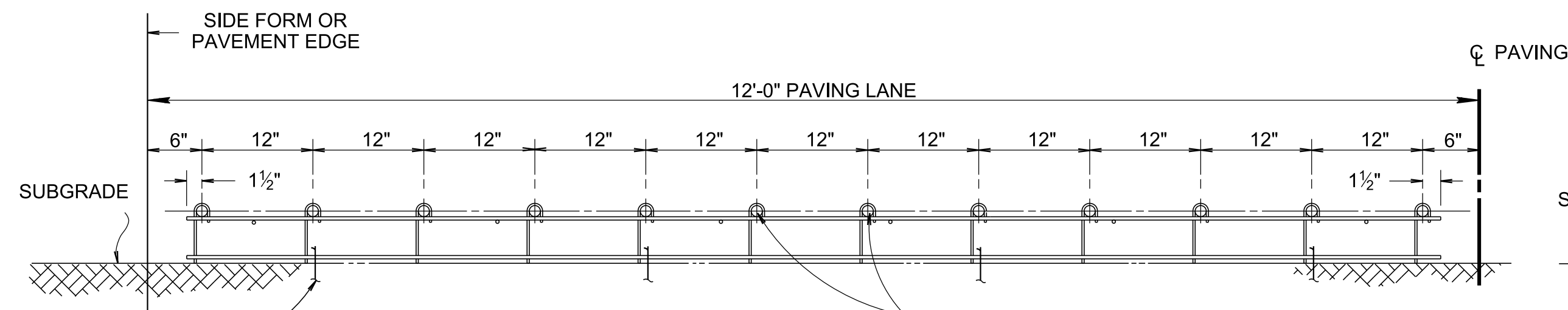


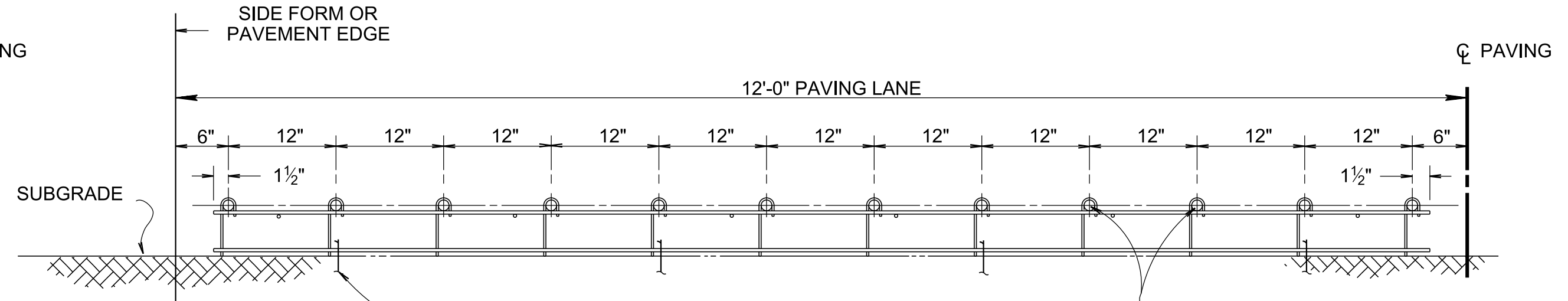
1/24/2022 11:26:36 AM
 P:\StandDraw\DESIGN STANDARDS\Standards Drawings\Standard Roadway Drawings - CURRENT\In Progress\10-104.00 Roadway, Pavement Appurtenances and Fence IP\104.01 Concrete Pavement IP



USE 4-NO. 1/0 GAGE x 12" HOLDDOWN STAKES EACH SIDE, USE STRAP (SEE STRAP DETAIL THIS DRAWING) OR USE SPECIAL STAKE (SEE STAKE DETAIL ON DRAWING NO. RP-J-19) AS NEEDED TO KEEP DOWEL ASSEMBLY FROM SHIFTING.

**SECTION A-A
(EXPANSION TYPE)**

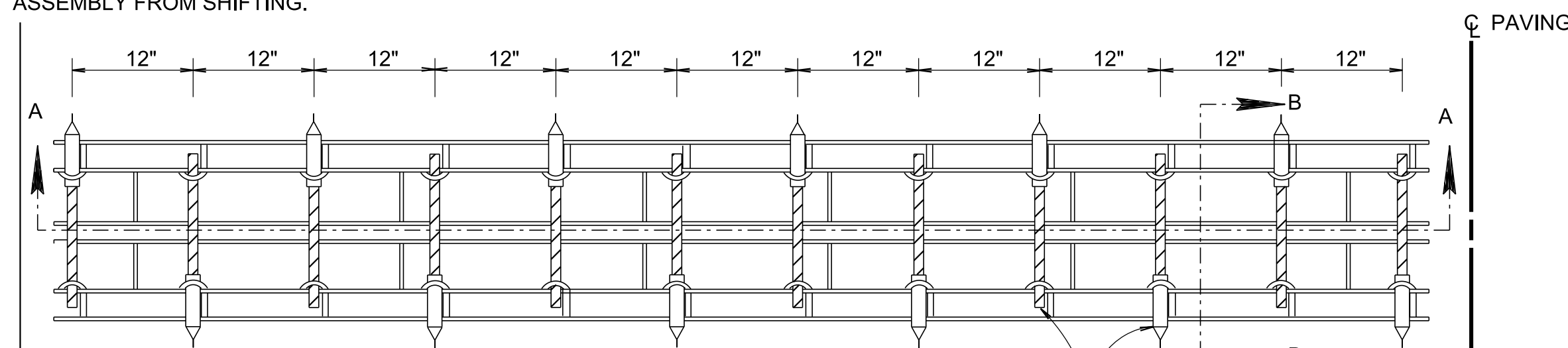
VARIABLE DIAMETER x 18" DOWELS AT 12" C-C (SEE TABLE ON THIS SHEET).



USE 4-NO. 1/0 GAGE x 12" HOLDDOWN STAKES EACH SIDE, USE STRAP (SEE STRAP DETAIL THIS DRAWING) OR USE SPECIAL STAKE (SEE STAKE DETAIL ON DRAWING NO. RP-J-19) AS NEEDED TO KEEP DOWEL ASSEMBLY FROM SHIFTING.

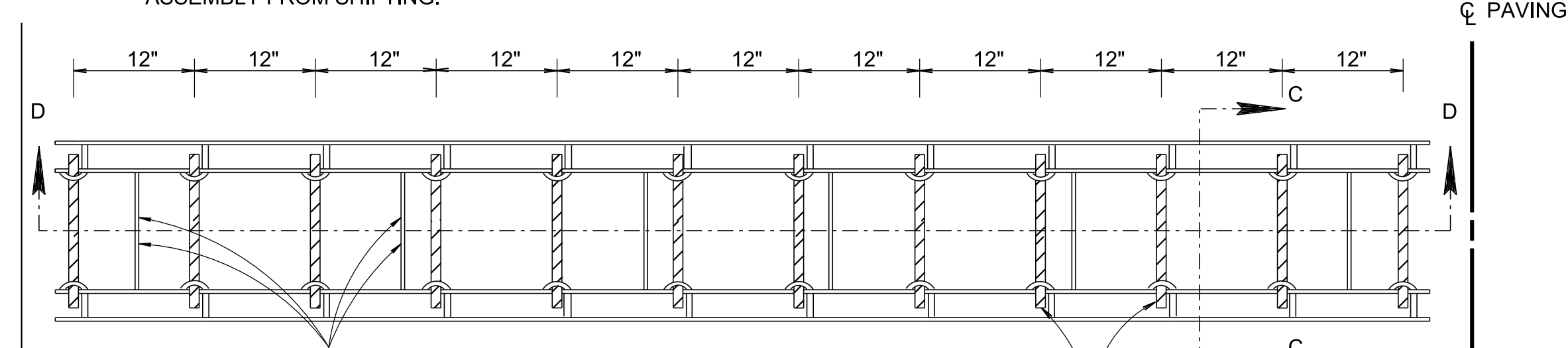
**SECTION D-D
(CONTRACTION TYPE)**

VARIABLE DIAMETER x 18" DOWELS AT 12" C-C (SEE TABLE ON THIS SHEET).



PLAN

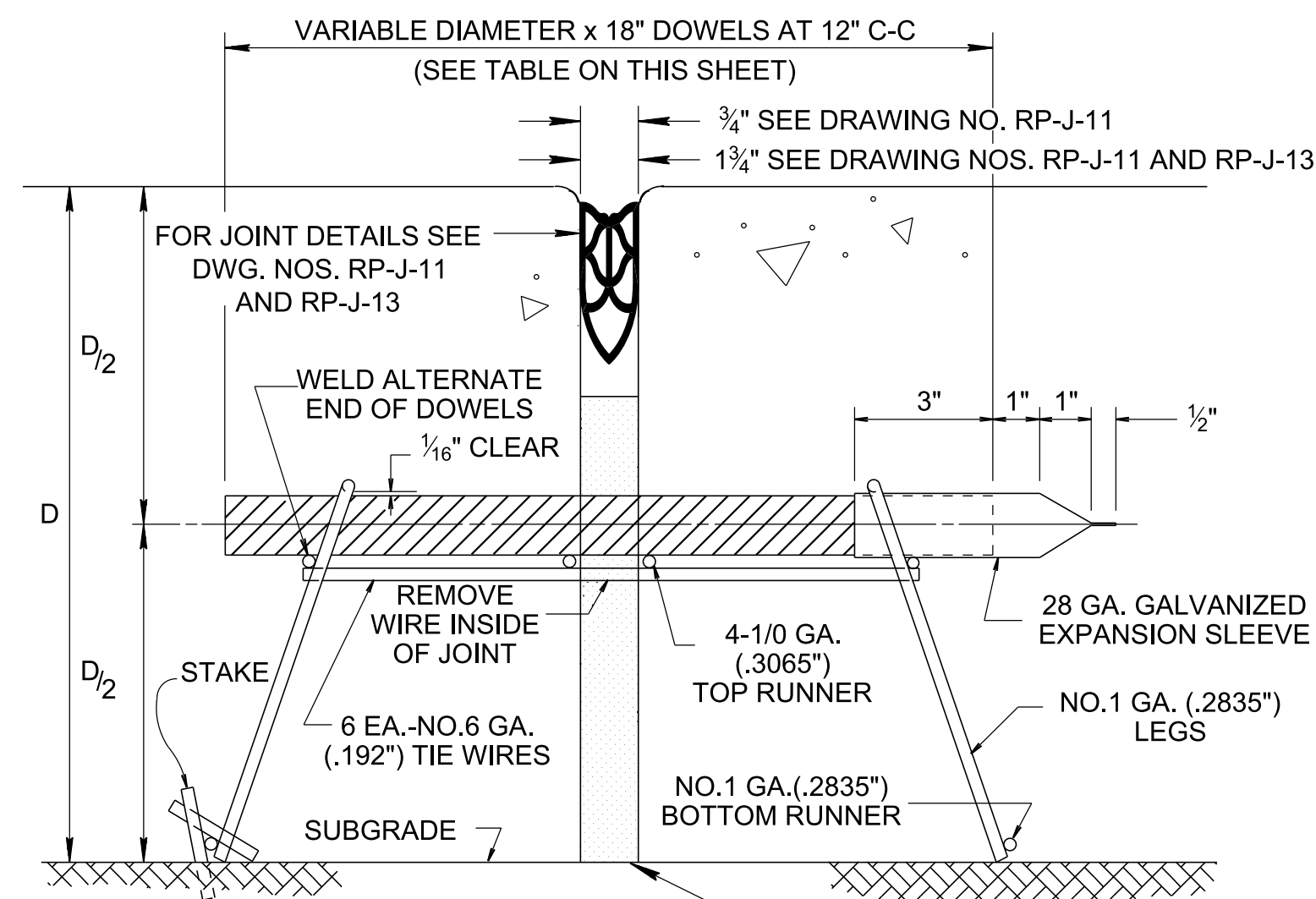
VARIABLE DIAMETER x 18" DOWELS AT 12" C-C (SEE TABLE ON THIS SHEET).



PLAN

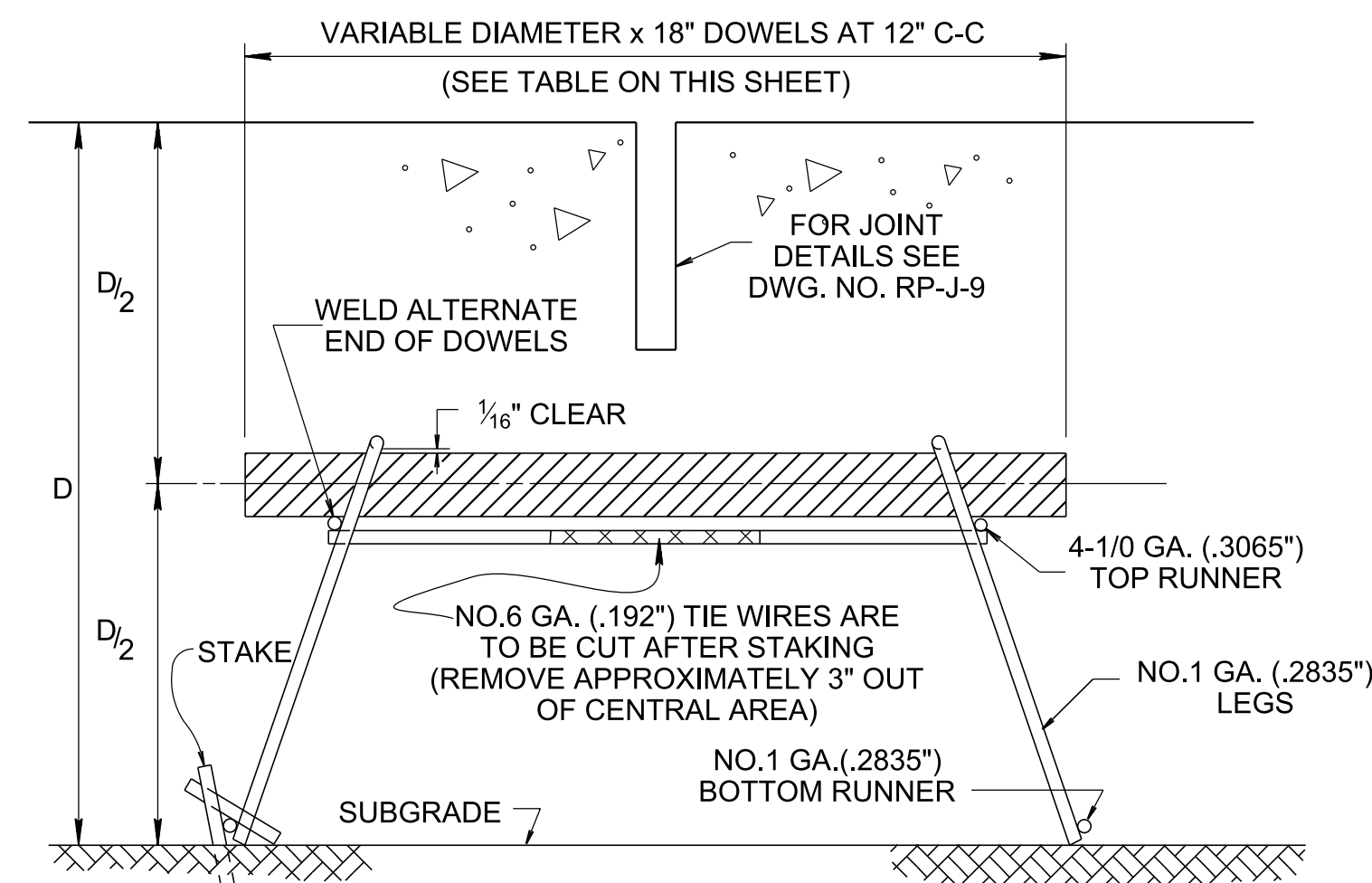
CUT APPROXIMATELY 3" OUT OF CENTRAL AREA OF TIE WIRES AFTER STAKING

VARIABLE DIAMETER x 18" DOWELS AT 12" C-C (SEE TABLE ON THIS SHEET).



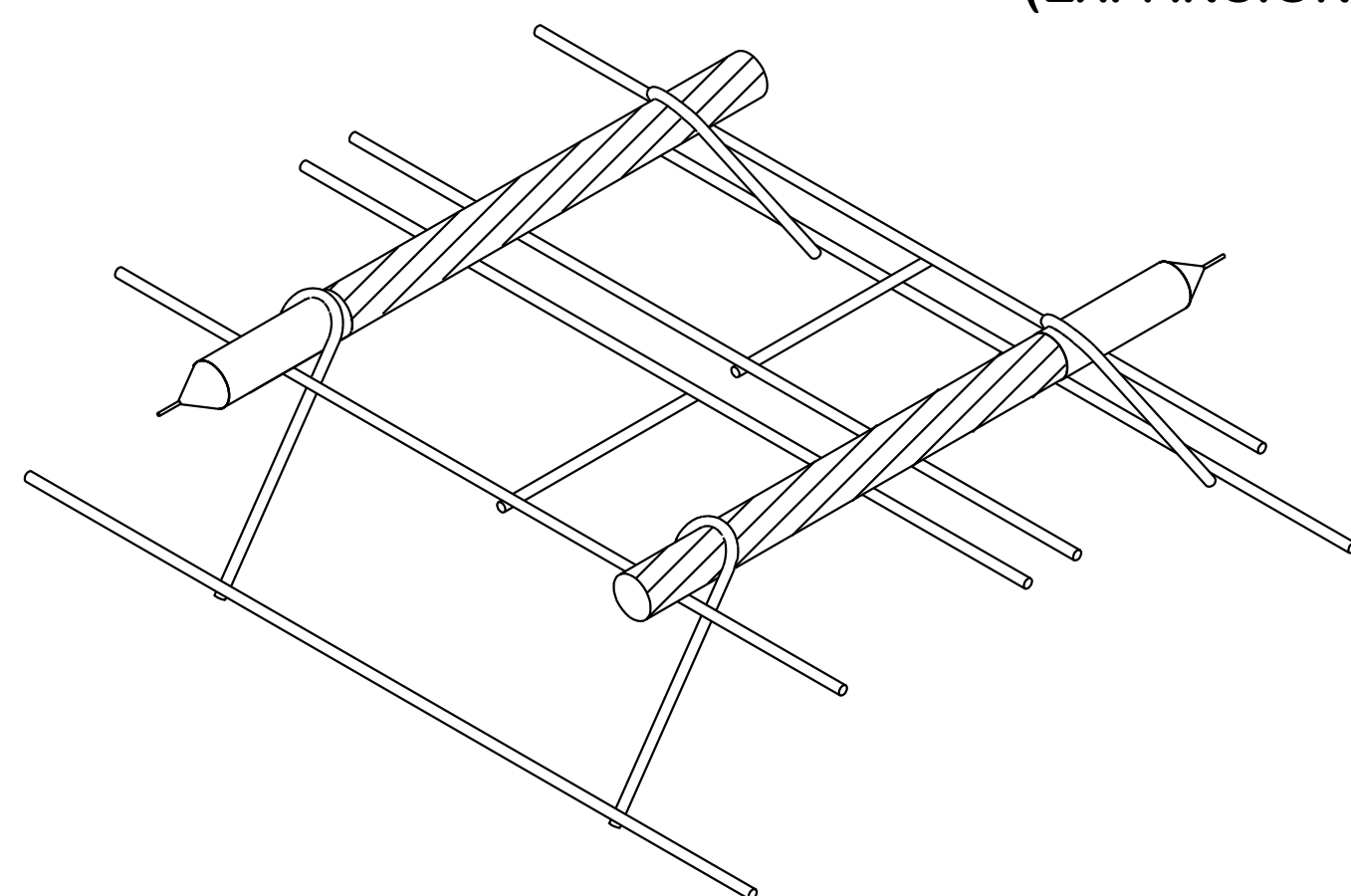
**SECTION B-B
(EXPANSION TYPE)**

SEE DRAWING NO. RP-J-11 FOR DETAILS

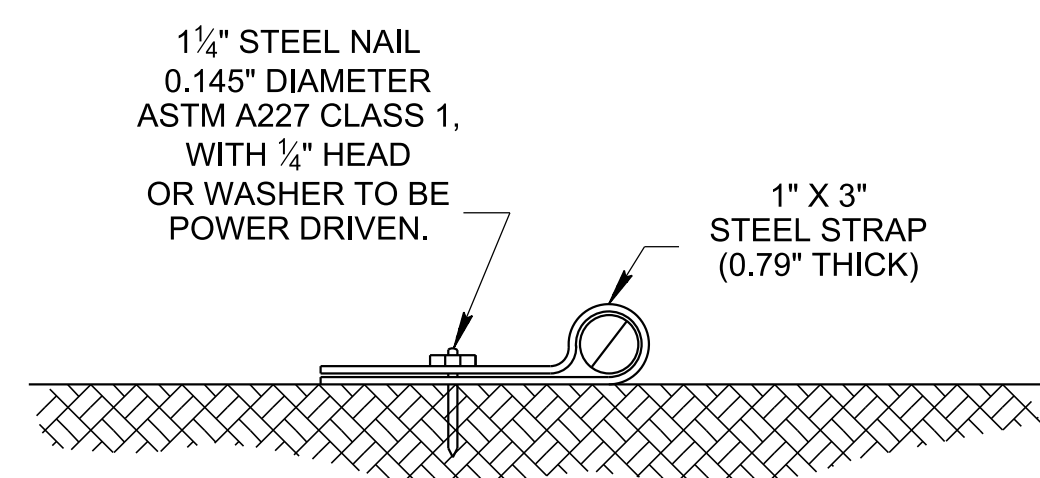


**SECTION C-C
(CONTRACTION TYPE)**

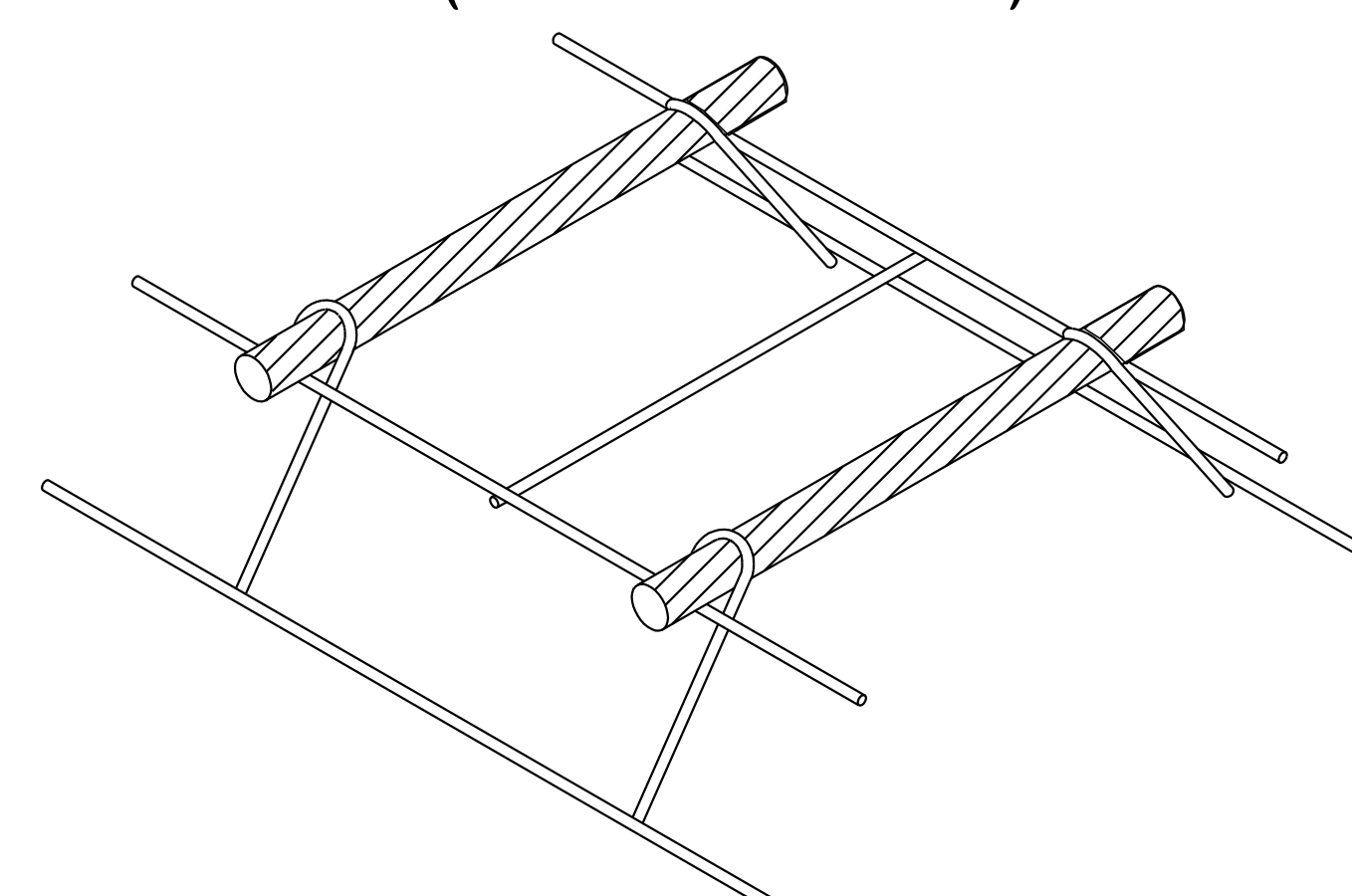
| DOWEL BAR SIZE TABLE | |
|-----------------------------|-----------------------|
| PAVEMENT THICKNESS (INCHES) | BAR DIAMETER (INCHES) |
| 8-10 | 1/4" |
| >10 | 1/2" |



EXPANSION JOINT



STRAP DETAIL



CONTRACTION JOINT

- GENERAL NOTES**
- (A) DOWEL ASSEMBLY DEVICES OTHER THAN SHOWN ON DRAWING NOS. RP-J-17, RP-J-18, AND RP-J-19 MAY BE USED FOR SUPPORTING DOWELS AT EXPANSION AND CONTRACTION JOINTS.
 - (B) DOWEL ASSEMBLY DEVICES SHALL BE SO CONSTRUCTED AS TO HOLD THE DOWEL BARS FIRMLY IN POSITION PARALLEL TO THE SURFACE AND CENTERLINE OF THE PAVEMENT SLAB DURING THE PLACING OF CONCRETE.
 - (C) DOWEL ASSEMBLY DEVICES SHALL BE OF SUCH DESIGN AS TO PERMIT UNRESTRICTED MOVEMENT OF THE PAVEMENT SLAB.
 - (D) DOWEL ASSEMBLY DEVICES TO BE USED MUST BE APPROVED BY THE ENGINEER PRIOR TO THEIR USE.
 - (E) SEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 501-PORTLAND CEMENT CONCRETE PAVEMENT FOR DOWEL ASSEMBLY DEVICES. ALSO SEE APPLICABLE SPECIAL PROVISIONS.
 - (F) DOWEL ASSEMBLY DEVICES ARE TO BE FURNISHED IN SECTIONS WITH SUITABLE LENGTHS FOR VARIOUS WIDTHS OF PAVEMENT.
 - (G) ONE OF THE ALTERNATE DOWEL ASSEMBLY DEVICES WILL BE REQUIRED AT EACH EXPANSION JOINT WITH LOAD TRANSFERS, UNLESS A BULKHEAD IS USED. SEE DRAWING NOS. RP-J-17, RP-J-18, AND RP-J-19 FOR ALTERNATE DOWEL BAR AND DOWEL ASSEMBLY DETAILS AND SPECIFICATIONS.
 - (H) SEE DRAWING NOS. RP-J-9 AND RP-J-11 FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS SHEET.

- REV. 4-18-90: CHANGE DOWEL BAR LENGTH FROM 15" TO 18". ELIMINATED DOWEL BAR ASSEMBLY DETAILS FOR SKEWED INSTALLATIONS.
- REV. 3-20-91: REDREW AND REORGANIZED SHEET. ADDED DOWEL BAR SIZE TABLE. CHANGED REFERENCE FOR DOWEL BAR SIZE FROM 1 1/4" TO VARIABLE DIAMETER.
- REV. 7-29-93: REMOVED REFERENCE TO THE ORIGINAL MANUFACTURER'S NAME AND CROSS-REFERENCE TO DRAWING NO. RP-J-19. CHANGED GAGE OF BOTTOM WIRE AND VERTICAL SUPPORT WIRE FROM NO. 2 TO NO. 1. CHANGED CUTTING OF TIE WIRE NOTE ON CONTRACTION PLAN VIEW AND SECTION C-C VIEW.
- REV. 12-18-94: CHANGED CROSS-REFERENCE BLOCK AND GENERAL NOTE (A).
- REV. 10-26-00: CHANGED WIDTH AND DEPTH OF SAWED GROOVED CONTRACTION JOINT.
- REV. 10-21-05: DELETED NOTES ABOUT CUTTING OF TIE WIRE AFTER STAKING.
- REV. 2-2-12: CHANGED DOWEL BAR TABLE.
- REV. 05-01-20: REDREW SHEET.
- REV. 01-28-2022: ADDED NOTES ABOUT CUTTING OF TIE WIRE AFTER STAKING ON PLAN AND ON SECTION C-C.

CROSS-REFERENCE DRAWINGS FOR THIS SHEET: RP-J-9, RP-J-11, RP-J-13, RP-J-17, AND RP-J-19.

APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

DOWEL ASSEMBLY DEVICES