

STREET AND PARKING LOT PAVING NOTES

- THE MAXIMUM ALLOWABLE PAVEMENT GRADE SHALL BE 7 PERCENT.
- THE MINIMUM ALLOWABLE PAVEMENT GRADE SHALL BE AS FOLLOWS:
 - A. CONCRETE PAVEMENT GUTTER GRADES: 0.50 PERCENT.
 - B. ASPHALT PAVEMENT GUTTER GRADES: 1.0 PERCENT.
 - C. CONCRETE PAVEMENT SURFACE GRADE TO GUTTER LINE: 0.50 PERCENT.
 - D. ASPHALT PAVEMENT SURFACE GRADE TO GUTTER LINE: 1.0 PERCENT.
- WHENEVER A CHANGE IN THE GRADE OF TWO PERCENT OR MORE OCCURS, A VERTICAL CURVE SHALL BE PROVIDED WITH A LENGTH DETERMINED (TO THE NEAREST FIFTY FEET) BY THE FOLLOWING FORMULA: $L = 1/2 (G1 - G2)$ WHERE L IS THE LENGTH IN STATIONS OF 100 FEET PER EACH STATION, AND G1-G2 IS THE ALGEBRAIC CHANGE OF GRADE IN PERCENT.
- AT ALL INTERSECTIONS A MINIMUM OF 0.3 FEET IN DROP IN ELEVATION AROUND THE CURB RETURN SHALL BE ALLOWED FOR.
- CENTERLINE CURVE DATA (RADIUS, DEFLECTION ANGLE, AND TOTAL ARC LENGTH) FOR ALL STREET PAVEMENT CURVES SHALL BE INDICATED ON THE PLANS.
- THE TOP OF THE CURB OR THE GUTTER GRADE ELEVATIONS EVERY FIFTY FEET SHALL BE INDICATED ON THE PROFILE VIEW FOR EACH STREET.
- WHEN STREET CENTERLINES HAVE A DEFLECTION OF MORE THAN TEN DEGREES, THE CENTERLINE SHALL HAVE A CURVE WITH A MINIMUM RADIUS OF 150 FEET FOR LOCAL STREETS AND 300 FEET FOR COLLECTOR STREETS. BETWEEN REVERSE CURVES, THERE SHALL BE A TANGENT SECTION OF 200 FEET FOR COLLECTOR STREETS AND FIFTY FEET FOR LOCAL STREETS HAVING A RADIUS OF LESS THAN 300 FEET.
- ALL STREET PAVEMENT IN RESIDENTIAL AREAS SHALL HAVE MOUNTABLE CURBS. WHERE THE PAVEMENT IS A BOULEVARD SECTION, ISLAND CURBS SHALL BE SIX-INCH HIGH ROLL CURBS.
- AT THE END OF A STREET THAT WILL BE EXTENDED IN THE FUTURE, A ONE-FOOT WIDE CONCRETE PAVEMENT HEADER, A STANDARD ROAD-END BARRICADE AND A SIGN SHALL BE INSTALLED.
- WHERE THE ZONING CODE REQUIRES OFF-STREET PARKING, THE DESIGN OF THE PARKING AREA SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - A. ALL PARKING AREAS (OTHER THAN DRIVING LANES IN RESIDENTIAL PARKING LOT AREAS) SHALL BE PAVED WITH EITHER SIX INCHES MINIMUM THICKNESS OF CONCRETE OR SIX INCHES MINIMUM THICKNESS OF LIMESTONE AGGREGATE, TOPPED WITH 260 POUNDS PER SQUARE YARD OF BITUMINOUS AGGREGATE SURFACE COURSE. A SIX-INCH HIGH CONCRETE CURB SHALL BE PLACED AROUND THE ENTIRE PERIMETER (EXCEPT ALONG DRIVE ENTRANCES) OF THE PAVED PARKING AREA WHERE ADJACENT TO GRASSED OR SIDEWALK AREAS. ALL DRIVEWAY LANES IN PARKING LOTS AND MULTIPLE-FAMILY HOUSING SITES SHALL BE TWENTY-FOUR FEET WIDE AND CONSTRUCTED OF EITHER:
 - B. EACH PARKING STALL SHALL BE A MINIMUM OF TEN FEET IN WIDTH AND TWENTY FEET IN LENGTH AND TWELVE FEET IN WIDTH AND TWENTY FEET IN LENGTH FOR HANDICAPPED SPACES. EACH CAR SPACE SHALL BE MARKED WITH YELLOW PAINT STRIPES.
 - C. WHEN SIDEWALKS ARE PROVIDED ADJACENT TO THE PARKING AREA CURBS WHERE CAR OVERHANGS OCCUR, SUCH WALKS SHALL BE A MINIMUM WIDTH OF SIX FEET AS MEASURED FROM THE FACE OF THE CURB.
- PAVING FOR ALL STREETS AND PARKING LOTS, PUBLIC OR PRIVATE, SHALL CONFORM TO THE SPECIFICATIONS OF THE MACOMB COUNTY DEPARTMENT OF ROADS, IF APPLICABLE THE MICHIGAN DEPARTMENT OF TRANSPORTATION, AND THE TOWNSHIP PAVING DETAIL SHEET, WHICHEVER IS STRICTER AS DETERMINED BY THE TOWNSHIP ENGINEER.
- ALL RESURFACING OF EXISTING PRIVATE ROADS AND PARKING LOTS SHALL COMPLY WITH MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARDS WITH REGARD TO THE TYPE OF MIXTURE AND OTHER STANDARDS AS RELATE TO PAVING. A REVIEW OF THE PROPOSED RESURFACING OF THE CURRENT SITE CONDITIONS IS REQUIRED BY THE TOWNSHIP ENGINEER AND IS SUBJECT TO ENGINEERING APPROVAL WITH RESPECT TO CONSTRUCTION TECHNIQUE, FINAL PAVEMENT ELEVATION AND OTHER ISSUES, INCLUDING DETERMINING WHETHER SUBSTANTIAL MODIFICATIONS ARE BEING PROPOSED IN RELATION TO PREVIOUSLY APPROVED ENGINEERING PLANS.
- 6" EDGE DRAINS WRAPPED IN GEOTEXTILE FABRIC FILTER SHALL BE INSTALLED ON BOTH SIDES OF ALL ROADWAYS. ALSO PLACE UNDERDRAINS AT ALL DRAINAGE STRUCTURES WITHIN PARKING AREAS, (SEE DETAILS 6A, 6B, 6C, 6D).
- UNDERDRAIN INSPECTION TO BE PERFORMED BY CLINTON TOWNSHIP DPW.

Charter Township of Clinton



T-20 N-13-E



DATE:	ISSUE:

Developed For:
CHARTER TOWNSHIP OF CLINTON
 40700 ROMEO PLANK ROAD
 CLINTON TOWNSHIP, MI 48038

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CHARTER TOWNSHIP OF CLINTON

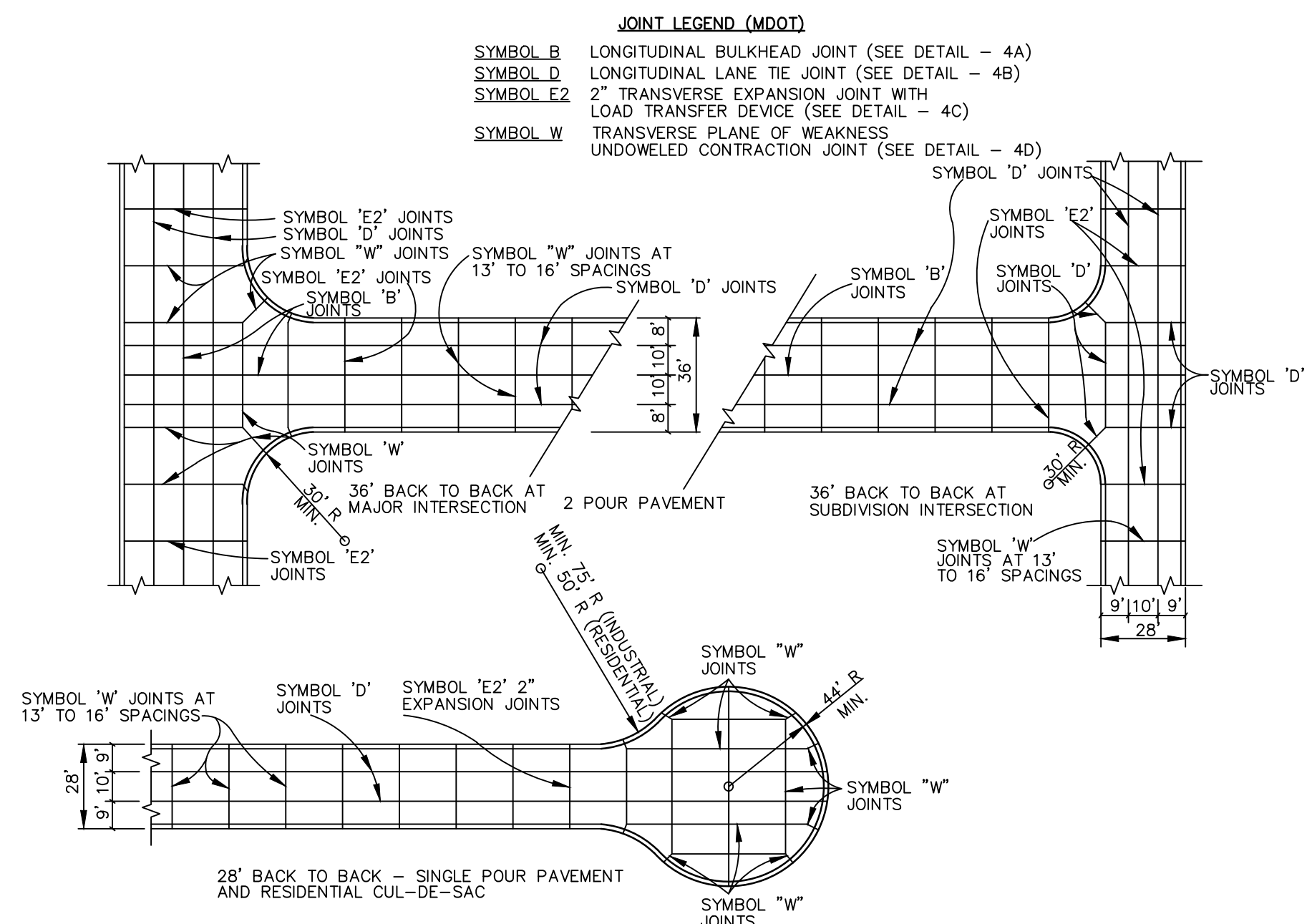
PAVING (2 OF 2)
 STANDARD DETAILS

CHARTER TOWNSHIP OF CLINTON
 MACOMB COUNTY
 MICHIGAN

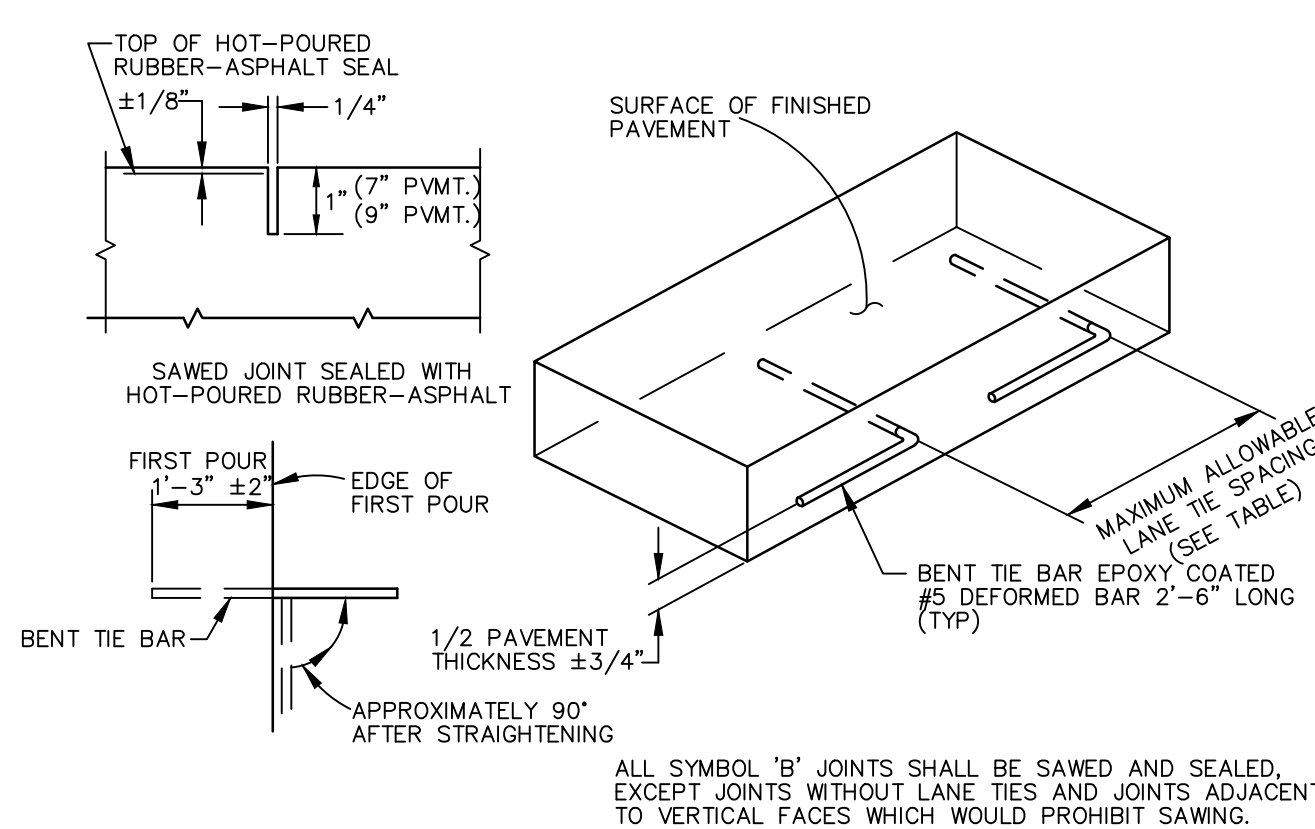
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 Sheet: P-2
 Project:

MAXIMUM ALLOWABLE LANE TIE SPACING SYMBOLS (B), (D)		* TOTAL DISTANCE OF TIED JOINT FROM NEAREST FREE EDGE	
GRADE 40	GRADE 60	(B)	(D)
2-10'	3-7'	12' OR LESS	
1-11'	2-7'	OVER 12 - THROUGH 17'	
1-5'	1-11'	OVER 17 - THROUGH 24'	
1-2'	1-9'	OVER 24 - THROUGH 28'	
1-2'	1-4'	OVER 28 - THROUGH 36'	
1-1'	1-1'	36' OR GREATER	

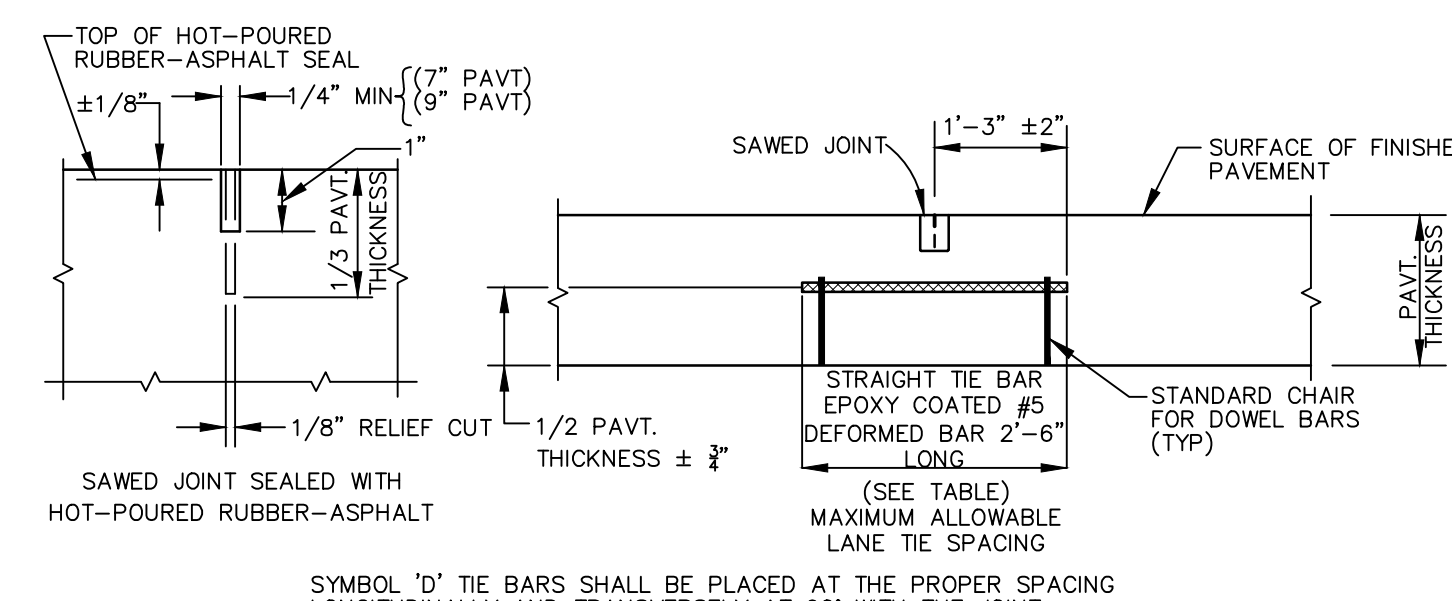
MAXIMUM ALLOWABLE LANE TIE SPACING TABLE
 * INCLUDES ANY TIED COMBINATION OF LANE WIDTH, VALLEY GUTTER, CURB & GUTTER, OR SHOULDER



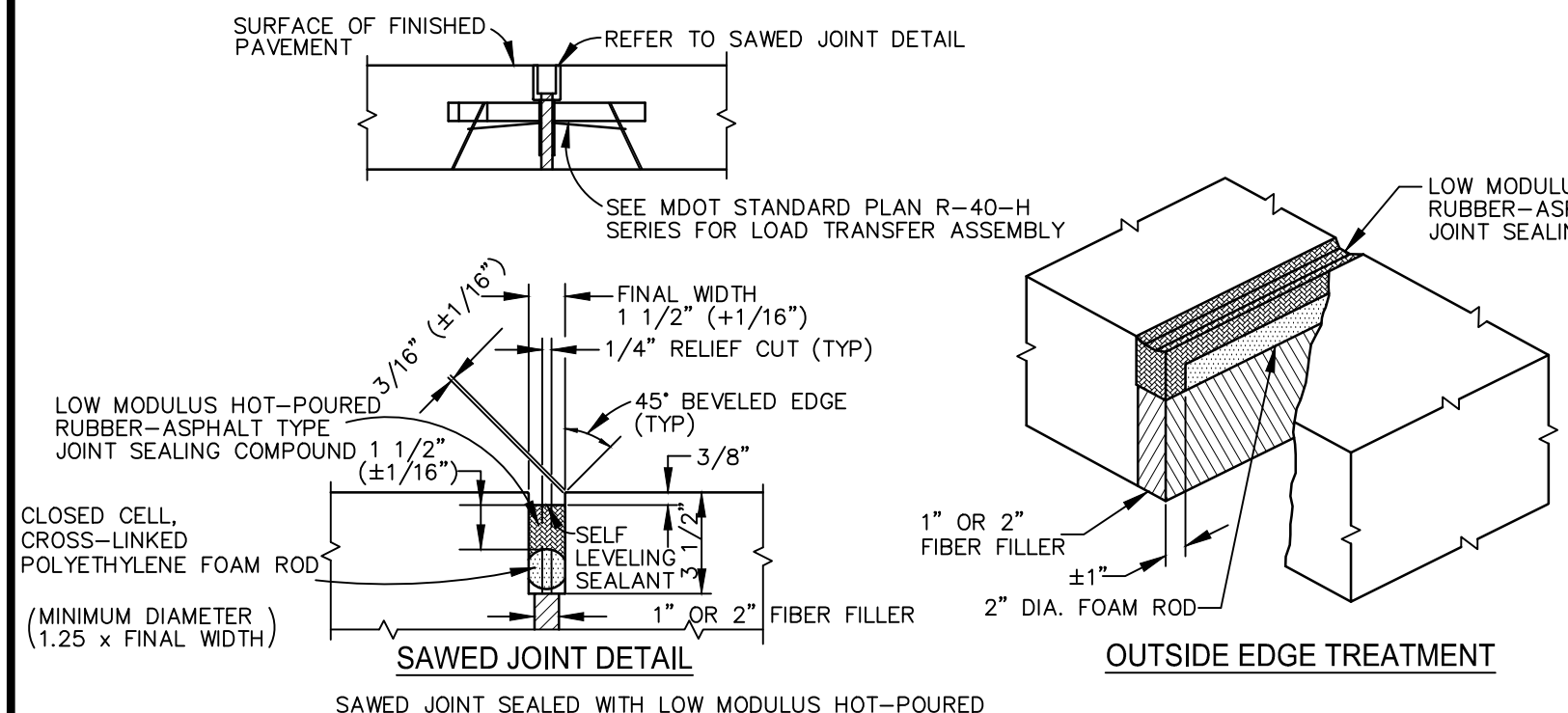
TYPICAL PLAN OF CONCRETE PAVEMENT JOINT LAYOUT
DETAIL - 4
 NOT TO SCALE



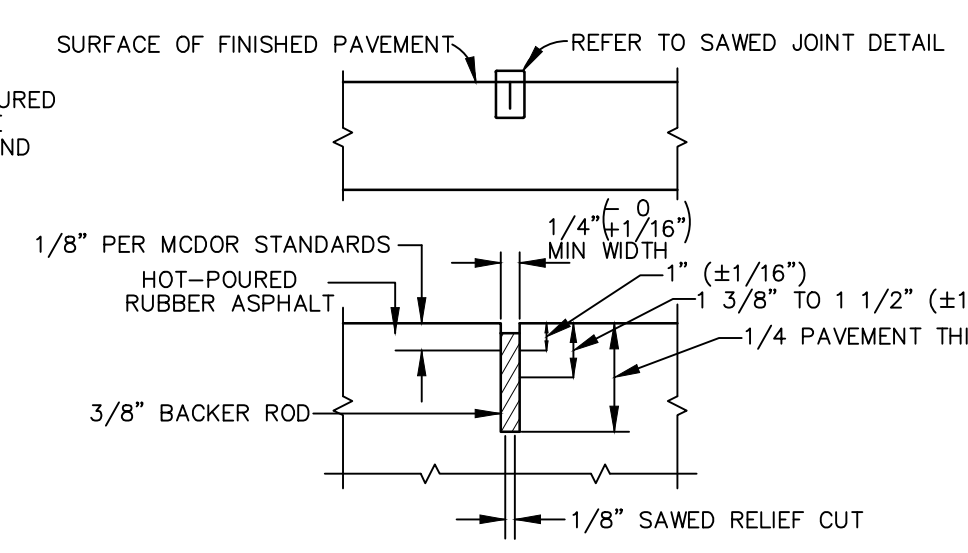
LONGITUDINAL BULKHEAD JOINT
MDOT SYMBOL 'B'
DETAIL - 4A
 NOT TO SCALE



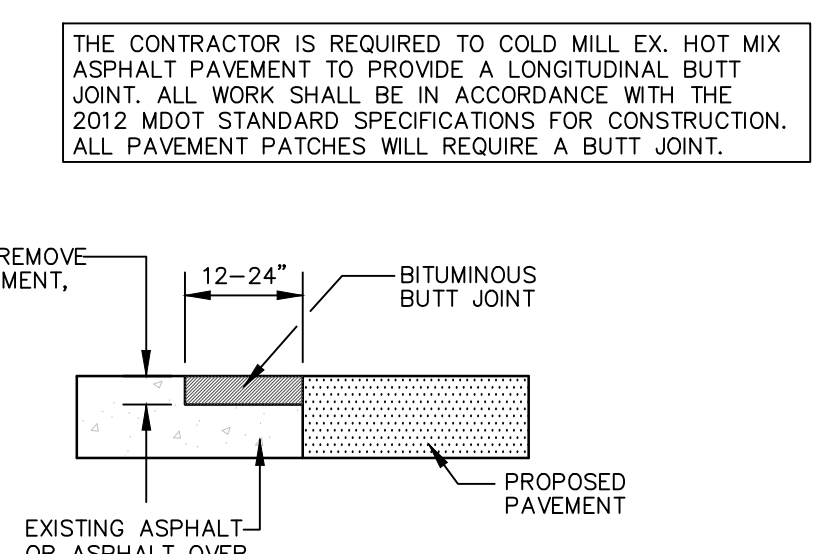
LONGITUDINAL LANE TIE JOINT
MDOT SYMBOL 'D'
DETAIL - 4B
 NOT TO SCALE



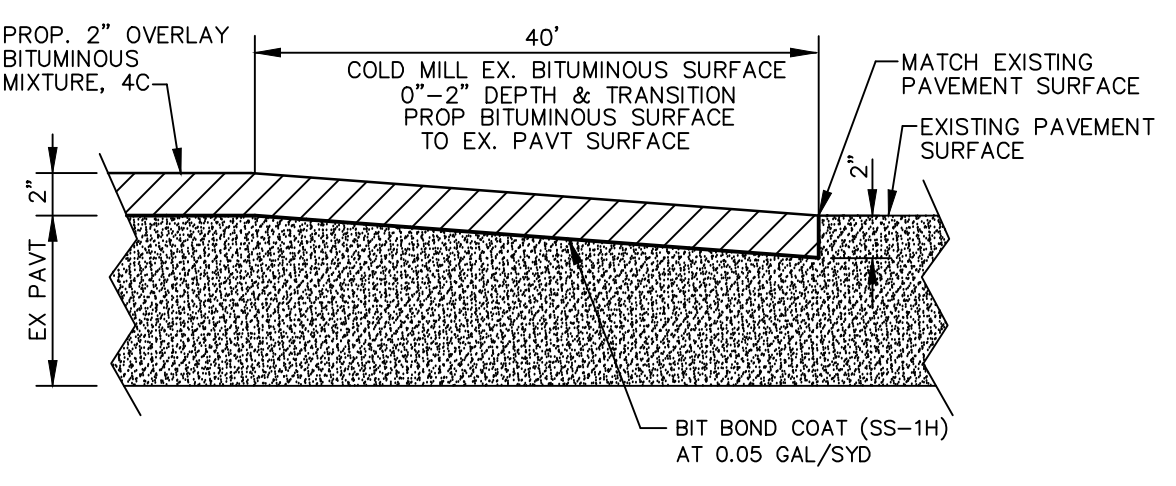
TRANSVERSE EXPANSION JOINT MDOT
SYMBOL 'E2', 'E3', AND 'E4'
DETAIL - 4C
 NOT TO SCALE



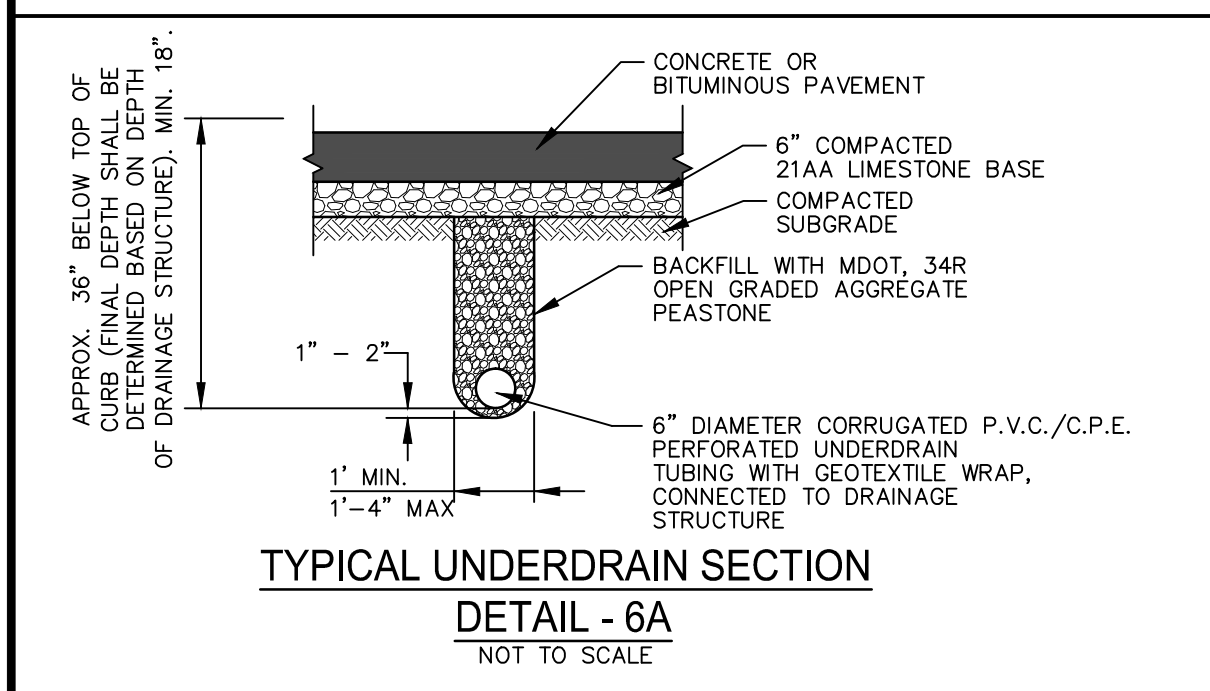
TRANSVERSE AND INTERSECTION PLANE OF WEAKNESS JOINT
MDOT SYMBOL 'W'
DETAIL - 4D
 NOT TO SCALE



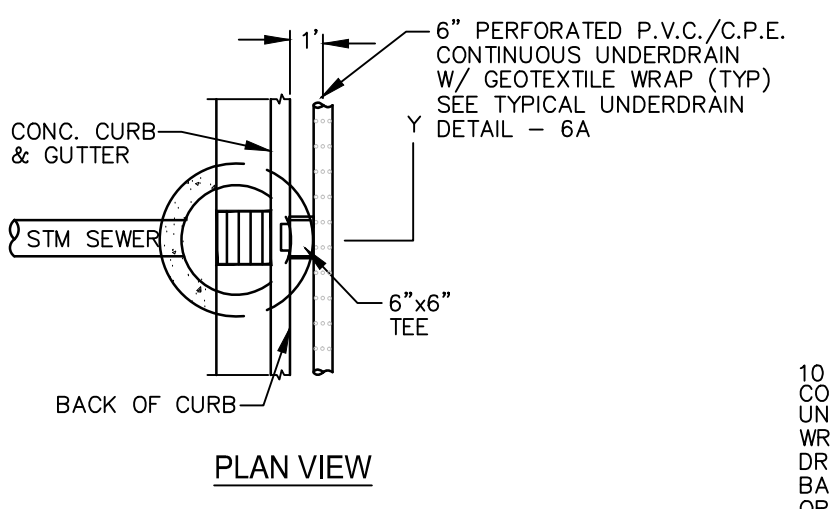
BUTT JOINT DETAIL
DETAIL - 4E
 NOT TO SCALE



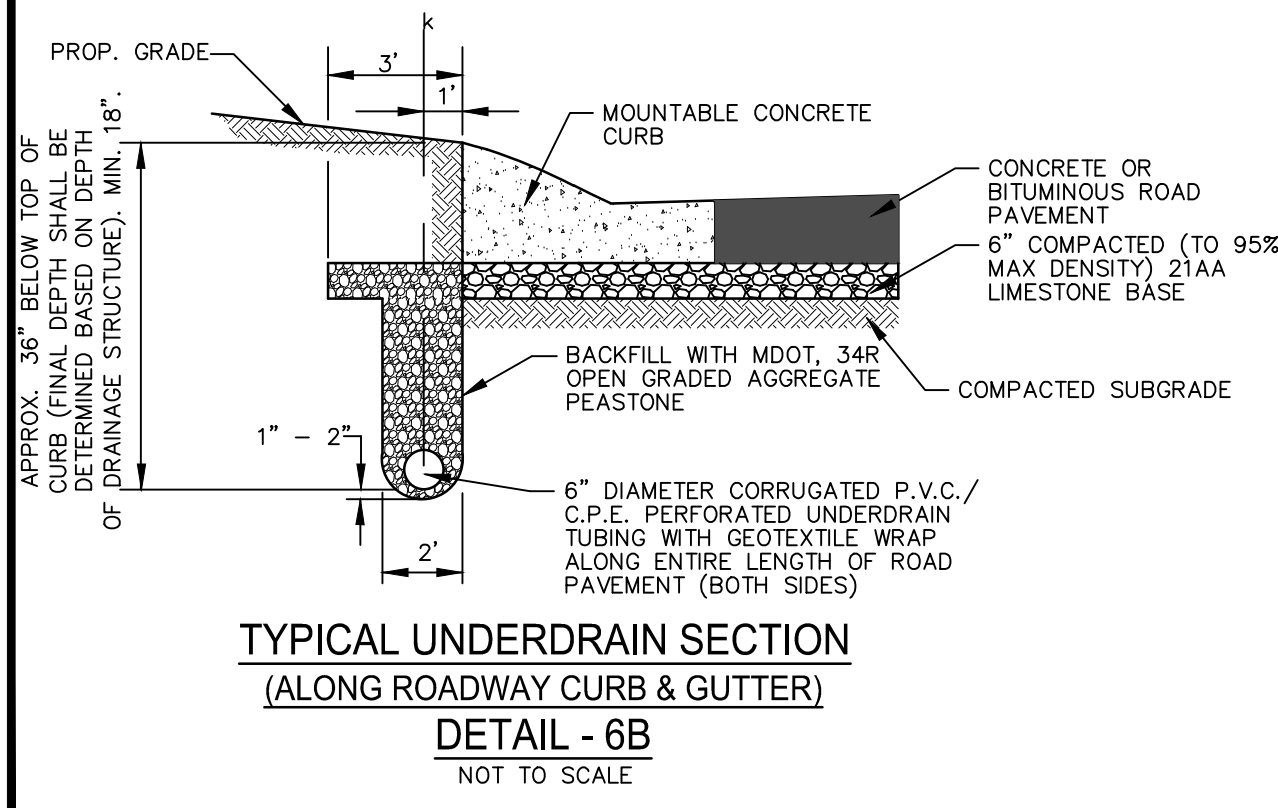
MILLING PAVEMENT FOR BUTT JOINT
DETAIL - 4F
 NOT TO SCALE



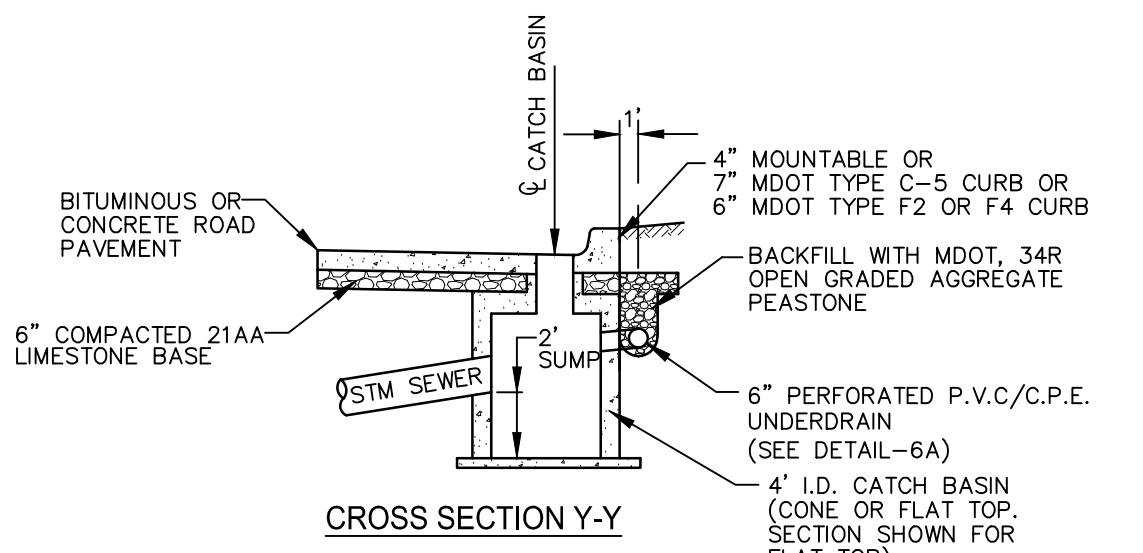
TYPICAL UNDERDRAIN SECTION
DETAIL - 6A
 NOT TO SCALE



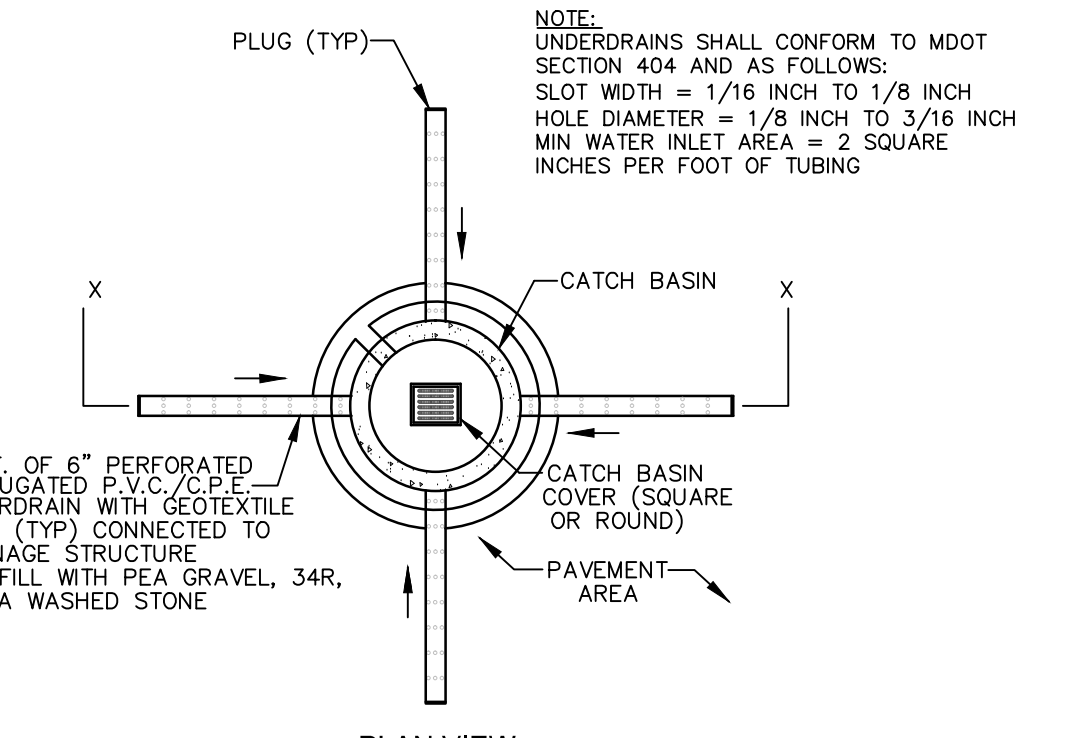
PLAN VIEW



TYPICAL UNDERDRAIN SECTION (ALONG ROADWAY CURB & GUTTER)
DETAIL - 6B
 NOT TO SCALE



TYPICAL UNDERDRAIN ALONG ROADWAY CURB & GUTTER
DETAIL - 6C
 NOT TO SCALE



TYPICAL FINGER TYPE (PARKING & OTHER PAVEMENT AREAS)
DETAIL - 6D
 NOT TO SCALE

TYPICAL UNDERDRAIN DETAILS
DETAIL - 6