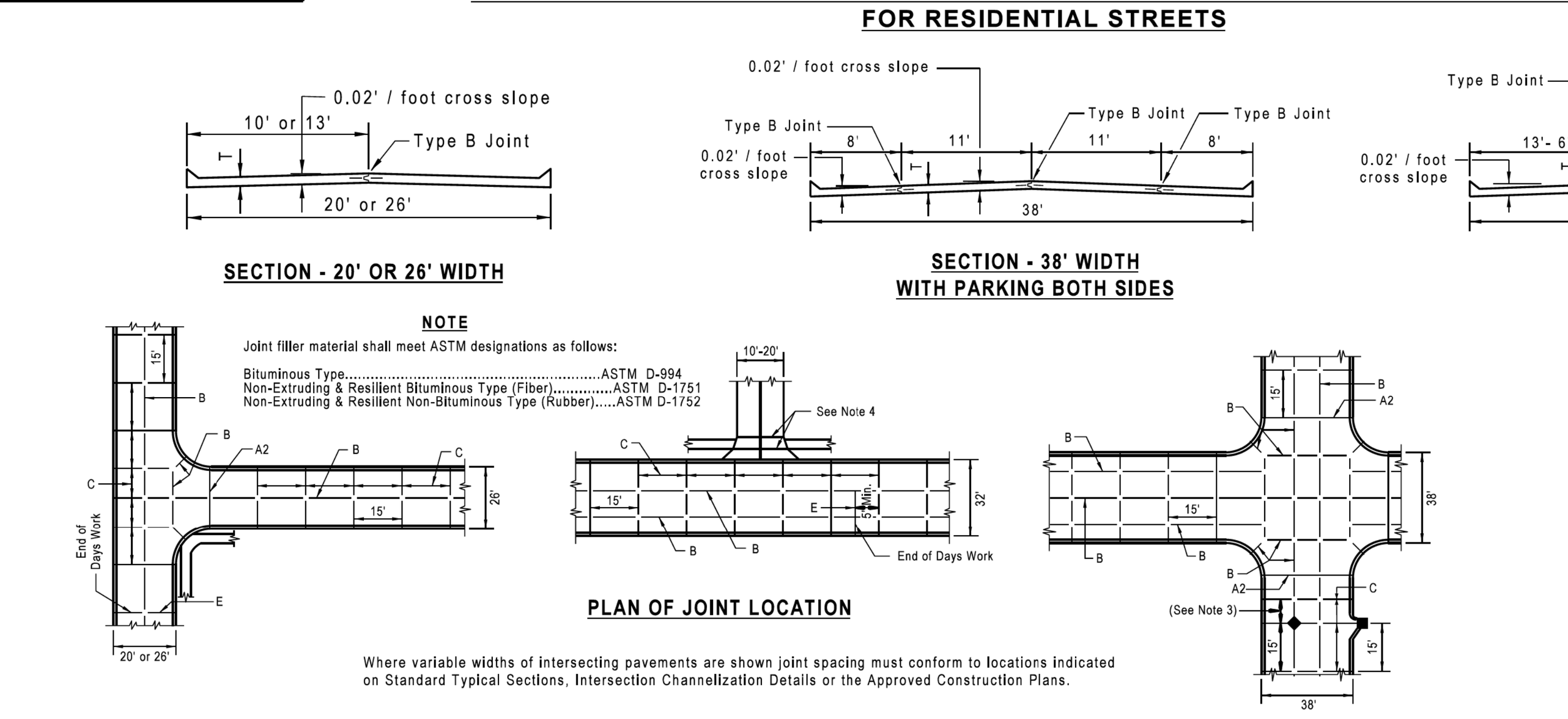
H:\CAD\22400-22499\22450\ImpPlans\22450 - C44 Construction Details.dgn Master Model 3/7/2022 2:50:44 PM Plotted by: jeskins Plot Scale: 50.000000 ' / in. Plot Driver: Volz15 PDF.pltcfg Pen Table: Volz15 PDF.tbl

NEW	REVISIONS			
1-11-90	7-31-07	10-1-07	7-1-09	10-1-12

ST. LOUIS COUNTY PROJ.

INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS FOR RESIDENTIAL STREETS



SECTION - 20' OR 26' WIDTH

SECTION - 38' WIDTH WITH PARKING BOTH SIDES

SECTION - 38' WIDTH WITH TURNING LANE

PLAN OF JOINT LOCATION

Where variable widths of intersecting pavements are shown joint spacing must conform to locations indicated on Standard Typical Sections, Intersection Channelization Details or the Approved Construction Plans.

JOINT REQUIREMENTS FOR CONCRETE PAVEMENT						
Pavement Thickness (T), inches	Transverse Dowel Bars			Longitudinal Tie Bars		
	Joint Type	Dowel Diameter x Length, inches	Dowel Spacing CTR-CTR, inches	Joint Type	Tie Bar No. Size x Length, inches	Tie Bar Spacing CTR-CTR, inches
T = 6	A, A2	None	None	B, C	None	None
				E	No. 5 x 30	30
T = 7	A, A2	None	None	B, E, F, H	No. 5 x 30	30
	AA, D, G, J	1 x 18	12			

NOTES:

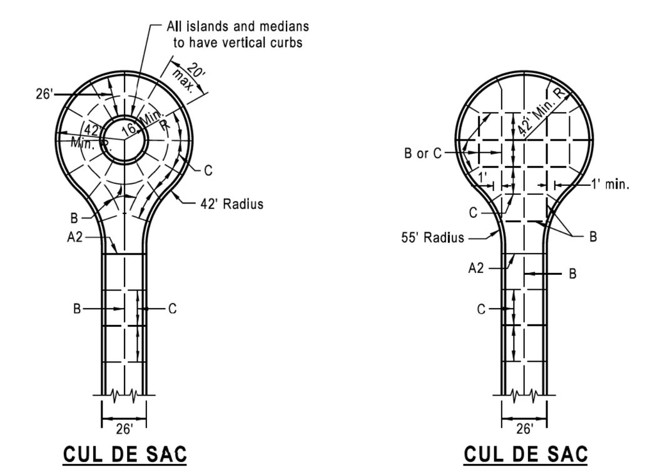
DOWEL BARS
Dowels for transverse joints shall be in accordance with the requirements of AASHTO M 254, Type B (ASTM A 615) Grade 40 or 60.

Dowels spaced 6 inches (typical) from longitudinal joint or pavement edge.

TIE BARS
Tie bars for longitudinal joints and construction joints shall be round, deformed and shall be in accordance with AASHTO M 31 (ASTM A 615), Grade 60, except that tie bars, which are to be bent and straightened, shall be in accordance with AASHTO M 31, Grade 40.

Tie bars spaced 15 inches (typical) from transverse joint or pavement edge.

EPOXY COATING
The dowels and tie bars shall be epoxy coated in accordance with Section 1036, except the nonabraded coating thickness shall be 7 ± 2 mils, the flexibility of coating requirement will not apply and the cut ends will not be required to be coated.



CUL DE SAC OPEN CENTER

CUL DE SAC FULLY PAVED

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) All street inlets shall be separated from the pavement and curb by expansion joint material extending completely through curb and slab. Manhole casting within the pavement limits shall be boxed as shown in the "Sewer Construction Details", (Drawing 604.37).
3) When a joint falls within 5ft. of, or contacts inlets, manholes, or other structures, shorten one or more panels either side of opening to permit joint to fall on round structures and at or between corners of rectangular structures.
4) Driveway configurations are shown in the "Entrance Construction Details."
5) Construction joints and tie bars may be omitted when curb is poured monolithic with pavement.
6) Minimum thickness for pavement is:
   Residential 20' & 26' wide streets 6 inches
   Residential 38' wide streets 7 inches
7) For joint and bar requirements refer to the "Pavement Construction Details for Joints" (Standard Drawing C502.13) and "Pavement Construction Details for Curbs" (Standard Drawing C502.14). Note that the width and location may change the type of joint required.
8) Transverse or longitudinal construction joints in slip formed pavements may be made with a groover or tool, if such device has been approved in advance by the Department.
9) The locations of the TYPE B longitudinal construction joints in the sections may be interchanged for the different widths of construction if approved by the Department.
10) All 5/8 inch and 1 inch diameter smooth dowel bars, 18 inches long at 12 inch centers, shall be epoxy coated.

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI

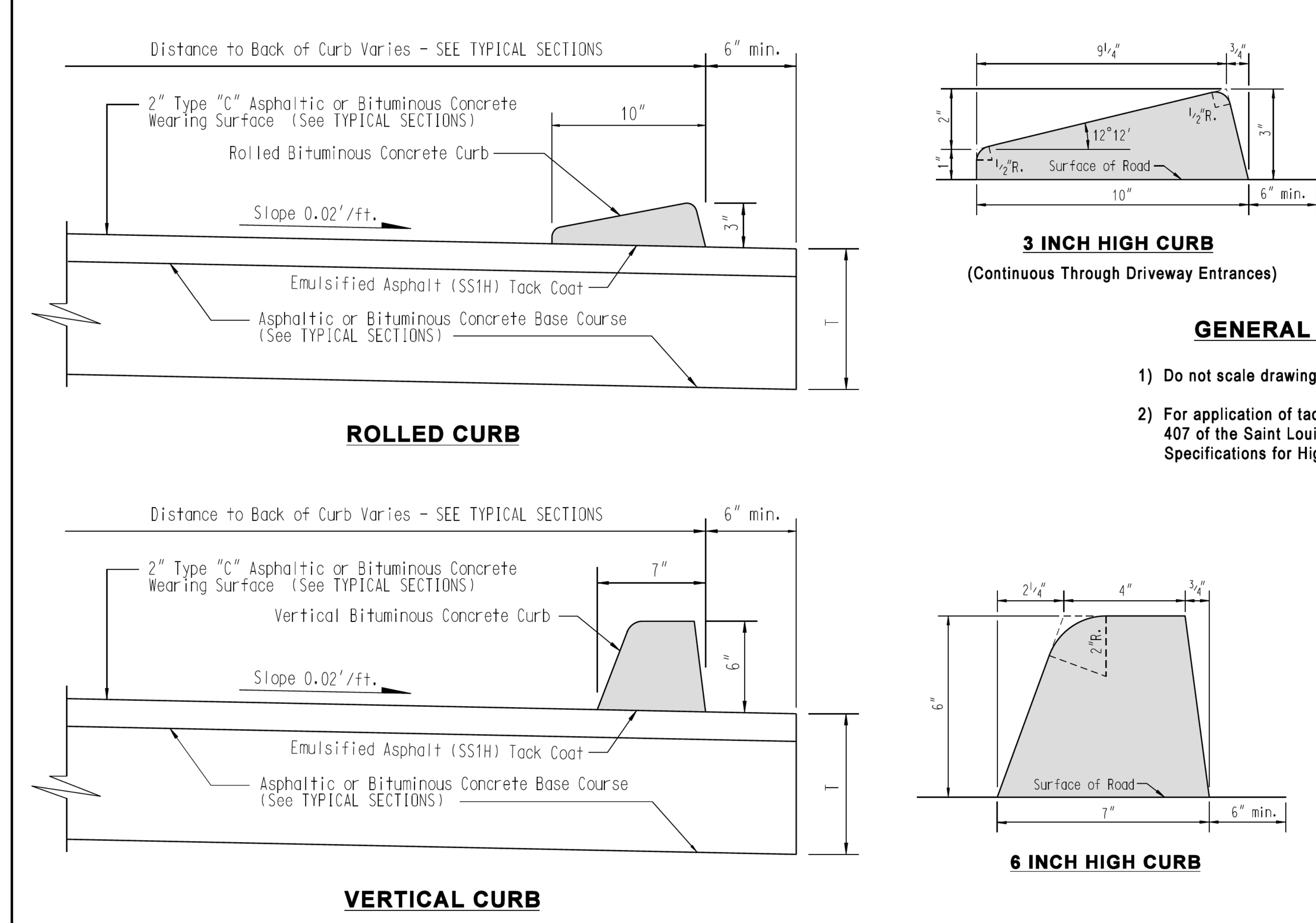
PAVEMENT CONSTRUCTION DETAILS
INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS

REVISION DATE: October 1, 2012

DRAWING C502.02

NEW	REVISIONS		
7-8-88	10-13-97	7-31-07	10-1-09	1-1-10

ST. LOUIS COUNTY PROJ.



ROLLED CURB

VERTICAL CURB

3 INCH HIGH CURB
(Continuous Through Driveway Entrances)

6 INCH HIGH CURB

GENERAL NOTES

1) Do not scale drawing, follow dimensions.
2) For application of tack coat refer to Section 407 of the Saint Louis County Standard Specifications for Highway Construction.

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI

PAVEMENT CONSTRUCTION DETAILS
BITUMINOUS CONCRETE CURB AND PAVEMENT DETAILS

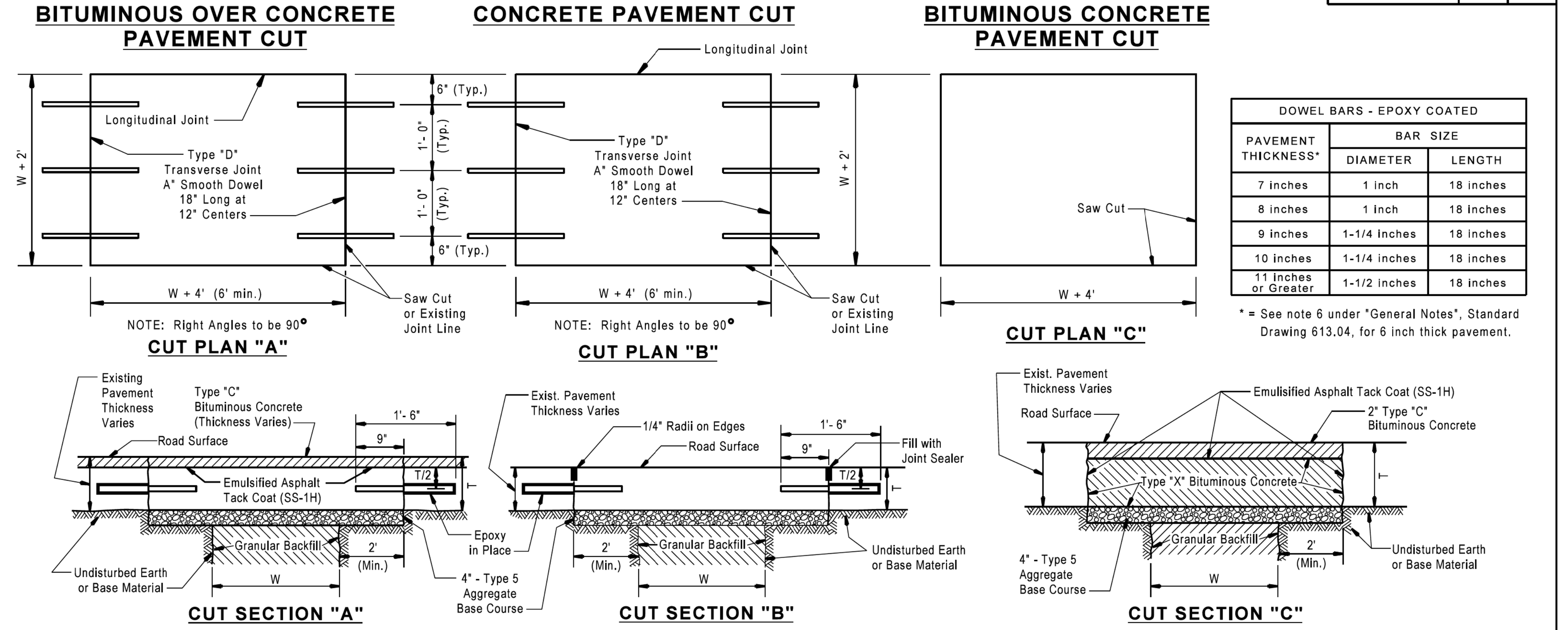
REVISION DATE: January 1, 2010

DRAWING C502.04

NEW	REVISIONS	
1-5-98	7-31-07	10-8-12

ST. LOUIS COUNTY PROJ.

BITUMINOUS OVER CONCRETE PAVEMENT CUT / CONCRETE PAVEMENT CUT / BITUMINOUS CONCRETE PAVEMENT CUT



CUT PLAN "A" — CUT PLAN "B" — CUT PLAN "C"

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE	
	DIAMETER	LENGTH
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

* = See note 6 under "General Notes", Standard Drawing 613.04, for 6 inch thick pavement.

CUT SECTION "A" — CUT SECTION "B" — CUT SECTION "C"

GENERAL NOTES

1) If a permit is issued to replace the existing asphaltic concrete pavement with full depth bituminous concrete pavement and concrete pavement is found under the existing asphaltic concrete pavement, the applicant will be required to follow the detail for bituminous concrete over concrete pavement cut (see Cut Section "A" above). The applicant will use high early Type III cement with an approved water reducer and non-chloride accelerator (County Specification 613.2.7.1) to replace existing concrete for 4 hour opening. Use 4 inches of Type 5 aggregate over granular backfill as a subbase. Compact all backfill and base materials per County specifications.
2) Refer to Standard Drawing C502.03, Type "D" joint at transverse joints.
3) Longitudinal and transverse joints: Do not drill concrete pavement less than 7 inches thick. For all other pavement thicknesses, install longitudinal bars by drilling holes with a gang-mounted drill, supplying epoxy in accordance with Section 1039.3, and cleaning hole, installing epoxy and tie bar in accordance with epoxy manufacturer's guidelines. Tie bars are to be installed no closer than 15 inches from transverse joint. Tie bar size and length shall be as follows:
   - Epoxy-Coated Tie Bars. For Pavement Thicknesses:
     - Less than 11 inches, use No. 5 deformed bars, 30-inches long at 30 inch centers
     - Greater than or equal to 11 inches, use No. 6 deformed bars, 40-inches long at 30 inch centers
4) Do not drill 6 inch pavement. Use epoxy coated Number 5 reinforcement bars, 18 inches long on 30 inch centers at longitudinal joint.
5) Pavement Repair Date Stamping. This is to be applied to concrete pavement repairs that will not be overlaid. Using Metal dies in accordance with Sec 502.3.11 the contractor shall stamp the pour date into the repair after surface texturing, but before curing is applied. The placement date (MM-DD-YY) of each pavement repair shall be stamped in the plastic concrete. The stamped date shall be located near the repair's transverse and longitudinal joint on a troweled surface not closer than 1 foot to any edge of the pavement repair and face outward so as to be read from the near shoulder. On roadways with narrow shoulders or curbs, the numbers shall be oriented (parallel with the transverse joint) so that they can be read from the roadway in the direction of traffic flow.
6) Joint Depth and Sealer material in accordance with Standard Drawings C502.13, "Joints" and C502.14, "Curbs".
7) Epoxy Anchoring Material in accordance with Section 1039.30, "Epoxy or Polyester Bonding Agents for Dowels".

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI

CONSTRUCTION DETAILS OF FULL DEPTH PAVEMENT REPAIR

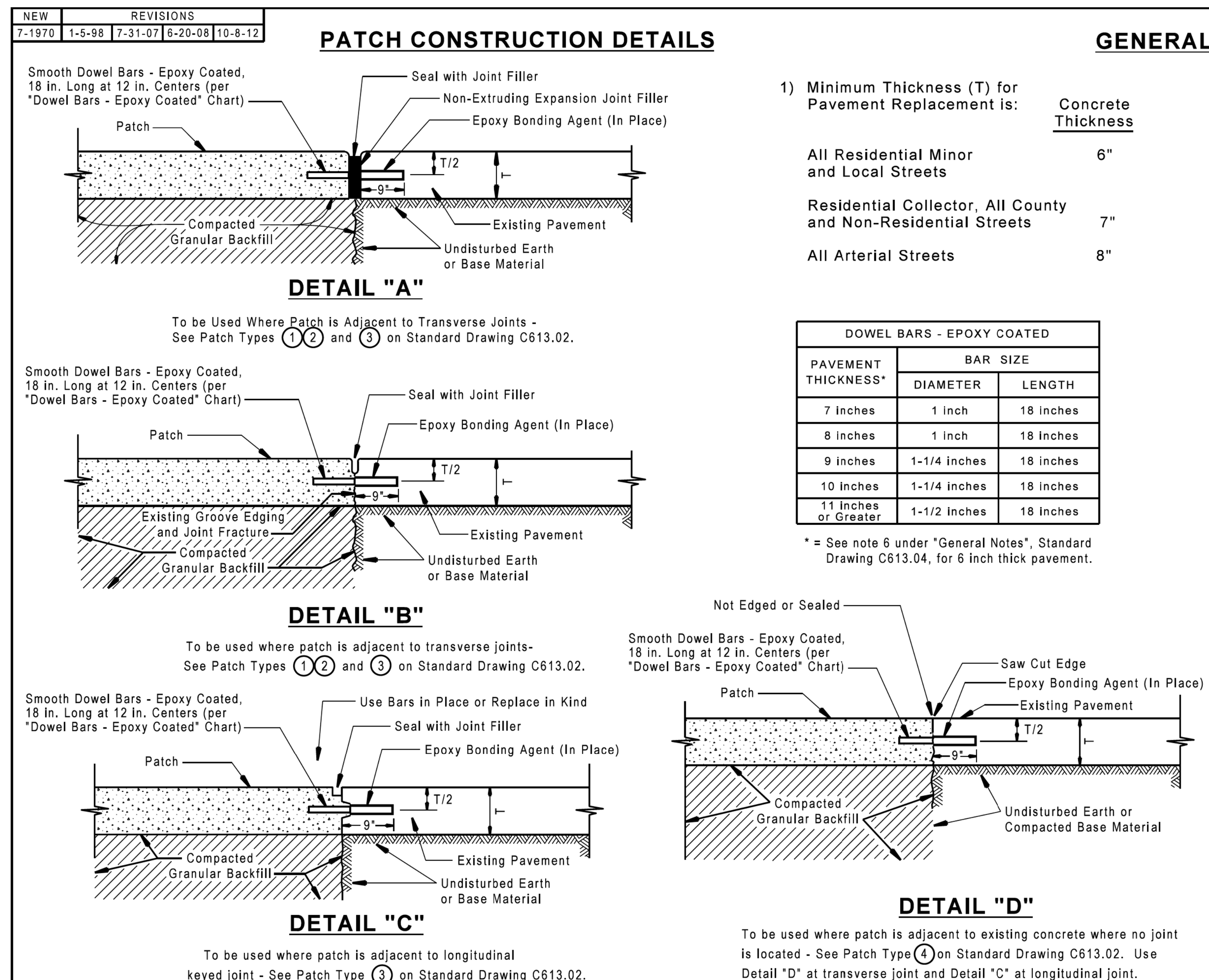
REVISION DATE: October 8, 2012

DRAWING C613.00

NEW	REVISIONS			
7-1970	1-5-98	7-31-07	6-20-08	10-8-12

ST. LOUIS COUNTY PROJ.

PATCH CONSTRUCTION DETAILS



DETAIL "A"
To be Used Where Patch is Adjacent to Transverse Joints - See Patch Types (1)(2) and (3) on Standard Drawing C613.02.

DETAIL "B"
To be used where patch is adjacent to transverse joints - See Patch Types (1)(2) and (3) on Standard Drawing C613.02.

DETAIL "C"
To be used where patch is adjacent to longitudinal keyed joint - See Patch Type (3) on Standard Drawing C613.02.

DETAIL "D"
To be used where patch is adjacent to existing concrete where no joint is located - See Patch Type (4) on Standard Drawing C613.02. Use Detail "D" at transverse joint and Detail "C" at longitudinal joint.

GENERAL NOTES

1) Minimum Thickness (T) for Pavement Replacement is:

	Concrete Thickness
All Residential Minor and Local Streets	6"
Residential Collector, All County and Non-Residential Streets	7"
All Arterial Streets	8"

DOWEL BARS - EPOXY COATED		
PAVEMENT THICKNESS*	BAR SIZE	
	DIAMETER	LENGTH
7 inches	1 inch	18 inches
8 inches	1 inch	18 inches
9 inches	1-1/4 inches	18 inches
10 inches	1-1/4 inches	18 inches
11 inches or Greater	1-1/2 inches	18 inches

* = See note 6 under "General Notes", Standard Drawing C613.04, for 6 inch thick pavement.

2) For additional details refer to Standard Drawings C613.02 and C613.03; and Standard Specifications for Highway Construction Manual, Section 613.
3) Longitudinal and transverse joints: Do not drill 6 inch thick concrete pavement. For all other pavement thicknesses, install longitudinal bars by drilling holes with a gang-mounted drill, supplying epoxy in accordance with Section 1039.3, and cleaning hole, installing epoxy and tie bar in accordance with epoxy manufacturer's guidelines. Tie bars are to be installed no closer than 15 inches from transverse joint. Tie bar size and length shall be as follows:
   Epoxy-Coated Tie Bars. For Pavement Thicknesses:
   Less than 11 inches, use No. 5 deformed bars, 30-inches long at 30 inch centers.
   Greater than or equal to 11 inches, use No. 6 deformed bars, 40-inches long at 30 inch centers.
4) Where base material exists under pavements, replacement will be made with 4 inches of Type 5 aggregate base course, granular backfill and base materials will be compacted and installed per St. Louis County Specifications.
5) Wherever tie bars, tie bolts, dowels or other load transfer devices are found in a joint, the exposed ends will be cleaned and left in place. All smooth slip dowels should be straightened if necessary and greased prior to placing in patch.
6) Refer to Standard Drawing C502.03, Type "D" joint at transverse joints.

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI

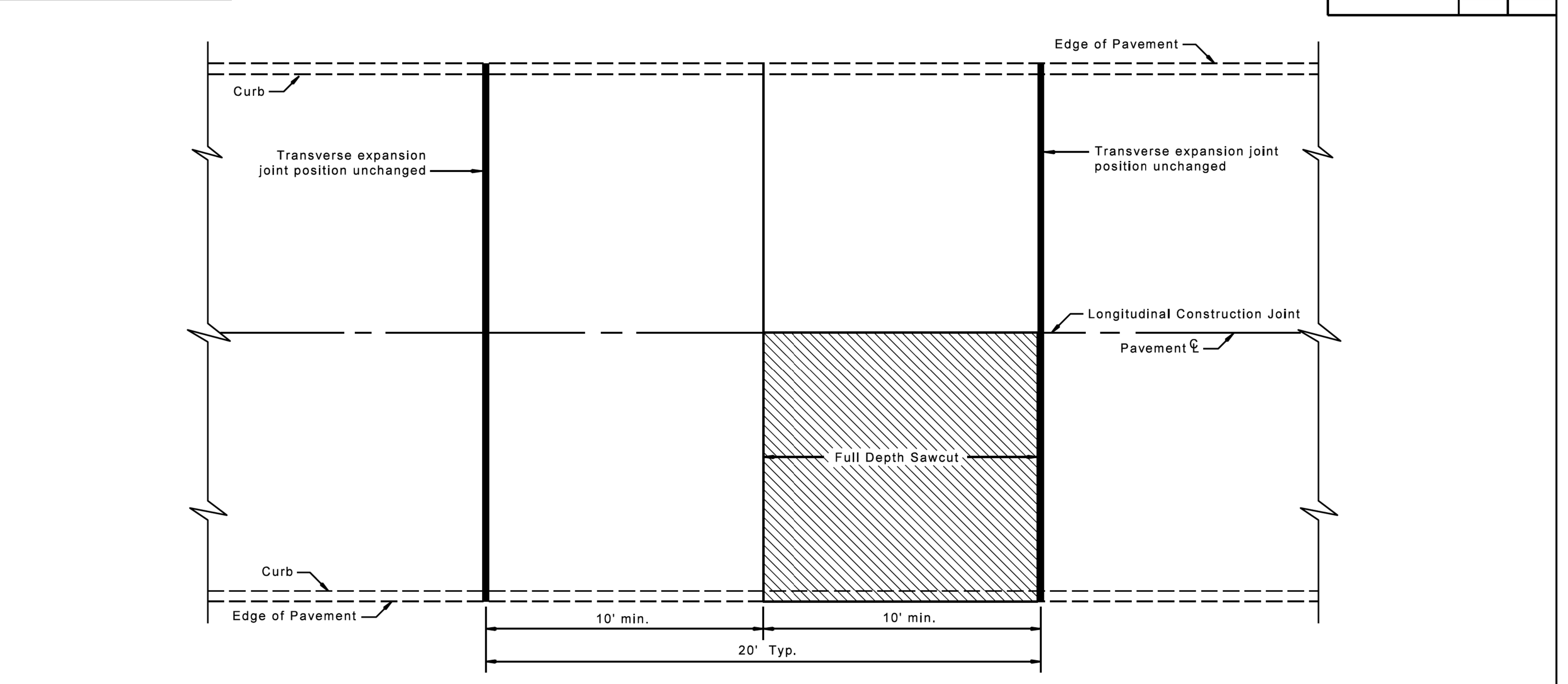
CONSTRUCTION DETAILS FOR CONCRETE CONSTRUCTION PATCHES

REVISION DATE: October 8, 2012

DRAWING C613.01

NEW	REVISIONS	
1-5-98	7-31-07	10-8-12

ST. LOUIS COUNTY PROJ.



GENERAL NOTES

1) For additional details refer to Standard Drawings C613.00, C613.01, C613.02 and C613.04.
2) If the repair area can not be confined to the dimension shown, then the entire slab shall be replaced.
3) Full depth sawcutting is required around the repair area.
4) Repair depth shall match surrounding pavement.
5) No longitudinal sawcutting of slabs will be permitted.
6) Half slab replacement not allowed on slabs less than 20 feet.

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI

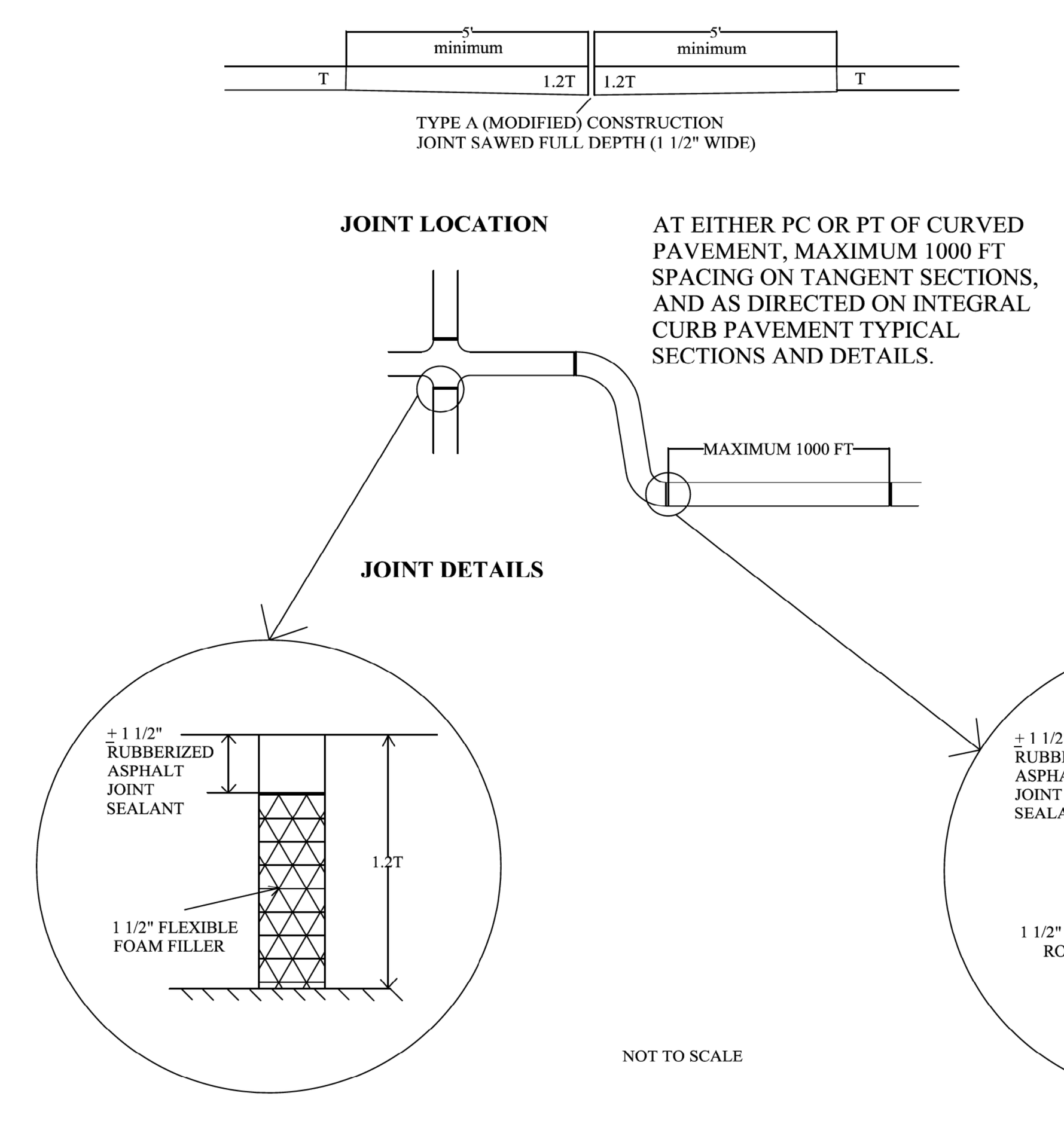
CONSTRUCTION DETAILS FOR P.C.C. REPAIR

REVISION DATE: October 8, 2012

DRAWING C613.03

155

TYPE A (MODIFIED) CONSTRUCTION JOINT



TYPE A (MODIFIED) CONSTRUCTION JOINT SAWED FULL DEPTH (1 1/2" WIDE)

JOINT LOCATION

AT EITHER PC OR PT OF CURVED PAVEMENT, MAXIMUM 1000 FT SPACING ON TANGENT SECTIONS, AND AS DIRECTED ON INTEGRAL CURB PAVEMENT TYPICAL SECTIONS AND DETAILS.

JOINT DETAILS

NOT TO SCALE

NOTES:

1. THE NUMBER OF BACKER RODS REQUIRED WILL VARY WITH THE PAVEMENT THICKNESS. BACKER RODS AND FLEXIBLE FOAM FILLER MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
2. JOINT FILLER SHALL BE A FLEXIBLE, NON-ABSORBENT, NON-GASSING, NON-STAINING, NON-SHRINKING MATERIAL, EXTRUDED FROM A CLOSED-CELL POLYMER, ASTM D-5249.
3. JOINT FILLER COMPOSED OF CELLULAR FIBERS, ASTM D-1751, MAY BE USED AT DRIVEWAY, SIDEWALK, AND SEWER INLET AND MANHOLE LOCATIONS.
4. SEE "INTEGRAL CURB DETAIL "B" AT DRIVEWAYS" FOR EXPANSION JOINT REQUIREMENTS AT DRIVEWAY CONNECTIONS TO THE STREET AND THE GARAGE.

SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI

PAVEMENT CONSTRUCTION DETAILS
Type "A" Expansion Joint

DATE: May, 2002

DRAWING C502.04

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Building A Tradition Of Excellence Since 1958
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STATE OF MISSOURI
TIMOTHY JOHN MEYER
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PROFESSIONAL ENGINEER
03/07/2022

TIMOTHY J MEYER
Professional Engineer
MO E-24665

INVERNESS

CONSTRUCTION DETAILS

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1575 BRYAN RD.

Project # 22450

01/20/2022

C44