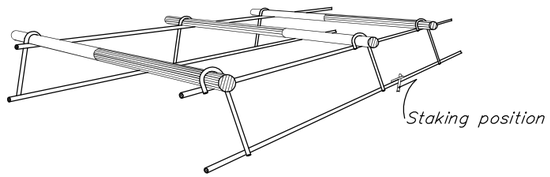
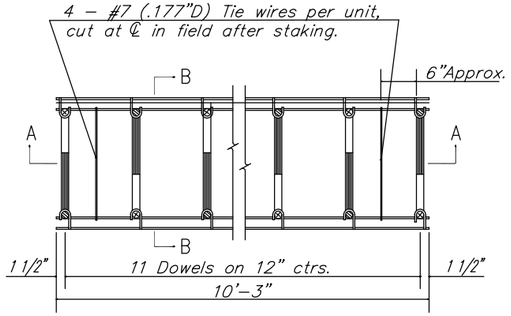
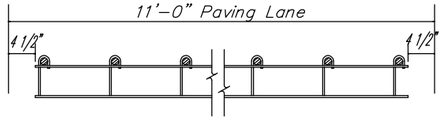


PERSPECTIVE VIEW



PLAN VIEW



SEC. A–A

GENERAL NOTE

Dowel bar insertion may be by mechanical dowel placers regardless of the joint spacing.

Each dowel bar shall be coated with an epoxy coating with the average film thickness of not less than 10 mils on any bar exclusive of end faces, with individual determinations within a tolerance of + 3 mils of the average. – The coating material shall be a powdered epoxy resin approved by the Chief, Bureau of Materials and Research and shall be uniformly applied according to accepted practices and the resin manufacturer's recommendations. For Alt. 1 the coating need not be applied to the end faces of the bars and will not be required within 2 inches of the end which will be fixed in the supporting basket by welding.

The cutting to length of the dowel bars shall be done in such a manner to result in no appreciable deformation of the ends.

Alt. 1 (Baskets)

Wire sizes shown are minimum required.

Basket to be staked to sub–grade, as shown. Ramset or similar type fastener with clip to be used when subgrade condition requires it.

A string line shall be stretched between the pavement forms along the center line of the joint. The position of the joint shall be carefully mark– ed so that the saw cut will coincide with the center line of the joint.

In order to identify the location of the bond breaker application, the working end of dowel and the supporting leg shall receive a light applica– tion of red paint at the place of fabrication. The bond breaker to be applied in the field prior to concrete placement shall consist of coating approximately three–fifths of the length of each dowel bar with hard grease at the working end identified by the red paint.

The entire joint assembly shall be carefully leveled so that the dowels are parallel to the slab surface and free to slide in the dowel holders. Any coating scraped off the dowels in assembling the joint shall be re– placed.

After the complete contraction joint is assembled, it shall be checked to be certain that the vertical plane of the joint will be perpendicular to the finished surface of the slab and at a right angle with the center line of the slab unless shown otherwise on the plans. The dowels shall be checked to be certain that they are level and will remain in a position parallel with the finished surface of the slab.

Concrete shall be placed over and adjacent to the joint in accordance with the requirements of the Specifications.

Other approved designs may be used in lieu of the type shown.

Alt. 2 (Mechanical placement)

Joint spacing shall be normal to centerline.

The pavement shall be placed and consolidated to full depth prior to insertion of the dowel bars.

The dowel bars shall be coated with a bond breaking agent prior to in– sertion into the plastic concrete.

The dowel bars shall be inserted into the plastic concrete ahead of the finishing beam or screed.

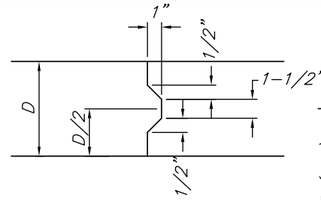
The installing device shall consolidate the concrete around the dowel bars such that no voids exist, without the supplemental use of hand held vibrators.

The dowel bars shall be located within one inch of the planned trans– + verse location and within the range of depth of D 0.1 D measured / – 2 from mid depth and mid length of the bar where D represents the pave– ment thickness.

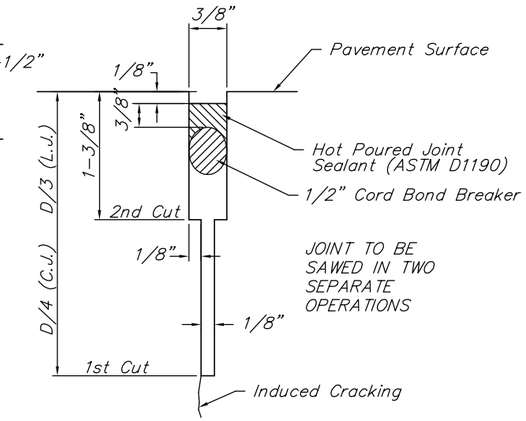
The dowel bars shall be located within two inches of the planned longitudinal location. The dowel bars shall be parallel to the pavement surface and centerline within a tolerance of one half inch in 18 inches in both the vertical and horizontal direction.

The forward movement of the finishing beam or screed shall not be interrupted by the inserting of the dowel bars.

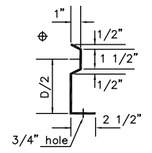
A positive method of marking the locations of the transverse joints shall be provided.



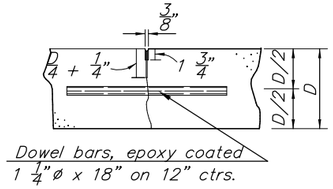
KEYWAY DETAIL



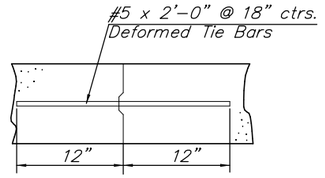
SAW JOINT DETAIL



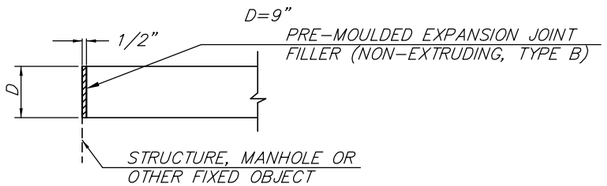
SECTION OF RECESSED FORM LEG



DOWELED CONTRACTION JOINT DETAIL (C.J.)



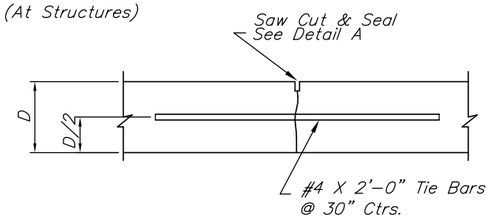
TIED CONSTRUCTION JOINT DETAIL (T.J.)



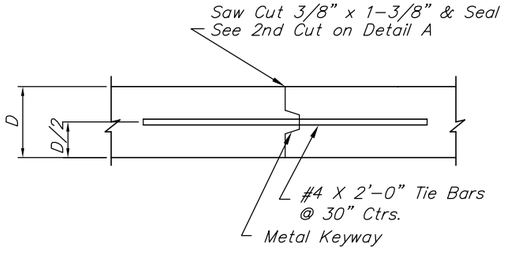
ISOLATION JOINT (I.J.)

(At Structures)

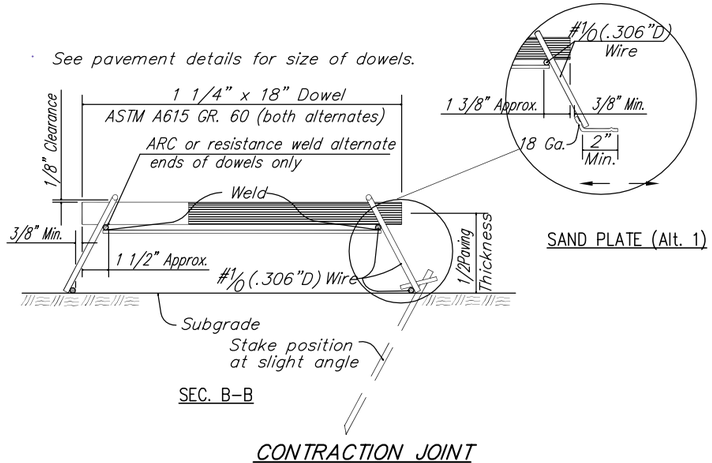
Note: Contraction joints will be constructed at the planned location or as directed by the Engineer. When necessary to interrupt continuous placement for a substantial length of time or at the end of a day's pour, the Contractor has the option of ending placement at a contraction joint or with a construction joint located a minimum of five (5) feet from a contraction joint. Either joint type may be constructed by placing a header at the end of the pour or by paving past the joint location, sawing the joint after the concrete has hardened, and drilling holes for the tie bars and securing into the concrete with epoxy or cement grout.



LONGITUDINAL JOINT DETAIL (L.J.)



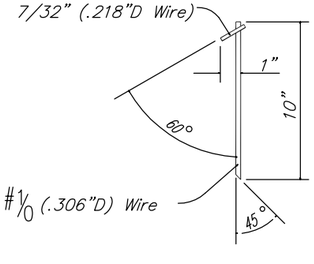
OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



SEC. B–B

SAND PLATE (Alt. 1)

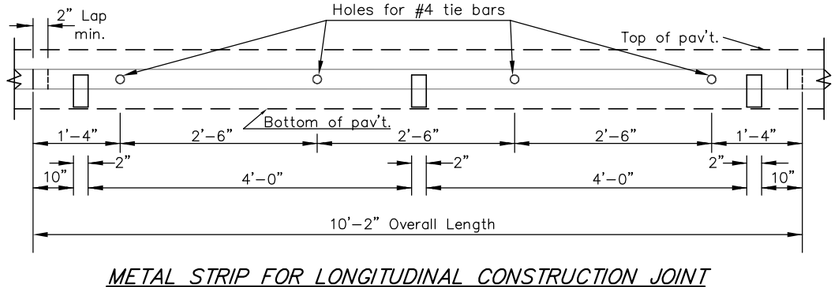
CONTRACTION JOINT



STAKE DETAIL

(6 Pieces minimum required)

⊕ Snap–in leg or other approved designs may be used inlieu of welded leg.



METAL STRIP FOR LONGITUDINAL CONSTRUCTION JOINT

TO BE USED ONLY AGAINST FORMS. SHALL NOT EXTEND THROUGH CONTRACTION OR EXPANSION JOINTS.
OTHER TYPES OF CONSTRUCTION SHALL BE PERMITTED WITH THE APPROVAL OF THE ENGINEER.

KANSAS DEPARTMENT OF TRANSPORTATION

CONCRETE PAVEMENT DETAILS

PROJECT NO. 87 N–0135–01 SEDGWICK CO.

M K E C ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

DESIGNED BY:	JRA	CHECKED BY:	JRA	
DRAWN BY:	WNJ	DATE: DEC. 2005	SHEET	31 OF 137