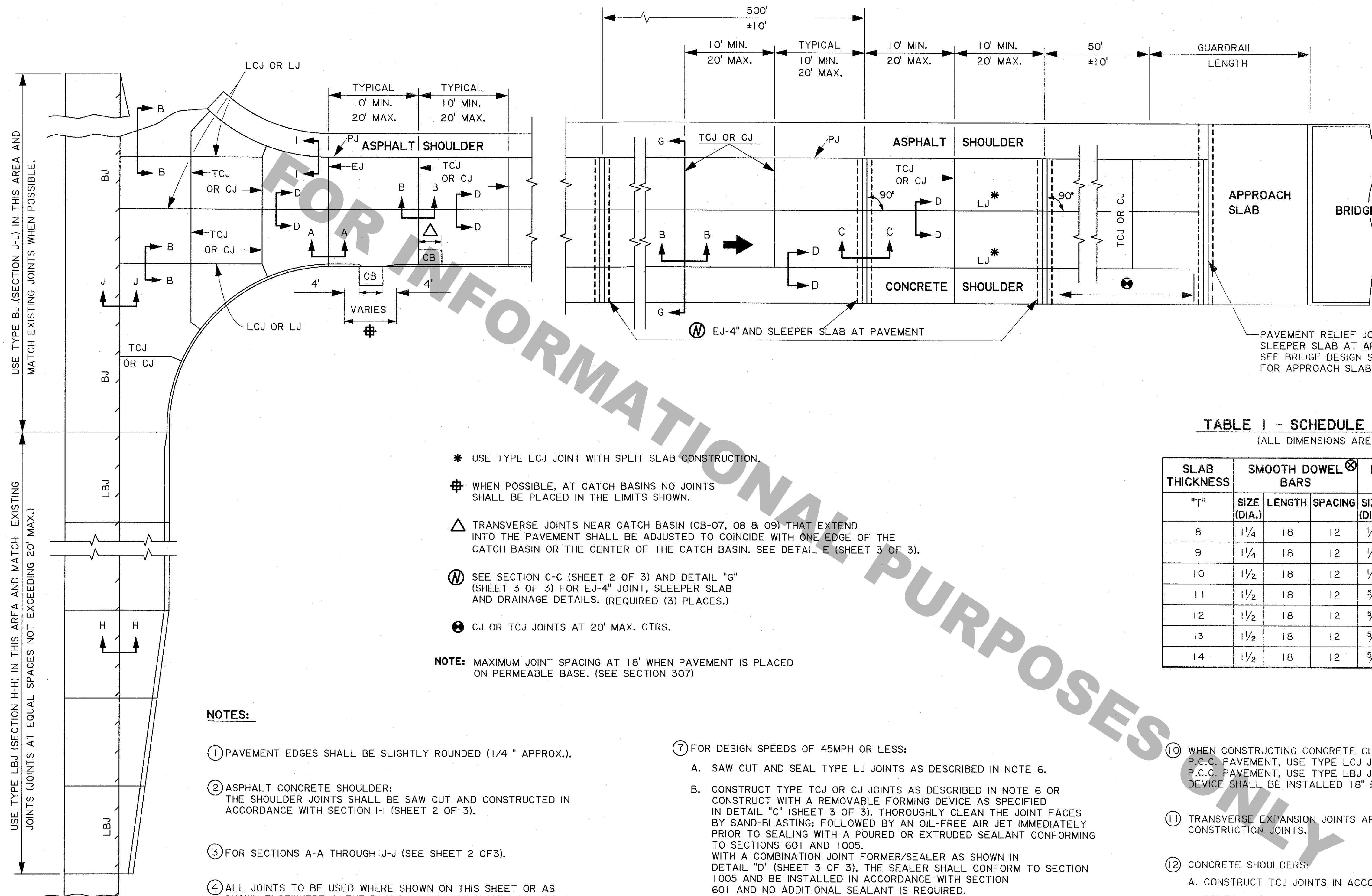


PLAN VIEW  
ROADWAY SHOWING JOINTS



- JOINT ABBREVIATIONS:**
- LJ - LONGITUDINAL JOINT
  - EJ - TRANSVERSE EXPANSION JOINT
  - TCJ - TRANSVERSE CONTRACTION JOINT
  - CJ - CONSTRUCTION JOINT
  - LCJ - LONGITUDINAL CONSTRUCTION JOINT
  - LBJ - LONGITUDINAL BUTT JOINT
  - BJ - TRANSVERSE BUTT JOINT
  - PJ - PAVEMENT EDGE SEAL JOINT

**TABLE 1 - SCHEDULE OF DIMENSIONS**  
(ALL DIMENSIONS ARE IN INCHES)

SLAB THICKNESS "T"	SMOOTH DOWEL BARS			DEFORMED TIE BARS			KEYWAY	
	SIZE (DIA.)	LENGTH	SPACING	SIZE (DIA.)	LENGTH	SPACING	A ±1/4"	B ±1/4"
8	1 1/4	18	12	1/2	24	24	2 1/2	1 1/4
9	1 1/4	18	12	1/2	24	24	2 1/2	1 1/4
10	1 1/2	18	12	1/2	24	24	2 1/2	1 1/4
11	1 1/2	18	12	5/8	30	24	2 1/2	1 1/4
12	1 1/2	18	12	5/8	30	24	3	1 1/2
13	1 1/2	18	12	5/8	30	24	3	1 1/2
14	1 1/2	18	12	5/8	30	24	3	1 1/2

**NOTES:**

- PAVEMENT EDGES SHALL BE SLIGHTLY ROUNDED (1/4" APPROX.).
- ASPHALT CONCRETE SHOULDER:  
THE SHOULDER JOINTS SHALL BE SAW CUT AND CONSTRUCTED IN ACCORDANCE WITH SECTION 1-I (SHEET 2 OF 3).
- FOR SECTIONS A-A THROUGH J-J (SEE SHEET 2 OF 3).
- ALL JOINTS TO BE USED WHERE SHOWN ON THIS SHEET OR AS SHOWN ELSEWHERE IN THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- ON TYPE EJ ALTERNATE JOINTS, SPOT WELD ALTERNATE ENDS OF DOWEL BARS TO DOWEL BASKETS AND PLACE EXPANSION TUBES ON FREE ENDS OF DOWEL BARS.
- FOR DESIGN SPEEDS GREATER THAN 45MPH:  
SAW CUT AND CONSTRUCT THE TYPE LJ, TCJ, AND CJ JOINTS AS IN DETAILS "A, B OR C" TO A DEPTH OF T/3 INCHES. THOROUGHLY CLEAN THE JOINT FACES BY SANDBLASTING; FOLLOWED BY AN OIL-FREE AIR JET IMMEDIATELY PRIOR TO SEALING WITH A POURED OR EXTRUDED SEALANT CONFORMING TO SECTION 1005.

- FOR DESIGN SPEEDS OF 45MPH OR LESS:
  - SAW CUT AND SEAL TYPE LJ JOINTS AS DESCRIBED IN NOTE 6.
  - CONSTRUCT TYPE TCJ OR CJ JOINTS AS DESCRIBED IN NOTE 6 OR CONSTRUCT WITH A REMOVABLE FORMING DEVICE AS SPECIFIED IN DETAIL "C" (SHEET 3 OF 3). THOROUGHLY CLEAN THE JOINT FACES BY SANDBLASTING; FOLLOWED BY AN OIL-FREE AIR JET IMMEDIATELY PRIOR TO SEALING WITH A POURED OR EXTRUDED SEALANT CONFORMING TO SECTIONS 601 AND 1005. WITH A COMBINATION JOINT FORMER/SEALER AS SHOWN IN DETAIL "D" (SHEET 3 OF 3), THE SEALER SHALL CONFORM TO SECTION 1005 AND BE INSTALLED IN ACCORDANCE WITH SECTION 601 AND NO ADDITIONAL SEALANT IS REQUIRED.
- EXCEPT AS NOTED BELOW, DOWEL BARS & TIE BARS SHALL BE HELD IN PLACE BY SUPPORTS SIMILAR TO THE ONES SHOWN, OR APPROVED EQUALS. APPROVED MECHANICAL PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE ALLOWED WITH ALL PAVING METHODS.
- INSTALL GEOTEXTILE FABRIC (TYPE B, C, OR D) UNDER ALL TCJ, CJ, AND EJ ALTERNATE JOINTS WHEN CONCRETE PAVEMENT IS PLACED ON PERMEABLE BASE. WHEN DOWEL BARS ARE MECHANICALLY IMPLANTED, THE GEOTEXTILE FABRIC SHALL BE ANCHORED TO THE BASE COURSE WITH PINS.

- WHEN CONSTRUCTING CONCRETE CURB AND GUTTER ADJACENT TO NEW P.C.C. PAVEMENT, USE TYPE LCJ JOINT. WHEN ADJACENT TO EXISTING P.C.C. PAVEMENT, USE TYPE LBJ JOINT. THE FIRST LOAD TRANSFER DEVICE SHALL BE INSTALLED 18" FROM THE PAVEMENT EDGE.
- TRANSVERSE EXPANSION JOINTS ARE NOT TO BE USED FOR CONSTRUCTION JOINTS.
- CONCRETE SHOULDERS:
  - CONSTRUCT TCJ JOINTS IN ACCORDANCE WITH SECTION B-B (SHEET 2 OF 3).
  - CONSTRUCT LCJ JOINTS IN ACCORDANCE WITH TYPE LCJ DETAIL AND LJ JOINTS IN ACCORDANCE WITH TYPE LJ DETAIL. SEE SECTION D-D (SHEET 2 OF 3).
  - USE THE MAXIMUM SHOULDER THICKNESS WHEN DETERMINING DOWEL BAR AND TIE BAR SIZES IN TABLE 1.
  - WHEN SKEWED JOINTS ARE USED ON MAINLINE PAVING THE SHOULDER TCJ JOINTS MAY BE SKEWED OR CONSTRUCTED AT 90°.
  - SHOULDER JOINTS AND JOINT MATERIALS SHALL MATCH THE MAINLINE.
  - HEIGHT OF DOWEL BASKET SHALL BE BASED ON THE THINNEST SHOULDER THICKNESS. VARYING HEIGHT DOWEL BASKETS WILL BE ALLOWED TO KEEP THE DOWEL BAR LOCATED WITHIN TOLERANCE.
- TIE BARS SHALL NOT BE PLACED WITHIN 18" OF CONTRACTION OR EXPANSION JOINTS.

NOT TO SCALE

SHEET NUMBER

PARISH

STATE PROJECT

DESIGN

CHECK

DETAIL

CHECK

REVIEW

T. LAM

D. SMITH

T. LAM

D. SMITH

1 OF 3

APPROVED BY CHIEF ENGINEER:

DATE: 10/13/2021

STATE OF LOUISIANA

PORTLAND CEMENT CONCRETE PAVEMENT DETAILS

CP-01

DOTD

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ROAD DESIGN