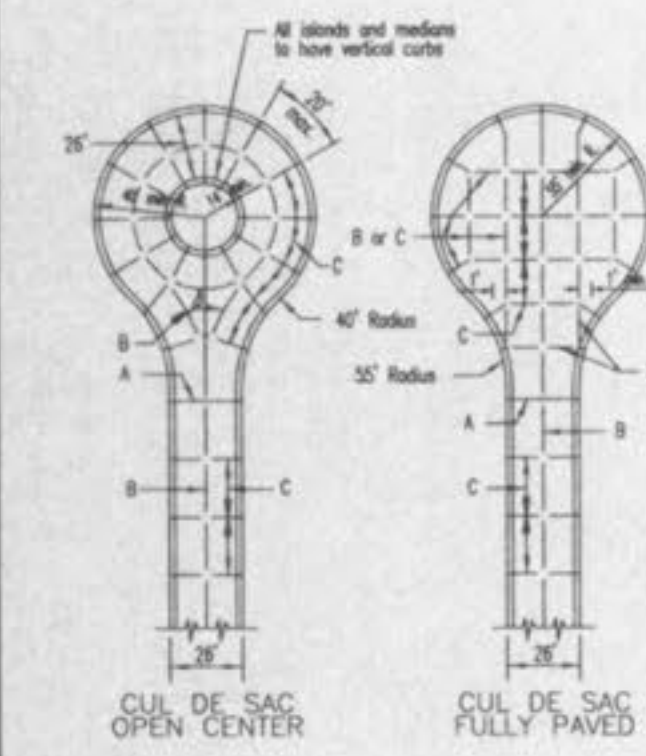
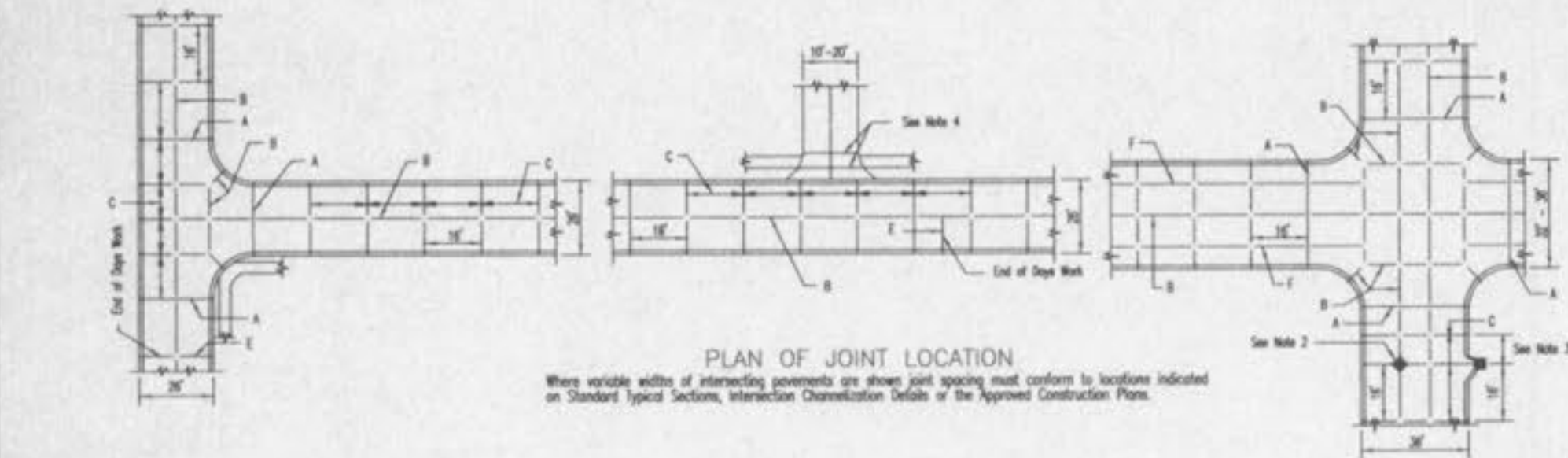
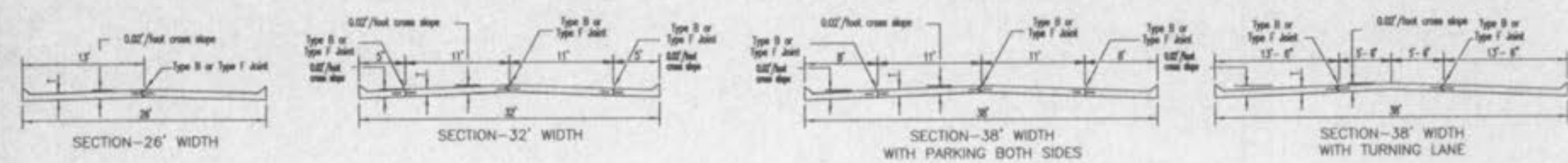


INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS

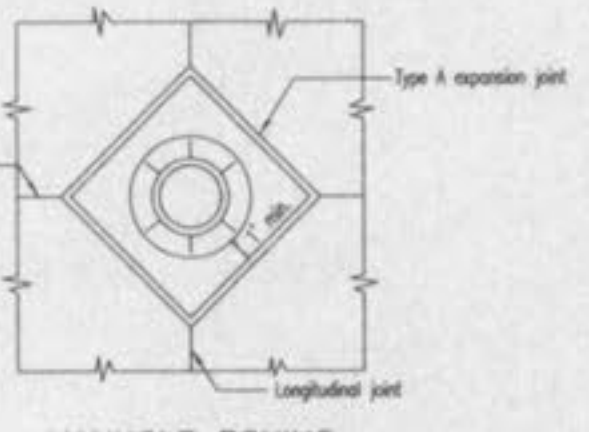


JOINT REQUIREMENTS FOR CONCRETE PAVEMENT		
STREET	JOINT TYPE	JOINT AND BAR REQUIREMENTS
3 LANE RESIDENTIAL 32'-36' wide pavement	Transverse	TYPE C no steel bars
	Longitudinal	Within a paved section: TYPE F 1/2" x 1/2" x 18" x 30" cts. At the edge between two paved sections: TYPE B 1/2" x 1/2" x 18" x 30" cts.
7" thick concrete	Expansion	TYPE A no steel bars
	Transverse	TYPE C no steel bars
RESIDENTIAL 2 LANE 26' wide pavement	Longitudinal	Full Width Construction: TYPE B modified with 1/2" x 1/2" x 18" x 30" cts. Half Width Construction: TYPE B modified with 1/2" x 1/2" x 18" x 30" cts.
	Expansion	TYPE A no steel bars

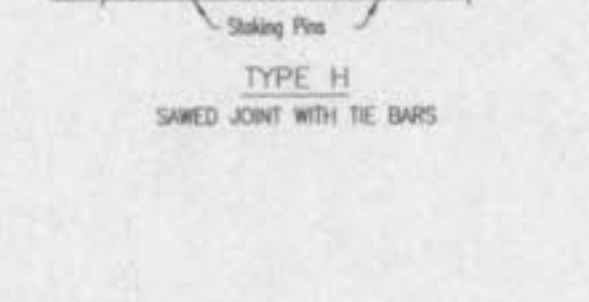
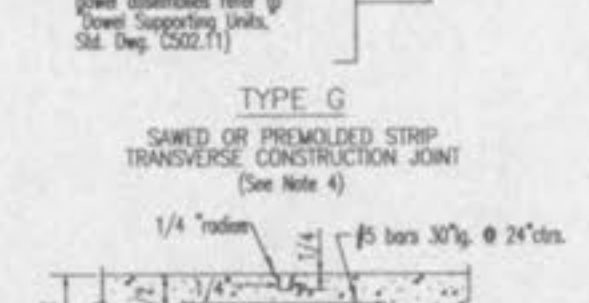
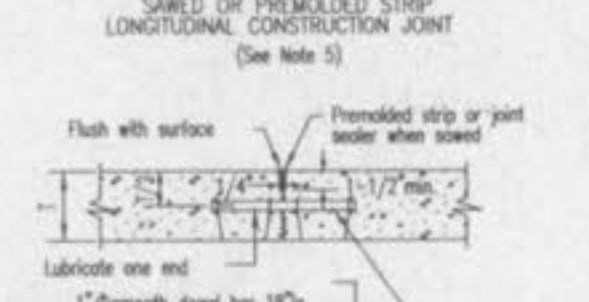
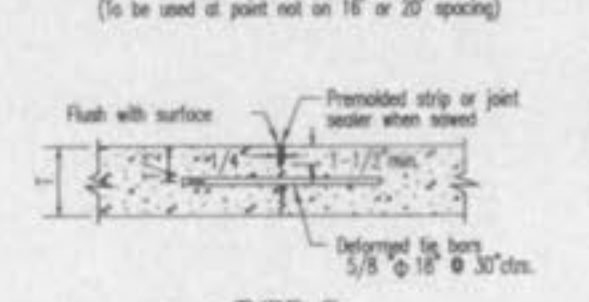
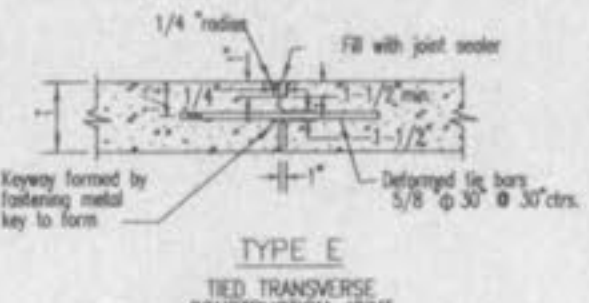
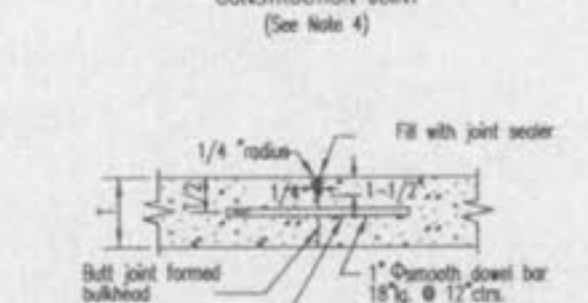
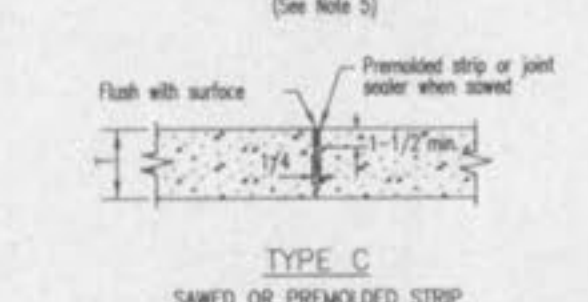
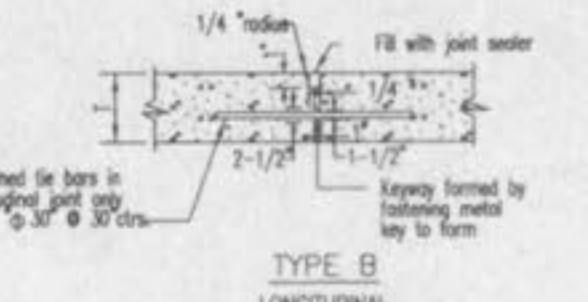
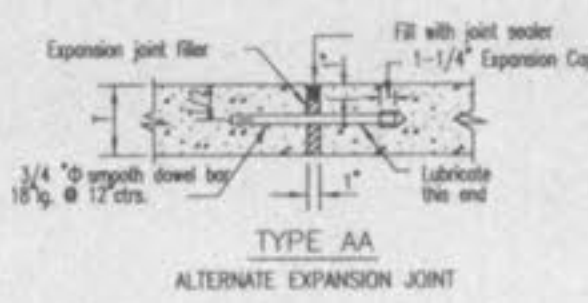
NOTE: Joint filler material shall meet ASTM designations as follows:
 Blumiseal type ASTM D-994-53
 Non extruding & resilient bituminous type (fiber) ASTM D-1751-60T
 Non extruding & resilient non bituminous type (rubber) ASTM D-5249

GENERAL NOTES

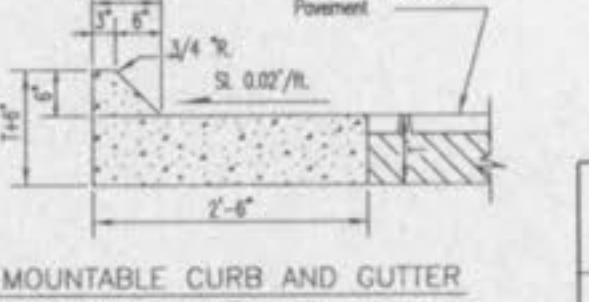
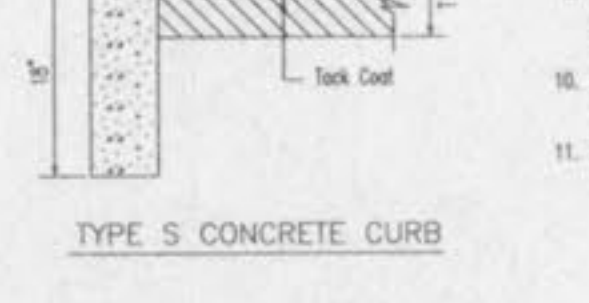
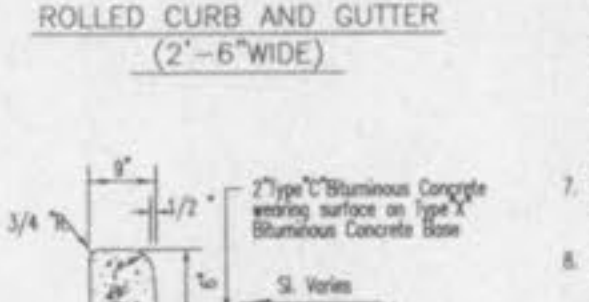
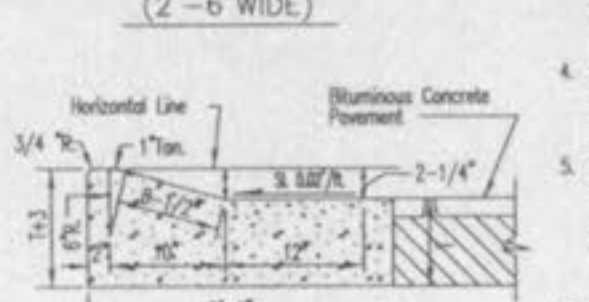
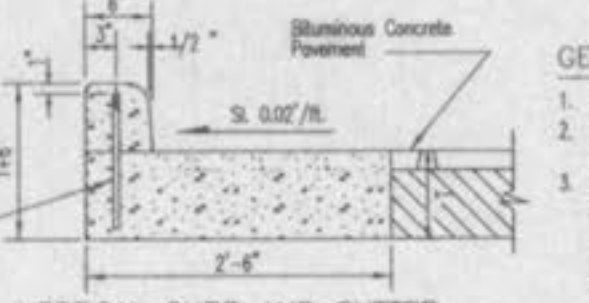
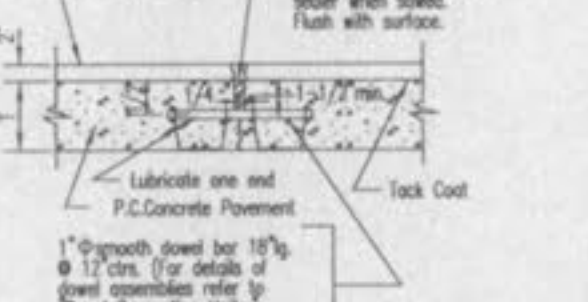
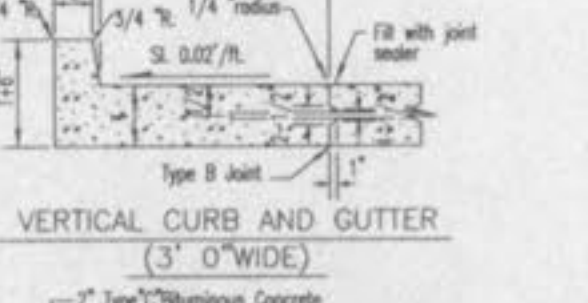
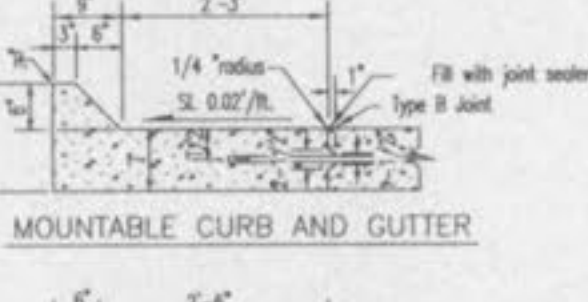
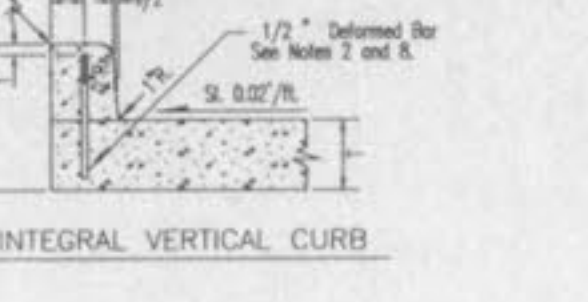
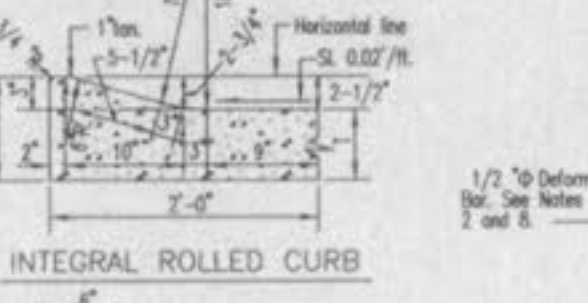
- Do not scale drawing. Follow dimensions.
- All street labels shall be separated from the pavement and curb by expansion joint material extending completely through curb and slab. Manhole casing within the pavement limits shall be based on shown.
- When a joint falls within 5ft. of, or contacts inlets, manholes, or other structures, shorten one or more panels either side of opening to permit joint to fall on raised 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 26' wide Streets 6"
 Residential 32'-36' wide Streets 7"
- For joint and bar requirements refer to the Pavement Construction Details for Joints and Curbs. Std. Dep. 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.



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 C502.03

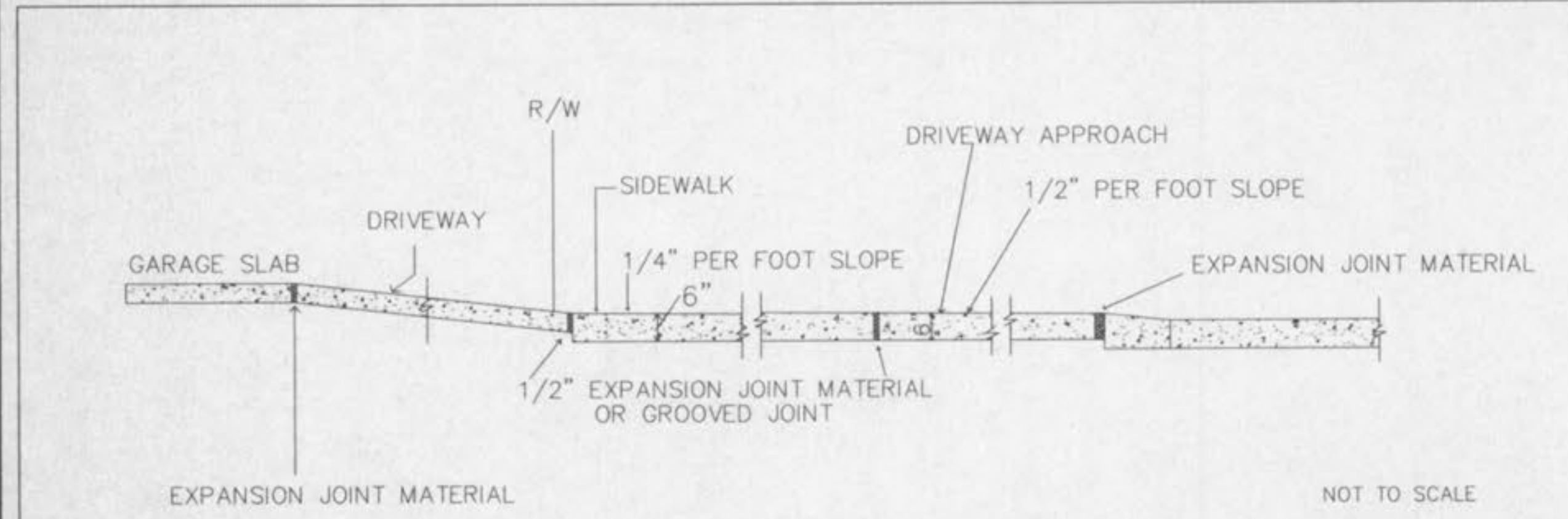


SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI
 PAVEMENT CONSTRUCTION DETAILS INTEGRAL ROLLED CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS
 DATE: October 2002 DRAWING C502.03



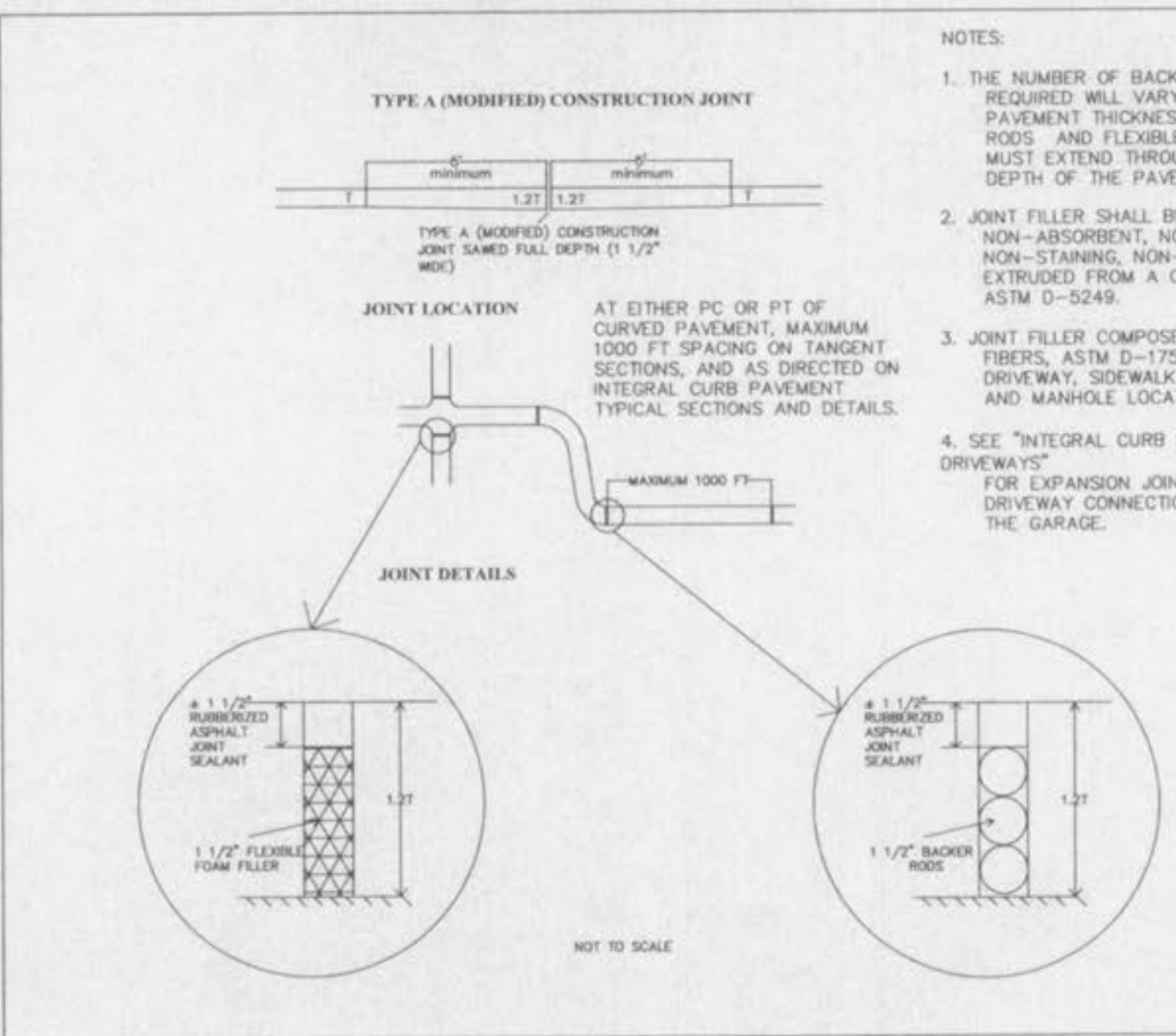
- GENERAL NOTES
- Do not scale drawing. Follow dimensions.
 - Construction joint and tie bars may be omitted when curb is poured integral with pavement.
 - Minimum Thickness for Pavement is:
 Blumiseal Concrete Pavement Thickness = 11"
 All Residential Minor and Local Streets 5"
 Residential Collectors and Non-Residential Streets 7"
 All Arterial Streets 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" x 1/2" x 18" x 30" cts. bars shall be used for Type "C" Longitudinal Joints and 1/2" x 1/2" x 18" x 30" cts. bars shall be used for Type "C" Longitudinal Joints.
 - Refer to Pavement Construction Details for Integral Rolled Curbs and Concrete Pavement Typical Sections and Details. Std. Dep. C502.03 and Integral Rolled Curb and Concrete Pavement Typical Sections and Details. Std. Dep. 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 Reinforcing Bars conforming to A.S.T.M. A615-70, Grade 60.
 - Length of the tie bars shall equal the thickness of pavement plus the height of curb less tie bars shall be placed at 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 steel bar for a length of at least 11 inches shall be coated with an approved graphite grease.
 - All steel bars 18" x 12" cts. shall be epoxy coated.

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



- NOTES:
- A 1" JOINT IS REQUIRED AT THE CURB AND GARAGE FOR ALL DRIVEWAYS LOCATED ON THE OUTER EDGE OF CURVED PAVEMENT, UNLESS GROOVED JOINTS ARE USED AT SIDEWALK. THEN A 2" JOINT IS REQUIRED AT CURB.
 - A 1/2" JOINT IS REQUIRED AT THE CURB AND GARAGE FOR ALL DRIVEWAYS LOCATED ON TANGENT SECTIONS OF PAVEMENT OR ON THE INNER EDGE OF CURVED PAVEMENT.
 - EXPANSION JOINT MATERIAL MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
 - SIDEWALK THICKNESS SHALL BE A MINIMUM OF 7" THROUGH COMMERCIAL DRIVEWAYS.

SAINT CHARLES COUNTY HIGHWAY DEPARTMENT ST. CHARLES, MISSOURI
 PAVEMENT CONSTRUCTION DETAILS Integral Curb Detail "B" of Driveways
 DATE: May, 2002 DRAWING C502.05

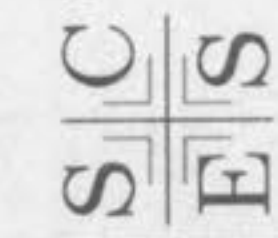


- NOTES:
- THE NUMBER OF BACKER RODS REQUIRED WILL VARY WITH THE PAVEMENT THICKNESS. BACKER RODS AND FLEXIBLE FOAM FILLER MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
 - JOINT FILLER SHALL BE A FLEXIBLE, NON-ABSORBENT, NON-GASSING, NON-STAINING, NON-SHRINKING MATERIAL, EXTRUDED FROM A CLOSED-CELL 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: May 2002 DRAWING C502.04

IMPROVEMENT PLANS PEACEFUL VALLEY PAVEMENT DETAILS

ST. CHARLES ENGINEERING & SURVEYING, INC.
 801 S. FIFTH STREET, SUITE 202 ST. CHARLES, MO 63301
 TEL: (636) 947-0607 FAX: (636) 947-2448



ORDER NO. 02-0890
 DATE 07/25/03
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