

OFFICE OF
PAVEMENT
ENGINEERING

REVISIONS
01-21-2022
07-17-2015
07-19-2013
07-18-2008
07-16-2004
07-28-2000
04-08-1997

STDS ENGINEER
W. Feehan

STATE OF OHIO DEPARTMENT OF
TRANSPORTATION ADMINISTRATOR
Craig Landefeld

LONGITUDINAL PAVEMENT JOINTS

DESIGN AGENCY



SCD NUMBER
BP-2.1
SHEET TOTAL
1 2

NOTES

GENERAL: Longitudinal joints shall be used when specified on the typical section and shall be constructed as shown on this drawing in Items 451 and 452 Pavement and Item 305 Base.

The joint shall be on the centerline of the pavement unless otherwise shown on the plans. Where the pavement width exceeds 16', an additional longitudinal joint shall be introduced into the jointing details as directed by the Engineer.

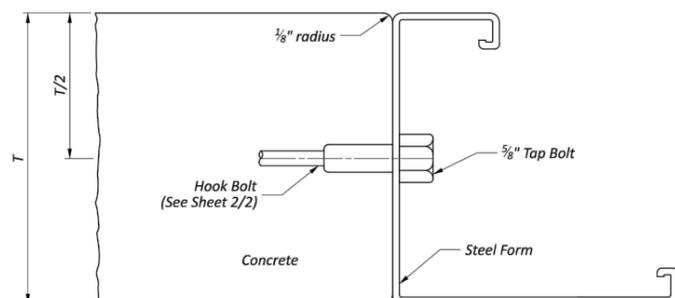
Tie bars shall be #5 deformed bars. A satisfactory device shall be used to hold the tie bars in proper positions or they may be installed by a mechanical installing device. Tie bars shall be centered on the longitudinal joint as nearly as practical.

BUTT JOINT: The longitudinal joint between adjoining slabs poured in separate operations shall be butt joint with hook bolts or tie bars, unless otherwise shown on the plans. Bent tie bars shall not be permitted.

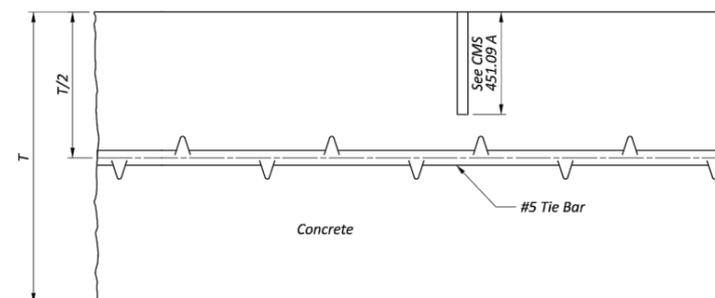
TYPE D (DRILLED TIED LONGITUDINAL) JOINT: Type D joints shall be constructed in accordance with CMS 255.05. The nylon or plastic retention disc shall be clear or opaque white in color. Grout shall meet the requirements of CMS 255.02. 5/8" expansion anchors, 712.01.A may be used in lieu of the #5 x 24" deformed bar and shall be installed according to the manufacturer's recommendations.

The use of self drilling expansion shield anchors, 712.01.B shall not be permitted.

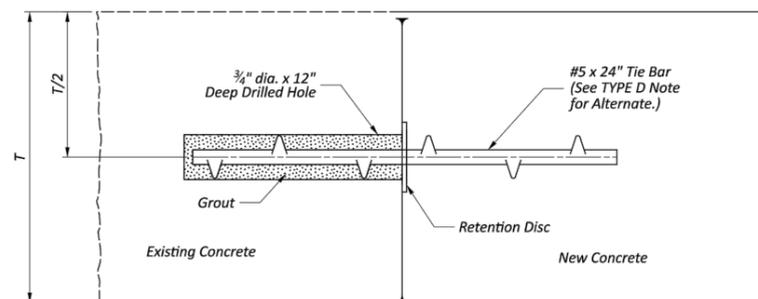
See sheet 2/2 for additional details.



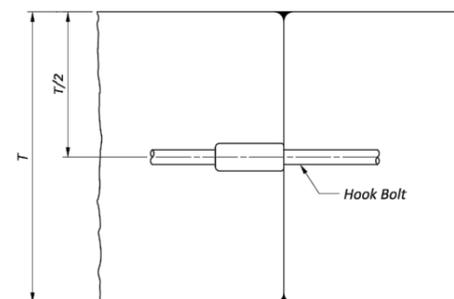
ACCEPTABLE METHOD OF FORMING JOINT



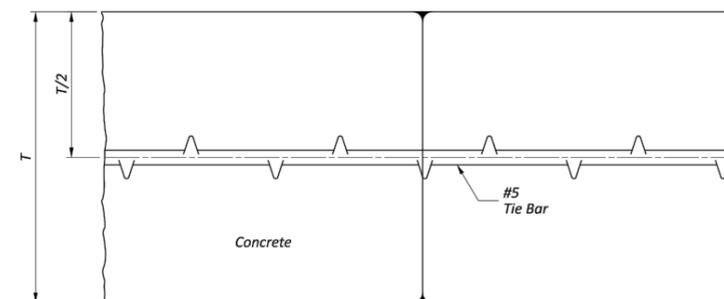
SAWED JOINT



TYPE D (DRILLED TIED LONGITUDINAL) JOINT



BUTT JOINT
w/ HOOK BOLT



BUTT JOINT
w/ TIE BAR



**CITY OF ALLIANCE
ENGINEERING DEPARTMENT**

504 E. MAIN ST.
ALLIANCE, OH 44601
PHONE: (330) 823-5122 FAX: (330) 829-2236

**LONGITUDINAL CONCRETE PAVEMENT JOINT
DETAILS**

NOT TO SCALE
ENGSERV1 / E./ DATA / ENGINEERING DOCUMENTS / STANDARD DRAWINGS / RD-4.DWG

APPROVED BY:

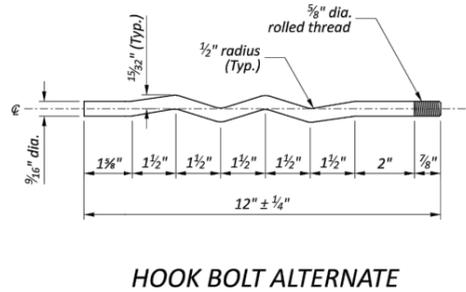
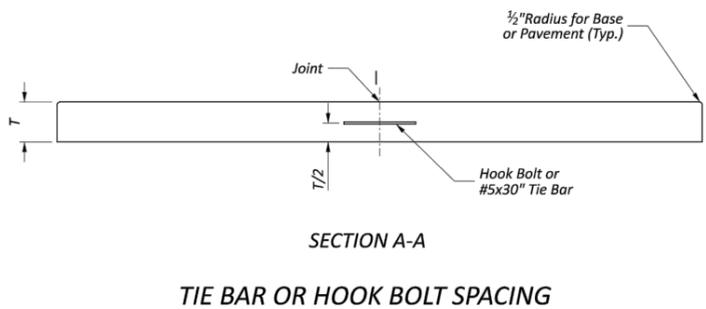
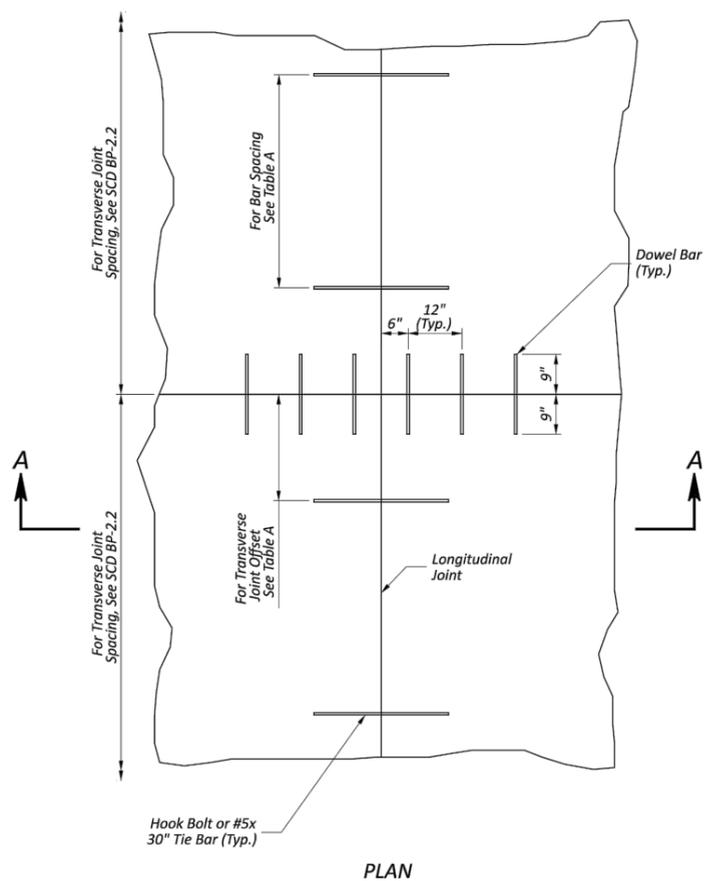
V. A. Mueser PE, S.T.
VINCENT MUESER, P.E., S.I.T.
ALLIANCE CITY ENGINEER

**ALLIANCE RD-4
(1 OF 2)**

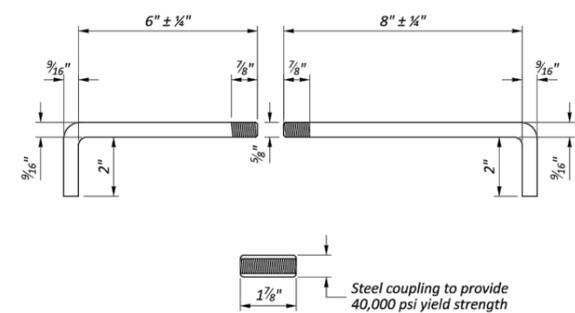
Revisions / Drawn By

02-19-10 / CAF

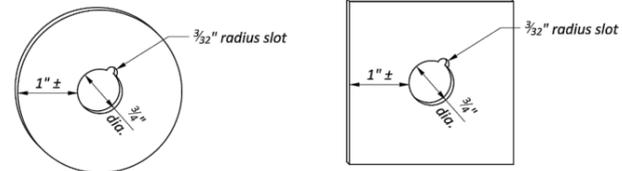
01-28-22 / ANP



HOOK BOLT ALTERNATE



HOOK BOLT



NYLON OR PLASTIC GROUT RETENTION DISCS FOR DOWEL/TIE BARS
(1/16" min. thick)

TABLE A			
Transverse Joint Spacing	Number of Tie Bars per Slab	Max. spacing between Tie Bars	Minimum Offset to Transverse Joint
15'	6	30"	15"
21'	8	30"	21"

EDGING: Edge butt joints with a thin metal edger having a radius of 3/8". Finish the free edges of the pavement with a thin metal edger having a radius of 1/2". Any impression left in the surface of the pavement by the flat part of the edging tool shall be eliminated.

HOOK BOLTS: Threaded hook bolts and alternates shall be turned to a tight fit when installed in couplings. Ensure the coupling is located on the same side of the joint as the shorter (6" +/- 1/4") hook bolt.

METAL STRENGTH: Tie bars, hook bolts assemblies, and the hook bolt alternate shall have a minimum yield strength of 40,000 psi.

SPACING: Tie bars shall not be located within 15" of any transverse joint.

OFFICE OF PAVEMENT ENGINEERING

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W. Feehan

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APPROVED BY:

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ALLIANCE CITY ENGINEER

ALLIANCE RD-4
(2 OF 2)

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