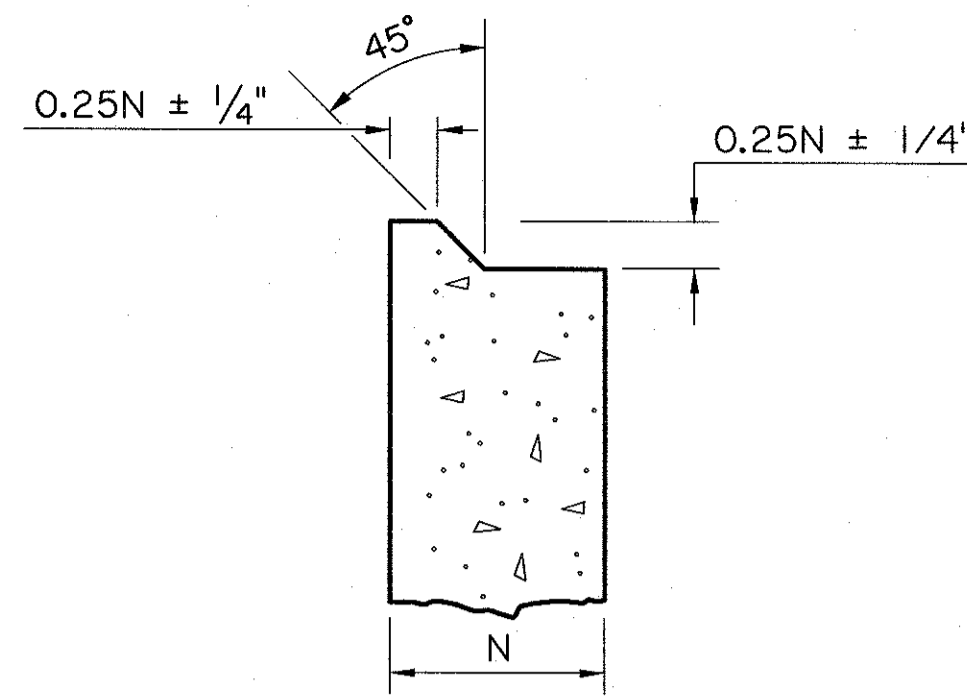


**GENERAL NOTES:**

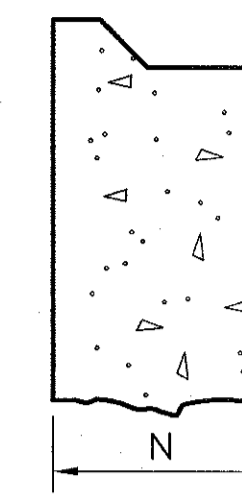
- THIS STRUCTURE MEETS ALL DOTD HYDRAULIC PERFORMANCE CRITERIA WHEN USED IN ACCORDANCE WITH THE DOTD HYDRAULICS MANUAL AND ALL DOTD HYDRAULIC DESIGN POLICIES.
- PROVIDE PRECAST UNITS AS THE LOWER PORTION OF A COMPOSITE STRUCTURE. PROVIDE CAST-IN-PLACE CONCRETE FOR THE TOP 1'-6" OF THE STRUCTURE, EXCEPT THAT STRUCTURES NOT EXPOSED TO TRAFFIC LOADS MAY BE COMPLETELY PRECAST.
- DESIGN IS TO BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, 2017, AND THE LATEST LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.
- CONFORM TO 1016.06 AND 805 FOR CONCRETE. USE DEFORMED REINFORCING STEEL AND CONFORM TO 806.
- FINISH CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH OTHER STANDARD PLANS AND 805.
- FORM PIPE OPENINGS ONLY AS REQUIRED FOR INTERSECTING PIPES. PROVIDE OPENING DIMENSIONS TO ACCOMMODATE PIPE DIAMETER AND SKEW ANGLE. PROVIDE OPENING DIMENSION THAT IS 4±1/2 INCH LARGER THAN OUTSIDE PIPE DIMENSION.
- RESILIENT CONNECTORS OR CONCRETE COLLARS ARE REQUIRED FOR CONNECTIONS OF ALL PIPE SIZES (EXCEPT YARD DRAIN PIPE AND UNDERDRAINS) WITH COST TO BE INCLUDED IN THE COST OF THE PRECAST STRUCTURE.



**JOINT DETAIL A  
PRECAST/PRECAST**

- SEAL JOINTS BETWEEN PRECAST UNITS WITH FLEXIBLE GASKET MATERIAL IN ACCORDANCE WITH 1016.
- WRAP UNIT AT JOINT WITH A 12-INCH WIDTH OF GEOTEXTILE FABRIC IN ACCORDANCE WITH 1019.

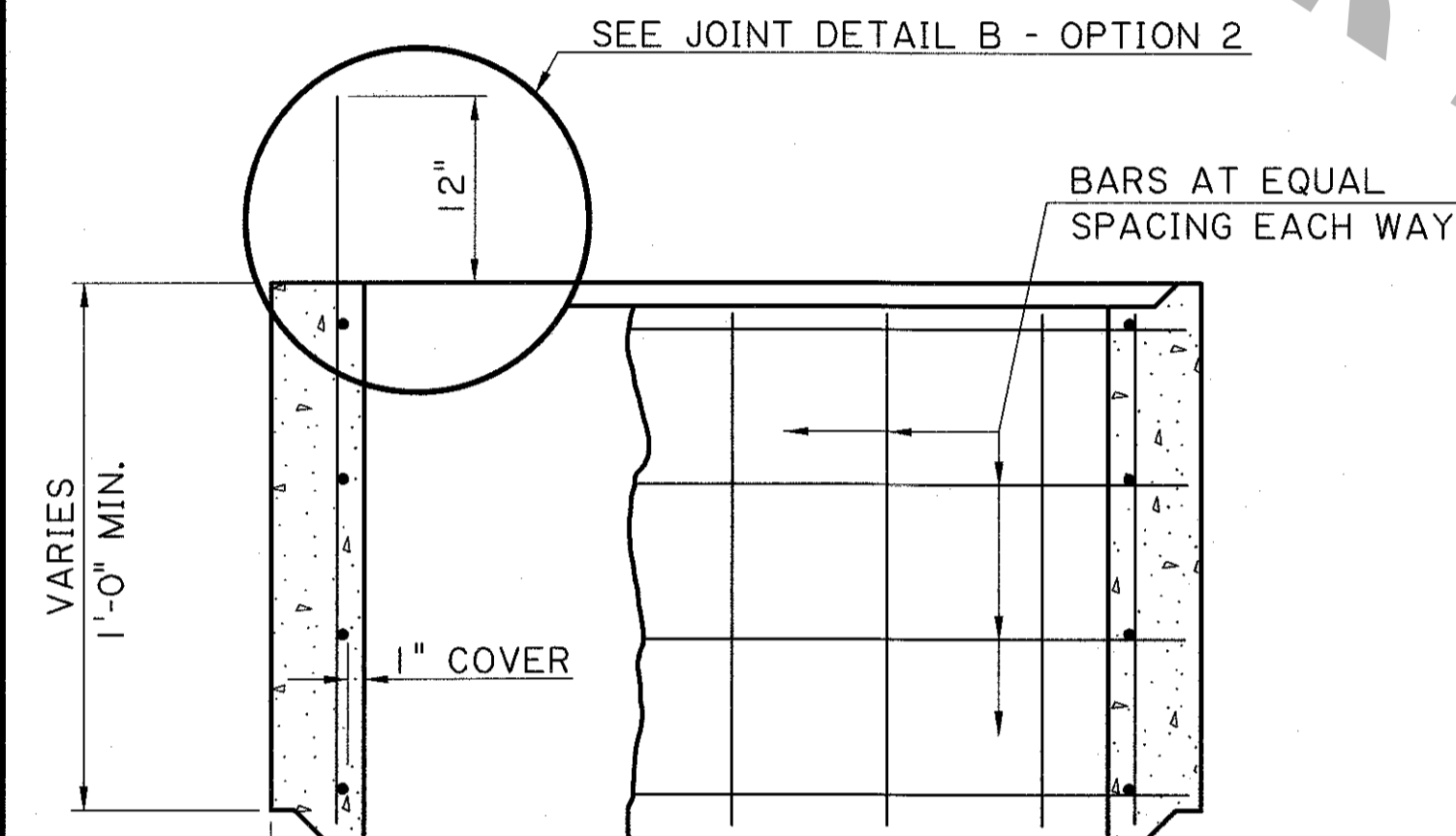
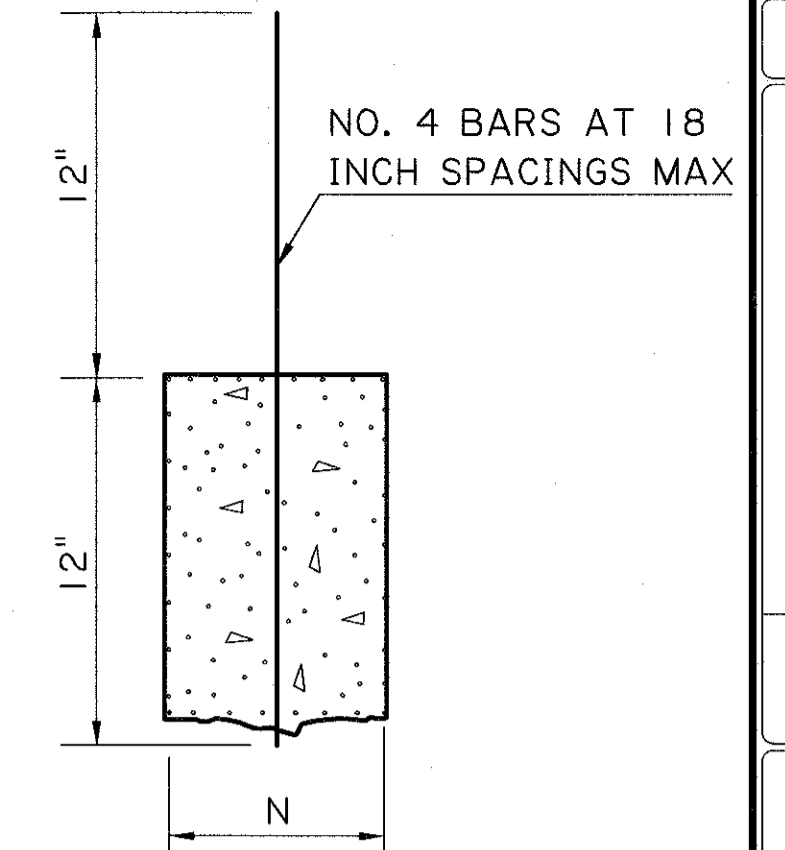
USE DIMENSIONS FROM JOINT DETAIL "A"



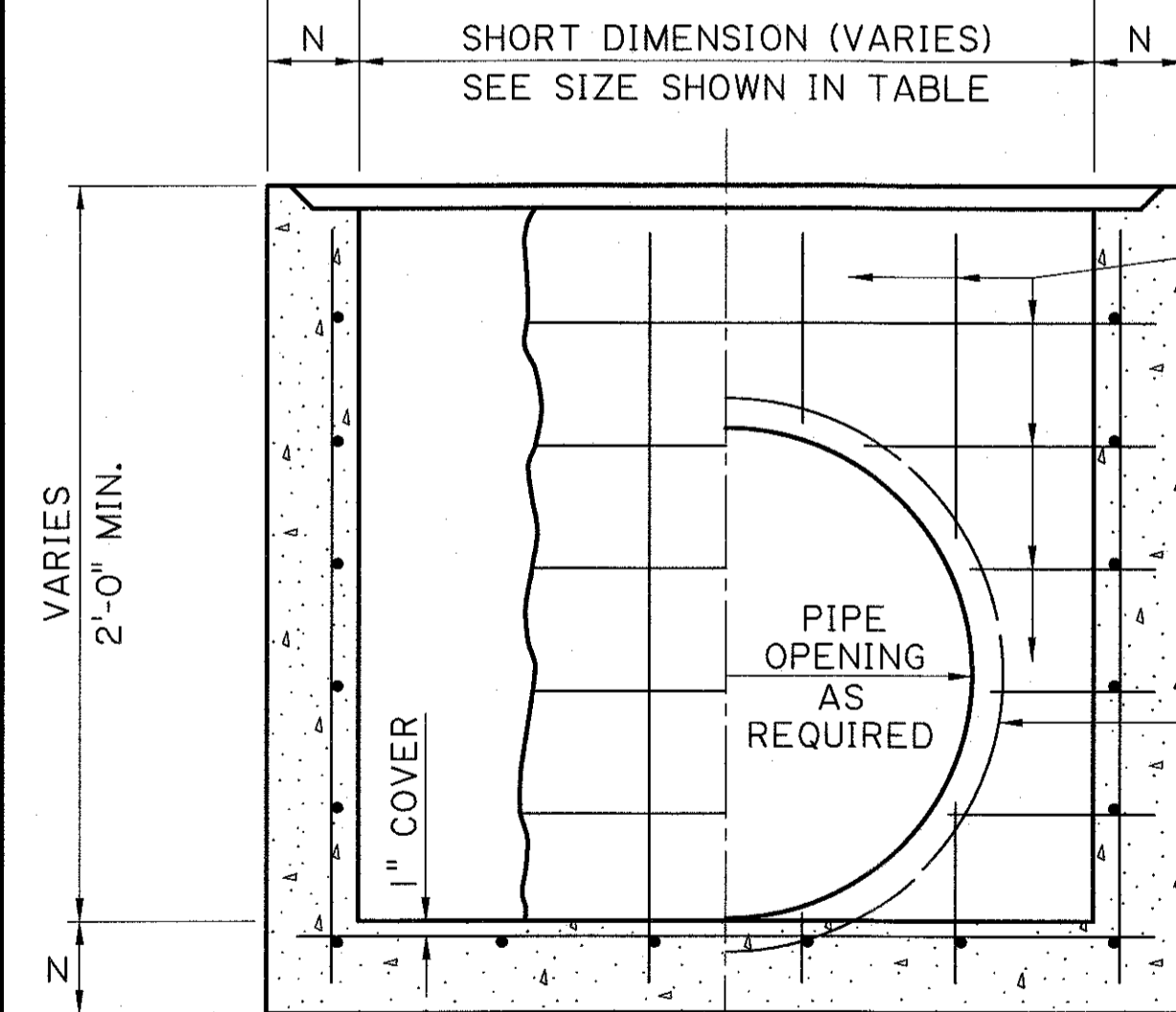
**JOINT DETAIL B - OPTION 1  
CAST-IN-PLACE/PRECAST**

**JOINT DETAIL B - OPTION 2  
CAST-IN-PLACE/PRECAST**

IN OPTIONS 1 AND 2, COAT PRECAST CONCRETE JOINT SURFACE AND A MAXIMUM OF 2 INCHES OF REINFORCING STEEL WITH TYPE V, GRADE 2 OR GRADE 3 RESIN CONFORMING TO 1017. APPLY RESIN AND PLACE CONCRETE IN ACCORDANCE WITH RESIN MANUFACTURER'S RECOMMENDATIONS.



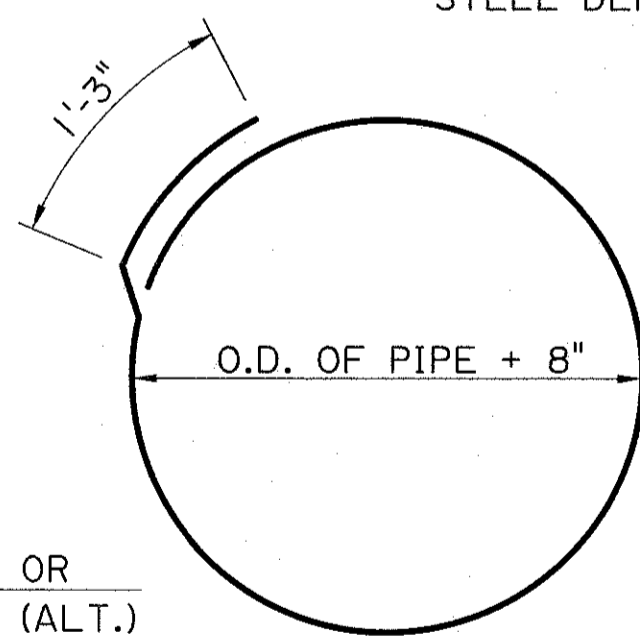
**OPTIONAL RISER UNIT**



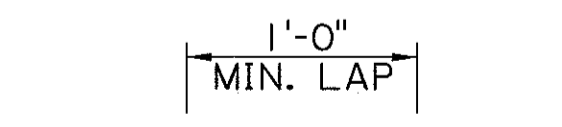
**BASE UNIT  
SECTION B-B**

△ #4 HOOP MAY BE USED WHEN PIPE IS CIRCULAR AND CONNECTS TO THE CATCH BASIN AT +/- 90 (DEGREE) ANGLE. #4 HOOP (ALT.) SHALL BE USED FOR NON-CIRCULAR (ELLIPTICAL) PIPES AND ALL PIPES THAT ENTER THE CATCH BASIN AT A SKEWED ANGLE.

PIPE OPENING SHORT AXIS +8"



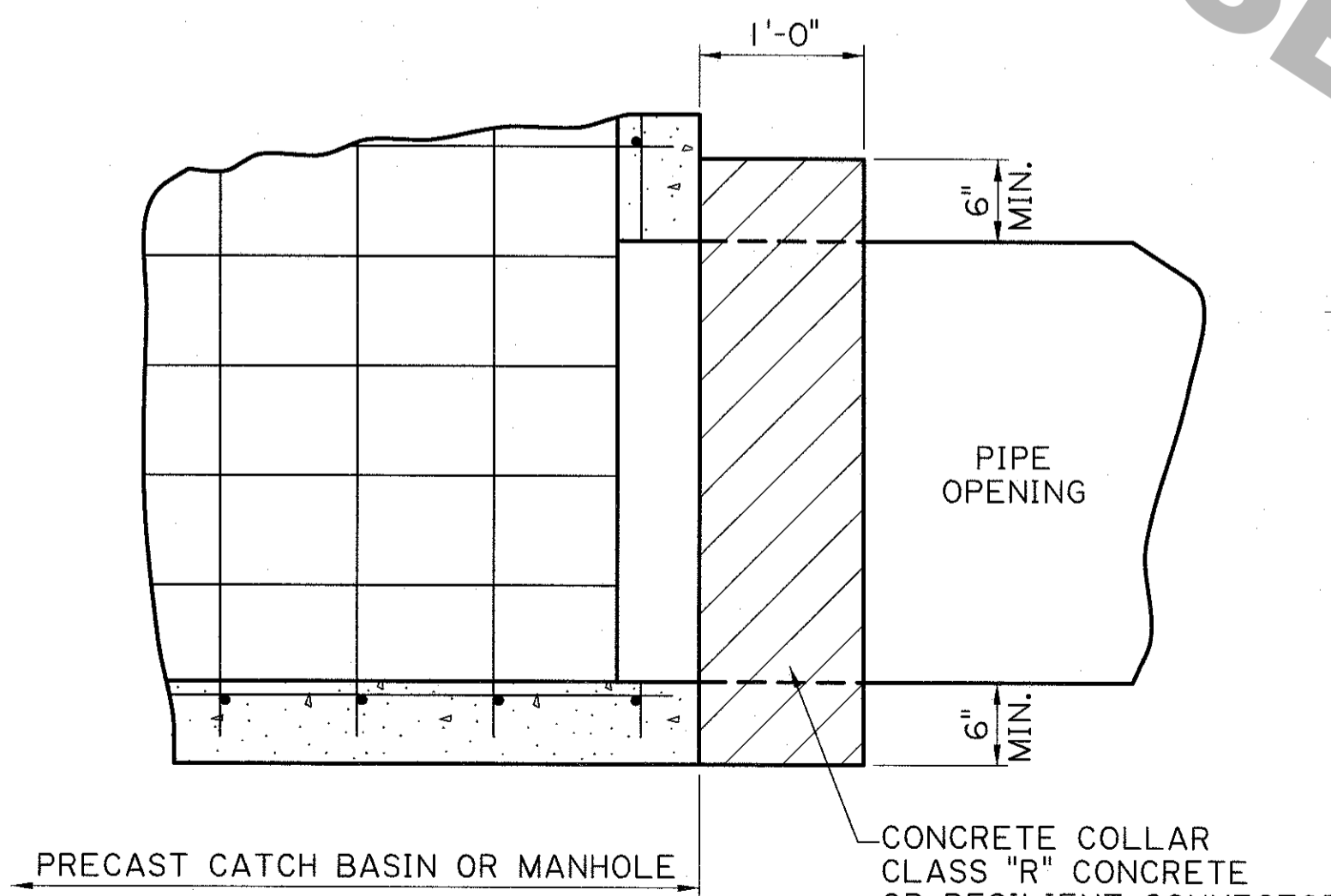
**△ #4 HOOP**



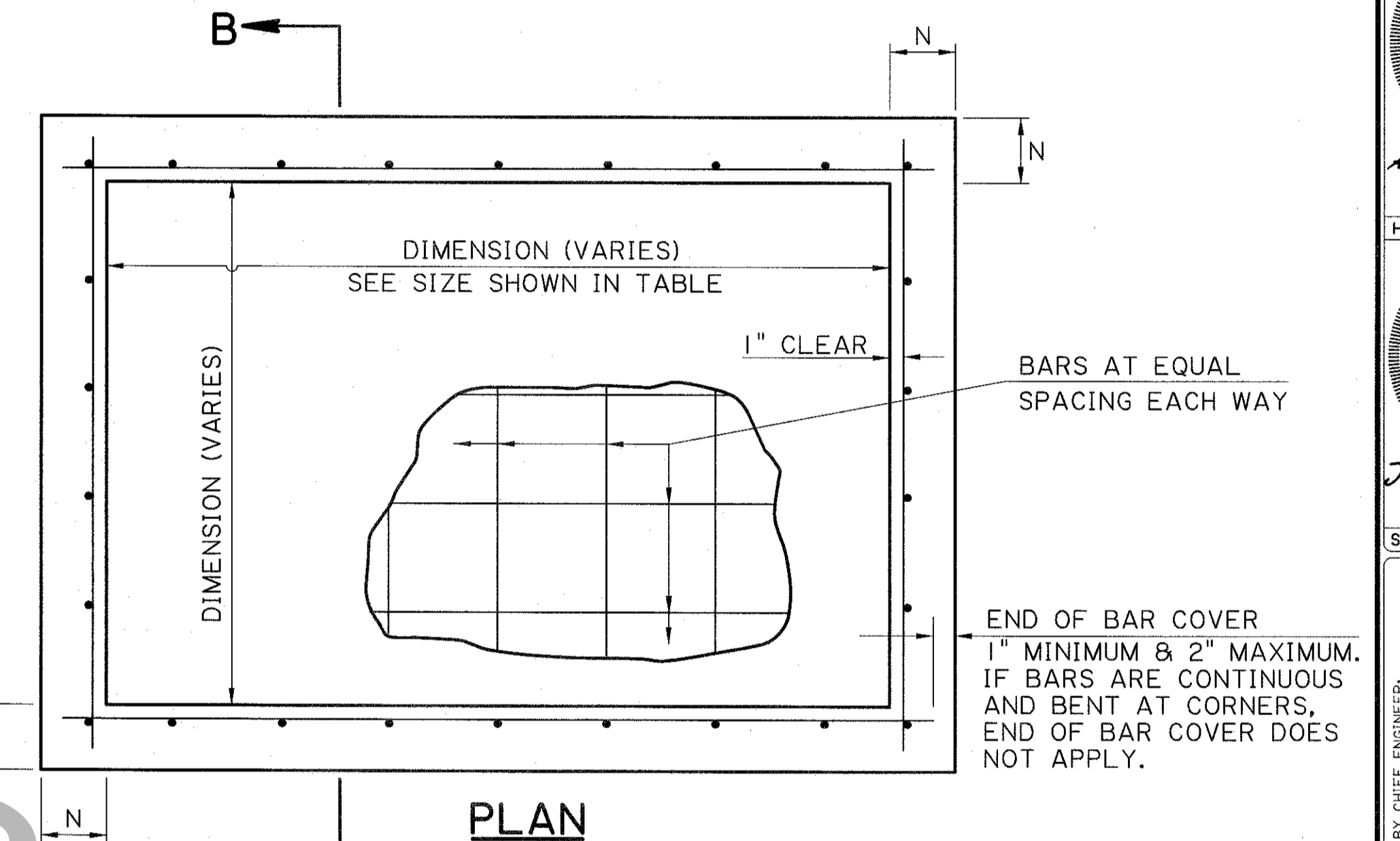
**△ #4 HOOP (ALT.)**

MAXIMUM HEIGHT	N	4' MAX. DIMENSION			6' MAX. DIMENSION			8' MAX. DIMENSION			10' MAX. DIMENSION		
		Ø TYPICAL SIZES [3'X3' 4'X4']	Ø TYPICAL SIZES [6'X4' 6'X6']	Ø TYPICAL SIZES [8'X4' 8'X6' 8'X8']	Ø TYPICAL SIZES [10'X4' 10'X6' 10'X8' 10'X10']								
FT.	IN.	BAR SIZE	SPAC.* IN.	As <sup>⊠</sup> IN <sup>2</sup> /FT.	BAR SIZE	SPAC.* IN.	As <sup>⊠</sup> IN <sup>2</sup> /FT.	BAR SIZE	SPAC.* IN.	As <sup>⊠</sup> IN <sup>2</sup> /FT.	BAR SIZE	SPAC.* IN.	As <sup>⊠</sup> IN <sup>2</sup> /FT.
8	4	4	6	0.40	4	8	0.30	4	5.5	0.44	5	5.5	0.68
14	6	4	9	0.27	4	6	0.40	5	5	0.74	5	3.25	1.14
20	6	4	7	0.34	4	4.5	0.53						

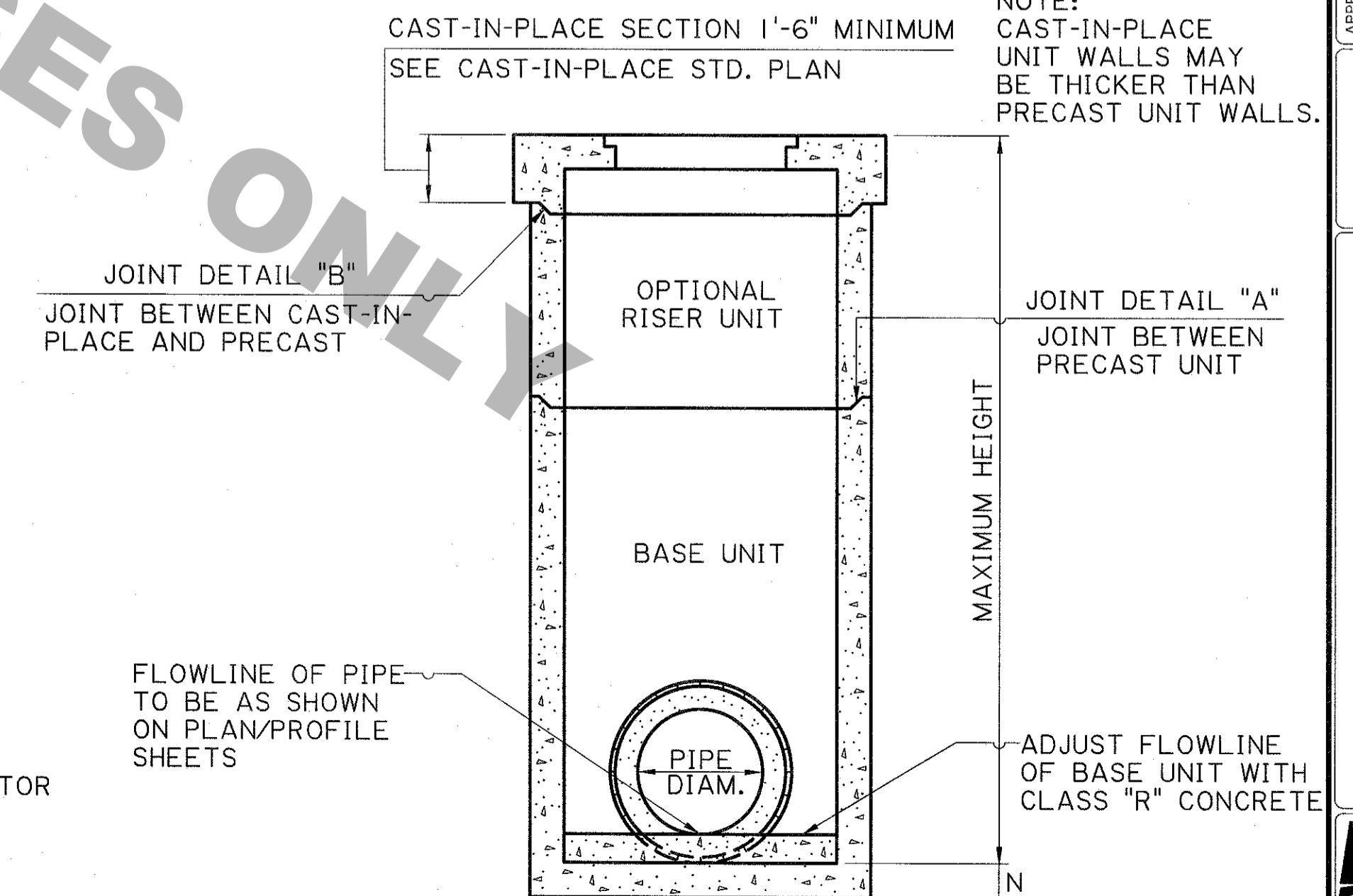
⊙ OTHER SIZES ARE ACCEPTABLE AS LONG AS THE DIMENSIONS DO NOT EXCEED THE MAXIMUM DIMENSIONS.  
 \* BAR SPACING APPLIES TO BOTH DIRECTIONS AND AT ALL LOCATIONS.  
 ⊠ BAR SIZES AND SPACING MAY DIFFER FROM VALUES SHOWN, BUT THE AREA OF STEEL (As) SHALL BE EQUAL TO OR GREATER THAN VALUE SHOWN, AND BAR SPACING SHALL NOT EXCEED 1.5 TIMES THE WALL THICKNESS. THE AREA OF STEEL (As) MAY BE PROVIDED WITH STEEL DEFORMED WELDED WIRE FABRIC.



**PIPE CONNECTION DETAIL**



**PLAN**



**ELEVATION**

**TYPICAL COMPOSITE STRUCTURE**

SHEET NUMBER	
PARISH	
CONTROL SECTION	
STATE PROJECT	
DESIGN	
CHECK	
DETAIL	
CHECK	
REVIEW	
SERIES #	
STATE OF LOUISIANA	
MITRA HASHEMIEH	
REG. NO. 28546	
REGISTERED PROFESSIONAL ENGINEER	
CIVIL ENGINEERING	
7/20/2021	
HYDRAULICS	
STATE OF LOUISIANA	
XUYONG WANG	
REG. NO. 32508	
REGISTERED PROFESSIONAL ENGINEER	
CIVIL ENGINEERING	
Xuyong Wang	
7/20/2021	
STRUCTURAL	
APPROVED BY CHIEF ENGINEER	
Mitch P. Hoops	
DATE: 7/26/2021	
STATE OF LOUISIANA	
PRECAST CATCH BASINS AND MANHOLES	
STANDARD PLAN	
PC-01	
DOTD	
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT	
HYDRAULICS SECTION	