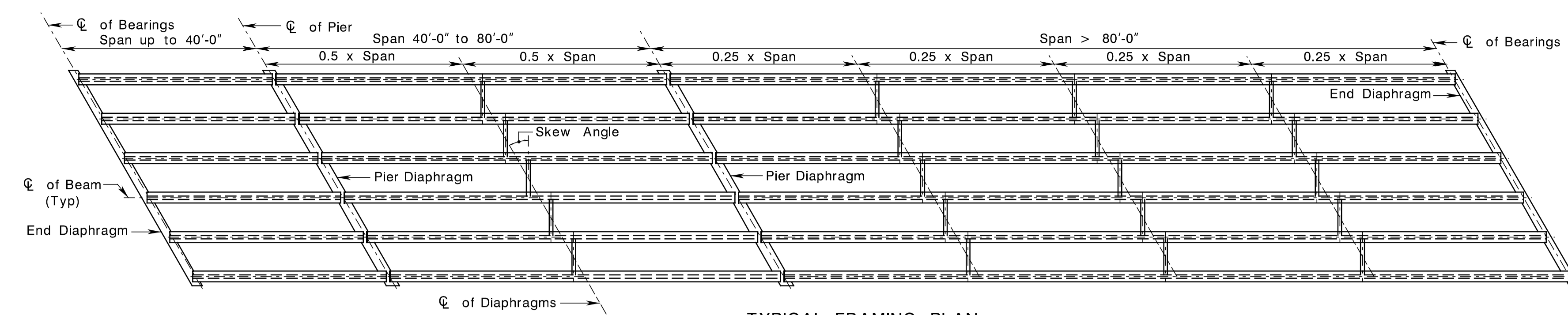
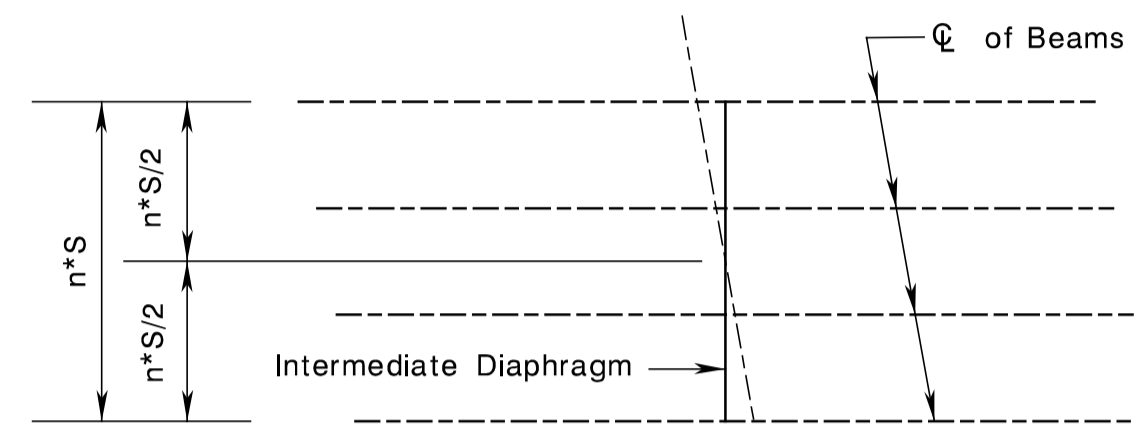


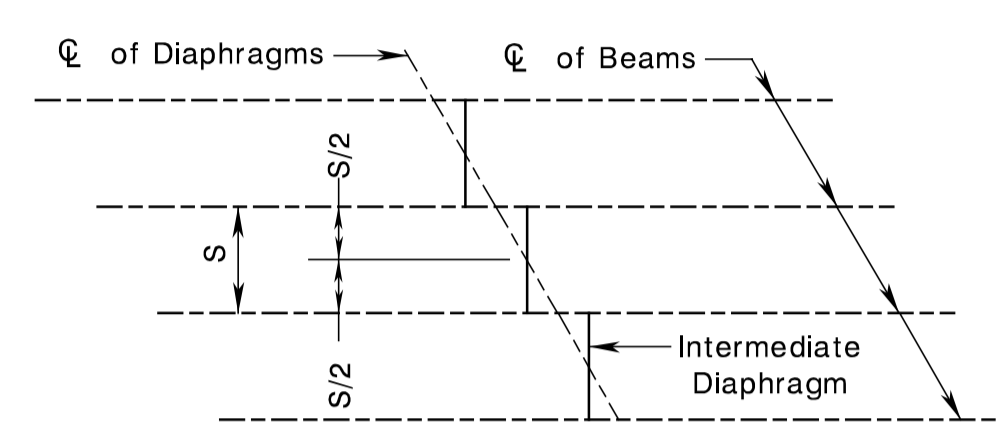
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
(D) STRUCTURE NO.			
STRUCTURE NAME			



TYPICAL FRAMING PLAN



PLAN FOR SKEW ANGLES ≤ 10°



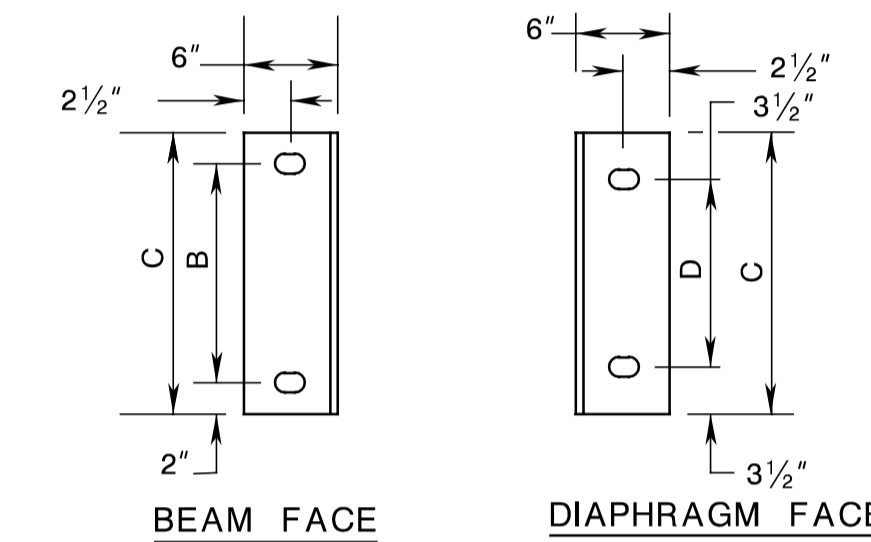
PLAN FOR SKEW ANGLES > 10°

DIAPHRAGM SUPPORT DIMENSIONS

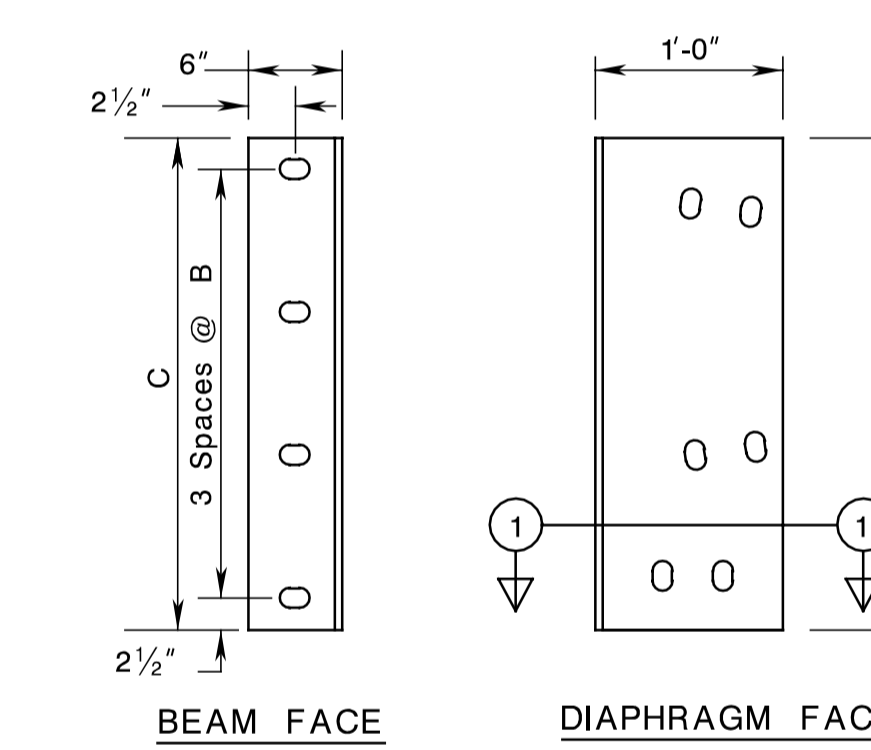
BEAM HEIGHT	A	B	C	D
45"	1'-2 1/2"	1'-1"	1'-5"	10"
54"	1'-5"	1'-5"	1'-9"	1'-2"
63"	1'-1/2"	11"	3'-2"	-
72"	1'-1/2"	1'-1"	3'-8"	-

GENERAL NOTES

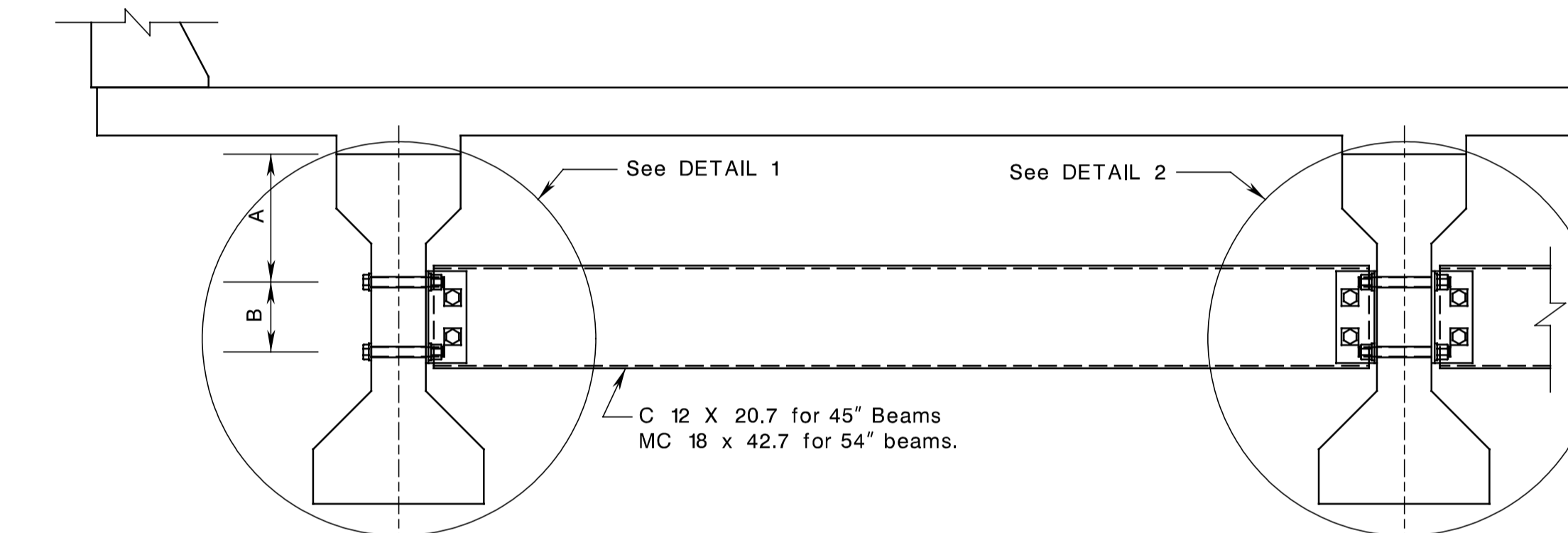
- This standard drawing provides steel diaphragm details for prestressed concrete I-Beam bridges. The details in this standard are applicable to structures with beam spacings less than 14'-0" and skew angles less than 45°.
  - End and pier diaphragms shall be cast-in-place. The design plans show the centerline location of each intermediate diaphragm. All intermediate diaphragm details and associated prestressed beam details shall be included on the fabricator's shop drawings. Only one type of intermediate diaphragm may be used per structure.
  - The sizes of steel diaphragm and accessories provided are for information only. Actual sizes shall be based on design requirements in accordance with the AASHTO LRFD Bridge Design Specifications, with current interims, as modified by Section 3 of the NJDOT Design Manual for Bridges and Structures.
  - All structural steel, including bolts, nuts and washers shall be in accordance with the NJDOT Standard Specifications for Road and Bridge Construction with current Supplemental Specifications, as modified by the Special Provisions.
  - All structural steel shall be ASTM A36, galvanized as per ASTM A153, Class C.
  - All bolts are 7/8" dia. ASTM A325, Type 1. All bolts, nuts and washers shall be galvanized as per ASTM A153, Class C.
  - Bolt holes in the I-beam webs shall be located to avoid prestressing strands.
  - The placement of deck concrete shall not proceed until all intermediate diaphragms have been properly installed.
- \* The note should be modified to reflect applicable year and updated Specifications



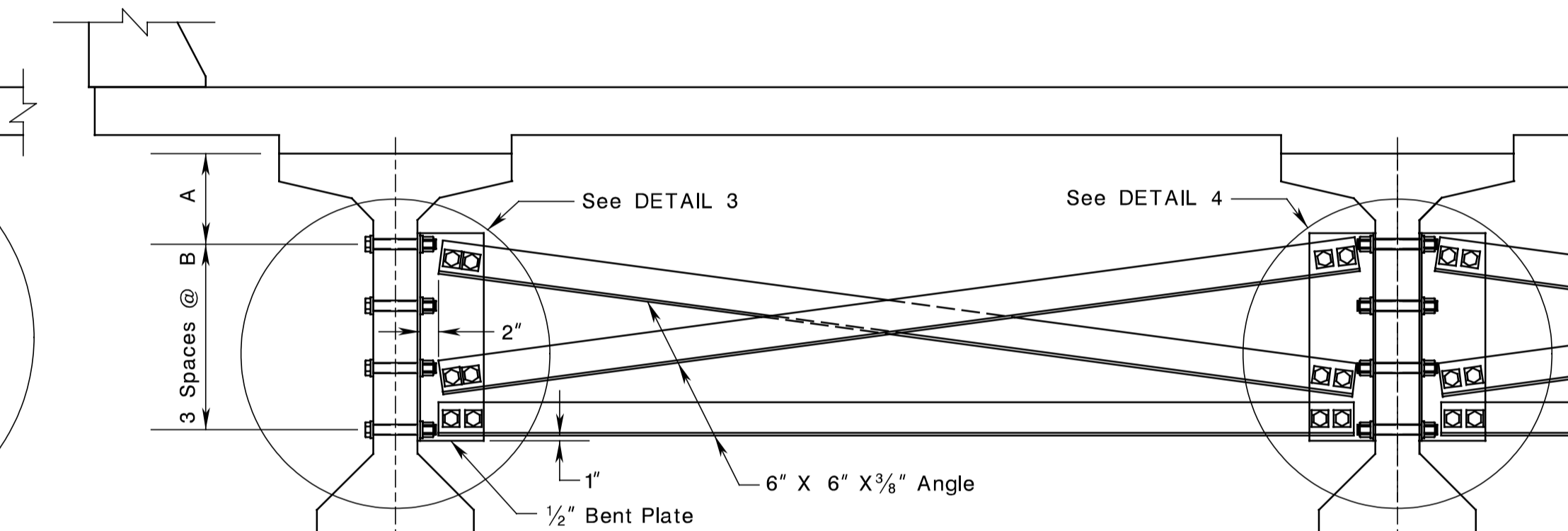
DIAPHRAGM SUPPORT (FOR 45" AND 54" PRETENSIONED BEAMS)



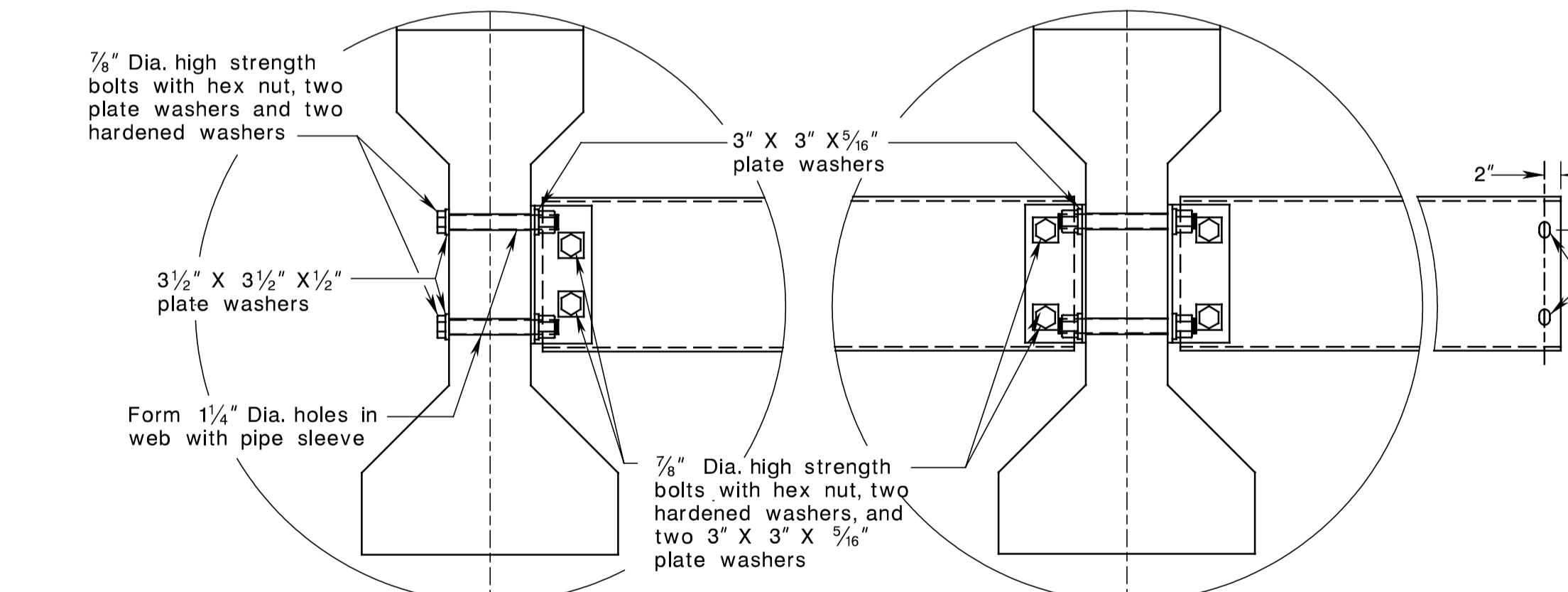
DIAPHRAGM SUPPORT (FOR 63" AND 72" PRETENSIONED BEAMS)



INTERMEDIATE DIAPHRAGM (FOR 45" AND 54" PRETENSIONED BEAMS)

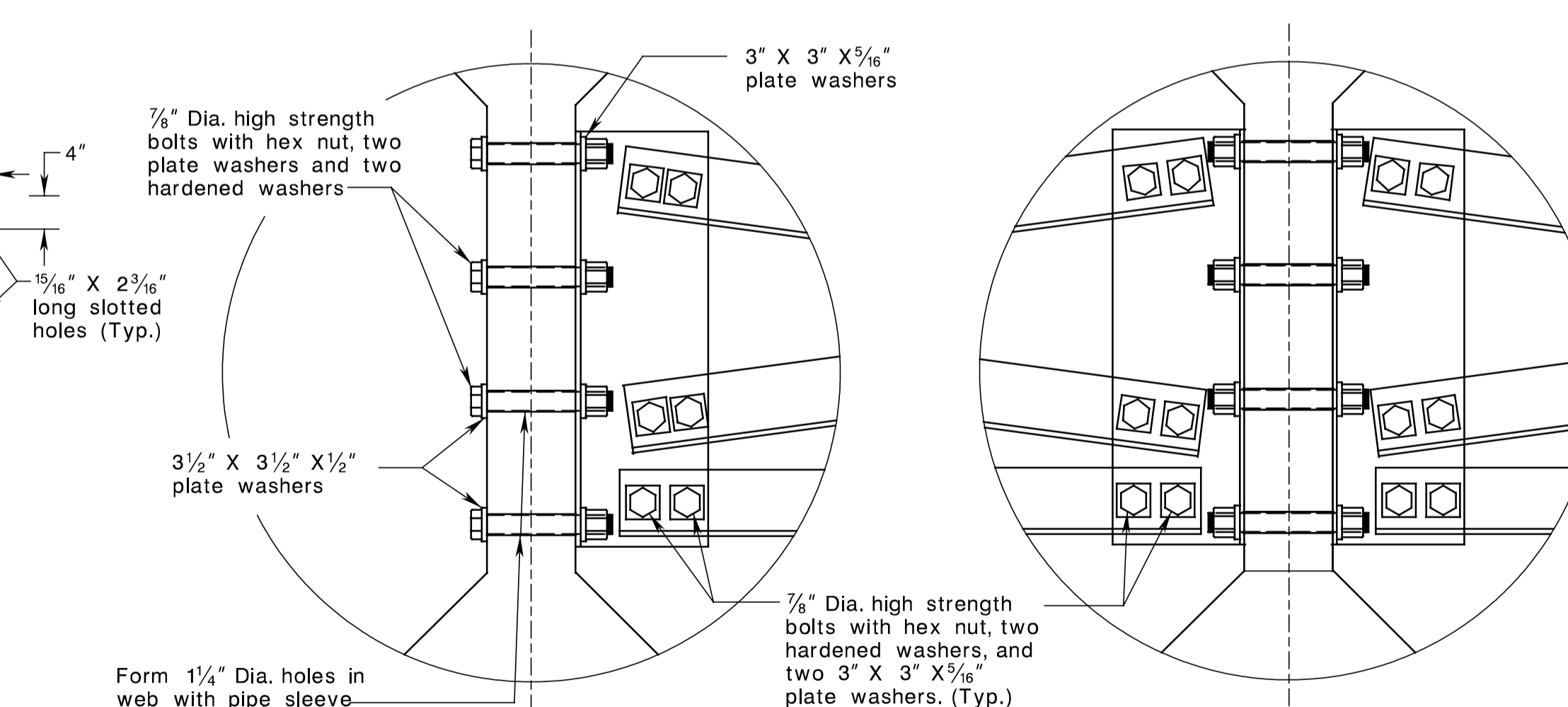


INTERMEDIATE DIAPHRAGM (FOR 63" AND 72" PRETENSIONED BEAMS)



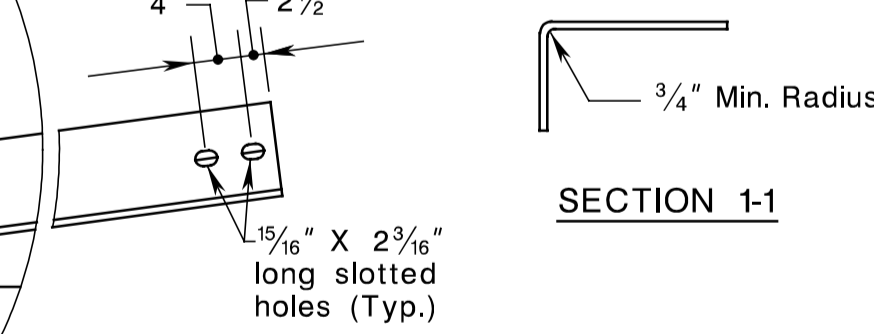
DETAIL 1  
Detail 1 shall be used at the fascia beam and all interior beams when the skew angle exceeds 10°

DETAIL 2  
Detail 2 shall be used at interior beams when the skew angle is less than 10°



DETAIL 3  
Detail 3 shall be used at the fascia beam and all interior beams when the skew angle exceeds 10°

DETAIL 4  
Detail 4 shall be used at interior beams when the skew angle is less than 10°



SECTION 1-1

THIS SHEET IS FOR DESIGN INFORMATION ONLY. DO NOT INCLUDE IN CONTRACT PLANS.

STANDARD DRAWING PLATE 2.4-5  
NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF STRUCTURAL ENGINEERING

DETAILS OF INTERMEDIATE STEEL DIAPHRAGMS FOR PRESTRESSED CONCRETE BEAMS  
ROUTE SECTION

CONTROL SECTION	JOB NO.
DES. BY	CHK. BY
DWN. BY	CHK. BY
EST. BY	CHK. BY
SPECS. BY	
IN CHARGE OF	

REVISION	BY	CKD	DATE

SCALE: NONE  
BRIDGE SHEET NO. B OF B