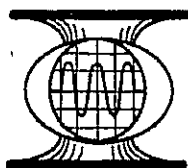


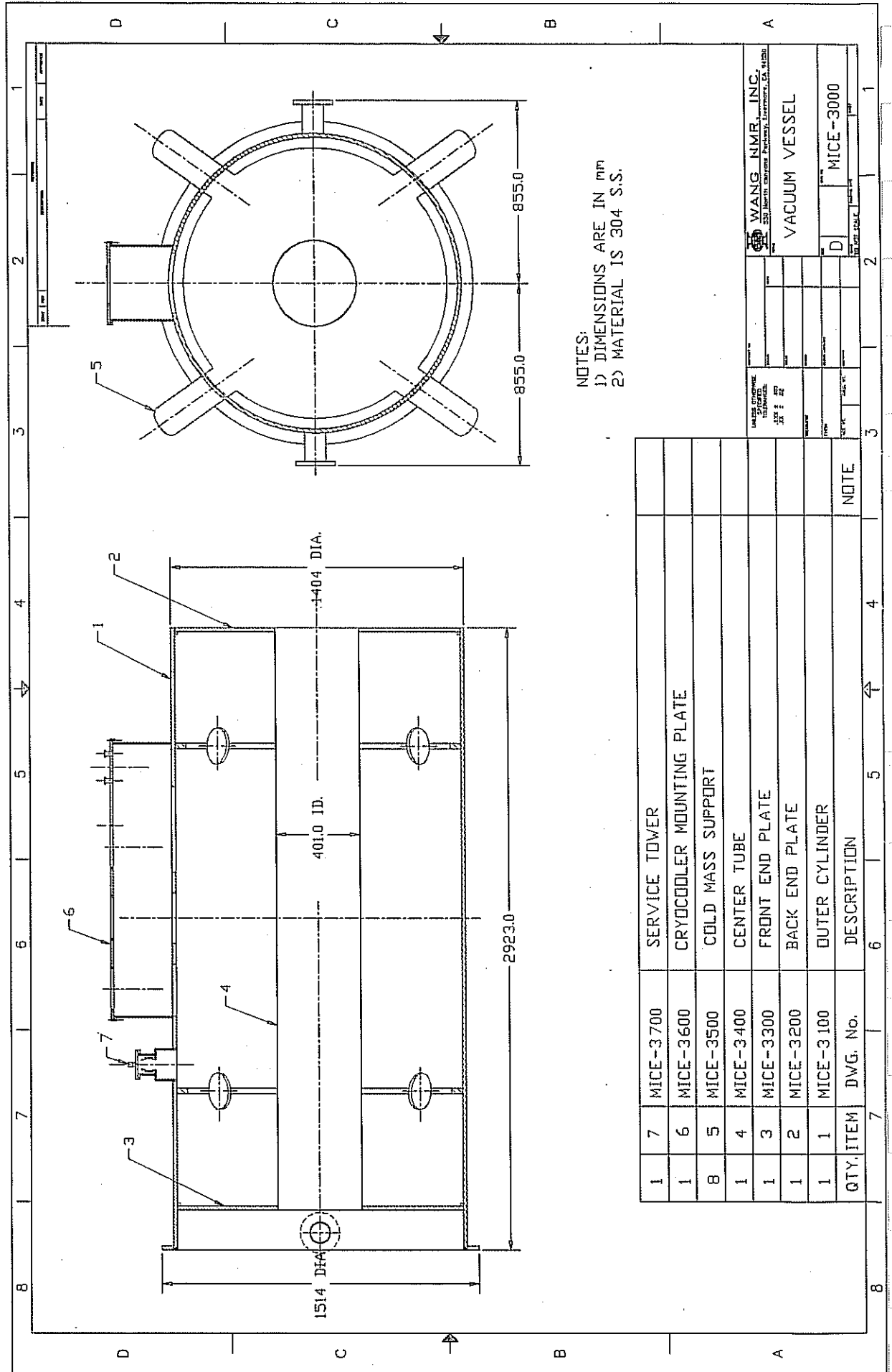
Appendix III-3-1

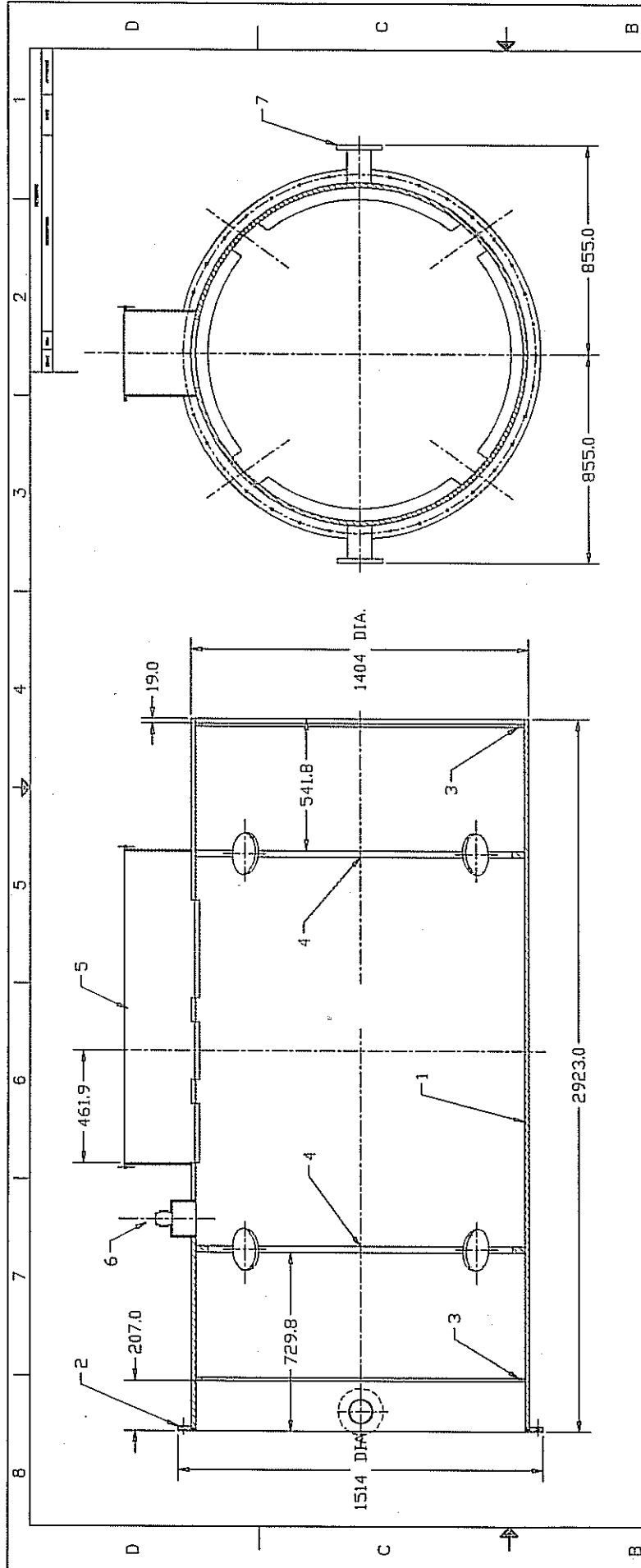
Engineering Design Drawing For 300 K Vacuum Vessel



Wang NMR Inc.

• 550 North Canyons Parkway • Livermore, CA 94551

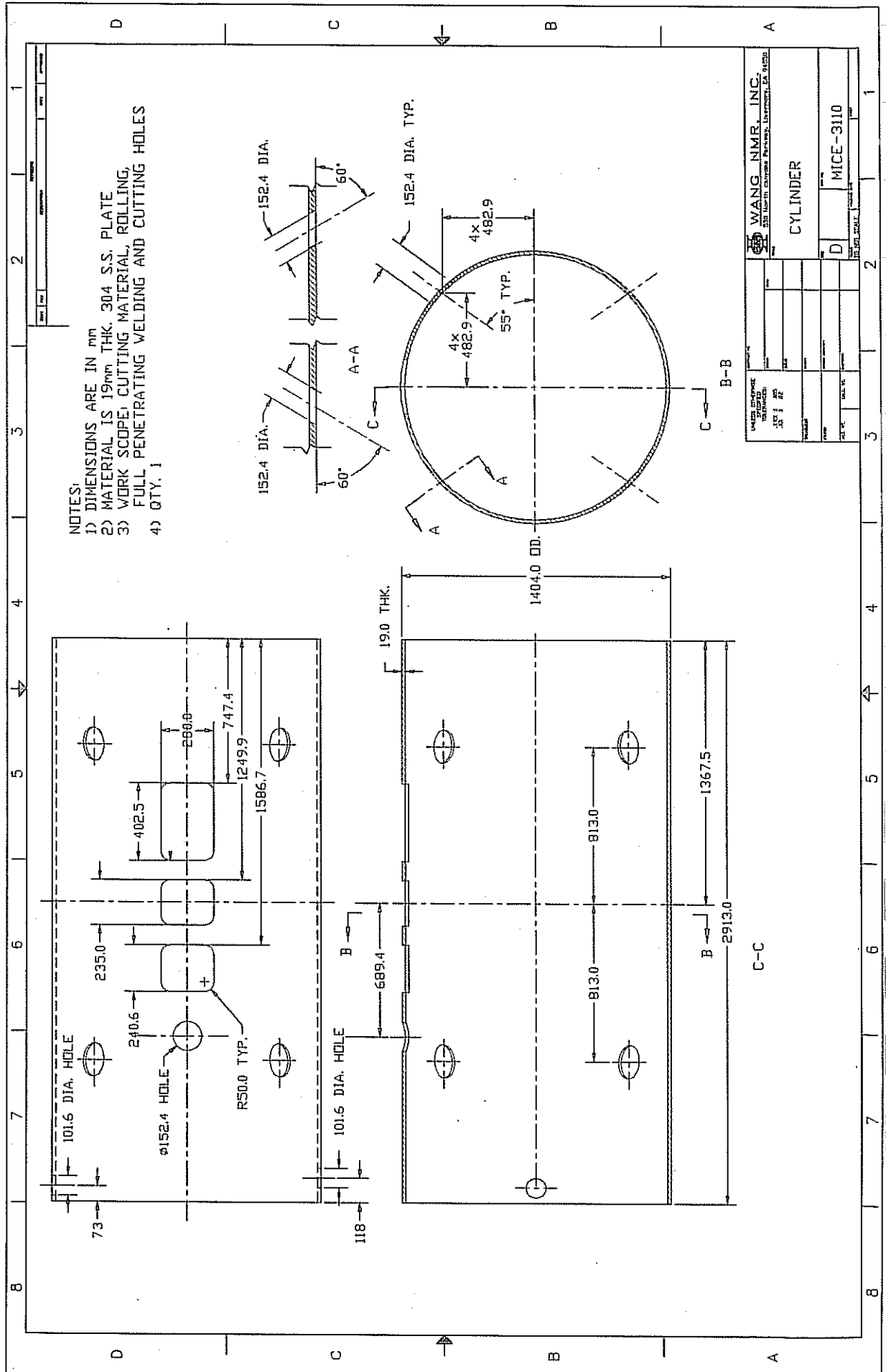


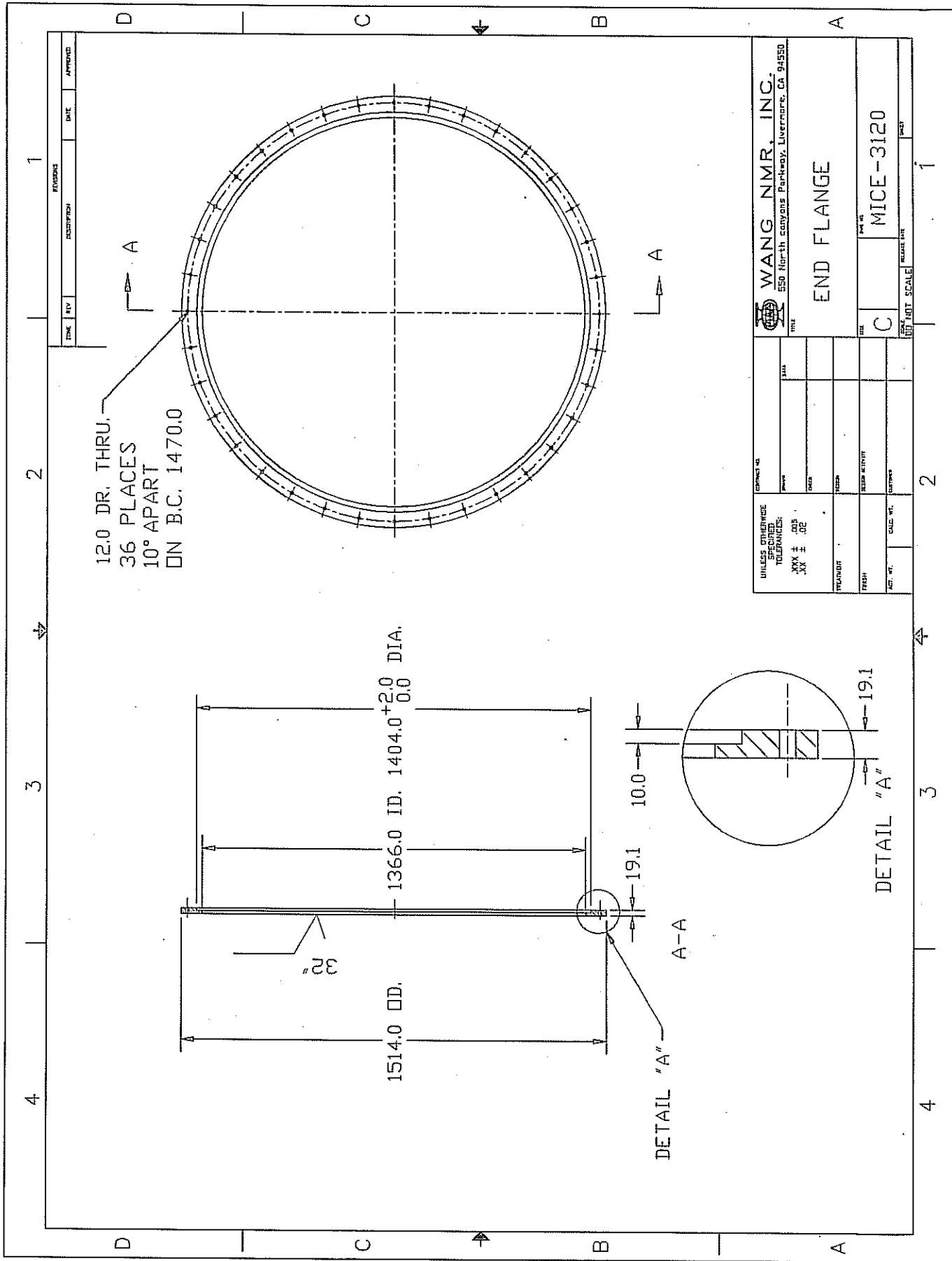


NOTES:
 1) DIMENSIONS ARE IN MM
 2) MATERIAL IS 304 S.S.

QTY.	ITEM	DWG. No.	DESCRIPTION	NOTE
2	7	MICE-3 170	FLANGE	
1	6	MICE-3 160	LHe INPUT TOWER	
1	5	MICE-3 150	CRYOCOOLER TOWER	
2	4	MICE-3 140	REINFORCEMENT	
2	3	MICE-3 130	STOP RING	
1	2	MICE-3 120	END FLANGE	
1	1	MICE-3 110	CYLINDER	

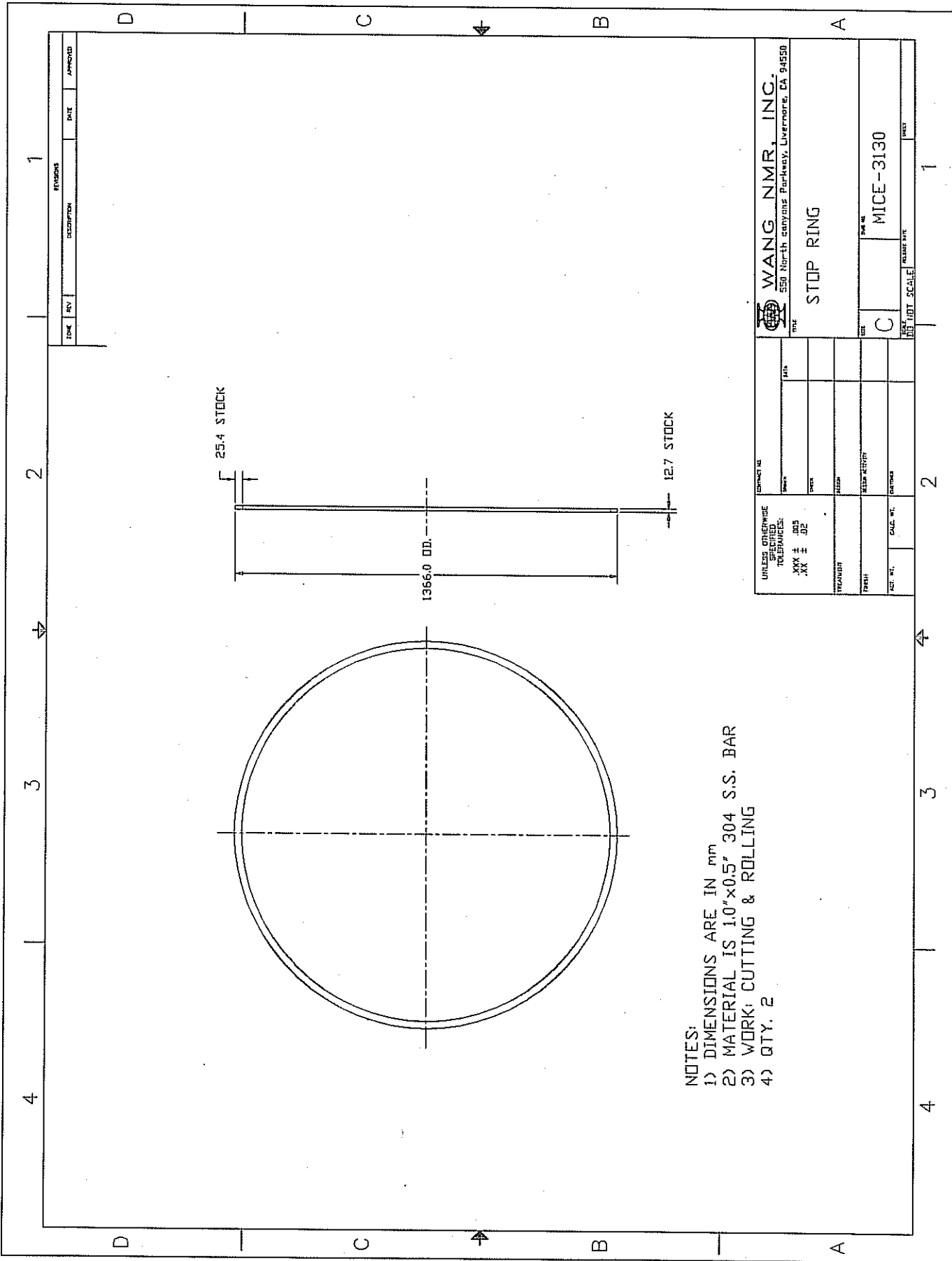
WANG NMR, INC.		250 NORTH CENTRAL EXPRESS, UNIVERSITY, CA 94720	
PROJECT NO.		DATE	
DRAWN BY		CHECKED BY	
DESIGNED BY		APPROVED BY	
MATERIAL		MATERIAL	
QTY.		QTY.	
UNIT		UNIT	
TOTAL		TOTAL	
MICE-3100		MICE-3100	





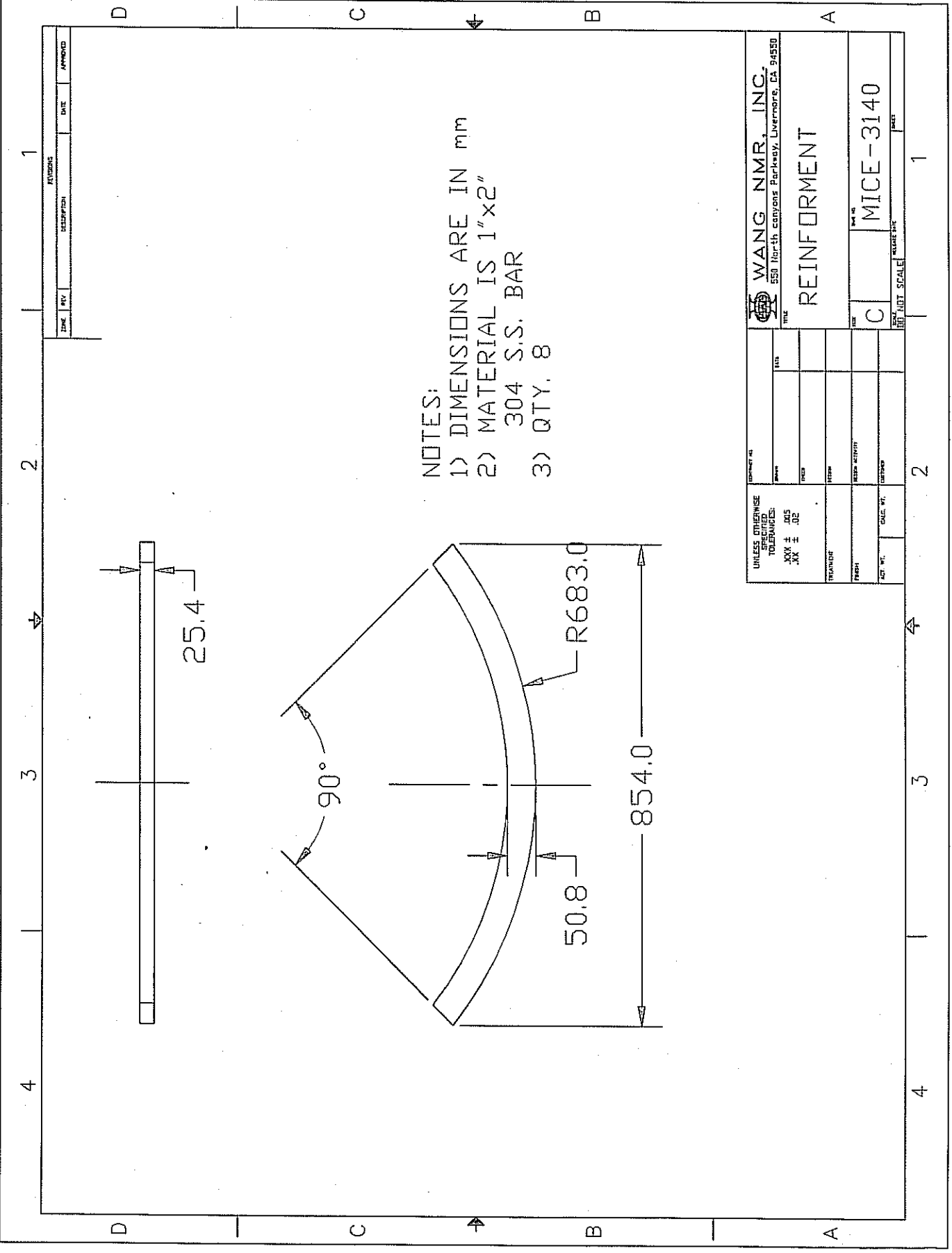
DATE	REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± .05 XX ± .02		COMPACT 45		WANG NMR, INC. 550 North canyons Parkway, Livermore, CA 94550	
FINISH	HEAD	TAIL	SECTION	SIZE	ITEM NO.
ACT. WT.	CALL. WT.	SECTION	SECTION	SECTION	SECTION
TITLE			END FLANGE		
ITEM NO.			MICE-3120		
SCALE			1		



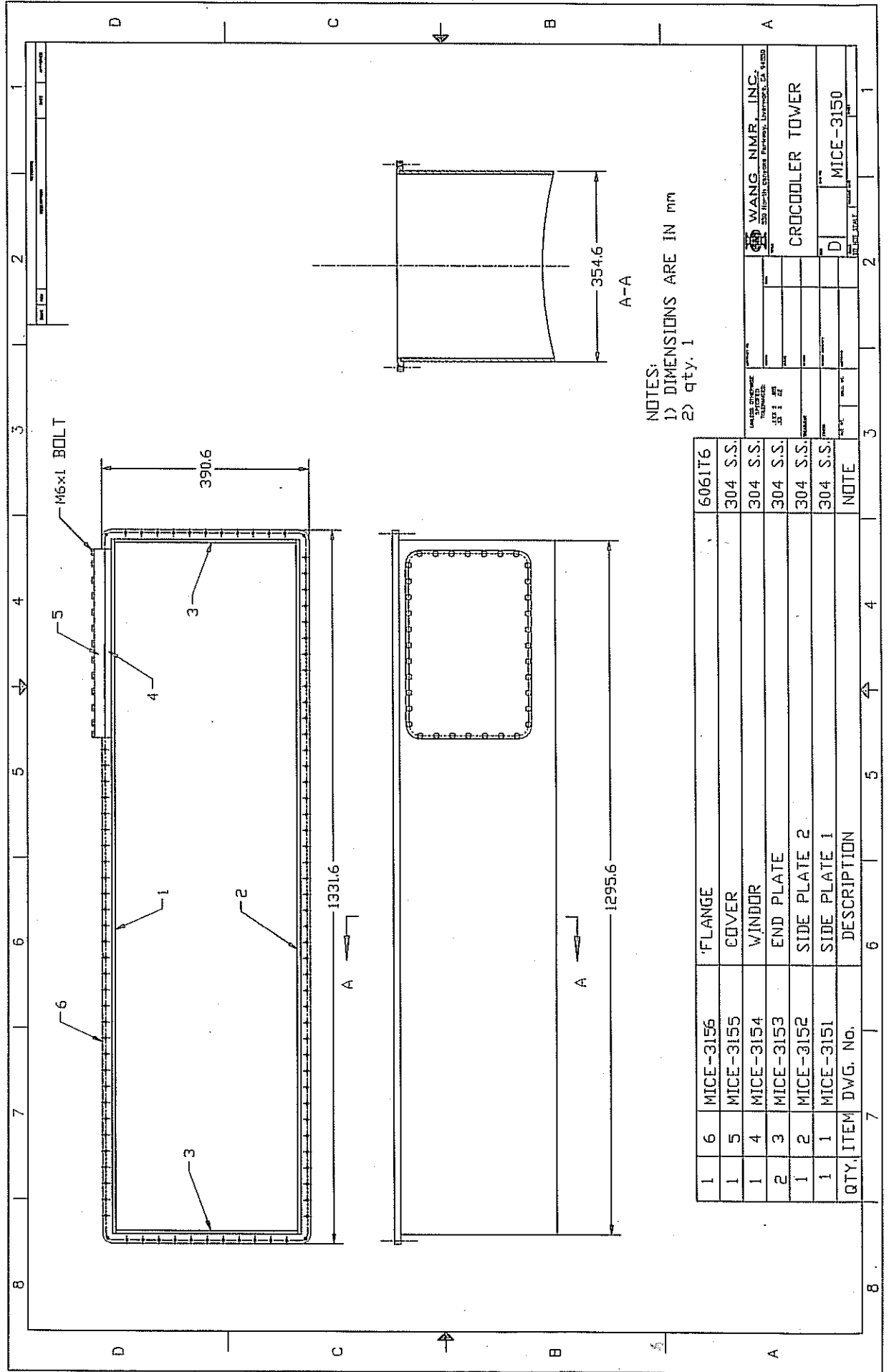
NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 1.0"x0.5" 304 S.S. BAR
 3) WORK: CUTTING & ROLLING
 4) QTY. 2

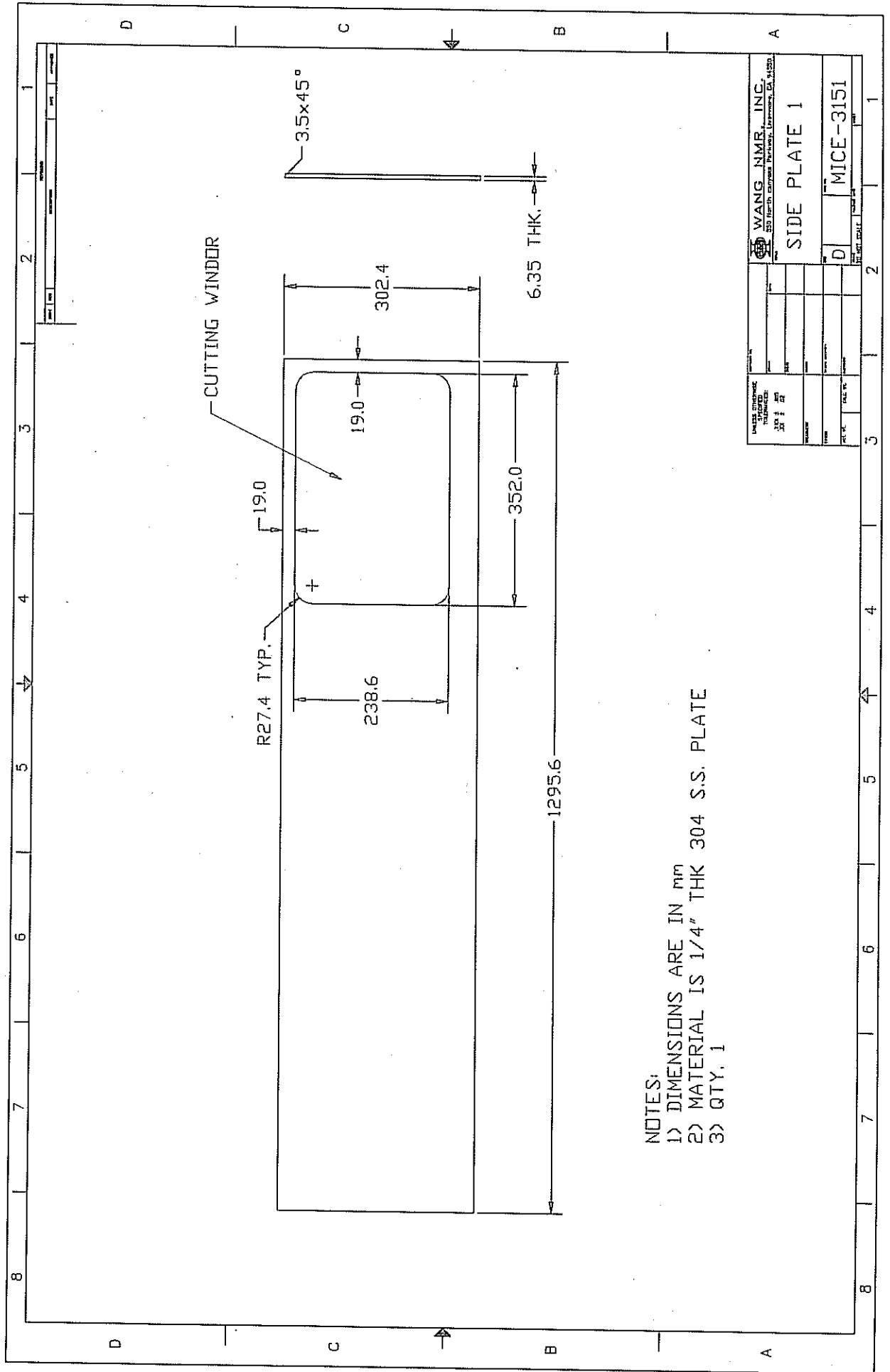
UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± .005 XX ± .02		WANG NMR, INC. 550 North canyons Parkway, Livermore, CA 94550	
TREATMENT		STOP RING	
FINISH	SCALE: 1:1	SIZE	MICE-3130
FACT. WT.	DATE: 11/11/88	REV	1
CUSTOMER	RELEASE DATE	1	



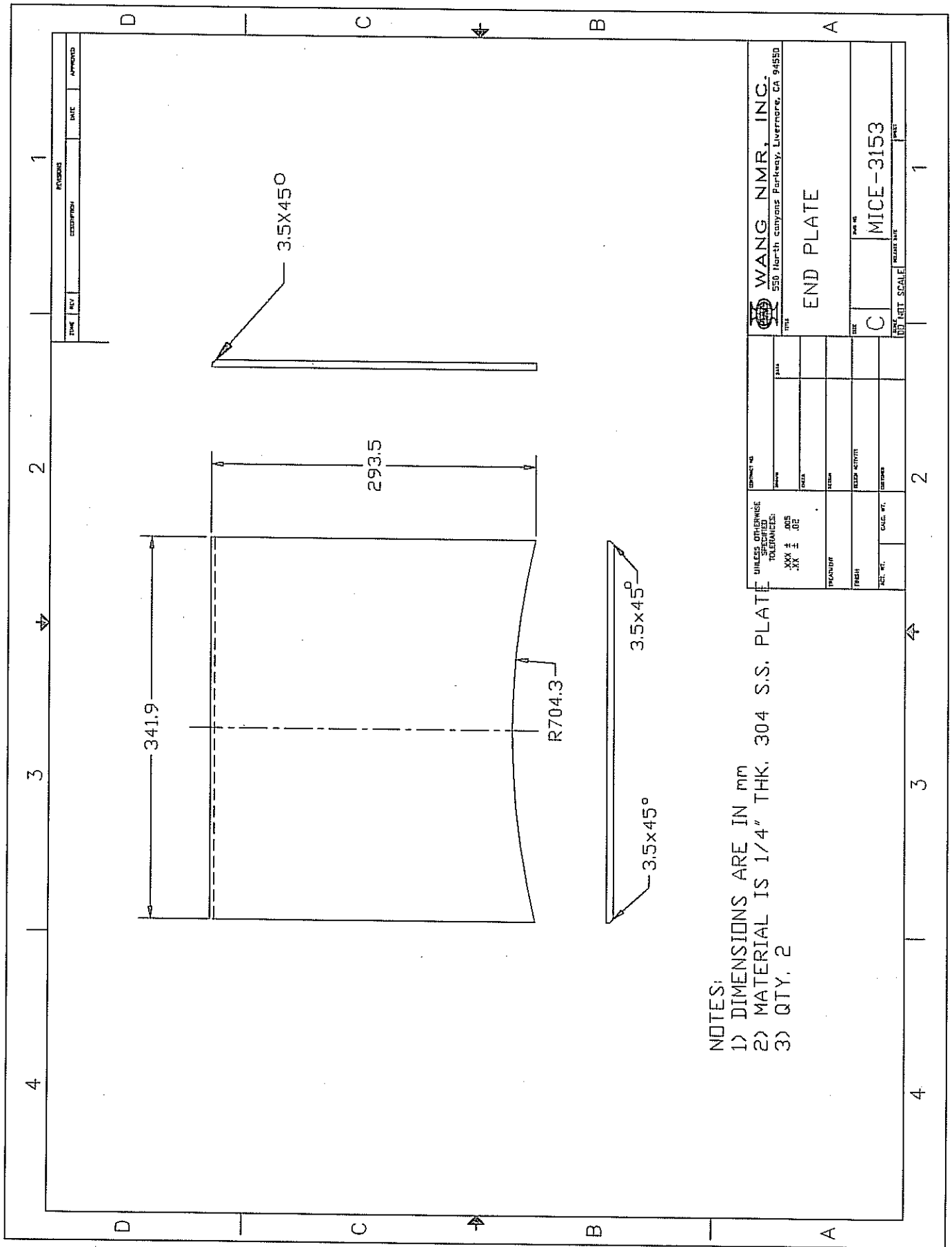
NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 1"x2"
 304 S.S. BAR
 3) QTY. 8

UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± .015 .XX ± .02		WANG NMR, INC. 550 North canyons Parkway, Livermore, CA 94550	
DATE	REV	DESCRIPTION	APPROVED
TITLE		REINFORCEMENT	
DESIGNER	CHECKED	DATE	SCALE
PROJECT	NO.	MICE-3140	
SHEET		1	





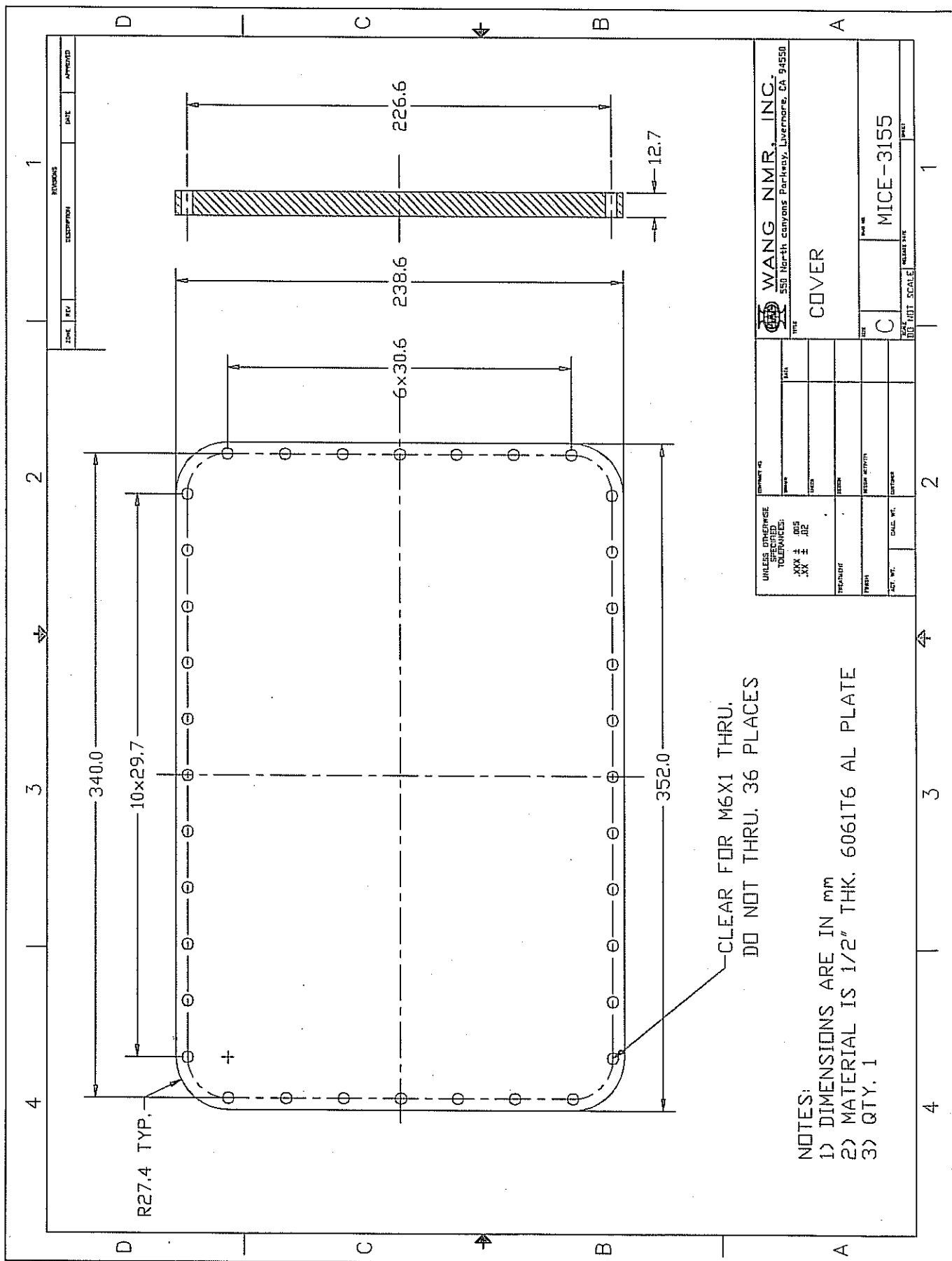
- NOTES:
- 1) DIMENSIONS ARE IN mm
 - 2) MATERIAL IS 1/4" THK 304 S.S. PLATE
 - 3) QTY, 1

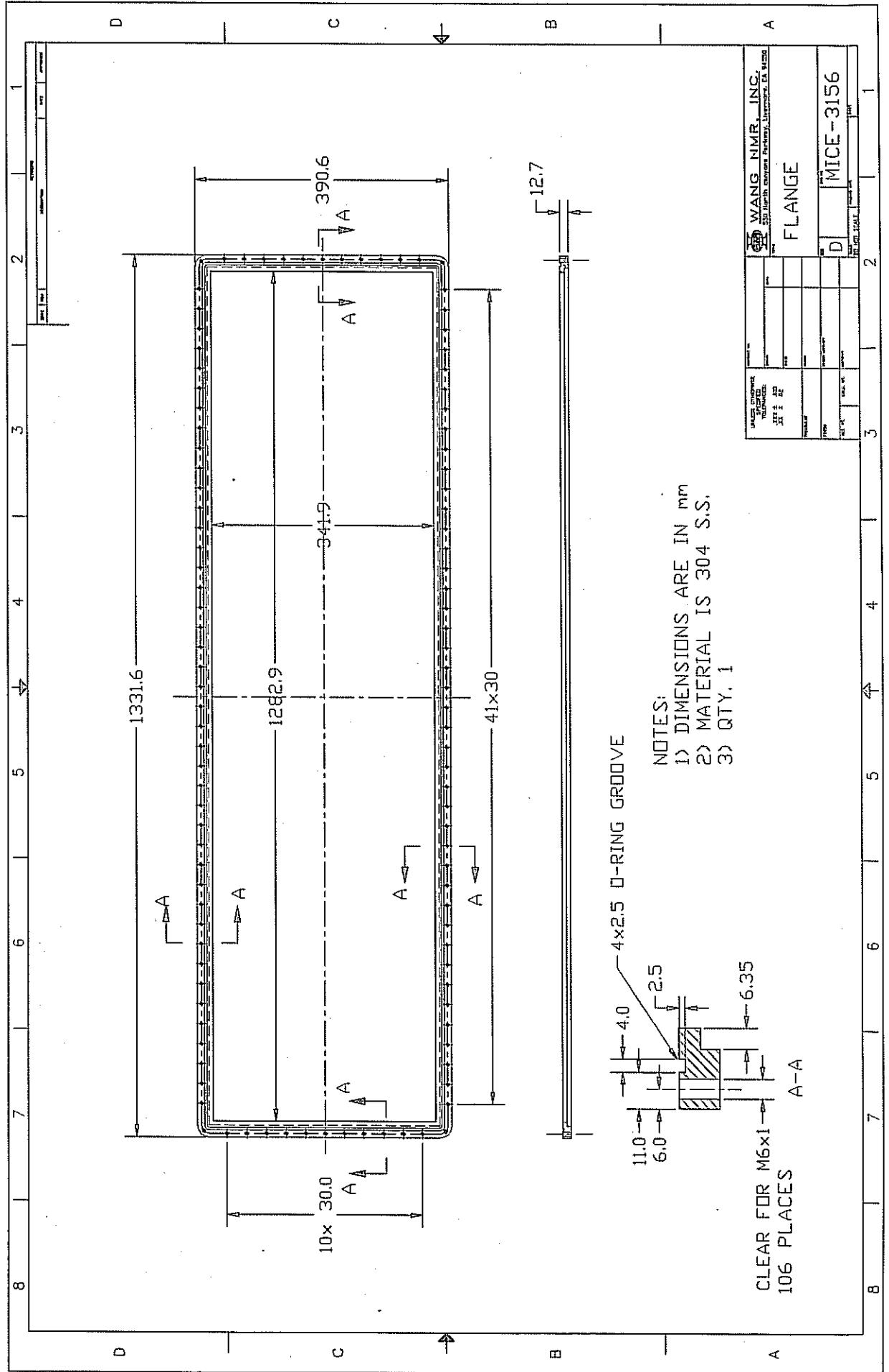


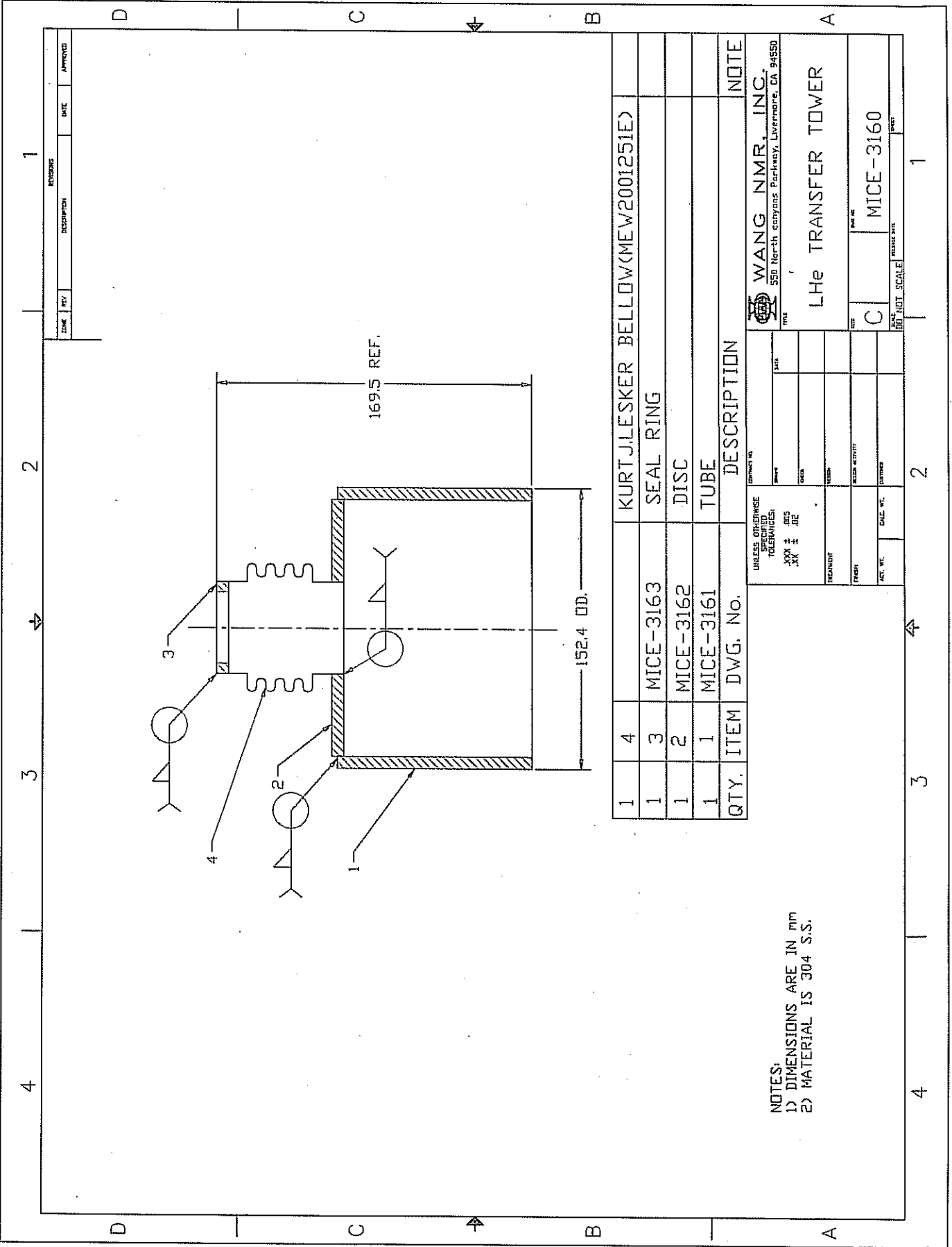
NOTES:

- 1) DIMENSIONS ARE IN MM
- 2) MATERIAL IS 1/4" THK. 304 S.S. PLATE
- 3) QTY. 2

UNLESS OTHERWISE SPECIFIED:		TOLERANCES:		XXX ± .005		XX ± .02	
FINISH	TEXTURE	WELD	WELD	WELD	WELD	WELD	WELD
NET WT.	CALC. WT.	SCALE		1/4" = 1"		1/4" = 1"	
WANG NMR, INC.				550 North Canyon Parkway, Livermore, CA 94550			
END PLATE				MICE-3153			



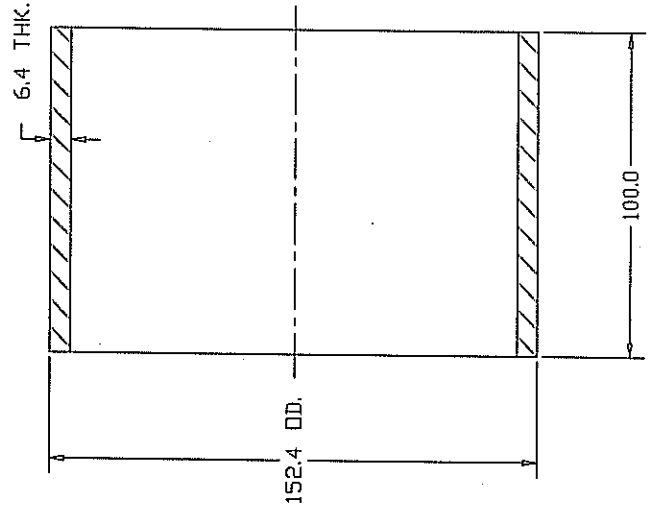




NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 304 S.S.

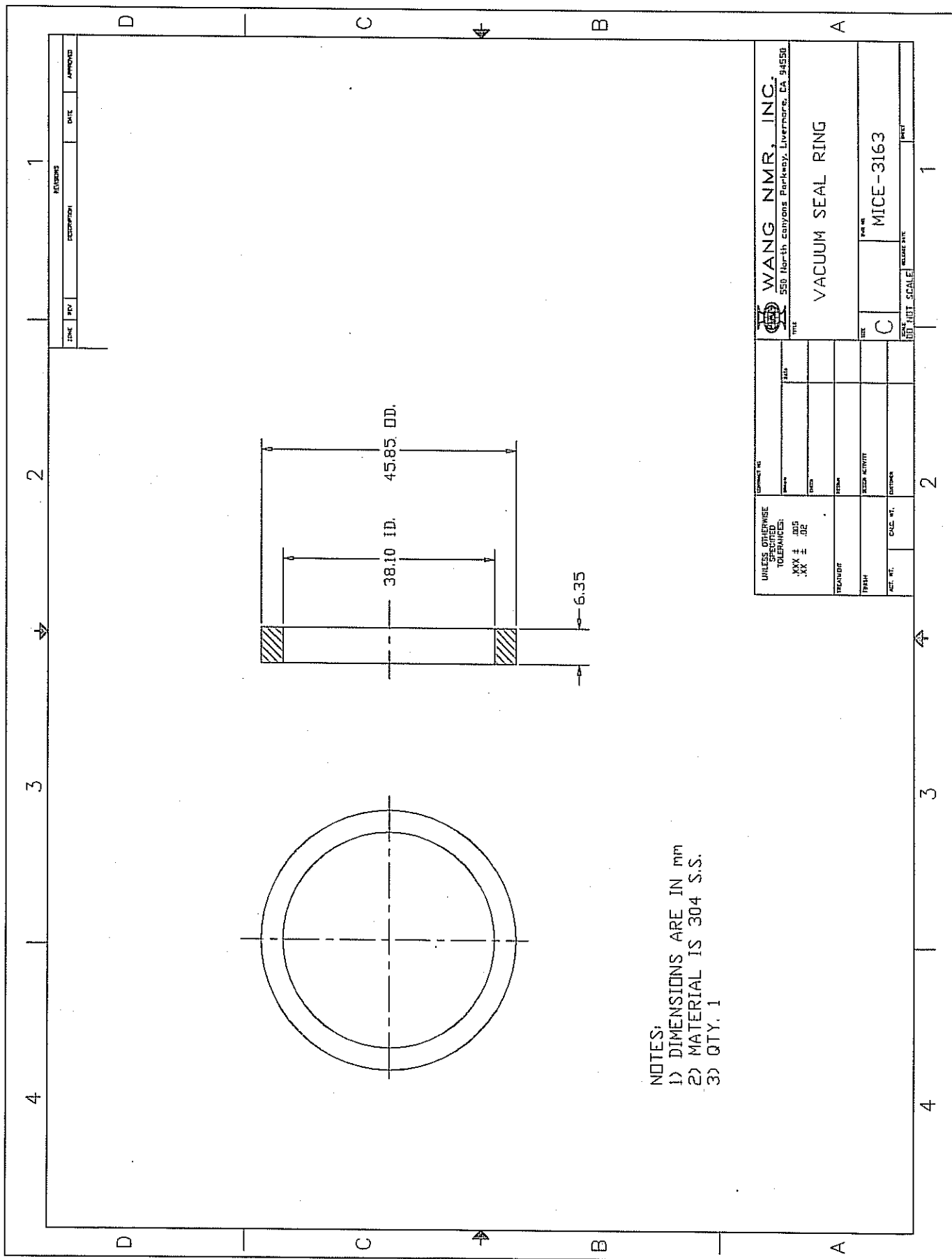
QTY.	ITEM	DWG. No.	DESCRIPTION	NOTE
1	4		KURTJLESKER BELLOW(MEW2001251E)	
1	3	MICE-3163	SEAL RING	
1	2	MICE-3162	DISC	
1	1	MICE-3161	TUBE	

UNLESS OTHERWISE SPECIFIED, TOLERANCES:		WANG NMR, INC.	
XX ± .05	XX ± .02	550 North Canyon Parkway, Livermore, CA 94550	
XX ± .01	XX ± .01		
TOLERANCE		LHe TRANSFER TOWER	
ACT. WT.	CALC. WT.	DATE	REV. NO.
		C	MICE-3160
SCALE		RELEASE DATE	
1:1		1	



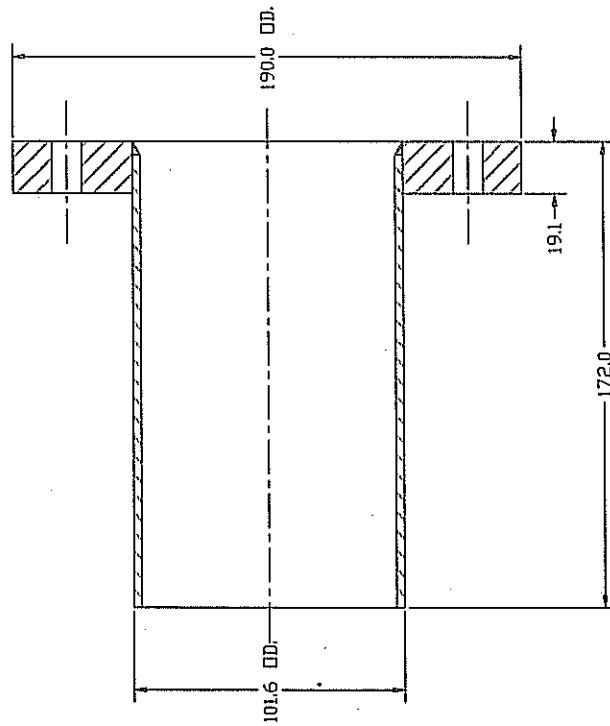
NOTES:
1) DIMENSIONS ARE IN mm
2) MATERIAL IS 6" OD. 0.25" WALL 304 S.S. TUBE
3) QTY. 1

[illegible]

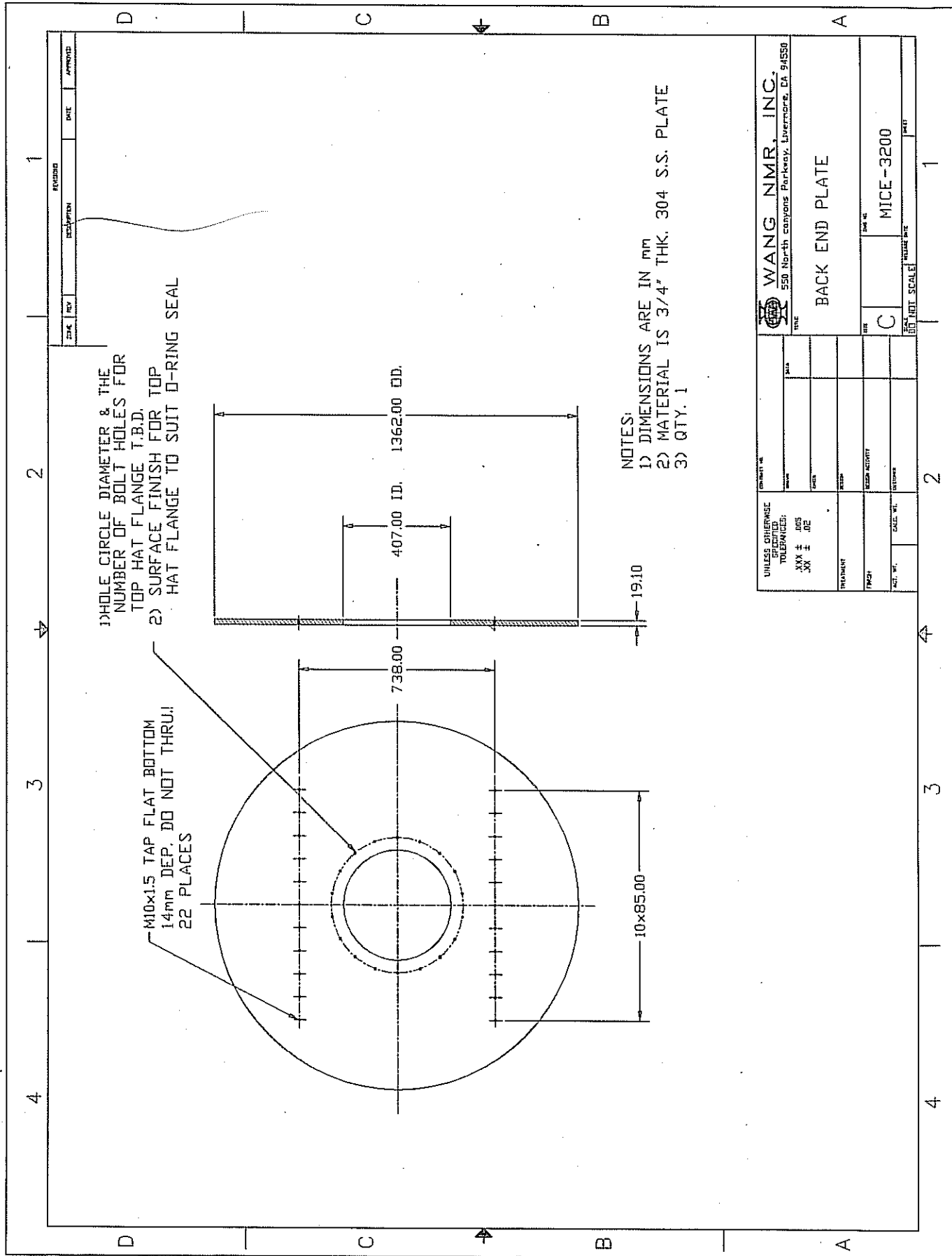


NOTES:
 1) DIMENSIONS ARE IN MM
 2) MATERIAL IS 304 S.S.
 3) QTY. 1

UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± .005 XX ± .02		WANG NMR, INC. 550 North canyons Parkway, Livermore, CA 94550	
DATE	REV	DESCRIPTION	APPROVED
TITLE		VACUUM SEAL RING	
DRAWN		CHECKED	
DESIGNED		MATERIAL	
TREATMENT		FINISH	
ACT. WT.		CALC. WT.	
NET WT.		GROSS WT.	
SCALE		SHEET	

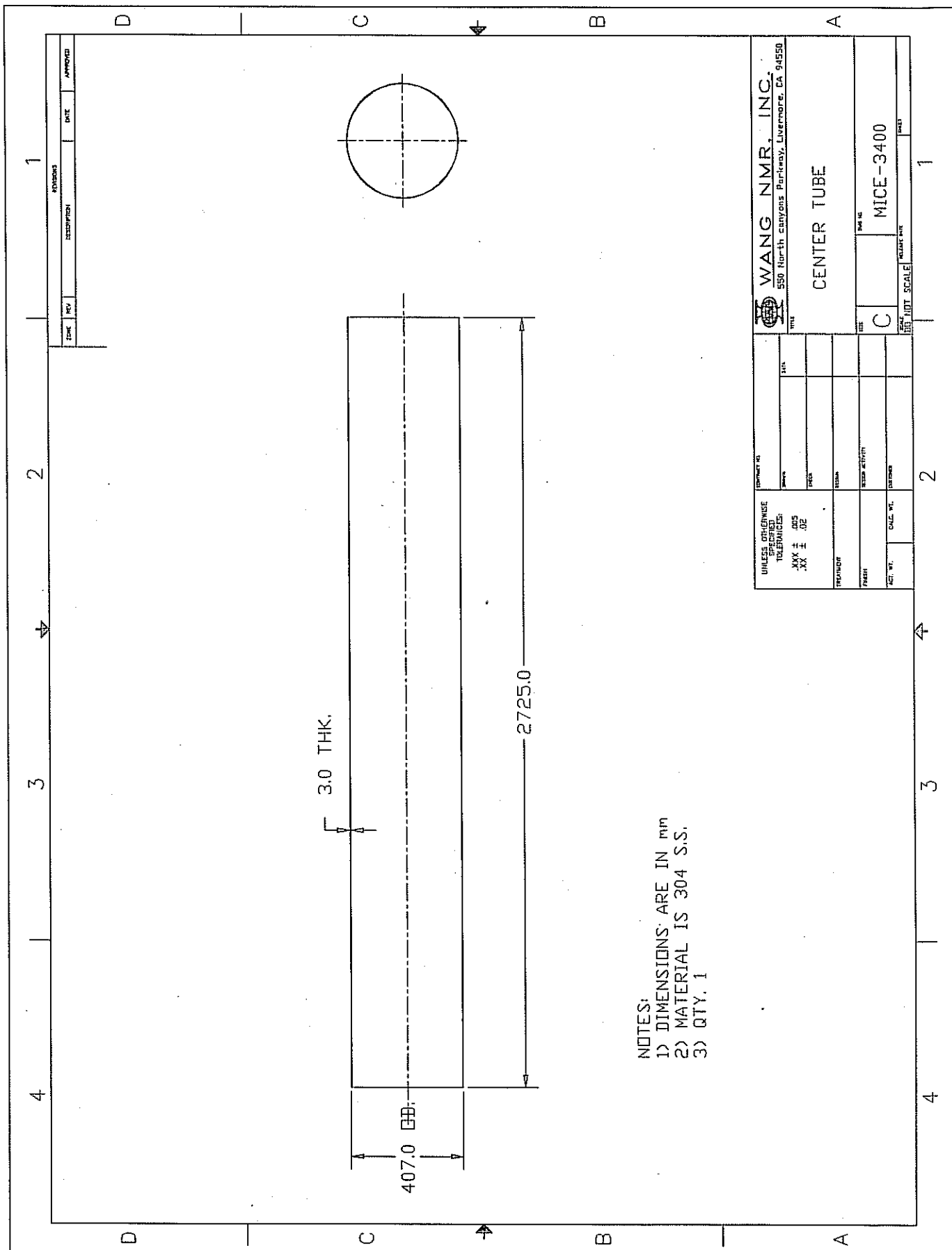


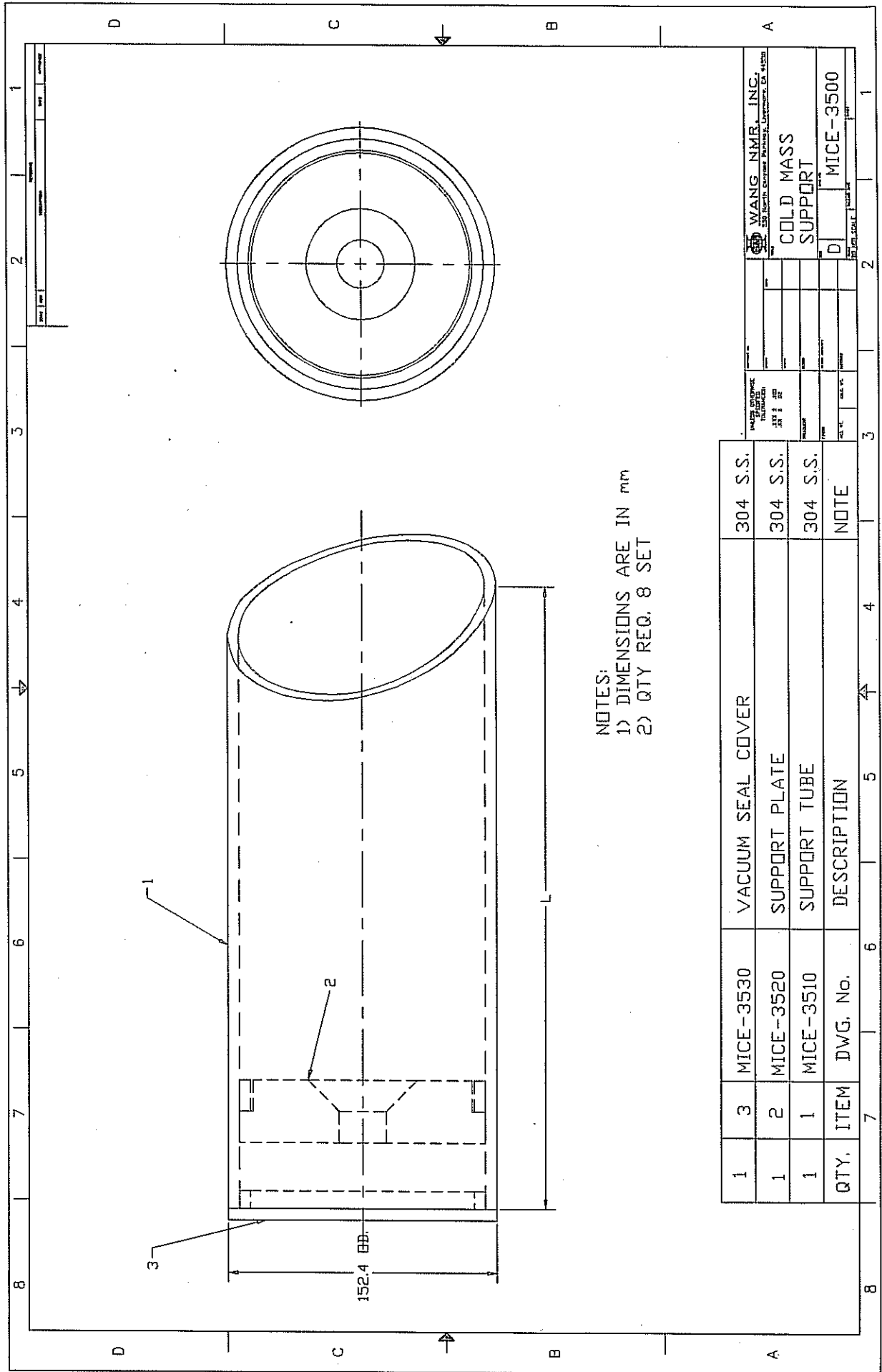
UNLESS OTHERWISE SPECIFIED TOLERANCES:		FRACTION		DECIMALS		MILS	
XXX ± .015							
XX ± .02							
TOLERANCE		DIPPER		PICKER		PICKER	
FINISH							
CUT WT.		CALC WT.		GROSS WT.		NET WT.	



DATE	REV	DESCRIPTION	DATE	APPROVED

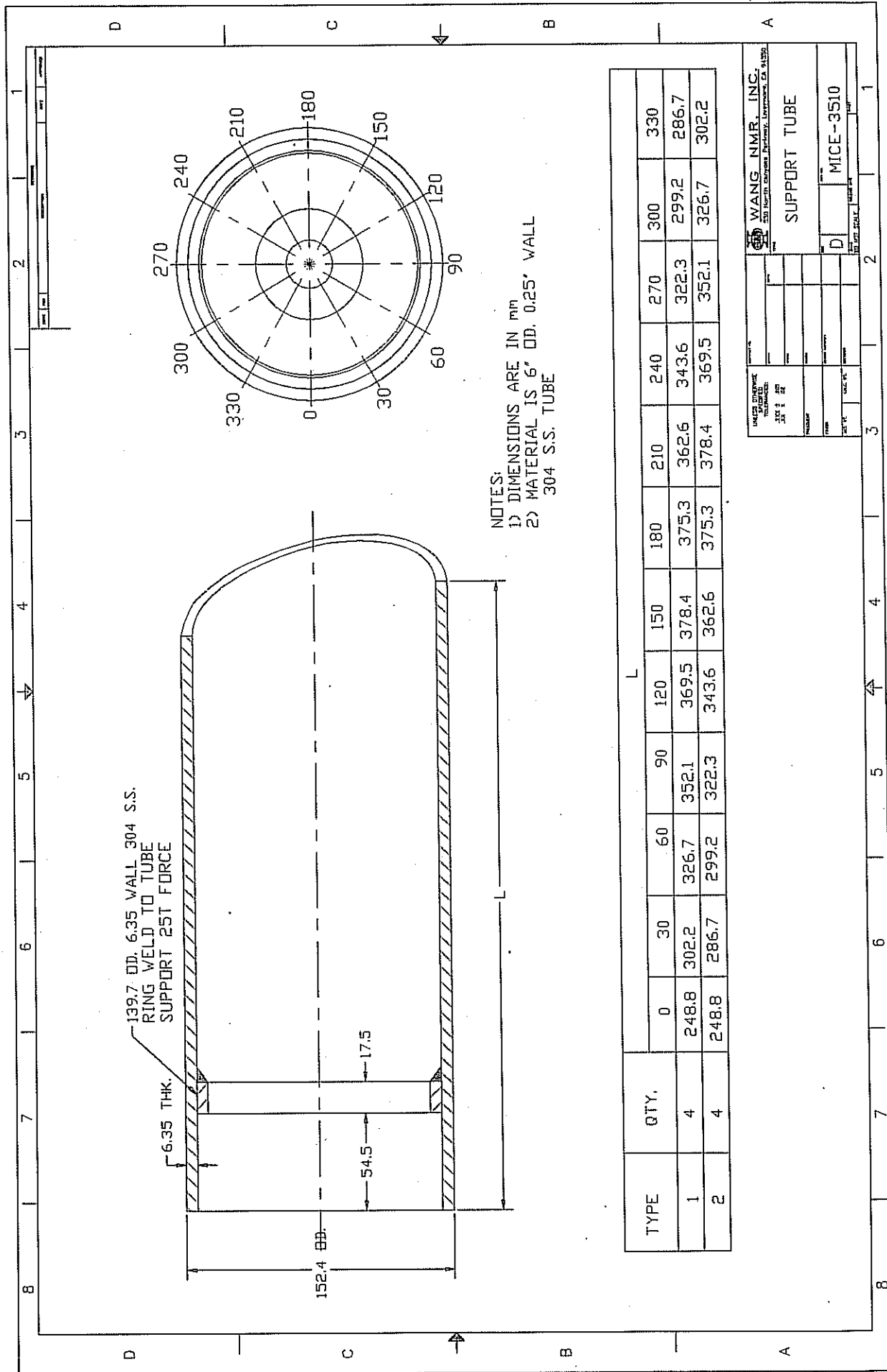
UNLESS OTHERWISE SPECIFIED: TOLERANCES: XX ± .005 .XX ± .02		WANG NMR, INC. 550 North canyons Parkway, Livermore, CA 94550	
PART NAME BACK END PLATE		QTY 1	
MATERIAL 304 S.S.		FINISH MICE-3200	
ACT. WT. 1.00		CALC. WT. 1.00	





NOTES:
 1) DIMENSIONS ARE IN mm
 2) QTY REQ. 8 SET

WANG NMR, INC.
 25 NORTH CENTRAL PARKWAY, LANSING, MI 48206
 COLD MASS
 SUPPORT
 MICE-3500



NOTES:
 1) DIMENSIONS ARE IN MM
 2) MATERIAL IS 6" OD, 0.25" WALL
 304 S.S. TUBE

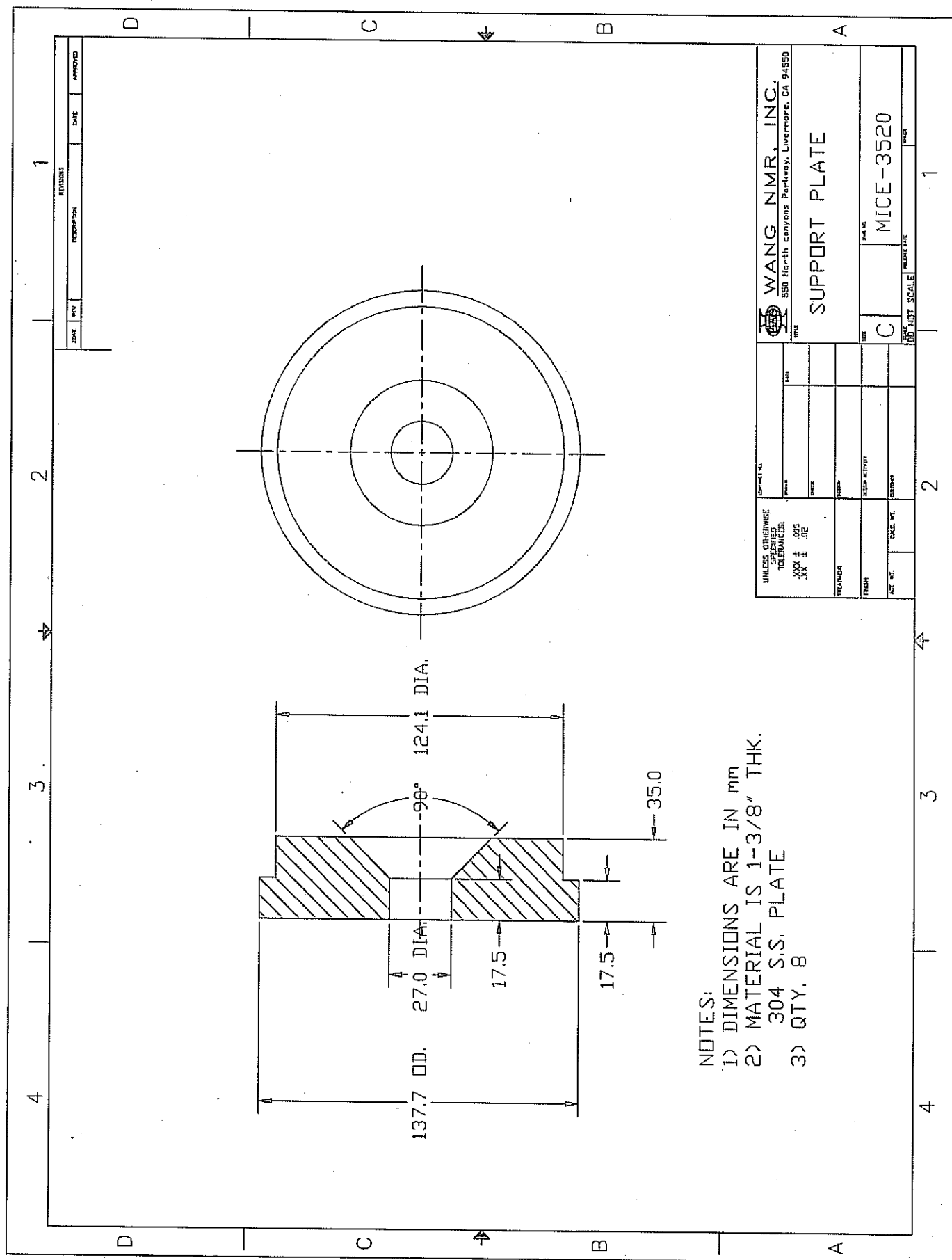
TYPE	QTY.	L											
		0	30	60	90	120	150	180	210	240	270	300	330
1	4	248.8	302.2	326.7	352.1	369.5	378.4	375.3	362.6	343.6	322.3	299.2	286.7
2	4	248.8	286.7	299.2	322.3	343.6	362.6	375.3	378.4	369.5	352.1	326.7	302.2

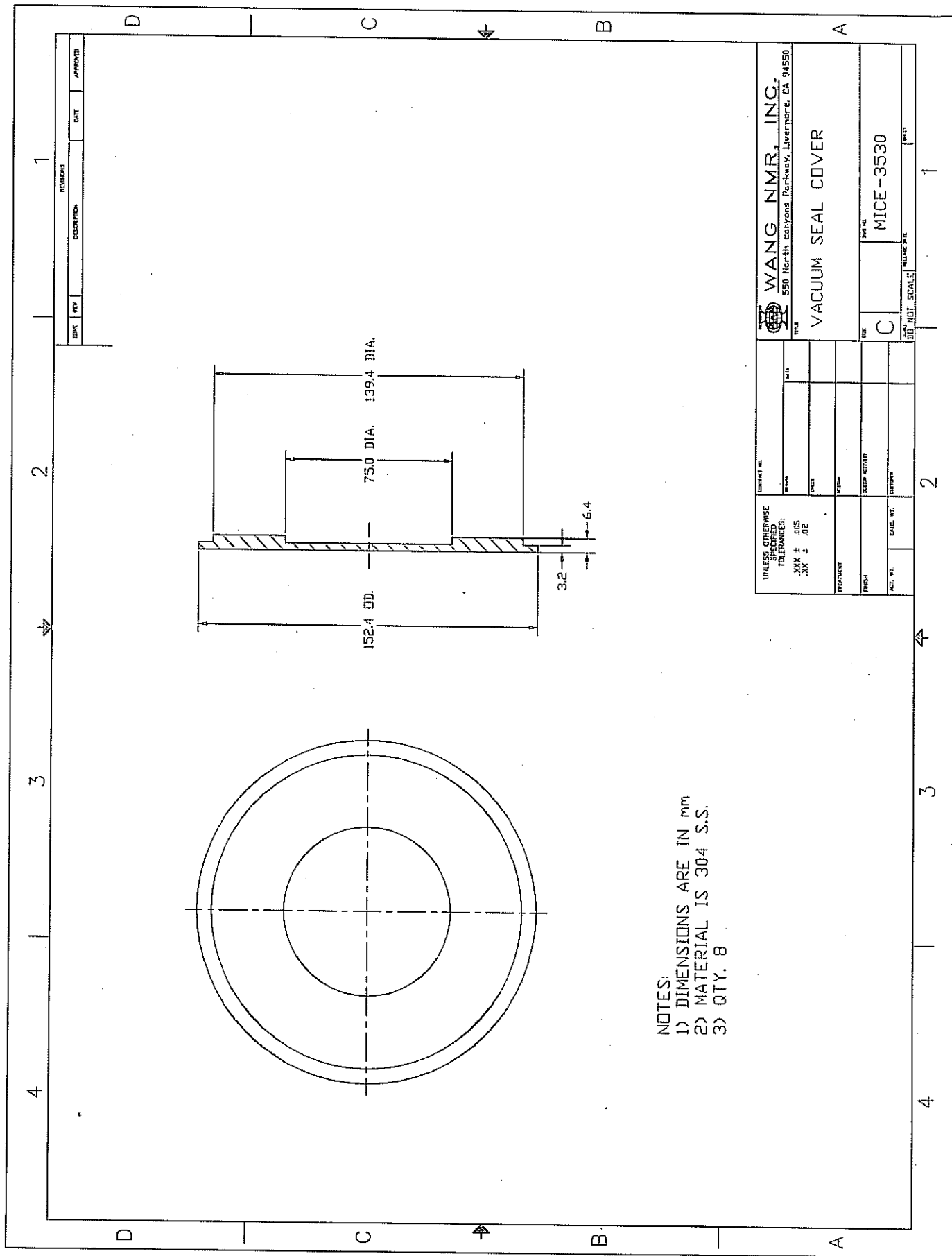
WANG NMR, INC.
 500 NORTH CENTRAL AVENUE, LIVERMORE, CA 94550

PROJECT NO. _____
 DRAWING NO. _____
 DATE _____
 BY _____
 CHECKED BY _____

SUPPORT TUBE

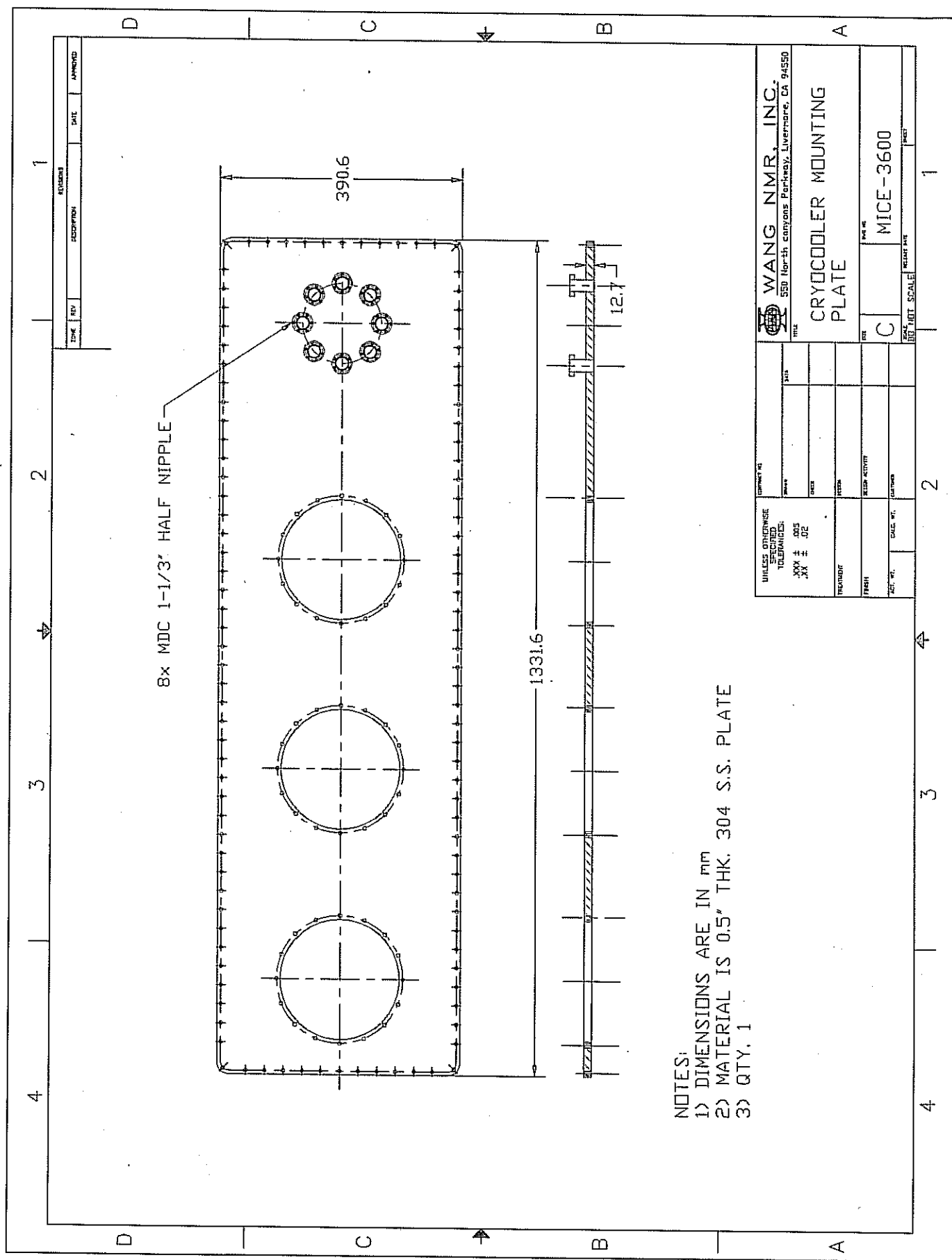
D MICE-3510





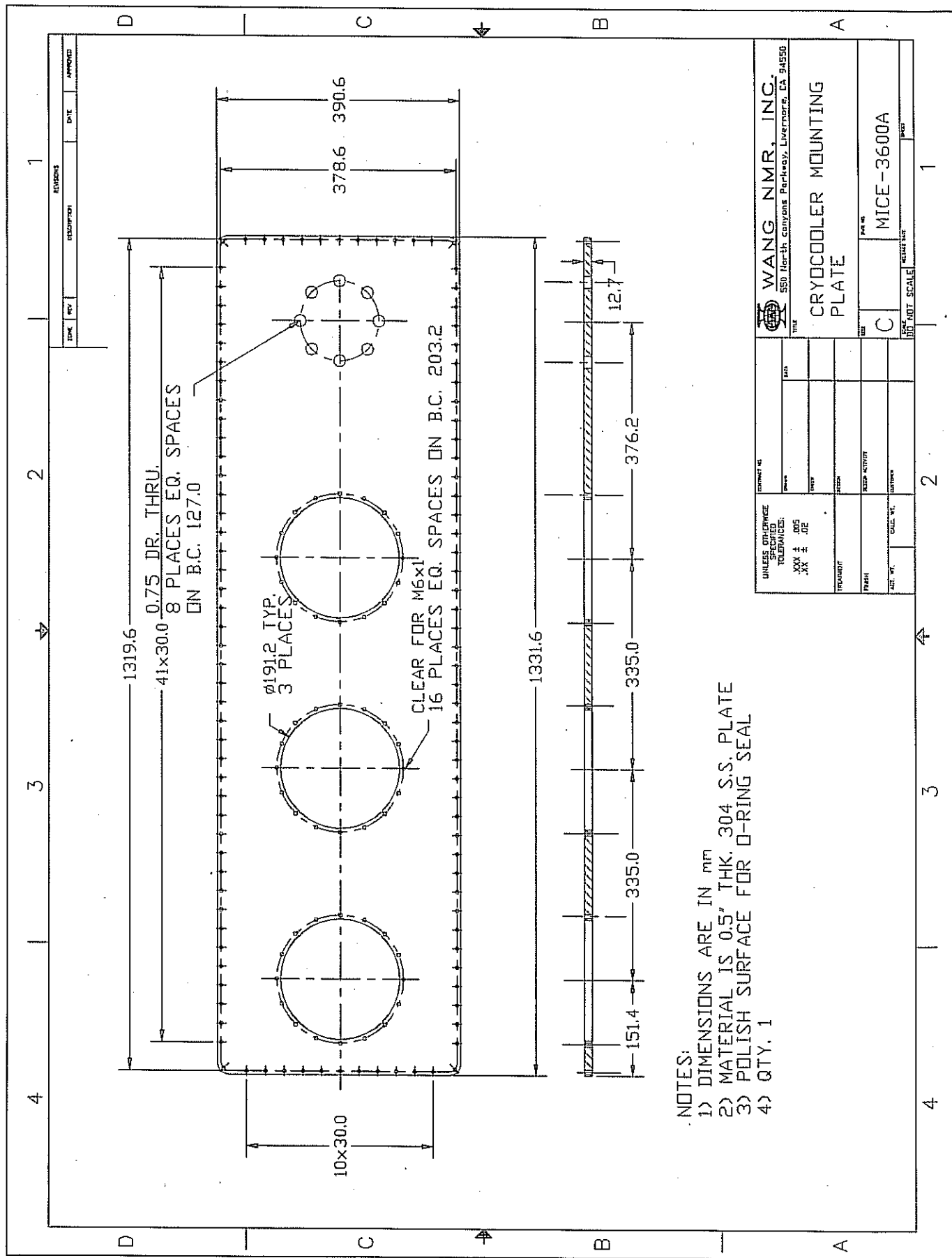
DATE	REV	DESCRIPTION	DATE	APPROVED

UNLESS OTHERWISE SPECIFIED TOLERANCES:		WANG NMR, INC.	
XXX ± .015		550 North Canyon Parkway, Livermore, CA 94550	
XX ± .02		VACUUM SEAL COVER	
TREATMENT	FINISH	QTY	DATE
		C	MICE-3530
NET WT.	GALL. WT.	NET WT. SCALE	
		SHEET	

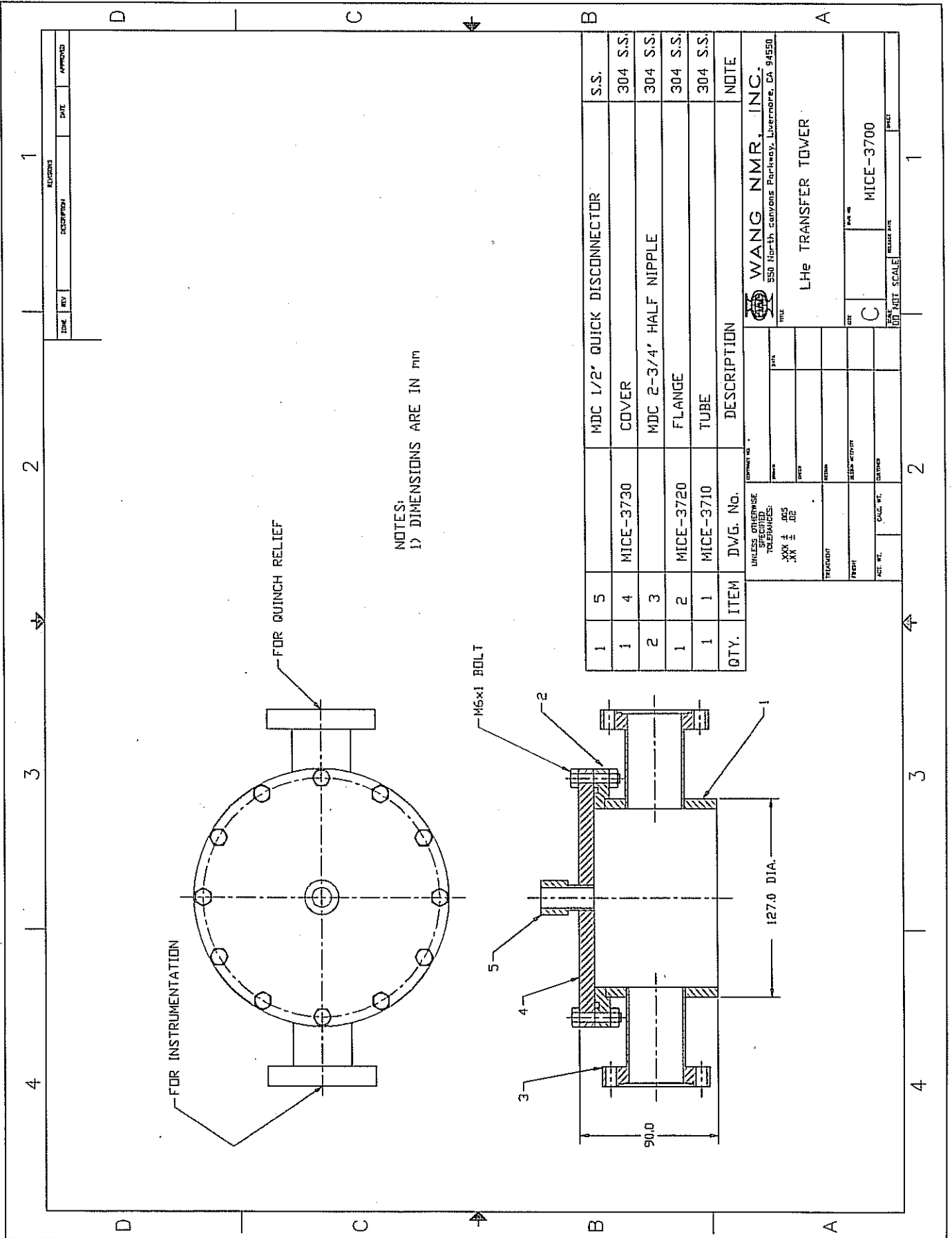


NOTES:
 1) DIMENSIONS ARE IN MM
 2) MATERIAL IS 0.5" THK. 304 S.S. PLATE
 3) QTY. 1

UNLESS OTHERWISE SPECIFIED: TOLERANCES: XXX ± .005 XX ± .02		WANG NMR, INC. 550 North Canyon Parkway, Livermore, CA 94550	
TREATMENT		CRYOCOOLER MOUNTING PLATE	
FINISH		SIZE	
NET WT.		C	
GROSS WT.		MICE-3600	
SCALE		SCALE	
DATE		DATE	
BY		BY	
CHECKED		CHECKED	
DESIGNED		DESIGNED	
DRAWN		DRAWN	
APPROVED		APPROVED	
DATE		DATE	
REV		REV	
DESCRIPTION		DESCRIPTION	
DATE		DATE	
APPROVED		APPROVED	



UNLESS OTHERWISE SPECIFIED TOLERANCES:		DRAWING NO.	
XXX ± .005	XXX ± .02	WANG NMR, INC.	550 North Canyon Parkway, Livermore, CA 94550
TREATMENT		TIME	
FRESH		CRYOCOOLER MOUNTING PLATE	
ASST. MGR.	CALL. MGR.	DATE	REV.
PART NO.		MICE-3600A	
PART SCALE		SCALE	
1		1	

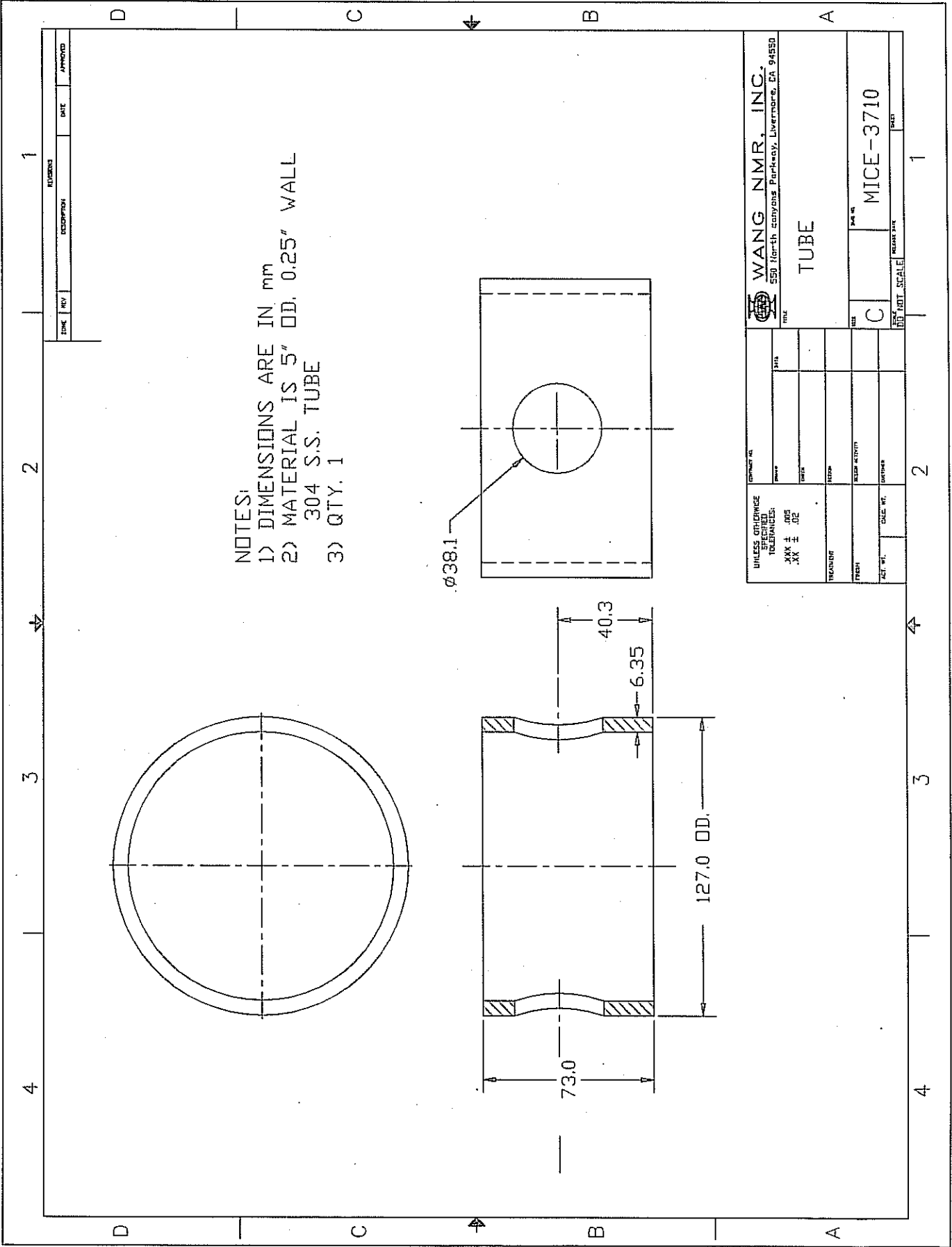


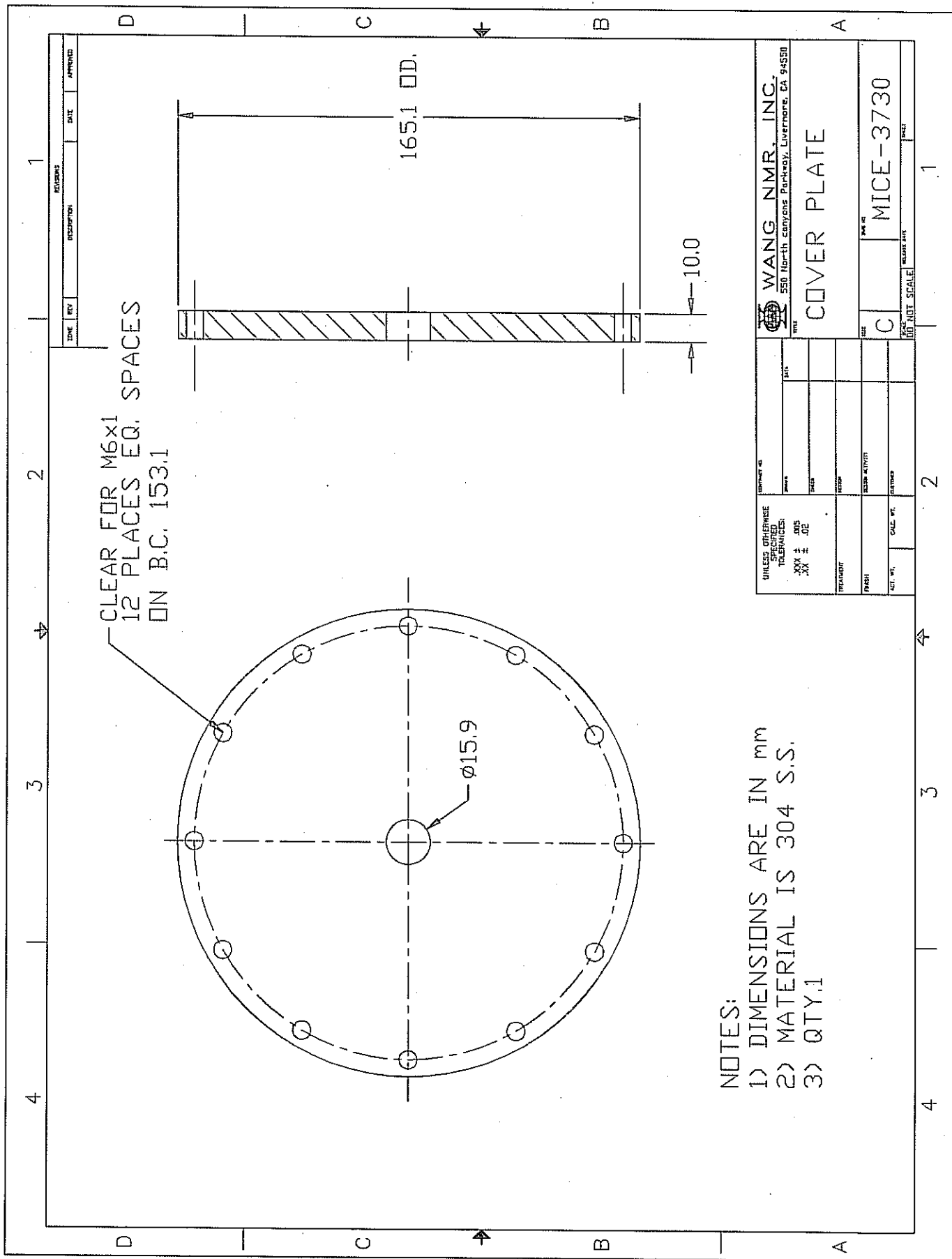
DATE	REV	DESCRIPTION	DATE	APPROVED

NOTES:
1) DIMENSIONS ARE IN mm

QTY.	ITEM	DWG. No.	DESCRIPTION	NOTE
1	5		MDC 1/2' QUICK DISCONNECTOR	S.S.
1	4	MICE-3730	COVER	304 S.S.
2	3		MDC 2-3/4' HALF NIPPLE	304 S.S.
1	2	MICE-3720	FLANGE	304 S.S.
1	1	MICE-3710	TUBE	304 S.S.

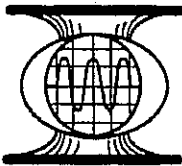
WANG NMR, INC. 550 North Canyon Parkway, Livermore, CA 94550	
LHe TRANSFER TOWER	
TITLE DATE DRAWN CHECKED DESIGNED APPROVED	C MICE-3700 SCALE SHEET





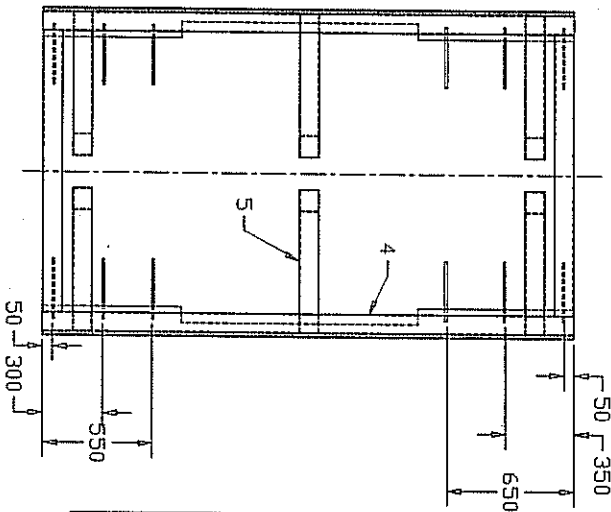
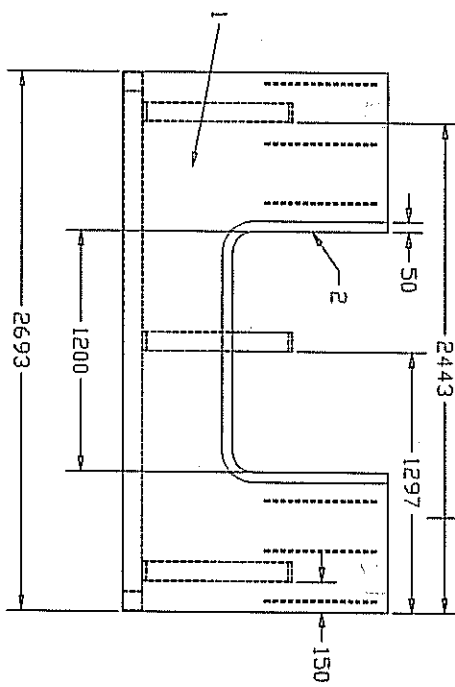
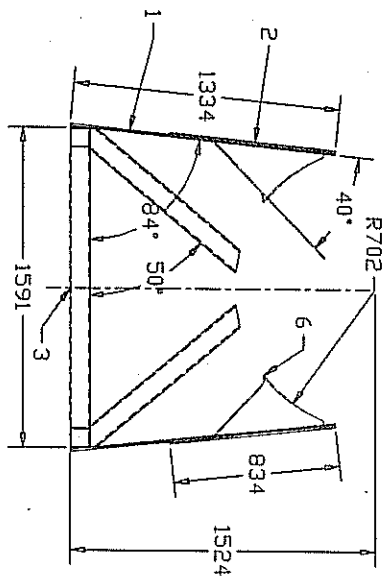
Appendix III-3-2

Engineering Design Drawing For Magnet Support System



Wang NMR Inc.

• 550 North Canyons Parkway • Livermore, CA 94551



NOTES:
1) DIMENSIONS ARE IN mm
2) ALL CONTACT AREA WELDED

QTY.	ITEM	DWG. NO.	DESCRIPTION	NOTE
12	6	MICE-F006	GUSSET PLATE	304 S.S.
6	5	MICE-F005	SQUARE 3	304 S.S.
2	4	MICE-F004	SQUARE 2	304 S.S.
2	3	MICE-F003	SQUARE 1	304 S.S.
2	2	MICE-F002	REINFORCE PLATE	304 S.S.
2	1	MICE-F001	PLATE	304 S.S.

UNLESS OTHERWISE
SPECIFIED:
TOLERANCES:
XXX ± .005
XX ± .02

SUPPORT STAND

WANG NMR, INC.
550 North Canyon Parkway, Livermore, CA 94550

MICE-F000

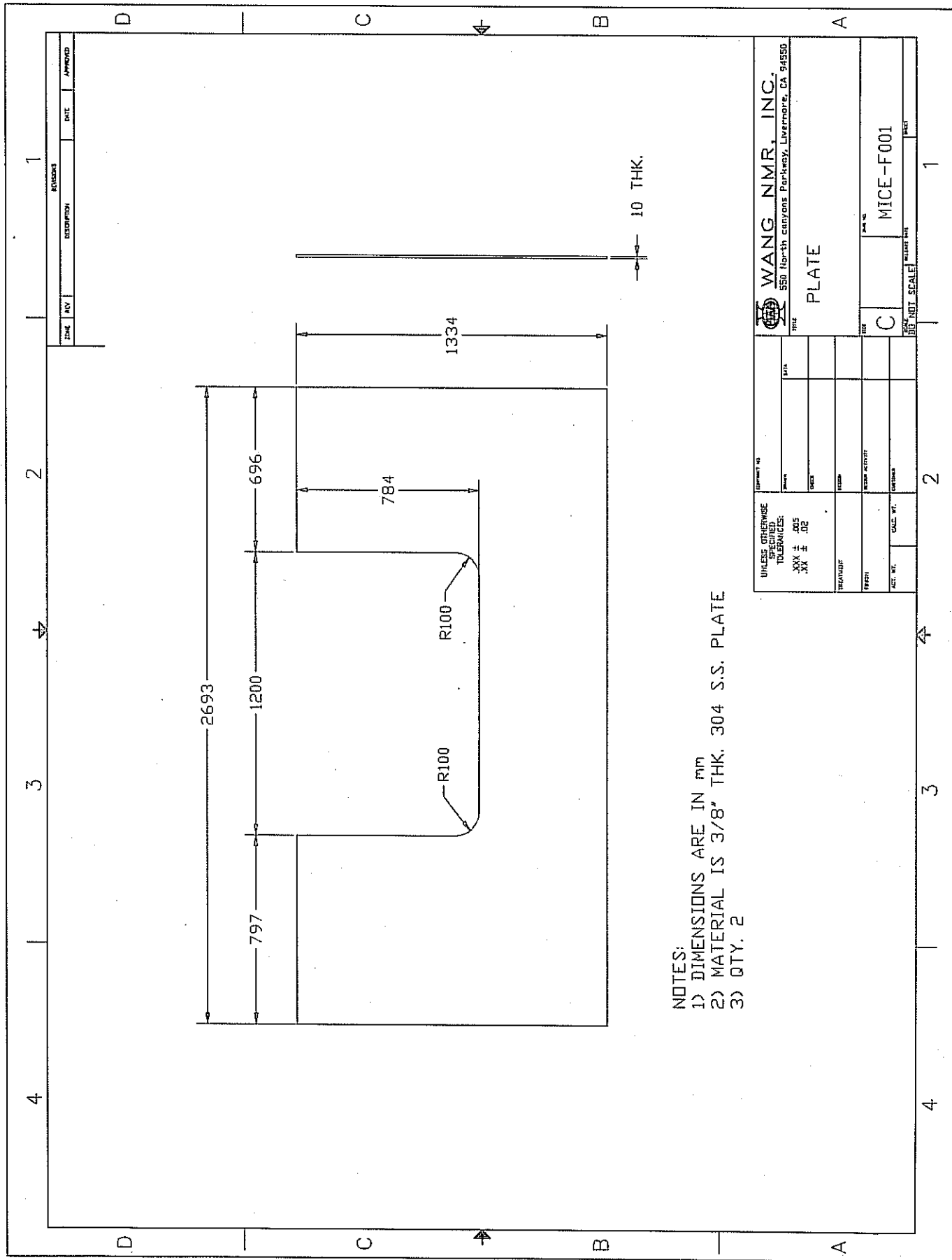
1/8" = 1"

4

3

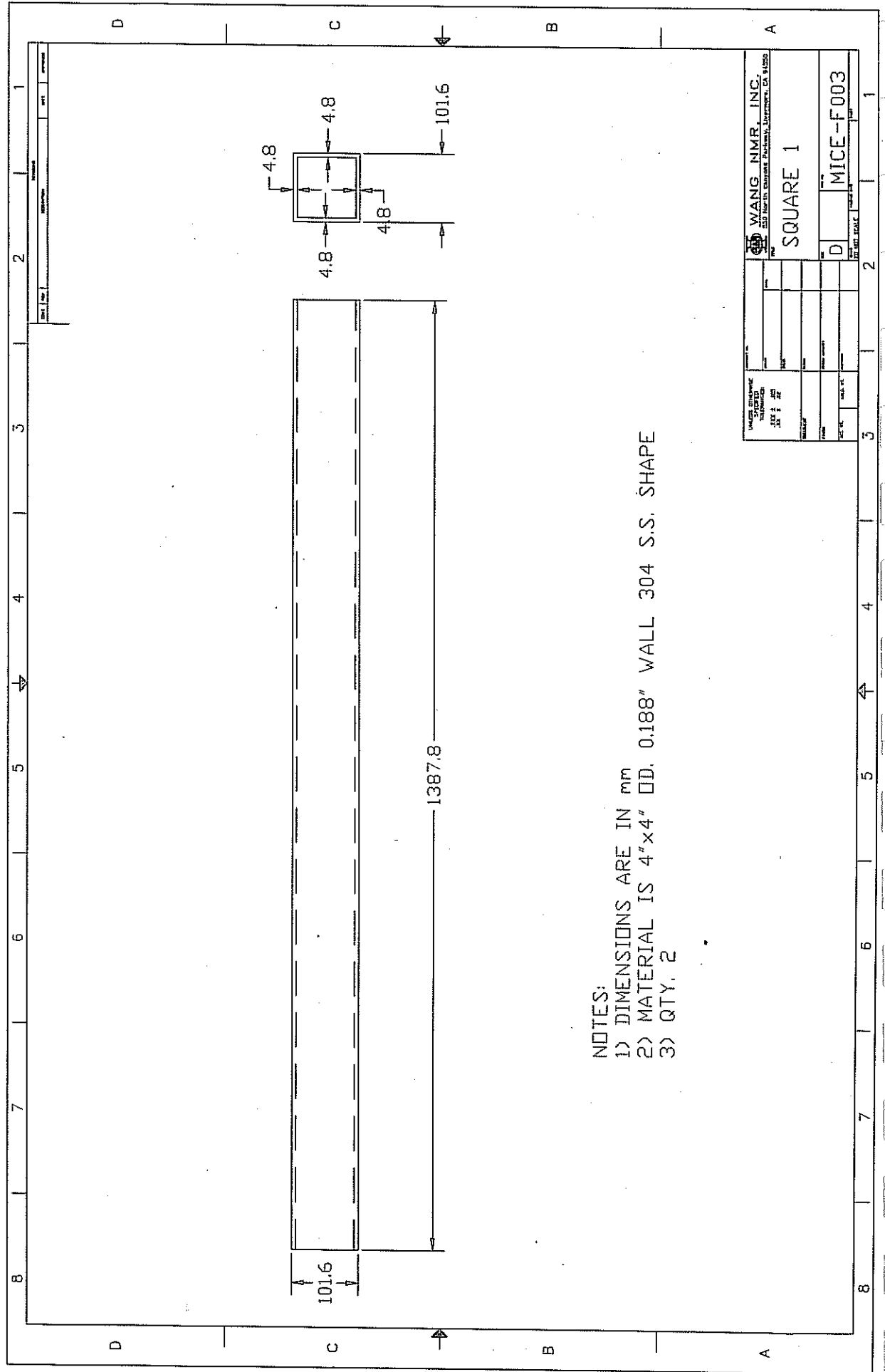
2

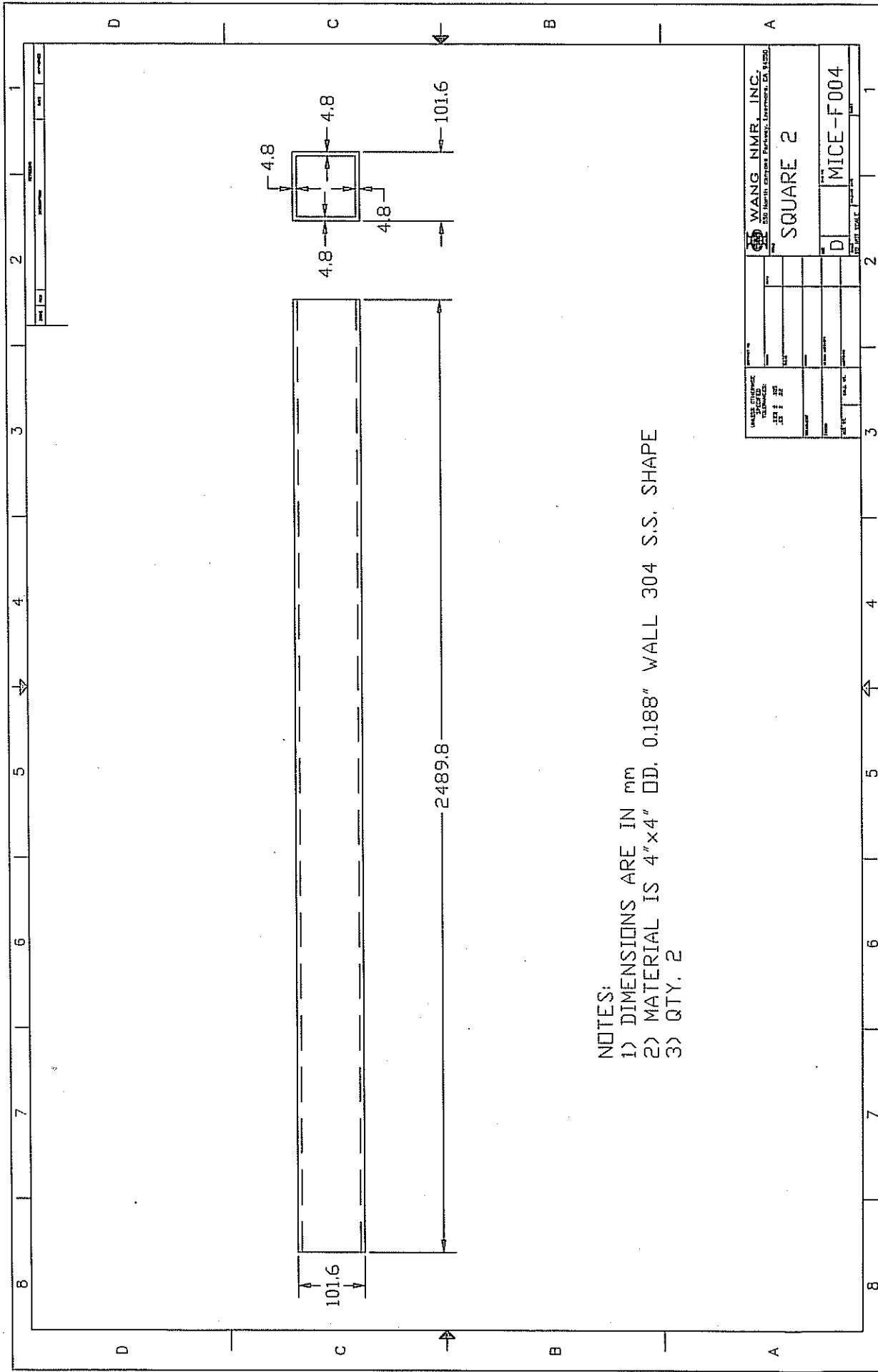
1



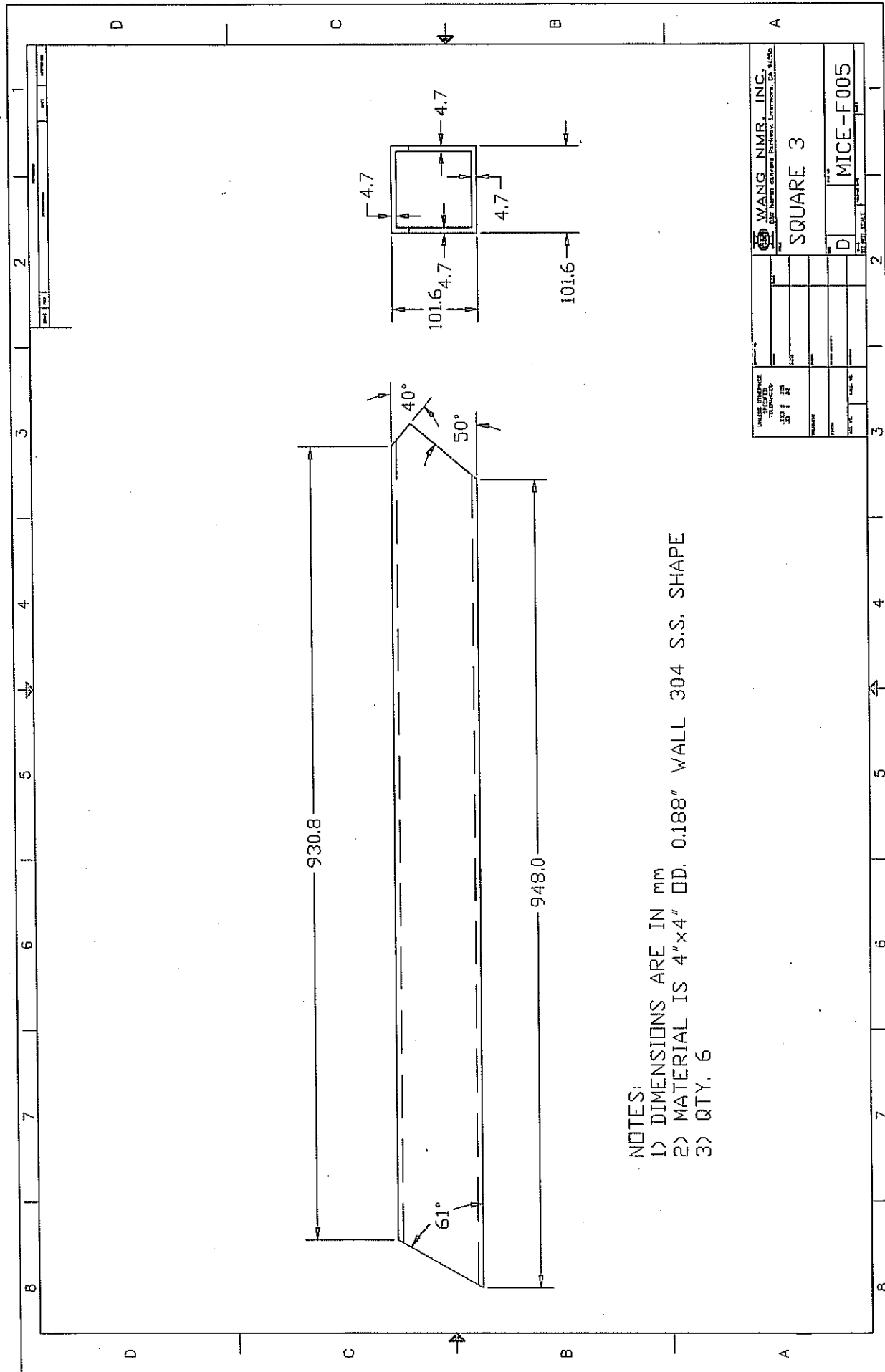
NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 3/8" THK. 304 S.S. PLATE
 3) QTY. 2

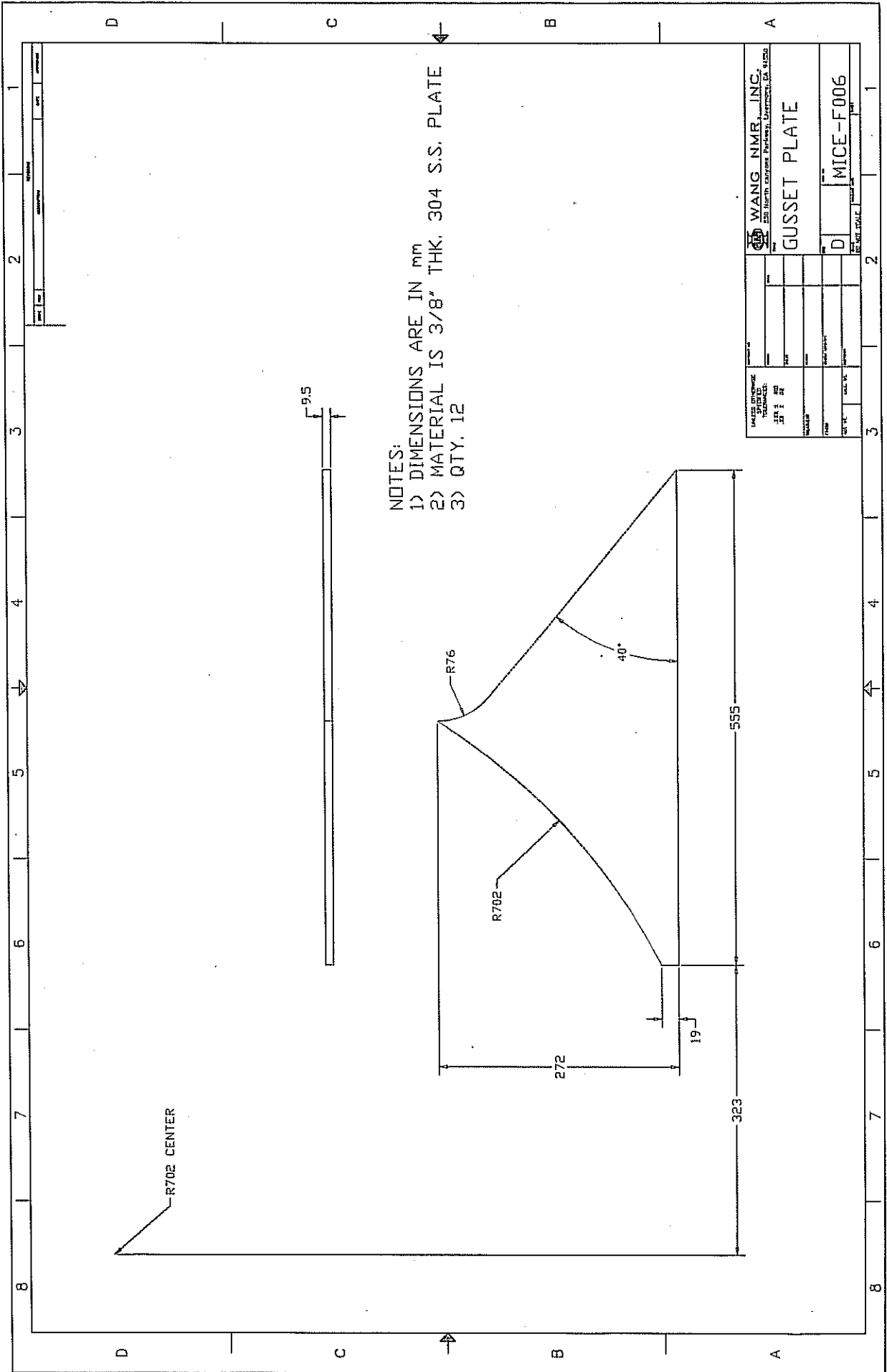
UNLESS OTHERWISE SPECIFIED:		TOLERANCES:		XXX ± .015		XX ± .02	
TREATMENT		FINISH		ACT. WT.		CALC. WT.	
REVISION		DATE		REVISION		DATE	
WANG NMR, INC.				550 North canyons Parkway, Livermore, CA 94550			
TITLE				MICE-F001			
C				MICE-F001			
DO NOT SCALE				SHEET			





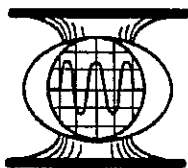
NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 4"x4" OD. 0.188" WALL 304 S.S. SHAPE
 3) QTY. 2





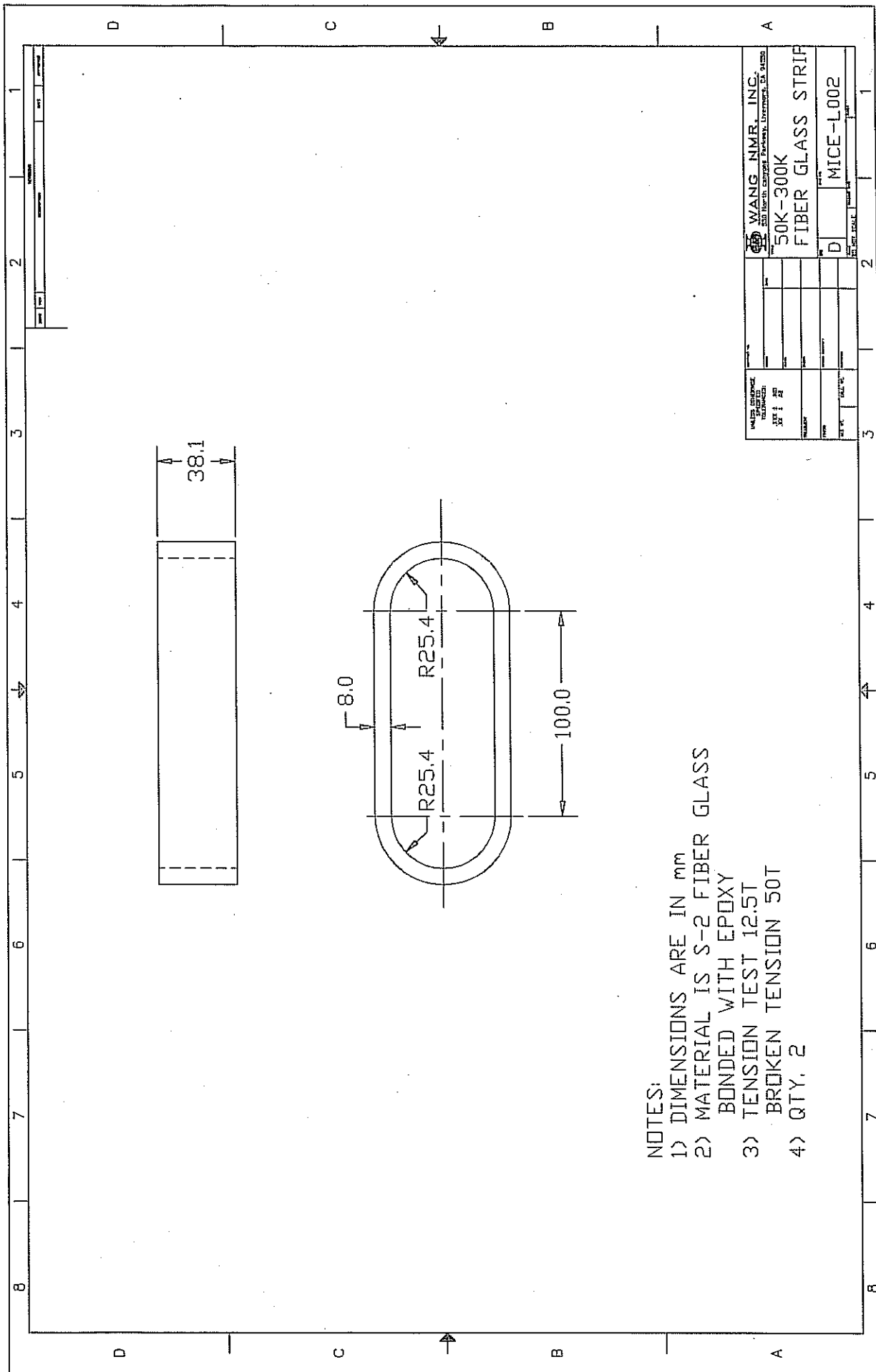
Appendix III-11-1

Engineering Design Drawing For Cold Mass Support



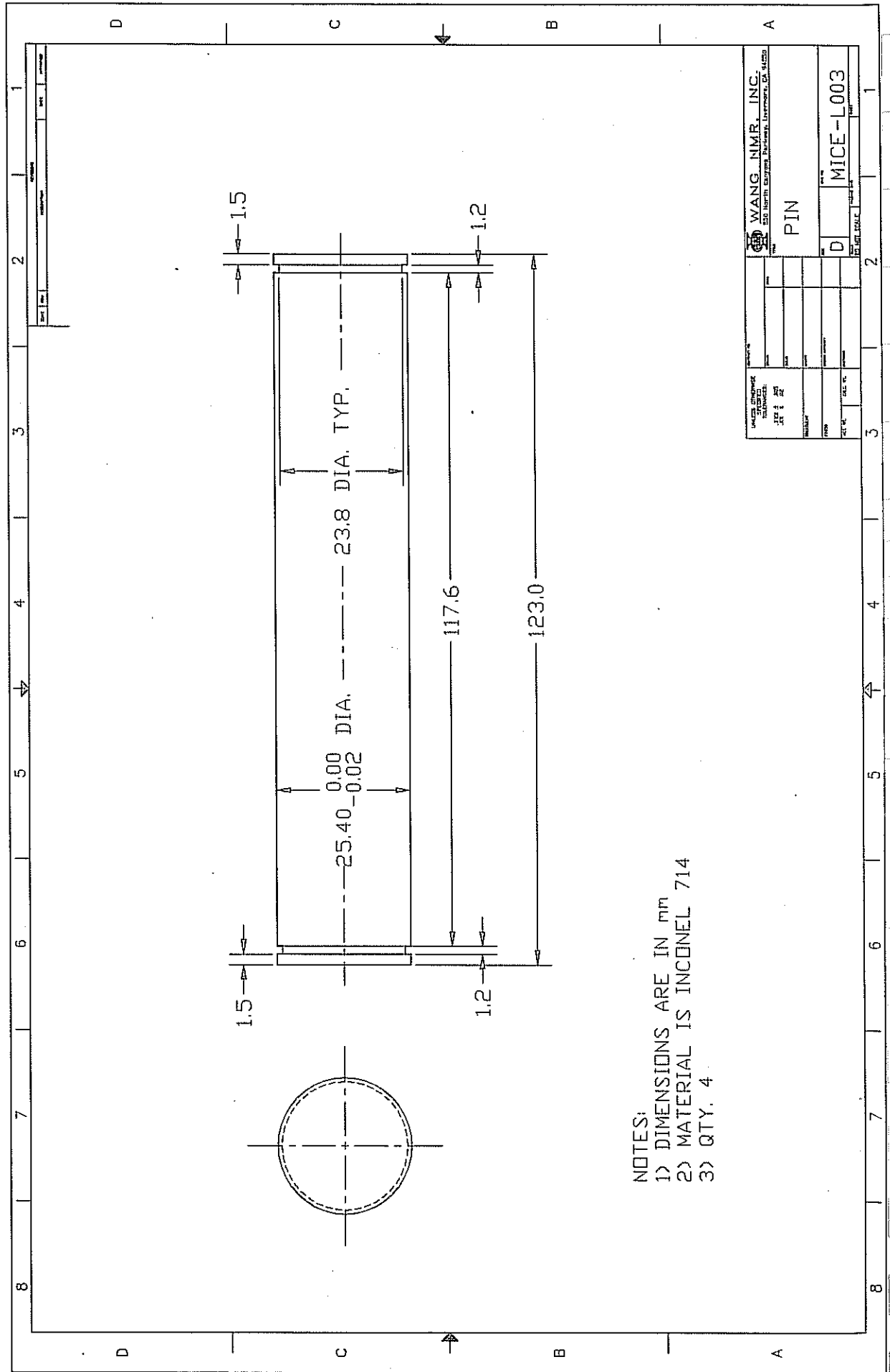
Wang NMR Inc.

• 550 North Canyons Parkway • Livermore, CA 94551



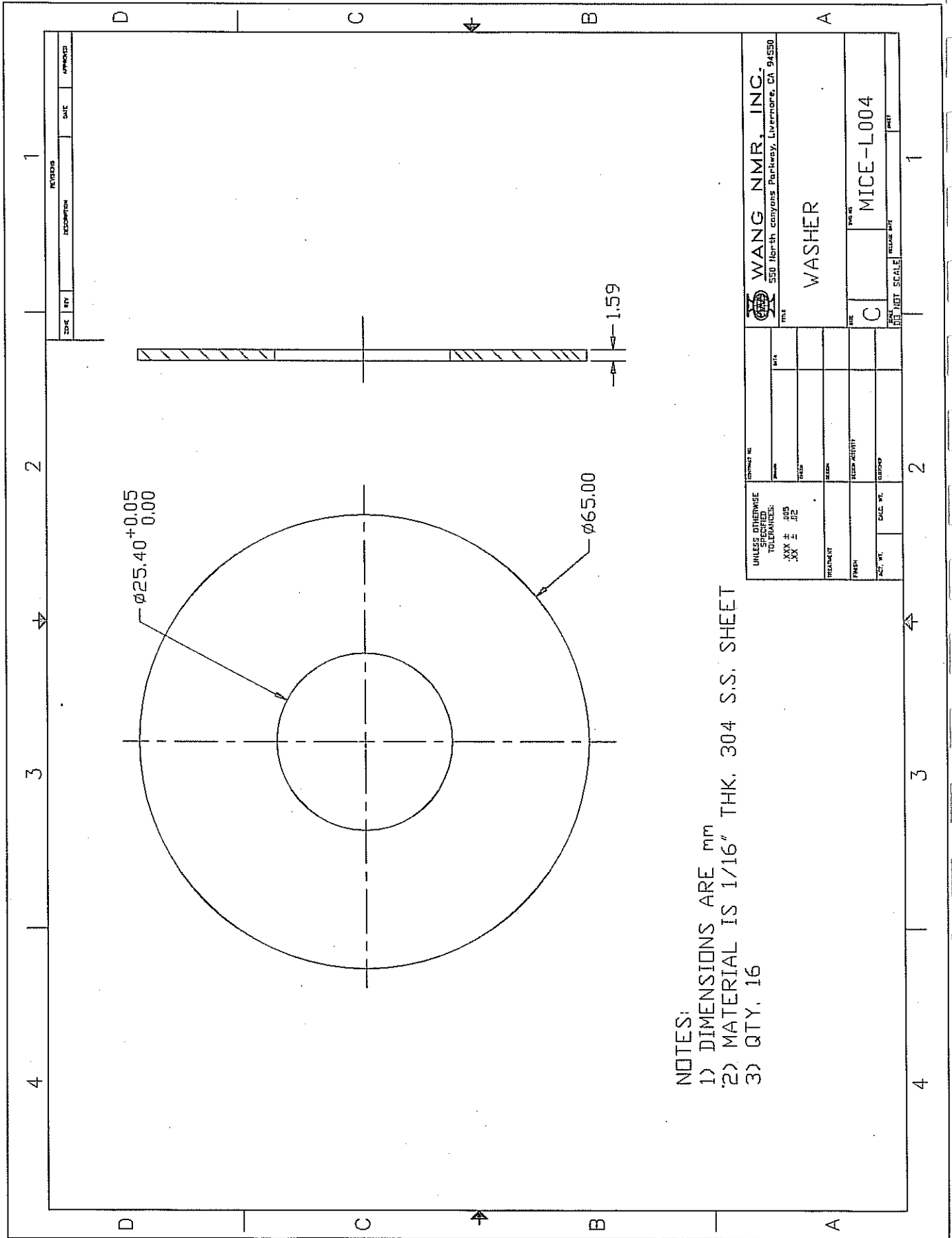
NOTES:

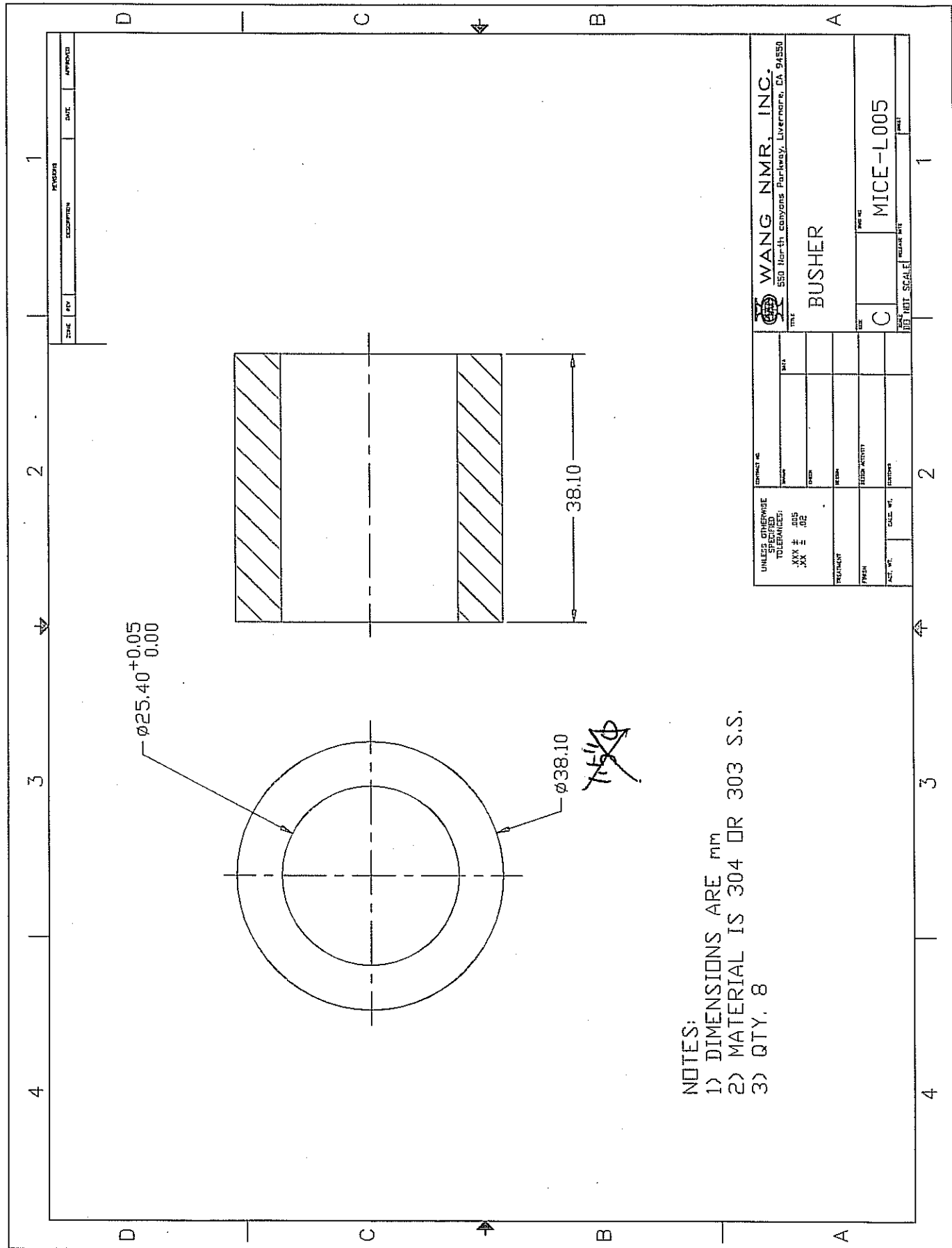
- 1) DIMENSIONS ARE IN mm
- 2) MATERIAL IS S-2 FIBER GLASS
BONDED WITH EPOXY
- 3) TENSION TEST 12.5T
BROKEN TENSION 50T
- 4) QTY. 2



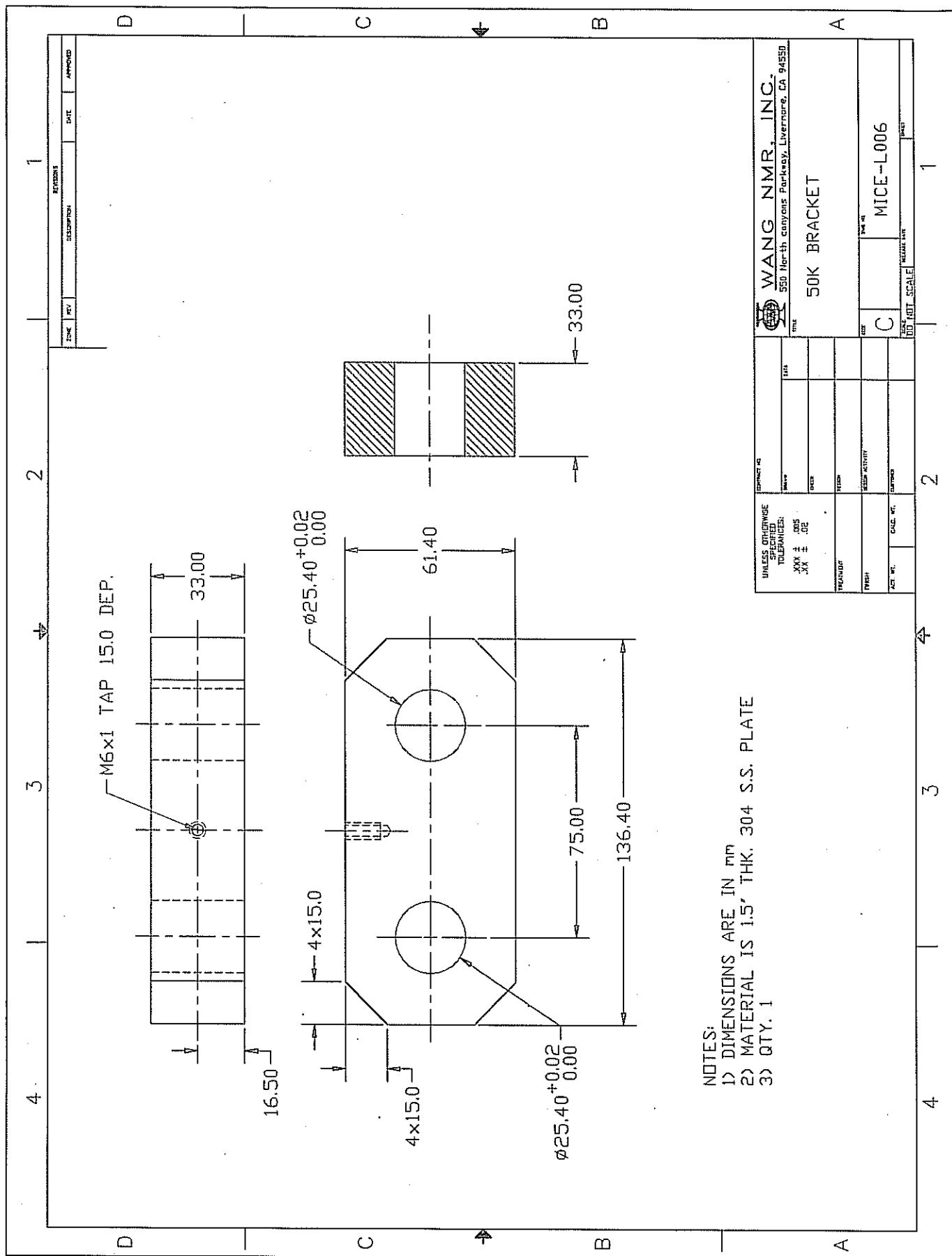
NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS INCONEL 714
 3) QTY. 4

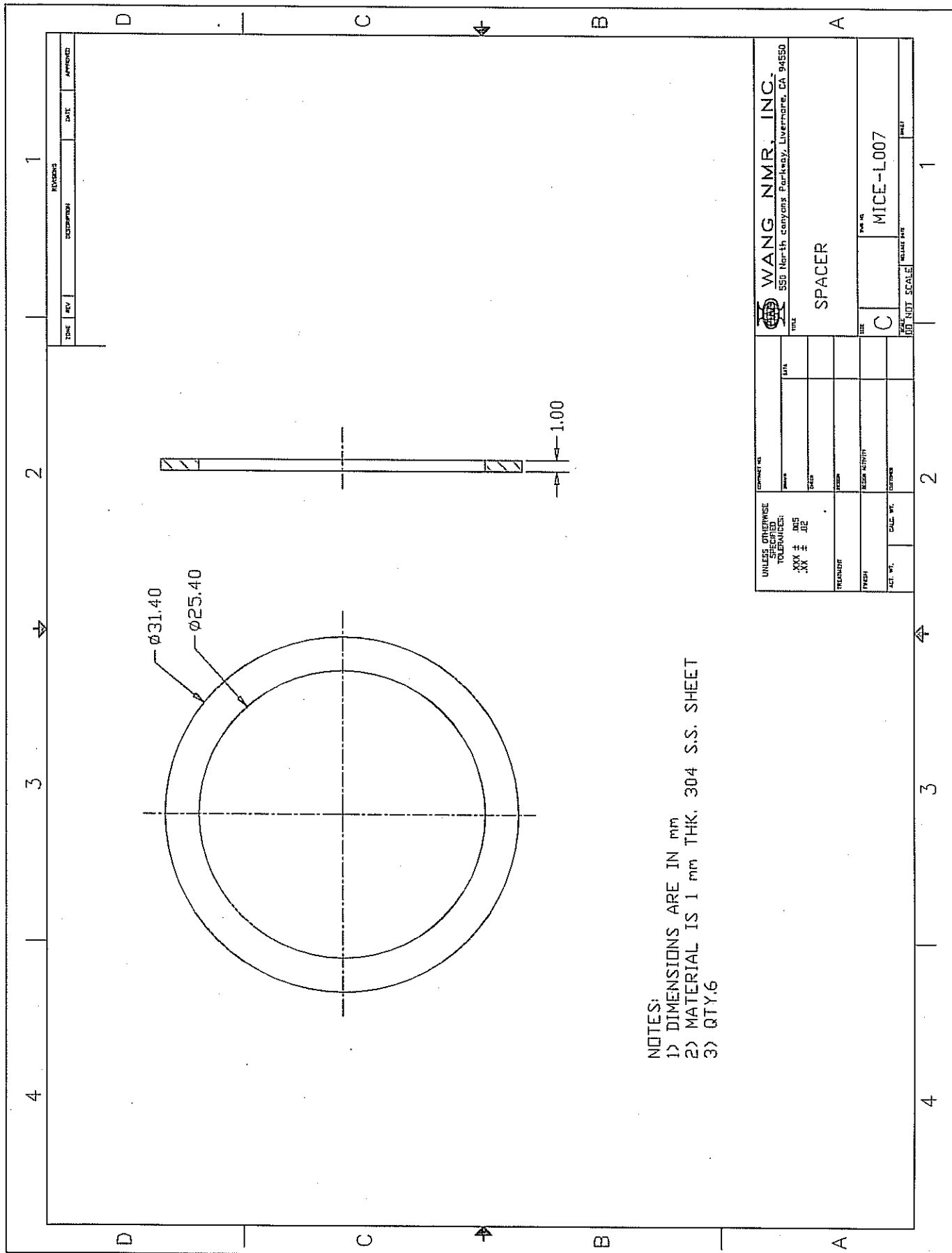
WANG NMR, INC.	
222 NORTH EIGHTH AVENUE, SUITE 200, MINNEAPOLIS, MN 55402	
PIN	
D	MICE-L003
DATE: 10/1/84	
BY: [Signature]	
CHECKED: [Signature]	
APPROVED: [Signature]	





- NOTES:
- 1) DIMENSIONS ARE mm
 - 2) MATERIAL IS 304 OR 303 S.S.
 - 3) QTY. 8





NOTES:
 1) DIMENSIONS ARE IN mm
 2) MATERIAL IS 1 mm THK. 304 S.S. SHEET
 3) QTY.6

UNLESS OTHERWISE SPECIFIED TOLERANCES: XXX ± .02 .XX ± .01		COMPANY NO.		WANG NMR, INC. 550 North Canyon Parkway, Livermore, CA 94550	
TITLE		DATE		REV	
SPACER		DATE		REV	
SIZE		DATE		REV	
C		DATE		REV	
MICE-L007		DATE		REV	
SCALE		DATE		REV	
1:1		DATE		REV	