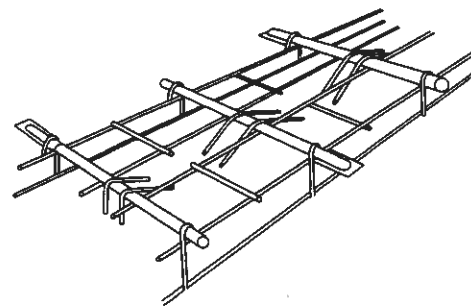
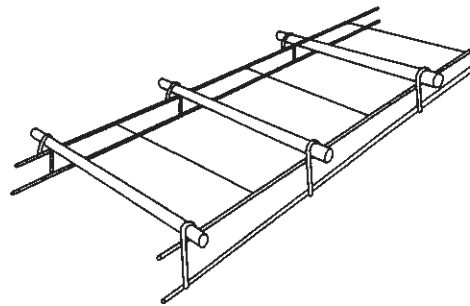
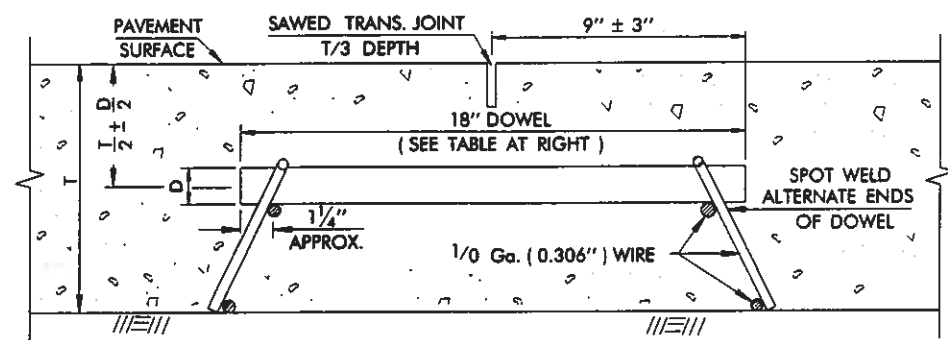


| DESCRIPTION | REVISIONS | DATE |
|----------------------------------|-----------|----------|
| RE-ISSUE W/ENGLISH 1999 SPECS. | | 7/99 |
| Revise Slab Dept T | | 1gc 4/02 |
| Rev. Slab Dept Limits, G. Note 5 | | 1gc 4/05 |
| Rev. Dowel Bar Size | | 1gc 3/07 |

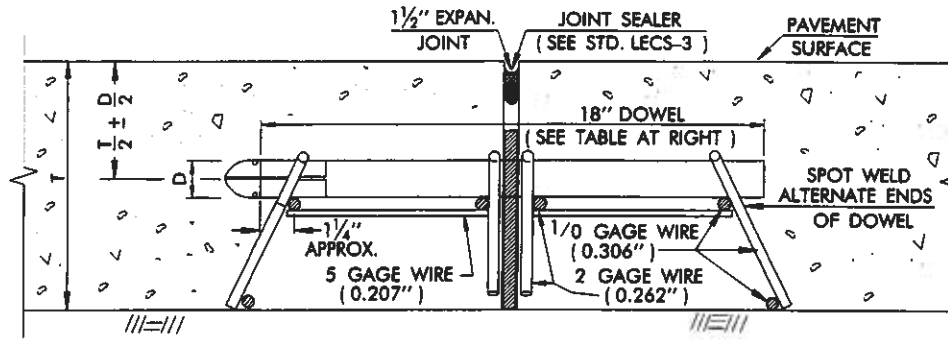


| DOWEL BARS | | | |
|------------------------|---------------|--------------------------|-------------------------|
| ▲ SPACING & SIZE DATA | | | |
| (T) SLAB DEPTH | DOWEL DIA. | TOTAL DOWEL LENGTH | C/C DOWEL SPACING |
| 6"-8" | 1" | 18" | 12" |
| 8 1/2"-10" | 1 1/2" | 18" | 12" |
| 10 1/2" + | 1 1/2" | 18" | 12" |

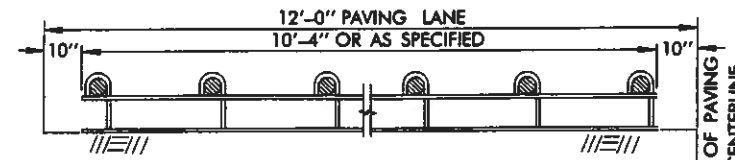
DOWEL DIAMETER WILL BE DETERMINED BY THE SLAB DEPTH (T) OR THE NOMINAL DEPTH WHEN SLAB DEPTH VARIES. WHEN NOMINAL DEPTH VALUE IS TO BE USED, THE CALCULATED NOMINAL DEPTH WILL BE SHOWN ON THE PLANS.



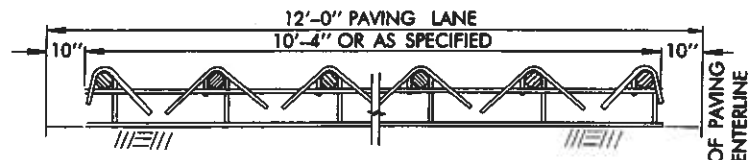
SECTION A-A



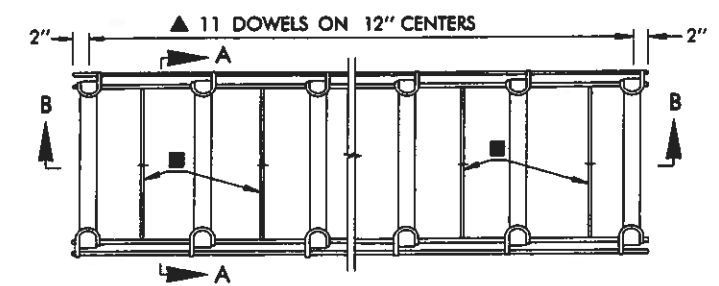
SECTION A-A



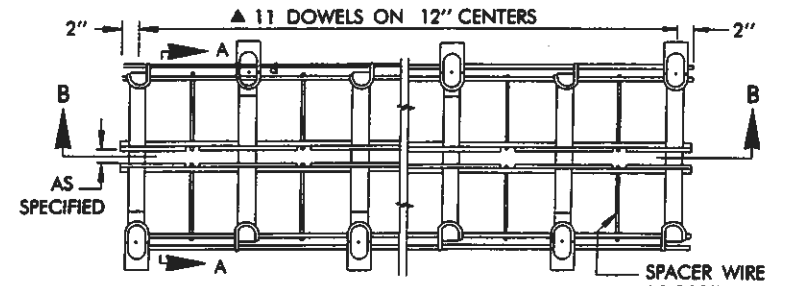
SECTION B-B



SECTION B-B



PLAN VIEW



PLAN VIEW

WELDED CONTRACTION JOINT ASSEMBLY

■ SPACER: FOUR EA. 7 GAGE (0.177") WIRES PER UNIT, NOTCHED @ MIDPOINT OF WIRE SPACER IN FIELD AFTER PLACEMENT

WELDED EXPANSION JOINT ASSEMBLY

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECIFICATIONS.
- ANY DEVICE USED FOR SUPPORTING DOWELS SHALL HAVE SUFFICIENT RIGIDITY AND BE HELD IN PLACE DURING CONCRETE PLACEMENT SO THAT DOWELS WILL BE IN SPECIFIED POSITION IN THE FINISHED PAVEMENT. ANY DEVICE NOT PRODUCING THE SPECIFIED RESULTS SHALL BE REJECTED.
- PRODUCER AND CONTRACTOR SHALL AVOID PATENT INFRINGEMENT OF THE BASKET AND SHALL SAVE THE STATE HARMLESS IN THE USE OF ANY BASKET.
- THE CONTRACTOR MAY SELECT THE TYPE OF BASKET TO BE USED. AFTER THE SELECTION IS MADE, THE SAME TYPE BASKET SHALL BE USED THROUGHOUT THE PROJECT, UNLESS APPROVED OTHERWISE BY THE ENGINEER.
- COLD-DRAWN STEEL WIRE USED FOR DOWEL BASKETS, SHALL BE ACCEPTED BY VISUAL FIELD INSPECTION, AS PROVIDING SUFFICIENT DOWEL BAR SUPPORT DURING PAVING PROCESS.
- DOWEL BARS SHALL CONFORM TO MATERIAL REQUIREMENTS OF AASHTO SECTION M 31, M 42, OR M 53; GRADE 60. DOWEL BARS SHALL BE CENTERED ON THE BASKET REGARDLESS OF THE WIDTH OF THE BASKET OR THE LENGTH OF THE DOWEL BAR. SEE TABLE THIS SHEET.
- THE HEIGHT OF THE LOAD TRANSFER UNIT (MEASURED TO THE CENTER OF THE DOWEL BAR FROM THE PAVEMENT SURFACE) SHALL BE 1/2 THE THICKNESS OF THE PAVEMENT, PLUS OR MINUS 1/2 THE DIAMETER OF DOWEL BAR OF THE UNIT.
- DOWEL BARS SHALL HAVE A SHOP APPLIED EPOXY COATING OVER THEIR ENTIRE LENGTH (ENDS EXCEPTED). ADDITIONALLY, DOWELS SHALL BE COMPLETELY COATED WITH A FORM RELEASE AGENT (OR APPROVED EQUIVALENT BOND BREAKER) APPLIED IN THE FIELD, IMMEDIATELY PRIOR TO PAVING. THE FORM RELEASE AGENT SHALL NOT BE ALLOWED TO EVAPORATE FROM THE BARS PRIOR TO PAVING.
- FOR EXPANSION JOINTS, THE DOWEL BARS SHALL HAVE EXPANSION CAPS WITH A MINIMUM 1" AND A MAXIMUM 2" AIR SPACE IN THE END OF THE EXPANSION CAPS (EXPANSION JOINT ASSEMBLIES).
- THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER A STAKING PATTERN THAT SHALL SECURE ALL DOWEL BASKETS SUCH THAT THE FINAL DOWEL POSITION IS WITHIN SPECIFICATION LIMITS.
- FOR EXPANSION JOINTS, IN ADDITION TO THE SUPPORTS INDICATED, THE CONTRACTOR SHALL PROVIDE SUITABLE INSTALLING DEVICES AND SUCH ADDITIONAL STAKES AS MAY BE REQUIRED TO HOLD THE JOINT FILLER VERTICAL AND SECURELY IN LINE AND POSITION. THE CONTRACTOR WILL ALSO BE REQUIRED TO SATISFACTORILY FORM THE UPPER PORTION OF THE JOINT FOR RECEIVING THE SEAL. SEE 1999 ENGLISH ROADWAY STD. LECS-3 FOR DETAILS.

APPROVED BY ROADWAY ENGINEER *Nimithy A. Regular* DATE 3/1/07

OKLAHOMA DEPT. OF TRANSPORTATION
ROADWAY STANDARD (ENGLISH)
LOAD TRANSFER UNITS FOR
CONCRETE PAVEMENT JOINTS