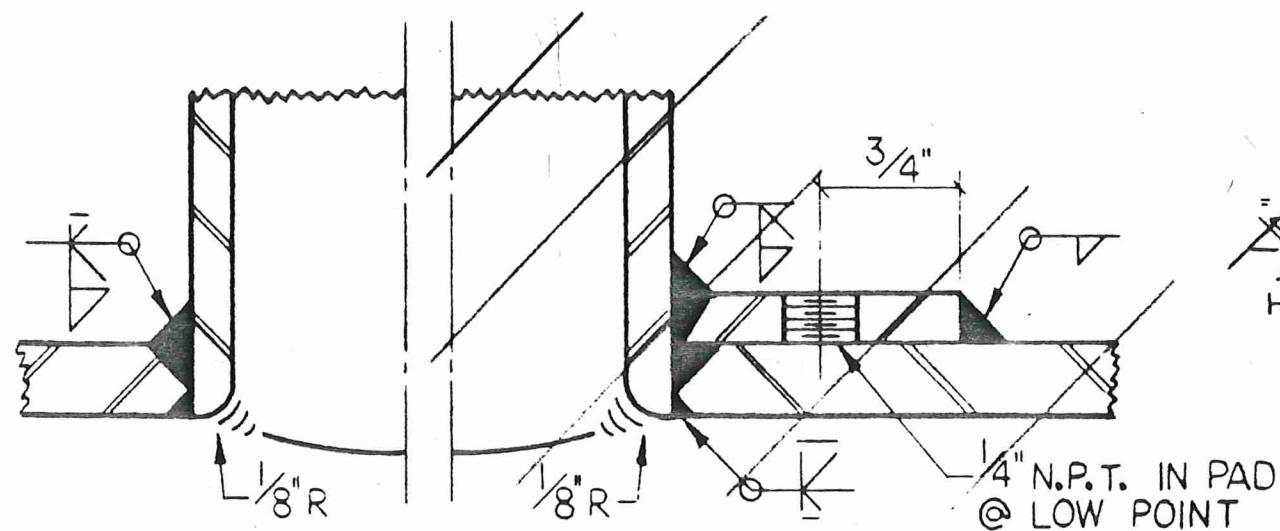
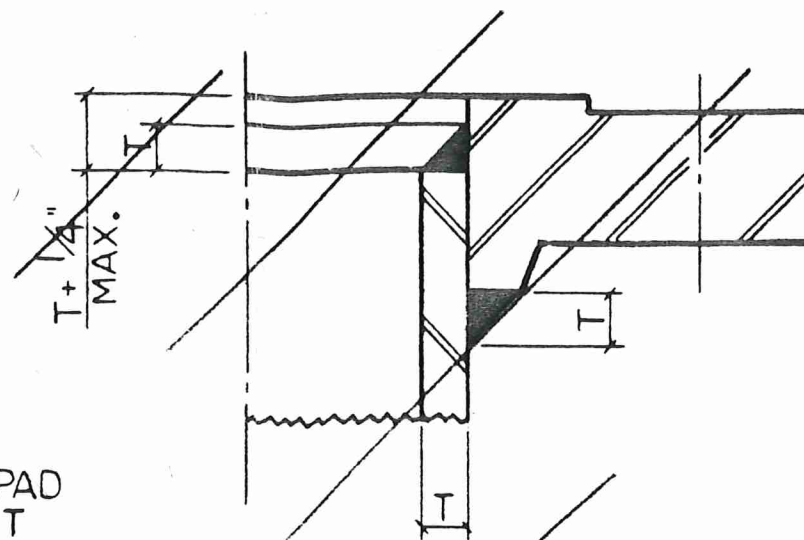
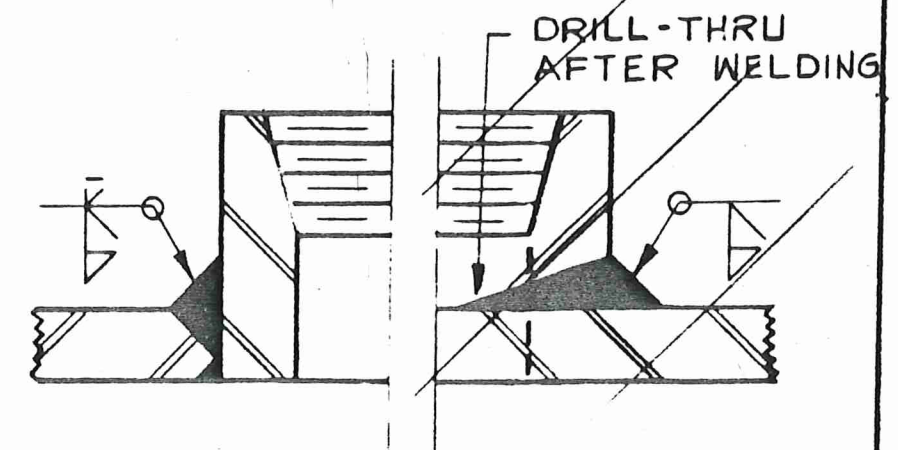




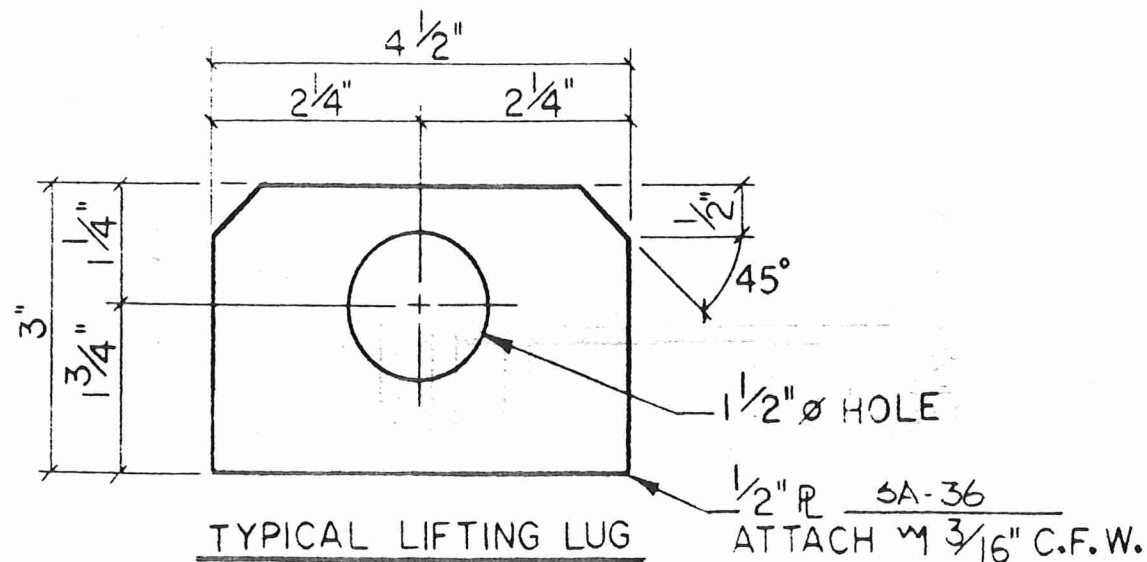
TYPICAL NOZZLE NECK WELDS



TYPICAL SLIP ON FLANGE WELDS



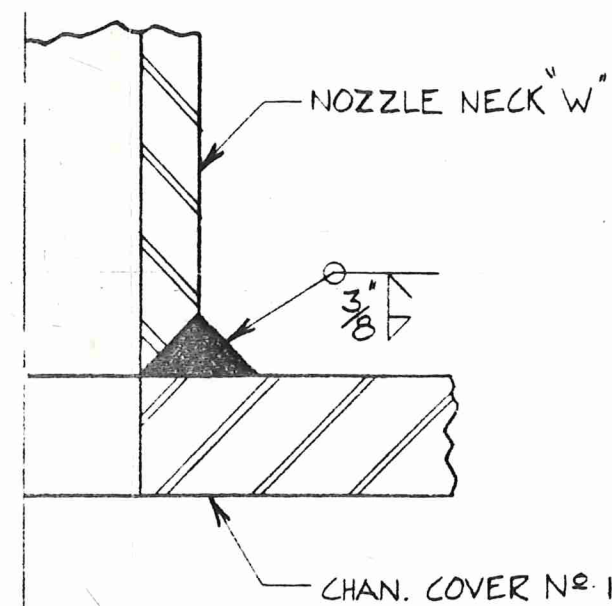
TYPICAL COUPLING WELDS



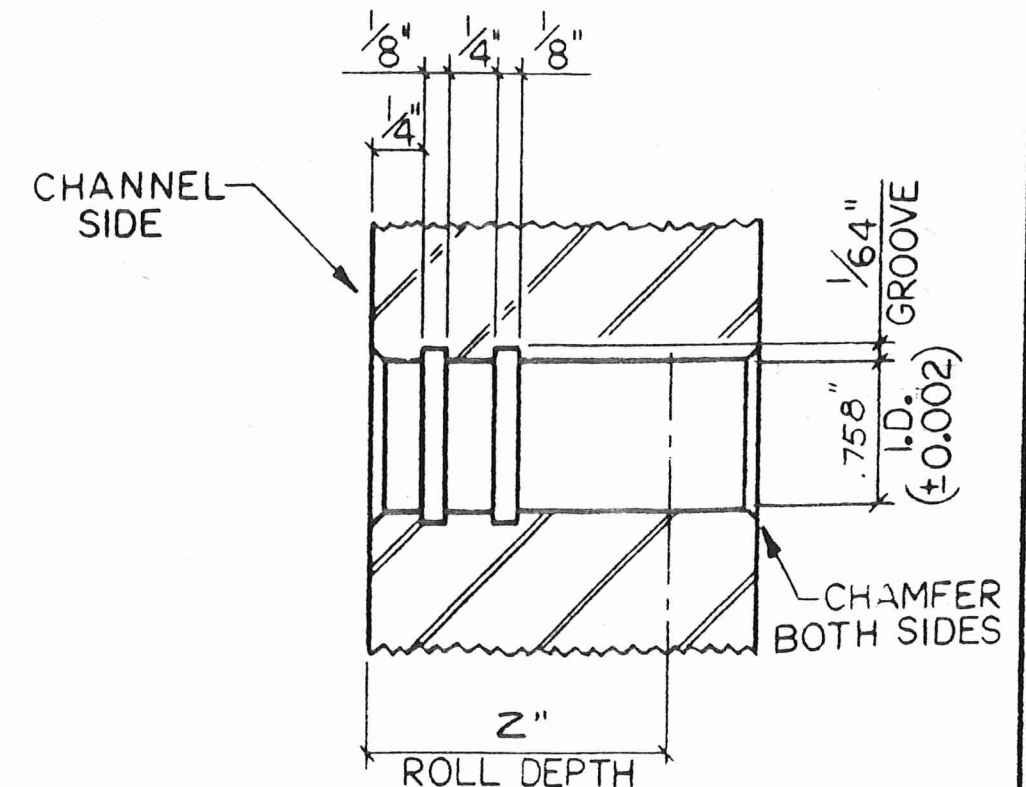
TYPICAL LIFTING LUG

(6) REQ'D EA. EXCH.

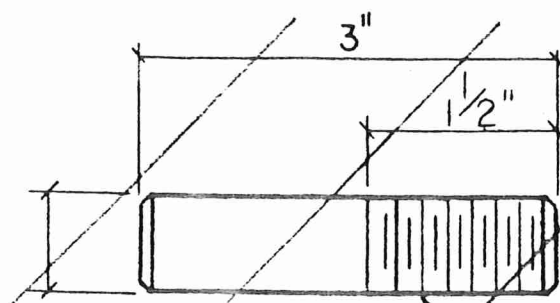
DO NOT LIFT ASSEMBLED EXCHANGER BY LIFT LUGS. THEY ARE FOR FIT UP USE ONLY.



NOZZ. \"W\" WELD DETAIL



TYPICAL TUBEHOLE GROOVING



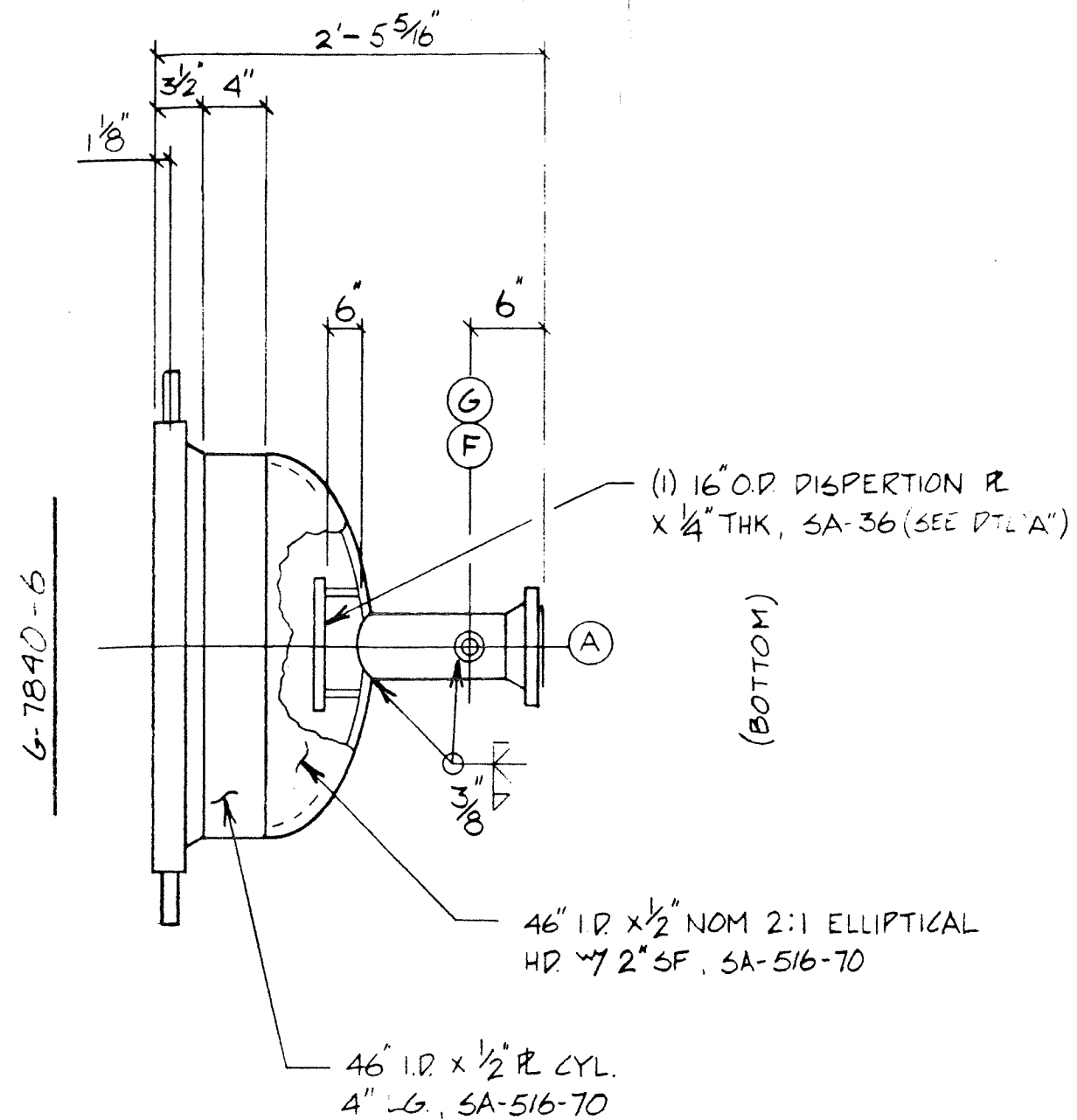
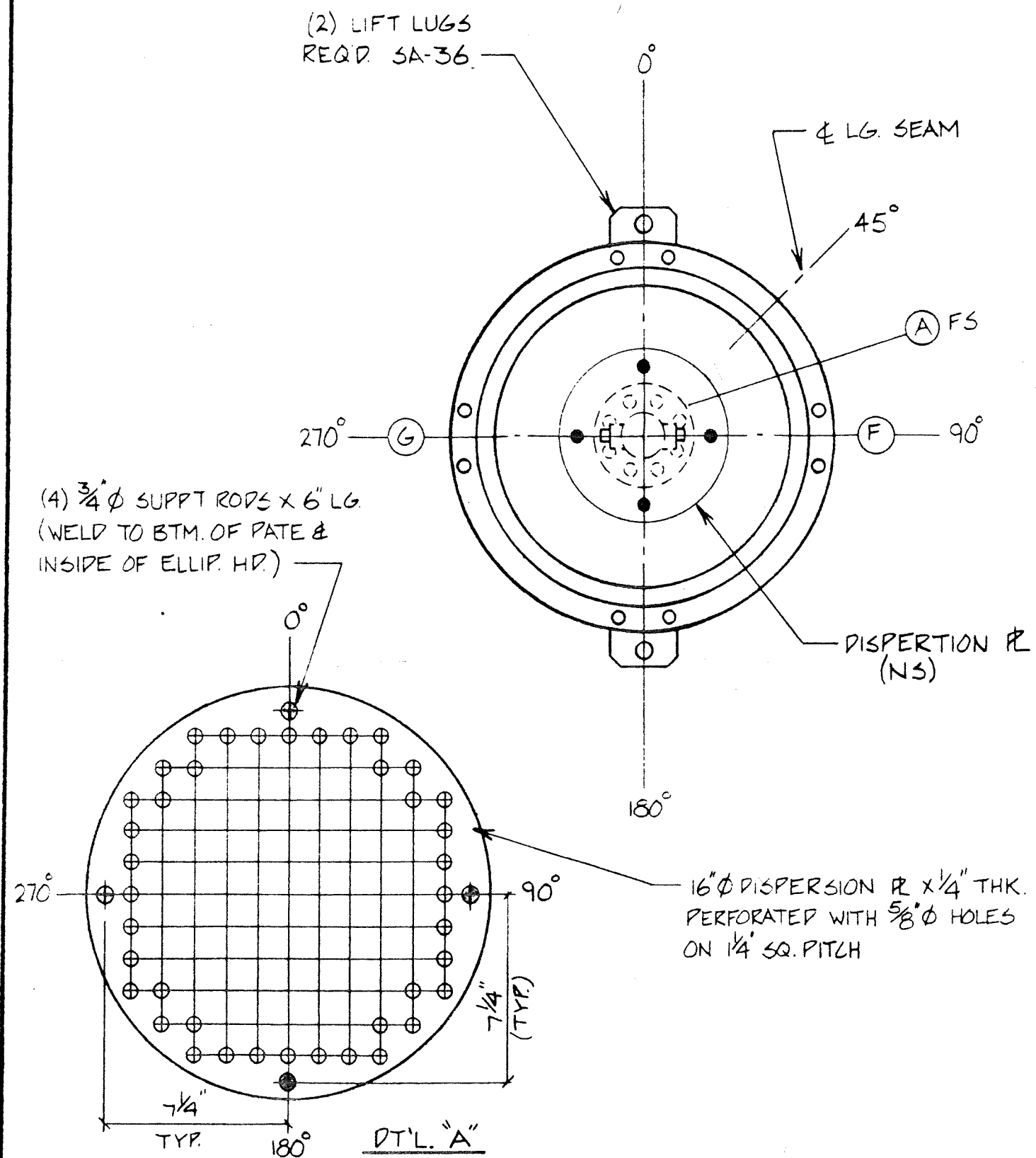
N.C. 2 THR'D.  
TYPICAL BAR PLUG  
( ) REQ'D. EA. EXCH.  
MAT'L.

REV.  
△ FOR APPROVAL  
△ CERTIFIED 2-11-92 LEF

EXELL, INC.

STANDARD DETAILS

|        |     |          |                 |               |
|--------|-----|----------|-----------------|---------------|
| DRW'N. | GR1 | 12-16-91 | NO. REQ'D. ONE  | TYPE: AEM     |
| CHK'D. | PG  | 1-11-92  | ITEM NO. E-1531 |               |
| APV'D. | LEF | 1-11-92  | DWG. NO. 7840   | SHT. 11 OF 11 |



"SPOT X-RAY"

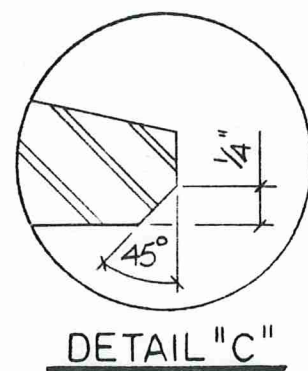
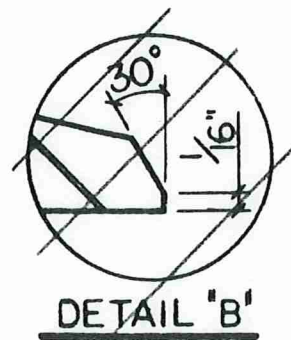
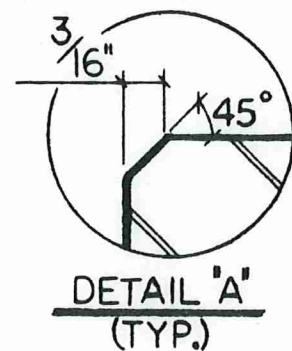
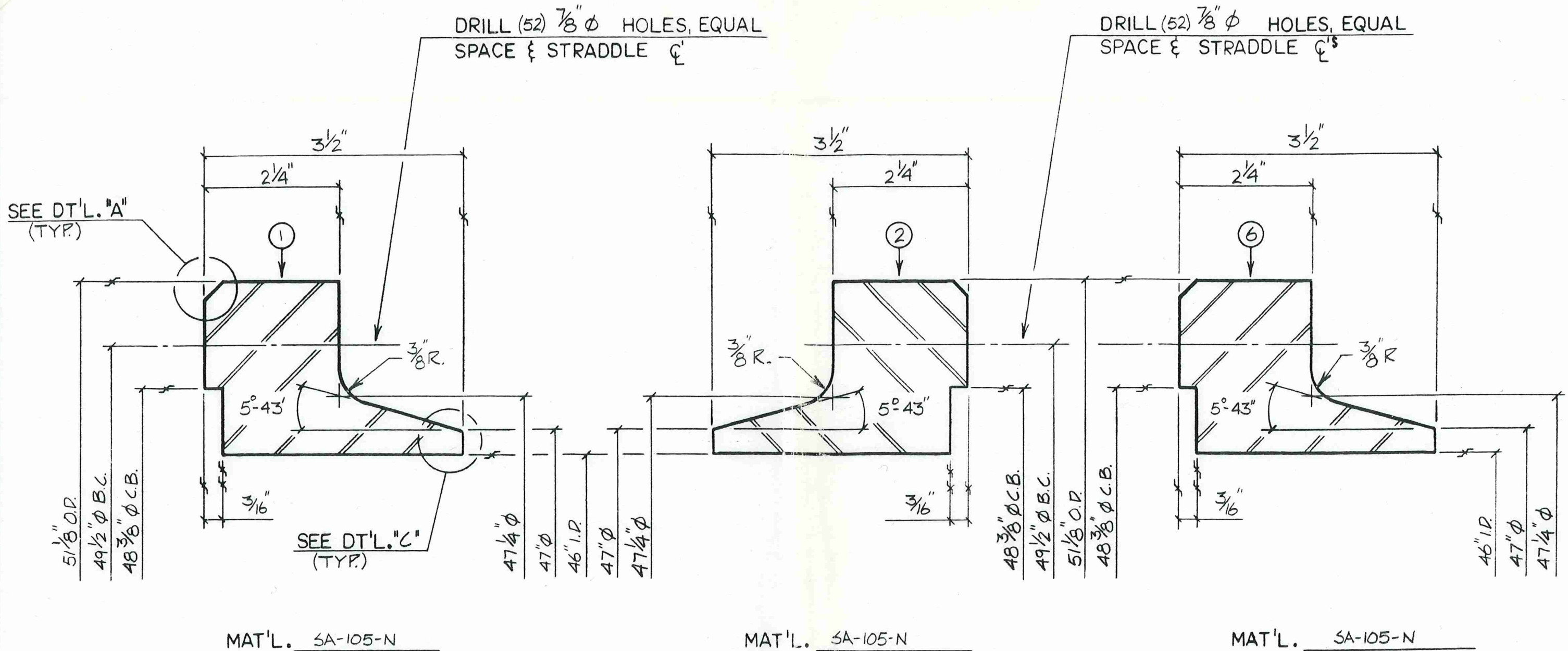
| REV. |                       |
|------|-----------------------|
|      | FOR APPROVAL          |
|      | ADD CHAN. CYL.        |
|      | CERTIFIED 2-11-92 LEF |

|   |                                                                                           |
|---|-------------------------------------------------------------------------------------------|
| G | 1"-6000# FULL CPLG W/ 3" LG. PLUG SA-105                                                  |
| F | $\frac{3}{4}$ "-6000# FULL CPLG W/ 3" LG. PLUG SA-105                                     |
| A | 8"-150# RFWN W/ X-STG. BORE SA-105<br>8" X-STG. (.500") PIPE X 4 $\frac{5}{8}$ " SA-106-B |

EXELL, INC.

CHANNEL DETAIL

|        |     |          |                 |              |
|--------|-----|----------|-----------------|--------------|
| DRW'N. | GRI | 12-11-91 | NO. REQ'D. ONE  | TYPE: AEM    |
| CHK'D. | PG  | 1-11-92  | ITEM NO. E-1531 |              |
| APV'D. | LEF | 1-11-92  | DWG. NO. 7840   | SHT. 5 OF 11 |



Equip. No. 23-08-033

SURFACE MICRO-FINISH

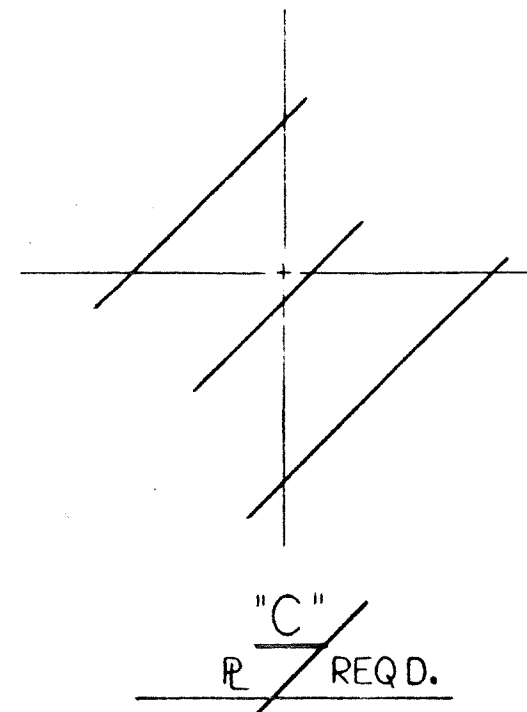
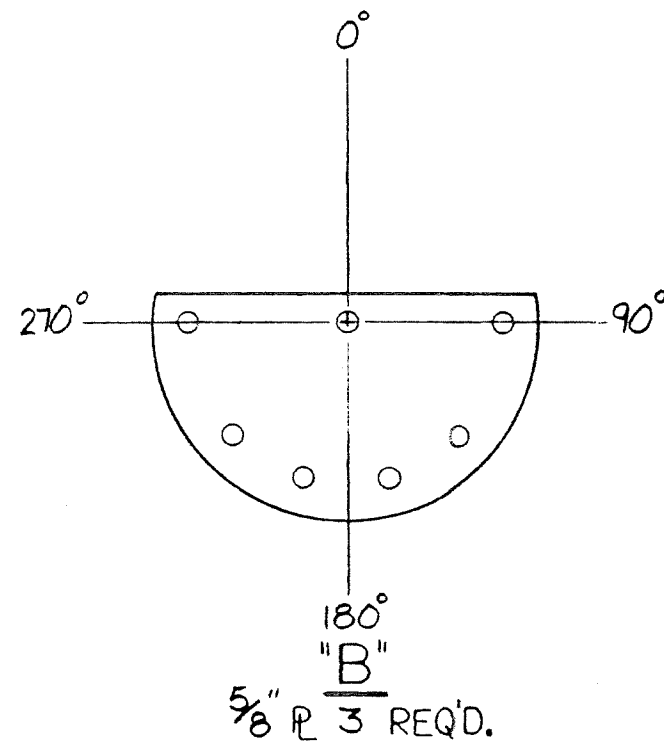
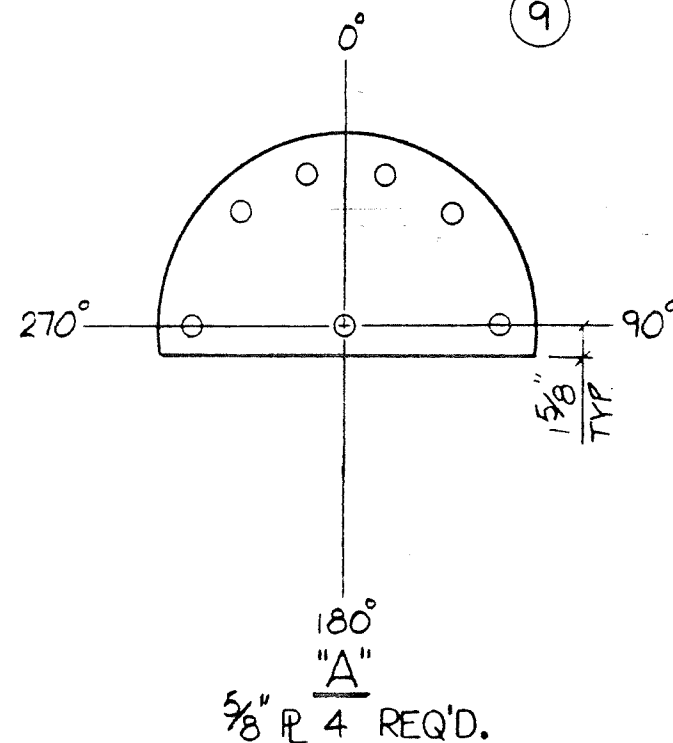
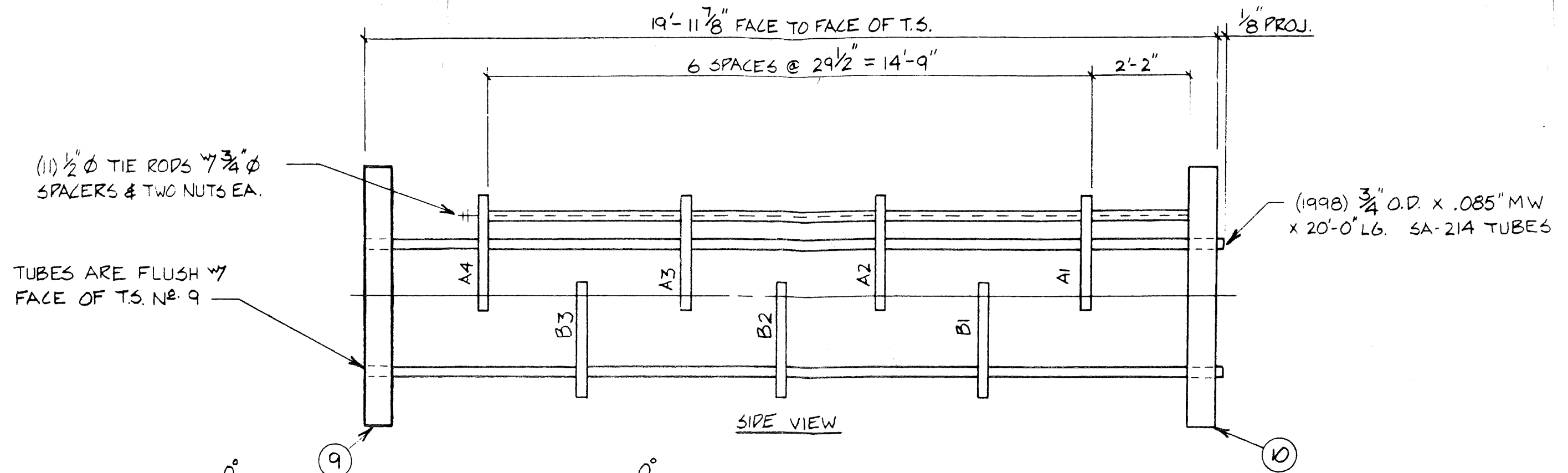
$\chi$  = 250 R.M.S.  
 $\chi\chi$  = 125 R.M.S.

BODY FLANGE DT'L.

REV.  
 (O) FOR APPROVAL  
 (I) CERTIFIED 2-11-92 LEF

EXELL, INC.

|        |     |          |                 |              |
|--------|-----|----------|-----------------|--------------|
| DRW'N. | GRI | 12-13-91 | NO. REQ'D. ONE  | TYPE: AEM    |
| CHK'D. | DG  | 1-11-92  | ITEM NO. E-1531 |              |
| APV'D. | LEF | 1-11-92  | DWG. NO. 7840   | SHT. 9 OF 11 |



| TIE ROD & SPACER SCHEDULE           |                       |                                      |                       |
|-------------------------------------|-----------------------|--------------------------------------|-----------------------|
| TIE ROD MAT'L.                      |                       | SPACER MAT'L.                        |                       |
| $\frac{1}{2}$ " $\phi$ ROD<br>C STL |                       | $\frac{3}{4}$ " $\phi$ TUBE<br>C STL |                       |
| NO.                                 | LENGTH                | NO.                                  | LENGTH                |
| 7                                   | 17'-1 $\frac{5}{8}$ " | 7                                    | 2'-2"                 |
| 4                                   | 14'-8 $\frac{1}{8}$ " | 18                                   | 2'-4 $\frac{7}{8}$ "  |
|                                     |                       | 4                                    | 4'-7 $\frac{1}{2}$ "  |
|                                     |                       | 20                                   | 4'-10 $\frac{3}{8}$ " |
|                                     |                       |                                      |                       |
|                                     |                       |                                      |                       |

## NOTES

1. BAFFLE O.D. = 45 $\frac{3}{4}$ " BAFFLE MAT'L. = SA-36
2. DRILL  $\frac{9}{16}$ "  $\phi$  TIE ROD HOLES IN BAFFLES. SEE SHT. 6 FOR LOCATION.
3. DRILL 49 $\frac{1}{64}$ "  $\phi$  TUBE HOLES IN BAFFLES. SEE SHT. 6 FOR LOCATION.
4. TUBE ENDS TO BE ROLLED.
5. ALL CROSS BAFFLES ARE VIEWED FROM SHELL SIDE OF TUBESHEET # 10.

REV.

△ FOR APPROVAL

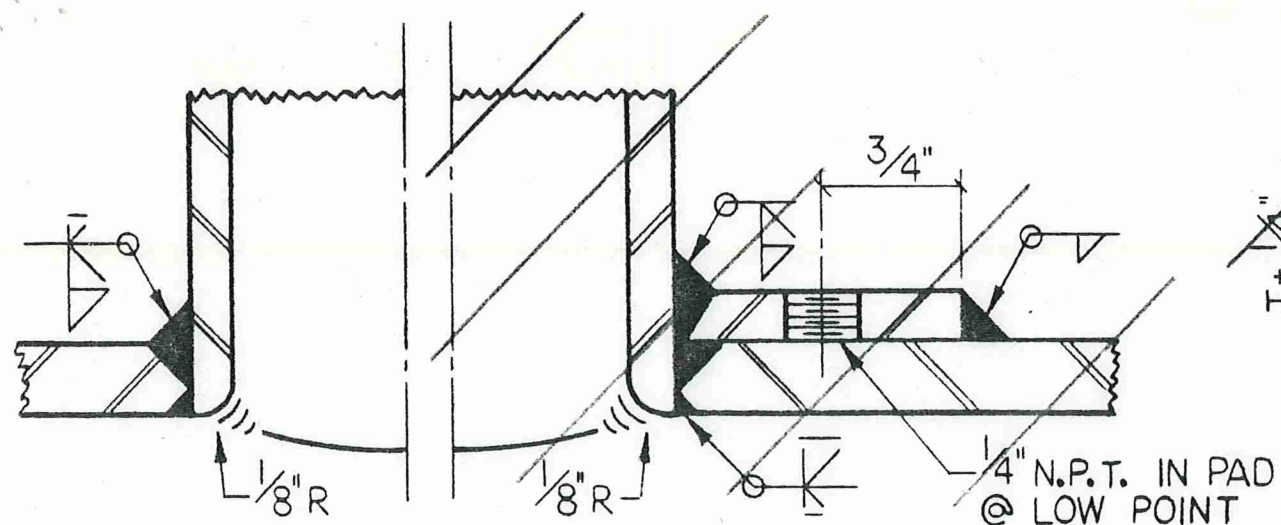
1 REV. BAFF. D.D. 1-22-92

2 CERTIFIED 2-11-92 LEF

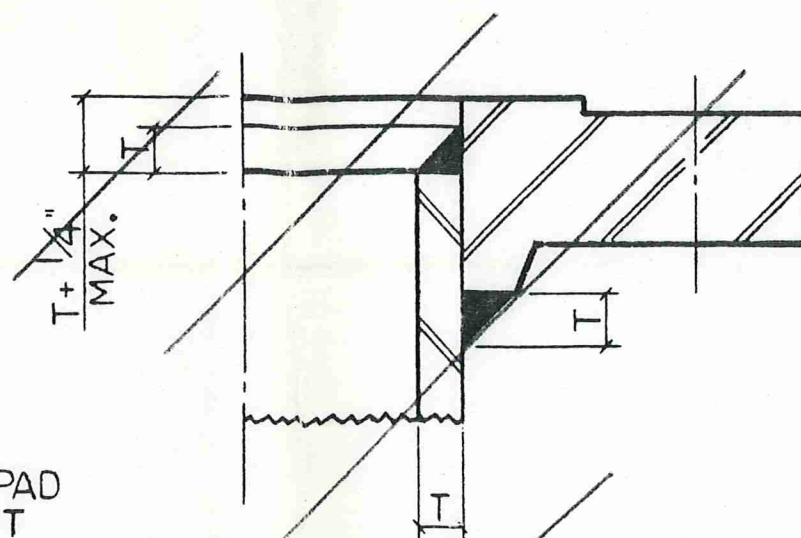
EXELL, INC.

BUNDLE ASSEMBLY

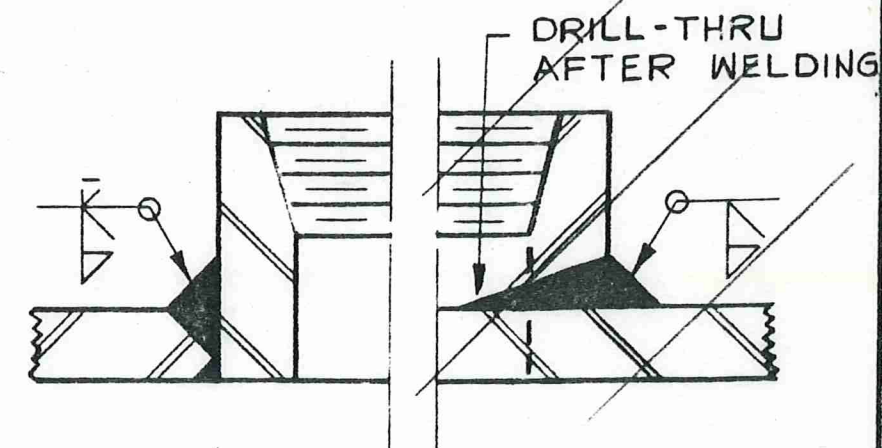
|        |     |          |                 |              |
|--------|-----|----------|-----------------|--------------|
| DRW'N. | GRI | 12-12-91 | NO. REQ'D. ONE  | TYPE: AEM    |
| CHK'D. | DG  | 1-11-92  | ITEM NO. E-1531 |              |
| APV'D. | LEF | 1-11-92  | DWG. NO. 7840   | SHT. 7 OF 11 |



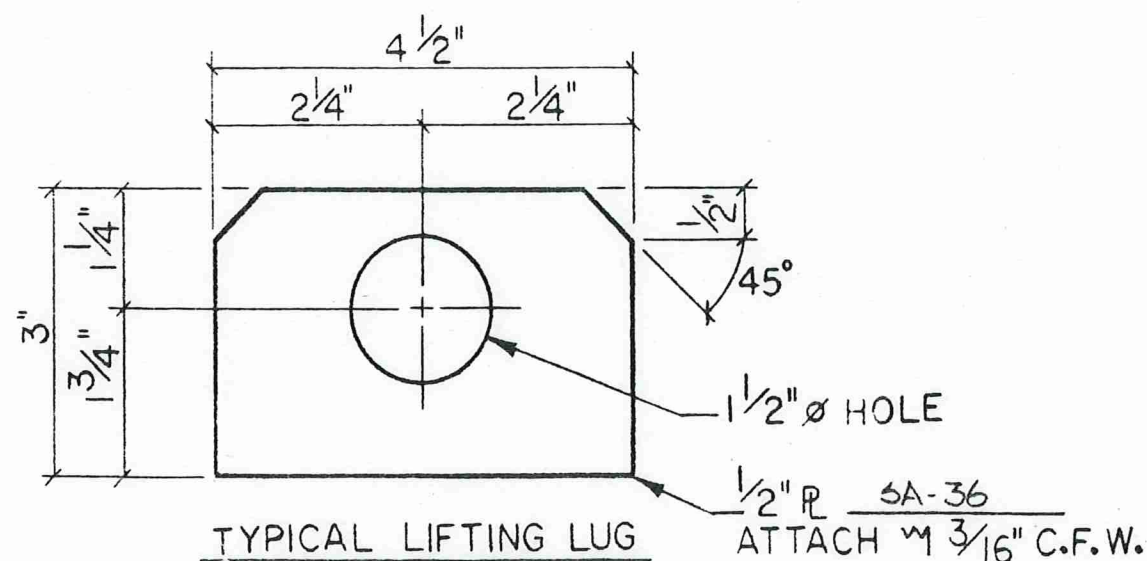
TYPICAL NOZZLE NECK WELDS



TYPICAL SLIP ON FLANGE WELDS



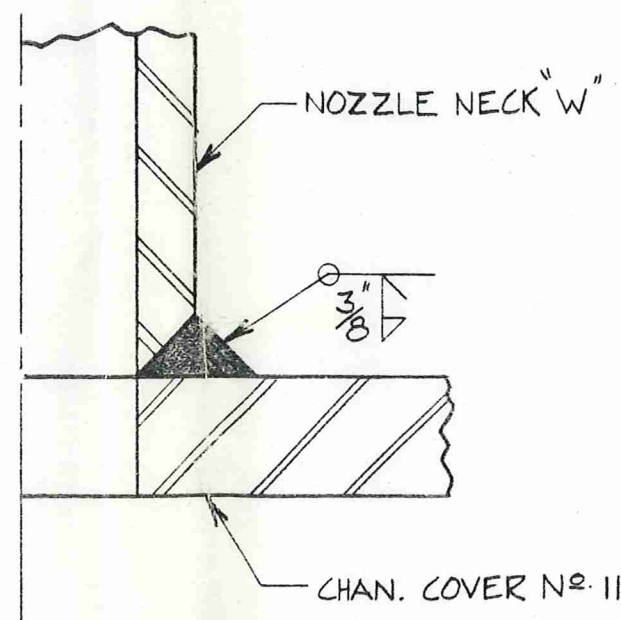
TYPICAL COUPLING WELDS



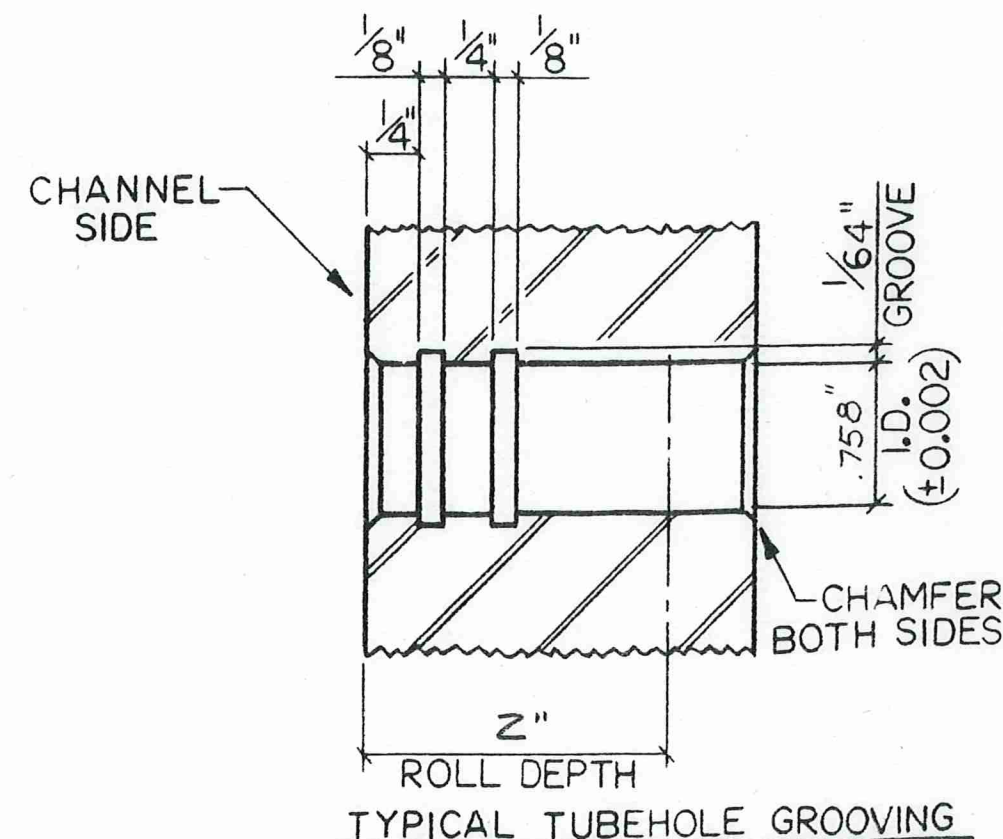
TYPICAL LIFTING LUG

(6) REQ'D EA. EXCH.

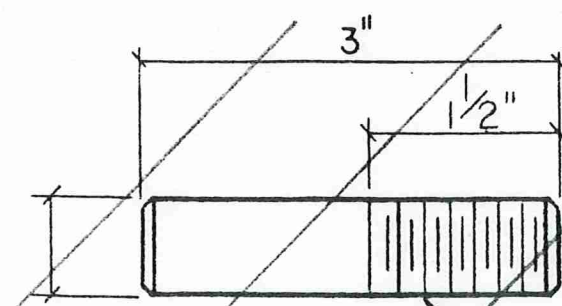
DO NOT LIFT ASSEMBLED EXCHANGER BY  
LIFT LUGS. THEY ARE FOR FIT UP USE ONLY.



NOZZ. "W" WELD DETAIL



TYPICAL TUBEHOLE GROOVING



N.C. 2 THR'D.  
TYPICAL BAR PLUG  
( ) REQ'D. EA. EXCH.  
MAT'L.

Equip. No. 23-08-033

REV.

△ FOR APPROVAL

△ CERTIFIED 2-11-92 LEF

EXELL, INC.

STANDARD DETAILS

|        |     |          |                 |               |
|--------|-----|----------|-----------------|---------------|
| DRW'N. | GRI | 12-16-91 | NO. REQ'D. ONE  | TYPE: AEM     |
| CHK'D. | PG  | 1-11-92  | ITEM NO. E-1531 |               |
| APV'D. | LEF | 1-11-92  | DWG. NO. 7840   | SHT. 11 OF 11 |