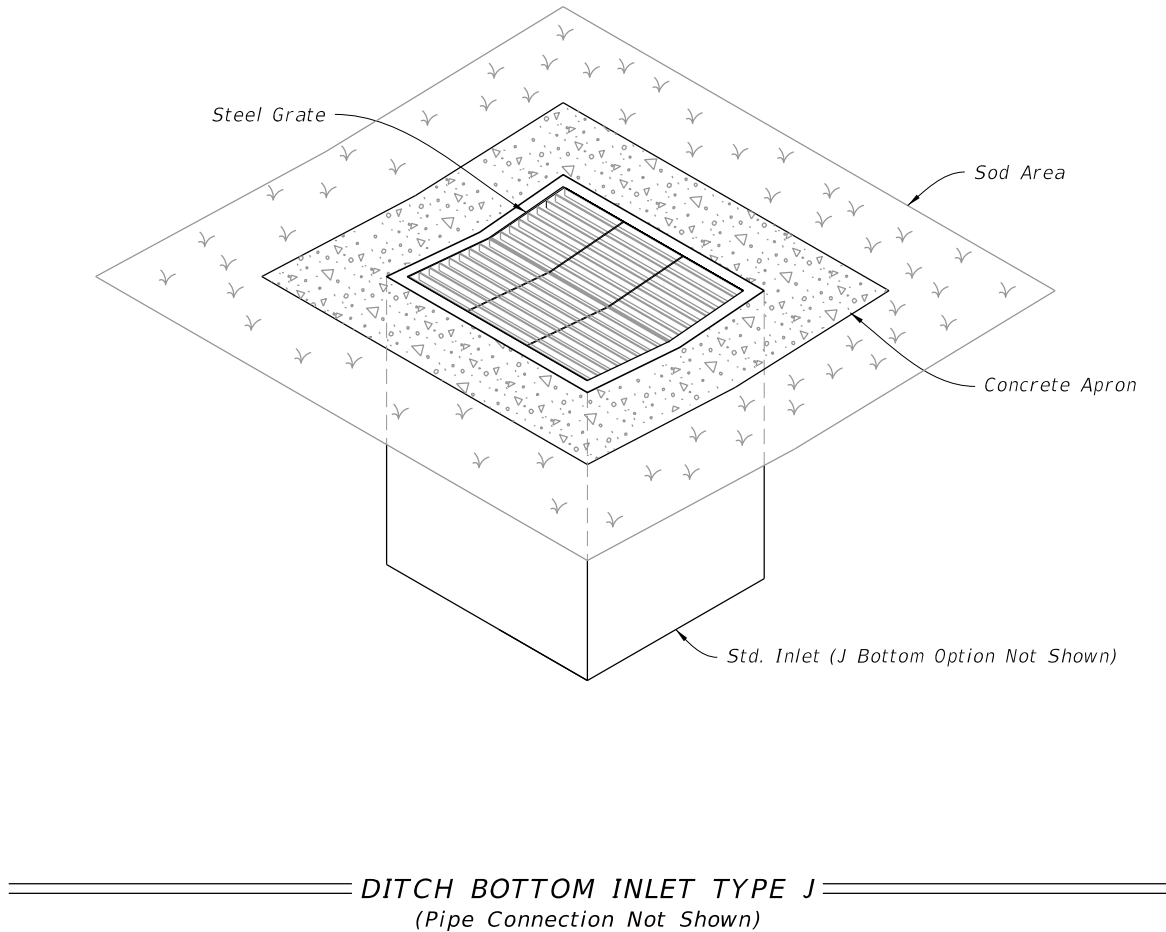


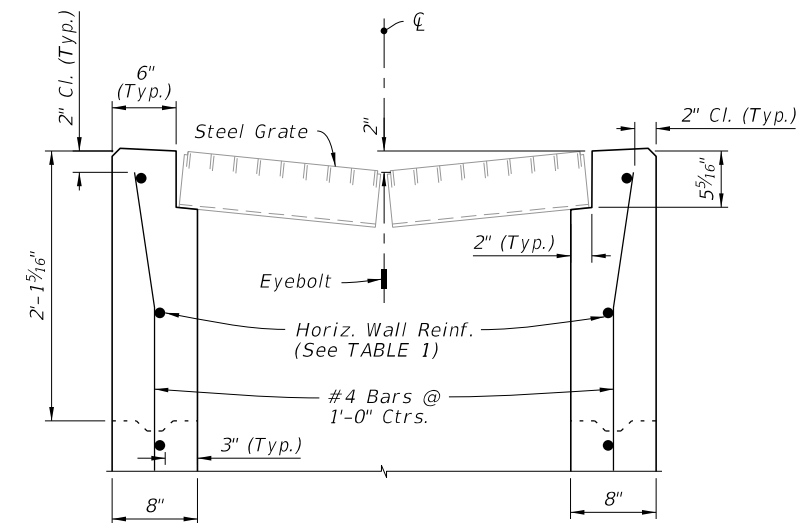
GENERAL NOTES:

- 1. Work this Index with Index 425-001 and Index 425-010.
- 2. Reinforcing bars are Grade 60 bars with 2" minimum cover unless otherwise noted.
See Index 425-001 for equivalent area of welded wire fabric. Cut or bend bars out of way of pipe when necessary; bars to clear pipe by 1½".
- 3. Chamfer all exposed edges and corners ¾" or tooled to ¼" radius.
- 4. Dimensions are for both precast and cast-in-place inlets unless otherwise noted.
- 5. Quantities are for informational and estimating purposes only.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Dimensional and Reinforcing Details
3	Grate, Concrete Apron, and Sodded Area Details
4	Alternate A Structure Bottom - Top Slab Details



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Technical drawing of a steel grate assembly. The drawing shows a side view of a structure with a steel grate at the top. Dimensions are provided in inches:

- Top horizontal dimensions: 6" and 6".
- Vertical dimensions on the right: 5" (from grate to a horizontal line), 5/16" (thickness of a plate), and 1'-0" (from the horizontal line to the center of the eyebolt).
- Bottom horizontal dimensions: 8" (total width) and 4" (offset from the right edge to the center of the eyebolt).
- Vertical dimension on the left: 6" (from the bottom to the center of the eyebolt).

Labels:

- Steel Grate* (pointing to the top horizontal section).
- Eyebolt (See Index 425-001)* (pointing to the circular feature on the right).

DETAIL "B"

= CAST-IN-PLACE OPTION :

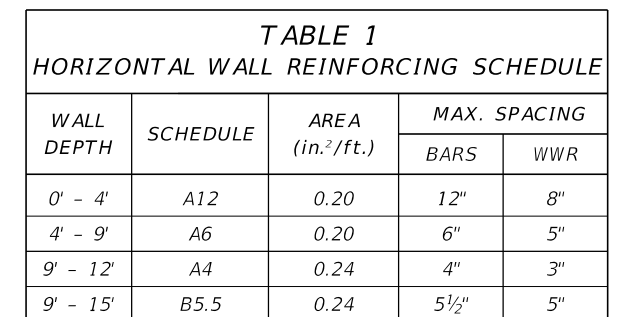
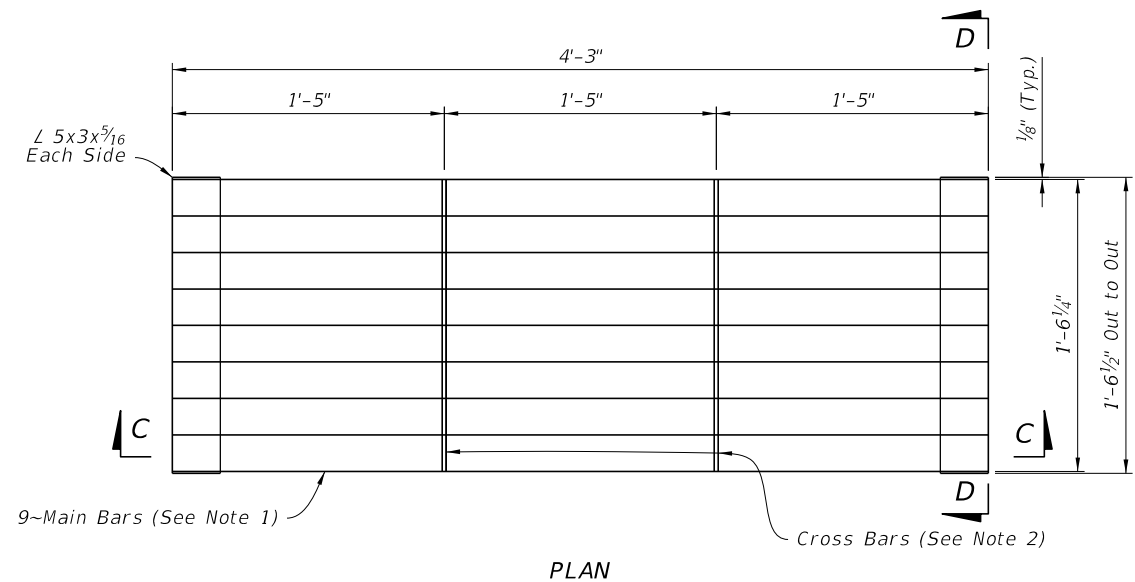
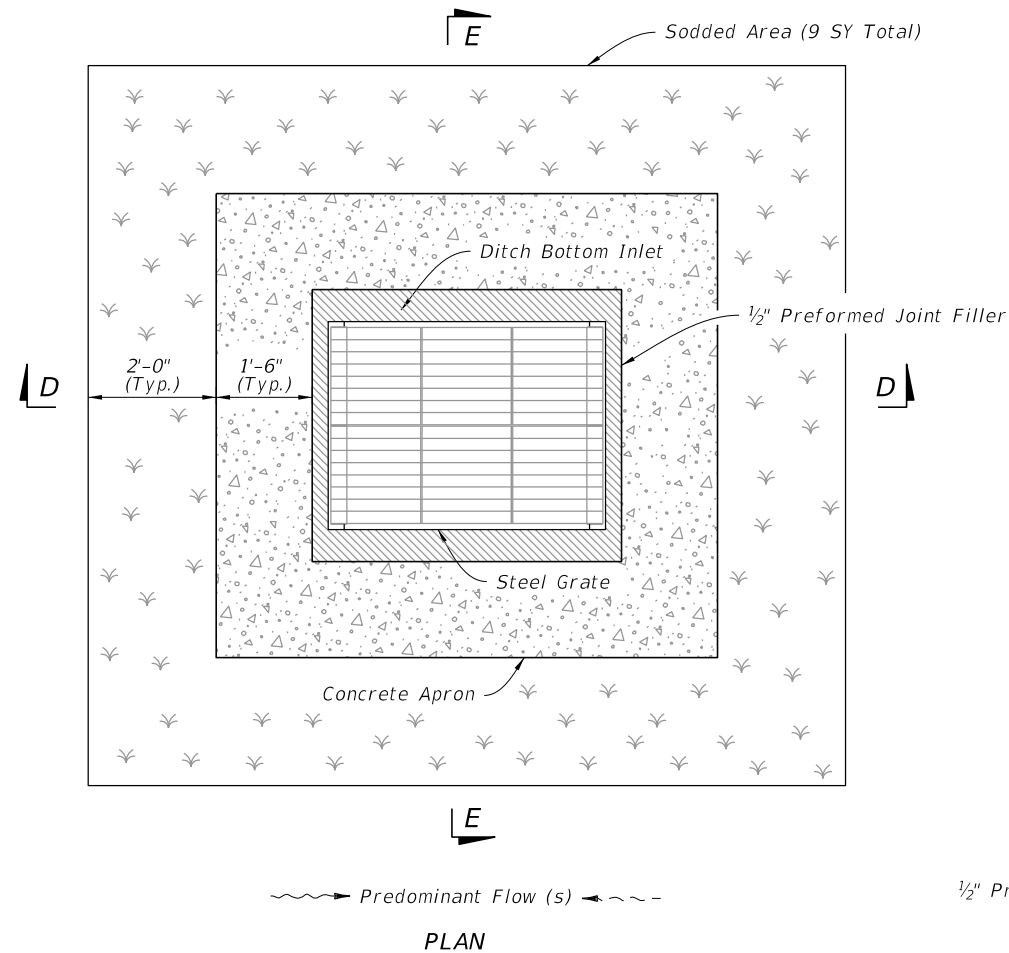


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

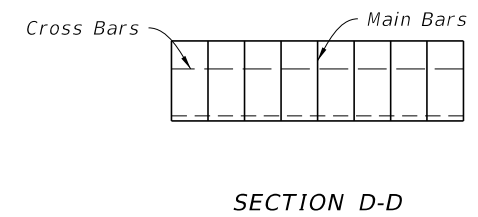
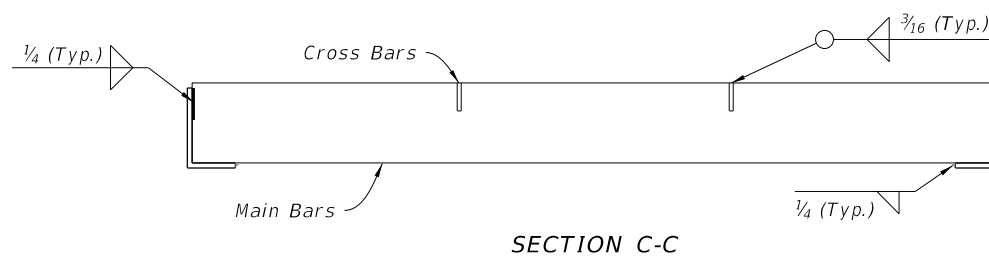
WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARs	WWR
0' - 4'	A12	0.20	12"	8"
4' - 9'	A6	0.20	6"	5"
9' - 12'	A4	0.24	4"	3"
9' - 15'	B5.5	0.24	5½"	5"

NOTES:

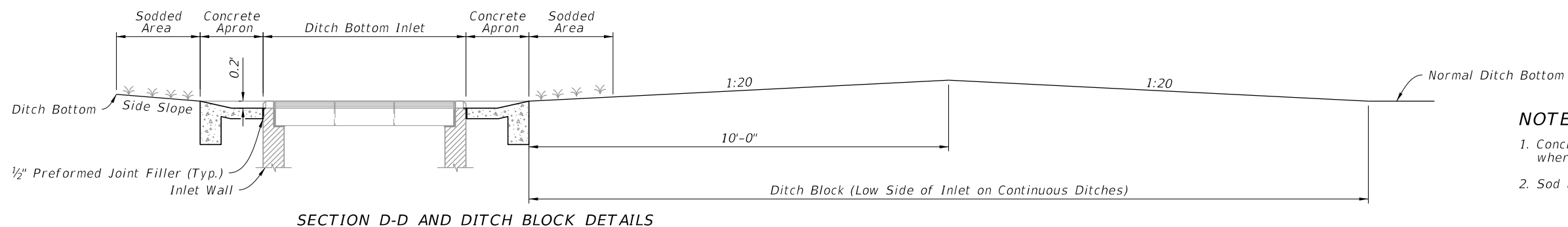
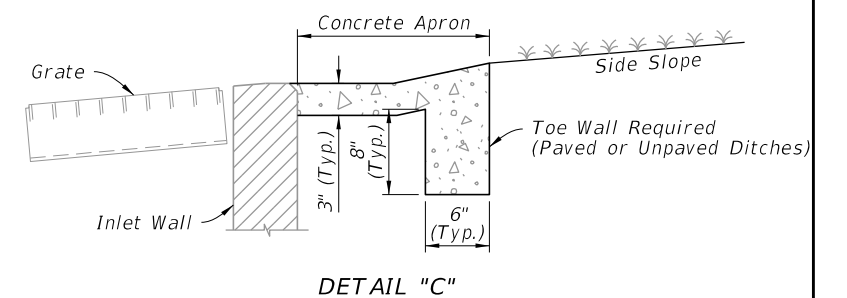
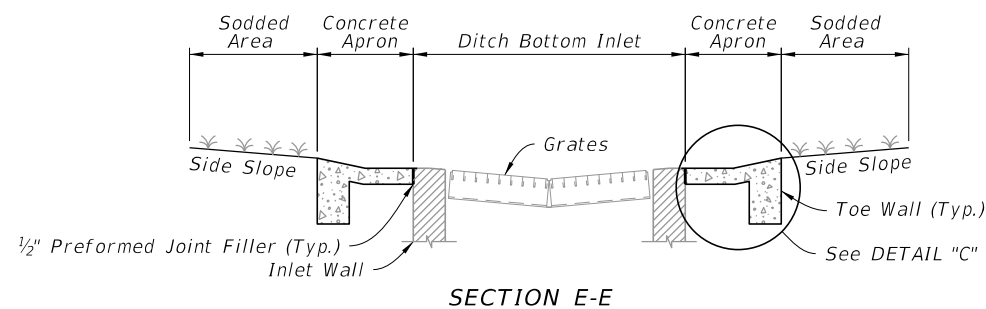
1. Grate, Concrete Apron, and Sod not shown in Plan View.
2. See Sheet 3 for Concrete Apron and Sodded Area details.
3. Construction joints permitted between these limits. See Index 425-001 for minimum dimensions.



- NOTES:**
1. Main Bars are 5"x $\frac{1}{4}$ " and are notched for Cross Bars.
 2. Cross Bars are 1 $\frac{3}{4}$ "x $\frac{1}{4}$ " and continuously welded at Main Bar Notches.
 3. Main Bars and Cross Bars are flush on top.



STEEL GRATE DETAIL



- NOTES:**
1. Concrete Apron to be installed only where called for in the Plans.
 2. Sod always required.

CONCRETE APRON AND SODDED AREA DETAILS

GRATE, CONCRETE APRON, AND SODDED AREA DETAILS

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FY 2027-28
STANDARD PLANS

DITCH BOTTOM INLET TYPE J

INDEX

425-054

SHEET

3 of 4

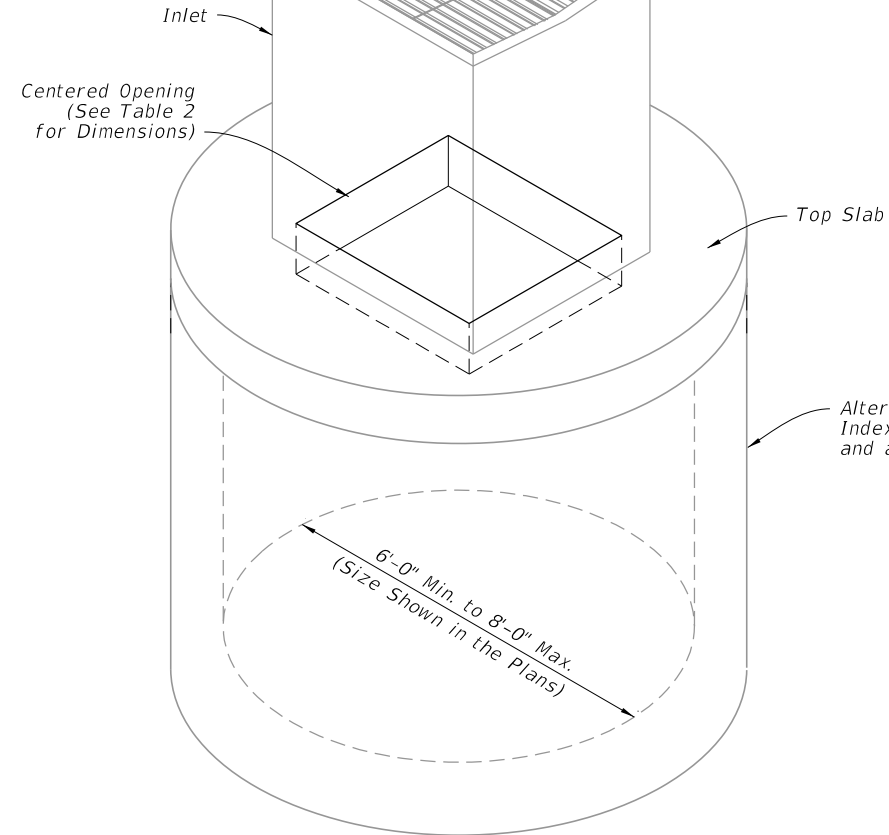


TABLE 2 TOP SLAB OPENING		
BOTTOM STRUCTURE DIAMETER	OPENING SIZE	
	Min.	Max.
6'-0" to 8'-0"	3'-8" x 4'-2"	3'-10" x 4'-2"

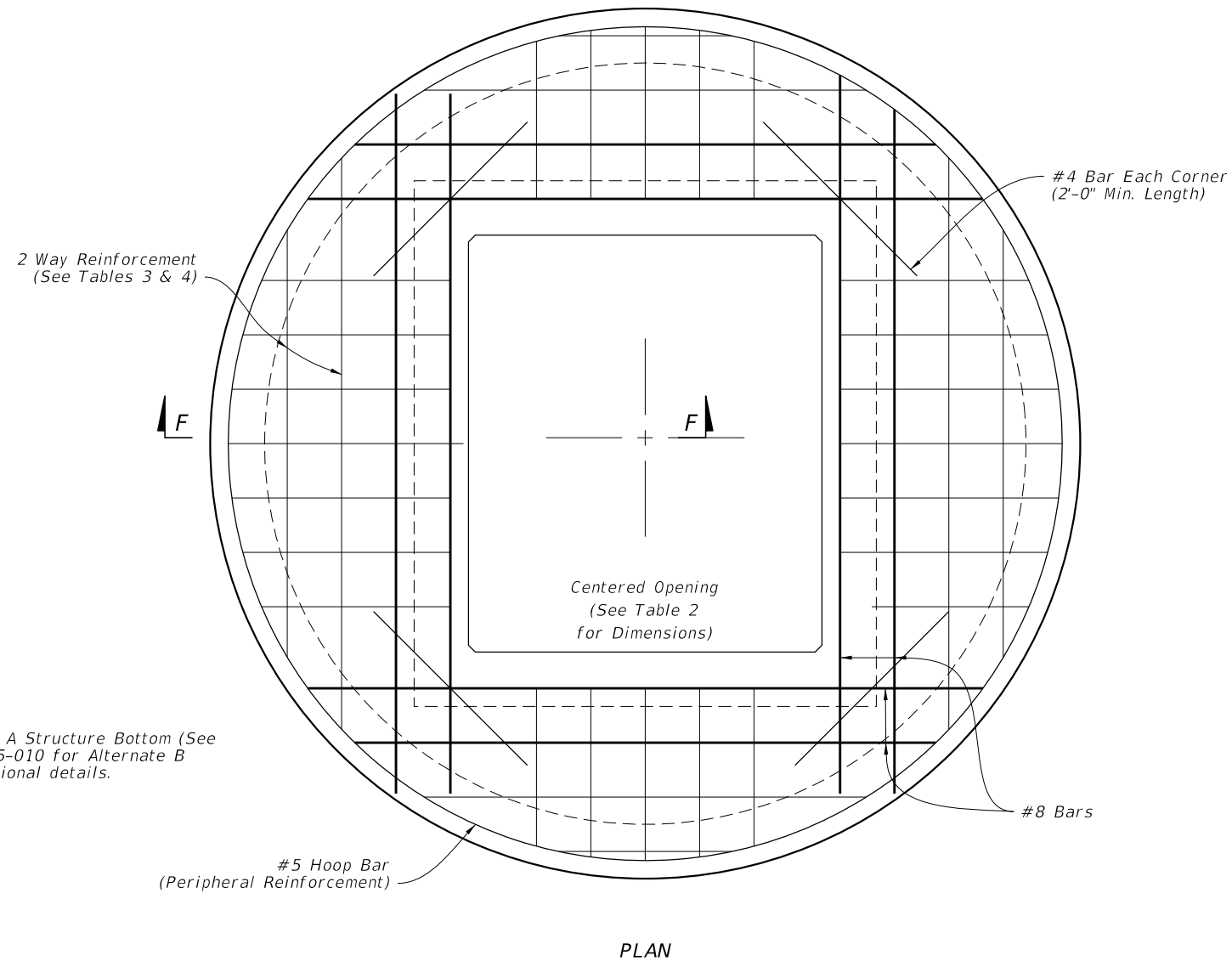
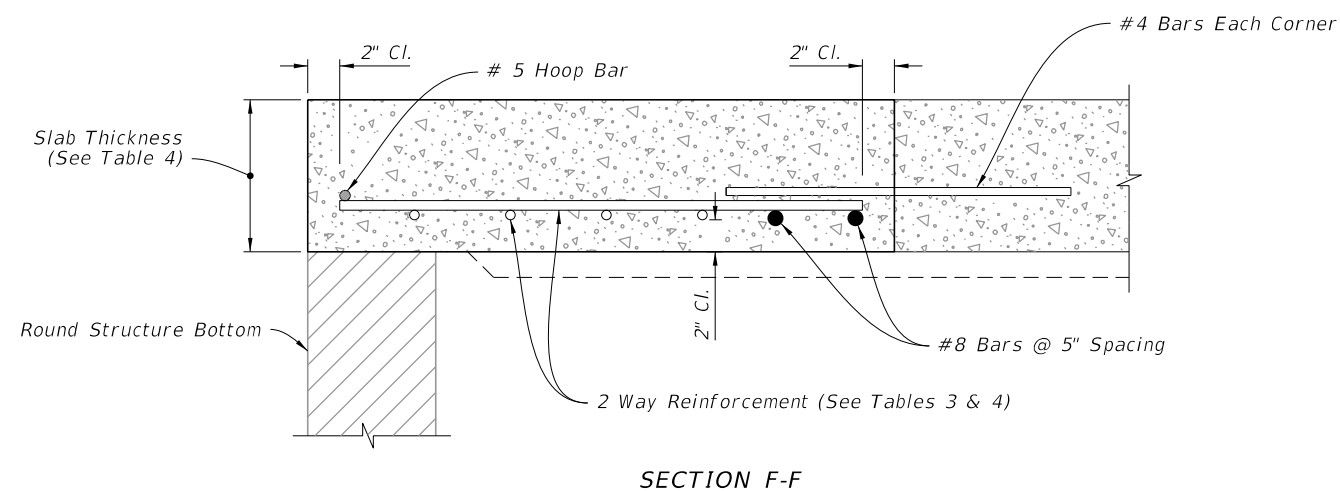


TABLE 3 TOP SLAB REINFORCING SCHEDULE	
<i>SCHEDULE</i>	<i>GRADE 60 (BAR) OR 65 KSI & 70 KSI (WIRE REINFORCING) In.²/ft.</i>
<i>A</i>	<i>0.20</i>
<i>B</i>	<i>0.24</i>
<i>C</i>	<i>0.37</i>
<i>D</i>	<i>0.53</i>
<i>E</i>	<i>0.73</i>
<i>F</i>	<i>1.06</i>
<i>G</i>	<i>1.45</i>

TABLE 4 TOP SLAB WITH CENTERED OPENING		
STRUCTURE DEPTH	SLAB THICKNESS	REINFORCING (2 WAY) SCHEDULE
SIZE: 6'-0"		
0.5' < 8'	9 1/2"	B
8' < 18'	9 1/2"	C
18' < 30'	9 1/2"	D
30' < 37'	9 1/2"	E
37' - 40'	9 1/2"	G
SIZE: 8'-0"		
≥ 0.5' < 9'	11 1/2"	C
9' < 15'	11 1/2"	D
15' < 23'	11 1/2"	E
23' < 33'	11 1/2"	E
33' - 40'	11 1/2"	G



ISOMETRIC VIEW

= TOP SLAB REINFORCEMENT DETAILS

ALTERNATE A STRUCTURE BOTTOM - TOP SLAB DETAILS

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2027-28 STANDARD PLANS	DITCH BOTTOM INLET TYPE J	INDEX 425-054	SHEET 4 of 4
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