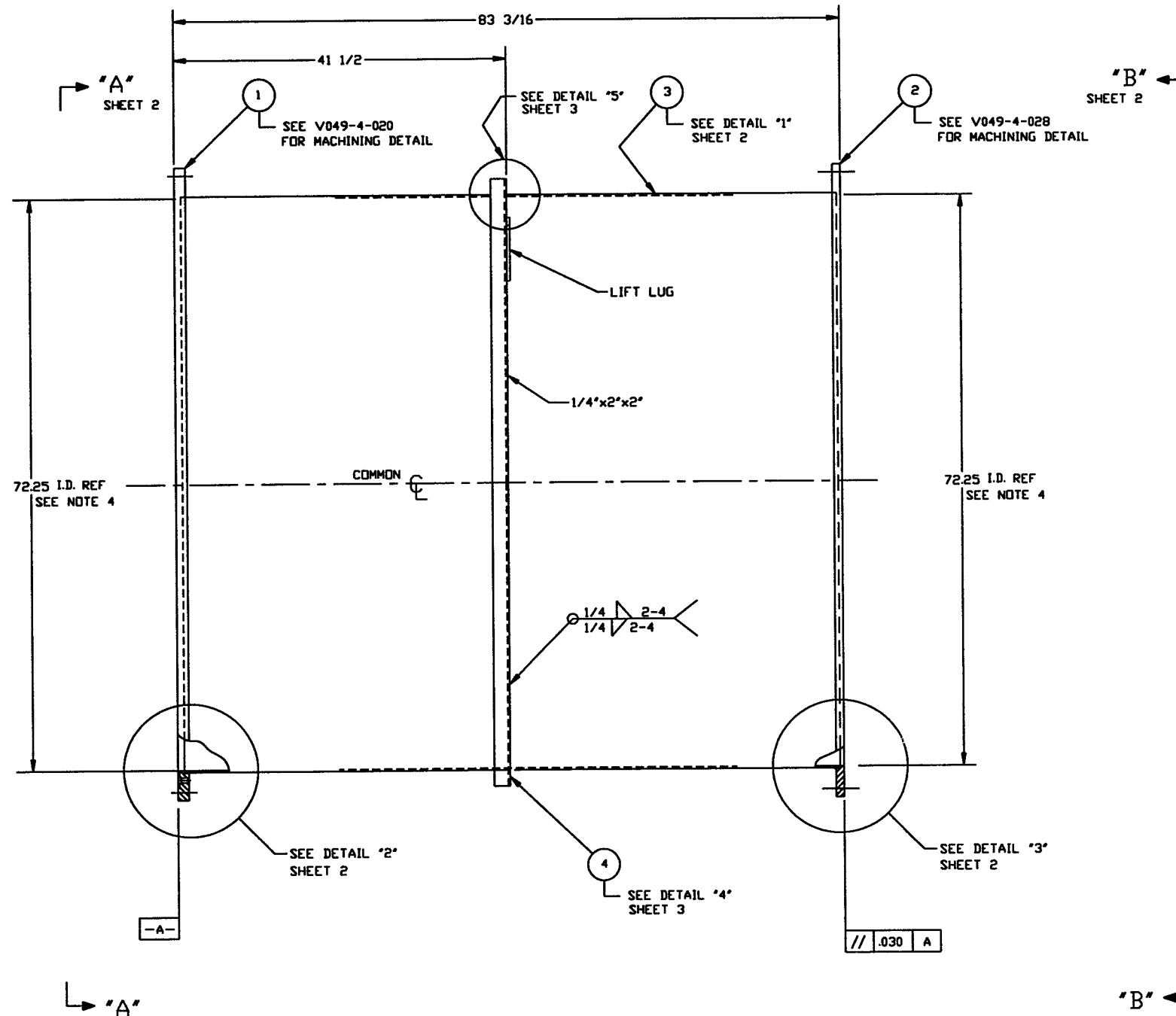


ITEM	PART NUMBER	SUFFIX	QTY	UN	DESCRIPTION
1	V0494020		1	EA	FLANGE, GROOVED, 72 1/4" ID X 80" OD
2	V0494028		1	EA	FLANGE, FLAT FACED, 72 1/4" ID X 80" OD
3	XX		XX	SF	PLATE, 304L SST, 1/4" THK
4	XX		XX	FT	ANGLE, 304L SST, 2" X 2" X 1/4"



**NOT FOR
CONSTRUCTION**

Raymond D. Coath, PE
5/6/96

NOTES:

- LEAK TEST & METHOD PER PSI SPEC: V049-2-014
- CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED.
- BOLT HOLES TO STRADDLE CENTERLINES AS SHOWN. +/- .015
- CLEAN PER SPEC: V049-2-015
- DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
- THE CENTER LINES OF ALL SHELLS AND FLANGES ARE TO LIE ON THE COMMON CENTER LINE WITHIN +/- 1/16.
- SPOOL FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
- FOR FLANGE DETAILS SEE DWG V049-4-020 & 028.
- THESE FLANGES EACH INCLUDE AN ANNULAR CHANNEL BETWEEN O-RINGS, MANIFOLD TO A SINGLE PUMPOUT PORT ON EACH CHAMBER, SEE DWG V049-4-

LIGO D961158-00-V

PROCESS SYSTEMS INTERNATIONAL, INC.
20 WALSH DR. WESTBOROUGH, MASSACHUSETTS 01581 USA

SPOOL B-B
72.25" ID
LIGO VACUUM EQUIPMENT

CAD FILE: V0494020/4BBS1
REV: 0
DATE: 4/29/96
DATE: 4/02/96

SCALE: 1-1/2" = 1"
SHEET: 1 OF 3

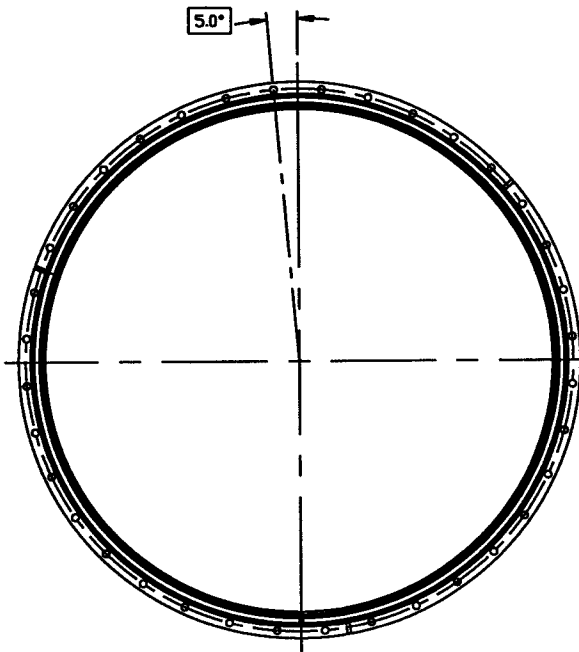
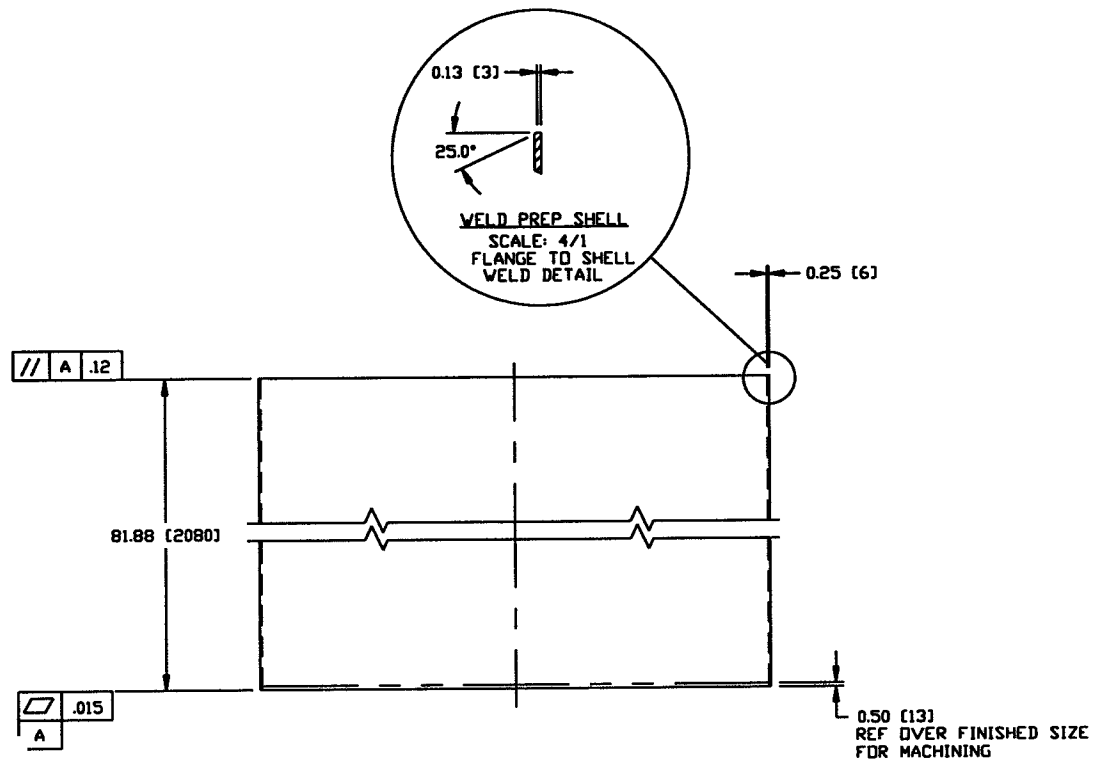
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0		ISSUED FOR FDR					
1		PRELIMINARY					

NO.	DATE	DESCRIPTION	BY	CHKD	DRWN	DATE	DCDR
0		ISSUED FOR FDR					
1		PRELIMINARY					

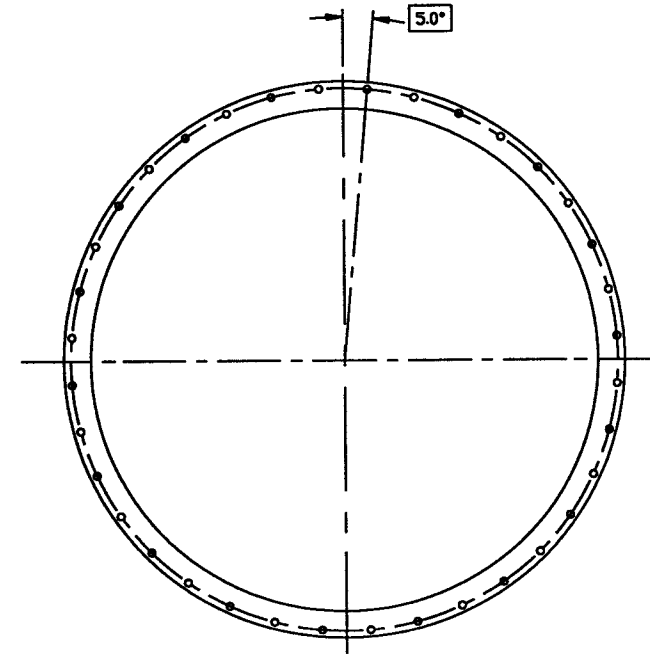
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REV: 0
DATE: 4/29/96
DATE: 4/02/96

SCALE: 1-1/2" = 1"
SHEET: 1 OF 3

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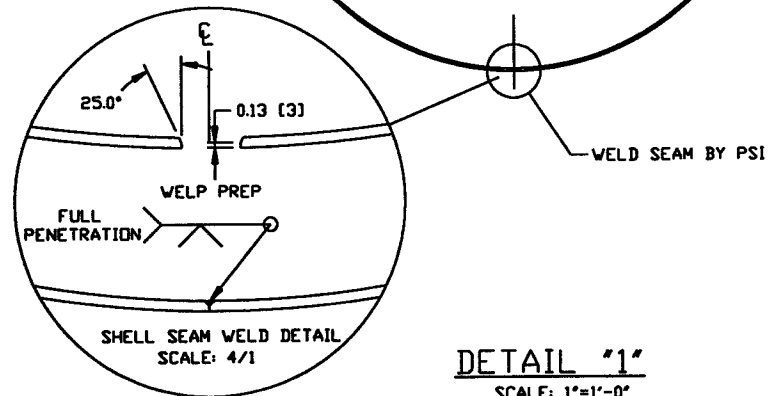
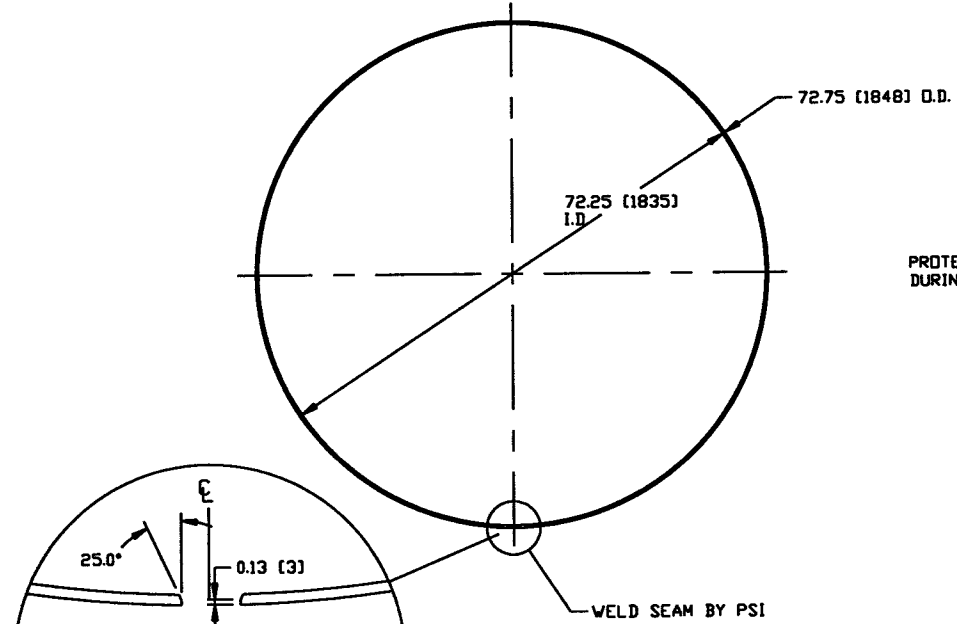
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SCALE: 1'=1'0"



VIEW "B"-B"
SCALE: 1'=1'0"

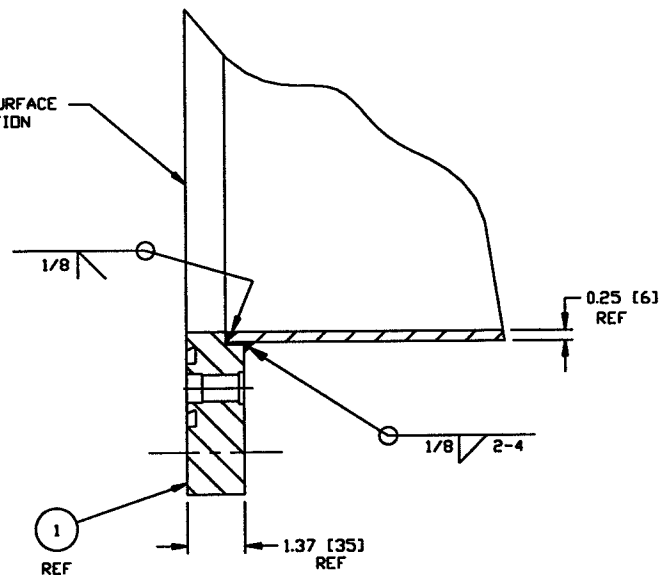
NOT FOR CONSTRUCTION

Raymond D. Ciath, P.E.
5/6/96



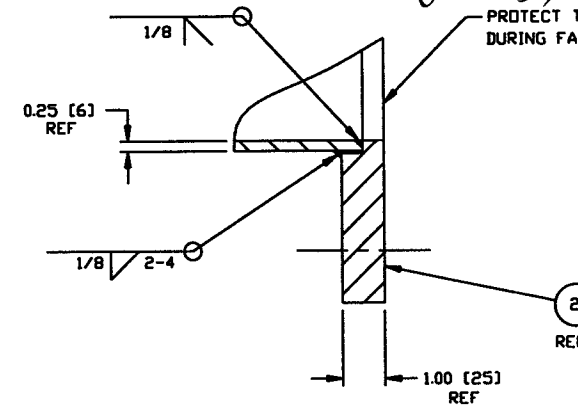
DETAIL "1"
SCALE: 1'=1'-0"

PROTECT THIS SURFACE DURING FABRICATION



DETAIL "2"
SCALE: HALF

PROTECT THIS SURFACE DURING FABRICATION

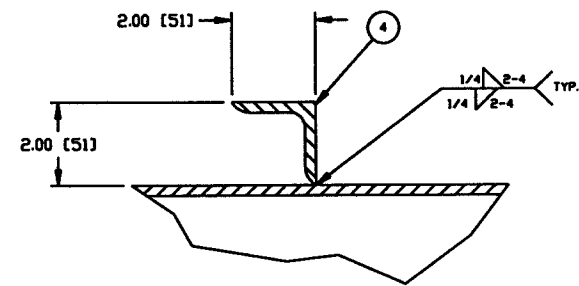
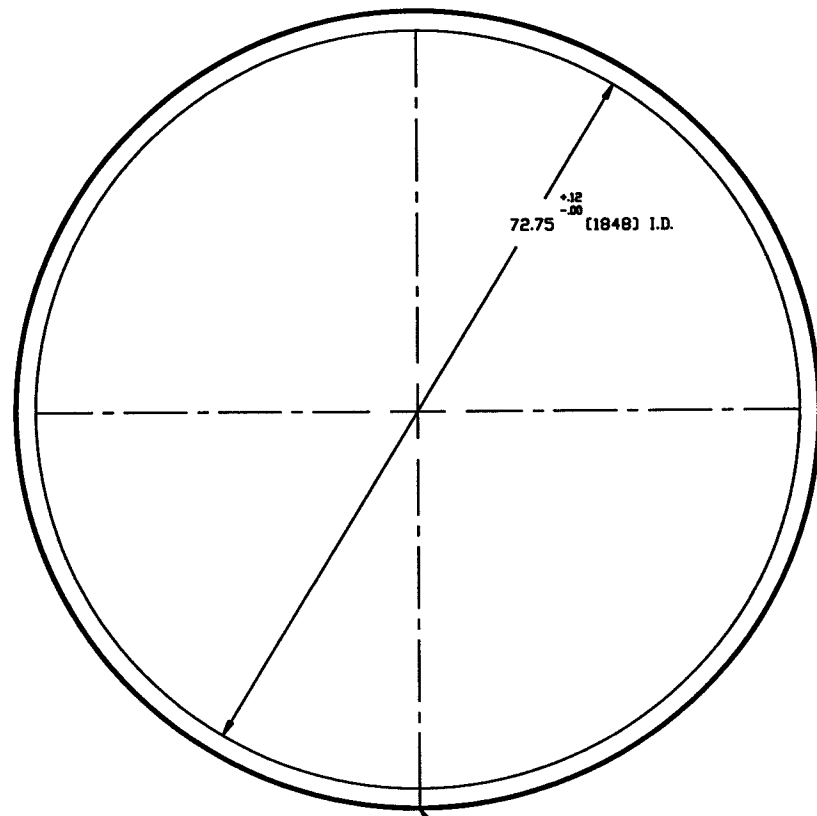


DETAIL "3"
SCALE: HALF

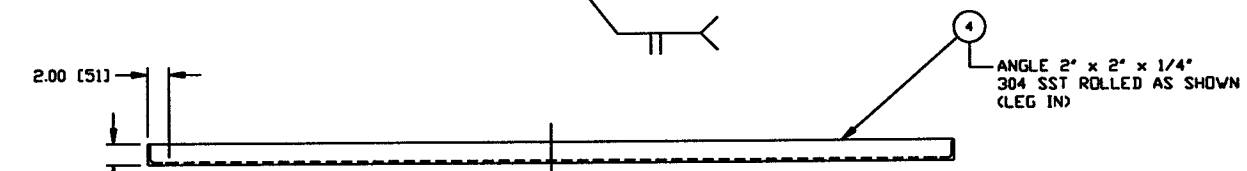
LIGO D961158-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALSH DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
SPOOL B-8 72.25" ID LIGO VACUUM EQUIPMENT			
CAD FILE V049488/48952	SIZE D	ENG. NO. V049-4-BB	REV. 0
SCALE AS NOTED	SHEET 2 OF 3		

May 06, 1996 - 1050013



DETAIL "5"
SCALE: HALF



DETAIL "4"
SCALE: 1 1/2"=1'-0"
QTY. 1

**NOT FOR
CONSTRUCTION**

Raymond P. Lieto
5/6/96

LIGO 0961158-00-V

PROCESS SYSTEMS INTERNATIONAL, INC. <small>20 WALUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</small>			
SPOOL B-8 72.25" ID LIGO VACUUM EQUIPMENT			
CAD FILE	SIZE	ENG. NO.	REV.
V0494B8/48953	D	V049-4-B8	0
SCALE	AS NOTED	SHEET	3 OF 3

REV. 05/1996 - 1049423