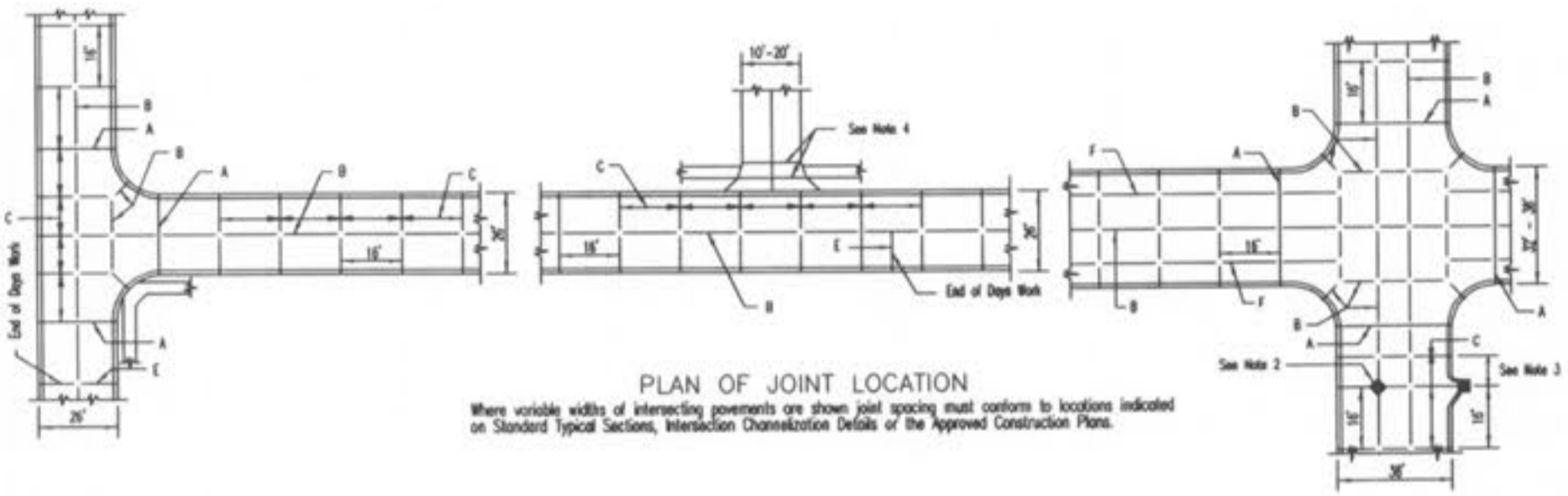
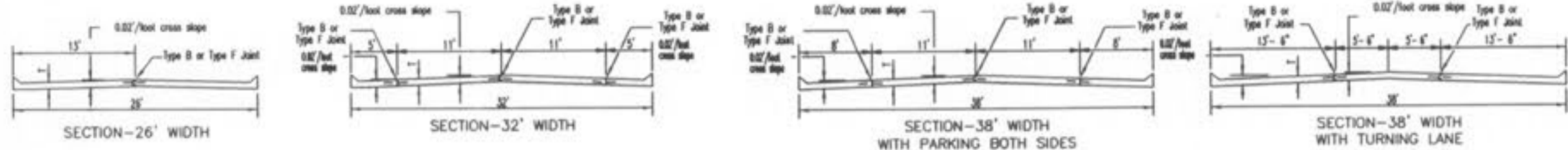
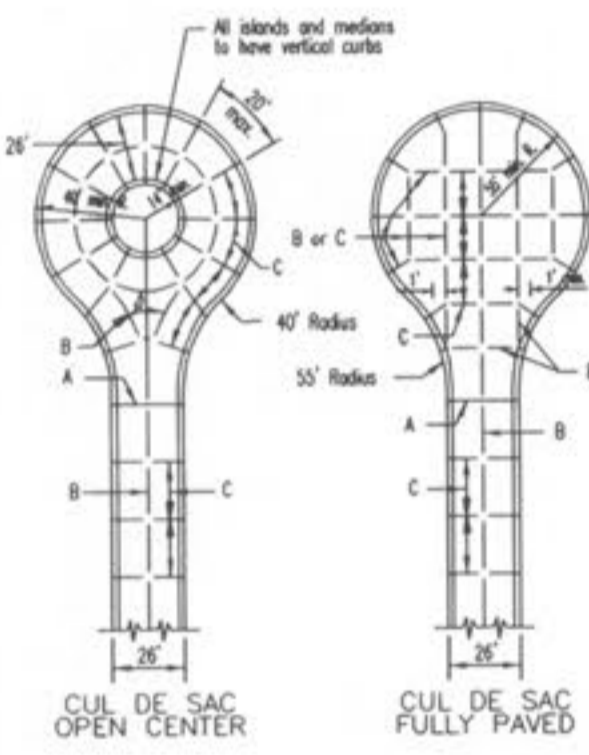


INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS



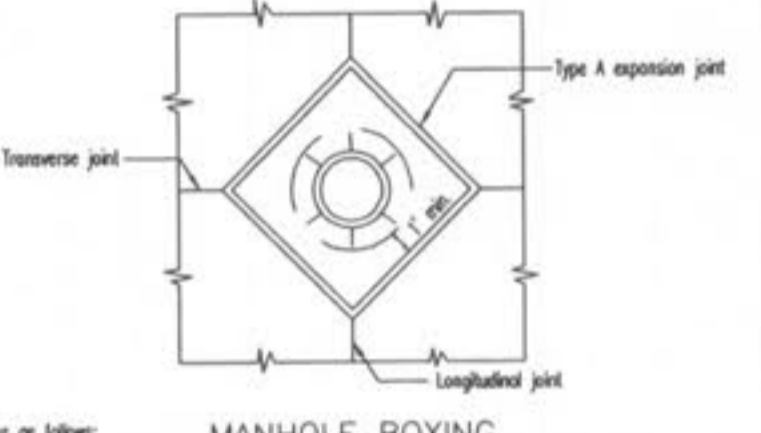
PLAN OF JOINT LOCATION
Where variable widths of intersecting pavements are shown joint spacing must conform to locations indicated on Standard Typical Sections, Intersection Construction Details or the approved Construction Plans.



JOINT REQUIREMENTS FOR CONCRETE PAVEMENT		
STREET	JOINT TYPE	JOINT AND BAR REQUIREMENTS
3 LANE RESIDENTIAL 32'-38' wide pavement	Transverse	TYPE C no steel bars
	Longitudinal	TYPE F Within a paired section: 5/8" ϕ deformed tie bars @ 30' c/s. At the edge between two paired sections: 5/8" ϕ deformed tie bars @ 30' c/s.
7' thick concrete	Expansion	TYPE A no steel bars
RESIDENTIAL 2 LANE 26' wide pavement	Transverse	TYPE C no steel bars
	Longitudinal	TYPE F modified with 1/2" ϕ deformed tie bars @ 30' c/s. Half Width Construction: TYPE F modified with 1/2" ϕ deformed tie bars @ 30' c/s.
6" thick concrete	Expansion	TYPE A no steel bars

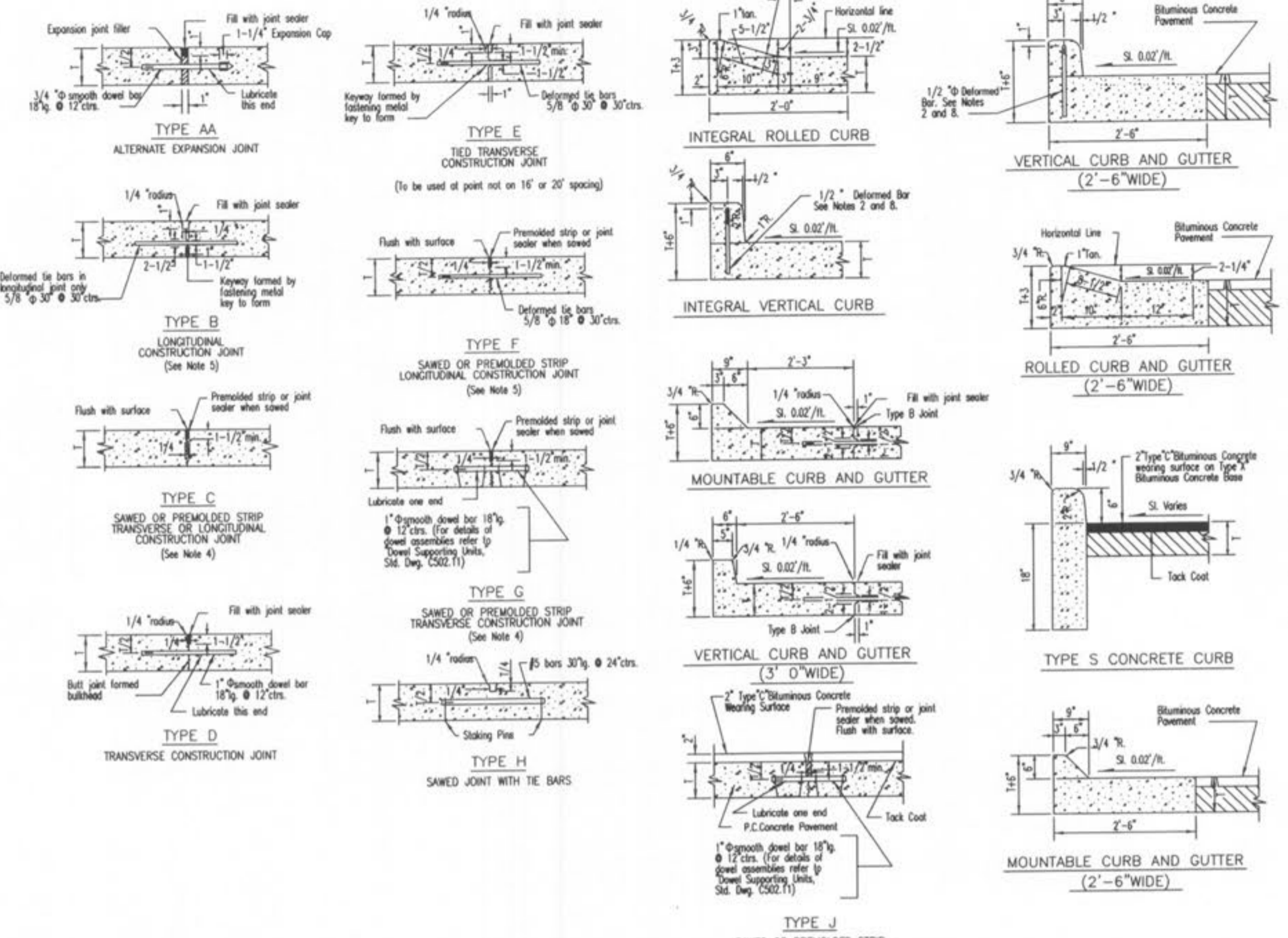
NOTE: Joint filler material shall meet ASTM designations as follows:
 Bituminous type: D-394-53
 Non extruding & resilient bituminous type (rubber): ASTM D-1751-40T
 Non extruding & resilient non bituminous type (rubber): ASTM D-5249

NOTE: Joint sealant material shall meet ASTM and AASHTO designations as follows:
 ASTM D-3465, AASHTO M-301 or ASTM D-1190-74, AASHTO M-173-84 or latest revisions thereof.



MANHOLE BOXING
 SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI
 PAVEMENT CONSTRUCTION DETAILS INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS
 DATE: October, 2002 DRAWING: C502.02

- GENERAL NOTES
- Do not scale drawing. Follow dimensions.
 - 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.
 - When a joint falls within SR 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.
 - Driveway configurations are shown in the "Entrance Construction Details".
 - Construction joints and tie bars may be omitted when curb is poured monolithic with pavement.
 - Minimum Thickness for Pavement is: Residential - 6" - 8" Standard - 6" - 8" Commercial - 6" - 8" - 10" - 12" - 15"
 - For joint and bar requirements refer to the Pavement Construction Details for "Joints and Curbs". Std. Dwg. C502.03. Note that the width and location may change the type of joint required.
 - 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.
 - 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.



- GENERAL NOTES
- Do not scale drawing. Follow dimensions.
 - Construction joint and tie bars may be omitted when curb is poured integral with pavement.
 - Minimum Thickness for Pavement is: Residential Concrete Pavement Thickness = (1) 6" 7-1/2" All Residential Minor and Local Streets Residential Collector and Non-Residential Streets All Arterial Streets 7" 9-1/2" 8" 12"
 - Type "C" Transverse Joint is required for Arterial and Non-Residential streets. Use Type "C" Transverse Joint for all others.
 - For Subdivision or Minor Streets having 6" concrete pavement, 1/2" ϕ deformed tie bars, 30' long at 30' centers shall be used for Type "E" Longitudinal Joints and 1/2" ϕ deformed tie bars 18' long at 30' centers shall be used for Type "F" Longitudinal Joints.
 - Refer to Pavement Construction Details for Integral Vertical Curbs and Concrete Pavement Typical Sections and Details, Std. Dwg. C502.04 and Integral Rolled Curbs and Concrete Pavement Typical Sections and Details, Std. Dwg. C502.02 for joint and bar requirements for different street classifications. Note that width and location of each poured portion of the pavement may change the type and location of joint required.
 - All deformed bars for joints and curbs shall be steel bars conforming to A.S.T.M. A615-75, Grade 60.
 - Length of the tie bars shall equal the thickness of pavement plus the height of curb less 1/2" tie bars shall be placed @ 24 centers.
 - 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.
 - The free end of the deformed bar for a length of at least 11 inches shall be coated with an approved graphite grease.
 - All deformed bars 18" ϕ @ 12' c/s. shall be epoxy coated.

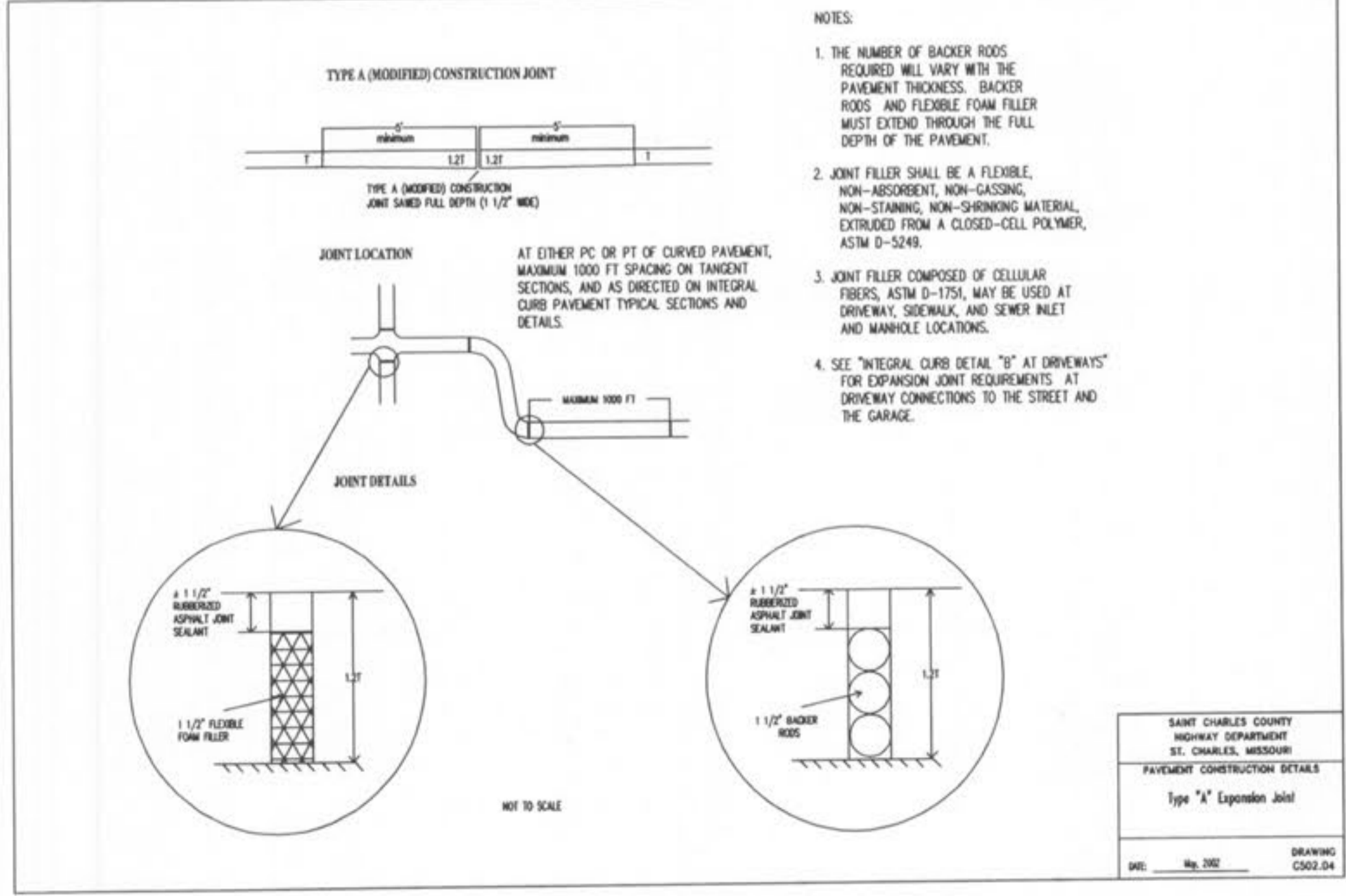
SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI
 PAVEMENT CONSTRUCTION DETAILS
 JOINTS AND CURBS
 DATE: September, 2002 DRAWING: C502.03

IMPROVEMENT PLANS BELLEAU CROSSING PAVEMENT DETAILS

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI
 PAVEMENT CONSTRUCTION DETAILS
 DATE: October, 2002 DRAWING: C502.02

SCEIS
 KARL ANTHONY SCHÖENIKE
 NUMBER PE-2003015039
 PROFESSIONAL ENGINEER

ORDER NO. 04-1419-01
 DATE 10/26/07
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- NOTES:
- 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.
 - JOINT FILLER SHALL BE A FLEXIBLE, NON-ABSORBENT, NON-GASSING, NON-STAINING, NON-SHRINKING MATERIAL, EXTRUDED FROM A CLOSED-CELL POLYMER, ASTM D-5249.
 - JOINT FILLER COMPOSED OF CELLULAR FIBERS, ASTM D-1751, MAY BE USED AT DRIVEWAY, SIDEWALK, AND SEWER INLET AND MANHOLE LOCATIONS.
 - 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: October, 2002 DRAWING: C502.04