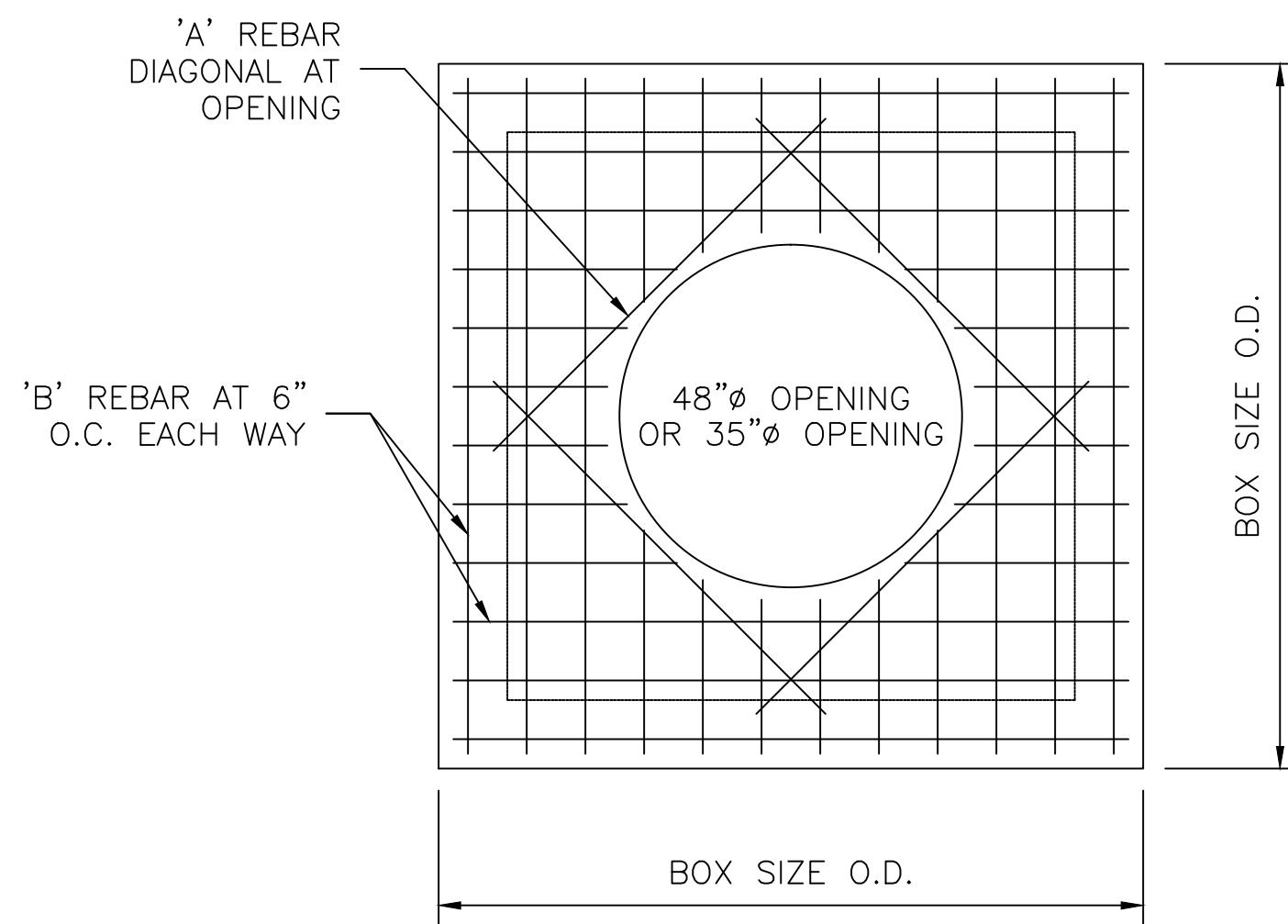
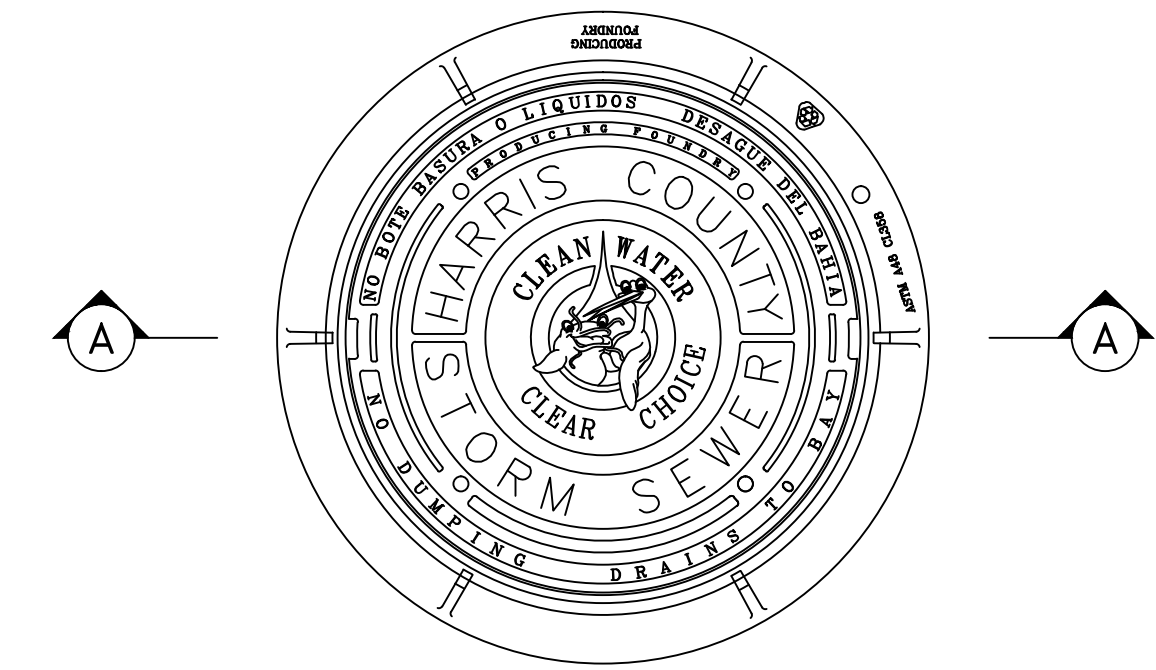


BOX SIZE I.D.	MAX. OPENING SIZE	FLAT SLAB THK.	WALL THK.	BASE THK.	BAR 'A'	BAR 'B'	BAR 'C'	*BAR 'D'
4'x4'	48"	8"	6"	6"	#4	#4	#4	#4
5'x5'	60"	10"	6"	8"	#5	#5	#4	#4
6'x6'	72"	10"	8"	8"	#5	#5	#5	#5
7'x7'	84"	10"	8"	8"	#5	#5	#5	#5
8'x8'	96"	10"	8"	8"	#5	#5	#5	#5

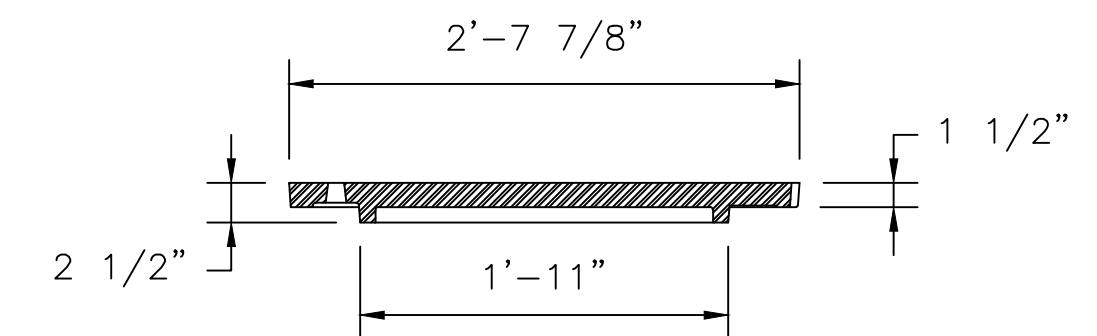
* FOR 7'x7' AND 8'x8' BOX SIZE: TWO LAYERS OF STEEL REQUIRED. (FOR DEPTHS GREATER THAN 15')



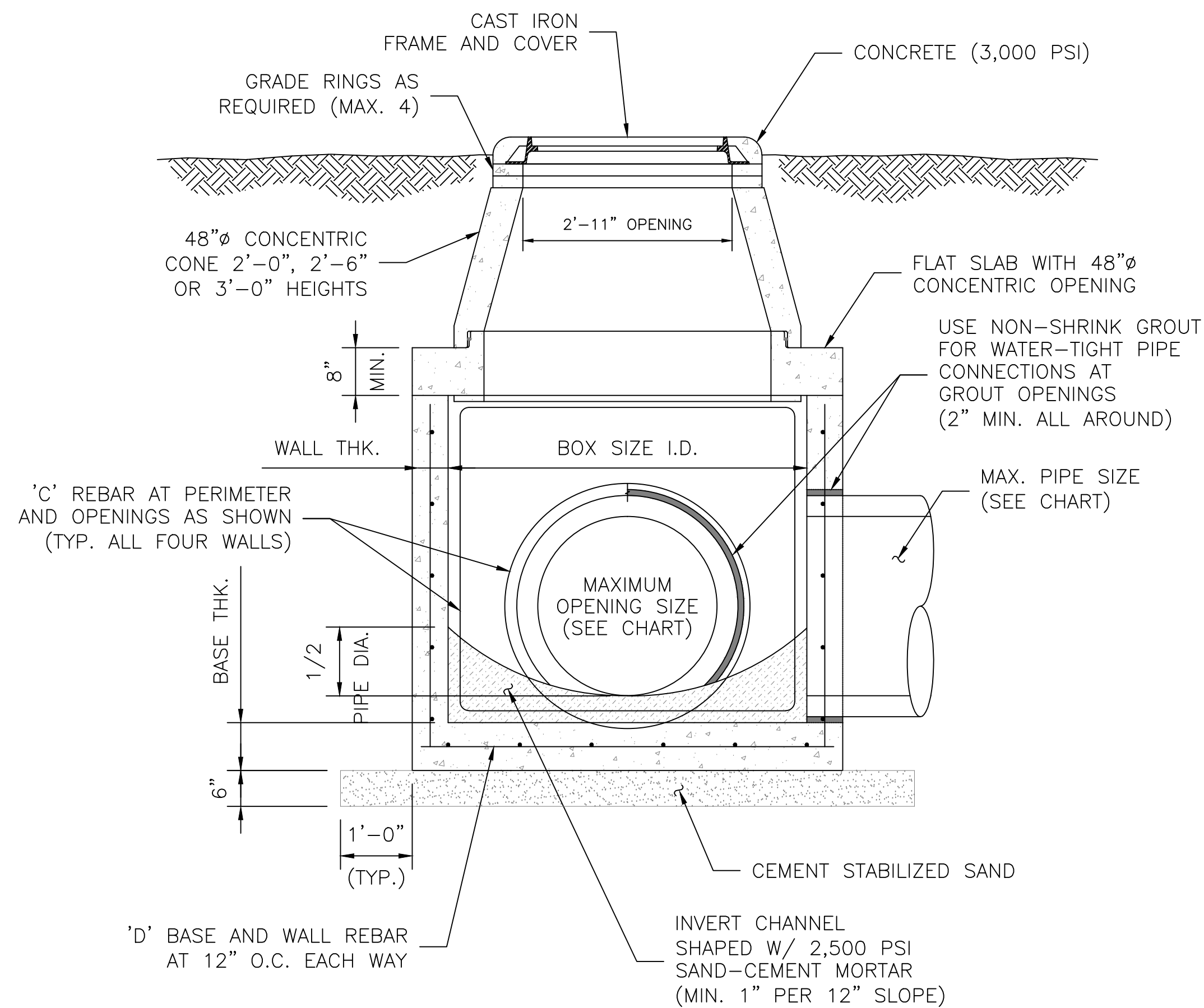
PLAN VIEW
FLAT SLAB WITH OPENING
SCALE: 1"=1'-6"



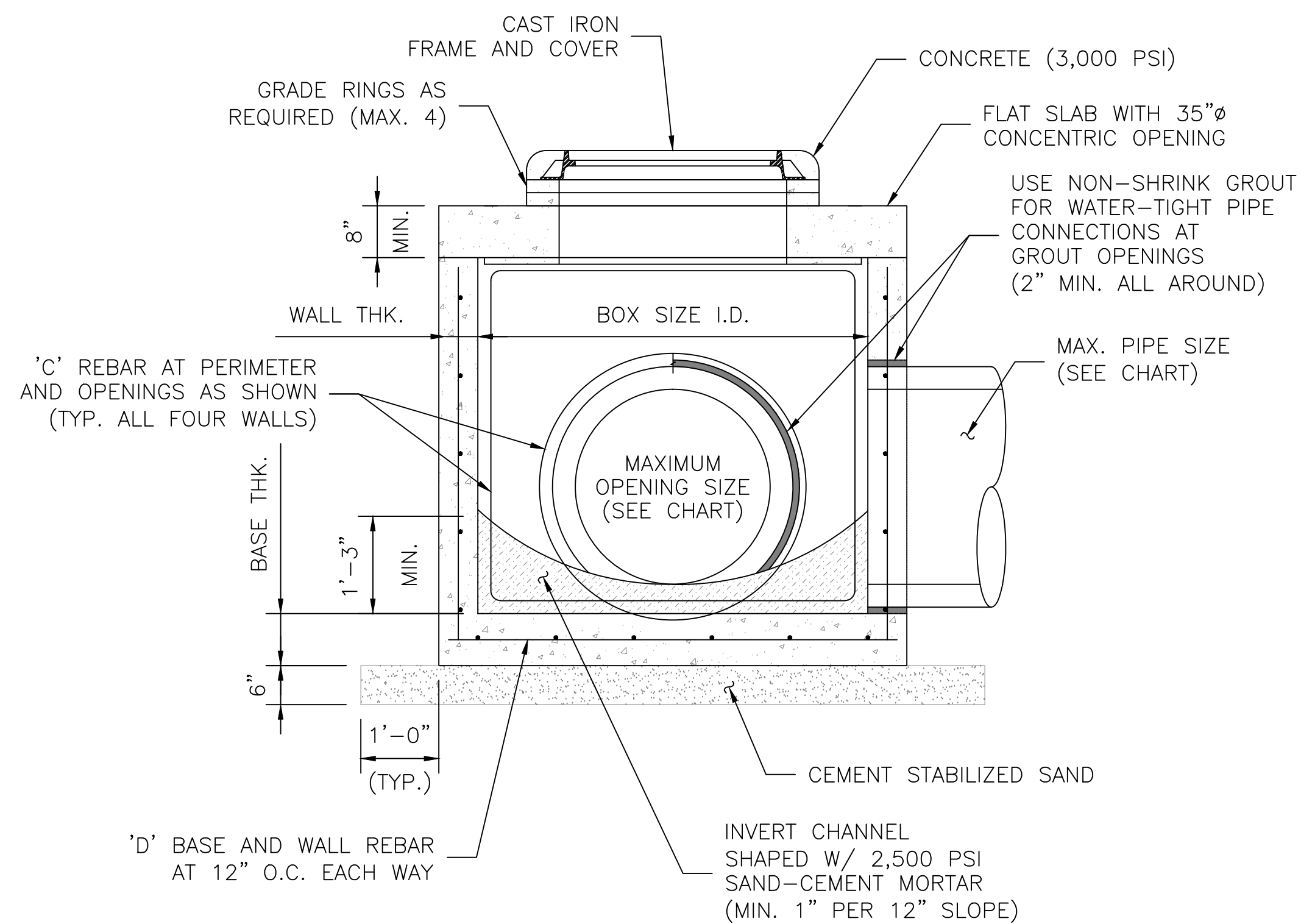
PLAN VIEW
FRAME AND COVER
SCALE: 1"=1'-0"



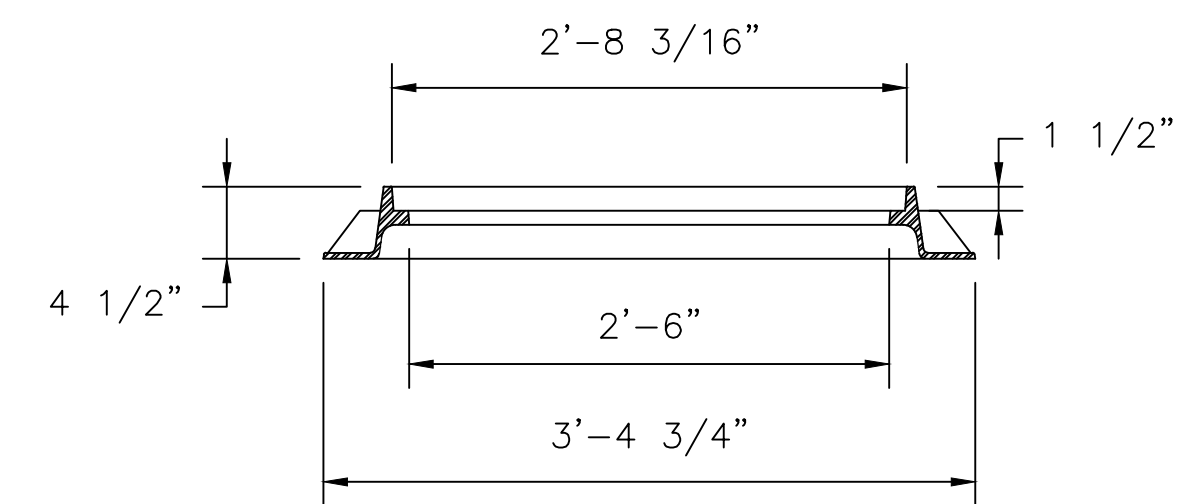
COVER SECTION A-A
SCALE: 1"=1'-0"



JUNCTION BOX/MANHOLE
WITH CONCENTRIC CONE
SCALE: 1"=1'-6"



JUNCTION BOX/MANHOLE
WITH FLAT SLAB
SCALE: 1"=1'-6"



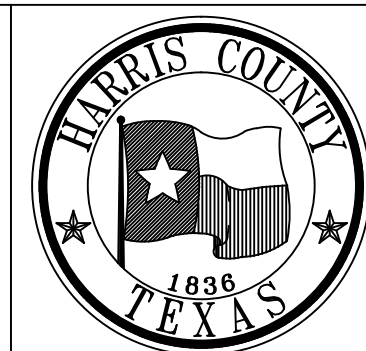
FRAME SECTION A-A
SCALE: 1"=1'-0"

GENERAL NOTES:

- CONSTRUCTION AND MATERIALS SHALL MEET REQUIREMENTS OF ITEM 471 "PRECAST CONCRETE MANHOLES".
- CONCRETE FOR JUNCTION BOX: MINIMUM 4,000 PSI IN 28 DAYS.
- HS-20 LOADING; MANHOLE DESIGN SHALL MEET OR EXCEED ASTM C478 AND ASTM C913 REQUIREMENTS.
- JOINT SEALANT: RAM-NEK GASKET MATERIAL.
- FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS MODEL V-1420 OR APPROVED EQUAL.
- SHOP DRAWINGS WITH MANUFACTURER'S CERTIFICATION SHALL BE SUBMITTED FOR ENGINEER'S APPROVAL.
- KNOCK-OUTS ARE NOT PERMISSIBLE FOR THE PRECAST JUNCTION BOXES OR MANHOLES.

NO.	REVISIONS	DATE	NAME
1	UPDATED DEPARTMENT NAME	2/17/15	RS
2	ADDED NOTE 7	3/24/15	RS

HARRIS COUNTY
ENGINEERING DEPARTMENT



CONSULTANT
LOGO/INFORMATION

FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE:
NOT INTENDED FOR CONSTRUCTION,
BIDDING, OR PERMIT PURPOSES
ENGINEER:
P.E. SERIAL No.
DATE:

PROJECT TITLE:		HCD STANDARD
DRAWN BY: JDZ	SHEET DESCRIPTION: PRECAST CONCRETE JUNCTION BOX	19
CK'D BY: PDG		
SCALE: AS NOTED	MANHOLE DETAILS	SHEET NO: /
DATE: 4/4/13	APPROVED BY:	