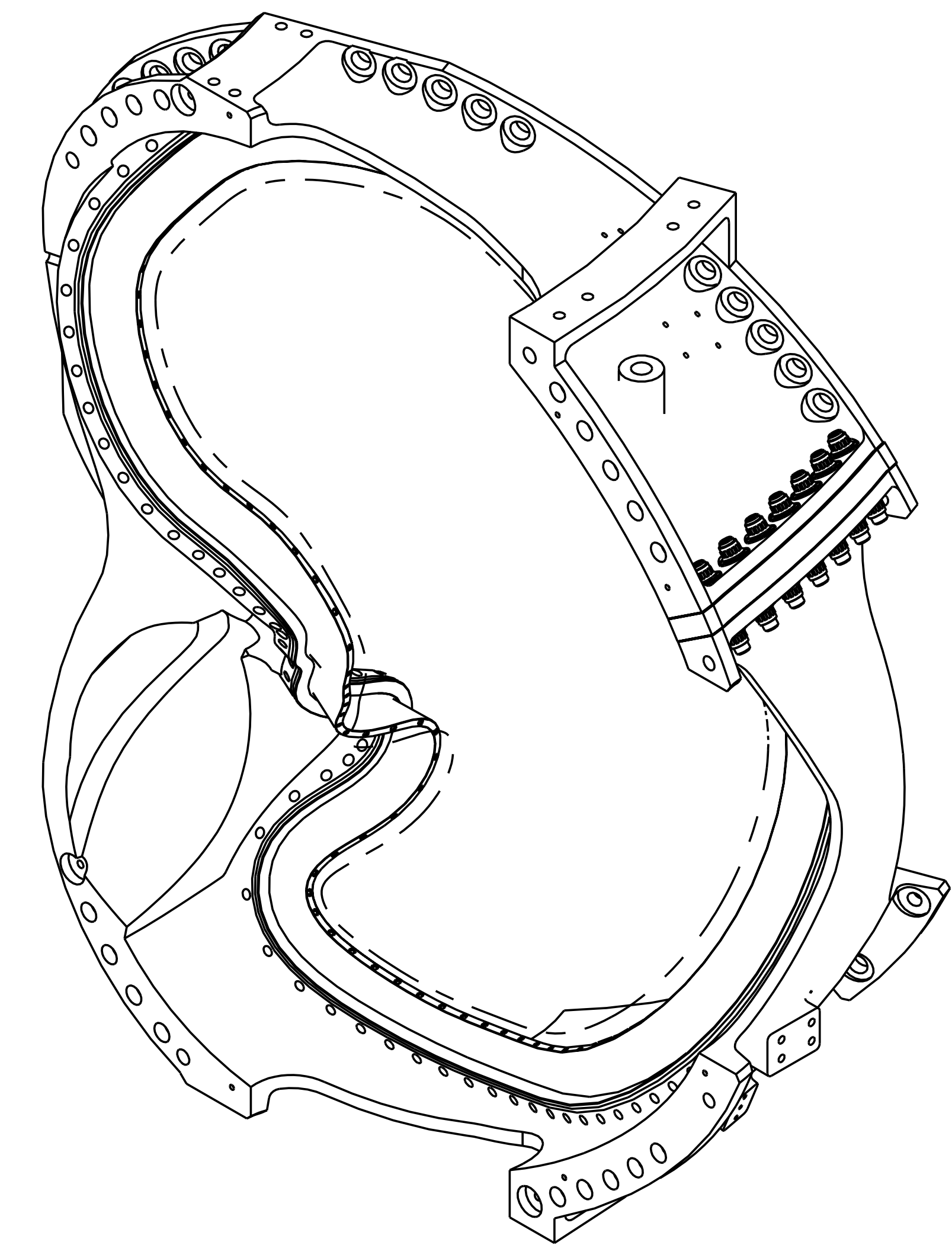
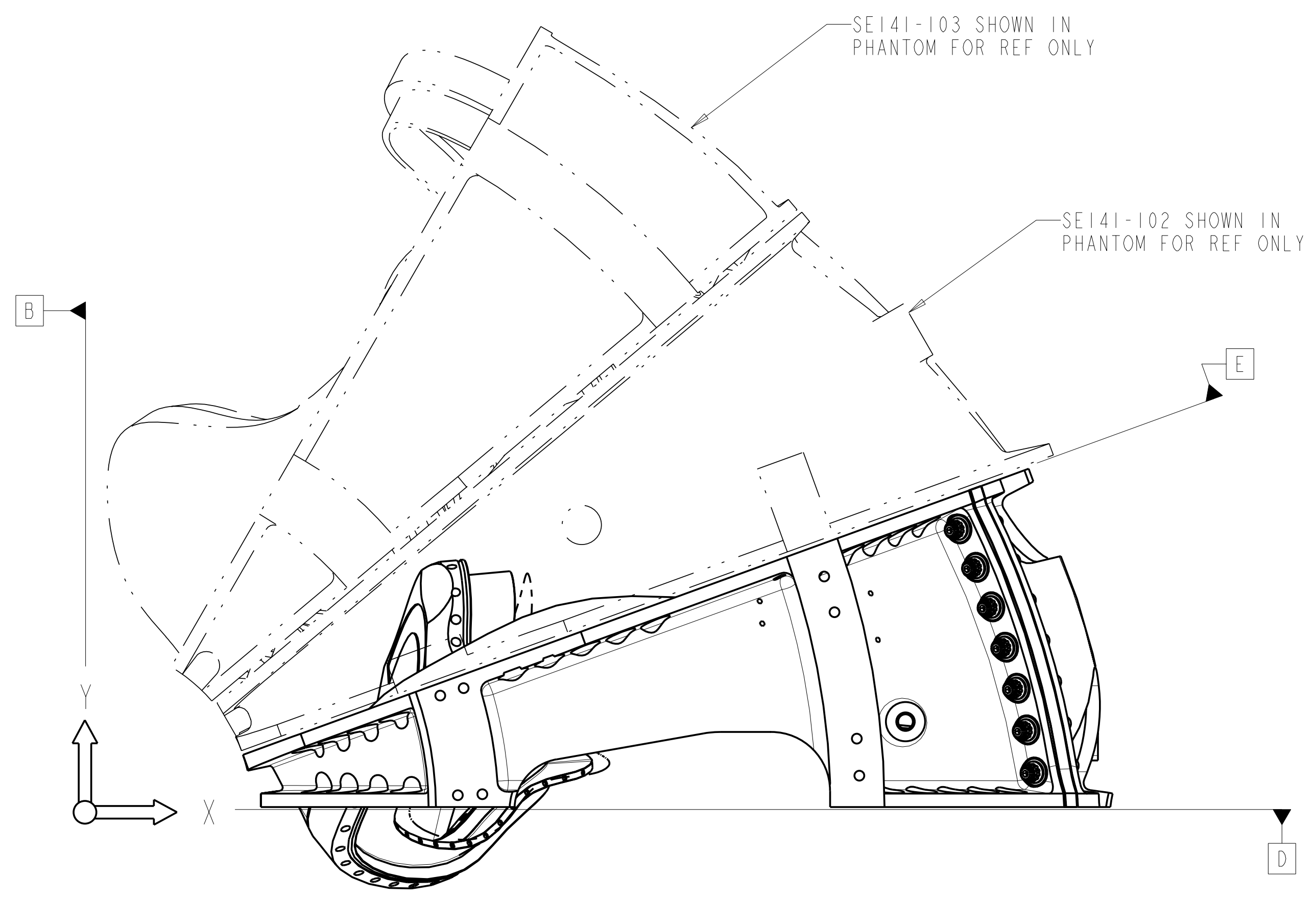
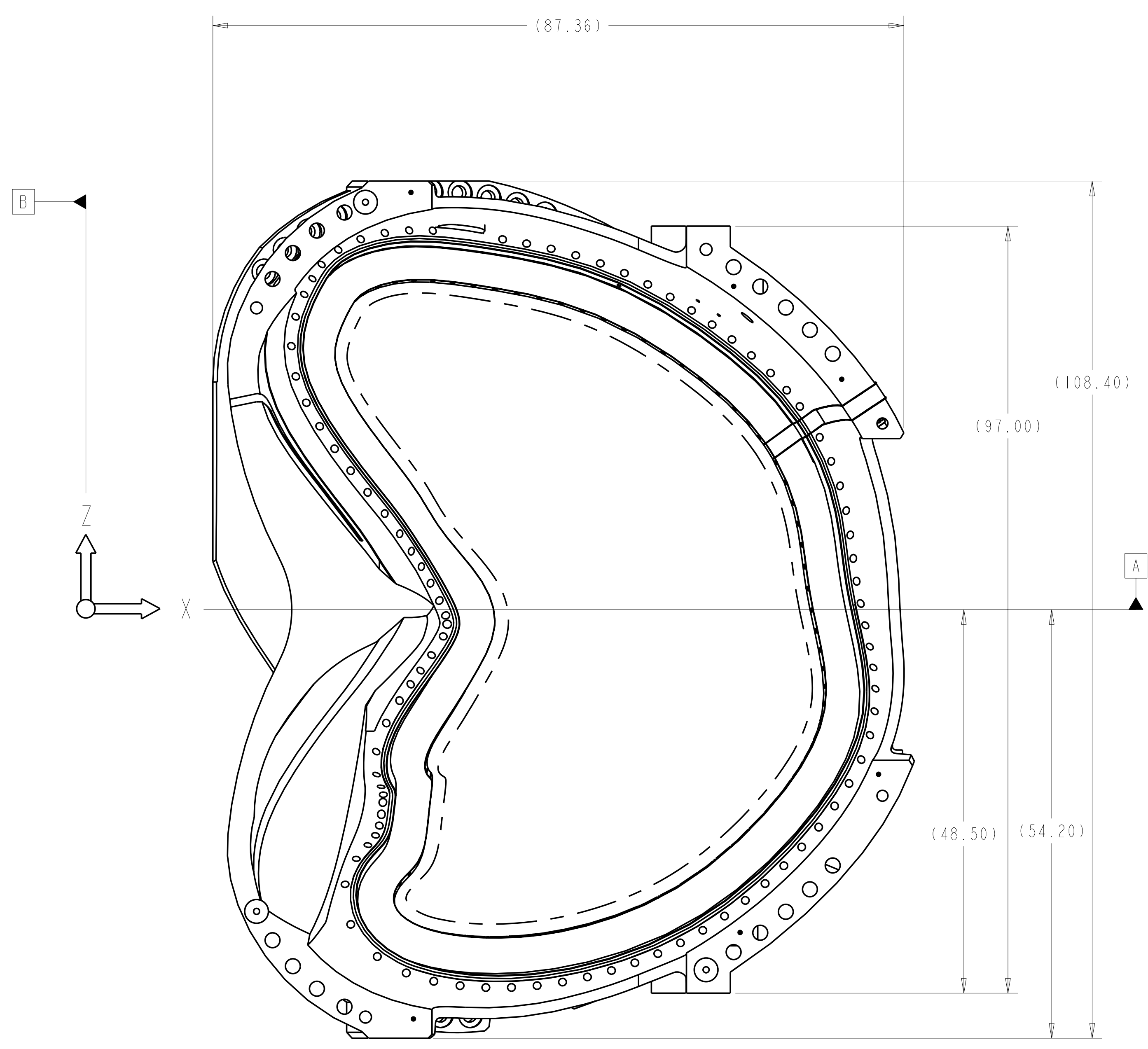


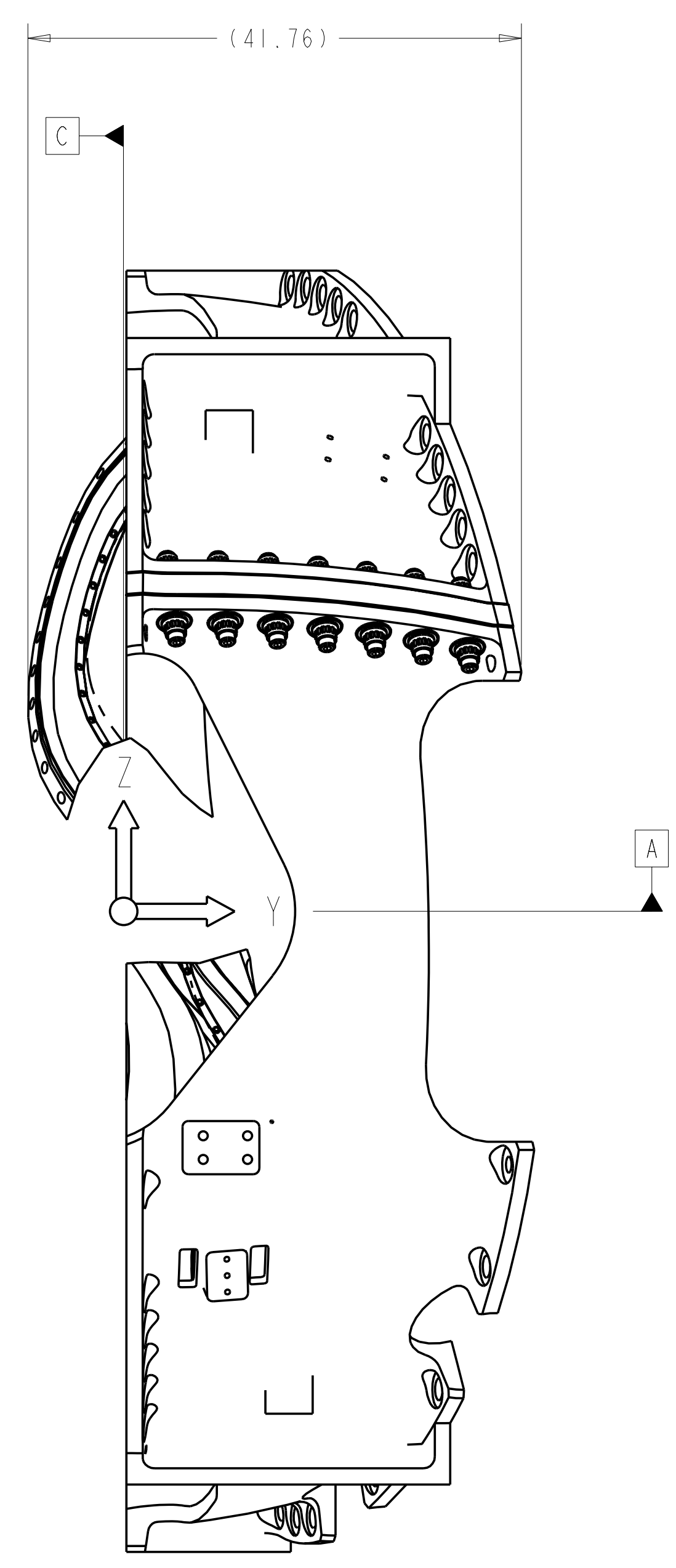
- NOTES:
- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.8M-1996.
 - INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
 - DIMENSIONS ARE IN INCHES.
 - DRAWING DEPICTS FINAL MACHINED STATE OF ASSEMBLY DEFINED BY PRO/ENGINEER FILE SEI41-101.PRT.
 - UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE RELATED TO DATUM A- (PRIMARY X-Y PLANE, TOP) DATUM B- (SECONDARY Y-Z PLANE, SIDE) DATUM C- (TERTIARY X-Z PLANE, FRONT)
 - DIMENSIONS APPLY AT TEMPERATURE OF 20-30°C (68-86°F).
 - DIMENSIONS AND TOLERANCES EXCLUDE PROCESS MATERIAL ALLOWANCES WHICH MAY ADD MASS.
 - APPROXIMATE WEIGHT = 4983 LBS
 - MATCH DRILL OR REAM AS REQUIRED TO ACHIEVE RUNNING FIT BETWEEN PARTS AT ASSEMBLY.
 - LUBRICATE THREADED SURFACES WITH MOLYCOTE 321R PER MANUFACTURER'S INSTRUCTIONS.
 - SEE LATEST REVISION OF SPECIFICATION NCSX-CSPEC-141-03 FOR ADDITIONAL REQUIREMENTS.
 - BOND INSULATING SLEEVE (F/N 5) TO WINDING FORM (F/N 2) USING LOCTITE 411, PER MANUFACTURER'S INSTRUCTIONS.



ISOMETRIC VIEW
SCALE 0.10



I SCALE .10



RELEASED FOR FABRICATION / INSTALLATION
 PPPL Drafting:

| REV | CAGE CODE | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION | MATERIAL | SPECIFICATION | FIND NO |
|-----------|-----------|-------------------------------|---------------------------------------|------------------|---------------|---------|
| 14 | DS141-079 | | FLAT WASHER | | | 9 |
| 14 | DS141-060 | | NUT, 12PT HEX 1.375-6UNC-2B | | | 8 |
| 14 | DS141-038 | | INSULATING WASHER | | | 7 |
| 7 | DS141-036 | | STUD, 1.375-6UNC-2A X 9 LG | | | 6 |
| 14 | -5 | MCWF INSULATING SLEEVE TYPE-A | GI1CR | NEMA LI I - 1998 | | 5 |
| I | -4 | INSULATING SHEET TYPE-A | GI1CR | NEMA LI I - 1998 | | 4 |
| I | SEI41-048 | | POL BREAK SHIM ASSEMBLY TYPE-A | | | 3 |
| I | SEI41-114 | | PRODUCTION WINDING FORM TYPE-A | | | 2 |
| AR | X | -1 | MOD COIL WINDING FORM ASSEMBLY TYPE-A | | | 1 |
| SEI41-101 | | | | | | |

← NEXT ASSEMBLY

PARTS LIST

| | | | | | | | | | | | | |
|-----|---------------------------|----|------|-----|------|------|----|-----|------|------|-----|------|
| REV | DESCRIPTION | BY | DATE | CHK | DEPT | DATE | PE | REQ | DATE | ORNL | DOE | DATE |
| | REVISION OR ISSUE PURPOSE | | | | | | | | | | | |

| | | | | | |
|---------------------------------------|----------------------------------|----------------------|--------------------|--------|----------------------------|
| SCALE NOTED | DES T BROWN 6-30-04 | DRW P MILLER 6-30-04 | CHK M COLE 6-30-04 | SECT : | DEPT : |
| TOLERANCES UNLESS OTHERWISE SPECIFIED | PE D WILLIAMSON 6-30-04 | CR : | PJ : | REO : | PPPL DRFT J SIEGEL 6-30-04 |
| FRACTIONS | ± .01 | | | | |
| XX DECIMALS | ± .005 | | | | |
| XXX DECIMALS | ± .0015 | | | | |
| ANGLES | ± 0'15" | | | | |
| BREAK SHARP EDGES | 06 MAX | | | | |
| FINISH | ±.025 UNLESS OTHERWISE SPECIFIED | | | | |

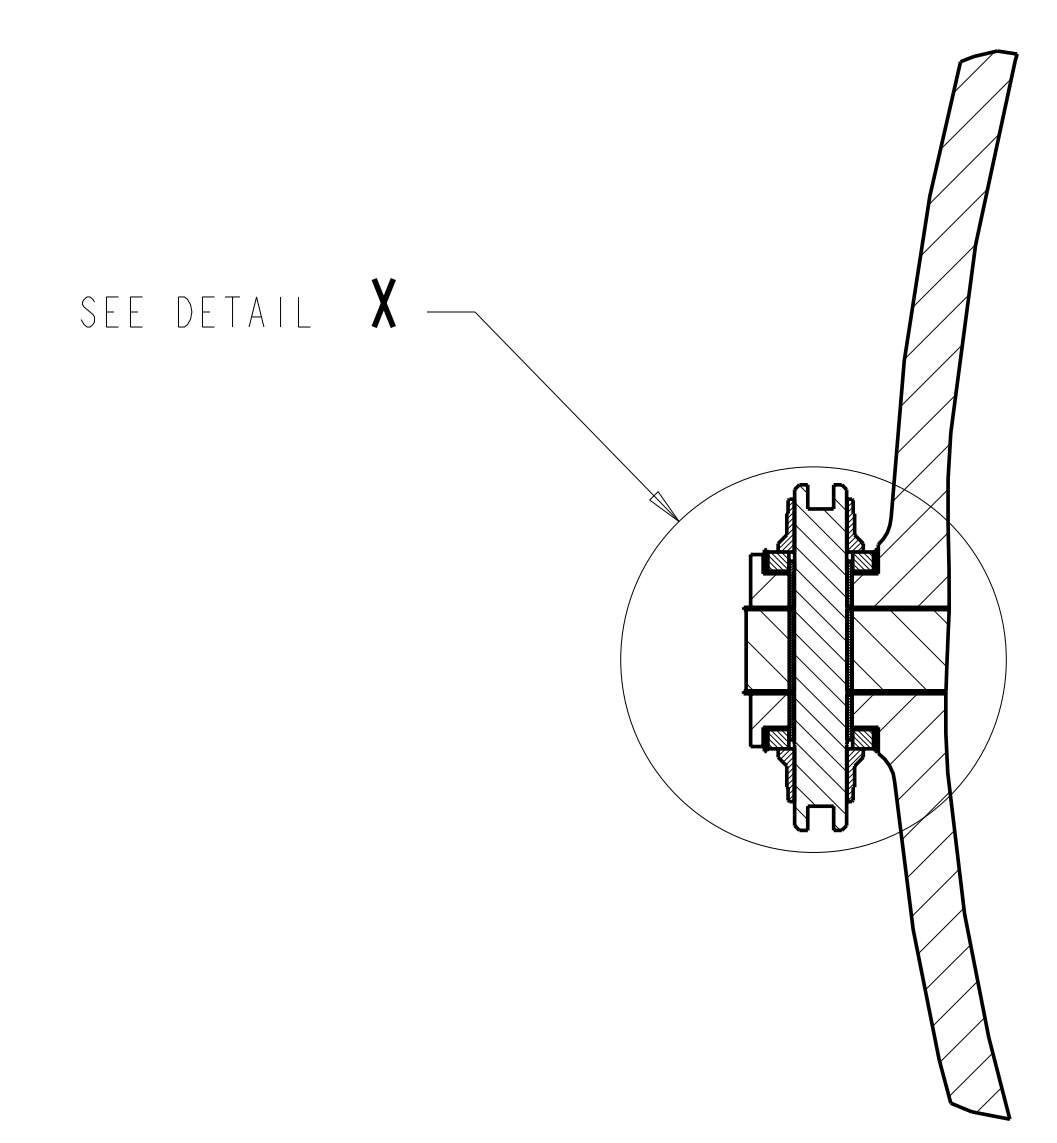
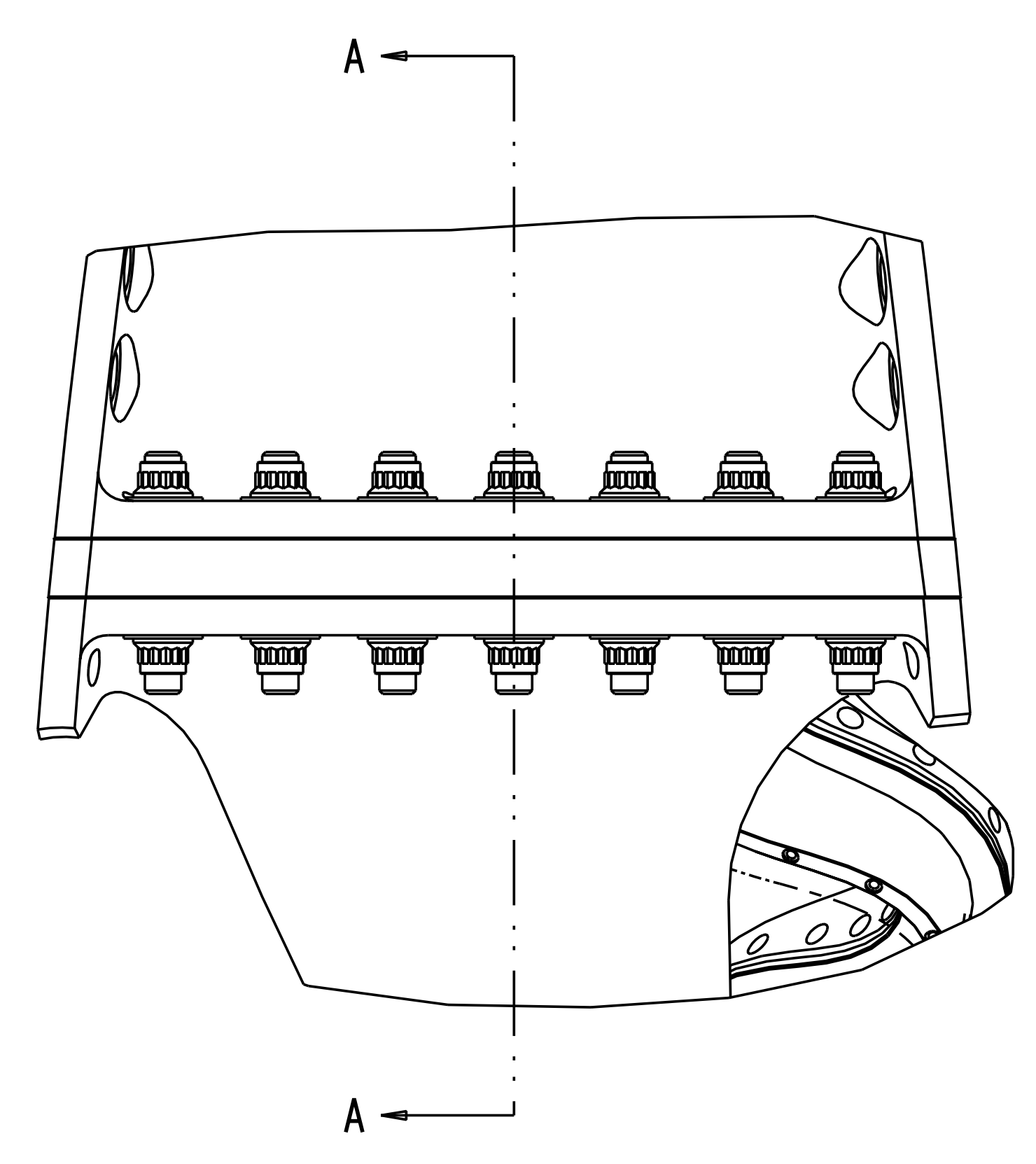
| | | | | | | |
|---|--|------|-----|--------|------|-------|
| UT-BATTELLE | Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee | | | | | |
| PROJECT NAME | | | | | | |
| NATIONAL COMPACT STELLARATOR EXPERIMENT | | | | | | |
| MOD COIL WINDING FORM ASSEMBLY TYPE-A | | | | | | |
| VERSION NO. | PLANT | BLDG | FL | SHT OF | TYPE | CLASS |
| 31 | X-10 | 5700 | 3 | 1 2 1 | S | U |
| RELEASE LEVEL | SEI41-101 | | REV | 0 | | |
| Fabrication | | | | | | |

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF, ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

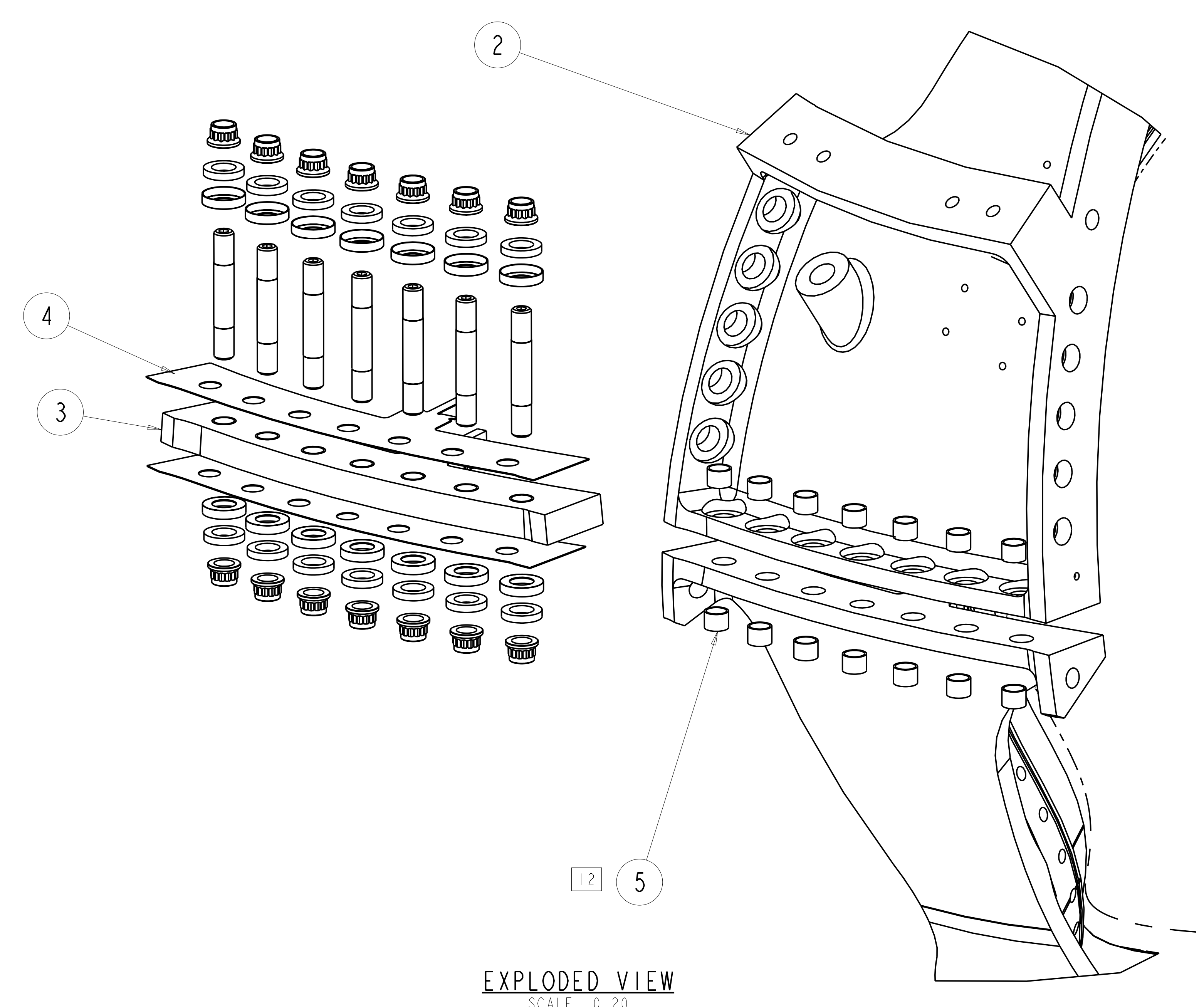
P THIS DRAWING PRODUCED ON PRO-ENGINEER

H
G
F
E
D
C
B
A

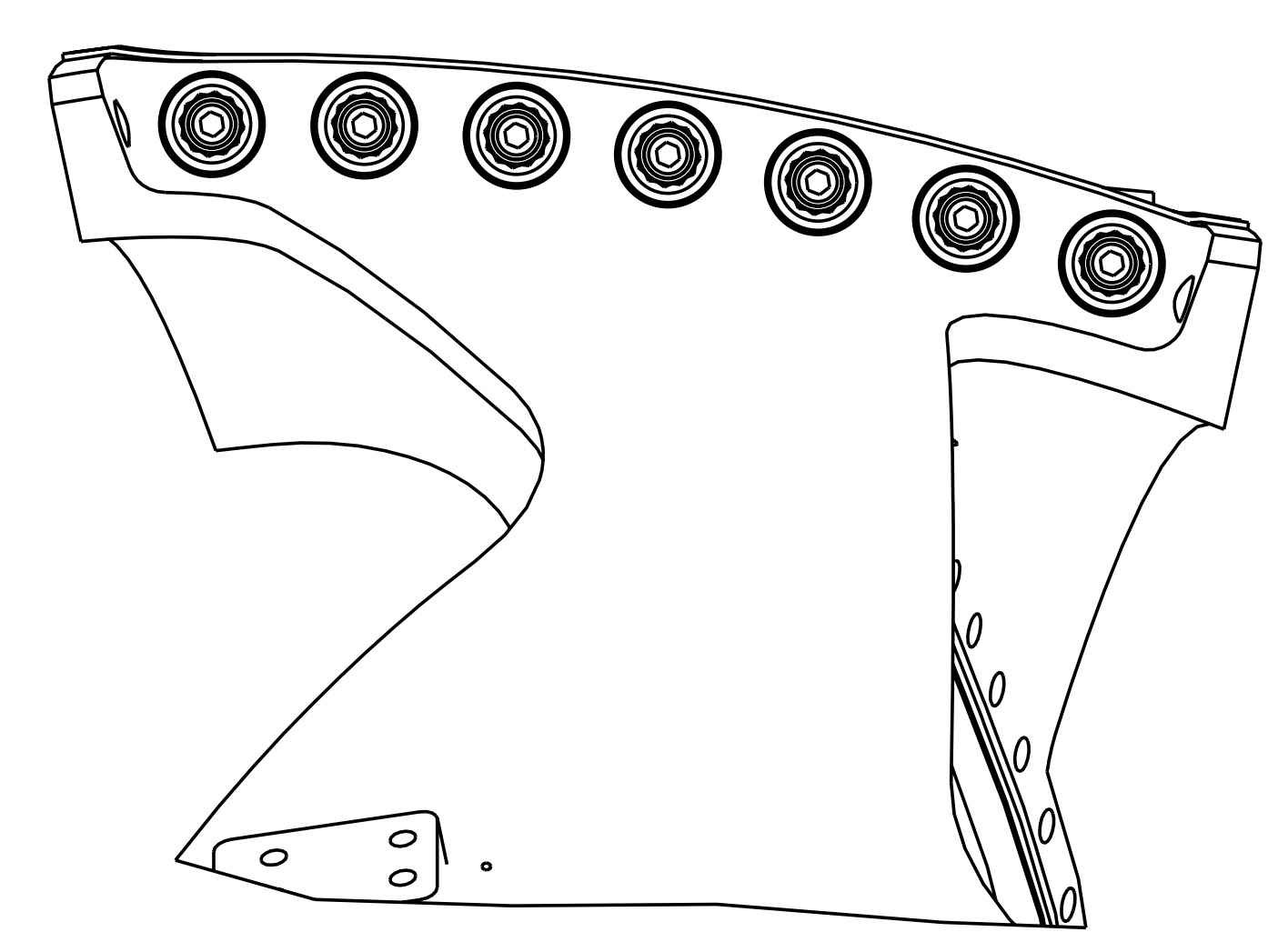
FOR NOTES AND PARTS LIST SEE SHEET 1



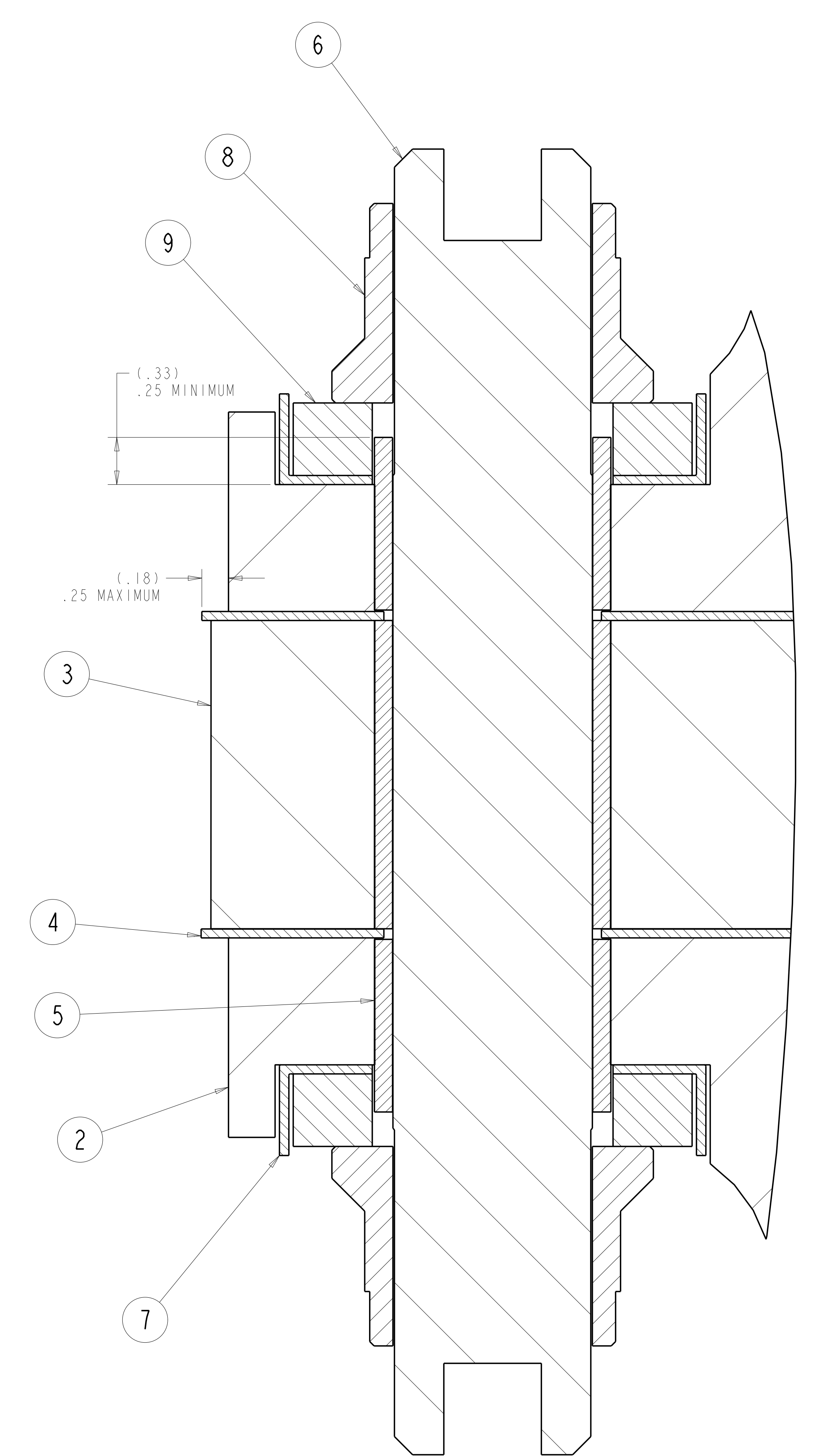
SECTION A-A
 SCALE 0.20



EXPLODED VIEW
 SCALE 0.20



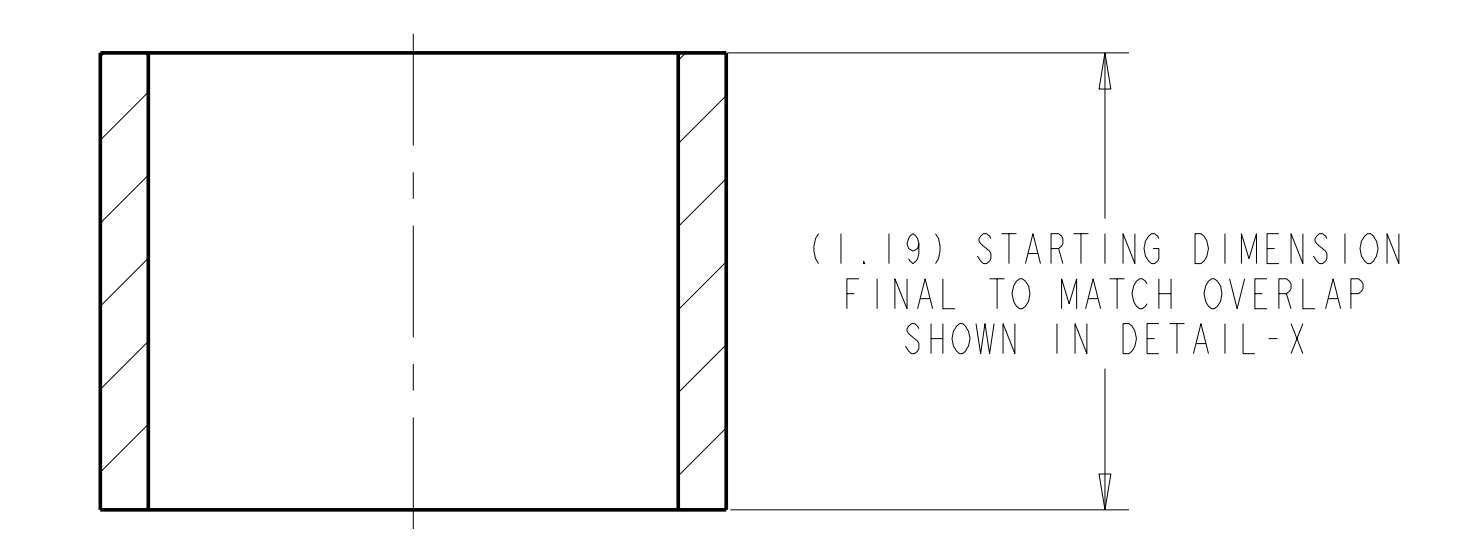
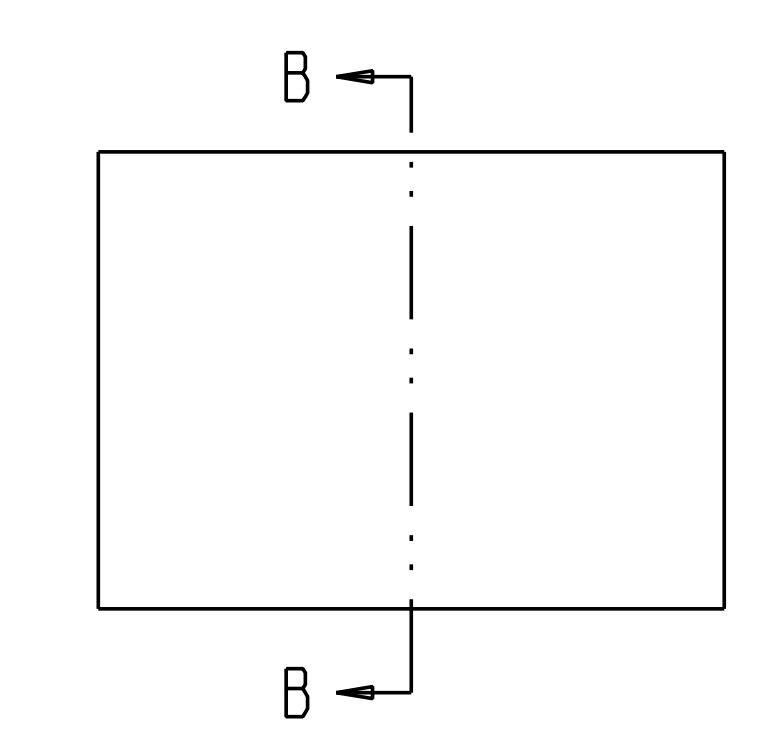
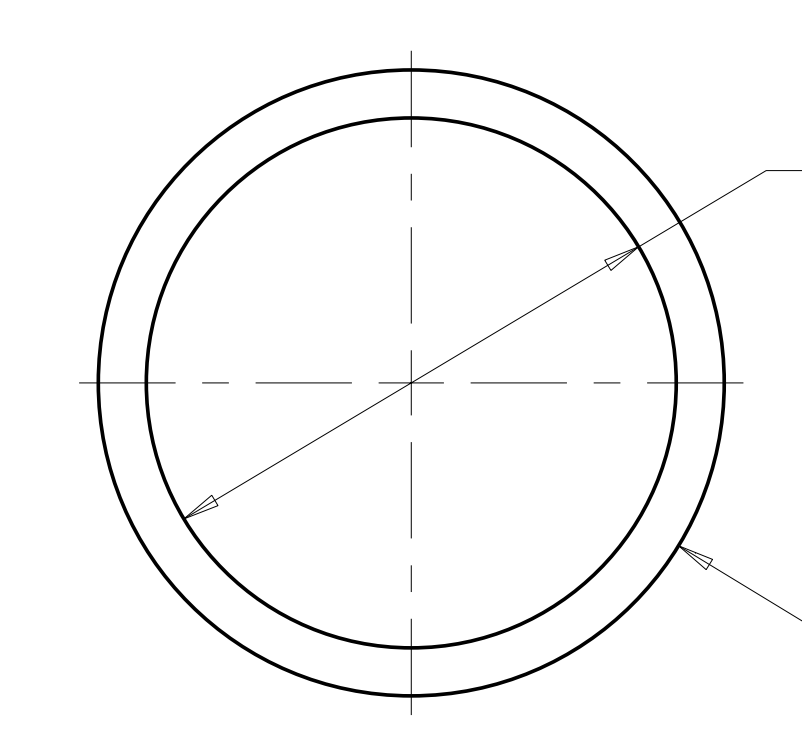
POLOIDAL BREAK DETAIL



(.33)
 .25 MINIMUM

(.18)
 .25 MAXIMUM

DETAIL X
 SCALE 2.00



SECTION B-B
 SCALE 2.00

**RELEASED FOR
 FABRICATION / INSTALLATION**
 PPPL Drafting:

| | | | | | | | |
|---|-----------|------|----|--------|------|-------|-----|
| Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee | | | | | | | |
| UT-BATTELLE | | | | | | | |
| NATIONAL COMPACT STELLARATOR EXPERIMENT | | | | | | | |
| MOD COIL WINDING FORM ASSEMBLY TYPE-A | | | | | | | |
| VERSION NO. | PLANT | BLDG | FL | SHT OF | TYPE | CLASS | |
| 31 | X-10 | 5700 | 3 | 2 | S | U | |
| RELEASE LEVEL | SEI41-101 | | | | | | REV |
| Fabrication | | | | | | | 0 |

SEI41-101