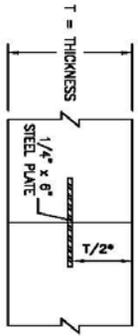


JOINT TYPES AND THEIR DESCRIPTION

CONTROL - (CONTRACTION) - CONTRACTION JOINTS ARE USED TO CONTROL THE LOCATION OF CRACKS CAUSED BY DRYING, SHRINKAGE AND THERMAL CHANGES. THESE JOINTS MAY BE FORMED BY PARTIALLY REDUCING THE CROSS SECTION OF CONCRETE BY SAWING, USING HAND GROOVERS, OR USING REMOVABLE STRIPS OF WOOD, METAL, OR PREFORMED JOINT MATERIAL.

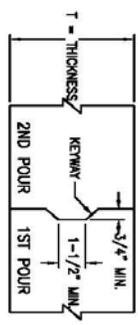
ISOLATION - (EXPANSION) - DESIGNED TO PREVENT CRUSHING AND DISTORTION OF ABUTTING CONCRETE UNITS FROM COMPRESSIVE FORCES DEVELOPED FROM EXPANSION. THIS JOINT IS USED TO ISOLATE STRUCTURAL UNITS THAT EXHIBIT DIFFERENTIAL MOVEMENT.

CONSTRUCTION - THIS TYPE JOINT IS USED WHERE A FRESH POUR OF CONCRETE ABUTS AN EXISTING ONE. THIS TYPE OF JOINT IS NORMALLY USED WHEN BONDING OF THE TWO POURS IS PROPOSED. PLACEMENT OF THESE JOINTS IS USUALLY IN A PREDETERMINED LOCATION. THE CONSTRUCTION JOINTS MAY ALSO FUNCTION AS AN EXPANSION OR A CONTRACTION JOINT WHEN MODIFIED.



* SHIFT PLATE TO LIQUID SIDE WHERE REINFORCING STEEL IS AT CENTER.

STEEL PLATE ALTERNATE FOR CONSTRUCTION JOINTS THAT ARE NOT CONTROL OR ISOLATION JOINTS



KEYWAY ALTERNATE FOR ALL CONSTRUCTION JOINTS

NOTES FOR DRAWINGS PA 004B - 004E:

1. Reinforcing steel may be bars or wire fabric.
2. Sections are shown with single grid of reinforcing steel; same joint details apply for multiple grid.
3. Drawings are adapted from WI - 560/564.
4. Most common purpose of labeled joints is underlined.

TYPES OF CONCRETE JOINTS	DRAWING NO.
Liquid Tight Slab Joints	PA-004B
Non-Liquid Tight Slab Joints	PA-004C
Liquid Tight Wall Joints	PA-004D
Non-Liquid Tight Wall Joints	PA-004E

REDRAWN: TJA 7/05

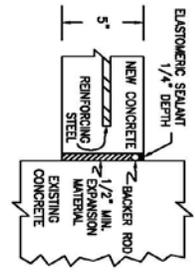
Drawn by	A. PERRY	Date	11/99
Check by	S. BERRY	Date	11/99
Scale			
Approved by			

_____ COUNTY, PENNSYLVANIA

CONCRETE JOINTS

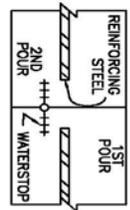


Print No.	PA-004A
Printed by	PA-004A
Printed on	PA-004A



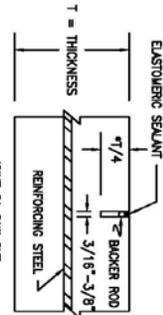
JOINT A

ISOLATION
CONSTRUCTION
CONTROL



JOINT B

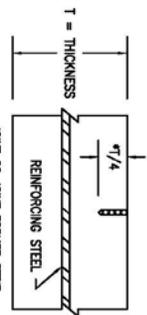
CONSTRUCTION
CONTROL



JOINT C1

CONTROL

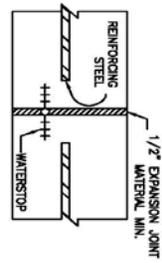
- NOTES:
1. BACKER ROD SHALL BE A LARGER WIDTH THAN THE WIDTH OF THE SAW CUT.
 2. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY LESS THAN JOINT WIDTH, WHICHEVER IS LESS.
 3. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.



JOINT C2

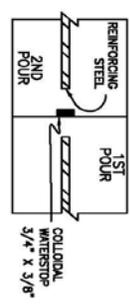
CONTROL

- NOTES:
1. REMOVE JOINT FORMER STRIP AND TREAT AS INDICATED FOR JOINT C1.
 2. SEALANT DEPTH SHALL BE 1/4" OR SLIGHTLY LESS THAN JOINT WIDTH WHICHEVER IS LESS.
 3. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.



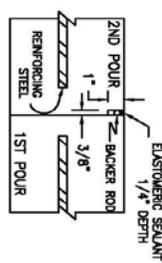
JOINT D

ISOLATION
CONTROL
CONSTRUCTION



JOINT E

CONSTRUCTION
CONTROL



JOINT F

CONSTRUCTION
CONTROL

NOTE: BACKER ROD TO BE 1/8" LARGER THAN WIDTH OF JOINT

* T/4 NEED NOT BE GREATER THAN 2" FOR SLABS THICKER THAN 8".

LIQUID TIGHT SLAB JOINTS

CROSS SECTIONS

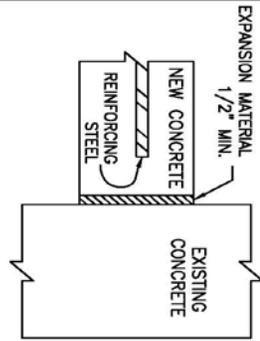
REVISED 6/02
REDRAWN: TJA 7/05

Date	11/20
Drawn	S. BURN
Checked	
Approved by	

COUNTY, PENNSYLVANIA
CONCRETE JOINTS



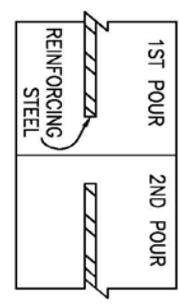
PA-004
R1-04B



JOINT G

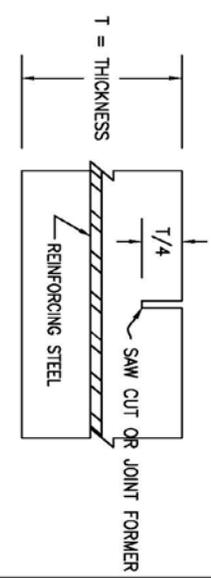
MAY BE USED AGAINST EXISTING STRUCTURE

ISOLATION
CONTROL
CONSTRUCTION



JOINT H

CONSTRUCTION
CONTROL



JOINT I

CONTROL

- NOTES: 1. CUT 50% OF THE REINFORCING STEEL DIRECTLY UNDER THE JOINT.
 2. T/4 NEED NOT BE GREATER THAN 2" FOR SLABS THICKER THAN 8".

NON-LIQUID TIGHT SLAB JOINTS
CROSS SECTIONS

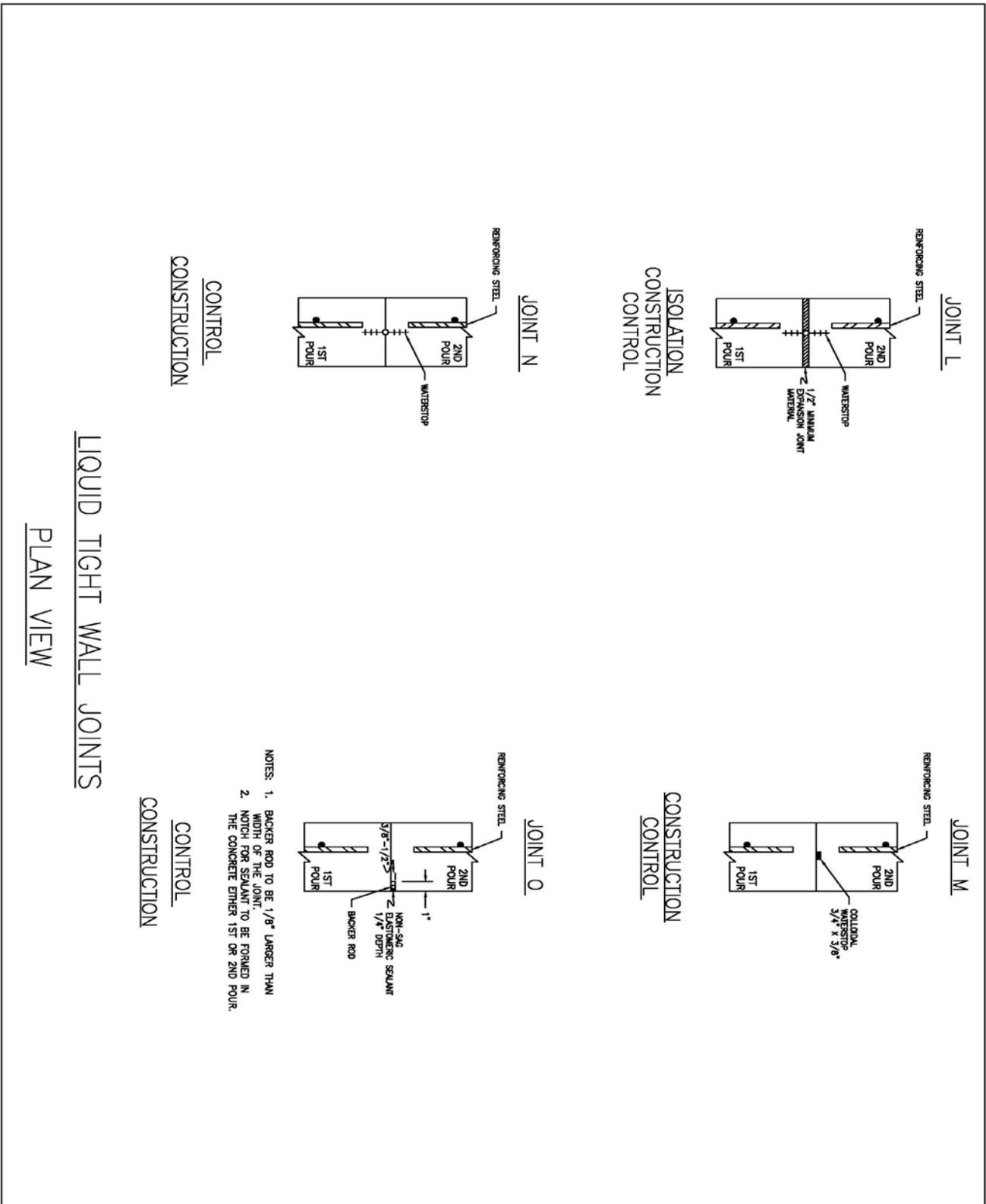
REVISED 6/02
 REDRAWN: TJA 7/05

Design	A. WOOD	Date	11/00
Drawn	S. BUNK	Date	11/00
Checked		Date	
Approved by		Date	



 COUNTY, PENNSYLVANIA
 CONCRETE JOINTS

File No.	PA-004-003
Project No.	
Sheet No.	PK-004C



CONTROL
CONSTRUCTION

ISOLATION
CONSTRUCTION
CONTROL

CONTROL
CONSTRUCTION

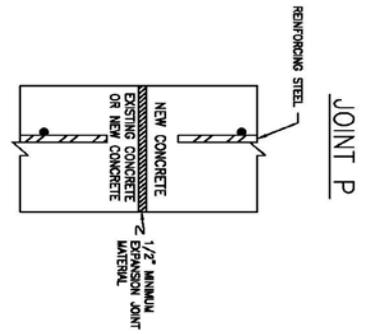
CONSTRUCTION
CONTROL

- NOTES: 1. BACKER ROD TO BE 1/8" LARGER THAN WIDTH OF THE JOINT.
 2. NOTCH FOR SEALANT TO BE FORMED IN THE CONCRETE EITHER 1ST OR 2ND POUR.

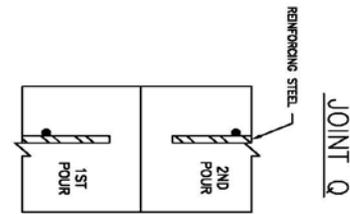
LIQUID TIGHT WALL JOINTS
 PLAN VIEW

REDRAWN: TJA 7/05

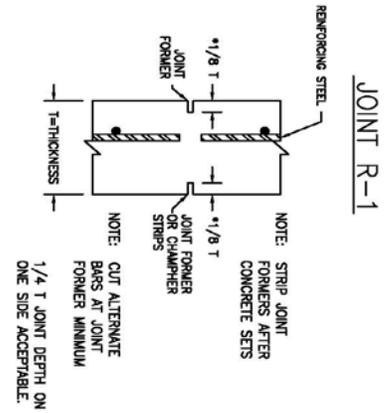
 <p>Natural Resources Conservation Service United States Department of Agriculture</p>	COUNTY, PENNSYLVANIA CONCRETE JOINTS		Date 11/20
	Designer S. BURN	Date 11/20	Checked Approved by



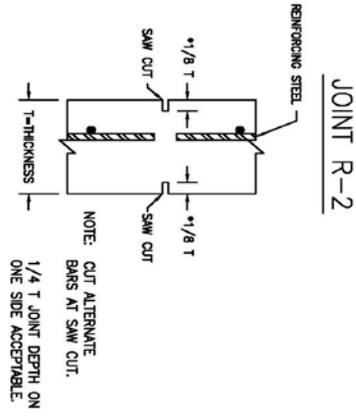
ISOLATION
 CONSTRUCTION
 CONTROL



CONSTRUCTION
 CONTROL

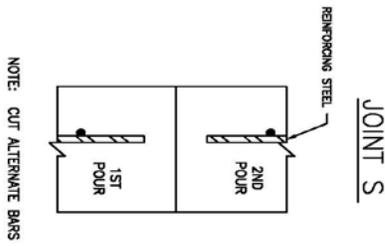


CONTROL



CONTROL

CONTROL



CONTROL

CONTROL

* T/8 NEED NOT BE GREATER THAN 1" FOR
 SLABS THICKER THAN 8".

NON-LIQUID TIGHT WALL JOINTS

PLAN VIEW

REDRAWN: TJA 7/05

Designed by	<u>A. WOOD</u>	Date	<u>11/78</u>
Drawn by	<u>S. BERRY</u>	Date	<u>11/78</u>
Checked by		Date	
Approved by		Date	

COUNTY, PENNSYLVANIA
 CONCRETE JOINTS



Project No. PA-004
 Drawing No. PA-004