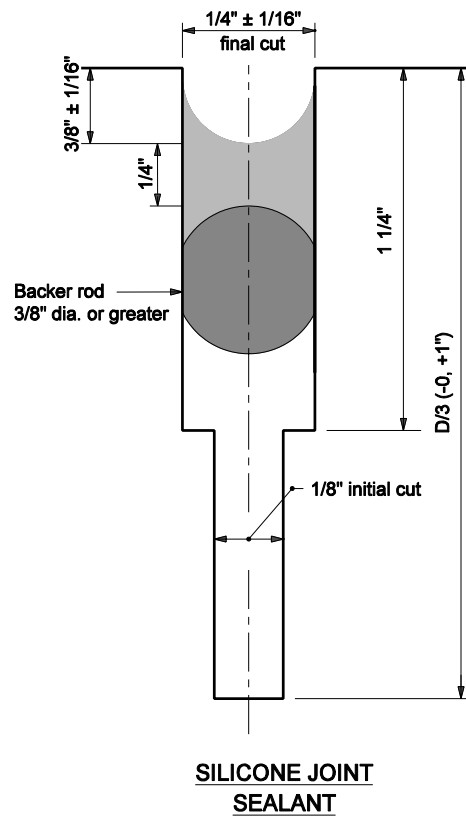
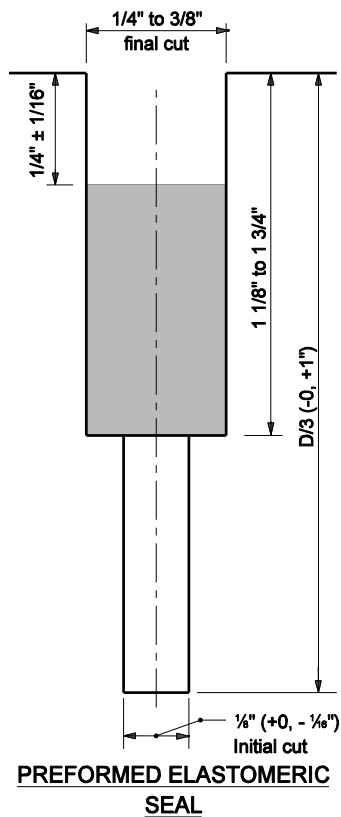
RETROFIT CONSTRUCTION TIE-BAR EMBEDMENT DETAIL

NOTES

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

TIE-BAR SIZES FOR TRANSVERSE CONSTRUCTION JOINT		
Pavement Thickness, D	Tie Bar Size	Min. le
Less than 9"	#5	1'-0"
9" through 12"	#8	1'-8"
Greater than 12"	#10	2'-0"

INDIANA DEPARTMENT OF TRANSPORTATION	
TRANSVERSE CONSTRUCTION JOINT	
SEPTEMBER 1999	
STANDARD DRAWING NO. E 503-CCPJ-05	
	/s/ Anthony L. Urenovich 9-01-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Donald W. Lucas 9-01-99 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



TYPE D-1 SAWED CONTRACTION JOINT SEALANT OPTIONS

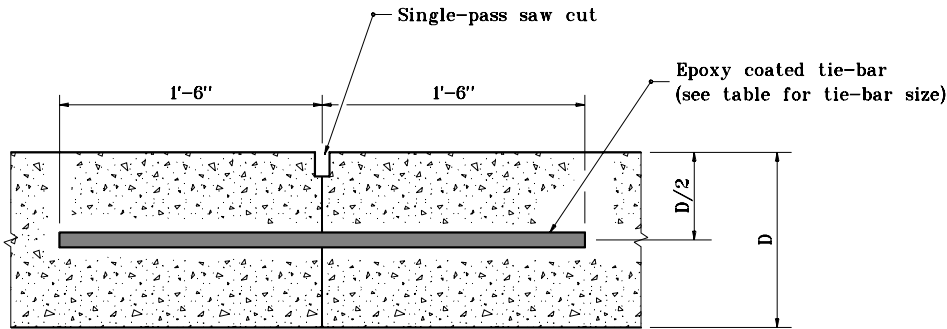
NOTES

1. Transverse joints shall be constructed perpendicular to the centerline with a maximum spacing of 18'-0" unless otherwise specified.
2. The configuration of the preformed elastomeric joint seal shall be a 9/16" to 5/8" wide seal with at least a five cell internal design. The seal height shall be 9/16" to 13/16" in uncompressed stage.
3. For transverse construction joints, the initial saw cut may be eliminated.

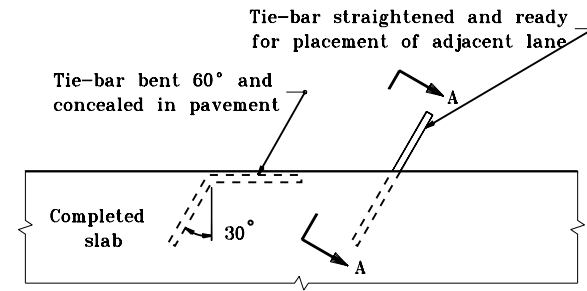
INDIANA DEPARTMENT OF TRANSPORTATION	
TRANSVERSE JOINT SEALS	
MARCH 2005	
STANDARD DRAWING NO. E 503-CCPJ-06	
	/s/ Richard L. VanCleave 3-01-05 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 3-01-05 CHIEF HIGHWAY ENGINEER DATE

TIE-BAR SIZES FOR LONGITUDINAL CONSTRUCTION JOINT

Pavement Thickness, D	Tie-Bar Size	Spacing
Less than 9"	#5	3'-0" c/c
9" through 12"	#6	3'-0" c/c
Greater than 12"	#6	2'-0" c/c
	or #7	3'-0" c/c



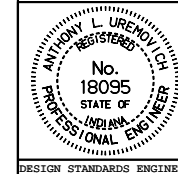
SECTION A-A



PLAN VIEW

**METHOD OF PLACING TIE-BAR
FOR LONGITUDINAL CONSTRUCTION JOINT**

INDIANA DEPARTMENT OF TRANSPORTATION
**LONGITUDINAL CONSTRUCTION
 JOINT**
 SEPTEMBER 1999
 STANDARD DRAWING NO. **E 503-CCPJ-07**



/s/ Anthony L. Urenovich 9-01-99
 DESIGN STANDARDS ENGINEER DATE

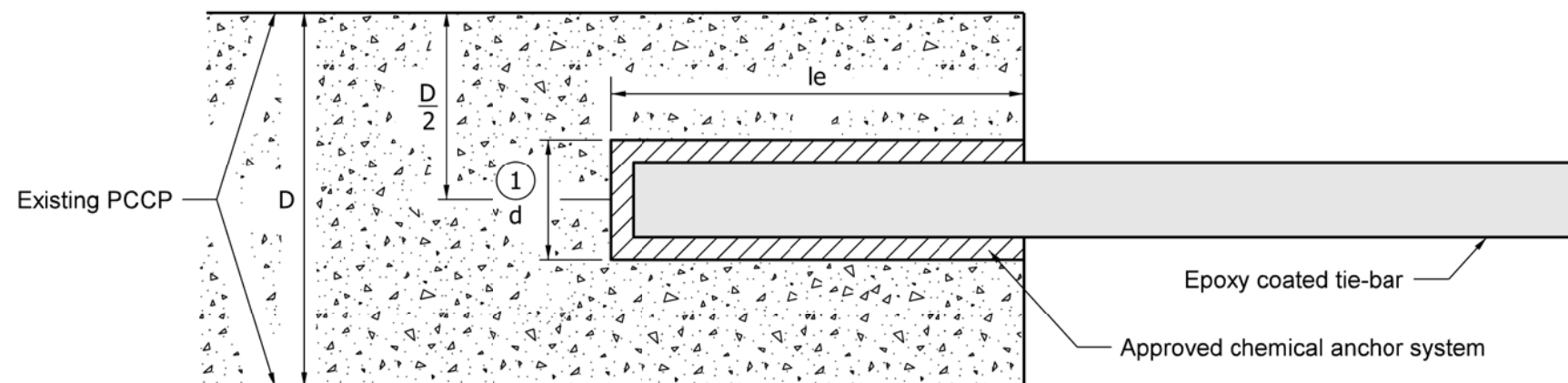
/s/ Donald W. Lucas 9-01-99
 CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER

NOTES:

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

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



RETROFIT CONSTRUCTION TIE-BAR EMBEDMENT DETAIL

INDIANA DEPARTMENT OF TRANSPORTATION	
LONGITUDINAL CONSTRUCTION JOINT	
SEPTEMBER 2011	
STANDARD DRAWING NO.	E 503-CCPJ-08
	<i>/s/ Richard L. VanCleave</i> 09/01/11 DESIGN STANDARDS ENGINEER DATE
	<i>/s/ Mark A. Miller</i> 09/01/11 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	