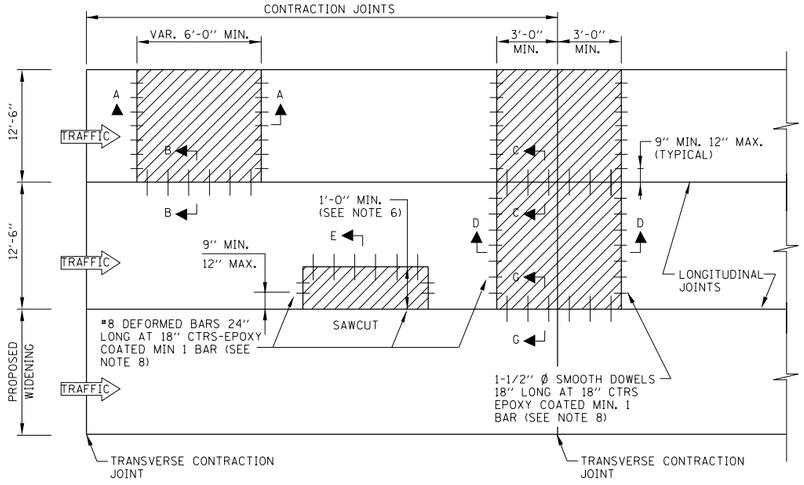
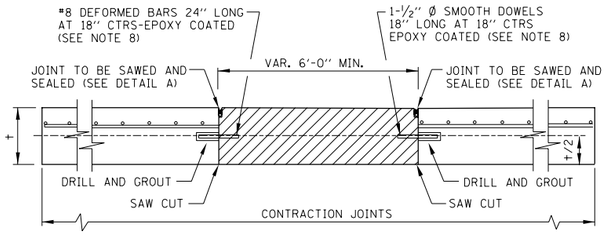
REVISIONS



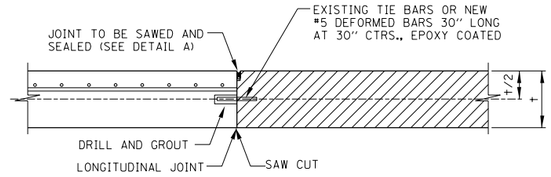
PROPOSED CONCRETE PAVEMENT FULL DEPTH REPAIR
TYPICAL ROADWAY PLAN

GENERAL NOTES:

1. THE MINIMUM OVERALL DIMENSIONS OF REPAIRS SHALL BE SIX (6) FEET BY THE LANE WIDTH EXCEPT FOR REPLACEMENT OF DETERIORATED PAVEMENT EDGES (SEE SECTION E-E). REPAIRS TERMINATING AT TRANSVERSE CONTRACTION JOINTS SHALL BE EXTENDED THREE FEET ACROSS THE JOINT. WHEN A REPAIR EXTENDS ACROSS AN EXISTING JOINT THE MINIMUM DIMENSION ON EITHER SIDE OF THE JOINT SHALL BE THREE FEET. LONGITUDINAL JOINTS IN THE REPAIR AREA SHALL BE SAWED AND SEALED (SEE DETAIL A).
2. WHENEVER A REPAIR IS CONSTRUCTED IN TWO OR MORE SEGMENTS BECAUSE OF MAINTENANCE OF TRAFFIC STAGING REQUIREMENTS, EACH SEGMENT SHALL BE CONSIDERED A SEPARATE PATCH WITH SIX (6) FOOT MINIMUM DIMENSION.
3. DRILLED AND GROUTED BARS SHALL BE EMBEDDED ½ THEIR LENGTH INTO THE EXISTING CONCRETE USING AN EPOXY GROUT AS SPECIFIED.
4. ALL TRANSVERSE CONTRACTION AND LONGITUDINAL JOINTS IN THE REPAIR AREA IN PAVEMENT NOT TO BE RESURFACED SHALL BE SAWCUT AND SEALED PER IDOT STANDARD 420001 (PAVEMENT JOINTS).
5. FOR SPOT REPAIR OF OVERLAID CONCRETE BITUMINOUS OVERLAY AND P.C.C. PAVEMENT SHALL BE SAW CUT FULL DEPTH.
6. AT LOCATIONS OF PROPOSED PAVEMENT WIDENING, EDGE DETERIORATION REQUIRING FULL DEPTH REPAIR SHALL BE REPAIRED BY REMOVAL AND REPLACEMENT OF A MINIMUM OF ONE (1) FOOT WIDE STRIP. THE NEW PAVEMENT SHALL BE CONSTRUCTED MONOLITHICALLY WITH THE PAVEMENT WIDENING. ANY SAW CUTTING AND REMOVAL WILL BE CONSIDERED CONTRACT SPECIFIED EXTRA WORK, WITH PAYMENT PER THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE PROVIDED IN THE CONTRACT.
7. WHEN PAVEMENT REPAIR PRECEDES PAVEMENT WIDENING, TIE BARS SHALL BE INSTALLED ALONG THE EXISTING PAVEMENT EDGE LINE.
8. SMOOTH DOWELS SHALL BE USED ON THE EXIT SIDE OF A FULL DEPTH PATCH AND DEFORMED BARS ON THE ENTRANCE SIDE. ALL DOWELS AND DEFORMED BARS SHALL BE EPOXY COATED.
9. TYPICAL ROADWAY PLAN FOR FULL DEPTH REPAIR IS APPLICABLE TO ALL PAVEMENTS, LANE WIDTHS AND NUMBER OF EXISTING LANES.

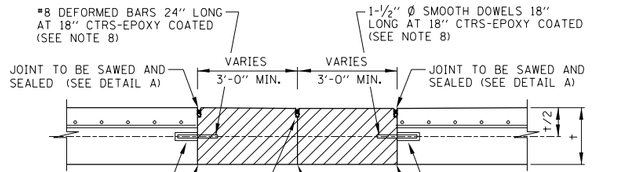


SECTION A-A
REPAIR - FULL DEPTH, ONE LANE

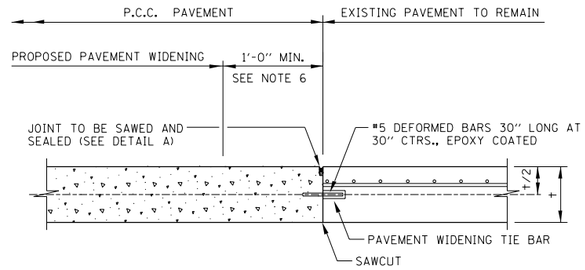


SECTION B-B
REPAIR ALONG LONGITUDINAL JOINT

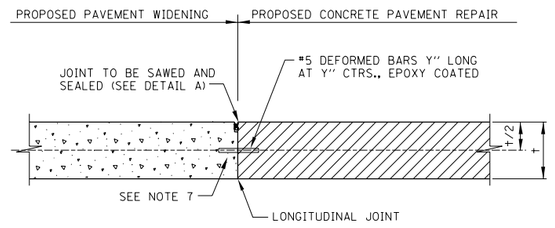
SECTION C-C
REPAIR THROUGH LONGITUDINAL JOINT



SECTION D-D
REPAIR AT CONTRACTION JOINT



SECTION E-E
REPLACEMENT OF DETERIORATED PAVEMENT EDGES ADJACENT TO PROPOSED WIDENING

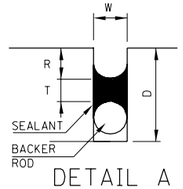


t	Y
10"	24"
12"	30"

SECTION G-G
REPAIR ADJACENT TO PROPOSED WIDENING

LEGEND

- EXISTING WELDED WIRE FABRIC (10" PAVEMENT ONLY)
- EXISTING PAVEMENT
- PROPOSED CONCRETE PAVEMENT REPAIR - FULL DEPTH
- PROPOSED CONCRETE PAVEMENT WIDENING
- t = CONCRETE PAVEMENT THICKNESS



DETAIL A
TYPICAL JOINT CROSS-SECTION

W = SEALANT WIDTH, ⅜" MIN.
T = SEALANT THICKNESS
R = SEALANT RECESS. FLUSH OR OVER BANDING NOT ALLOWED
D = JOINT CHANNEL DEPTH
— AS RECOMMENDED BY MANUFACTURER

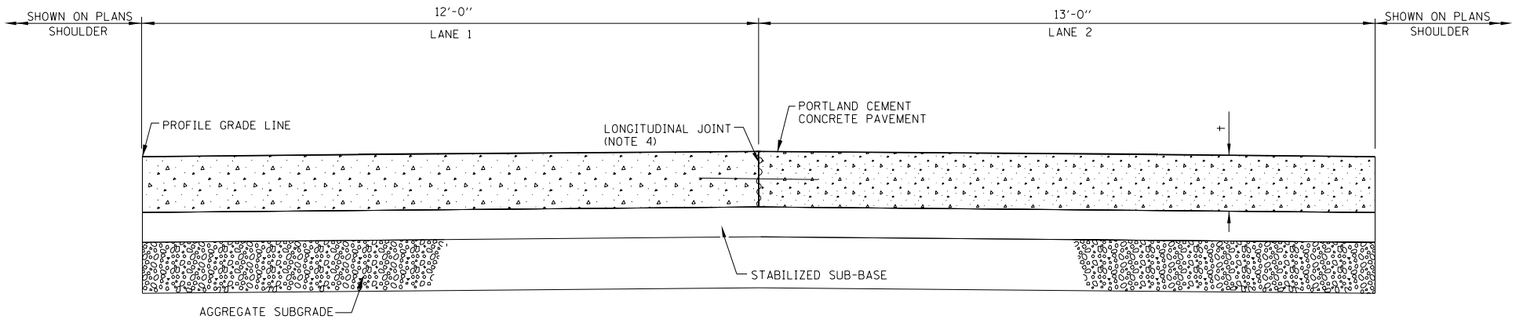
APPROVED Jeff Riley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

CONCRETE PAVEMENT REPAIR FULL DEPTH

DATE	STANDARD NO.
5-12-2005	SD 05-22A

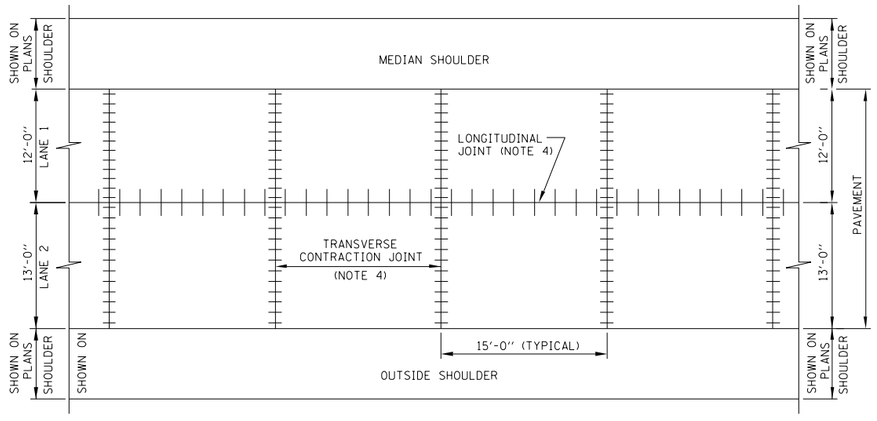
REVISIONS



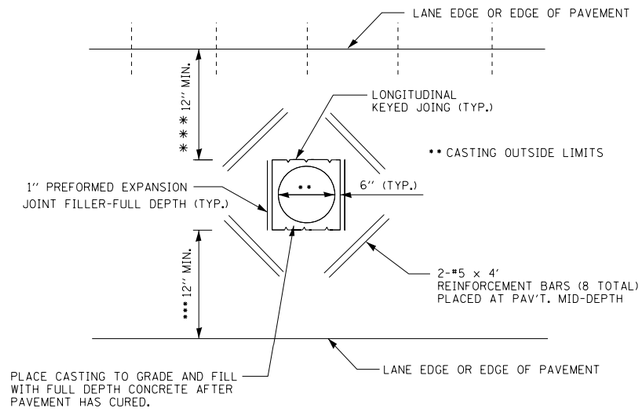
PAVEMENT CROSS - SECTION (2 LANES)

GENERAL NOTES:

1. DOWEL BASKET ASSEMBLIES, WHERE USED, SHALL BE SUPPORTED AND ANCHORED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. WHEN ADJACENT LANES ARE NOT BUILT IN ONE OPERATION, A LONGITUDINAL JOINT SHALL BE REPLACED WITH BULKHEAD LONGITUDINAL JOINT.
3. MATERIALS ARE PROJECT SPECIFIC. REFER TO PROJECT PLANS AND CONTRACT DOCUMENTS FOR DETAILS.
4. SEE STANDARD DRAWING SD XX-46 (PAVEMENT JOINTS) AND IDOT STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.



PAVEMENT PLAN
2 - LANE SECTION



*** WHEN THE 12" MINIMUM CANNOT BE ACHIEVED, THE TRANSVERSE JOINTS SHALL BE EXTENDED TO EITHER THE LONGITUDINAL JOINT OR EDGE OF PAVEMENT

DETAIL OF ADDED REINFORCEMENT
FOR PAVEMENT BLOCKS-OUTS

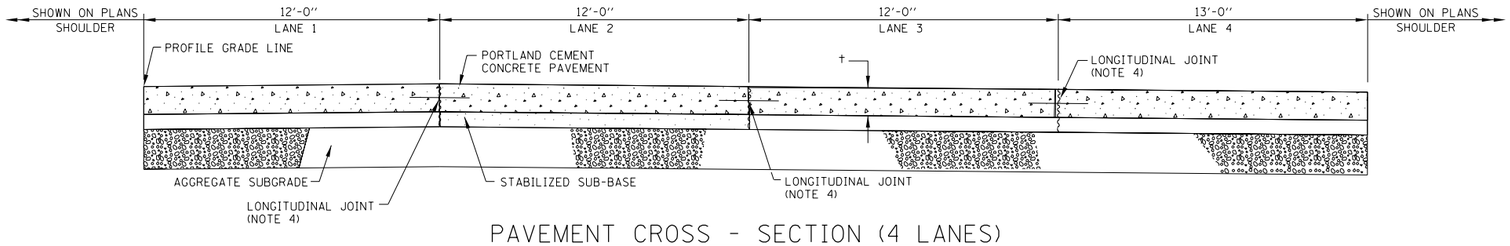
APPROVED Jeff Haley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

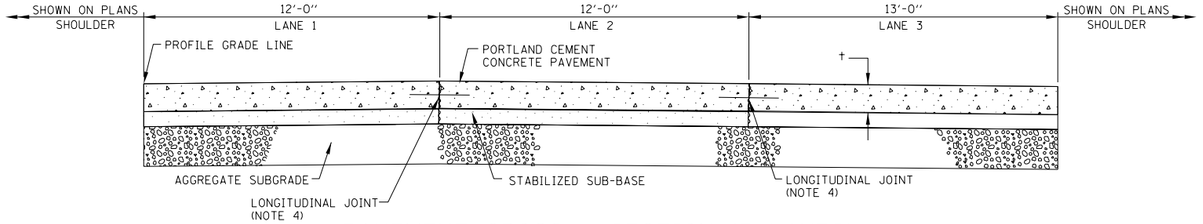
J.P.C. PAVEMENT

DATE	STANDARD NO.
5-12-2005	SD 05-31A

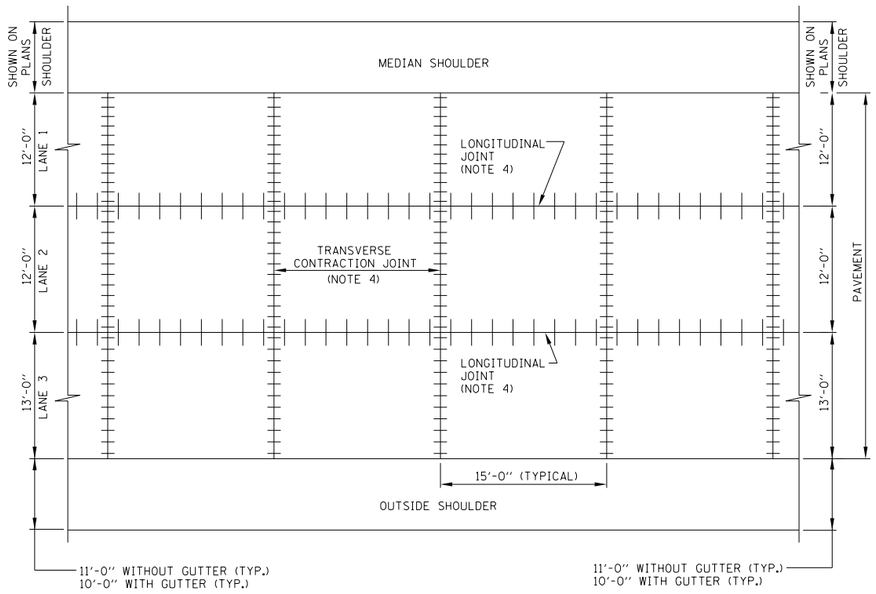
REVISIONS



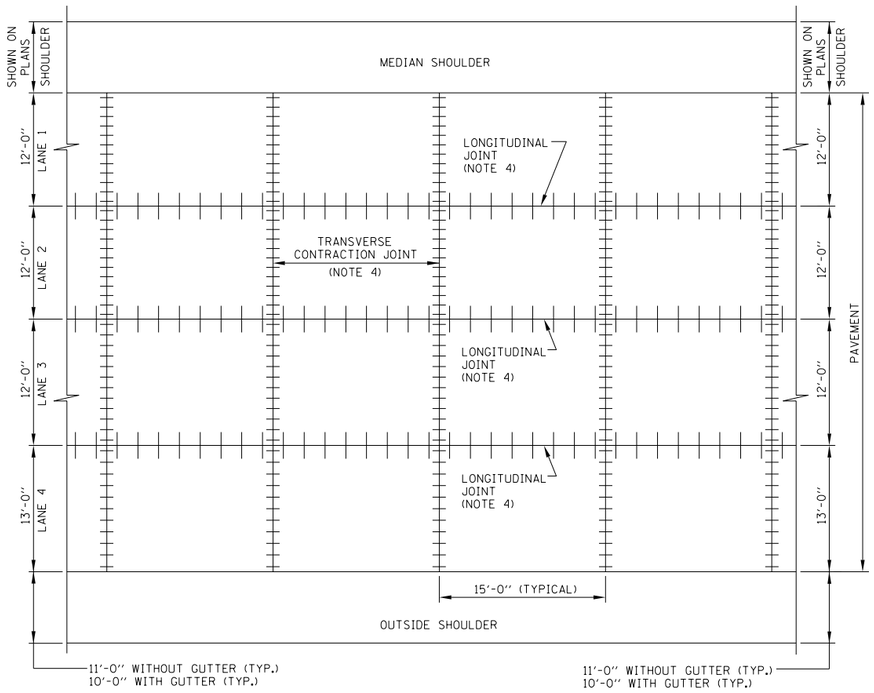
PAVEMENT CROSS - SECTION (4 LANES)



PAVEMENT CROSS - SECTION (3 LANES)



PAVEMENT PLAN
3 - LANE SECTION



PAVEMENT PLAN
4 - LANE SECTION

SEE SHEET 1 (OF 2) IN THIS SERIES FOR GENERAL NOTES.

APPROVED Jeff Haley CHIEF ENGINEER DATE 6-14-2006

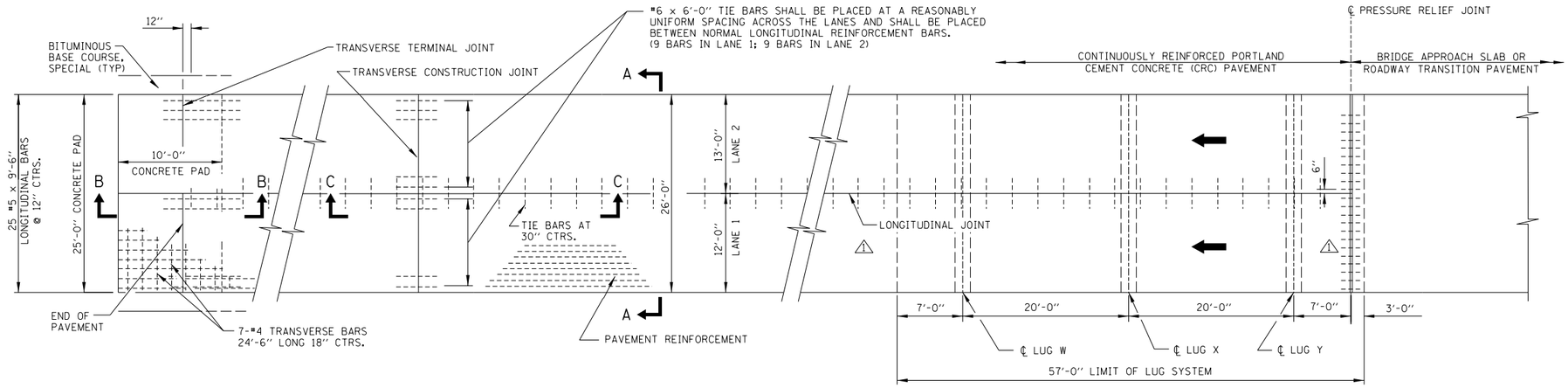
Illinois Tollway
Open Roads for a Faster Future

J.P.C. PAVEMENT

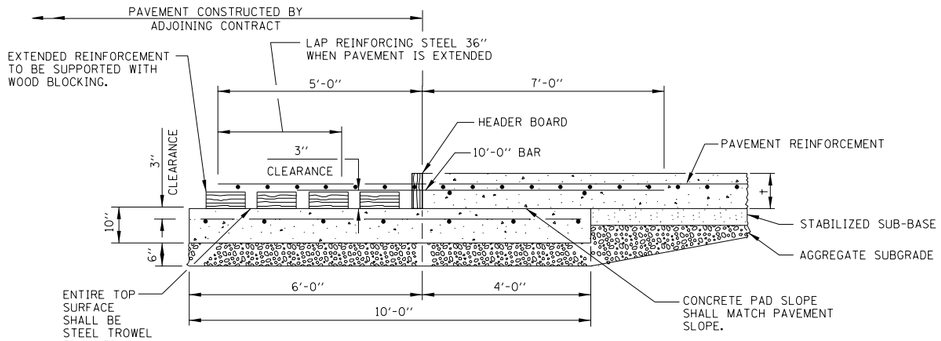
DATE 5-12-2005

STANDARD NO. SD 05-31A

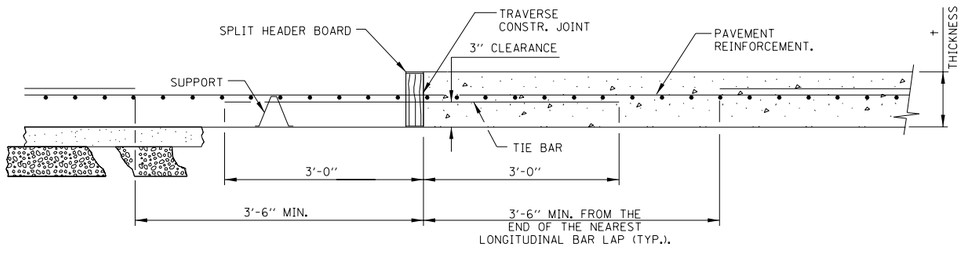
REVISIONS



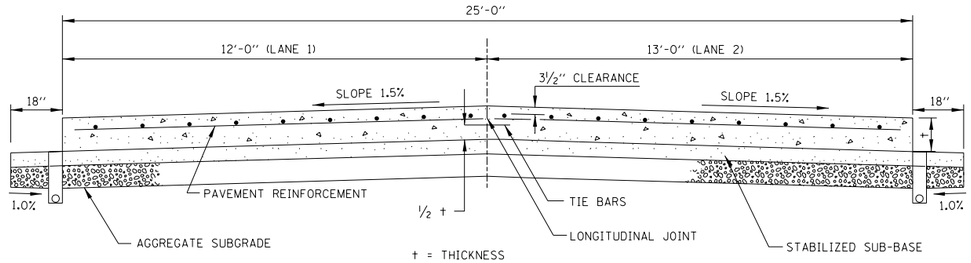
PLAN



TRANSVERSE TERMINAL JOINT
(ADJACENT TO NEW CONSTRUCTION)
SECTION B-B



TRANSVERSE CONSTRUCTION JOINT
SECTION C-C



SECTION A-A
(TYPICAL 2-LANE WITH SHOULDERS)

NOTES:

1. SEE STANDARD DRAWING SD XX-43 (BAR REINFORCEMENT FOR CRC PAVEMENT) FOR DETAILS OF PAVEMENT REINFORCEMENT.
2. SEE STANDARD DRAWING SD XX-46 (PAVEMENT JOINTS) AND IDOT STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.
3. SEE STANDARD DRAWING ST XX-9 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, AND SECTIONS AND DETAILS) FOR DETAILS OF BRIDGE APPROACH SLAB OR SD XX-47 (CRC ROADWAY TRANSITION PAVEMENT) FOR DETAILS OF ROADWAY TRANSITION PAVEMENT.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
6. SAWED AND CONSTRUCTION JOINTS MAY BE INTERCHANGED TO MATCH MAINTENANCE OF TRAFFIC. JOINTS SHOWN ARE FOR NEW CONSTRUCTION.
7. THICKNESS OF MATERIALS IS PROJECT SPECIFIC. REFER TO PROJECT PLANS FOR DETAILS.
8. QUANTITIES LISTED IN TABLE ON SHEET 2 HAVE BEEN ROUNDED AS FOLLOWS:
   - CONCRETE TO NEAREST CU YD
   - REINFORCING BARS TO NEAREST 10 LBS
   - AGGREGATE BASE COURSE, SPECIAL TO NEAREST SQ YD

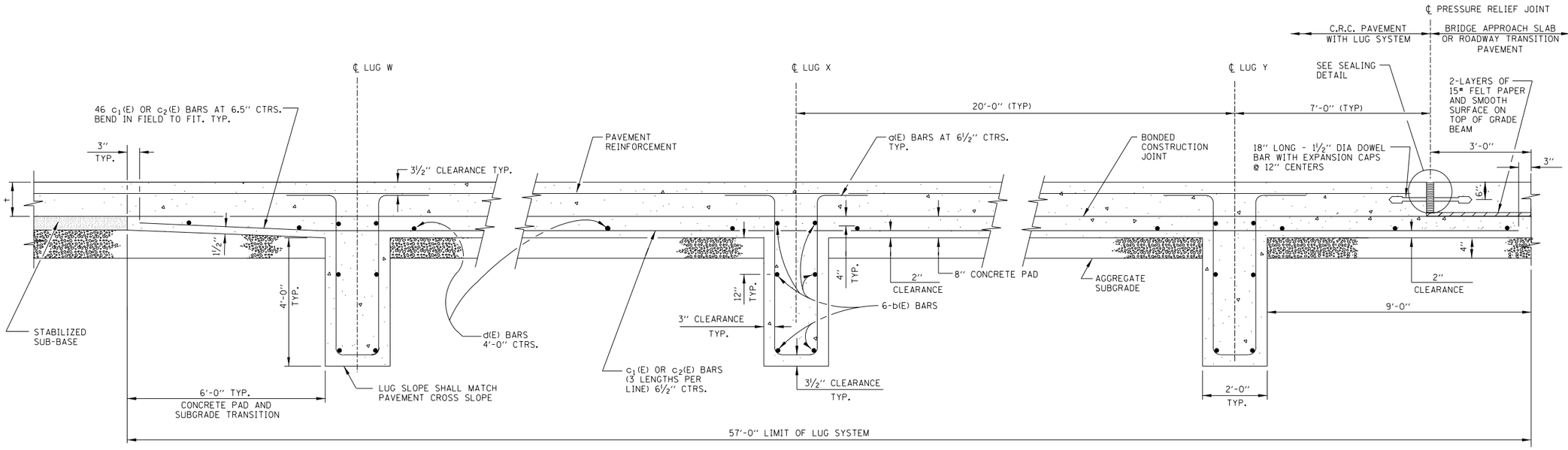
APPROVED Jeff Haley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

2-LANE CRC PAVEMENT
(WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-39

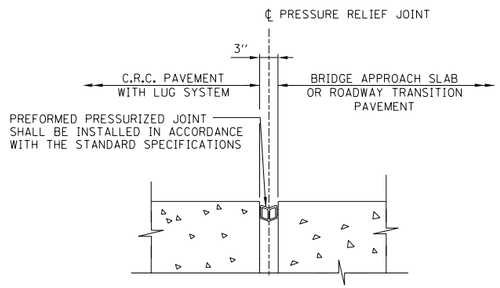
REVISIONS



SECTION AT LUG W

SECTION AT LUG X

SECTION AT LUG Y



SEALING DETAIL

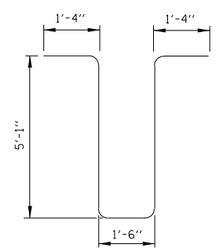
SEE SHEET 1 (OF 2) IN THIS SERIES FOR GENERAL NOTES.

MATERIALS REQUIRED FOR ONE LUG SYSTEM

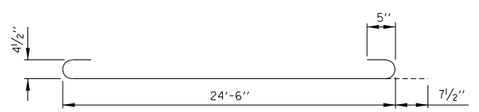
(EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE	LANE WIDTH
a(E)	138	NO. 8	14'-4"		ALL
b(E)	18	NO. 5	25'-9"		ALL
c_1(E)	92	NO. 5	21'-0"		ALL
c_2(E)	46	NO. 5	18'-10"		ALL
d(E)	15	No. 4	24'-6"		ALL

CONCRETE, CU. YDS.	57
REINFORCING BARS EPOXY COATED, LBS.	8,930
AGGREGATE SUBGRADE, SQ. YDS.	142
DOWEL BARS, EACH	25
PRESSURE RELIEF JOINT, LF	25



BAR a(E)



BAR b(E)

SHEET 2 OF 2

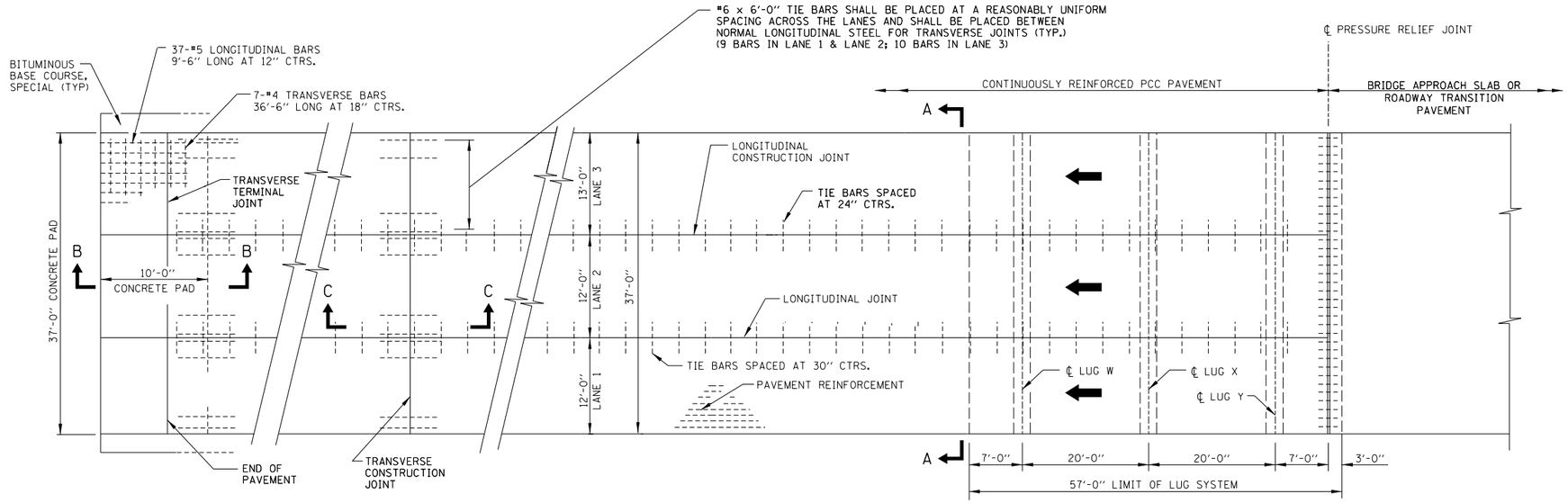
APPROVED Jeff Mosley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

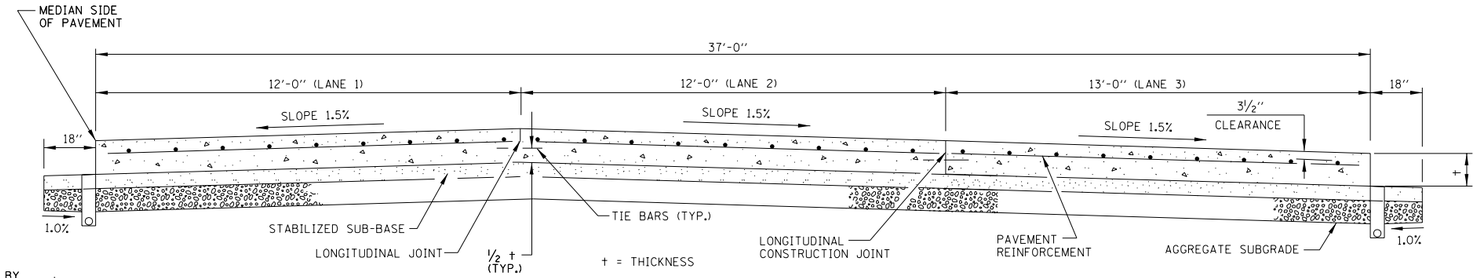
2-LANE CRC PAVEMENT (WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-39

REVISIONS

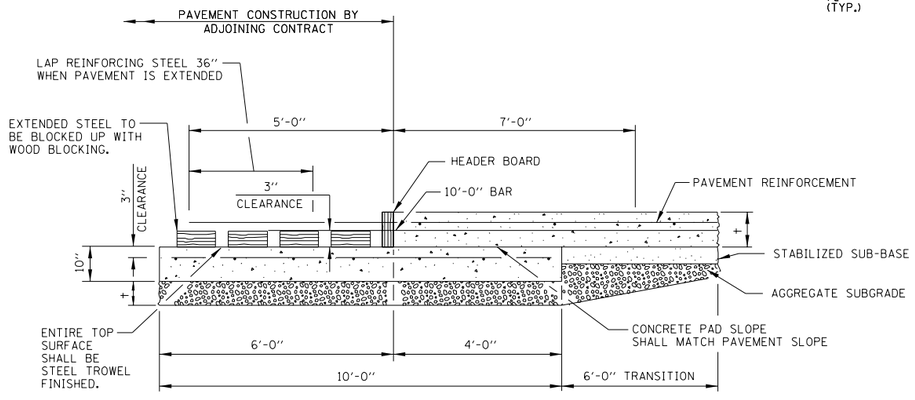


PLAN

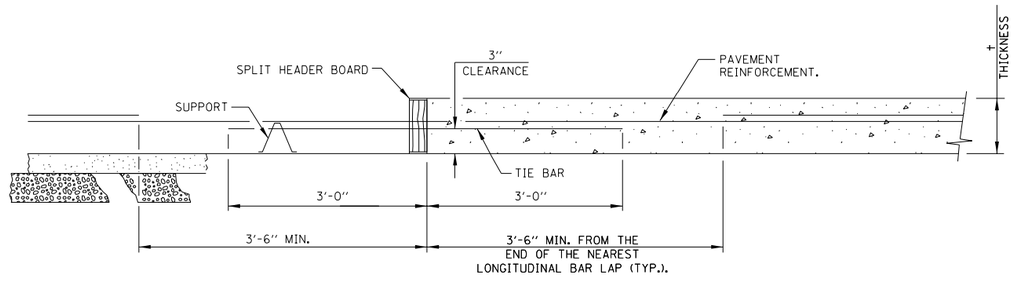


SECTION A-A

(TYPICAL 3-LANE, 1-WAY WITH SHOULDERS)



TRANSVERSE TERMINAL JOINT
(ADJACENT TO NEW CONSTRUCTION)
SECTION B-B



TRANSVERSE CONSTRUCTION JOINT
SECTION C-C

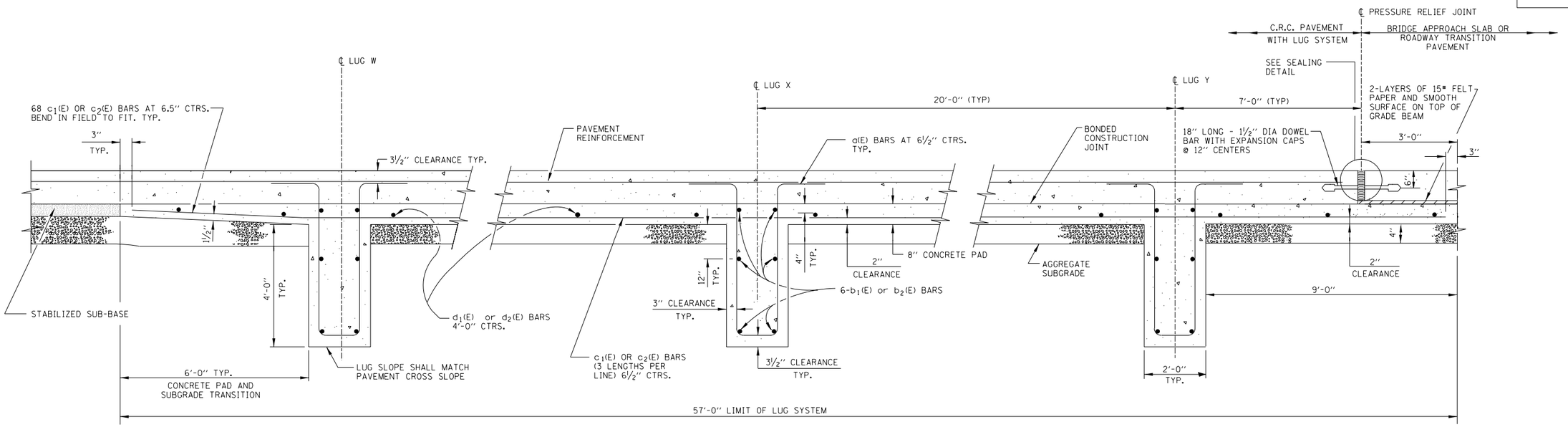
APPROVED Jeff Mackey CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

3-LANE CRC PAVEMENT
(WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-40

REVISIONS



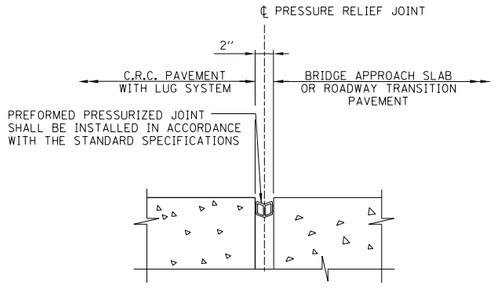
SECTION AT LUG W

SECTION AT LUG X

SECTION AT LUG Y

NOTES:

1. SEE STANDARD DRAWING SD XX-43 (BAR REINFORCEMENT FOR CRC PAVEMENT) FOR DETAILS OF PAVEMENT REINFORCEMENT.
2. SEE STANDARD DRAWING SD XX-46 (PAVEMENT JOINTS) AND IDOT STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.
3. SEE STANDARD DRAWING ST XX-9 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, AND SECTIONS AND DETAILS) FOR DETAILS OF BRIDGE APPROACH SLAB OR SD XX-47 (CRC ROADWAY TRANSITION PAVEMENT) FOR DETAILS OF ROADWAY TRANSITION PAVEMENT.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
6. SAWED AND CONSTRUCTION JOINTS MAY BE INTERCHANGED TO MATCH MAINTENANCE OF TRAFFIC. JOINTS SHOWN ARE FOR NEW CONSTRUCTION.
7. THICKNESS OF MATERIALS IS PROJECT SPECIFIC. REFER TO PROJECT PLANS FOR DETAILS.
8. QUANTITIES LISTED IN TABLE HAVE BEEN ROUNDED AS FOLLOWS:
   - CONCRETE TO NEAREST CU YD
   - REINFORCING BARS TO NEAREST 10 LBS
   - AGGREGATE BASE COURSE TO NEAREST SQ YD



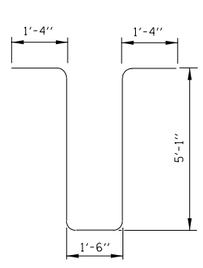
SEALING DETAIL

MATERIALS REQUIRED FOR ONE LUG SYSTEM

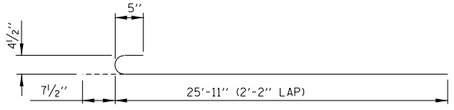
(EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE	LANE WIDTH
a(E)	204	#8	14'-4"		ALL
b_1(E)	18	#5	26'-6½"		1.2
b_2(E)	18	#5	13'-4½"		3
c_1(E)	136	#5	21'-0"		ALL
c_2(E)	68	#5	18'-10"		ALL
d_1(E)	15	#4	25'-5"		1.2
d_2(E)	15	#4	12'-9"		3

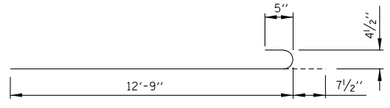
CONCRETE, CU. YDS.	85
REINFORCING BARS EPOXY COATED, LBS.	13,250
AGGREGATE SUBGRADE, SQ. YDS.	210
DOWEL BARS, EACH	37
PRESSURE RELIEF JOINT, LF	37



BAR a(E)



BAR b_1(E)



BAR b_2(E)

APPROVED Jeff Hanley CHIEF ENGINEER DATE 6-14-2006

SHEET 2 OF 2

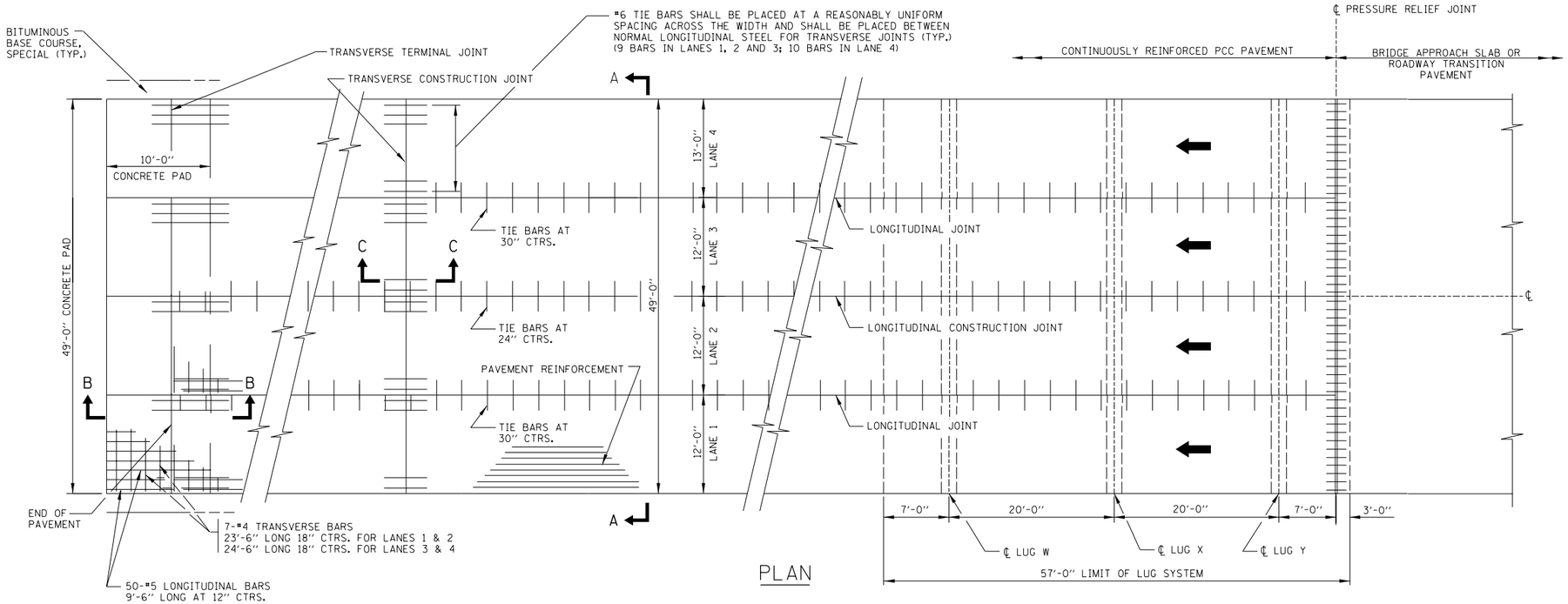
Illinois Tollway
Open Roads for a Faster Future

3-LANE CRC PAVEMENT (WITH LUG SYSTEM)

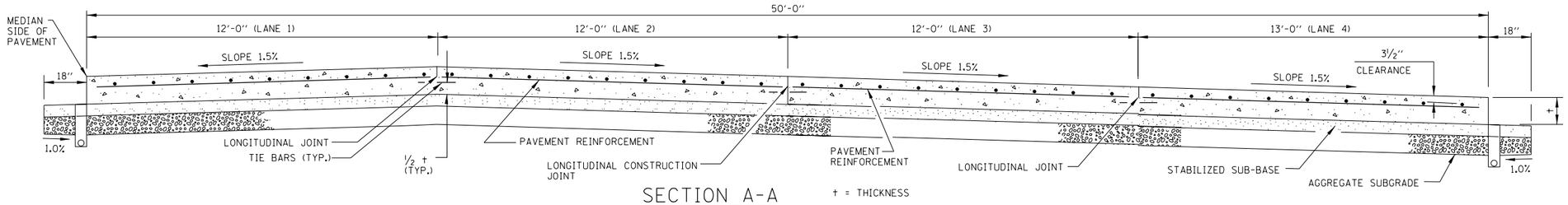
DATE 5-12-2005

STANDARD NO. SD 05-40

REVISIONS

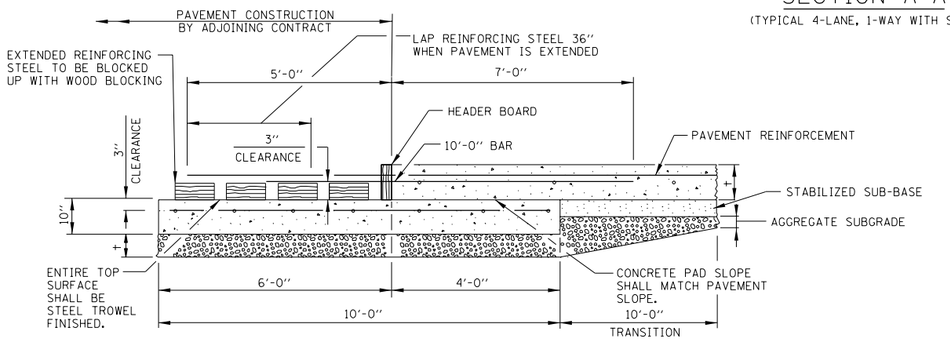


PLAN



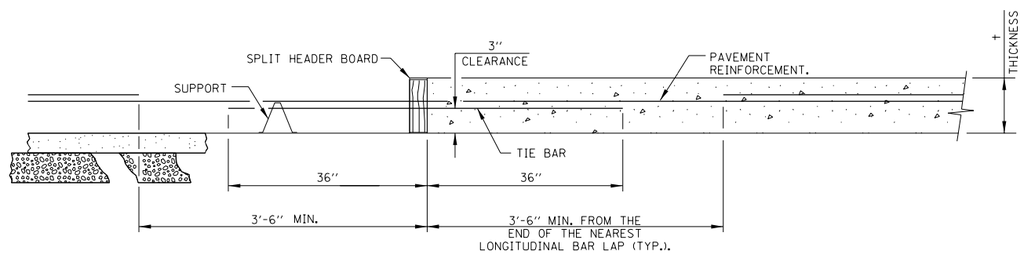
SECTION A-A

(TYPICAL 4-LANE, 1-WAY WITH SHOULDERS)



TRANSVERSE TERMINAL JOINT (ADJACENT TO NEW CONSTRUCTION)

SECTION B-B



TRANSVERSE CONSTRUCTION JOINT

SECTION C-C

SHEET 1 OF 2

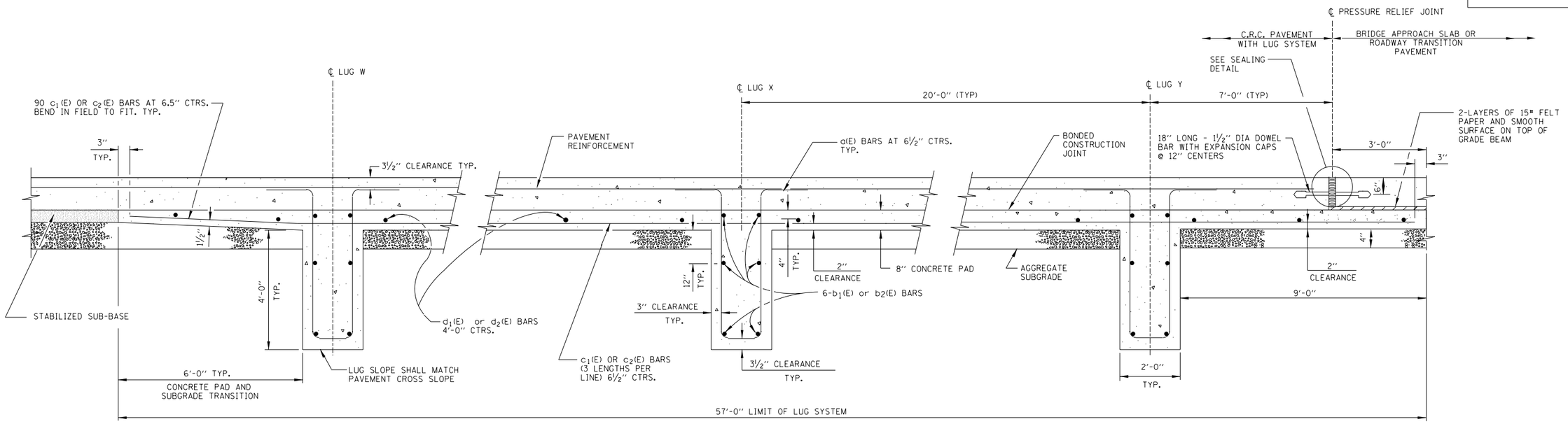
APPROVED Jeff Sadley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

4-LANE CRC PAVEMENT (WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-41

REVISIONS



SECTION AT LUG W

SECTION AT LUG X

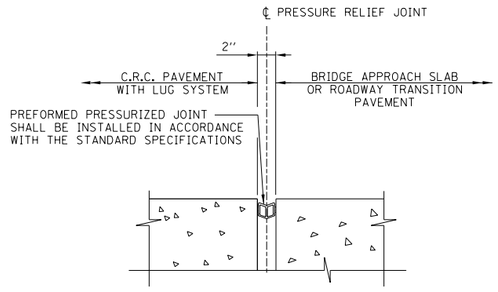
SECTION AT LUG Y

MATERIALS REQUIRED FOR ONE LUG SYSTEM

(EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE	LANE WIDTH
a(E)	270	#8	14'-4"		ALL
b_1(E)	18	#5	26'-6½"		1.2
b_2(E)	18	#5	25'-4½"		3.4
c_1(E)	180	#5	21'-0"		ALL
c_2(E)	90	#5	18'-10"		ALL
d_1(E)	15	#4	25'-5"		1.2
d_2(E)	15	#4	24'-9"		3.4

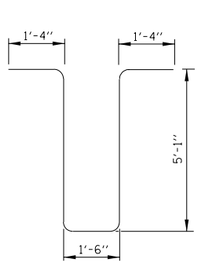
CONCRETE, CU. YDS.	113
REINFORCING BARS EPOXY COATED, LBS.	17,520
AGGREGATE SUBGRADE, SQ. YDS.	278
DOWEL BARS, EACH	49
PRESSURE RELIEF JOINT, LF	49



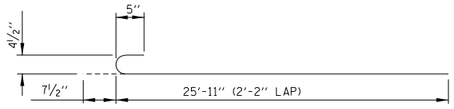
SEALING DETAIL

NOTES:

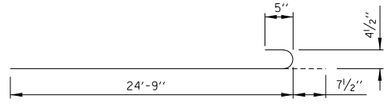
1. SEE STANDARD DRAWING SD XX-43 (BAR REINFORCEMENT FOR CRC PAVEMENT) FOR DETAILS OF PAVEMENT REINFORCEMENT.
2. SEE STANDARD DRAWING SD XX-46 (PAVEMENT JOINTS) AND IDOT STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.
3. SEE STANDARD DRAWINGS ST XX-9 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, AND SECTIONS AND DETAILS) AND ST XX-11 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 4 LANES) FOR DETAILS OF BRIDGE APPROACH SLAB OR SD XX-47 (CRC ROADWAY TRANSITION PAVEMENT) FOR DETAILS OF ROADWAY TRANSITION PAVEMENT.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
6. SAWED AND CONSTRUCTION JOINTS MAY BE INTERCHANGED TO MATCH MAINTENANCE OF TRAFFIC. JOINTS SHOWN ARE FOR NEW CONSTRUCTION.
7. THICKNESS OF MATERIALS IS PROJECT SPECIFIC. REFER TO PROJECT PLANS FOR DETAILS.
8. QUANTITIES LISTED IN TABLE HAVE BEEN ROUNDED AS FOLLOWS:
   - CONCRETE TO NEAREST CU YD
   - REINFORCING BARS TO NEAREST 10 LBS
   - AGGREGATE BASE COURSE, SPECIAL TO NEAREST SQ YD



BAR a(E)



BAR b_1(E)



BAR b_2(E)

APPROVED Jeff Daley CHIEF ENGINEER DATE 6-14-2006

SHEET 2 OF 2

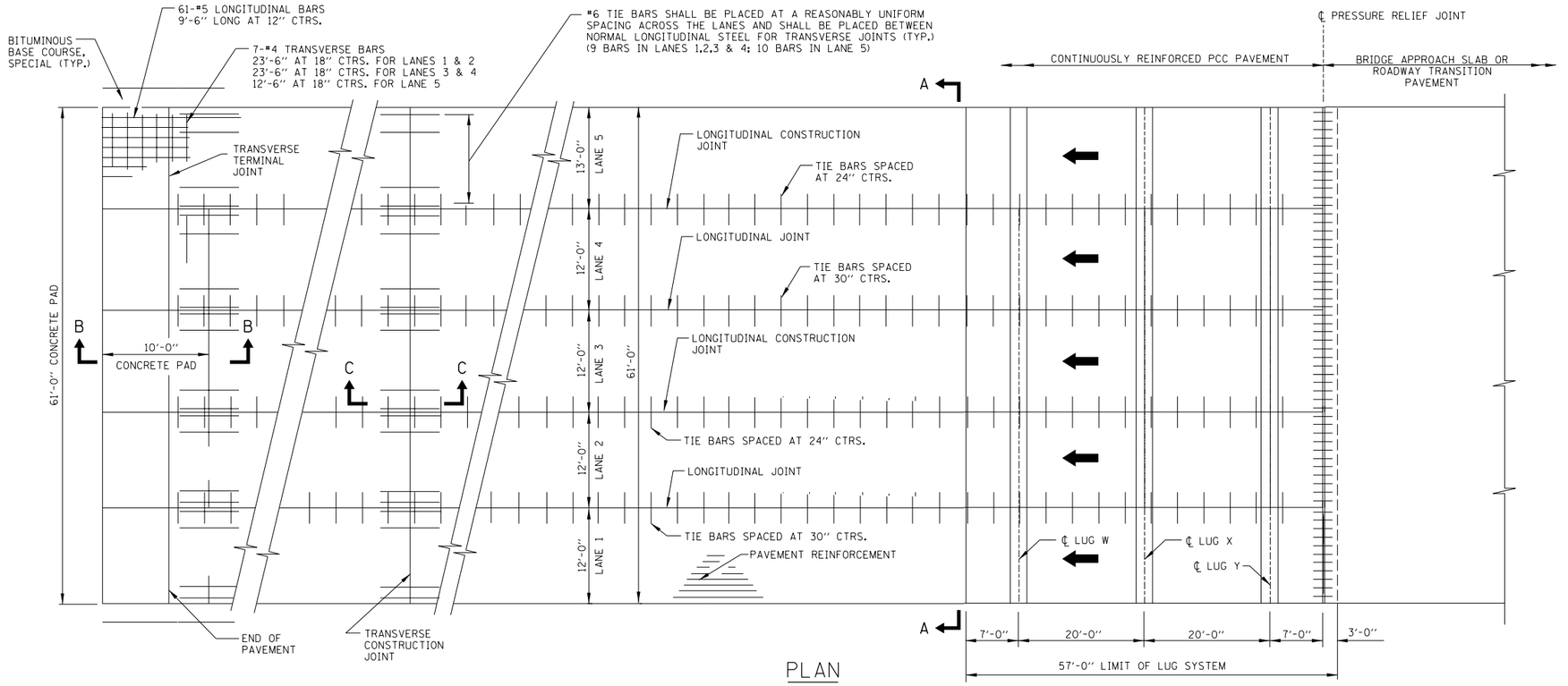
Illinois Tollway
Open Roads for a Faster Future

4-LANE CRC PAVEMENT (WITH LUG SYSTEM)

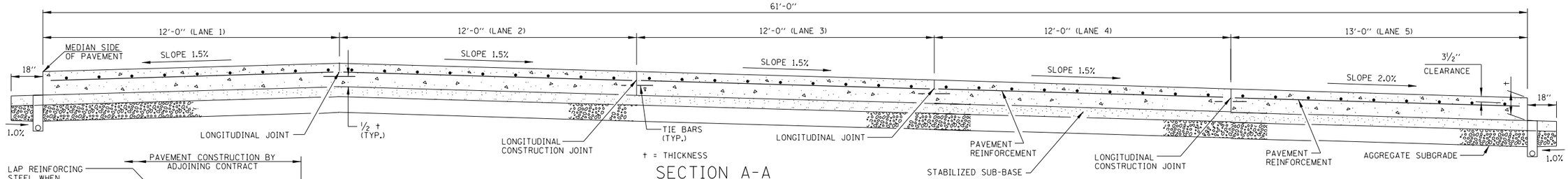
DATE 5-12-2005

STANDARD NO. SD 05-41

REVISIONS

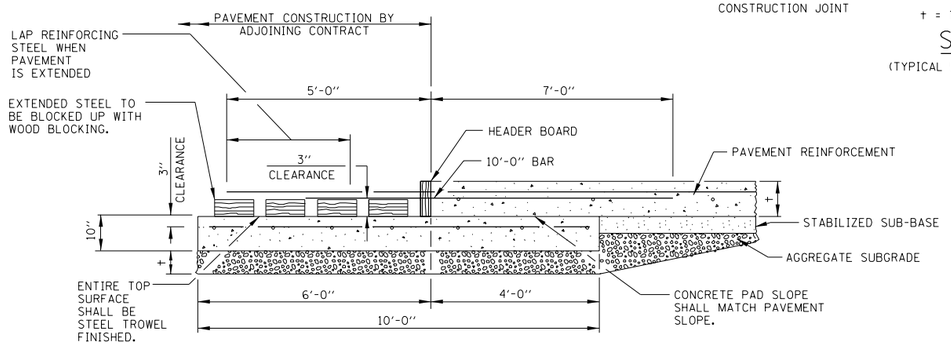


PLAN



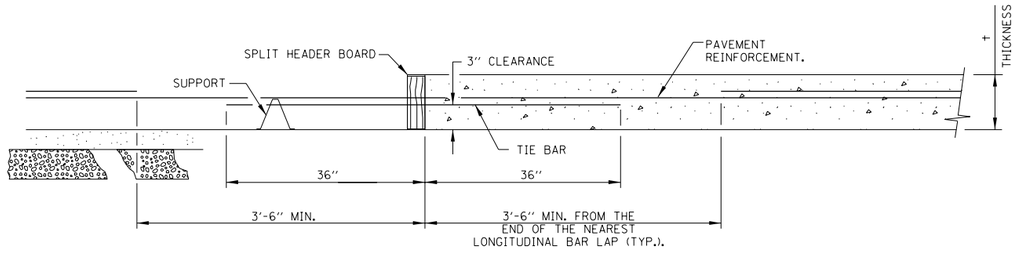
SECTION A-A

(TYPICAL 5-LANE, 1-WAY WITH SHOULDERS)



TRANSVERSE TERMINAL JOINT (ADJACENT TO NEW CONSTRUCTION)

SECTION B-B



TRANSVERSE CONSTRUCTION JOINT

SECTION C-C

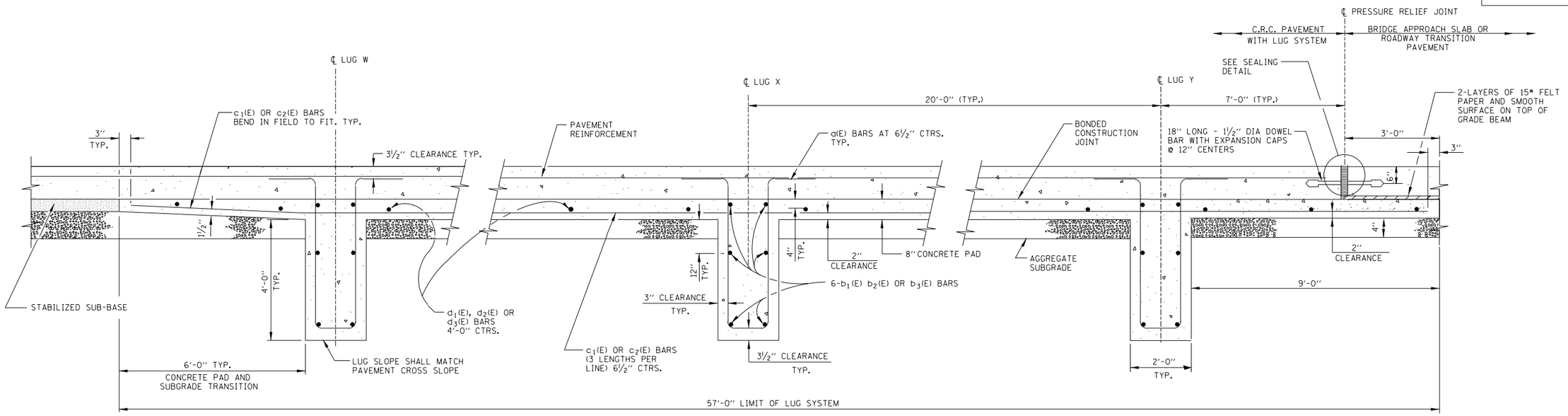
APPROVED Jeff Hanley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

5-LANE CRC PAVEMENT (WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-42

REVISIONS



SECTION AT LUG W

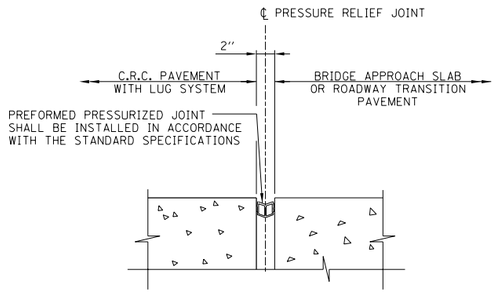
SECTION AT LUG X

SECTION AT LUG Y

MATERIALS REQUIRED FOR ONE LUG SYSTEM
(EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE	LANE WIDTH
a(E)	336	#8	14'-4"		ALL
b_1(E)	18	#5	26'-6½"		1,2
b_2(E)	18	#5	26'-2"		3,4
b_3(E)	18	#5	13'-4½"		5
c_1(E)	224	#5	21'-0"		ALL
c_2(E)	112	#5	18'-10"		ALL
d_1(E)	15	#4	25'-5"		1,2
d_2(E)	15	No. 4	25'-8"		3,4
d_3(E)	15	No. 4	12'-9"		5

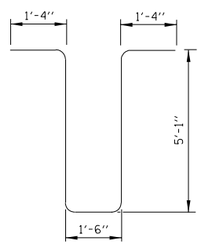
CONCRETE, CU. YDS.	140
REINFORCING BARS EPOXY COATED, LBS.	21,850
AGGREGATE SUBGRADE, SQ. YDS.	346
DOWEL BARS, EACH	61
PRESSURE RELIEF JOINT, LF	61



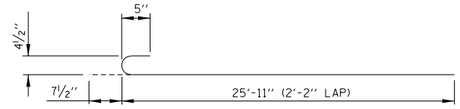
SEALING DETAIL

NOTES:

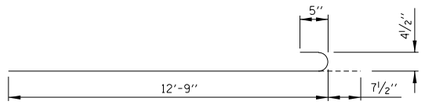
1. SEE STANDARD DRAWING SD XX-43 (BAR REINFORCEMENT FOR CRC PAVEMENT) FOR DETAILS OF PAVEMENT REINFORCEMENT.
2. SEE STANDARD DRAWING SD XX-46 (PAVEMENT JOINTS) AND IDOT STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.
3. SEE STANDARD DRAWINGS ST XX-9 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, AND SECTIONS AND DETAILS) AND ST XX-10 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 5 LANES) FOR DETAILS OF BRIDGE APPROACH SLAB OR SD XX-47 (CRC ROADWAY TRANSITION PAVEMENT) FOR DETAILS OF ROADWAY TRANSITION PAVEMENT.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
6. SAWED AND CONSTRUCTION JOINTS MAY BE INTERCHANGED TO MATCH MAINTENANCE OF TRAFFIC. JOINTS SHOWN ARE FOR NEW CONSTRUCTION.
7. THICKNESS OF MATERIALS IS PROJECT SPECIFIC. REFER TO PROJECT PLANS FOR DETAILS.
8. QUANTITIES LISTED IN TABLE HAVE BEEN ROUNDED AS FOLLOWS:
   - CONCRETE TO NEAREST CU YD
   - REINFORCING BARS TO NEAREST 10 LBS
   - AGGREGATE BASE COURSE, SPECIAL TO NEAREST SQ YD



BAR a(E)



BAR b_1(E)



BAR b_3(E)

APPROVED Jeff Hanley CHIEF ENGINEER DATE 6-14-2006

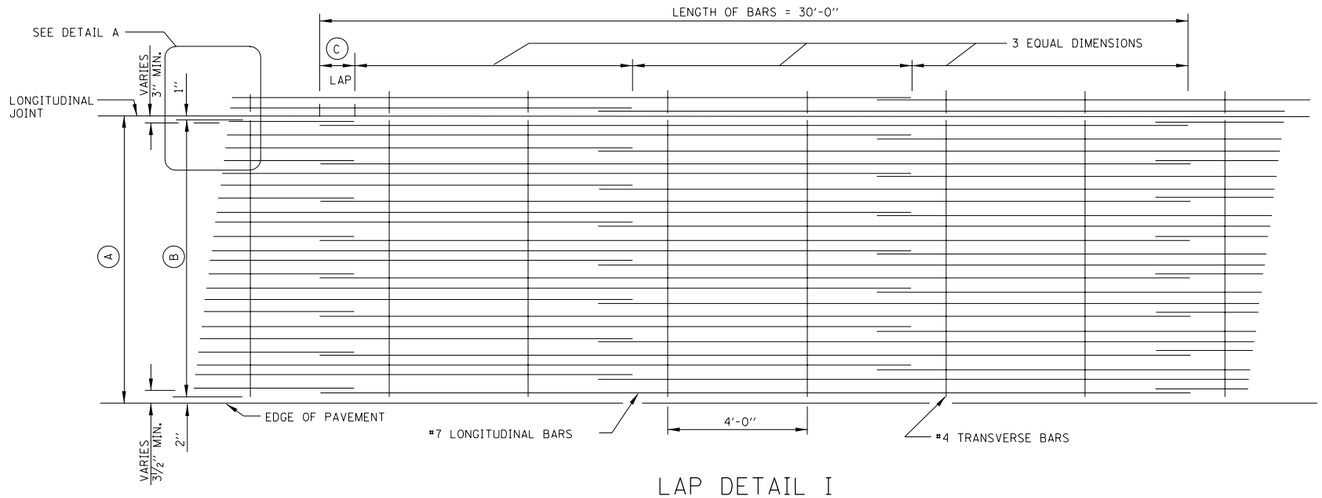
SHEET 2 OF 2

Illinois Tollway
Open Roads for a Faster Future

5-LANE CRC PAVEMENT (WITH LUG SYSTEM)

DATE	STANDARD NO.
5-12-2005	SD 05-42

REVISIONS



LAP DETAIL I

REINFORCEMENT BAR LAP PLAN LONGITUDINAL REINFORCEMENT BARS

A LANE WIDTH	B
12'-0"	11'-9"
13'-0"	12'-9"

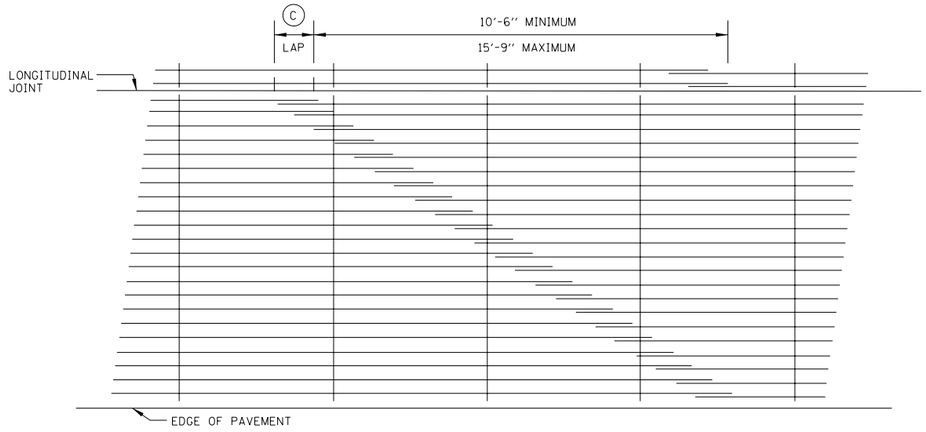
BAR SIZE	C LAP
#7	26"

12'-0" LANE		PAVEMENT THICKNESS (IN.) (t)													
		10		10.5		11		11.5		12		12.5		13	
		NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)
PERCENTAGE OF STEEL REINFORCEMENT	0.65%	16	9 1/8	17	8 5/8	18	8 1/8	18	8 1/8	20	7 1/4	19	7 5/8	20	7 1/4
	0.70%	17	8 5/8	18	8 1/8	19	7 5/8	19	7 5/8	21	6 7/8	21	6 7/8	22	6 1/2
	0.75%	18	8 1/8	19	7 5/8	20	7 1/4	21	6 7/8	22	6 1/2	23	6 1/4	24	6
	0.80%	19	7 5/8	20	7 1/4	22	6 1/2	22	6 1/2	23	6 1/4	24	6	25	5 3/4
	0.85%	20	7 1/4	22	6 1/2	23	6 1/4	24	6	25	5 3/4	26	5 1/2	27	5 1/4

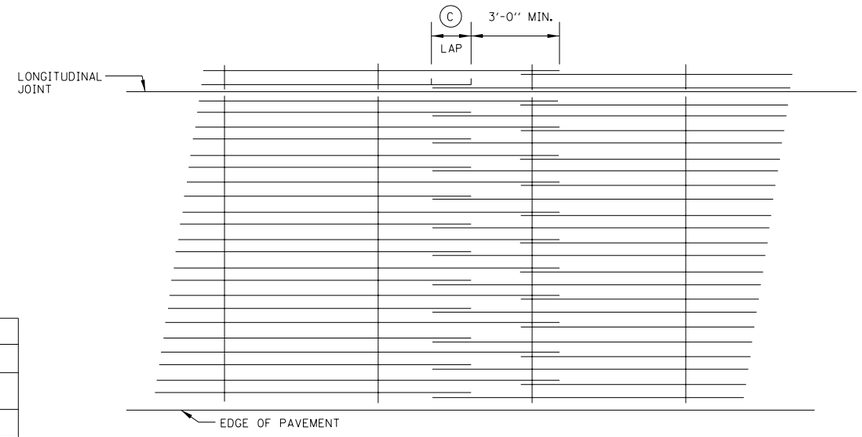
#7 BARS

13'-0" LANE		PAVEMENT THICKNESS (IN.) (t)													
		10		10.5		11		11.5		12		12.5		13	
		NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)	NO. OF BARS (EA.)	SPACING (IN.)
PERCENTAGE OF STEEL REINFORCEMENT	0.65%	17	9 3/8	18	8 3/4	19	8 1/4	19	8 1/4	20	7 1/8	21	7 1/2	22	7 1/8
	0.70%	18	8 3/4	19	8 1/4	20	7 1/8	21	7 1/2	22	7 1/8	23	6 3/4	24	6 1/2
	0.75%	20	7 1/8	21	7 1/2	22	7 1/8	23	6 3/4	24	6 1/2	25	6 1/4	26	6
	0.80%	21	7 1/2	22	7 1/8	23	6 3/4	24	6 1/2	25	6 1/4	26	6	27	5 3/4
	0.85%	23	6 3/4	24	6 1/2	25	6 1/4	26	6	27	5 3/4	28	5 1/2	29	5 3/8

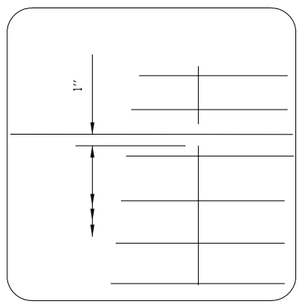
#7 BARS



LAP DETAIL II



LAP DETAIL III



DETAIL A

GENERAL NOTES:

1. EXCEPT AS NOTED OR SHOWN, THE DIMENSIONS AND NOTES SPECIFIED FOR LAP DETAIL I ARE TYPICAL FOR LAP DETAIL II AND III.
2. #7 REINFORCEMENT BARS ARE USED THROUGHOUT THESE TABLES.
3. THE DISTANCE FROM THE END OF THE TRANSVERSE BAR TO THE EDGE OF PAVEMENT MAY BE INCREASED BY 1" FOR SLIP FORM PAVING.
4. THE PERCENT OF STEEL REINFORCEMENT IS PROJECT SPECIFIC. REFER TO PROJECT PLANS AND CONTRACT DOCUMENTS FOR DETAILS.

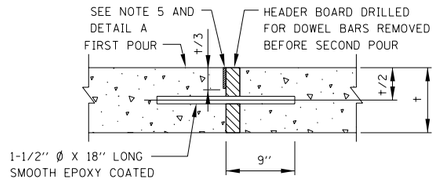
APPROVED Jeff Daley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

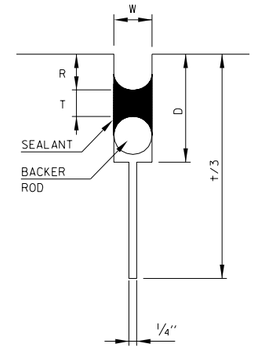
BAR REINFORCEMENT FOR CRC PAVEMENT

DATE	STANDARD NO.
11-9-2005	SD 05-43

REVISIONS



TRANSVERSE CONSTRUCTION JOINT
(JOINTED PLAIN CONCRETE PAVEMENT)

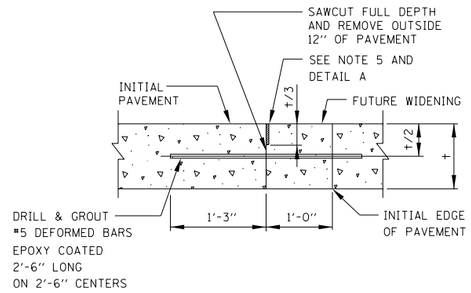


DETAIL A

TYPICAL JOINT CROSS-SECTION

W = SEALANT WIDTH, 3/8" MIN.
T = SEALANT THICKNESS
R = SEALANT RECESS. FLUSH OR OVER BANDING NOT ALLOWED
D = JOINT CHANNEL DEPTH
— AS RECOMMENDED BY MANUFACTURER

t = PAVEMENT THICKNESS



LONGITUDINAL JOINT
(FUTURE WIDENING)

GENERAL NOTES

1. DOWEL BAR CAPS SHALL BE PLACED ON OPPOSITE END OF ADJACENT DOWEL BARS.
2. ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).
3. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
4. t= PAVEMENT THICKNESS
5. SAW CUTS FOR PAVEMENT CRACK CONTROL AND JOINT SEALING SHALL BE MADE IN TWO STEPS. A 3/8" SAW CUT SHALL BE PROVIDED AS A JOINT SEALANT RESERVOIR TO THE DEPTH RECOMMENDED BY THE SEALANT MANUFACTURER AND APPROVED BY THE ENGINEER.

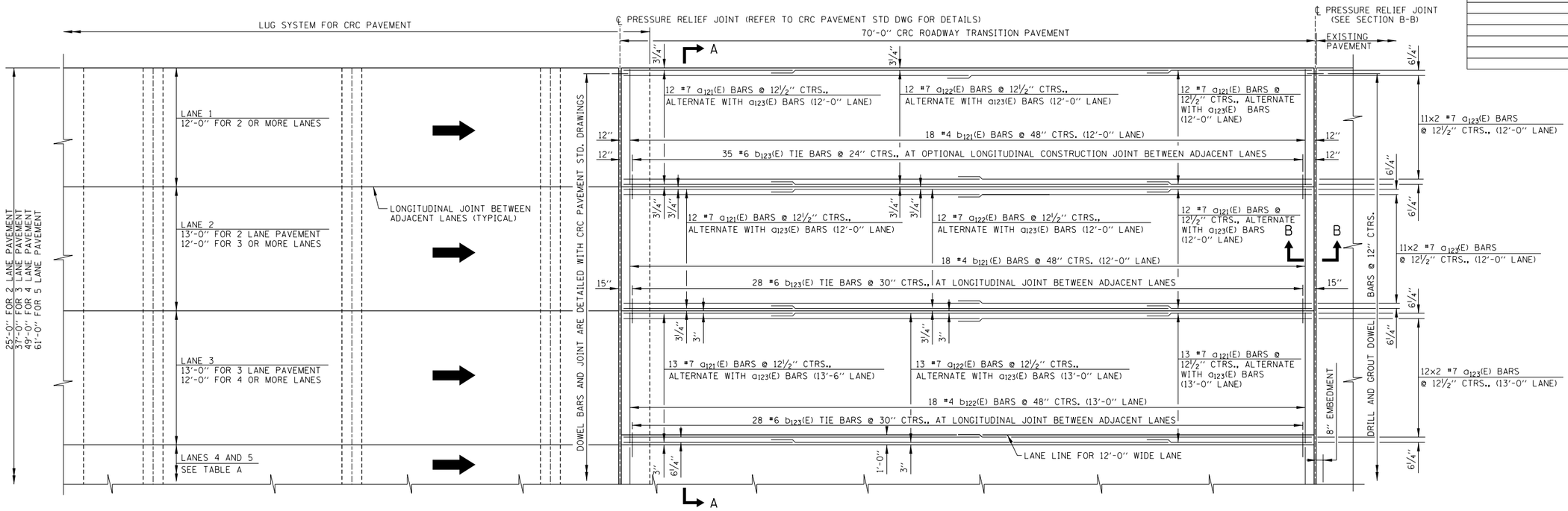
APPROVED Jeff Haley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

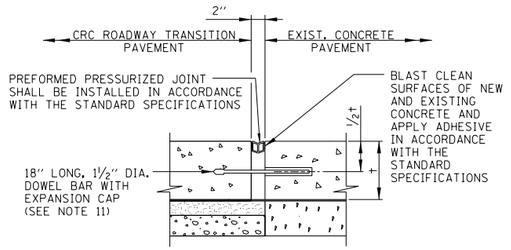
PAVEMENT JOINTS

DATE	STANDARD NO.
5-12-2005	SD 05-46

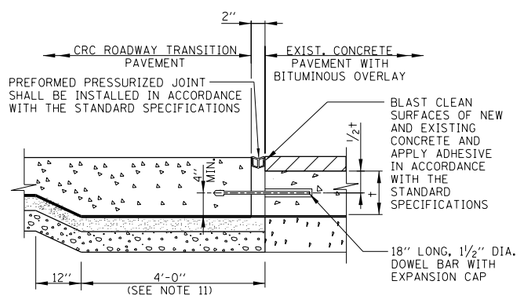
REVISIONS



PLAN VIEW



ALTERNATE "A"



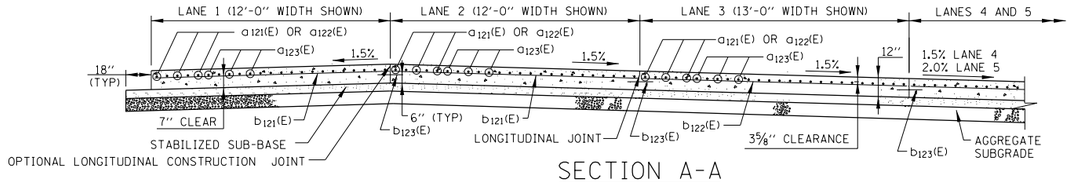
ALTERNATE "B"

SECTION B-B

TABLE A		
PAVEMENT SECTION	LANE 4 WIDTH	LANE 5 WIDTH
4 LANE PAVEMENT	13'-0"	N/A
5 LANE PAVEMENT	12'-0"	13'-0"

REINFORCING BAR SCHEDULE							
BAR	SIZE	LENGTH	NUMBER OF BARS NUMBER OF LANES 2	3	4	5
a121(E)	#7	17'-0"	50	74	98	122
a122(E)	#7	40'-0"	25	37	49	61
a123(E)	#7	35'-10"	46	68	90	112
b121(E)	#4	11'-8"	18	36	54	72
b122(E)	#4	12'-8"	18	18	18	18
b123(E)	#6	2'-6"	35	70	105	140

BILL OF MATERIAL (SEE NOTE 7)						
DESCRIPTION	UNIT	QUANTITY NUMBER OF LANES 2	3	4	5
CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE ROADWAY TRANSITION PAVEMENT	SQ. YD.	194	288	381	474
CONCRETE (12")	CU. YD.	64.8	95.9	127.0	158.1
REINFORCING STEEL, EPOXY COATED	LBS	7,575	11,273	14,971	18,669
DRILL & GROUT DOWEL BARS	EACH	25	37	49	61
PRESSURE RELIEF JOINT	LIN. FT.	25	37	49	61



SECTION A-A

TYPICAL SECTION

NOTES:

1. SEE STANDARD DRAWINGS SD XX-39, SD XX-40, SD XX-41, AND SD XX-42 (2-LANE, 3-LANE, 4-LANE, AND 5-LANE CRC PAVEMENT (WITH LUG SYSTEM) - RESPECTIVELY) FOR DETAILS OF CRC PAVEMENT, LUG SYSTEM, PRESSURE RELIEF JOINT ADJACENT TO LUG SYSTEM, AND CROSS SECTIONS THRU SAWED LONGITUDINAL JOINT AND LONGITUDINAL CONSTRUCTION JOINT.
2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
3. USE 2'-2" MINIMUM LAP FOR #7 BARS.
4. REINFORCING BARS SHOWN IN THE SCHEDULE ARE ALL STRAIGHT.
5. THE DESIGN DRAWINGS GOVERN THE TYPE OF LONGITUDINAL JOINT, SAWED OR CONSTRUCTION, BETWEEN ADJACENT LANES DEPENDING ON MAINTENANCE OF TRAFFIC.
6. BARS b123(E) (TIE BARS) IN THE BILL OF MATERIAL ASSUME A SPACING OF 24".
7. THE QUANTITIES FOR CONCRETE, REINFORCING STEEL (INCLUDING TIE BARS), DOWEL BARS AND PRESSURE RELIEF JOINT ARE TYPICAL FOR 12" PAVEMENT.
8. DOWEL BARS DRILLED AND GROUTED INTO EXISTING PAVEMENT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
9. TOOL EDGES OF PRESSURE RELIEF JOINTS TO ¼" RADIUS.
10. THE NOTATION MxN-#7a FOR REINFORCING BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE.
11. AT EXISTING PAVEMENT JOINT:
    - FOR PAVEMENT STRUCTURES > CRC ROADWAY TRANSITION PAVEMENT THICKNESS- PAVEMENT SHALL BE INCREASED AS REQUIRED TO MEET BOTTOM OF EXISTING CONCRETE PAVEMENT. ADDITIONAL CONCRETE SHALL BE INCLUDED IN THE COST OF CONTINUOSLY REINFORCED PC CONCRETE PAVEMENT (12")
    - FOR PAVEMENT STRUCTURES < CRC ROADWAY TRANSITION PAVEMENT THICKNESS - 12" THICKNESS SHALL BE MAINTAINED. INSTALL DOWEL BAR AT ½ EXISTING PAVEMENT THICKNESS OR A MINIMUM OF 4" FROM TOP OF NEW PAVEMENT.

APPROVED Jeff Hadley CHIEF ENGINEER DATE 6-14-2006

Illinois Tollway
Open Roads for a Faster Future

CRC ROADWAY TRANSITION PAVEMENT

DATE 5-12-2005

STANDARD NO. SD 05-47