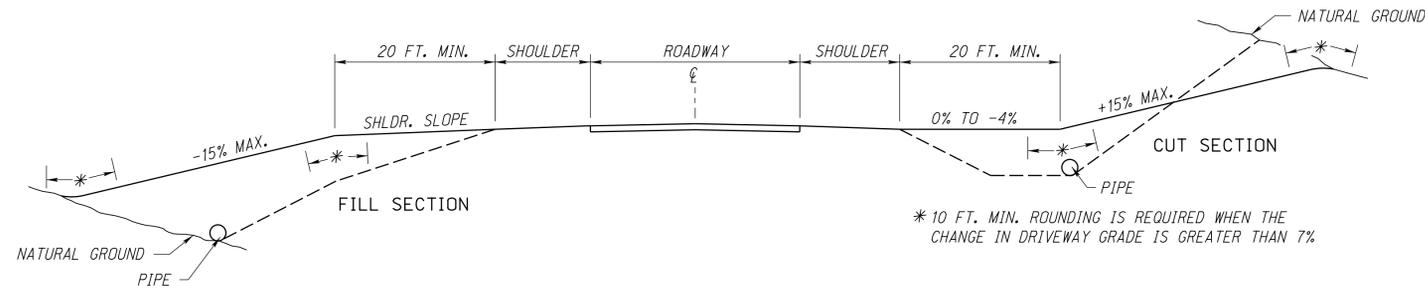
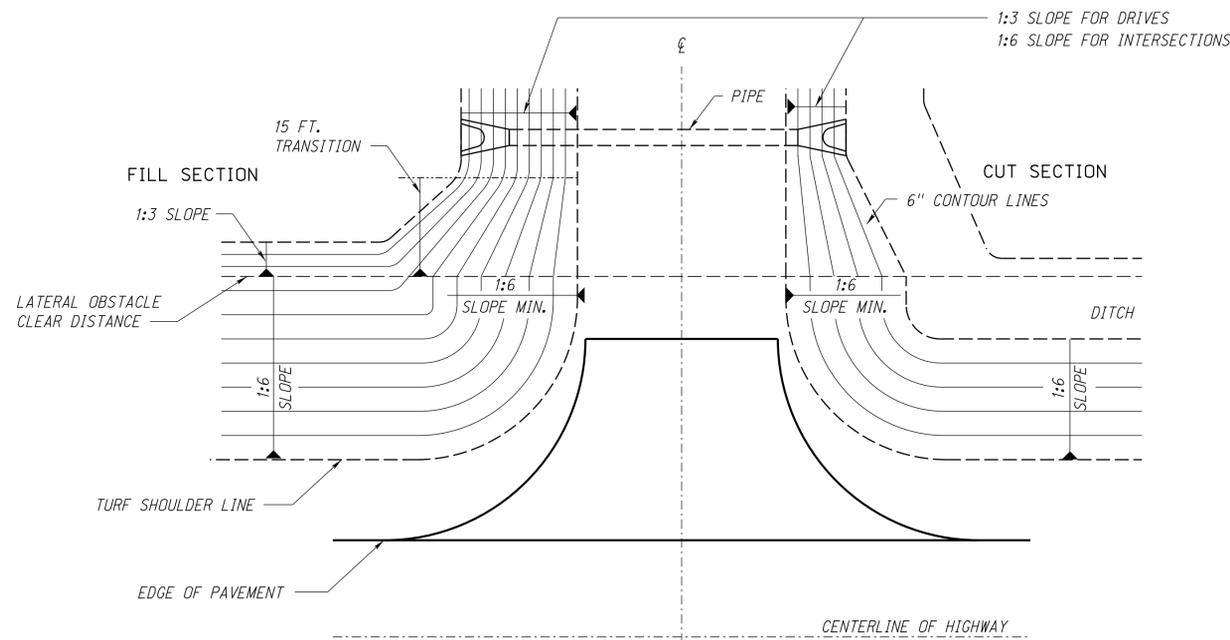


RURAL INTERSECTIONS & DRIVEWAYS

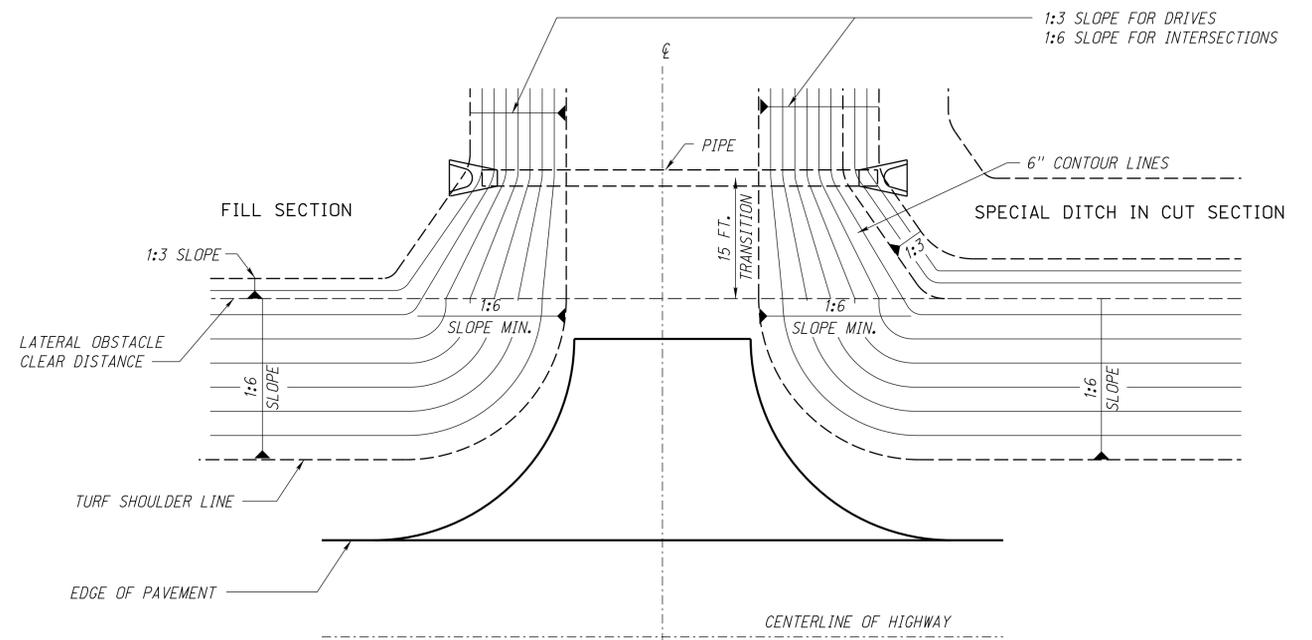
PROJECT NO. SHEET NO.
C.N.



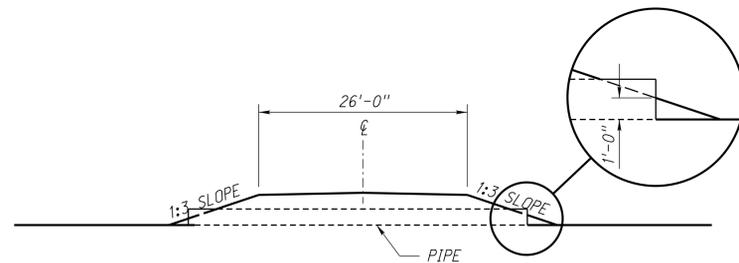
PROFILES FOR DRIVEWAY OR INTERSECTION GRADE EXCEEDING 8%



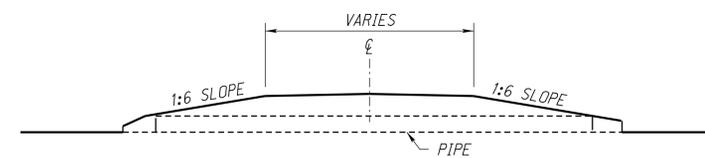
INTERSECTION OR DRIVEWAY WITHOUT SPECIAL DITCH



INTERSECTION OR DRIVEWAY WITH SPECIAL DITCH



SECTION OF DRIVEWAY WITH PIPE



SECTION OF INTERSECTION WITH PIPE



ROADWAY DESIGN DIVISION

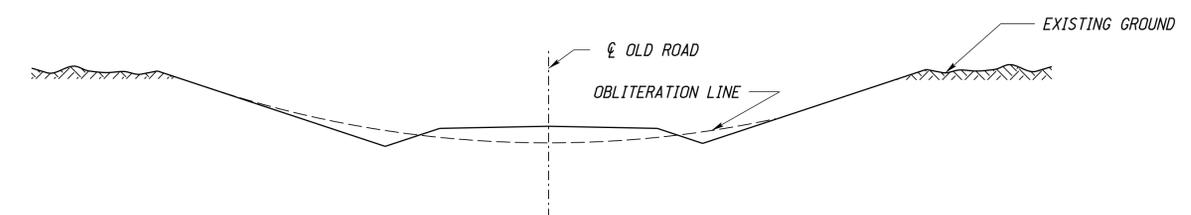
Computer: DRDESIGN147

User: ddr13017

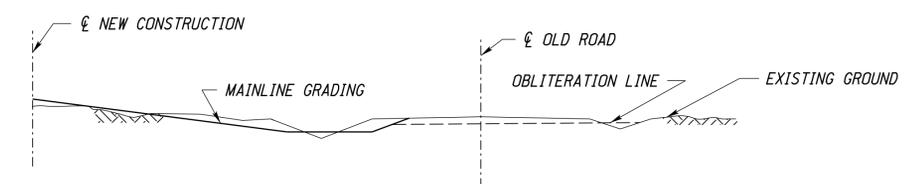
Date: 12-APR-2016 13:47

File: 11002604.dgn
Scale: 1:100
SHEET 1 OF 1 1100-2-E-04

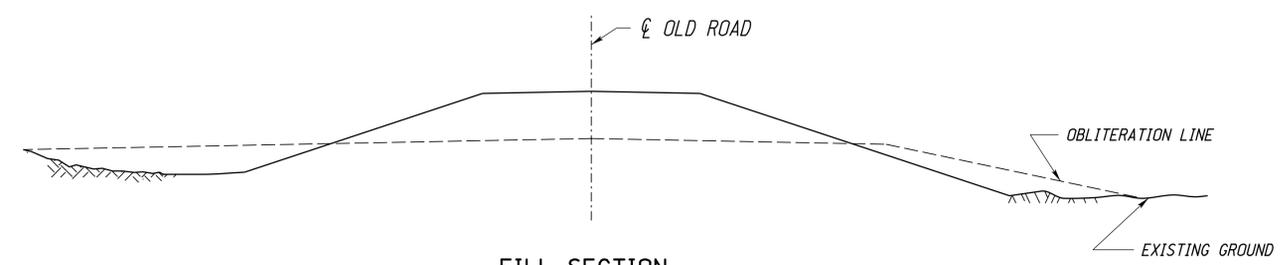
TYPICAL CROSS SECTIONS OF OLD ROAD OBLITERATION



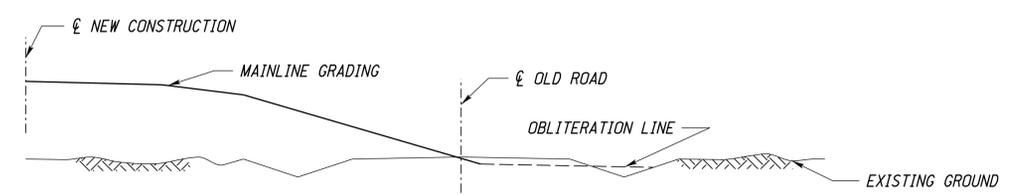
CUT SECTION
(OLD ROAD AWAY FROM NEW CONSTRUCTION)



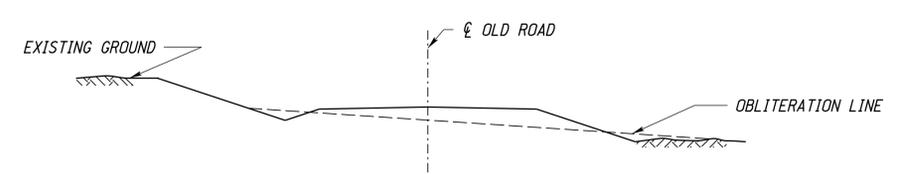
CUT SECTION
(OLD ROAD NEAR CUT SECTION, NEW CONSTRUCTION)



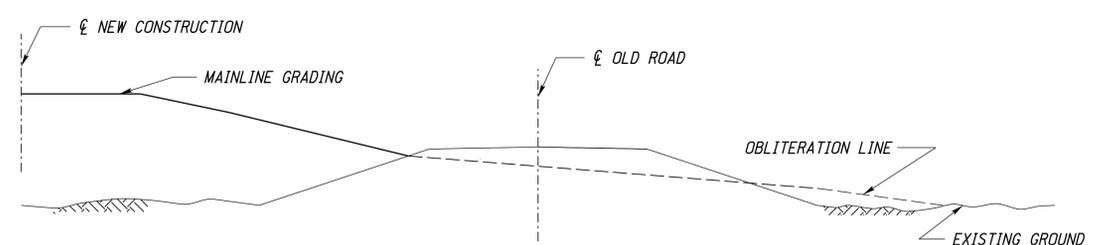
FILL SECTION
(OLD ROAD AWAY FROM NEW CONSTRUCTION)



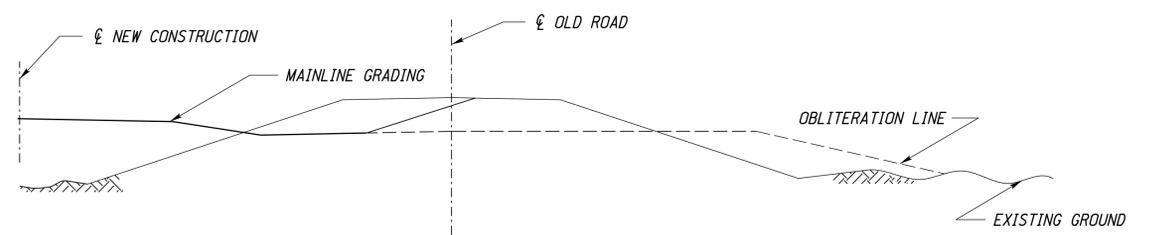
CUT SECTION
(OLD ROAD NEAR FILL SECTION, NEW CONSTRUCTION)



HALF CUT SECTION & HALF FILL SECTION
(OLD ROAD AWAY FROM NEW CONSTRUCTION)



FILL SECTION
(OLD ROAD NEAR FILL SECTION, NEW CONSTRUCTION)

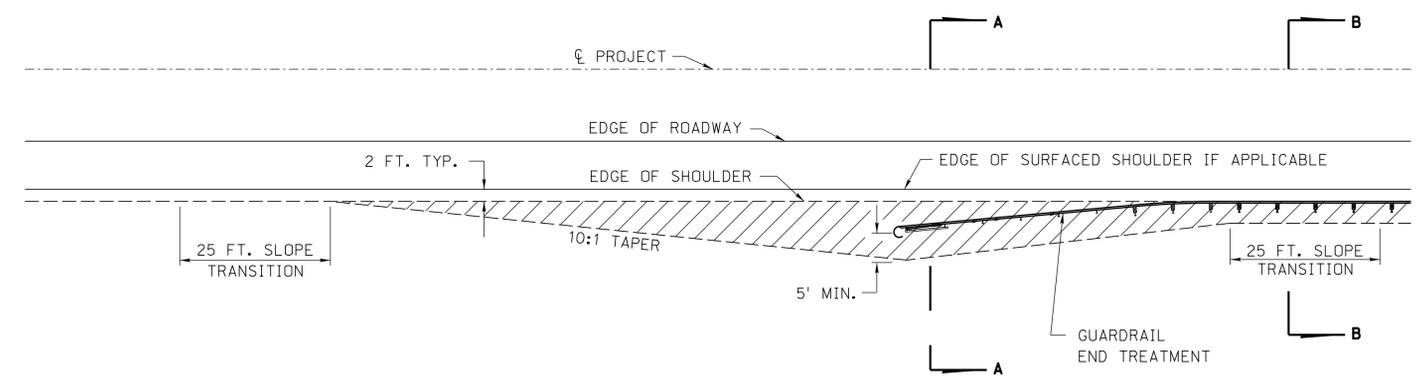


FILL SECTION
(OLD ROAD NEAR CUT SECTION, NEW CONSTRUCTION)

File: 11102e00.dgn
 Scale: 1:100
 SHEET 1 OF 1
 11-0-2-E-00
 Date: 12-APR-2016 13:47
 User: dcr13017
 Computer: DRDESIGN147
 ROADWAY DESIGN DIVISION

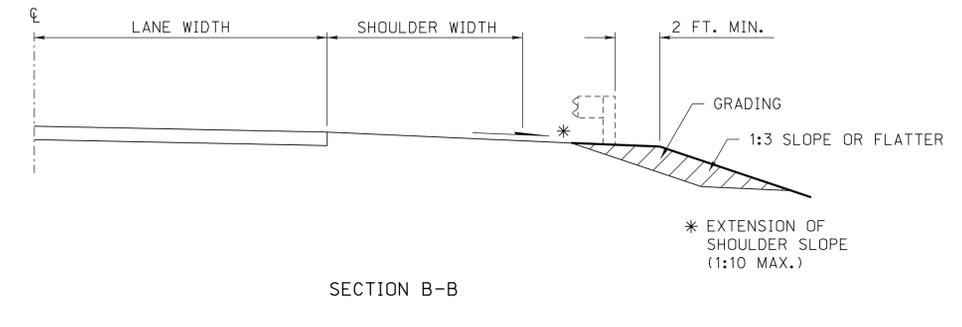
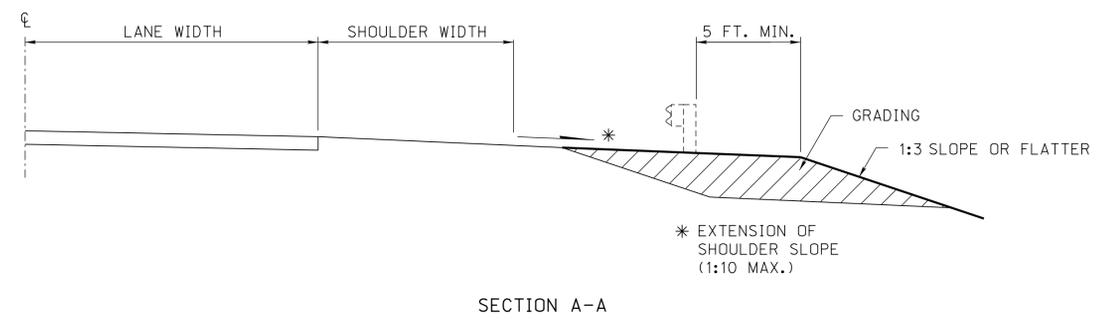


TYPICAL CROSS SECTIONS



GRADING FOR GUARDRAIL END TREATMENTS

PLAN



ROADWAY DESIGN DIVISION

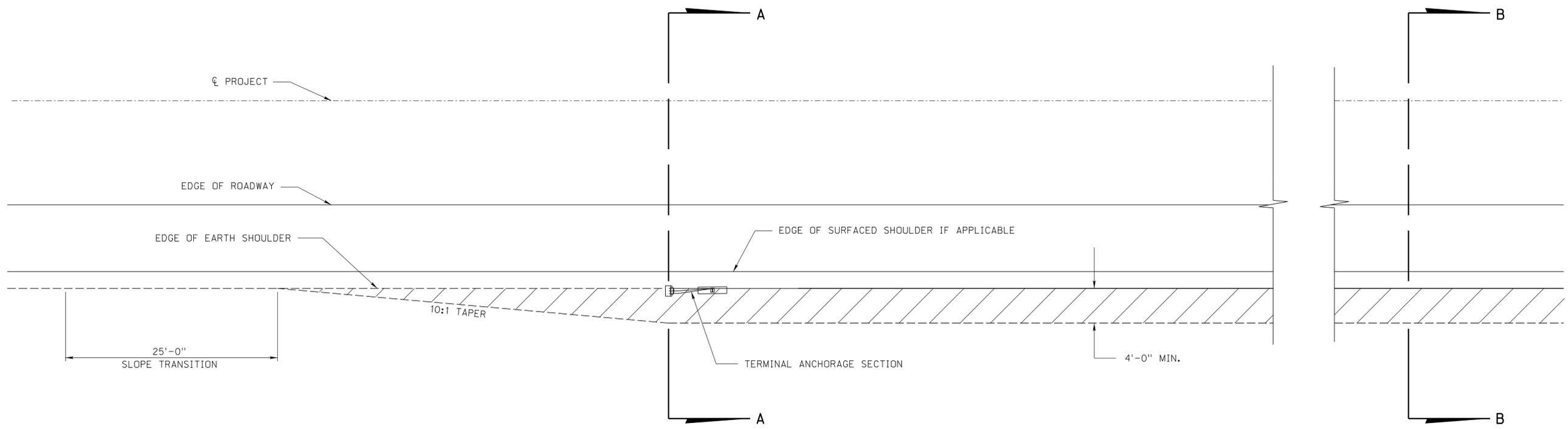
Computer: DRDESIGN147

User: dor13017

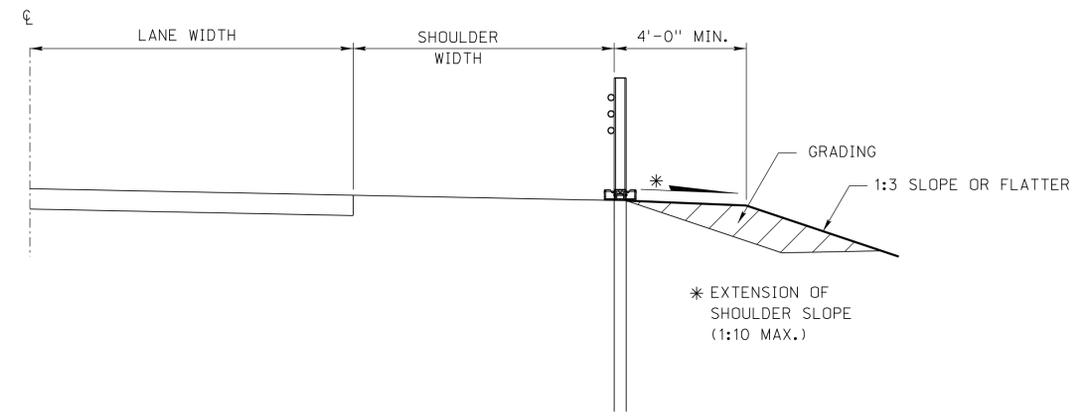
Date: 12-APR-2016 13:47

File: I7002e00.dgn
 Scale: 1/32=22'
 SHEET: 100-2-E-00

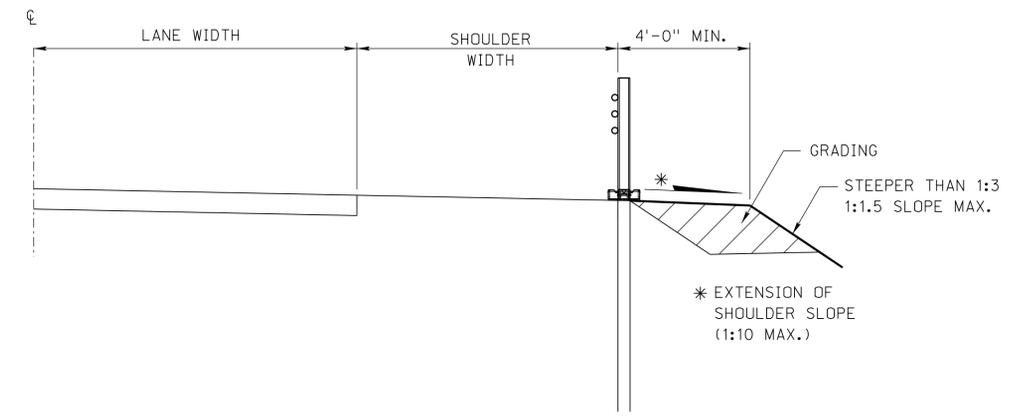
TYPICAL CROSS SECTIONS



PLAN



SECTION A-A



SECTION B-B

GRADING FOR TERMINAL ANCHORAGE SECTIONS

ROADWAY DESIGN DIVISION
 Computer: DRDESIGN147
 User: dor13017
 Date: 12-APR-2016 13:47
 File: I7022e00.dgn
 SHEET 1 OF 1
 157-2102-2-E-00

TYPICAL CROSS SECTIONS

NO OVERLAY JOINT REPAIR

- ① FULL DEPTH DIAMOND SAW CUT.
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.

- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS.
- ④ TIE BARS REQUIRED.

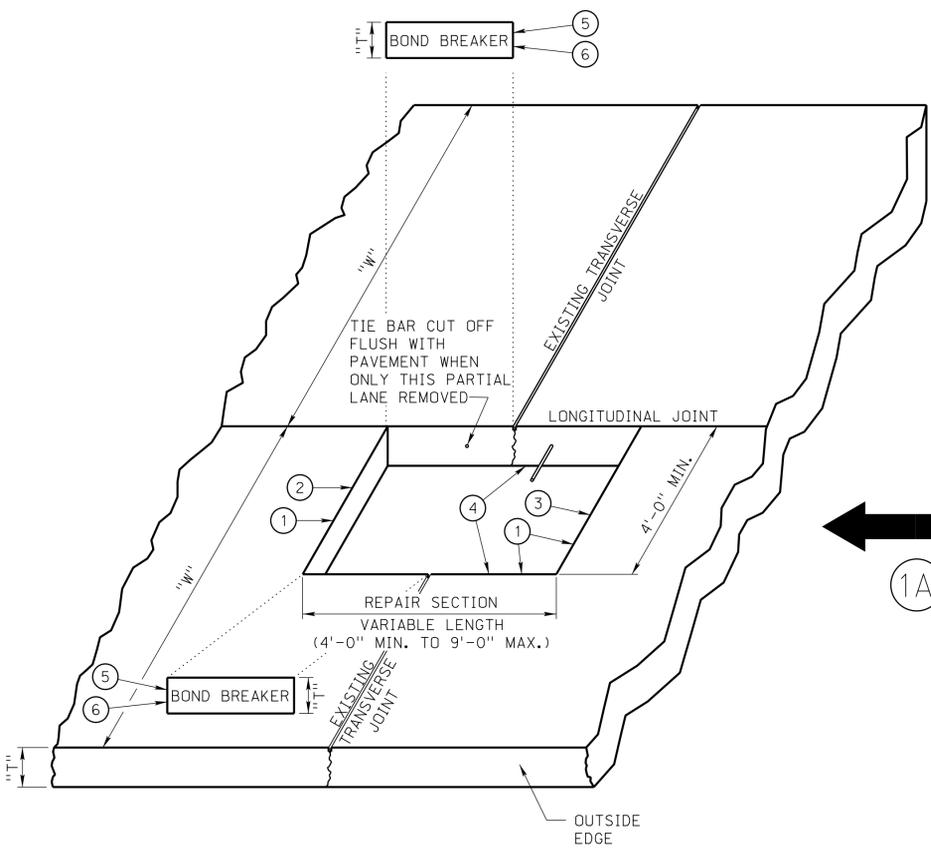
- ⑤ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.

- ⑥ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED TRANSVERSE JOINT AND THE EXISTING TRANSVERSE JOINT.

30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER. JOINT MUST BE SEALED.

NOTES:

ALL DOWEL BARS AND TIE BARS WILL BE EPOXY COATED.
THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE JOINT REPAIR.



CONCRETE PAVEMENT JOINT REPAIR, PARTIAL LANE

NOTES:

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

OR

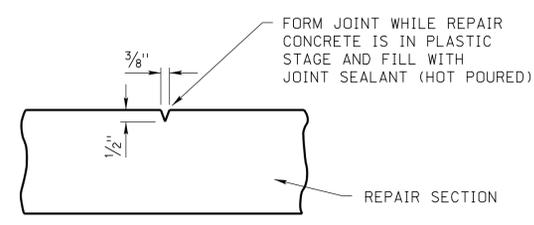
** IF THE WIDTH OF PANEL ("W") WAS PREVIOUSLY WIDENED, CONSTRUCT A TOOLED LONGITUDINAL JOINT TO MATCH THE LONGITUDINAL JOINTS OF THE ADJOINING PANELS.

IF THE PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB.

LEGEND

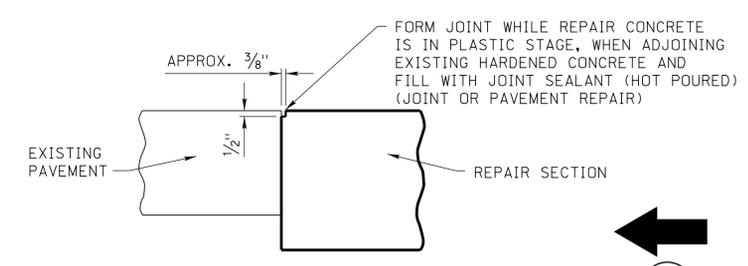
- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE

NOTE: FOR JOINT REPAIR LOCATIONS, SEE SHEET 2-S

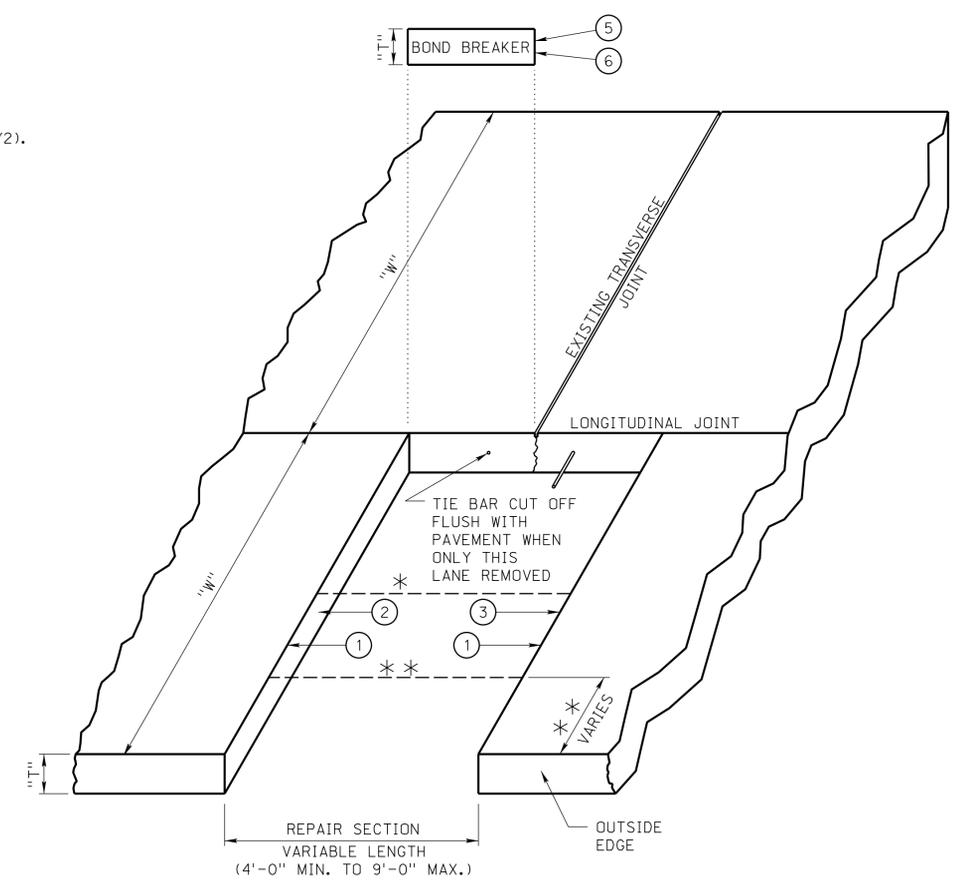


TOOLED LONGITUDINAL JOINT

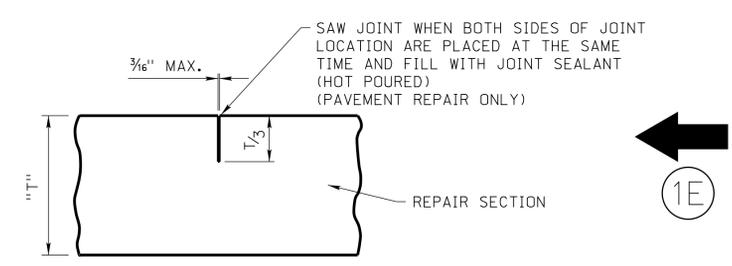
NOTE: CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.



FORMED JOINT

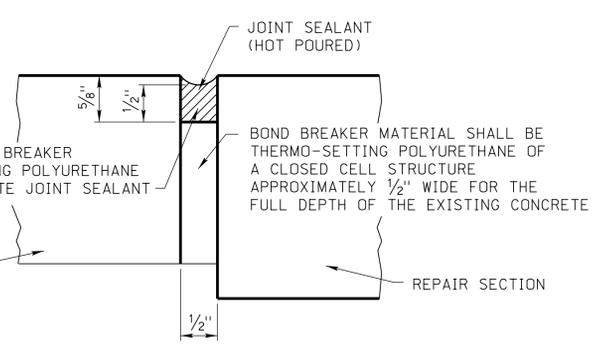


CONCRETE PAVEMENT JOINT REPAIR



TRANSVERSE JOINT

NOTE: FORMED JOINTS ARE NOT REQUIRED ON DIAMOND GRINDING PROJECTS.



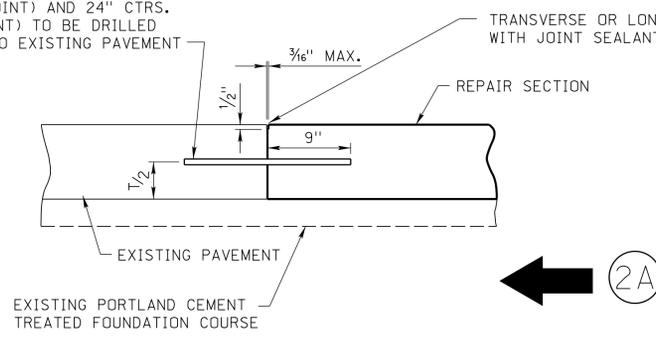
THERMO-SETTING POLYURETHANE BOND BREAKER

ROADWAY DESIGN DIVISION
Computer: DRDESIGN147
User: dcr13017
Date: 12-APR-2016 13:47
File: 38502e21.dgn
Scale: 1:100
SHEET 1 OF 10
3850-2-E-21

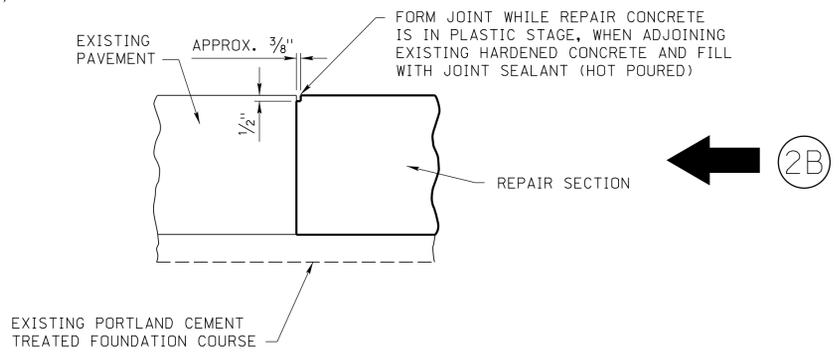
TYPICAL CROSS SECTIONS

NO OVERLAY TIES, DOWELS AND SEALING

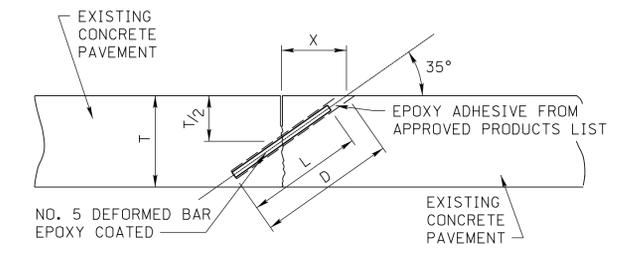
NO. 5 x 18" TIE BARS AT 33" CTRS. (LONGITUDINAL JOINT) AND 24" CTRS. (TRANSVERSE JOINT) TO BE DRILLED AND GROUTED INTO EXISTING PAVEMENT



TIE BAR



FORMED JOINT

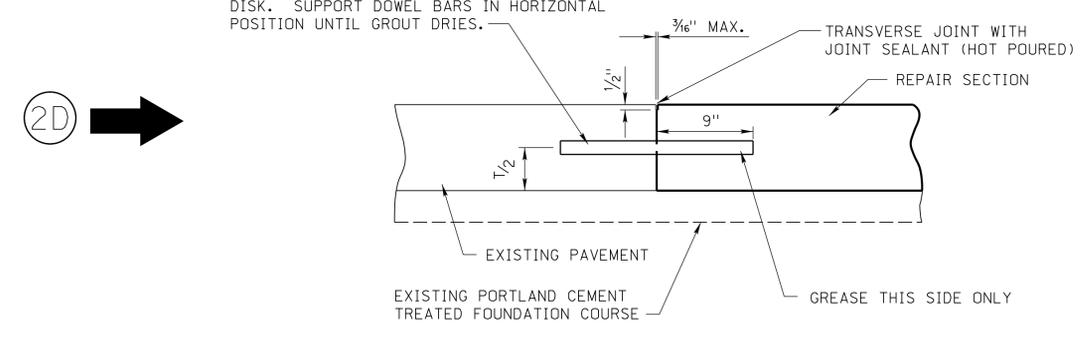


CROSS STITCHING EXISTING CONCRETE PAVEMENT
(SEE SHEET 2-S FOR LOCATIONS)

"T"	"X"	"D"	"L"
8.0"	5.7"	11.9"	9.8"
9.0"	6.5"	13.5"	11.5"
10.0"	7.0"	14.0"	12.5"
11.0"	8.0"	16.0"	13.0"
12.0"	8.5"	17.5"	14.0"
13.0"	9.5"	20.0"	18.0"
14.0"	10.0"	21.0"	18.0"

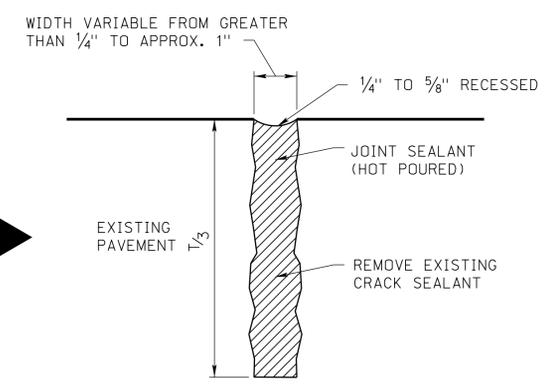
NOTE: DEFORMED BAR SHALL BE 1" BELOW THE SURFACE

1 1/4" DIA. x 18" DOWEL BARS "T" = 8" TO 9",
1 1/2" DIA. x 18" DOWEL BARS "T" = 10" OR MORE
DOWEL BARS TO BE DRILLED AND GROUTED INTO EXISTING PAVEMENT. PLACE GROUT RETENTION DISK. SUPPORT DOWEL BARS IN HORIZONTAL POSITION UNTIL GROUT DRIES.



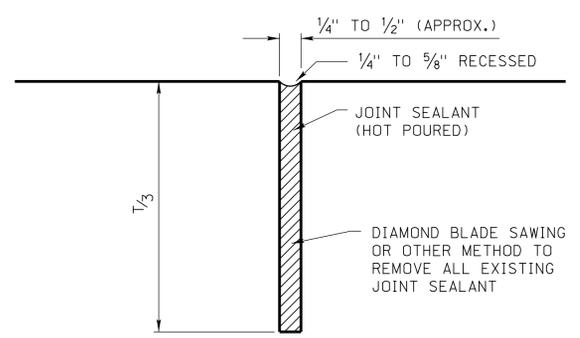
DOWEL BAR

NOTE: ALL DOWEL BARS WILL BE EPOXY COATED

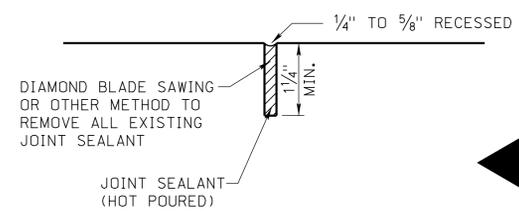


TYPICAL TRANSVERSE AND LONGITUDINAL CRACK

NOTE: FOR CRACK SEALING LOCATIONS, SEE SHEET 2-S



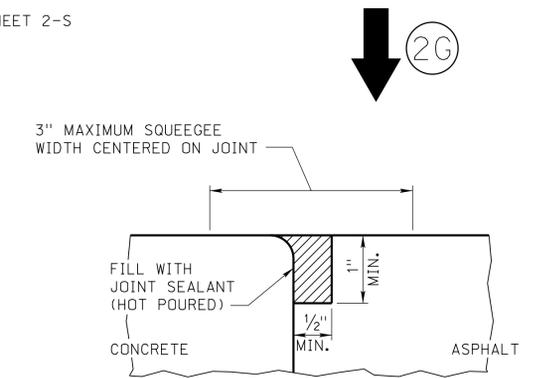
OR



EARLY-SAW CUT

TRANSVERSE AND LONGITUDINAL JOINT DETAILS

"T" = *



LONGITUDINAL JOINT SEALING DETAIL
(ASPHALT TO CONCRETE)

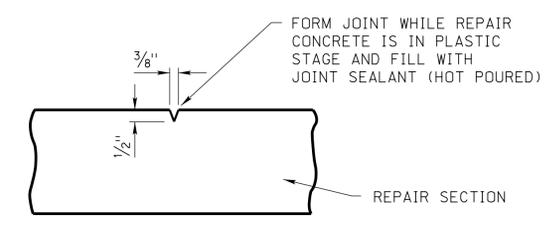
ROADWAY DESIGN DIVISION
Computer: DRDESIGN147
User: dcr13017
Date: 12-APR-2016 13:47
File: 38502e21.dgn
Scale: 1:100
SHEET 2 OF 10
3850-2-E-21

TYPICAL CROSS SECTIONS

NO OVERLAY PARTIAL DEPTH REPAIR

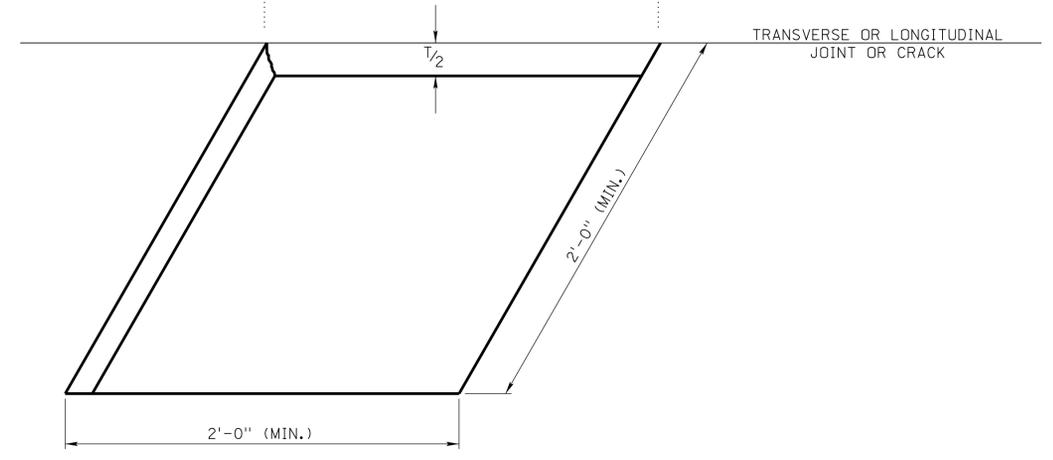


BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM. 30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT PARTIAL DEPTH TRANSVERSE OR LONGITUDINAL JOINT OR CRACK WHEN APPROVED BY THE ENGINEER. JOINT MUST BE SEALED.



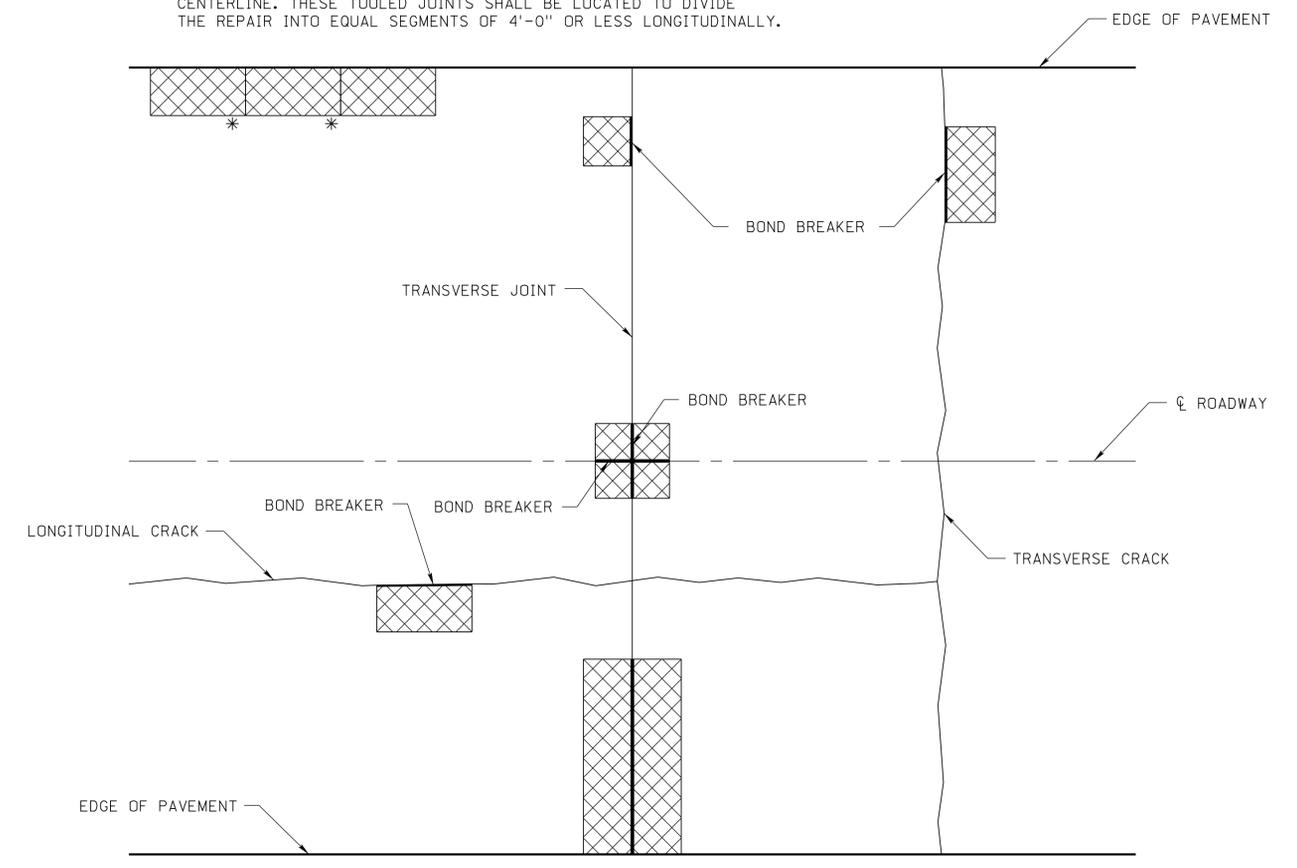
TOOLED LONGITUDINAL JOINT

NOTE:
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.



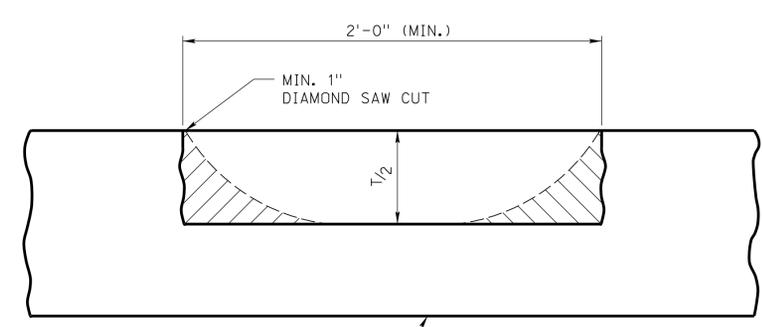
TRANSVERSE OR LONGITUDINAL JOINT OR CRACK

* IF PARTIAL DEPTH REPAIR IS LONGER THAN 4'-0" LONGITUDINALLY, TOOLED TRANSVERSE JOINTS SHALL BE MADE PERPENDICULAR TO CENTERLINE. THESE TOOLED JOINTS SHALL BE LOCATED TO DIVIDE THE REPAIR INTO EQUAL SEGMENTS OF 4'-0" OR LESS LONGITUDINALLY.



CONCRETE PAVEMENT REPAIR, TYPE "A", TYPE "B" AND TYPE "C", PARTIAL DEPTH

NOTE:
FOR CONCRETE PAVEMENT REPAIR (PARTIAL DEPTH) LOCATIONS, SEE SHEET 2-S.



TYPICAL SECTION OF PARTIAL DEPTH REPAIRS

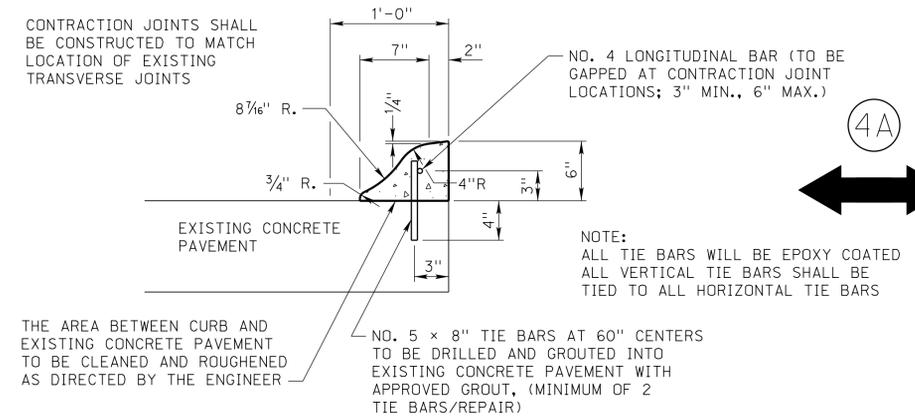
INDICATES MATERIAL LEFT AT MARGINS OF MILLED CUTS TO BE REMOVED WITH A 15# MAXIMUM CHIPPING HAMMER TO PROVIDE VERTICAL EDGES ALL AROUND

3A

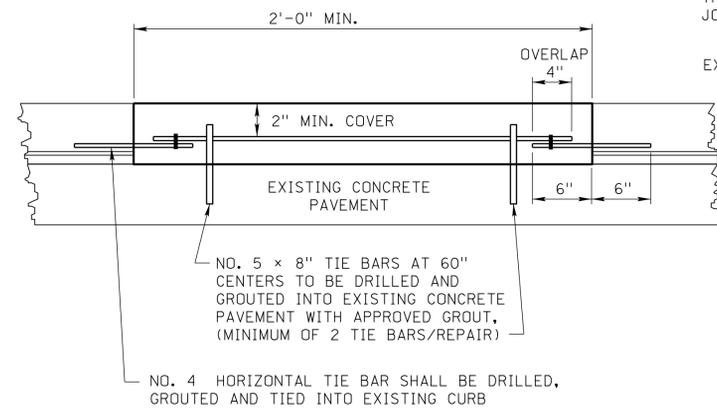
ROADWAY DESIGN DIVISION
 Computer: DRDESIGN147
 User: ddr13017
 Date: 12-APR-2016 13:47
 File: 38502e21.dgn
 Scale: 1:100
 SHEET 3 OF 10
 3850-2-E-21

TYPICAL CROSS SECTIONS

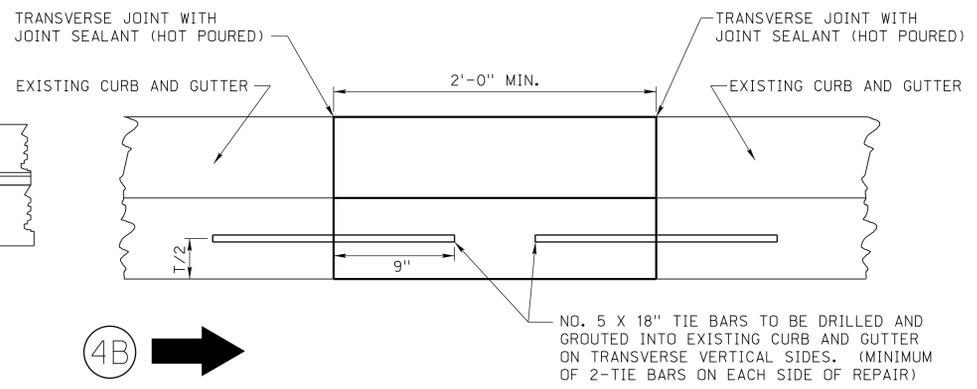
NO OVERLAY CURB REPAIR



CONCRETE TACK-ON CURB

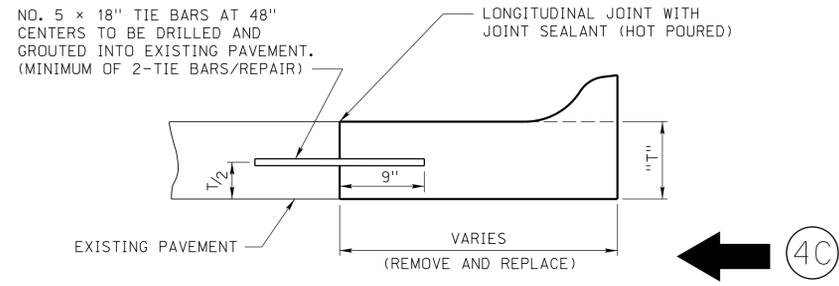


FRONT VIEW OF TACK-ON CURB REPAIR



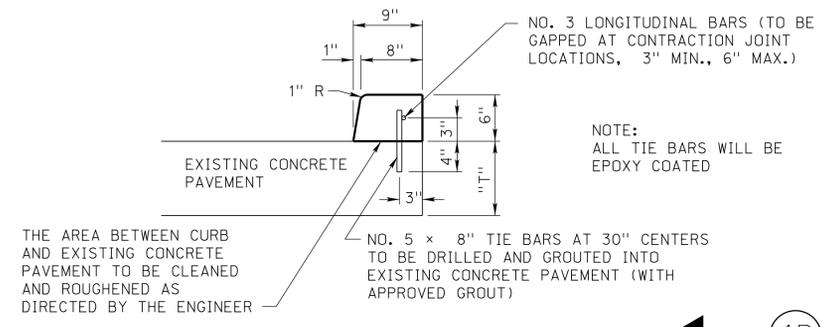
CONCRETE CURB AND GUTTER REPAIR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

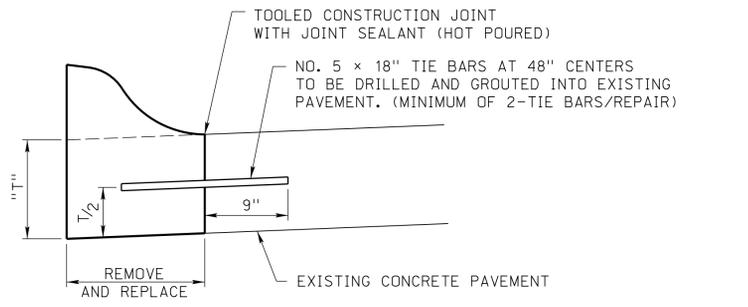


CONCRETE CURB AND GUTTER REPAIR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

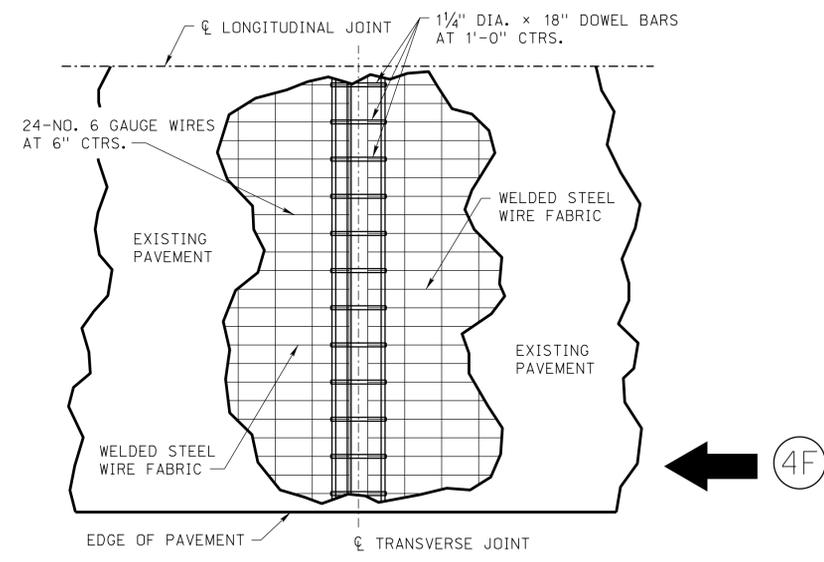


INTEGRAL CONCRETE CURB REPAIR (BARRIER TYPE)

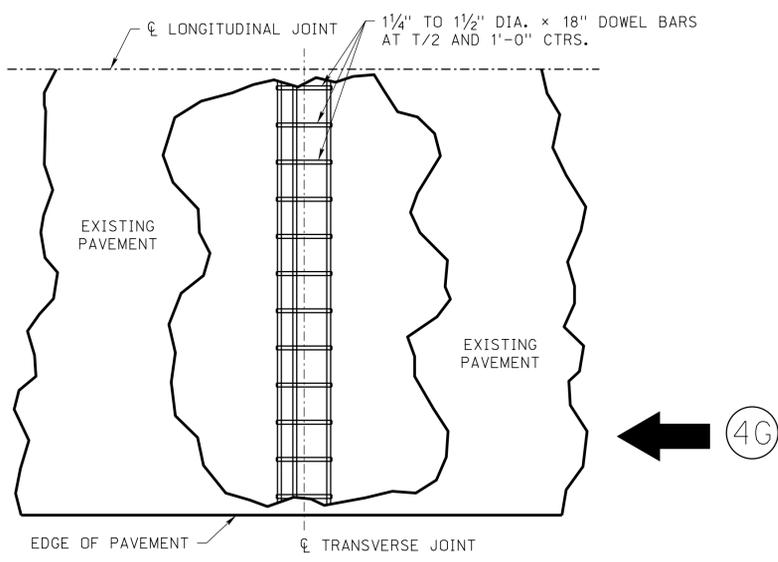


INTEGRAL CURB REPAIR

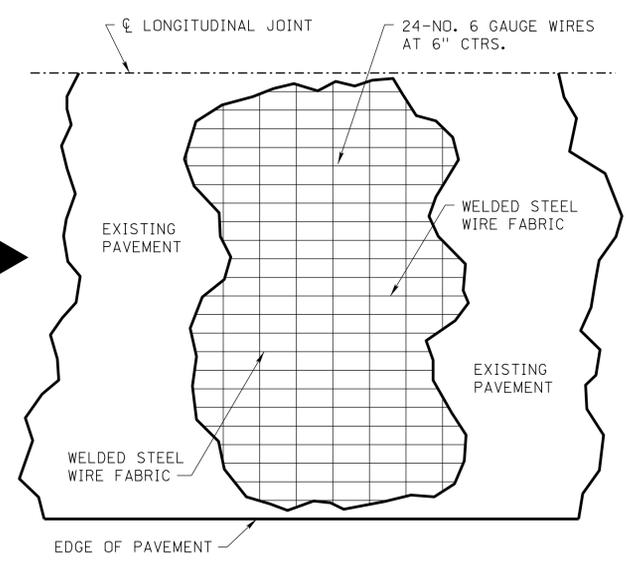
NOTE: ALL TIE BARS WILL BE EPOXY COATED



EXISTING 8" AND 9" REINFORCED CONCRETE PAVEMENT (RCP)



EXISTING DOWELED CONCRETE PAVEMENT



EXISTING 9"-6"-9" AND 9"-7"-9" REINFORCED CONCRETE PAVEMENT

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: dor13017

Date: 12-APR-2016 13:47

File: 38502e21.dgn
Scale: 1:100
SHEET 4 OF 10

TYPICAL CROSS SECTIONS

- ① FULL DEPTH DIAMOND SAW CUT.
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED 2'-0" BEYOND THE EXISTING TRANSVERSE JOINTS. (3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.
- ⑦ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.
- ⑧ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED JOINT AND THE EXISTING TRANSVERSE JOINT.

NO OVERLAY 8" AND 9" RCP REPAIR

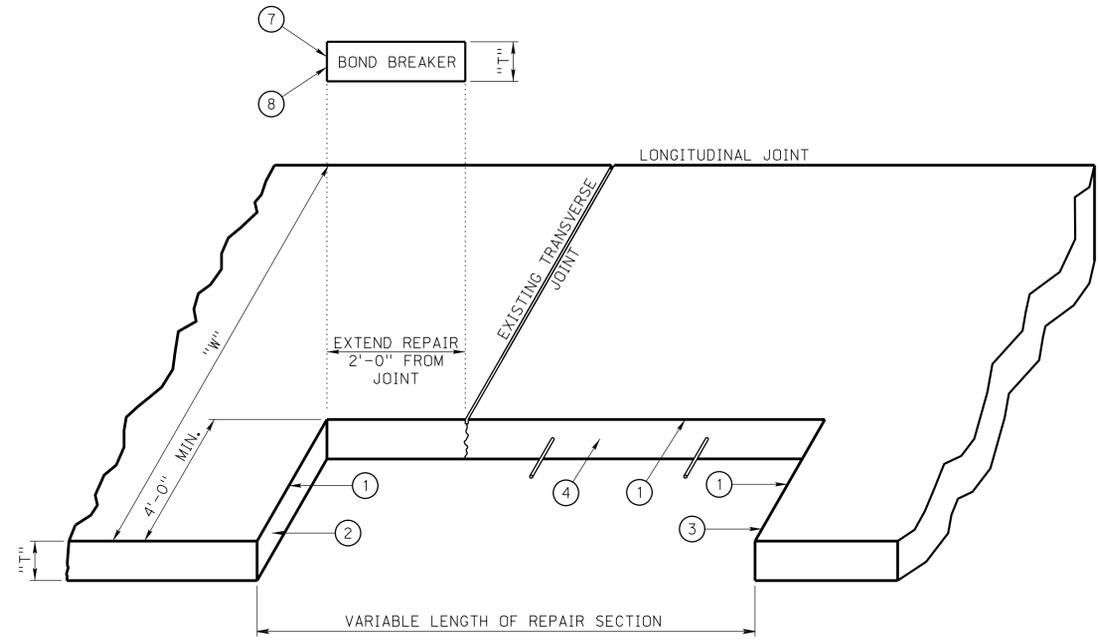
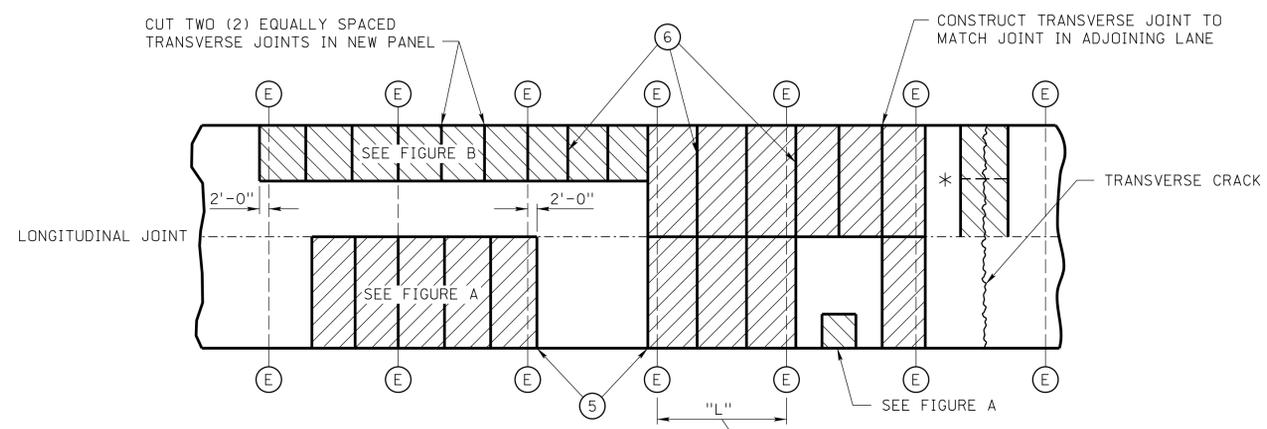


FIGURE B



NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

SEE REPAIR TABLES (FULL DEPTH) FOR ACTUAL REPAIR DIMENSIONS

8" AND 9" REINFORCED CONCRETE PAVEMENT REPAIR

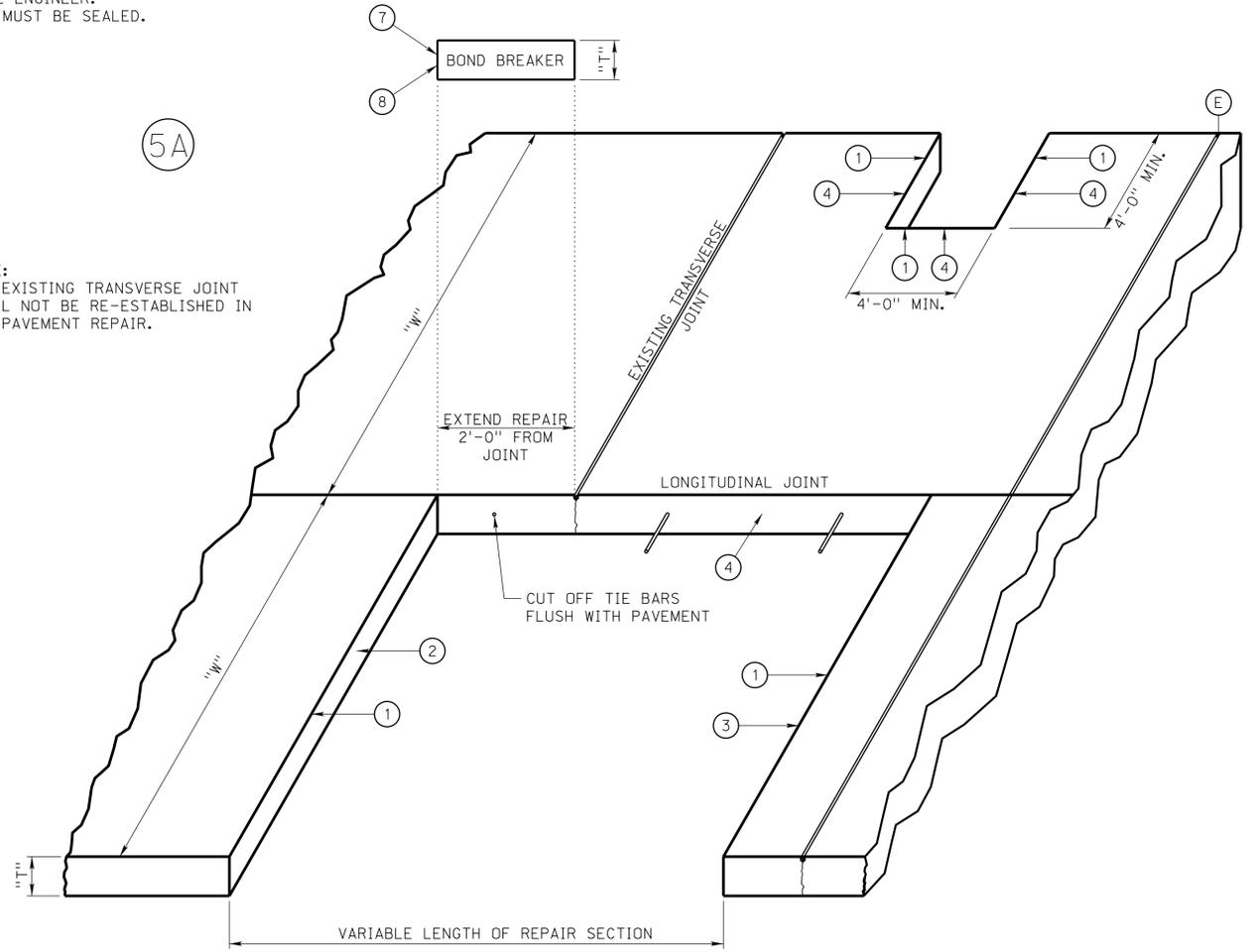
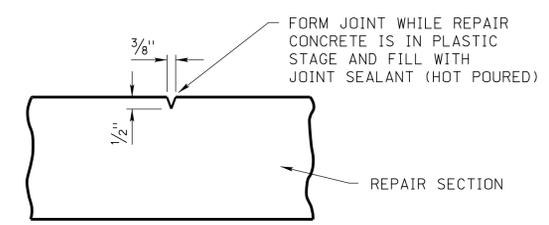


FIGURE A

NOTE:
THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE PAVEMENT REPAIR.

LEGEND

- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE
- ⓔ EXISTING TRANSVERSE JOINT
- CONCRETE REMOVAL (PARTIAL LANE WIDTH)
- CONCRETE REMOVAL (FULL LANE WIDTH)



TOOLED LONGITUDINAL JOINT

NOTE:
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND THE WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-5

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

Date: 12-APR-2016 13:47

File: 38502821.dgn
5:05:10
SHEET 2 OF 10 3850-2-E-21

TYPICAL CROSS SECTIONS

NO OVERLAY PLAIN CONCRETE PAVEMENT REPAIR

- ① FULL DEPTH DIAMOND SAW CUT (MAY NOT BE REQUIRED AT EXISTING TRANSVERSE JOINT).
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED AT EXISTING TRANSVERSE JOINTS. (3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.

NOTE:
IF REPAIR EXTENDS THROUGH EXISTING TRANSVERSE JOINT, SEE CONCRETE PAVEMENT JOINT REPAIR DETAIL FOR PROPER BOND BREAKER PLACEMENT.

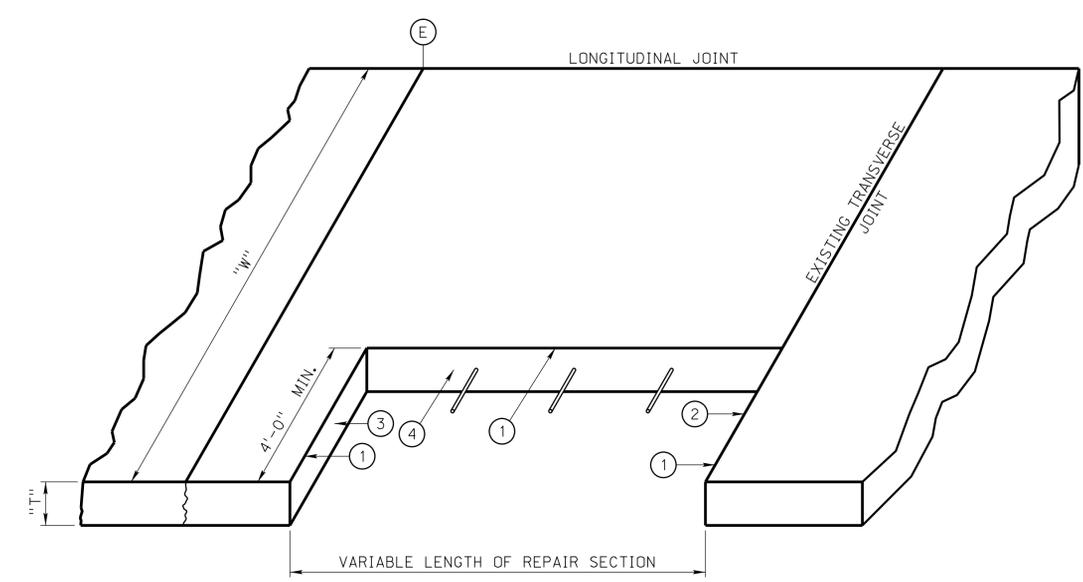


FIGURE B

NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

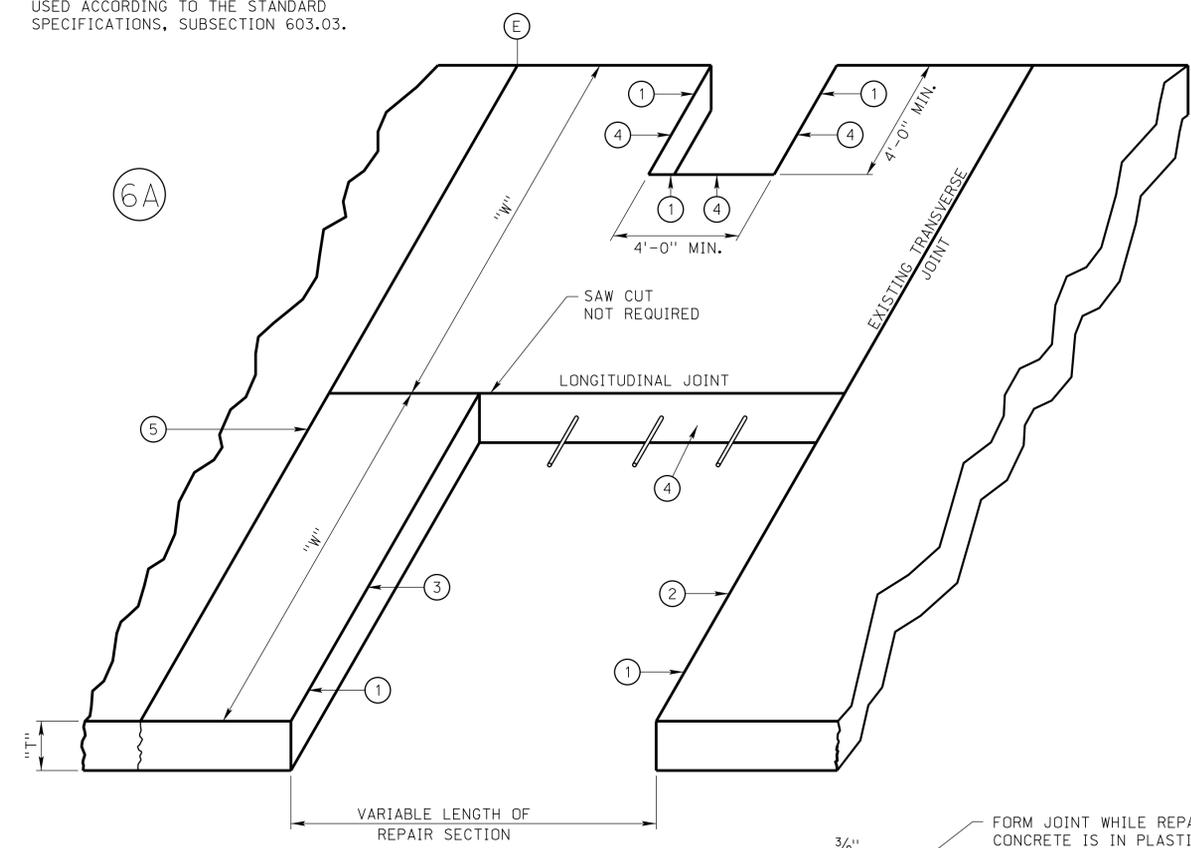
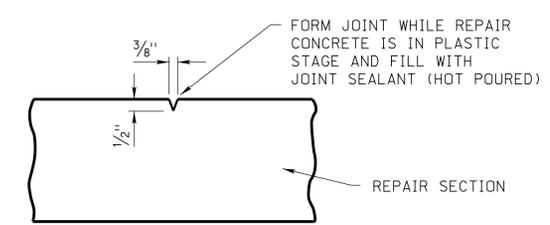


FIGURE A



TOOLED LONGITUDINAL JOINT

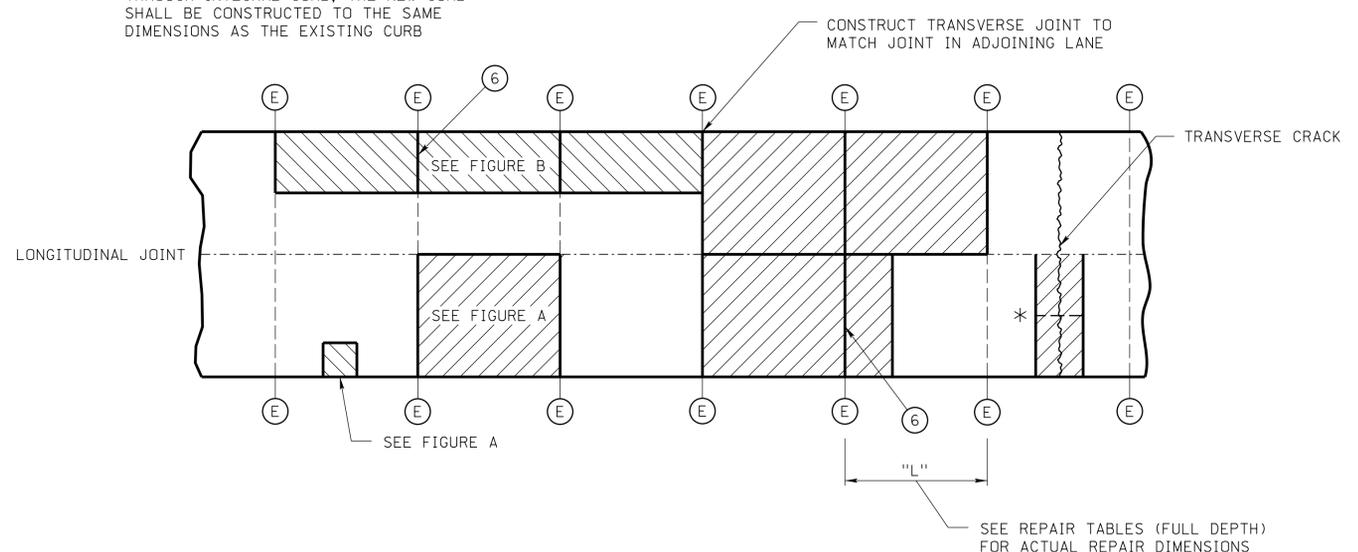
NOTE:
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND THE WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

OR

IF THE WIDTH OF PANEL ("W") WAS PREVIOUSLY WIDENED, CONSTRUCT A TOOLED LONGITUDINAL JOINT TO MATCH THE LONGITUDINAL JOINTS OF THE ADJOINING PANELS. SEE JOINT DETAIL FOR THIS TOOLED LONGITUDINAL JOINT.

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-5



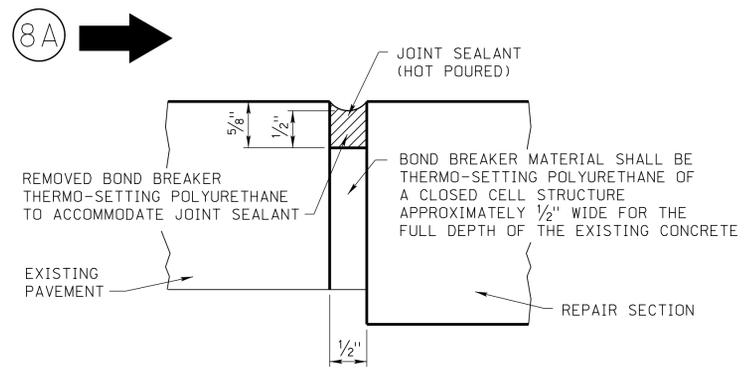
PLAIN CONCRETE PAVEMENT REPAIR

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - (E) EXISTING TRANSVERSE JOINT
 - [Hatched Box] CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - [Hatched Box] CONCRETE REMOVAL (FULL LANE WIDTH)

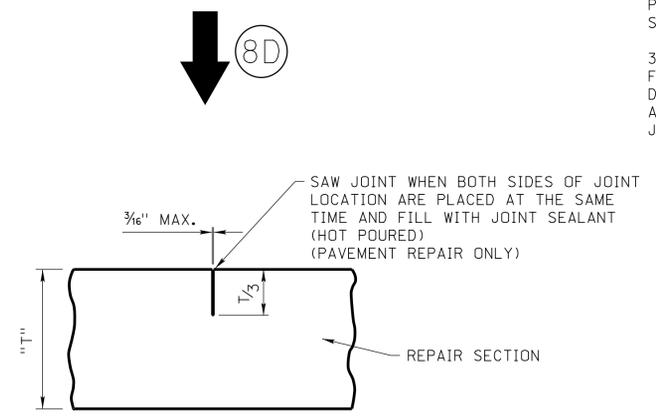
File: 38502e21.dgn
 Scale: 1:100
 SHEET 8 OF 10
 Date: 12-APR-2016 13:47
 User: dcr13017
 Computer: DRDESIGN147
 ROADWAY DESIGN DIVISION

TYPICAL CROSS SECTIONS

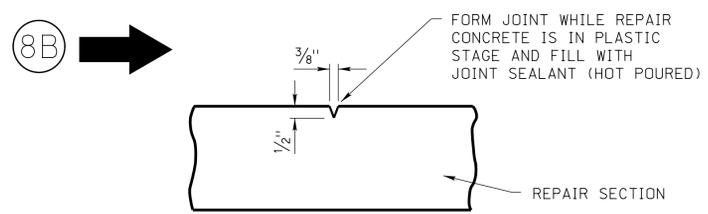
NO OVERLAY 6" & 7" JOINT REPAIR



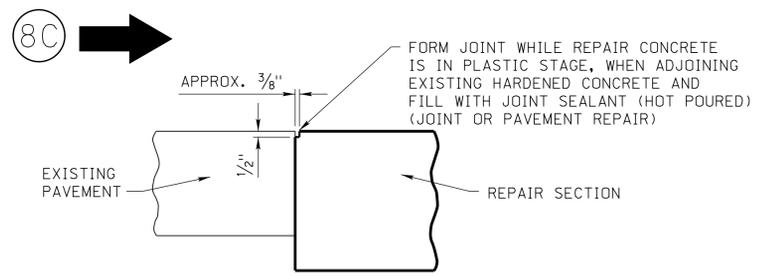
THERMO-SETTING POLYURETHANE BOND BREAKER



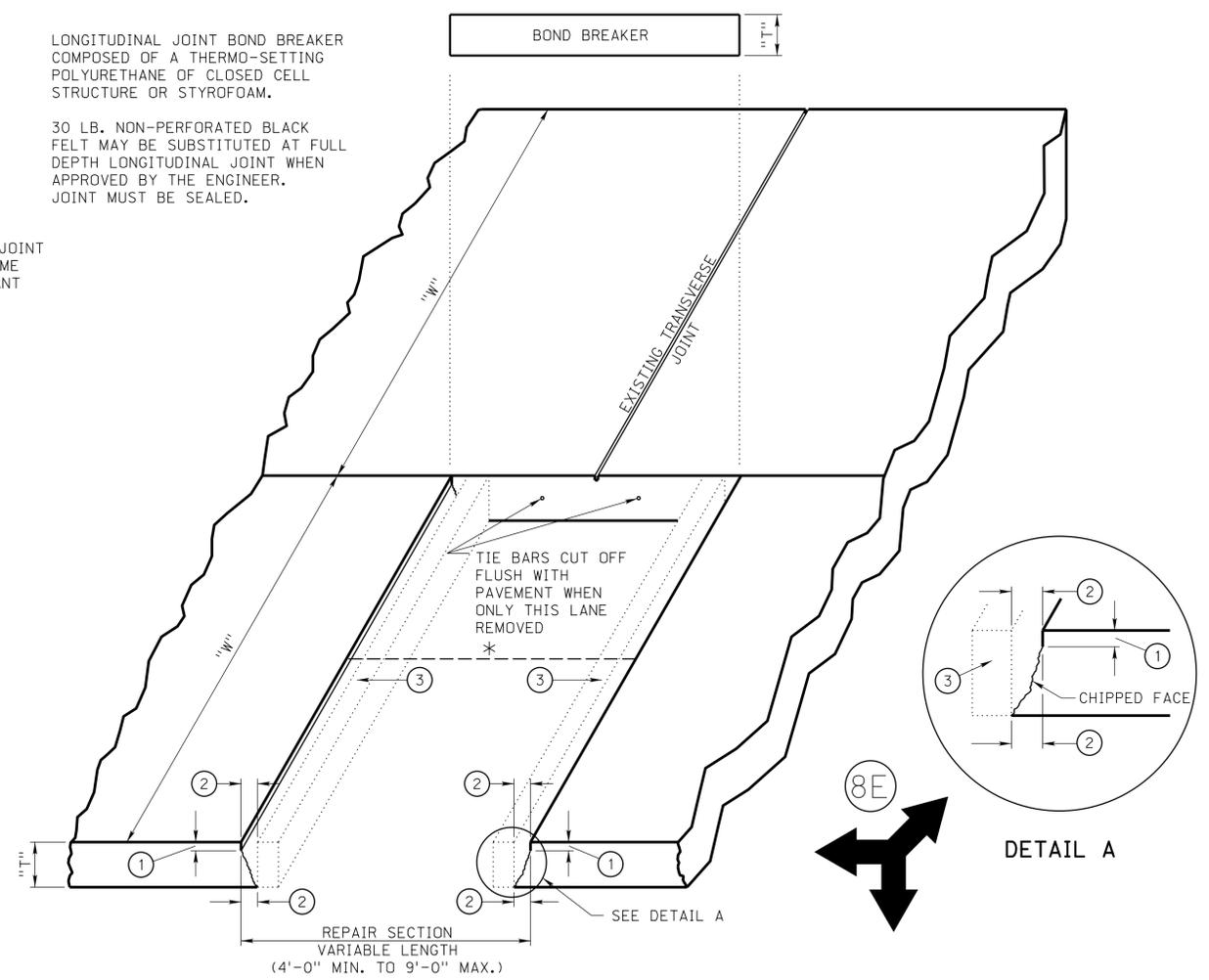
TRANSVERSE JOINT



TOOLED LONGITUDINAL JOINT



FORMED JOINT



CONCRETE PAVEMENT JOINT REPAIR

- ① 1" ± 1/4" DIAMOND SAW CUT
- ② APPROX. 4" WHEEL CUTTER SAW CUT 2" ± 1/2" INBOARD FROM DIAMOND SAW CUT ON EACH SIDE OF SECTION TO BE REMOVED. A 15# MAXIMUM CHIPPING HAMMER SHALL BE USED TO CONSTRUCT THE CHIPPED FACE.
- ③ 4" WHEEL CUTTER SAW CUT

NOTE:
CONTRACTOR MAY USE FULL DEPTH DIAMOND SAW CUT IN PLACE OF 4" WHEEL CUTTER SAW CUT. (2" ± 1/2" INBOARD FROM DIAMOND SAW CUT)
THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE JOINT REPAIR.

NOTES:

- * IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).
- IF THE PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB.

LEGEND

- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE

NOTE: FOR JOINT REPAIR LOCATIONS, SEE SHEET 2-S

ROADWAY DESIGN DIVISION
 Computer: DRDESIGN147
 User: dcr13017
 Date: 12-APR-2016 13:47
 File: 38502e21.dgn
 Scale: 1:100
 SHEET 8 OF 10
 3850-2-E-21

TYPICAL CROSS SECTIONS

NO OVERLAY 6" & 7" PLAIN CONCRETE REPAIR

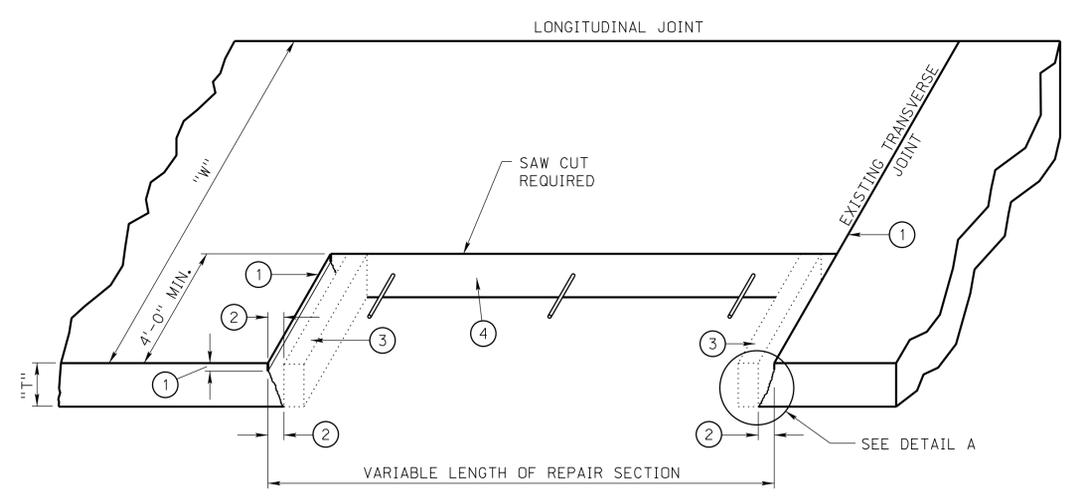
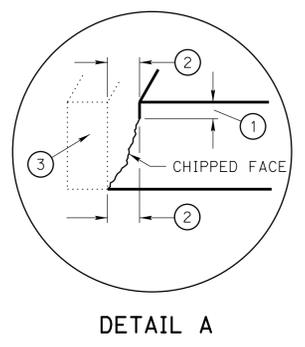


FIGURE B



DETAIL A

- ① 1" ± 1/4" DIAMOND SAW CUT
 - ② APPROX. 4" WHEEL CUTTER SAW CUT 2" ± 1/2" INBOARD FROM DIAMOND SAW CUT ON TRANSVERSE SIDES OF SECTION TO BE REMOVED. A 15# MAXIMUM CHIPPING HAMMER SHALL BE USED TO CONSTRUCT THE CHIPPED FACE. (MAY NOT BE REQUIRED AT EXISTING TRANSVERSE JOINT, IF ADEQUATE SLOPED FACE EXISTS)
 - ③ 4" WHEEL CUTTER SAW CUT
 - ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
 - ⑤ FULL DEPTH DIAMOND SAW CUT.
- NOTE:
CONTRACTOR MAY USE FULL DEPTH DIAMOND SAW CUT IN PLACE OF 4" WHEEL CUTTER SAW CUT. (2" ± 1/2" INBOARD FROM DIAMOND SAW CUT)
IF REPAIR EXTENDS THROUGH EXISTING TRANSVERSE JOINT, SEE JOINT REPAIR DETAIL FOR PROPER BOND BREAKER PLACEMENT.

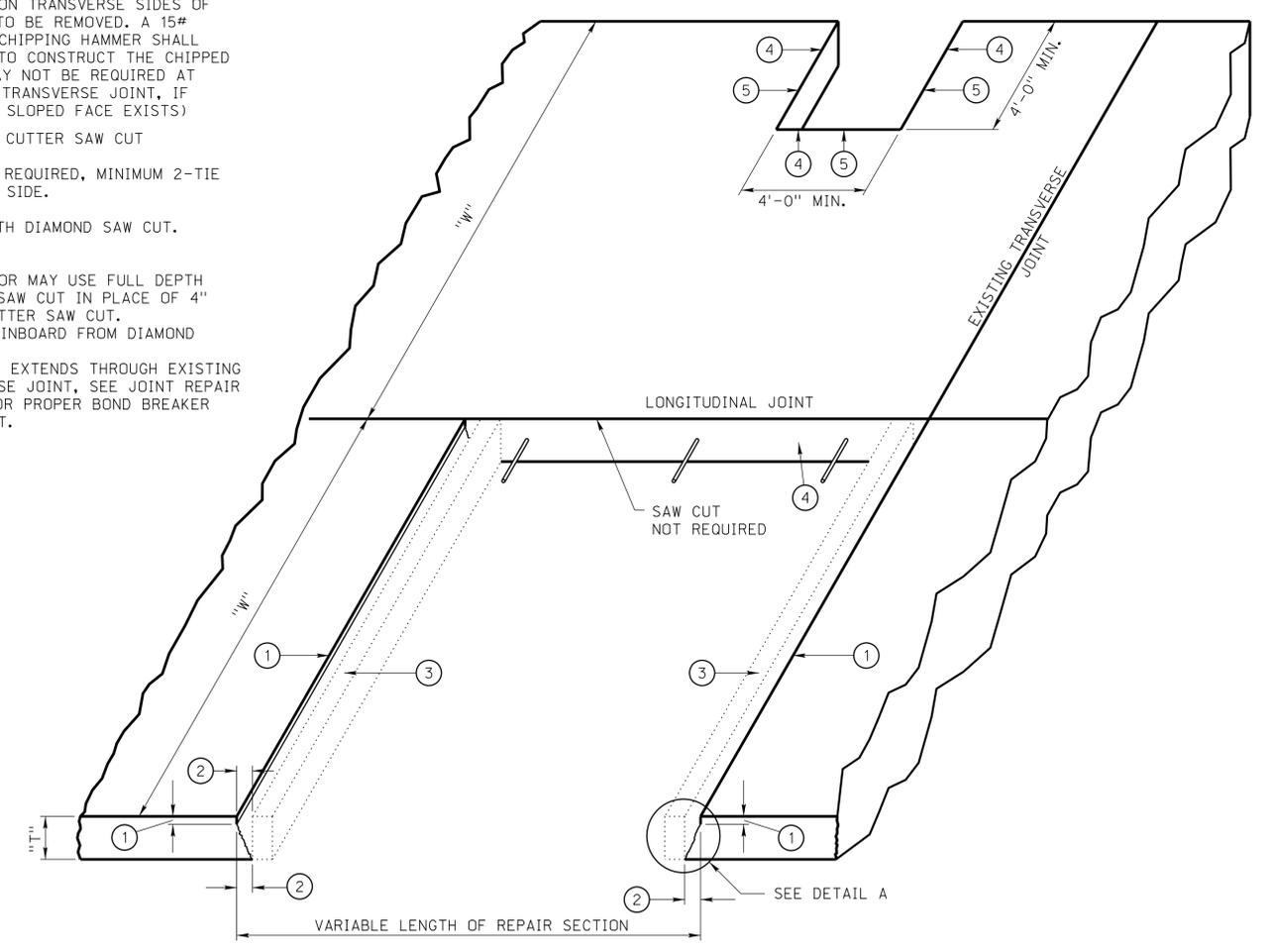
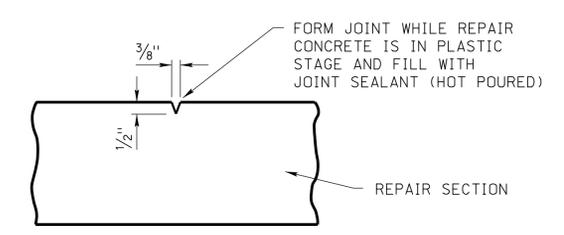


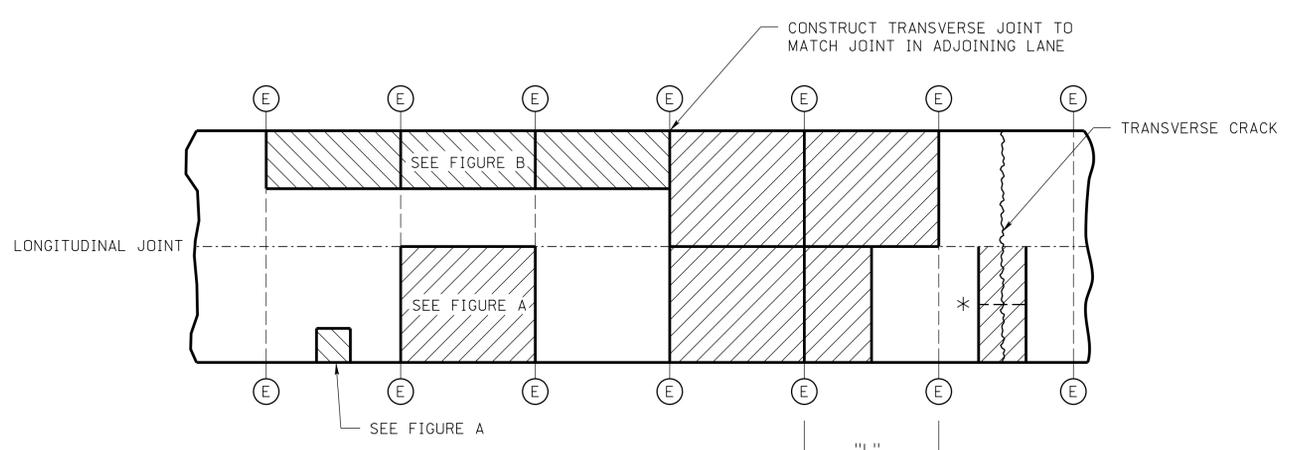
FIGURE A



TOOLED LONGITUDINAL JOINT

NOTE:
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.
* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND THE WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-S



PLAIN CONCRETE PAVEMENT REPAIR

NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - (E) EXISTING TRANSVERSE JOINT
 - [Hatched] CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - [Diagonal lines] CONCRETE REMOVAL (FULL LANE WIDTH)

TYPICAL CROSS SECTIONS

- ① FULL DEPTH DIAMOND SAW CUT.
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.

- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED 2'-0" BEYOND THE EXISTING TRANSVERSE JOINTS. (3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.

- ⑦ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.
- 30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER.

- ⑧ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED JOINT AND THE EXISTING TRANSVERSE JOINT.

NO OVERLAY DOWELED CONCRETE PAVEMENT REPAIR

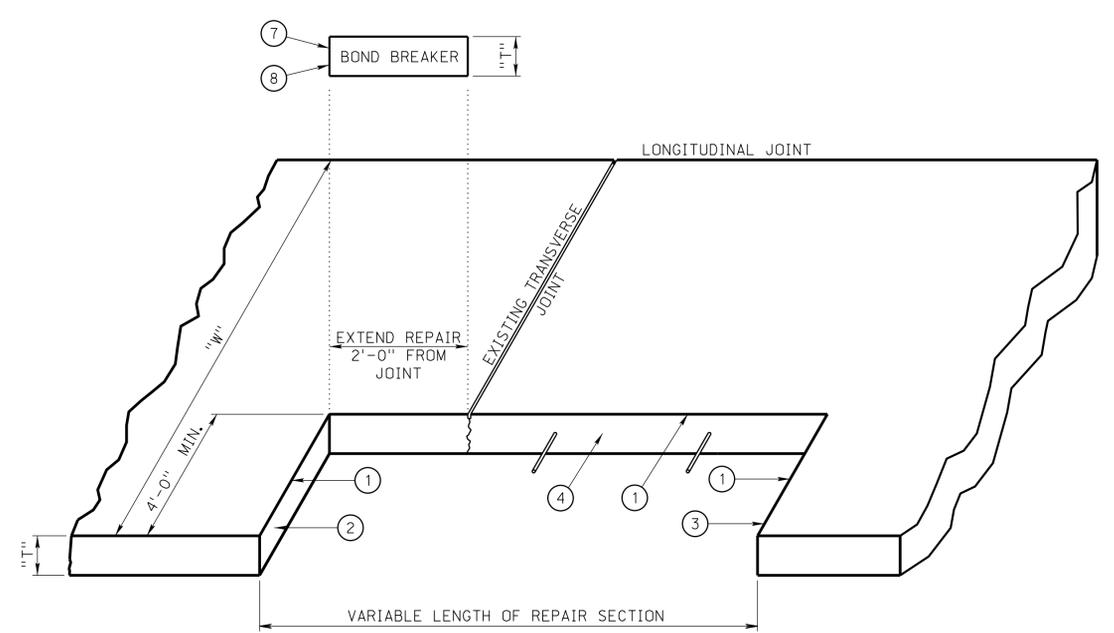
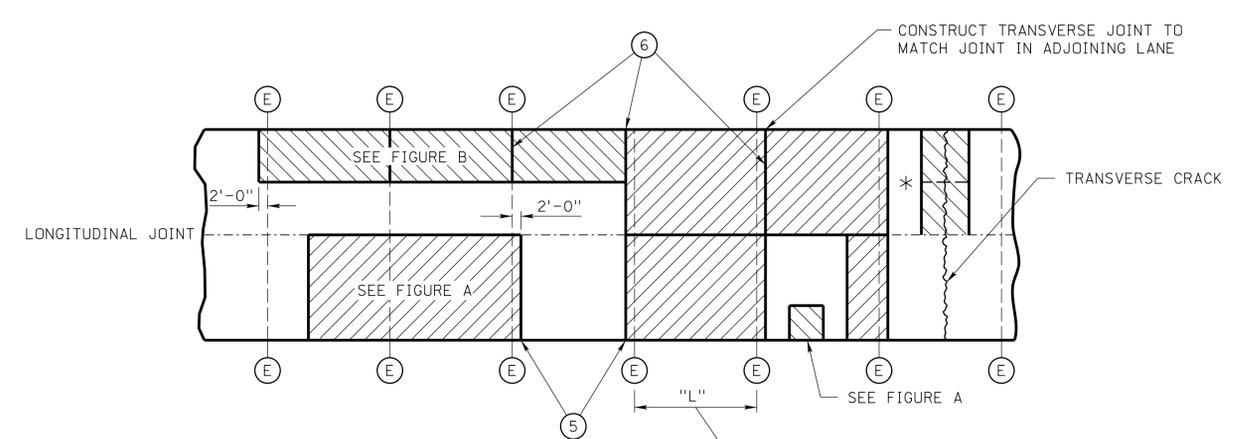


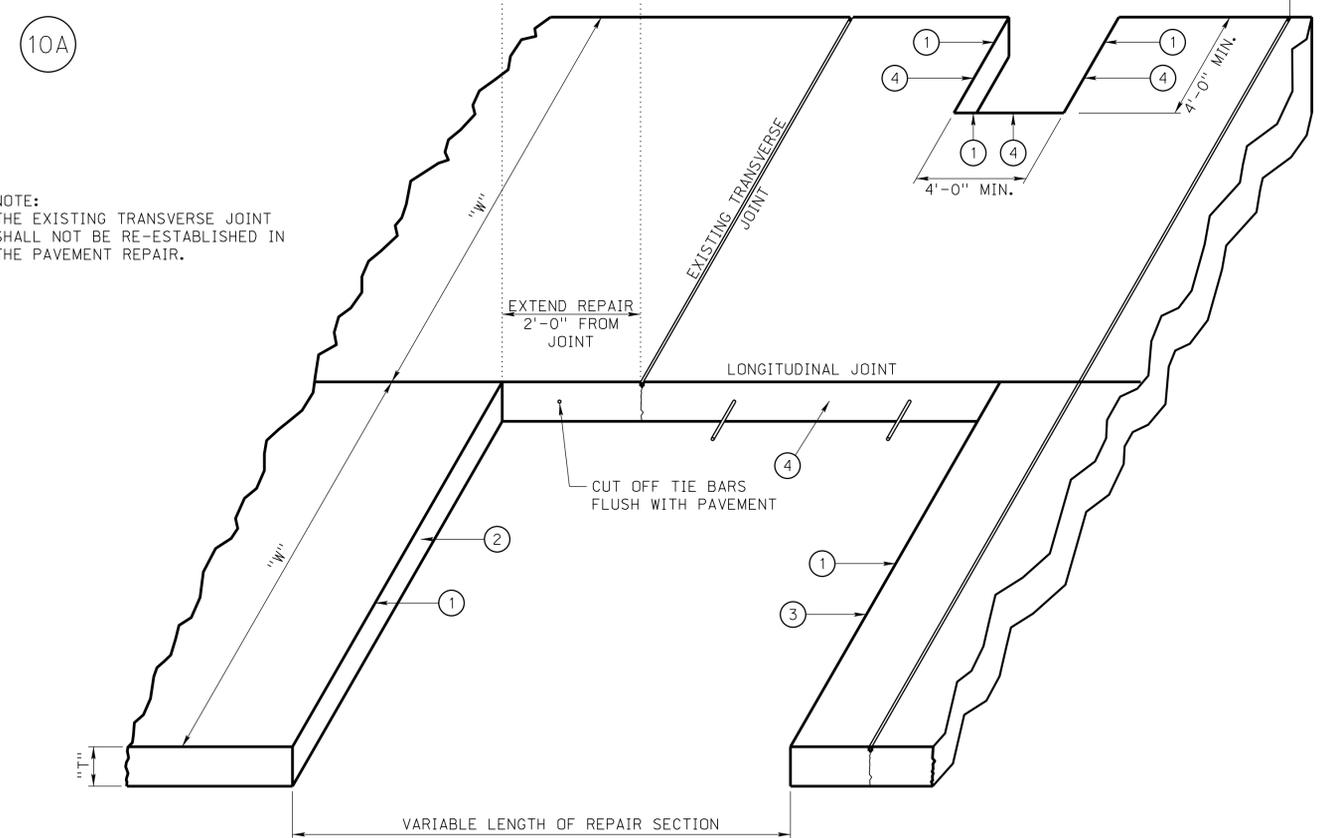
FIGURE B



NOTE: IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

SEE REPAIR TABLES (FULL DEPTH) FOR ACTUAL REPAIR DIMENSIONS

DOWELED CONCRETE PAVEMENT REPAIR

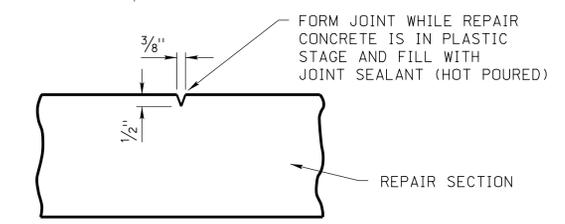


10A

NOTE: THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE PAVEMENT REPAIR.

FIGURE A

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - (E) EXISTING TRANSVERSE JOINT
 - [Hatched Box] CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - [Hatched Box] CONCRETE REMOVAL (FULL LANE WIDTH)



TOOLED LONGITUDINAL JOINT

NOTE: CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND THE WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-S

ROADWAY DESIGN DIVISION
 Computer: DRDESIGN147
 User: ddr13017
 Date: 12-APR-2016 13:47
 File: 38502621.dgn
 Scale: 1:100
 SHEET: 02 OF 10
 3850-2-E-21

TYPICAL CROSS SECTIONS

OVERLAY ONLY JOINT REPAIR

- ① FULL DEPTH DIAMOND SAW CUT (FULL DEPTH 4" WHEEL CUTTER SAW CUT WILL BE PERMITTED IF REPAIR IS OVERLAID.)
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.

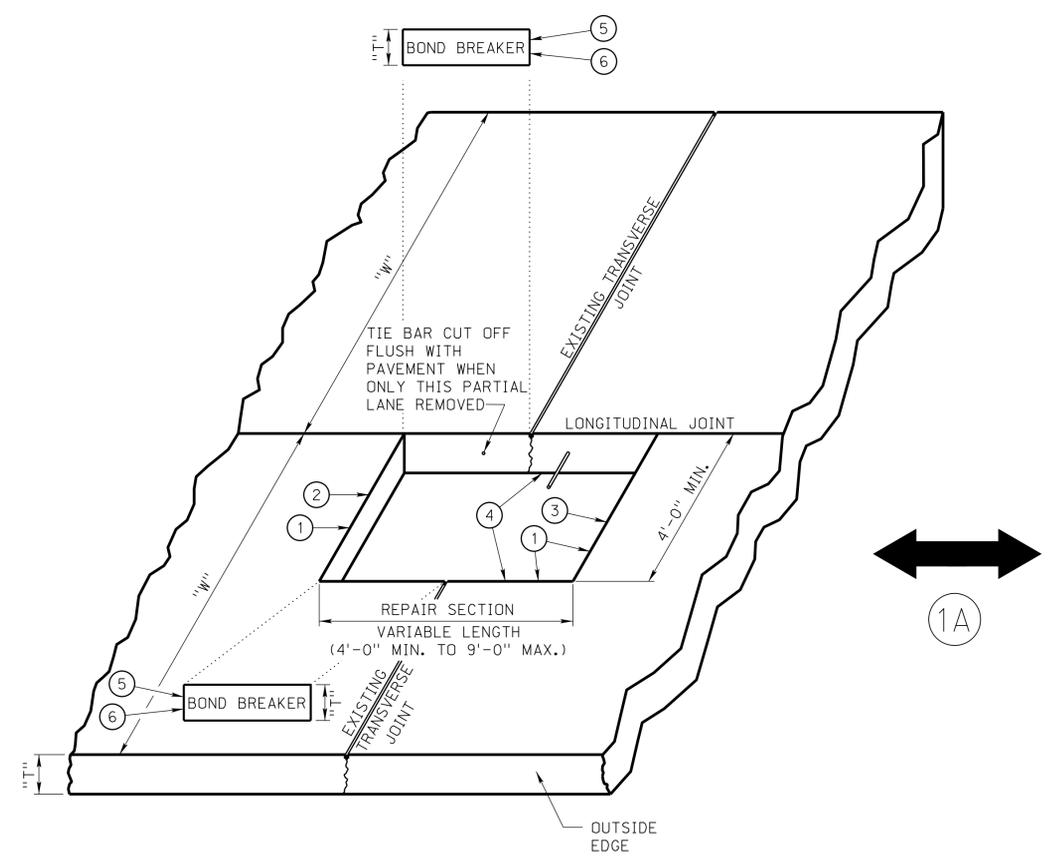
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS.
- ④ TIE BARS REQUIRED.

- ⑤ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.
- 30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER.

- ⑥ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED TRANSVERSE JOINT AND THE EXISTING TRANSVERSE JOINT.

NOTES:

ALL DOWEL BARS AND TIE BARS WILL BE EPOXY COATED.
THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE JOINT REPAIR.



1A

NOTES:

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

OR

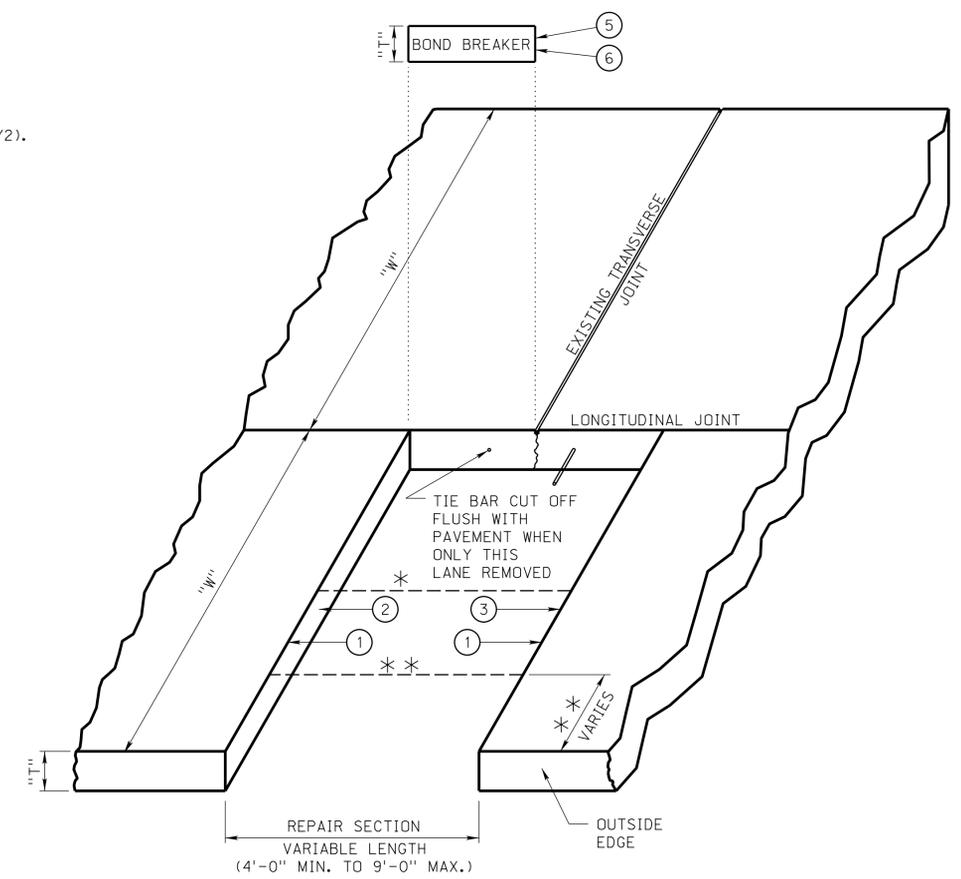
** IF THE WIDTH OF PANEL ("W") WAS PREVIOUSLY WIDENED, CONSTRUCT A TOOLED LONGITUDINAL JOINT TO MATCH THE LONGITUDINAL JOINTS OF THE ADJOINING PANELS.

IF THE PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB.

LEGEND

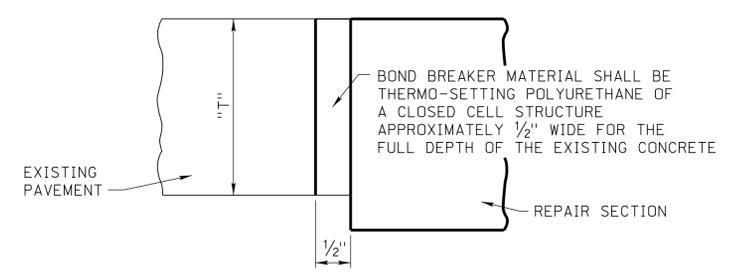
- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE

NOTE: FOR JOINT REPAIR LOCATIONS, SEE SHEET 2-S



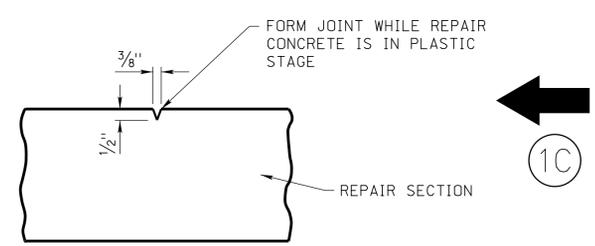
CONCRETE PAVEMENT JOINT REPAIR

CONCRETE PAVEMENT JOINT REPAIR, PARTIAL LANE



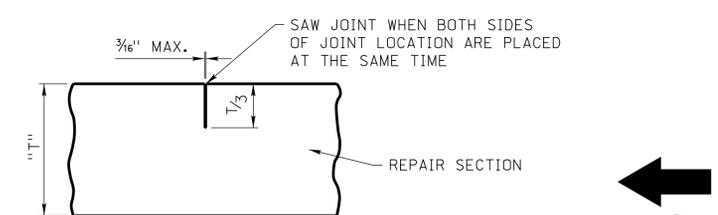
THERMO-SETTING POLYURETHANE BOND BREAKER

1B



TOOLED LONGITUDINAL JOINT

1C



TRANSVERSE JOINTS

1D

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

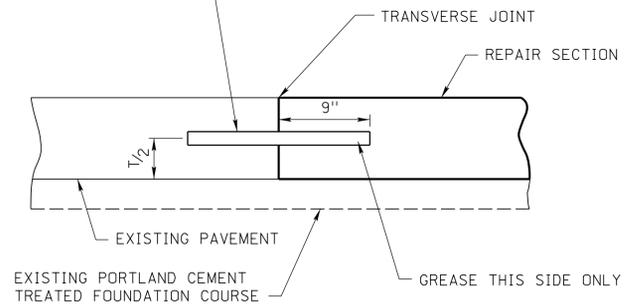
Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

TYPICAL CROSS SECTIONS

OVERLAY ONLY TIES, DOWELS AND CURB REPAIR

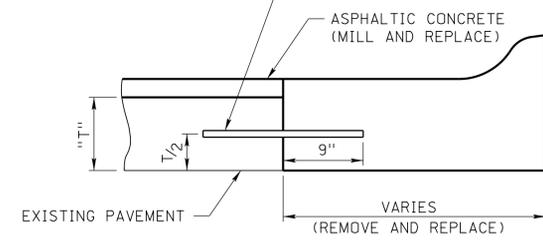
1/4" DIA. x 18" DOWEL BARS "T" = 8" TO 9",
1/2" DIA. x 18" DOWEL BARS "T" = 10" OR MORE
DOWEL BARS TO BE DRILLED AND GROUTED
INTO EXISTING PAVEMENT. PLACE GROUT RETENTION
DISK. SUPPORT DOWEL BARS IN HORIZONTAL
POSITION UNTIL GROUT DRIES.



DOWEL BAR

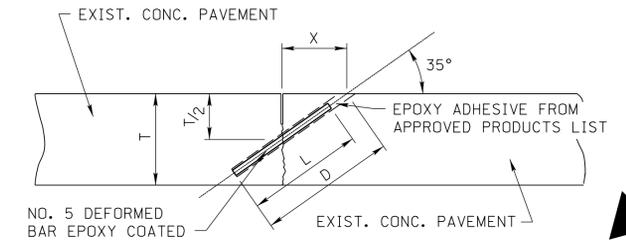
NOTE: ALL DOWEL BARS WILL BE EPOXY COATED

NO. 5 x 18" TIE BARS AT 48" CENTERS
TO BE DRILLED AND GROUTED INTO EXISTING
PAVEMENT. (MINIMUM OF 2-TIE BARS/REPAIR)



CONCRETE CURB AND GUTTER REPAIR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

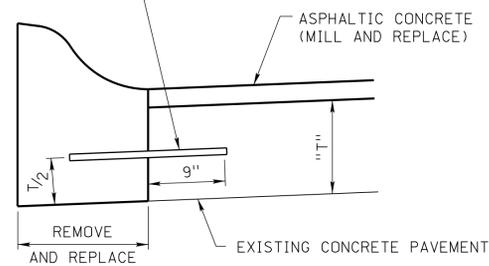


**CROSS STITCHING
EXISTING CONCRETE PAVEMENT**
(SEE SHEET 2-S FOR LOCATIONS)

"T"	"X"	"D"	"L"
8.0"	5.7"	11.9"	9.8"
9.0"	6.5"	13.5"	11.5"
10.0"	7.0"	14.0"	12.5"
11.0"	8.0"	16.0"	13.0"
12.0"	8.5"	17.5"	14.0"
13.0"	9.5"	20.0"	18.0"
14.0"	10.0"	21.0"	18.0"

NOTE: DEFORMED BAR SHALL BE 1" BELOW THE SURFACE

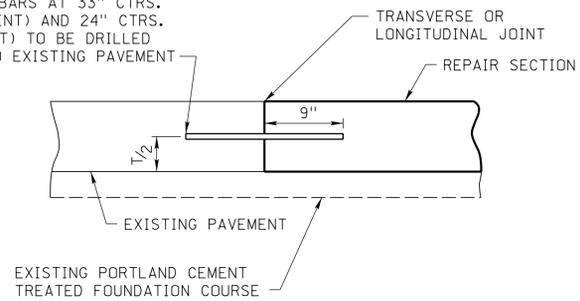
NO. 5 x 18" TIE BARS AT 48" CENTERS
TO BE DRILLED AND GROUTED INTO EXISTING
PAVEMENT. (MINIMUM OF 2-TIE BARS/REPAIR)



INTEGRAL CURB REPAIR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

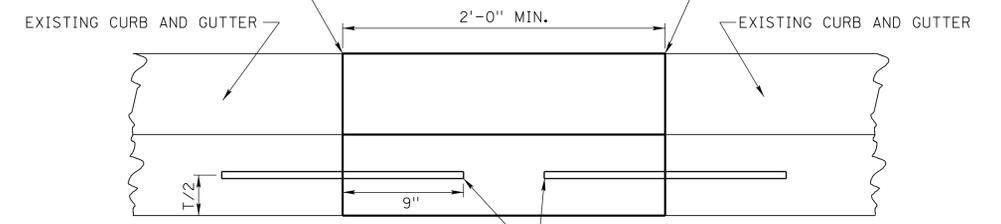
NO. 5 x 18" TIE BARS AT 33" CTRS.
(LONGITUDINAL JOINT) AND 24" CTRS.
(TRANSVERSE JOINT) TO BE DRILLED
AND GROUTED INTO EXISTING PAVEMENT



TIE BAR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

TRANSVERSE JOINT WITH
JOINT SEALANT (HOT Poured)



CONCRETE CURB AND GUTTER REPAIR

NOTE: ALL TIE BARS WILL BE EPOXY COATED

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: dcr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

TYPICAL CROSS SECTIONS

- ① FULL DEPTH DIAMOND SAW CUT. (FULL DEPTH 4" WHEEL CUTTER SAW CUT WILL BE PERMITTED IF REPAIR IS OVERLAID.)
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED 2'-0" BEYOND THE EXISTING TRANSVERSE JOINTS. (3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.
- ⑦ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.
- ⑧ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED JOINT AND THE EXISTING TRANSVERSE JOINT.

OVERLAY ONLY 8" AND 9" RCP REPAIR

30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER.

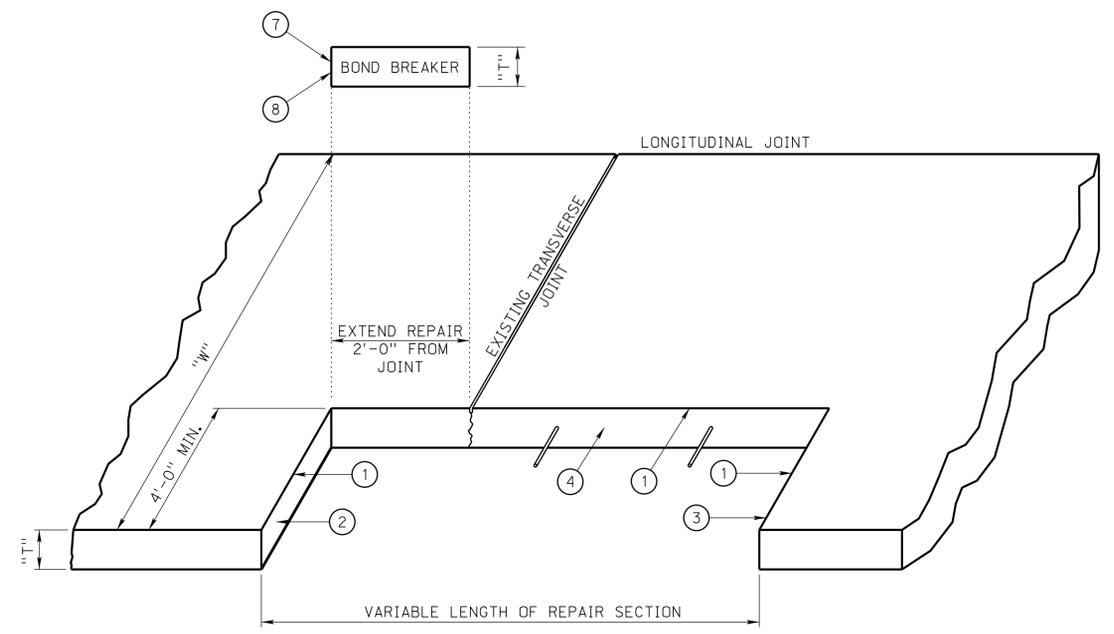
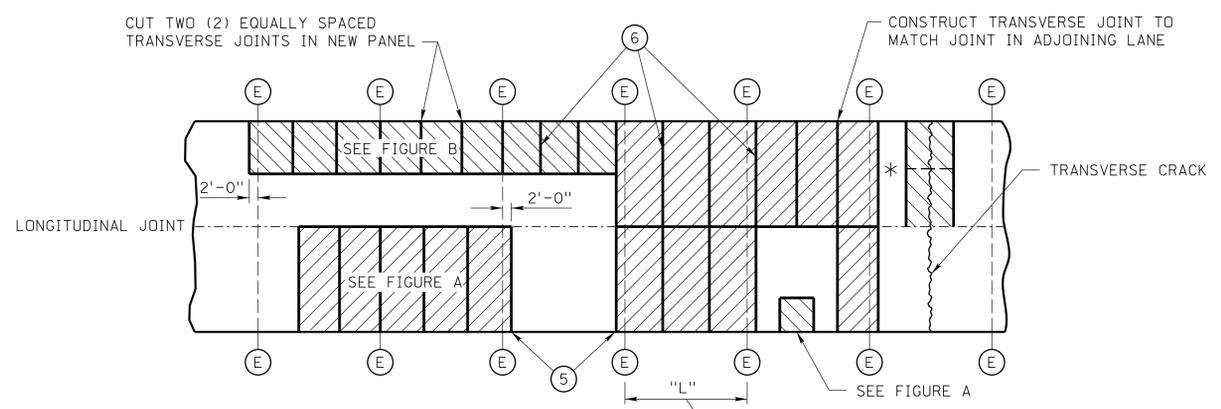


FIGURE B



NOTE: IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

SEE REPAIR TABLES (FULL DEPTH) FOR ACTUAL REPAIR DIMENSIONS

8" AND 9" REINFORCED CONCRETE PAVEMENT REPAIR

NOTE: THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE PAVEMENT REPAIR.

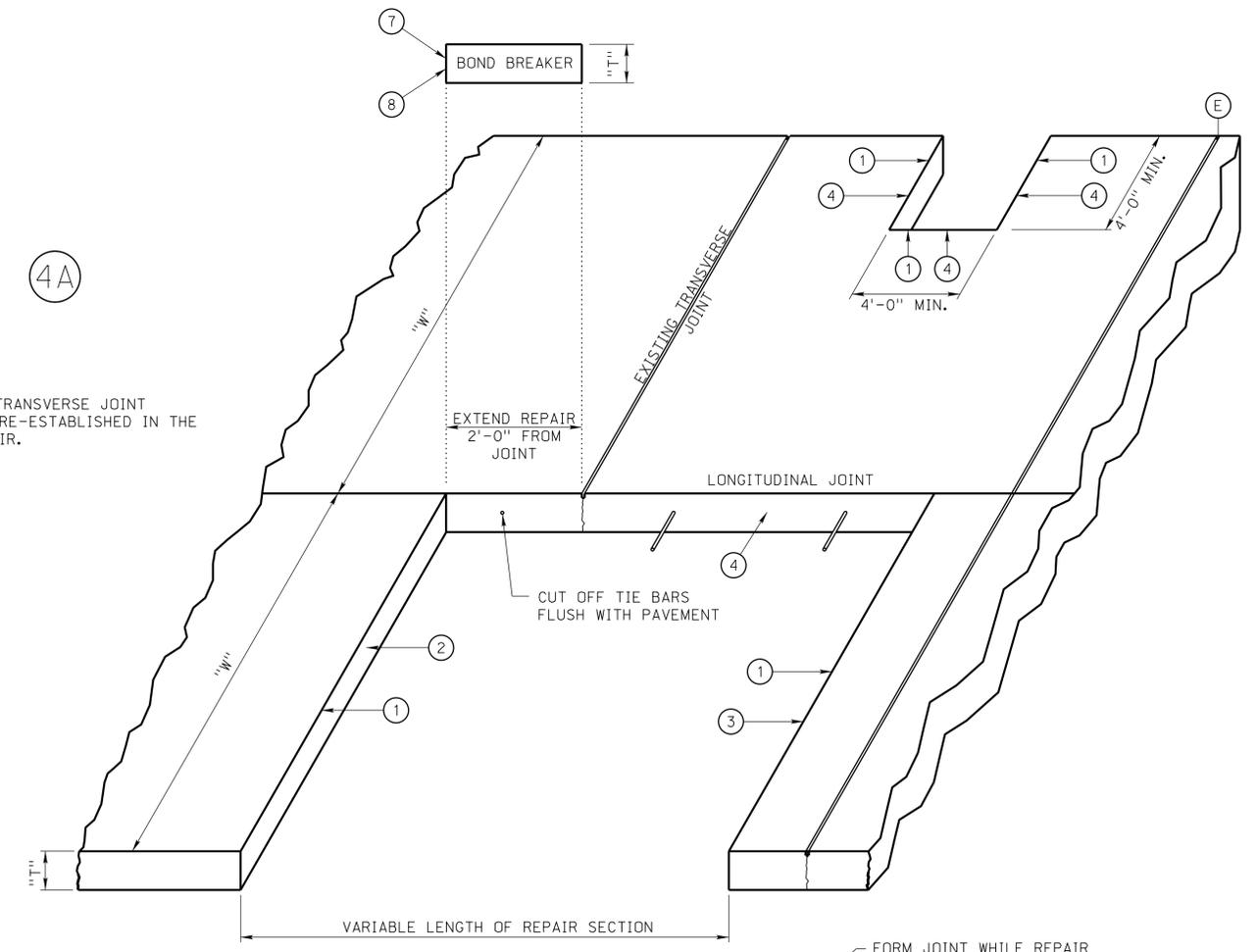
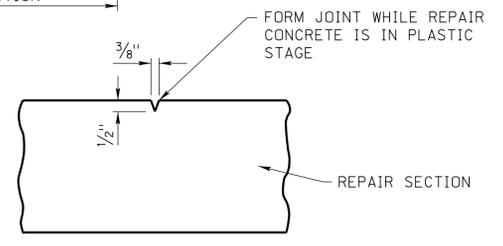


FIGURE A

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - (E) EXISTING TRANSVERSE JOINT
 - [Hatched] CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - [Diagonal Hatched] CONCRETE REMOVAL (FULL LANE WIDTH)



TOOLED LONGITUDINAL JOINT

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-S

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

TYPICAL CROSS SECTIONS

- ① FULL DEPTH DIAMOND SAW CUT. (FULL DEPTH 4" WHEEL CUTTER SAW CUT WILL BE PERMITTED IF REPAIR IS OVERLAID.) (MAY NOT BE REQUIRED AT EXISTING JOINT.)
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED AT EXISTING TRANSVERSE JOINTS. (MINIMUM 3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.

OVERLAY ONLY PLAIN CONCRETE PAVEMENT REPAIR

NOTE:
IF REPAIR EXTENDS THROUGH EXISTING JOINT, SEE JOINT REPAIR DETAIL FOR PROPER BOND BREAKER PLACEMENT.

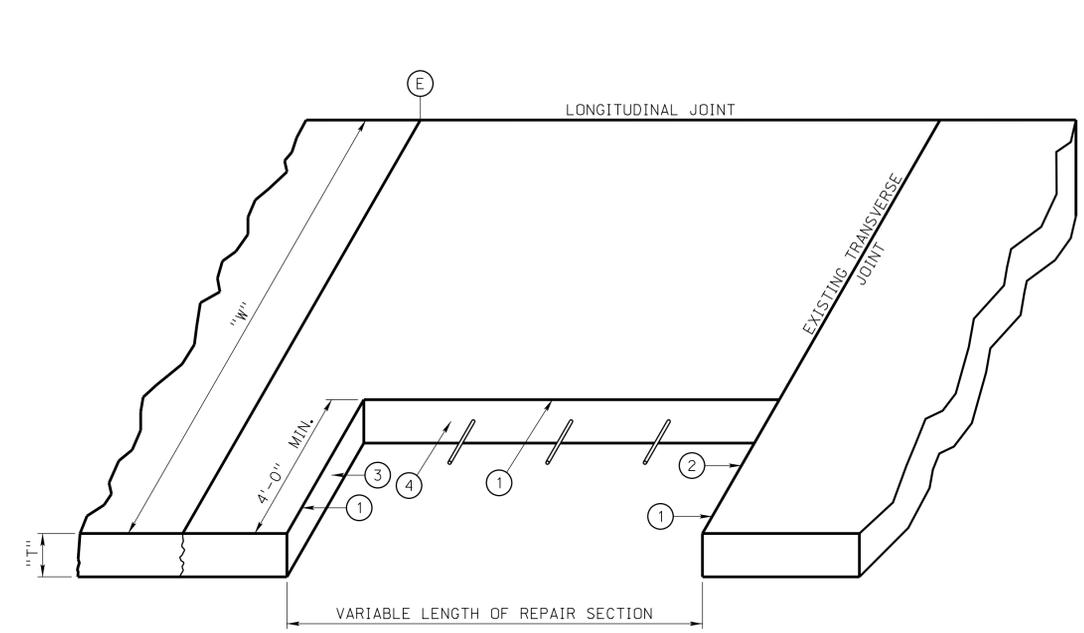


FIGURE B

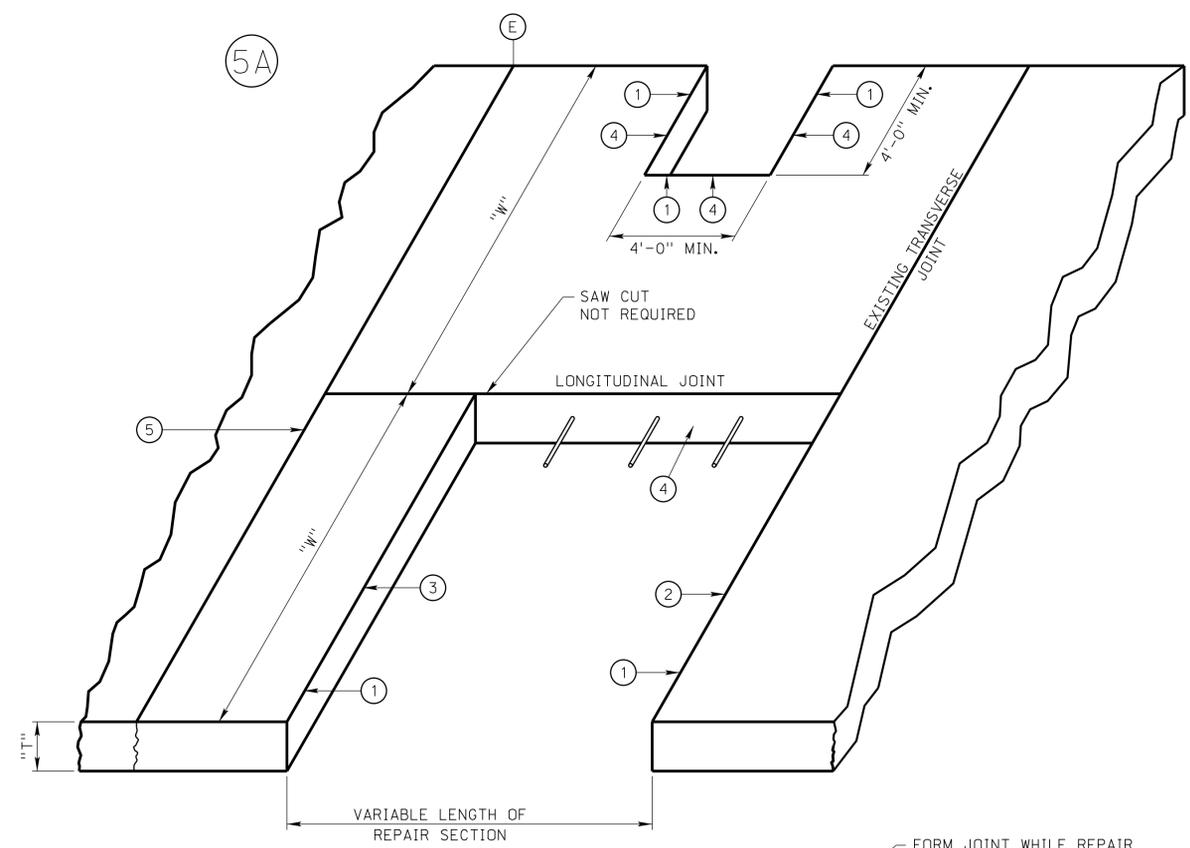
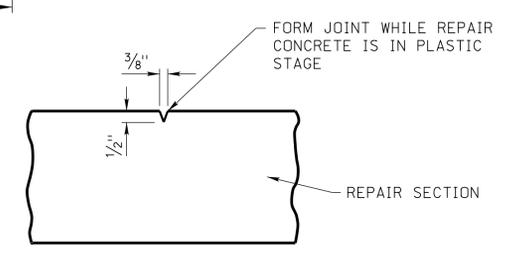


FIGURE A

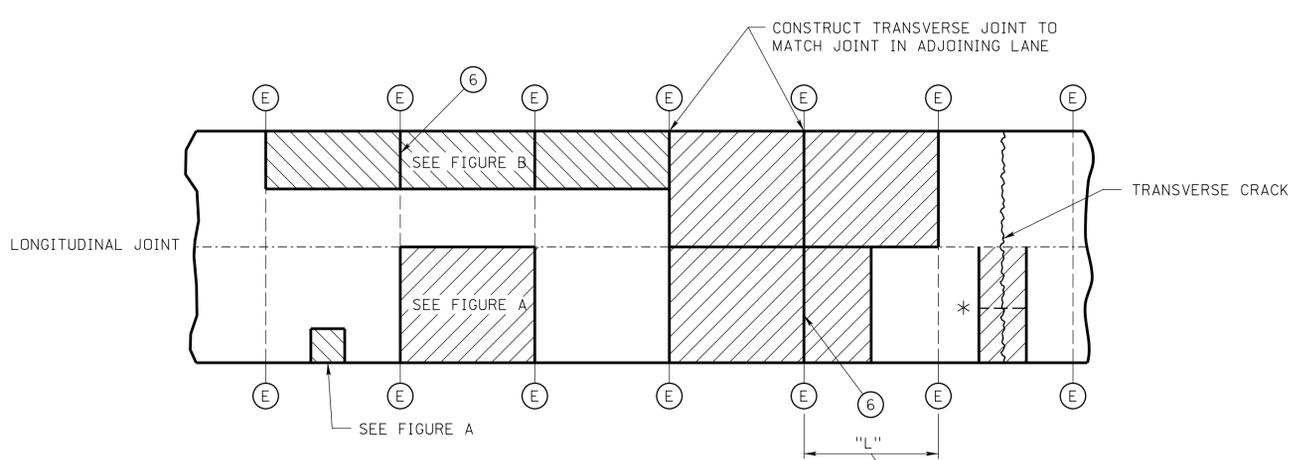


TOOLED LONGITUDINAL JOINT

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

OR

IF THE WIDTH OF PANEL ("W") WAS PREVIOUSLY WIDENED, CONSTRUCT A TOOLED LONGITUDINAL JOINT TO MATCH THE LONGITUDINAL JOINTS OF THE ADJOINING PANELS. SEE JOINT REPAIR DETAIL FOR THIS TOOLED LONGITUDINAL JOINT.



PLAIN CONCRETE PAVEMENT REPAIR

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - ⓔ EXISTING TRANSVERSE JOINT
 - ▨ CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - ▨ CONCRETE REMOVAL (FULL LANE WIDTH)

NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-S

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

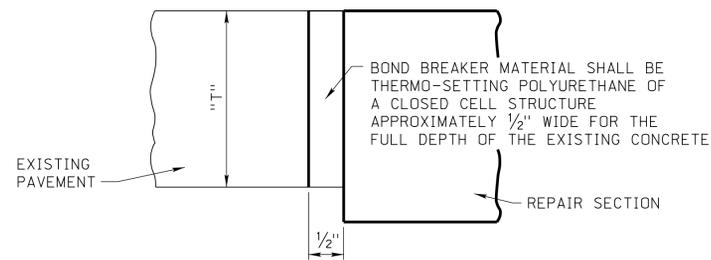
Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

TYPICAL CROSS SECTIONS

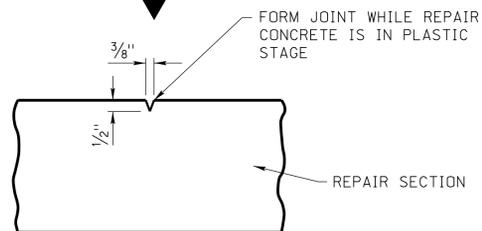
OVERLAY ONLY 6" AND 7" JOINT REPAIR

6A

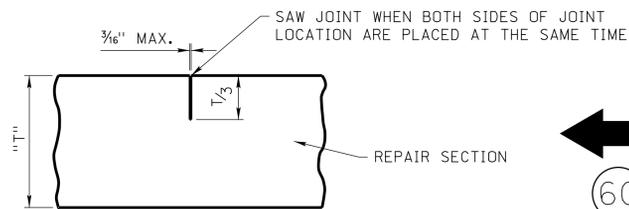


THERMO-SETTING POLYURETHANE BOND BREAKER

6B



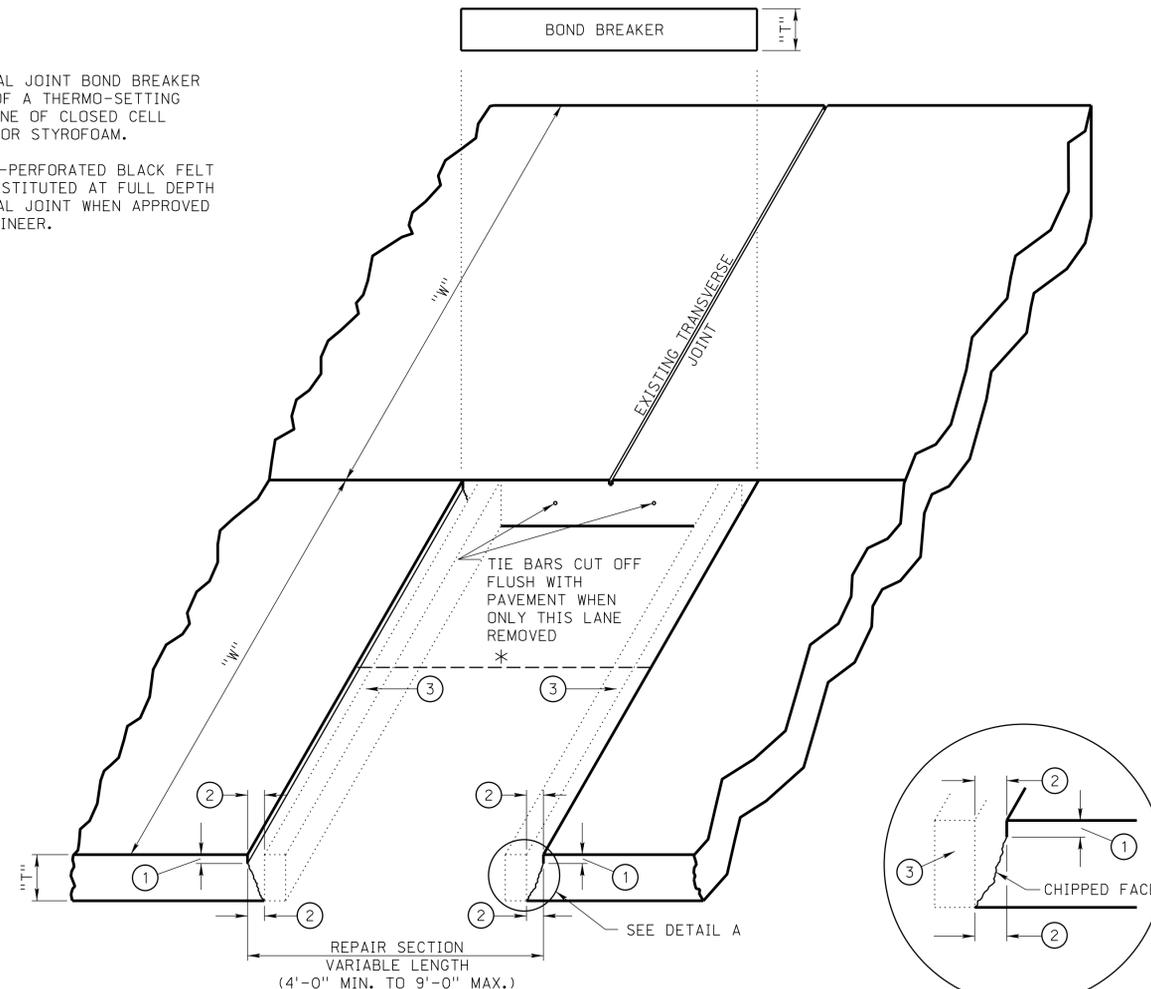
TOOLED LONGITUDINAL JOINT



TRANSVERSE JOINTS

LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.

30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER.



CONCRETE PAVEMENT JOINT REPAIR

DETAIL A

- 1 1" ± 1/4" DIAMOND SAW CUT
- 2 APPROX. 4" WHEEL CUTTER SAW CUT 2" ± 1/2" INBOARD FROM DIAMOND SAW CUT ON EACH SIDE OF SECTION TO BE REMOVED. A 15# MAXIMUM CHIPPING HAMMER SHALL BE USED TO CONSTRUCT THE CHIPPED FACE.
- 3 4" WHEEL CUTTER SAW CUT

NOTE:
CONTRACTOR MAY USE FULL DEPTH DIAMOND SAW CUT IN PLACE OF 4" WHEEL CUTTER SAW CUT. (2" ± 1/2" INBOARD FROM DIAMOND SAW CUT)

THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE JOINT REPAIR.

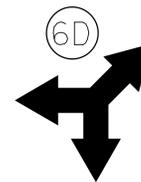
NOTES:

- * IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).
- IF THE PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB.

LEGEND

- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE

NOTE: FOR JOINT REPAIR LOCATIONS, SEE SHEET 2-S



TYPICAL CROSS SECTIONS

OVERLAY ONLY 6" AND 7" PLAIN CONCRETE REPAIR

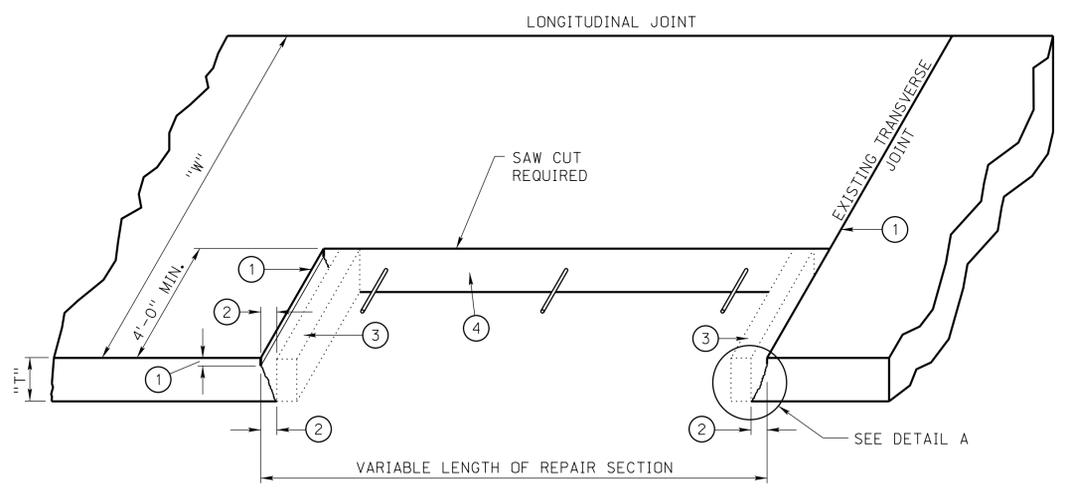
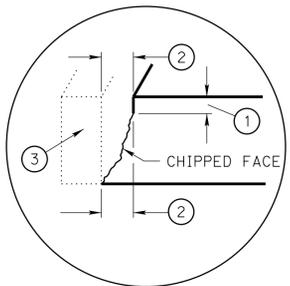


FIGURE B



DETAIL A

- ① 1" ± 1/4" DIAMOND SAW CUT
 - ② APPROX. 4" WHEEL CUTTER SAW CUT 2" ± 1/2" INBOARD FROM DIAMOND SAW CUT ON TRANSVERSE SIDES OF SECTION TO BE REMOVED. A 15# MAXIMUM CHIPPING HAMMER SHALL BE USED TO CONSTRUCT THE CHIPPED FACE. (MAY NOT BE REQUIRED AT EXISTING TRANSVERSE JOINT, IF ADEQUATE SLOPED FACE EXISTS)
 - ③ 4" WHEEL CUTTER SAW CUT
 - ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
 - ⑤ FULL DEPTH DIAMOND SAW CUT.
- NOTE:
CONTRACTOR MAY USE FULL DEPTH DIAMOND SAW CUT IN PLACE OF 4" WHEEL CUTTER SAW CUT. (2" ± 1/2" INBOARD FROM DIAMOND SAW CUT)
IF REPAIR EXTENDS THROUGH EXISTING TRANSVERSE JOINT, SEE CONCRETE PAVEMENT JOINT REPAIR FOR PROPER BOND BREAKER PLACEMENT.

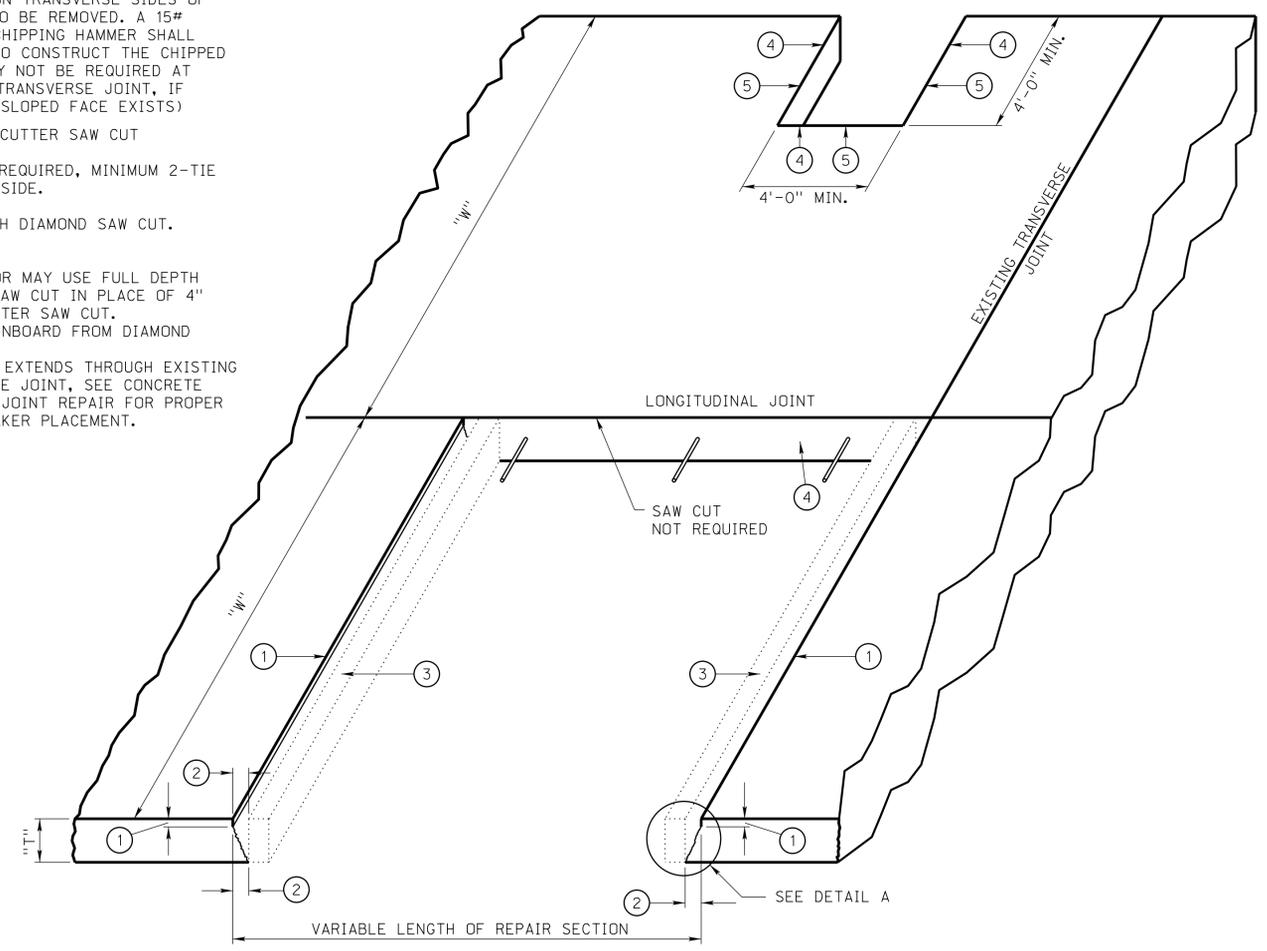
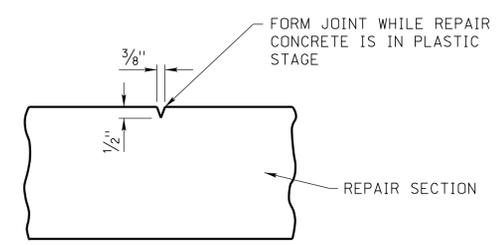


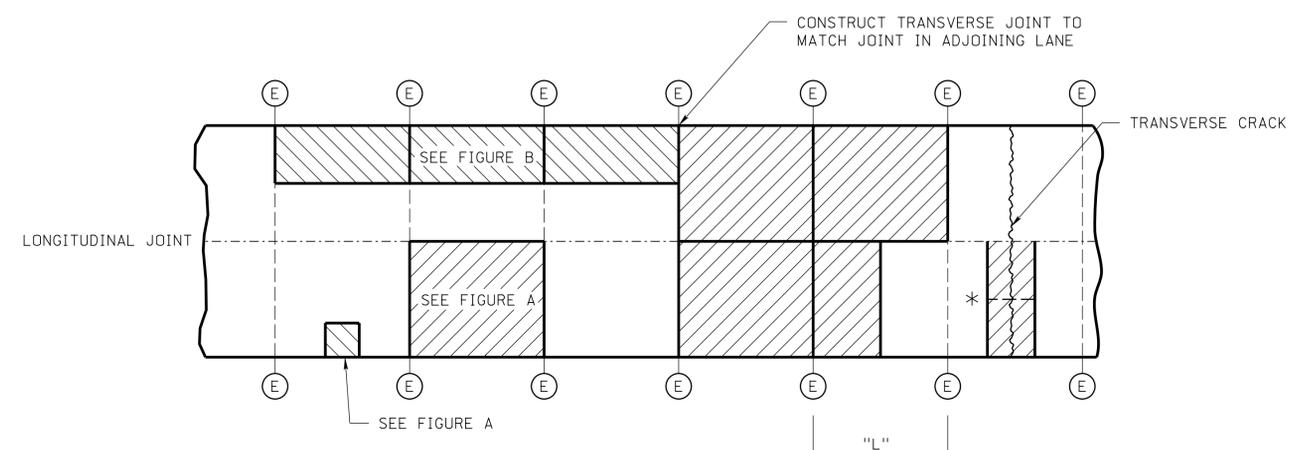
FIGURE A



DETAIL OF TOOLED LONGITUDINAL JOINT

* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-5



PLAIN CONCRETE PAVEMENT REPAIR

- LEGEND**
- "W" WIDTH OF PANEL
 - "L" LENGTH OF PANEL
 - "T" THICKNESS OF CONCRETE
 - ⓔ EXISTING TRANSVERSE JOINT
 - ▨ CONCRETE REMOVAL (PARTIAL LANE WIDTH)
 - ▩ CONCRETE REMOVAL (FULL LANE WIDTH)

NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

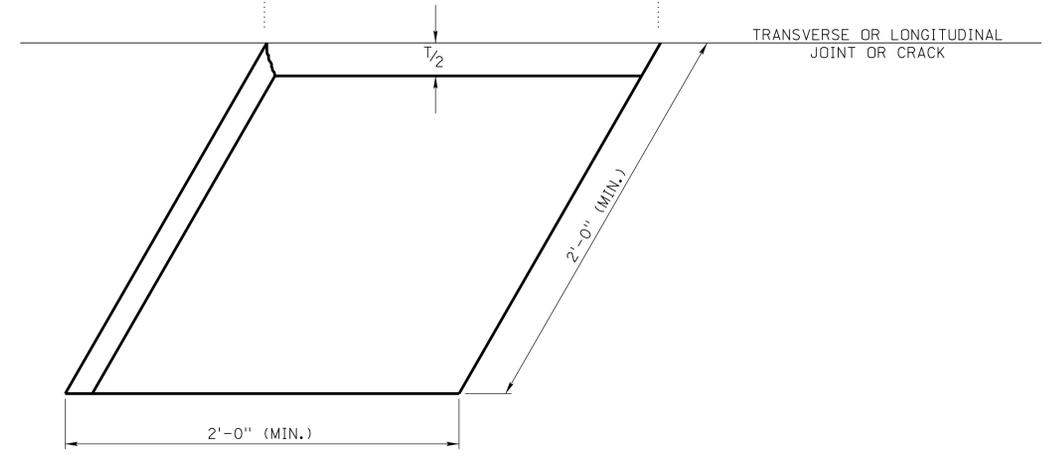
TYPICAL CROSS SECTIONS

OVERLAY ONLY PARTIAL DEPTH REPAIR

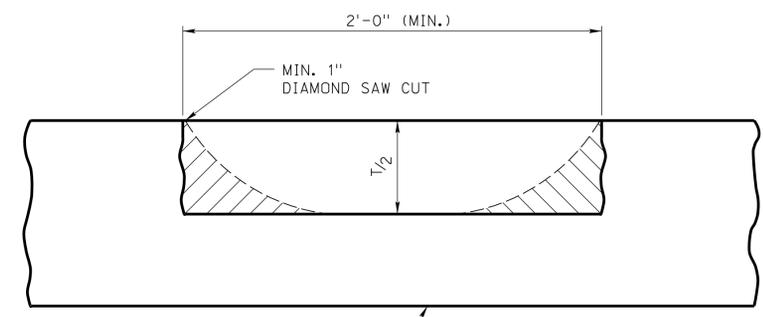


BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.

30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT PARTIAL DEPTH TRANSVERSE OR LONGITUDINAL JOINT OR CRACK WHEN APPROVED BY THE ENGINEER.

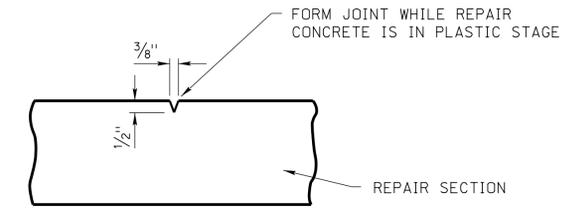


TRANSVERSE OR LONGITUDINAL JOINT OR CRACK



INDICATES MATERIAL LEFT AT MARGINS OF MILLED CUTS TO BE REMOVED WITH A 15# MAXIMUM CHIPPING HAMMER TO PROVIDE VERTICAL EDGES ALL AROUND

TYPICAL SECTION OF PARTIAL DEPTH REPAIRS

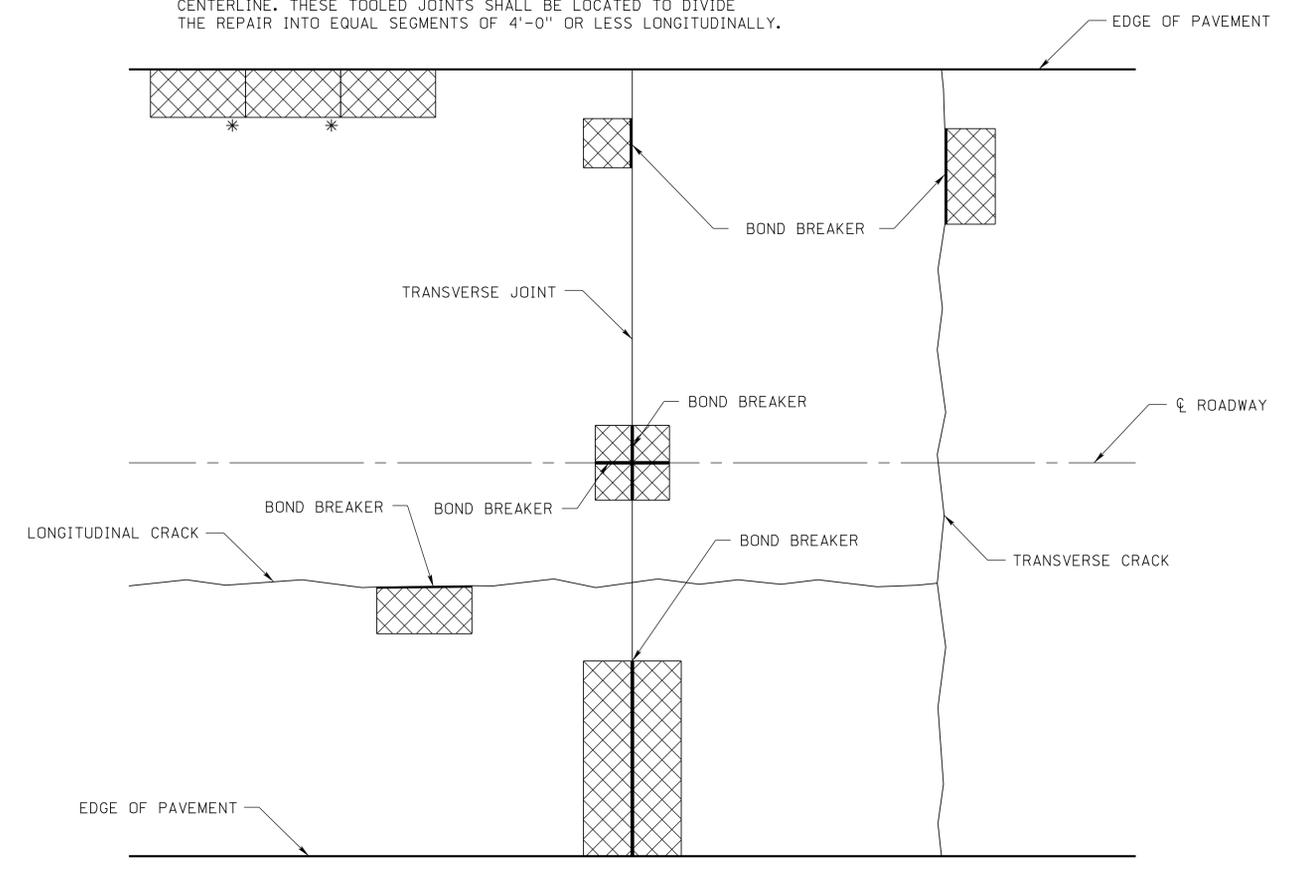


TOOLED LONGITUDINAL JOINT

NOTE:
CONTRACTOR HAS OPTION TO SAW OR TOOL LONGITUDINAL JOINT ON DIAMOND GRINDING PROJECTS.

* IF PARTIAL DEPTH REPAIR IS LONGER THAN 4'-0" LONGITUDINALLY, TOOLED TRANSVERSE JOINTS SHALL BE MADE PERPENDICULAR TO CENTERLINE. THESE TOOLED JOINTS SHALL BE LOCATED TO DIVIDE THE REPAIR INTO EQUAL SEGMENTS OF 4'-0" OR LESS LONGITUDINALLY.

8A



NOTE:
WHERE REPAIR EXTENDS THROUGH THE INTEGRAL CURB, IT SHALL BE RECONSTRUCTED TO THE SAME DIMENSIONS OF THE EXISTING CURB

CONCRETE REPAIR SECTIONS

CONCRETE PAVEMENT REPAIR, TYPE "A", TYPE "B" AND TYPE "C", PARTIAL DEPTH

NOTE:
FOR CONCRETE PAVEMENT REPAIR (PARTIAL DEPTH) LOCATIONS, SEE SHEET 2-S.

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

TYPICAL CROSS SECTIONS

OVERLAY ONLY DOWELED CONCRETE PAVEMENT REPAIR

- ① FULL DEPTH DIAMOND SAW CUT.
- ② INSTALL DOWEL BARS AT NEW TRANSVERSE JOINT NEAREST TO EXISTING TRANSVERSE JOINT.
- ③ INSTALL TIE BARS AT NEW TRANSVERSE JOINT OPPOSITE OF DOWEL BARS. MINIMUM 2-TIE BARS PER SIDE.
- ④ TIE BARS REQUIRED, MINIMUM 2-TIE BARS PER SIDE.
- ⑤ IN THE CASE OF PANEL REPLACEMENT, DOWEL BARS SHALL BE INSTALLED 2'-0" BEYOND THE EXISTING TRANSVERSE JOINTS. (3-DOWEL BARS PER WHEEL PATH.)
- ⑥ IN THE CASE OF MULTIPLE PANEL REPLACEMENTS, DOWEL BARS SHALL BE INSTALLED AT 12" CENTERS, AS SHOWN IN THE STANDARD PLANS. BASKETS SHALL BE USED ACCORDING TO THE STANDARD SPECIFICATIONS, SUBSECTION 603.03.
- ⑦ LONGITUDINAL JOINT BOND BREAKER COMPOSED OF A THERMO-SETTING POLYURETHANE OF CLOSED CELL STRUCTURE OR STYROFOAM.
- ⑧ BOND BREAKER WILL BE INSTALLED ON THE LONGITUDINAL JOINT BETWEEN THE NEW DOWELED JOINT AND THE EXISTING TRANSVERSE JOINT.

30 LB. NON-PERFORATED BLACK FELT MAY BE SUBSTITUTED AT FULL DEPTH LONGITUDINAL JOINT WHEN APPROVED BY THE ENGINEER.

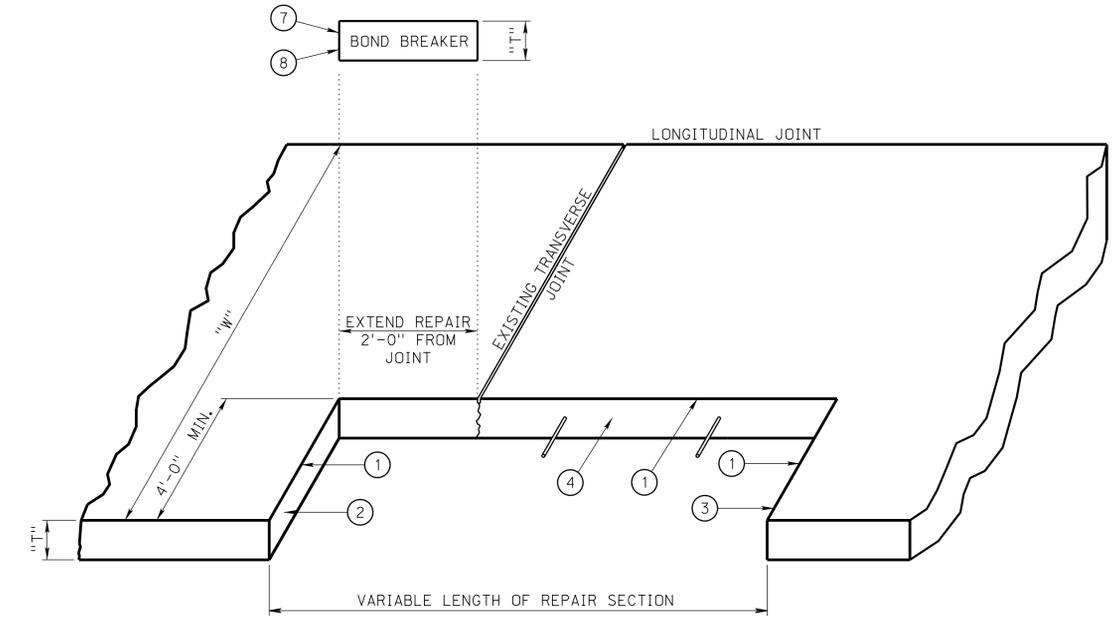


FIGURE B

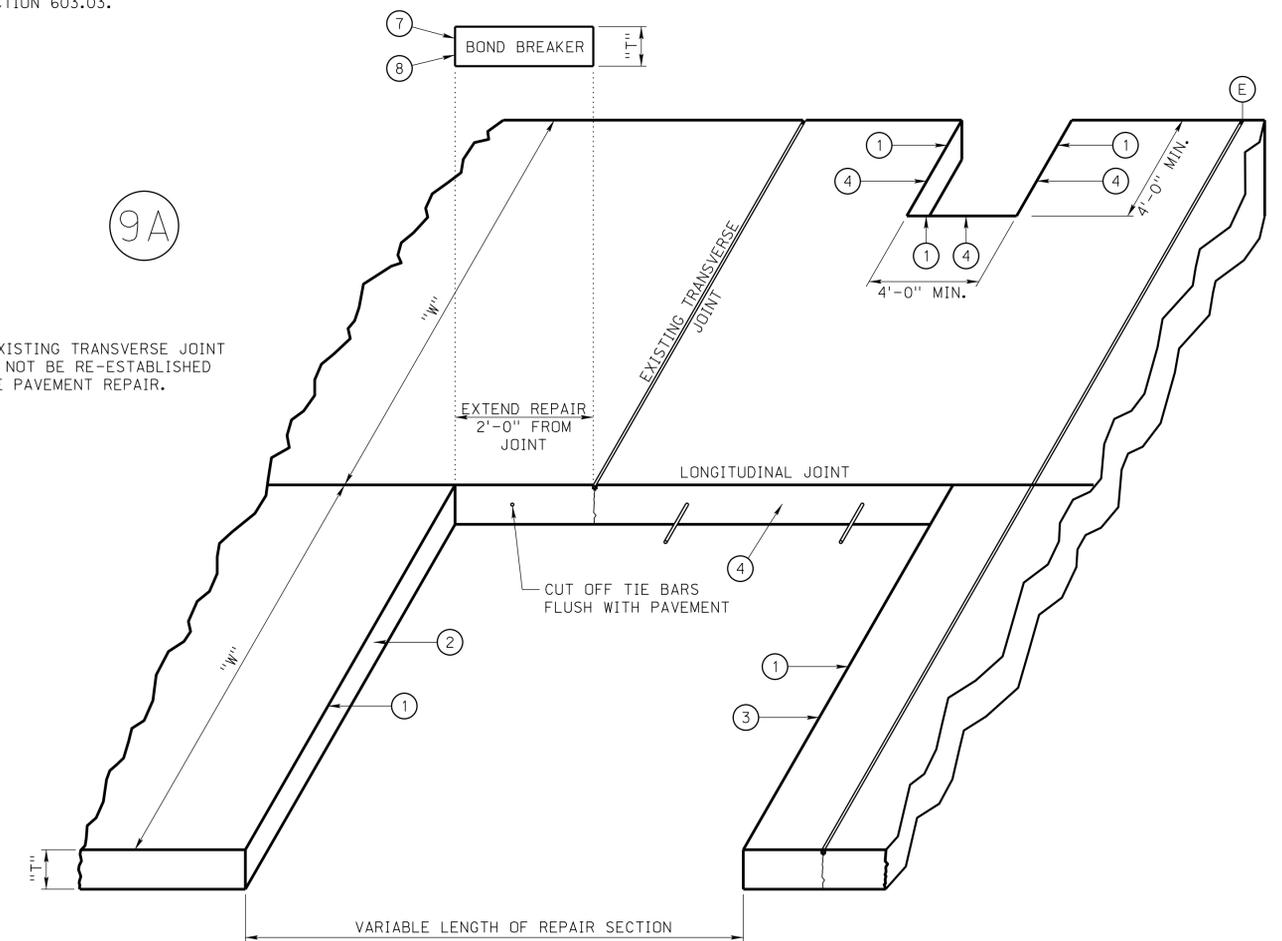
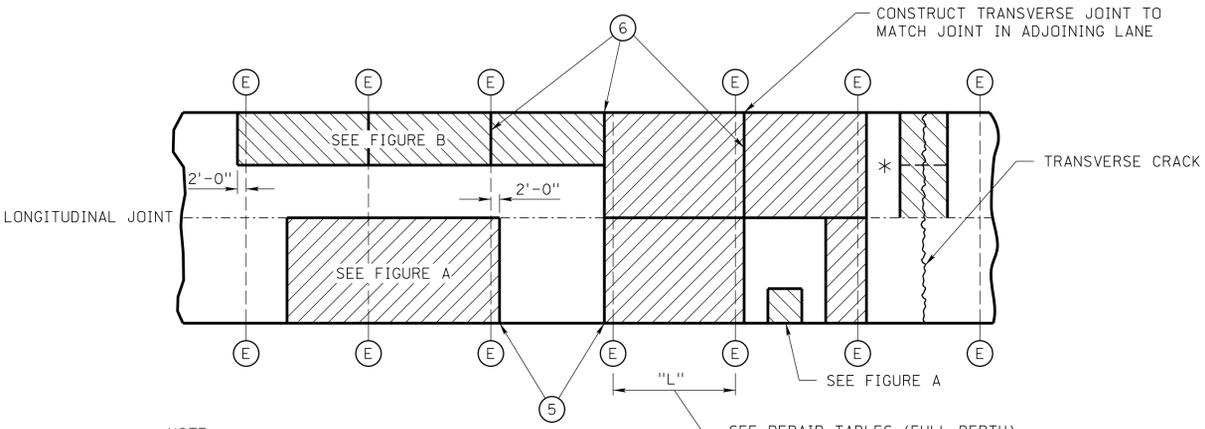


FIGURE A

NOTE:
THE EXISTING TRANSVERSE JOINT SHALL NOT BE RE-ESTABLISHED IN THE PAVEMENT REPAIR.



NOTE:
IF PAVEMENT REPAIR SHOULD EXTEND THROUGH INTEGRAL CURB, THE NEW CURB SHALL BE CONSTRUCTED TO THE SAME DIMENSIONS AS THE EXISTING CURB

SEE REPAIR TABLES (FULL DEPTH) FOR ACTUAL REPAIR DIMENSIONS

DOWELED CONCRETE PAVEMENT REPAIR

LEGEND

- "W" WIDTH OF PANEL
- "L" LENGTH OF PANEL
- "T" THICKNESS OF CONCRETE
- (E) EXISTING TRANSVERSE JOINT
- [Hatched] CONCRETE REMOVAL (PARTIAL LANE WIDTH)
- [Hatched] CONCRETE REMOVAL (FULL LANE WIDTH)

NOTE:
* IF THE LENGTH OF REPAIR IS 9'-0" OR LESS AND THE WIDTH OF REPAIR IS GREATER THAN 6'-0", CONSTRUCT A TOOLED LONGITUDINAL JOINT AT THE MIDPOINT OF THE REPAIR (W/2).

NOTE: FOR PAVEMENT REPAIR LOCATIONS, SEE SHEET 2-5

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

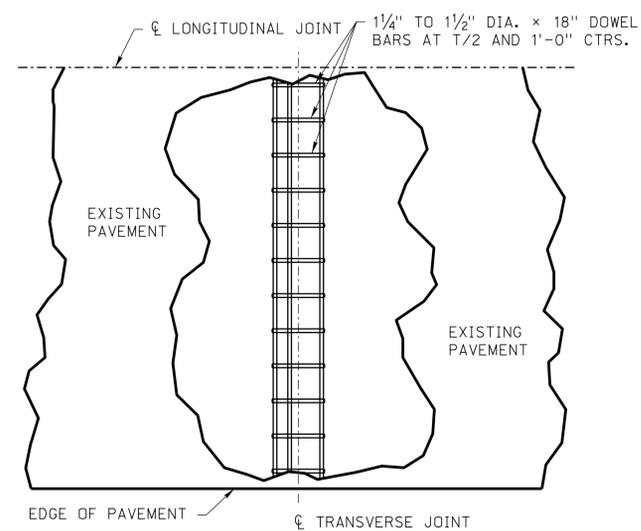
User: dcr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100

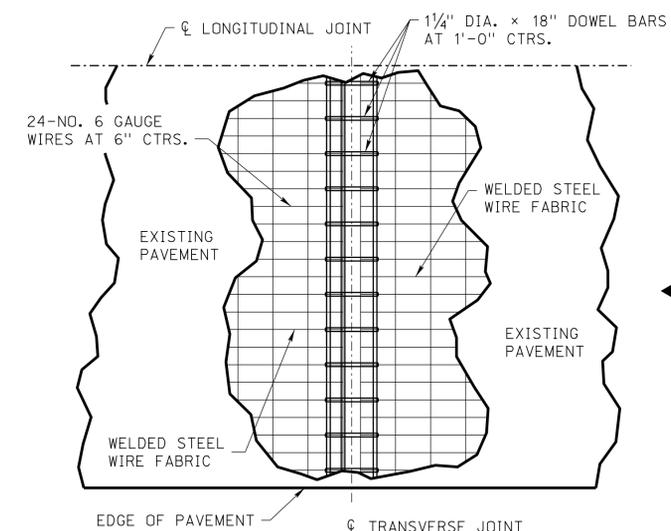
TYPICAL CROSS SECTIONS

OVERLAY ONLY STEEL REINFORCEMENT



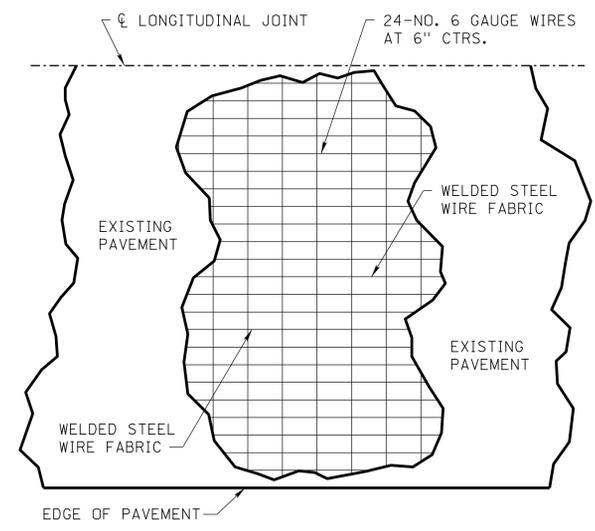
EXISTING DOWELED CONCRETE PAVEMENT

10A



EXISTING 8" AND 9" REINFORCED CONCRETE PAVEMENT (RCP)

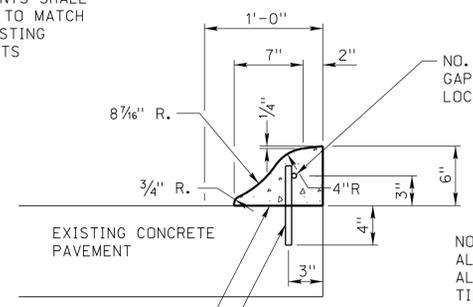
10B



EXISTING 9"-6"-9" AND 9"-7"-9" REINFORCED PAVEMENT

10C

CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH LOCATION OF EXISTING TRANSVERSE JOINTS



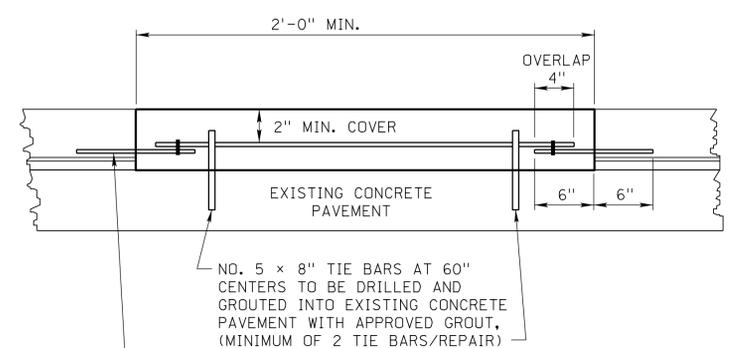
THE AREA BETWEEN CURB AND EXISTING CONCRETE PAVEMENT TO BE CLEANED AND ROUGHENED AS DIRECTED BY THE ENGINEER

CONCRETE TACK-ON CURB

NOTE: ALL TIE BARS WILL BE EPOXY COATED ALL VERTICAL TIE BARS SHALL BE TIED TO ALL HORIZONTAL TIE BARS

NO. 5 x 8" TIE BARS AT 60" CENTERS TO BE DRILLED AND GROUTED INTO EXISTING CONCRETE PAVEMENT WITH APPROVED GROUT, (MINIMUM OF 2 TIE BARS/REPAIR)

10D



FRONT VIEW OF TACK-ON CURB REPAIR

NO. 4 HORIZONTAL TIE BAR SHALL BE DRILLED, GROUTED AND TIED INTO EXISTING CURB

ROADWAY DESIGN DIVISION

Computer: DRDESIGN147

User: ddr13017

Date: 12-APR-2016 13:47

File: 38512e15.dgn
Scale: 1:100