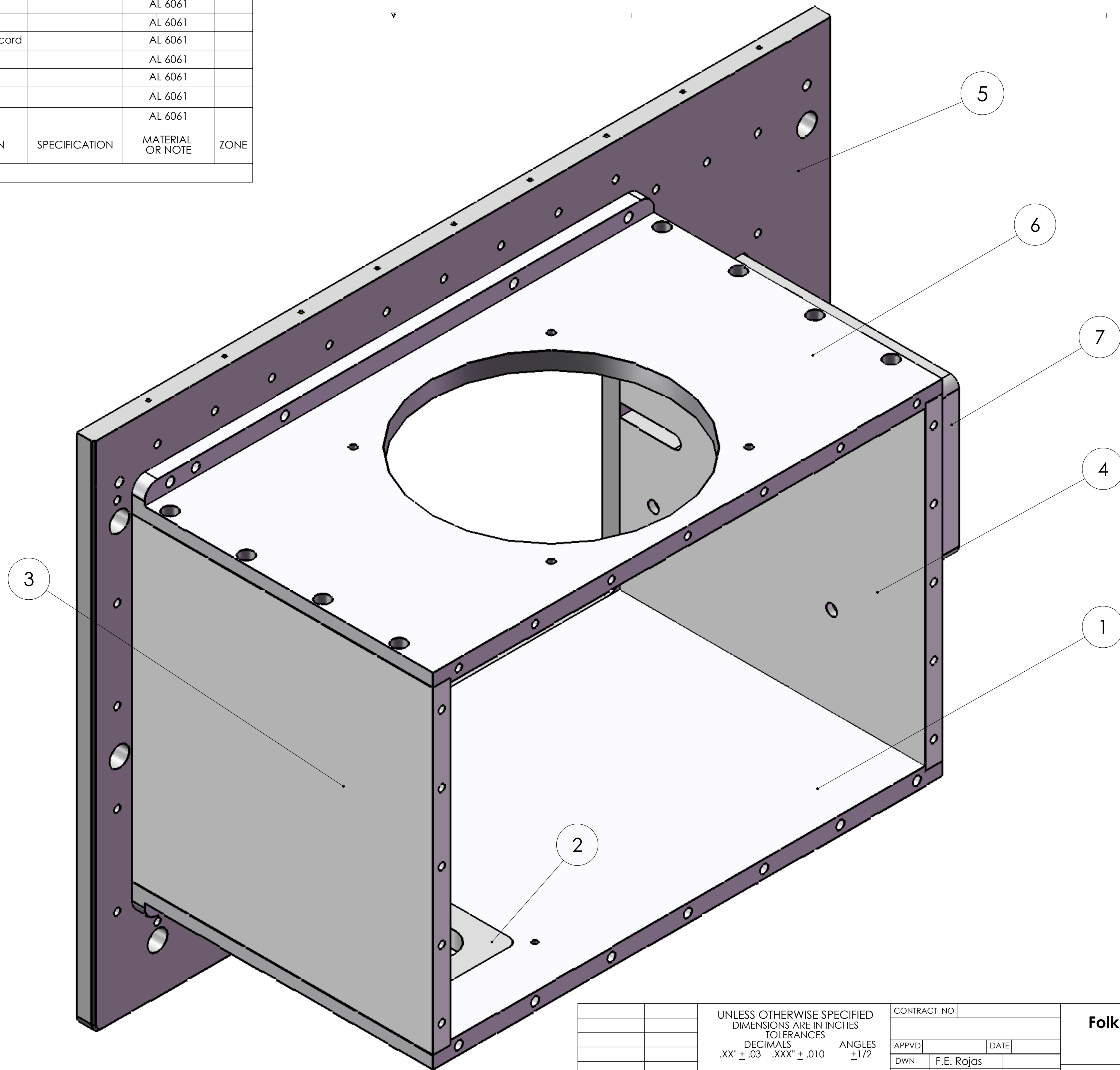


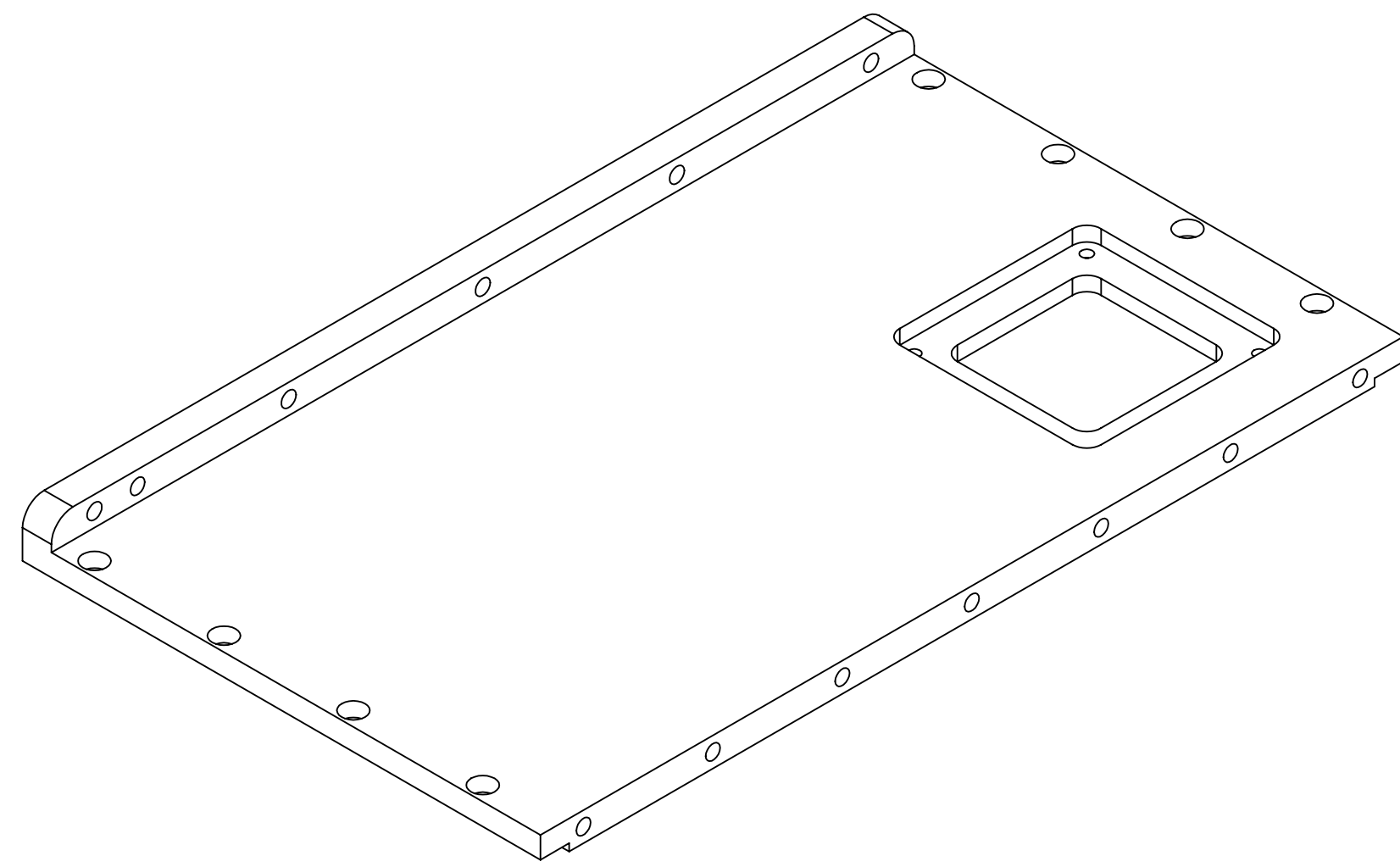
| QTY REQ'D | ITEM NO. | REF DES | CAGE NO. | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | SPECIFICATION | MATERIAL OR NOTE | ZONE |
|-----------|----------|---------|----------|--------------------------------|--|---------------|------------------|------|
| 1 | 8 | | 10-009 | P_C_Access Cover v1 | Not shown in picture | | AL 6061 | |
| 1 | 7 | | 10-007 | P_C_Left Lid Cover v1 | | | AL 6061 | |
| 1 | 6 | | 10-006 | P_C_Bottom Lid v1 | | | AL 6061 | |
| 1 | 5 | | - | P_Base Plate | Made by Hawaii, all drawings on Record | | AL 6061 | |
| 1 | 4 | | 10-005 | P_C_Left Lid v1 | | | AL 6061 | |
| 1 | 3 | | 10-004 | P_C_Right Lid v1 | | | AL 6061 | |
| 1 | 2 | | 10-003 | P_C_Top Lid Electronics Cap v1 | | | AL 6061 | |
| 1 | 1 | | 10-002 | P_C_Top Lid v1 | | | AL 6061 | |

PARTS LIST



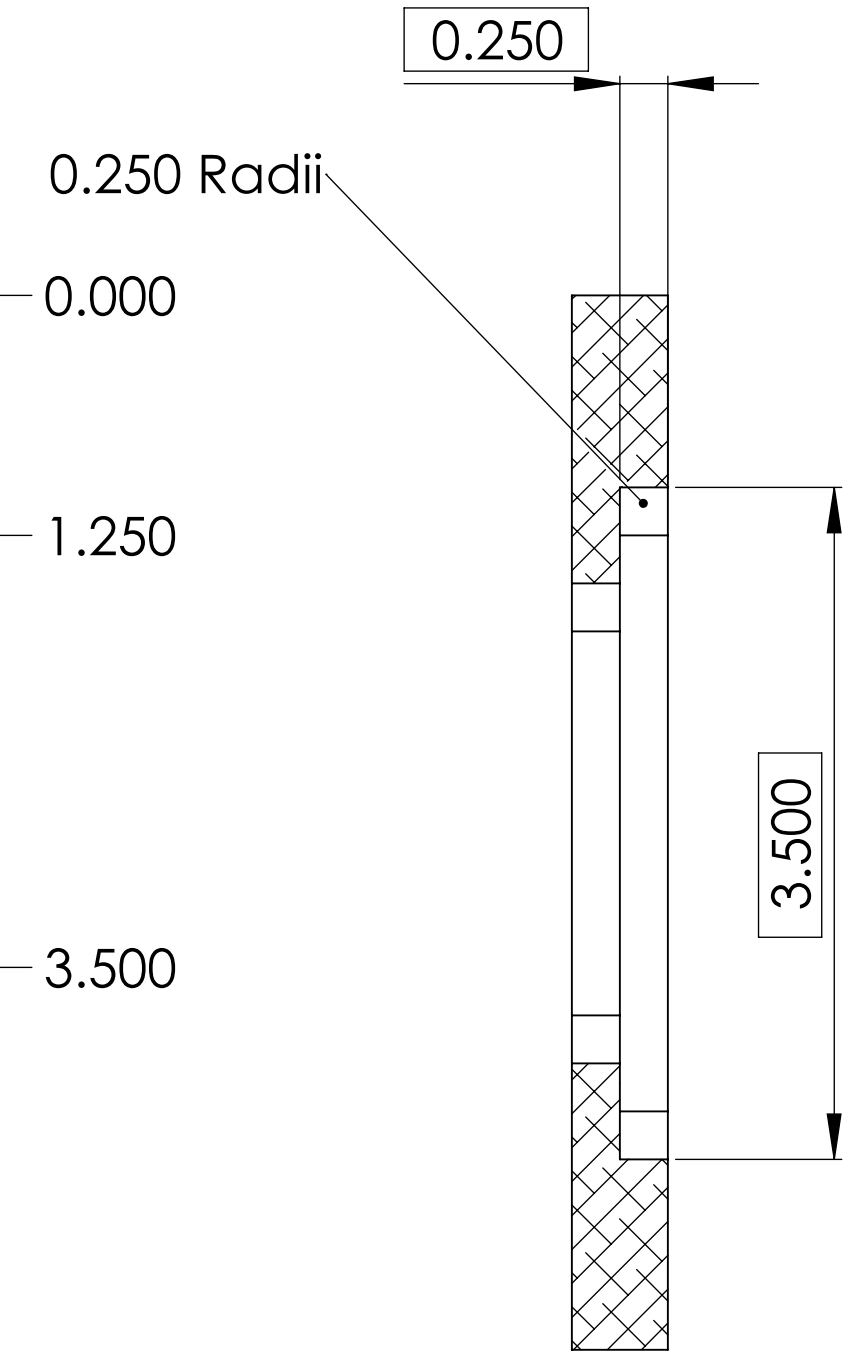
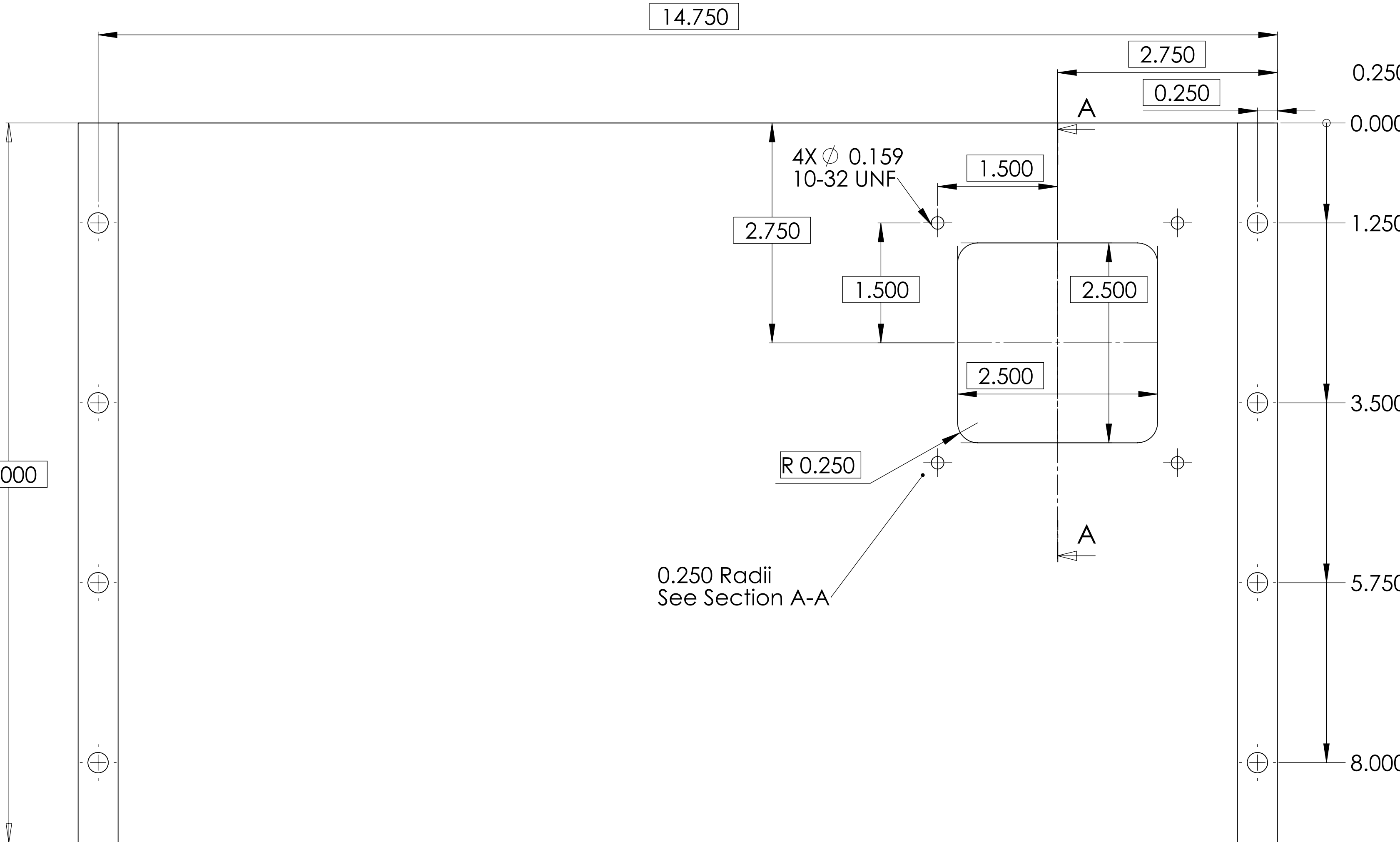
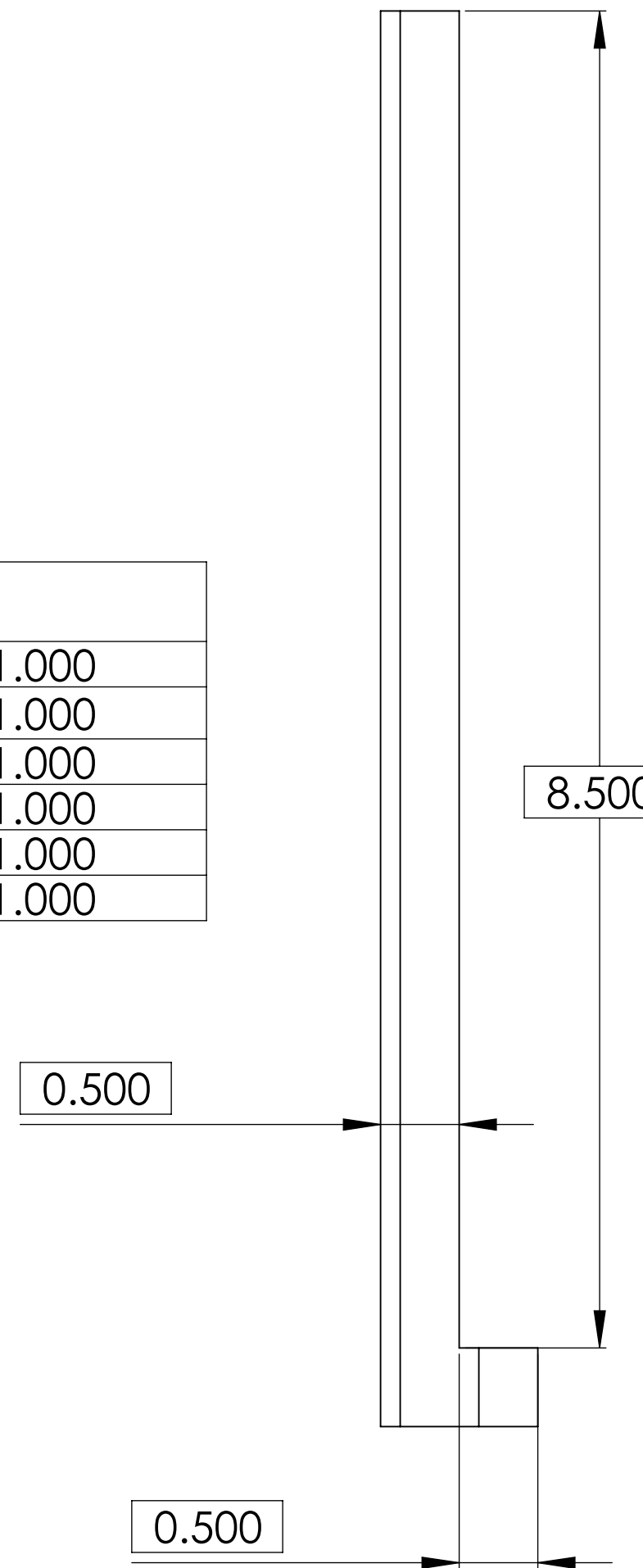
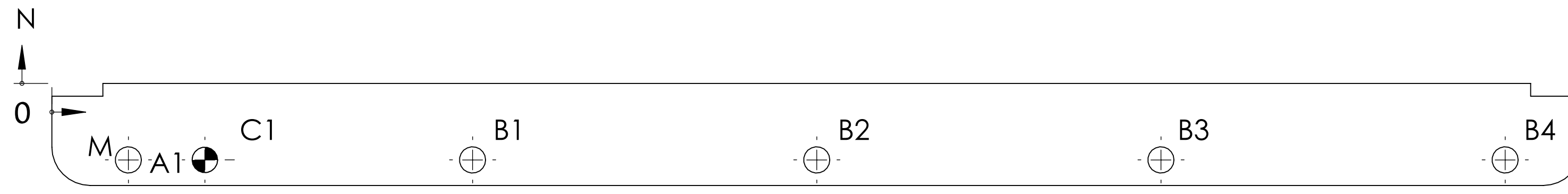
4. ALIGN USING DOWELL PINS
 3. ENSURE ALL GROOVES ARE FREE OF CHIPS
 2. REMOVE ALL BURRS AND SHARP EDGES 0.003 TO 0.010.
 1. ASSEMBLE TO FIT
- NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | |
|--|--|-----------------------|--|---|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS ANGLES .XX" ± .03 .XXX" ± .010 ± 1/2 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| MACHINE FINISH 32/ DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD F.E. Rojas DATE | | | |
| MATERIAL | | DWN | | POETS on IRTF Casing Assembly | |
| NEXT ASSEMBLY 10-999 USED ON | | CHK | | | |
| APPLICATION | | STRCT | | SCALE D | |
| | | MATL | | CAGE NO 10-001-B | |
| | | THRM CONT | | FILE: ASSEMBLY | |
| | | ENGR | | REV B | |
| | | DSGN SUPP | | SCALE 1:1.2 UNCLASSIFIED SHEET 1 OF 1 | |



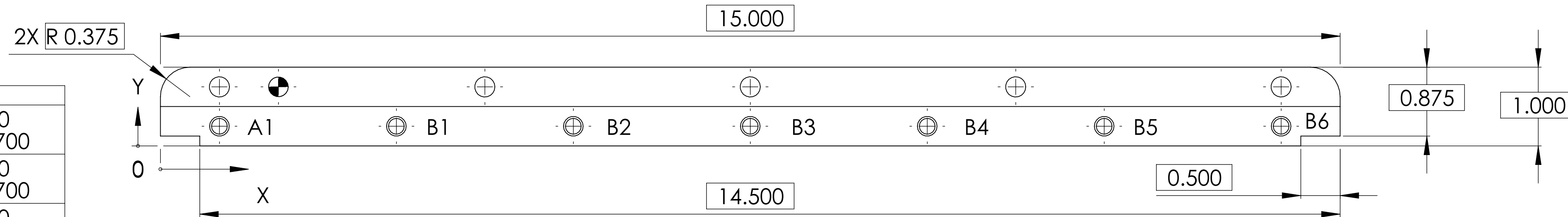
PROJECTED VIEW
FOR REFERENCE ONLY
DO NOT SCALE

| TAG | M LOC | N LOC | SIZE |
|-----|--------|--------|-----------------|
| A1 | 0.750 | -0.750 | ∅ 0.257 ∇ 1.000 |
| B1 | 4.125 | -0.750 | ∅ 0.257 ∇ 1.000 |
| B2 | 7.500 | -0.750 | ∅ 0.257 ∇ 1.000 |
| B3 | 10.875 | -0.750 | ∅ 0.257 ∇ 1.000 |
| B4 | 14.250 | -0.750 | ∅ 0.257 ∇ 1.000 |
| C1 | 1.500 | -0.750 | ∅ 0.250 ∇ 1.000 |



SECTION A-A
SCALE 1 : 1

| TAG | X LOC | Y LOC | SIZE |
|-----|--------|-------|---------------------------------------|
| A1 | 0.750 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B1 | 3.000 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B2 | 5.250 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B3 | 7.500 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B4 | 9.750 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B5 | 12.000 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |
| B6 | 14.250 | 0.250 | ∅ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.700 |

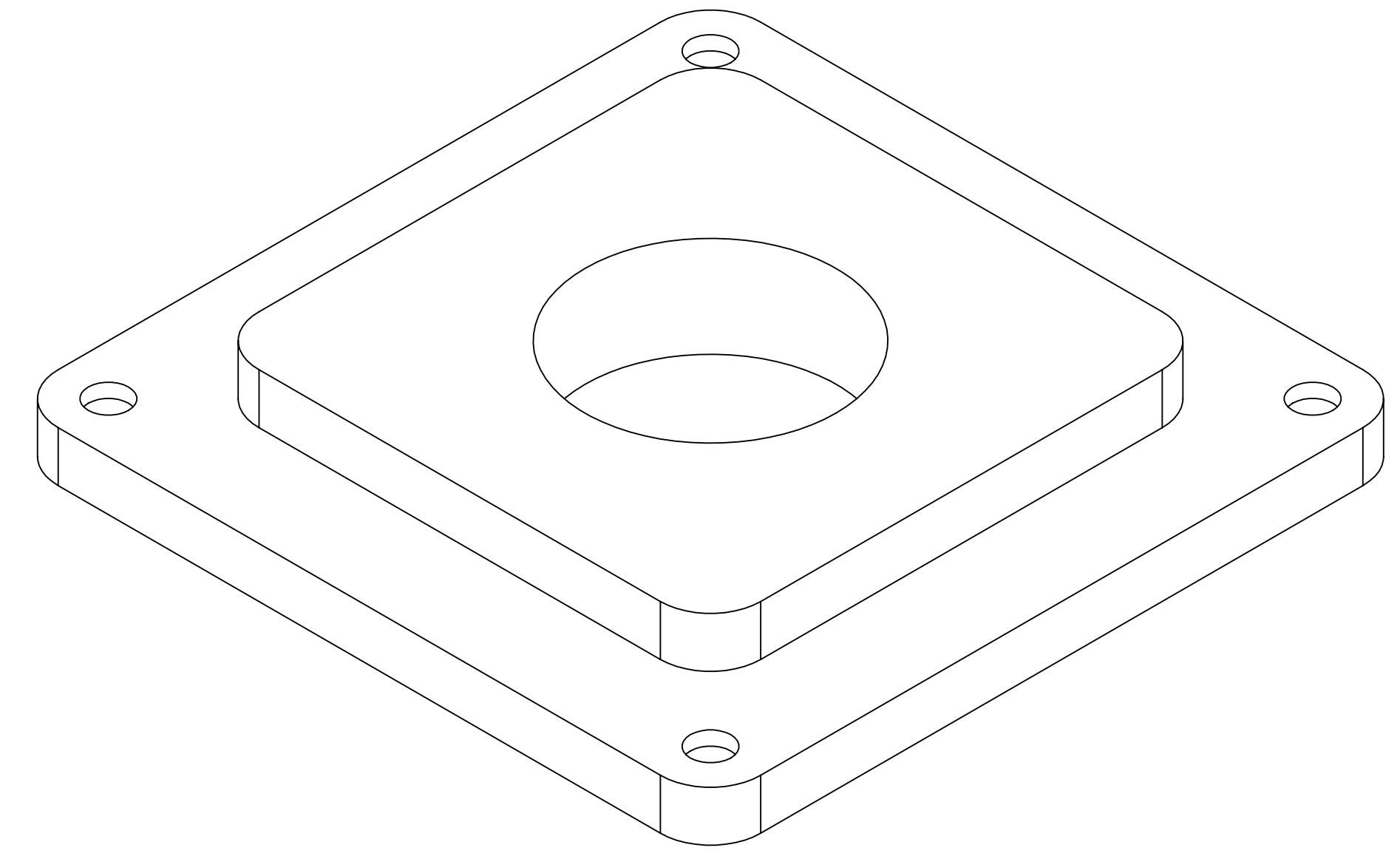
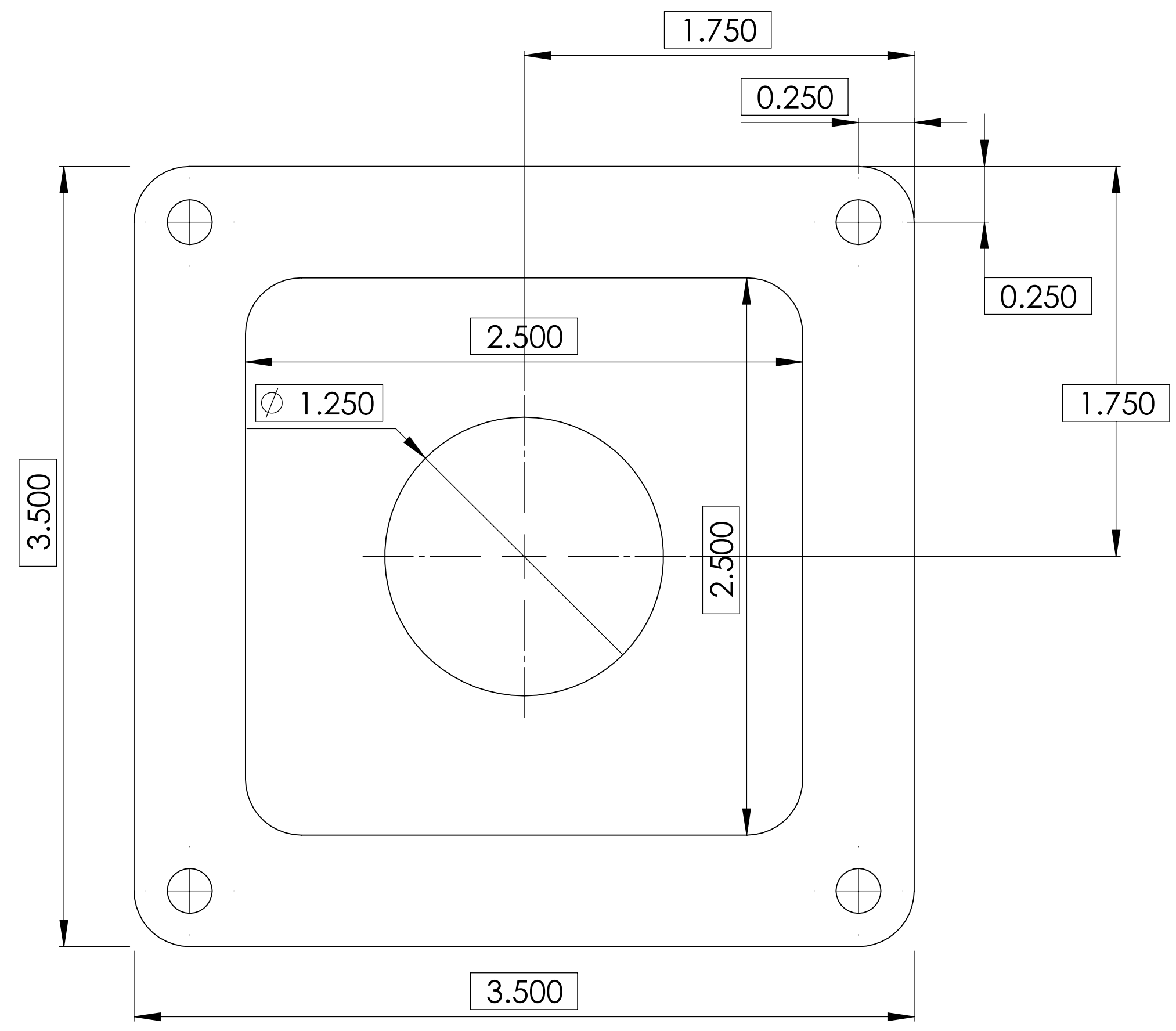
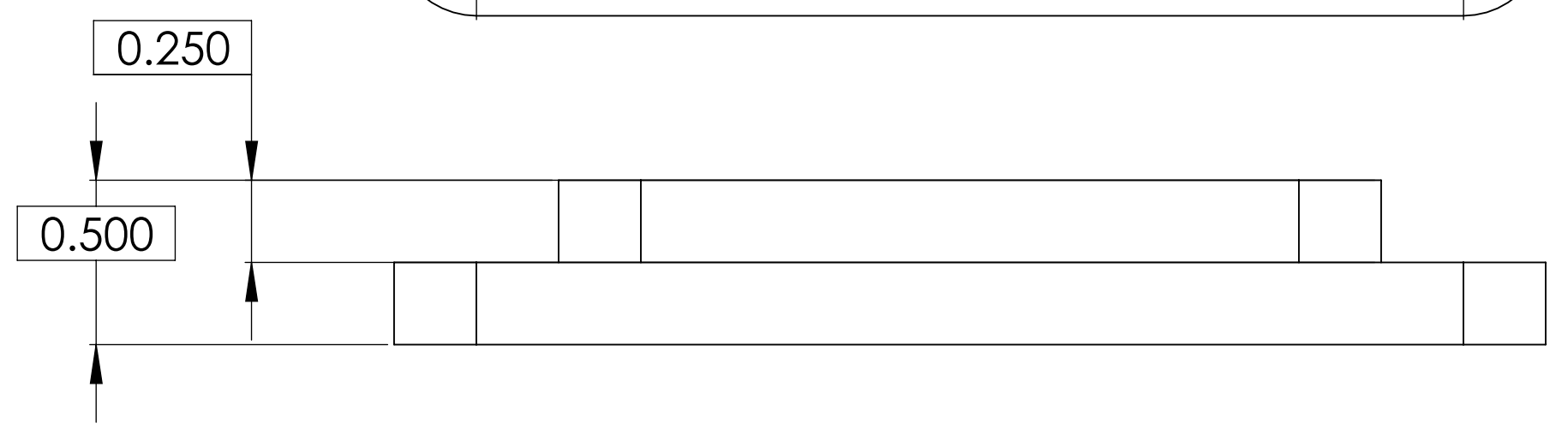
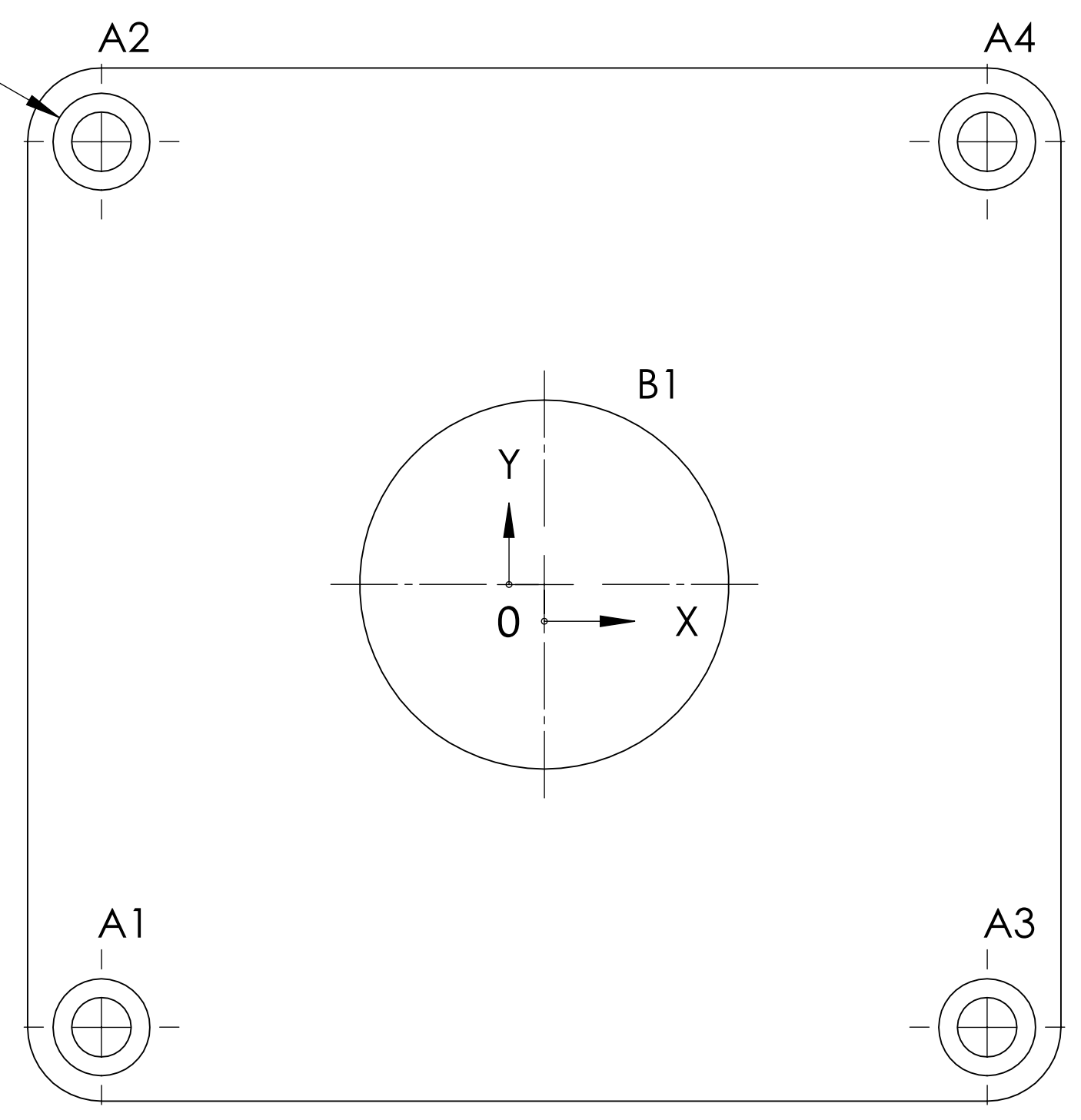


- 2. MADE TO FIT WITH ASSEMBLY 10-001 & MATCH WITH BASE PLAE CREATED BY HAWAII.
 - 1. ALIGN USING DOWELL PIN
- NOTES: UNLESS OTHERWISE SPECIFIED.

| | | | | | |
|---|--|------------------|--|--|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" ± .03 ANGLES ±1/2 .XXX" ± .010 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| MACHINE FINISH 32 | | DATE | | | |
| DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD F.E. Rojas | | POETS on IRTF Casing: Top Lid | |
| MATERIAL Al 6061 Cast | | CHK | | | |
| NEXT ASSEMBLY 10-001 USED ON | | STRCT | | SCALE D CAGE NO 10-002-B FILE: PART REV B SCALE 1:1 UNCLASSIFIED SHEET 1 OF 1 | |
| APPLICATION | | MATL | | | |
| | | THRM CONT | | | |
| | | ENGR | | | |
| | | DSGN SUPV | | | |

4 x ϕ 0.201 THRU ALL
 \square ϕ 0.3280 ∇ 0.1800

| TAG | X LOC | Y LOC | SIZE |
|-----|--------|--------|--|
| A1 | -1.500 | -1.500 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A2 | -1.500 | 1.500 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A3 | 1.500 | -1.500 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A4 | 1.500 | 1.500 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| B1 | 0.000 | 0.000 | ϕ 1.250 THRU |

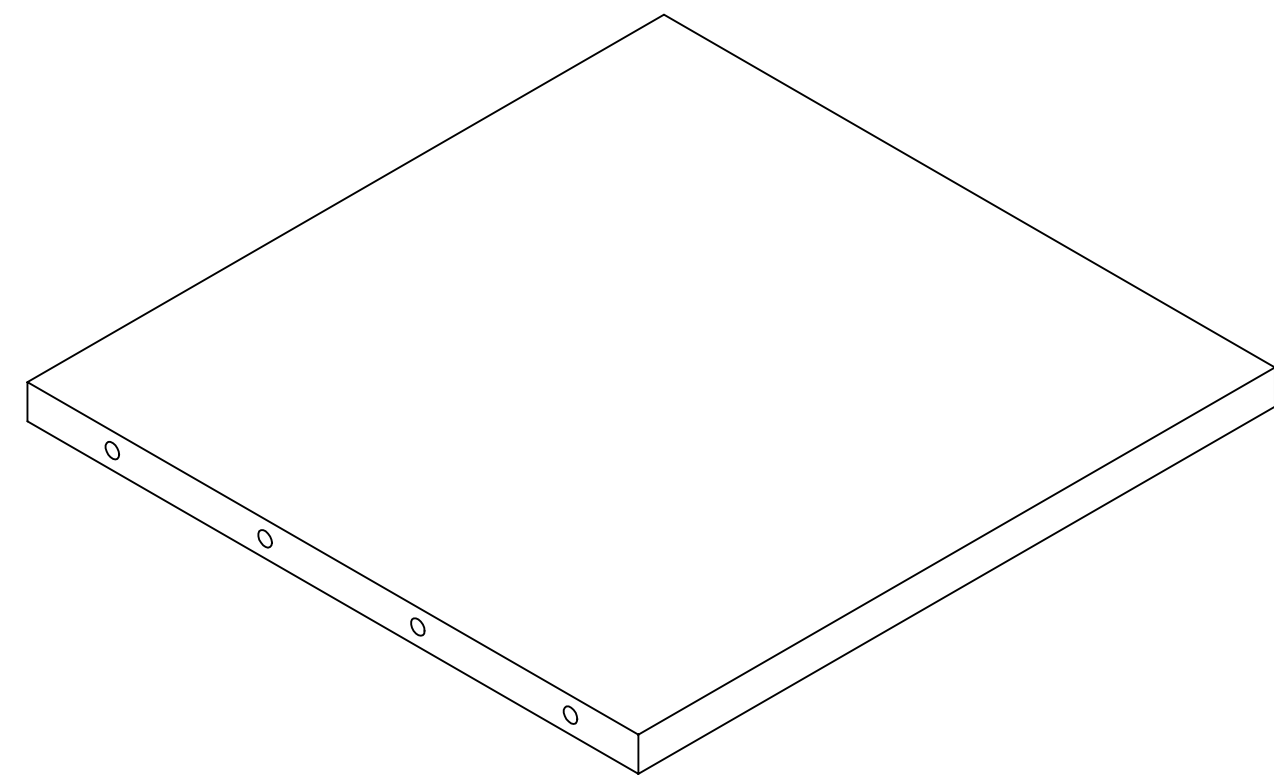


PROJECTED VIEW
 FOR REFERENCE ONLY
 DO NOT SCALE

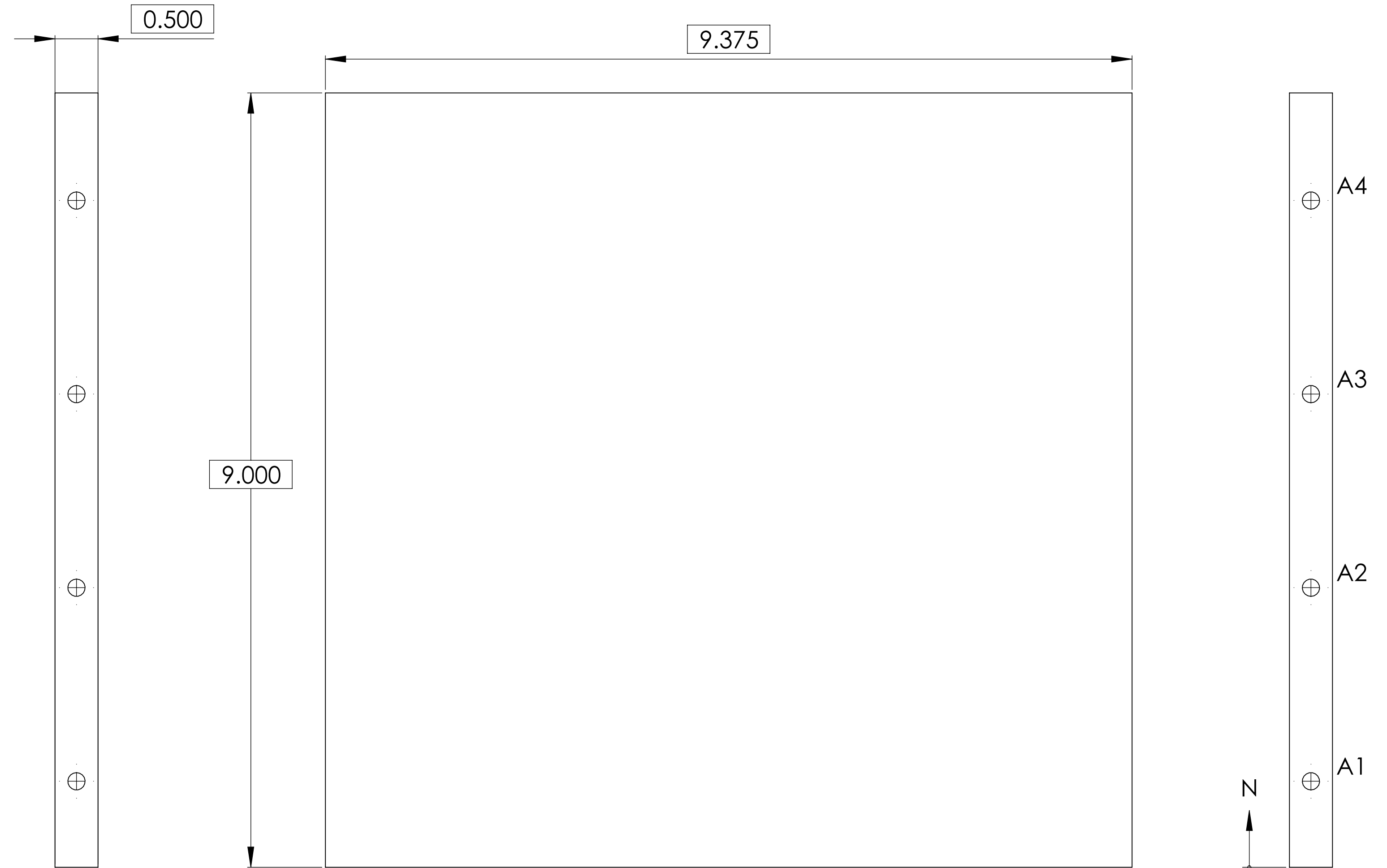
3. ALL RADII .25"
2. MADE TO FIT TO PART 10-002
1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010

NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | | | |
|--|--|---|--|-----------------|--|---|--|
| | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" \pm .03 .XXX" \pm .010 ANGLES \pm 1/2 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| | | MACHINE FINISH ∇ 32 DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD | | | |
| | | MATERIAL AL 6061 | | DWN F. E. Rojas | | CHK | |
| | | APPLICATION | | STRCT | | MATL | |
| | | NEXT ASSEMBLY | | ENGR | | THRM CONT | |
| | | 10-001 USED ON | | DSGN SUPP | | SCALE | |
| | | | | | | D 10-003-B PART B | |
| | | | | | | SCALE 2/1 UNCLASSIFIED SHEET 1 OF 1 | |



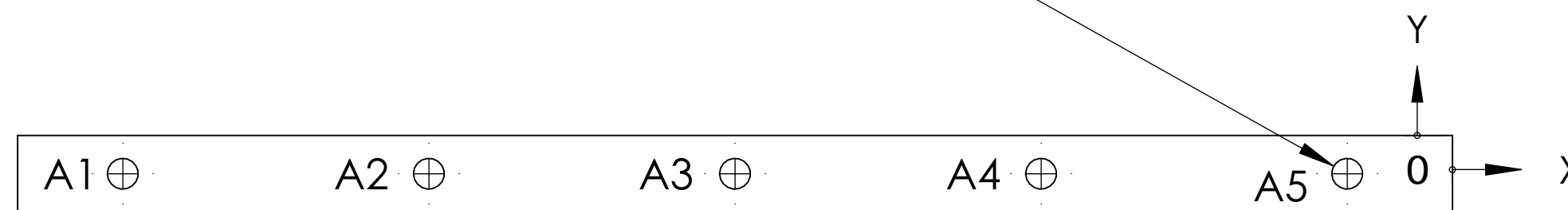
PROJECTED VIEW
FOR REFERENCE ONLY
DO NOT SCALE



| TAG | M LOC | N LOC | SIZE |
|-----|-------|-------|--|
| A1 | 0.250 | 1.000 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A2 | 0.250 | 3.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A3 | 0.250 | 5.500 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A4 | 0.250 | 7.750 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |

| TAG | X LOC | Y LOC | SIZE |
|-----|--------|--------|--|
| A1 | -8.687 | -0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A2 | -6.687 | -0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A3 | -4.687 | -0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A4 | -2.687 | -0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A5 | -0.687 | -0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |

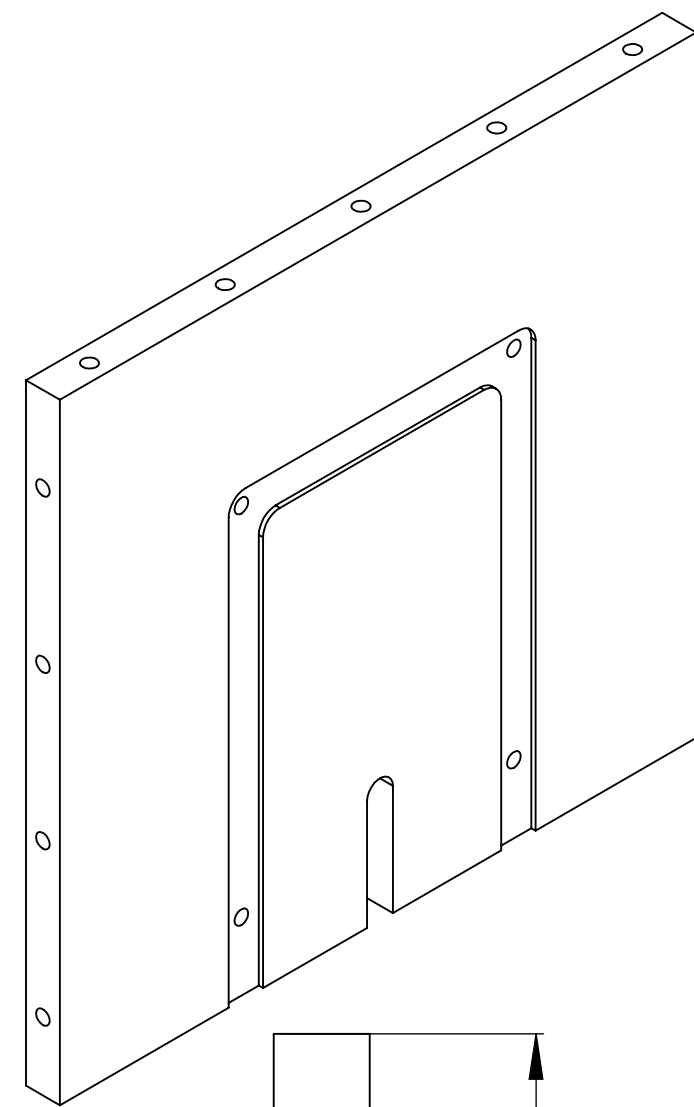
13 x ϕ 0.201 ∇ 0.850
1/4-20 UNC ∇ 0.500



2. MADE TO FIT IN ASSEMBLY 10-001
1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010
NOTES: UNLESS OTHERWISE SPECIFIED.

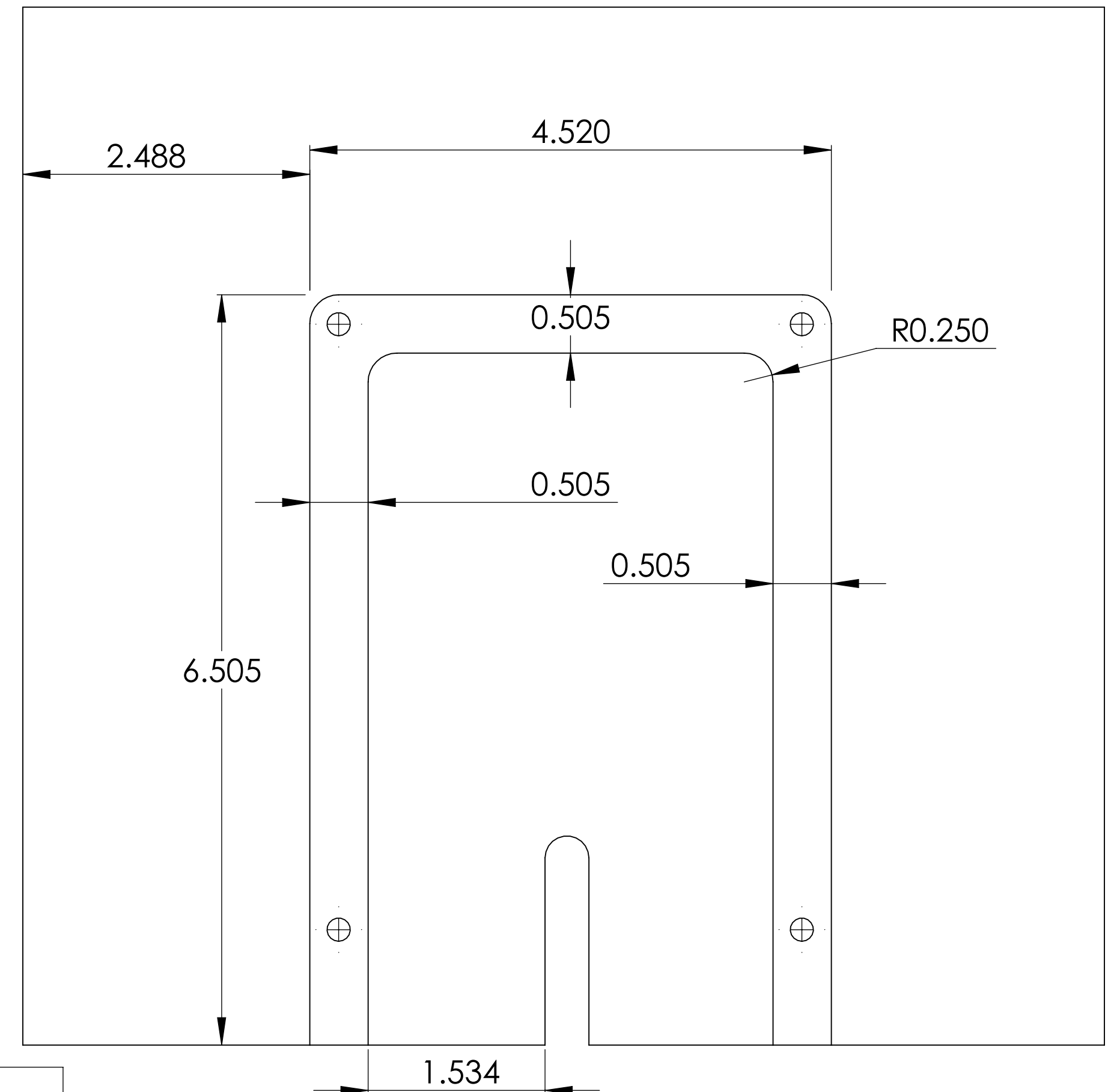
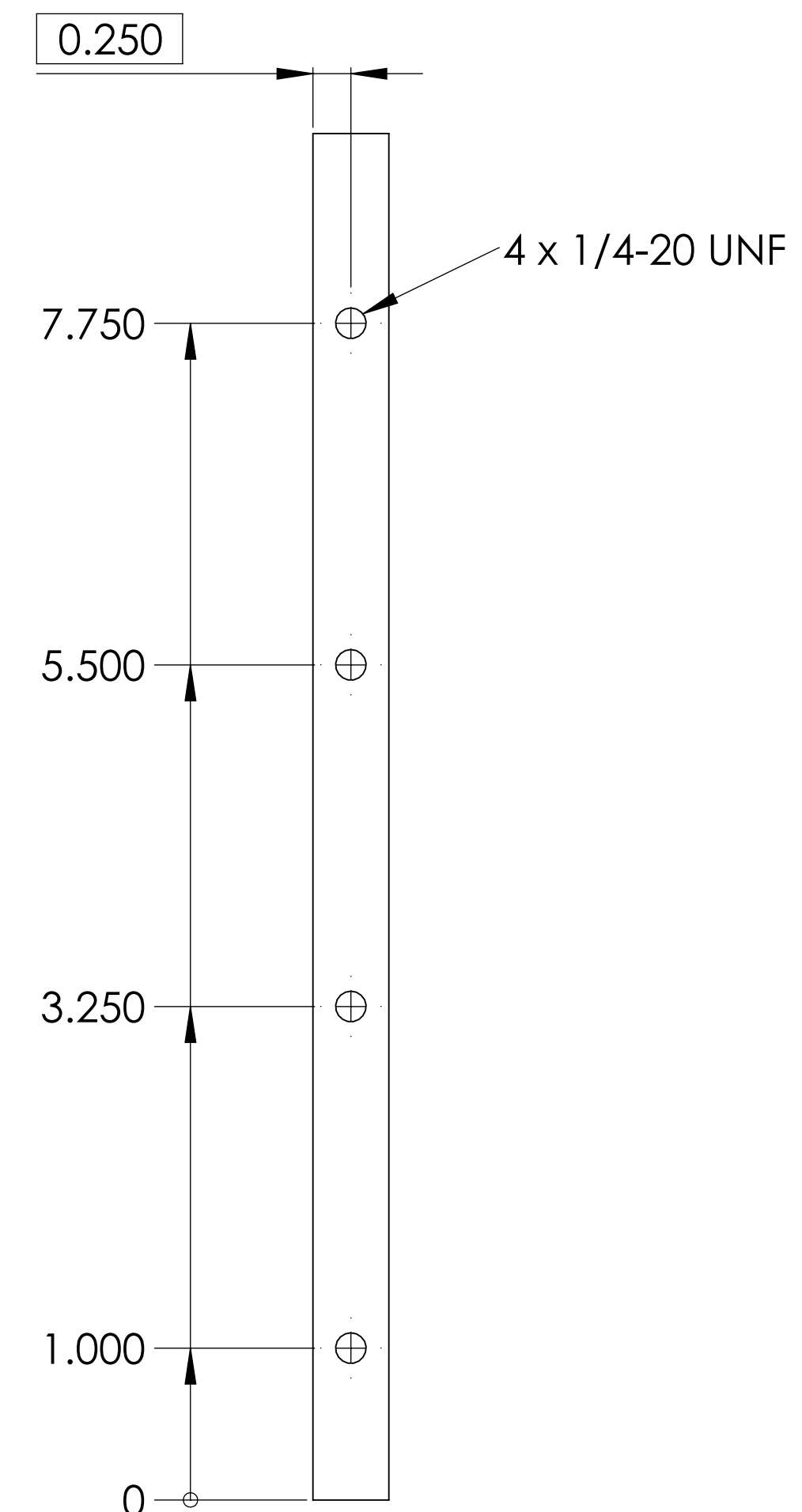
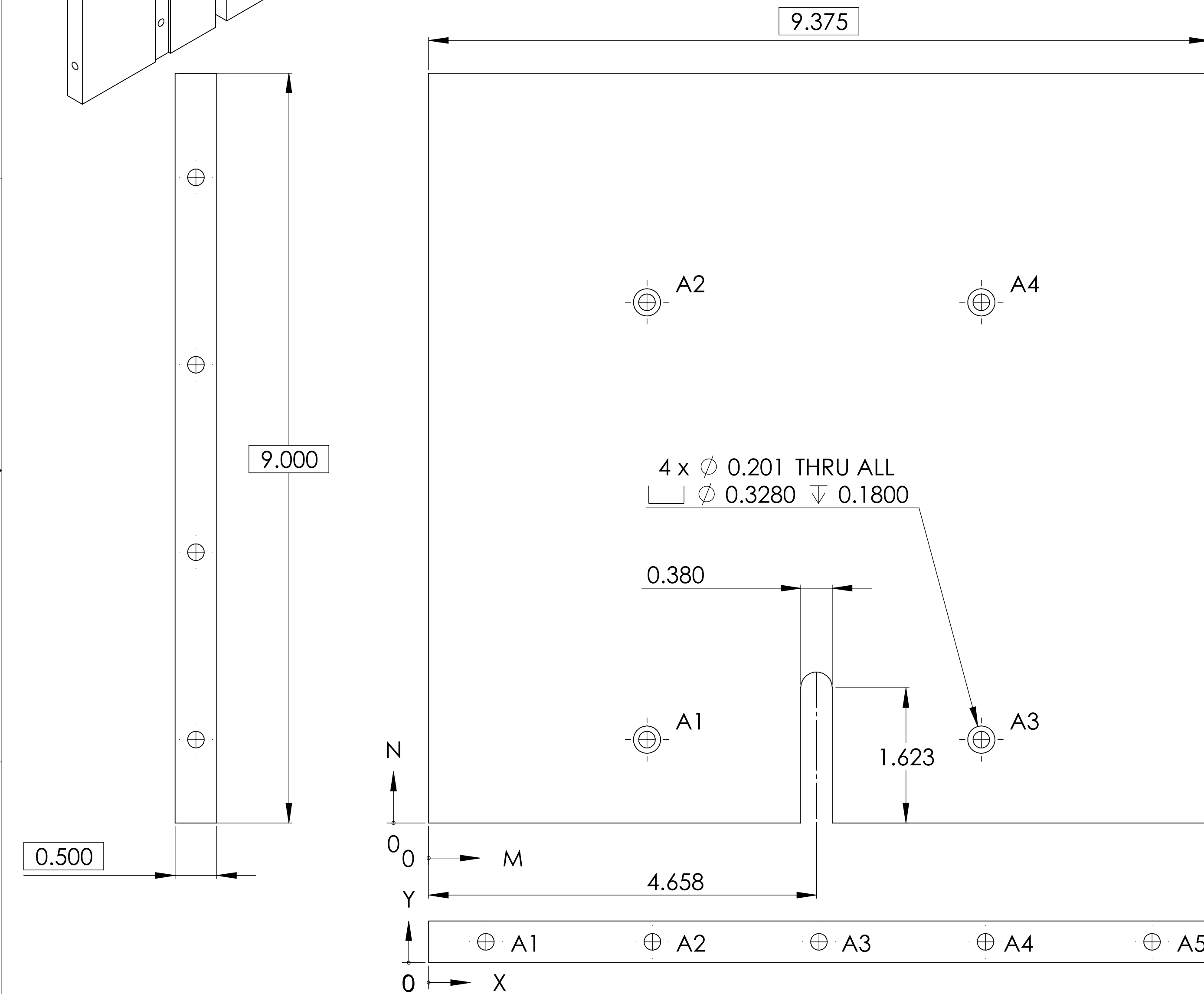
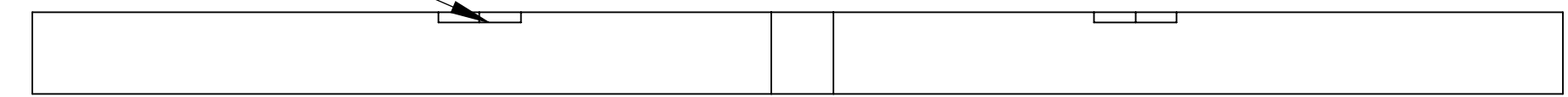
| | | | | | | |
|---|--|--------------------------|------------|--|---------------|----------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" \pm .03 .XXX" \pm .010 ANGLES \pm 1/2 MACHINE FINISH 32/ DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | | |
| MATERIAL Al CAST | | APPVD DWN F. E. Rojas | DATE | | | |
| APPLICATION 10-001 NEXT ASSEMBLY USED ON | | ENGR | SCALE D | CAGE NO 10-004-B | FILE: PART | REV B |
| | | DSGN SUPV | SCALE 1/1 | UNCLASSIFIED | SHEET 1 OF 1 | |

REV
10-004-B
D



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DO NOT SCALE

Depth
0.063



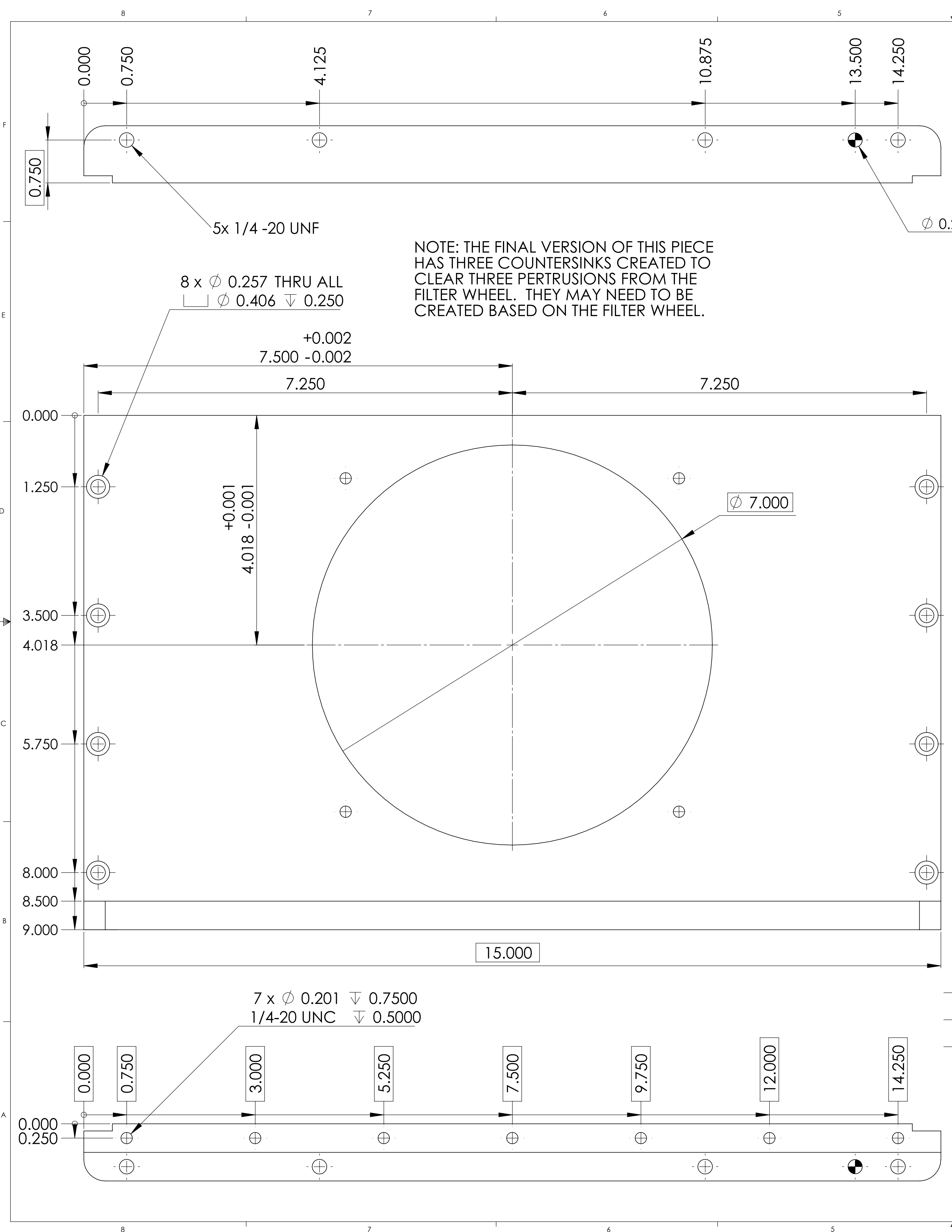
| TAG | X LOC | Y LOC | SIZE |
|-----|-------|-------|--|
| A1 | 0.688 | 0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A2 | 2.688 | 0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A3 | 4.688 | 0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A4 | 6.688 | 0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| A5 | 8.688 | 0.250 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |

4 x ϕ 0.201 THRU ALL
 \square ϕ 0.3280 ∇ 0.1800

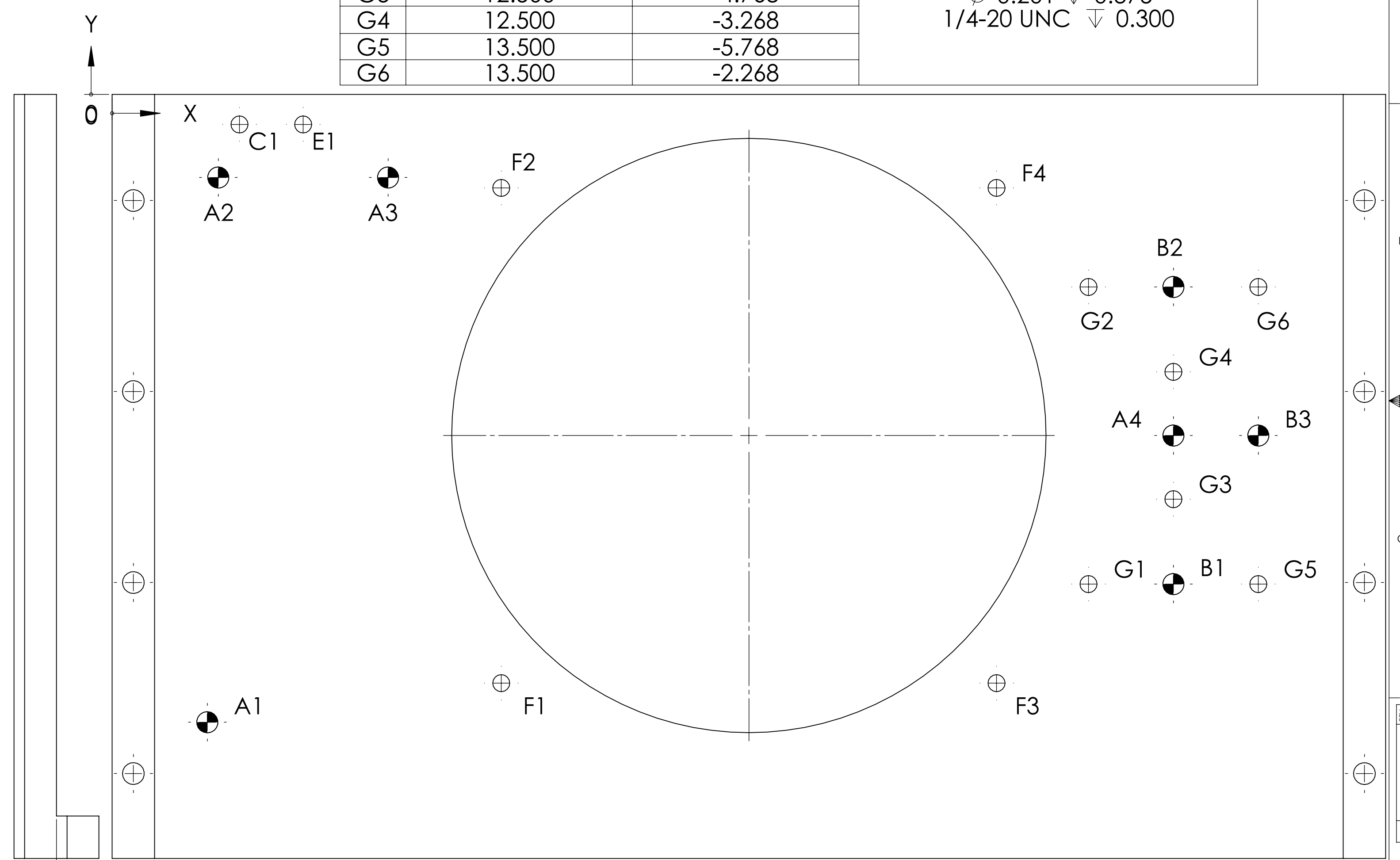
| TAG | M LOC | N LOC | SIZE |
|-----|-------|-------|--|
| A1 | 2.622 | 1.000 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A2 | 2.622 | 6.250 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A3 | 6.637 | 1.000 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |
| A4 | 6.637 | 6.250 | ϕ 0.201 THRU ALL \square ϕ 0.328 ∇ 0.180 |

2. ASSEMBLE TO FIT WITH ASSEMBLY 10-001
1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010.
NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | |
|---|--|-----------------------|--|--|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" \pm .03 .XXX" \pm .010 ANGLES \pm 1/2 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i> | |
| MACHINE FINISH ∇ 32 | | APPVD F.E. Rojas DATE | | | |
| DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | CHK | | POETS on IRTF Casing: Left Lid | |
| MATERIAL AL 6061 | | STRCT | | | |
| NEXT ASSEMBLY 10-001 USED ON | | MATL | | SCALE D | |
| APPLICATION | | THRM CONT | | CAGE NO 10-005-B | |
| | | ENGR | | FILE: PART | |
| | | DSGN SUPV | | REV B | |
| | | | | SCALE 1/1 UNCLASSIFIED SHEET 1 OF 1 | |

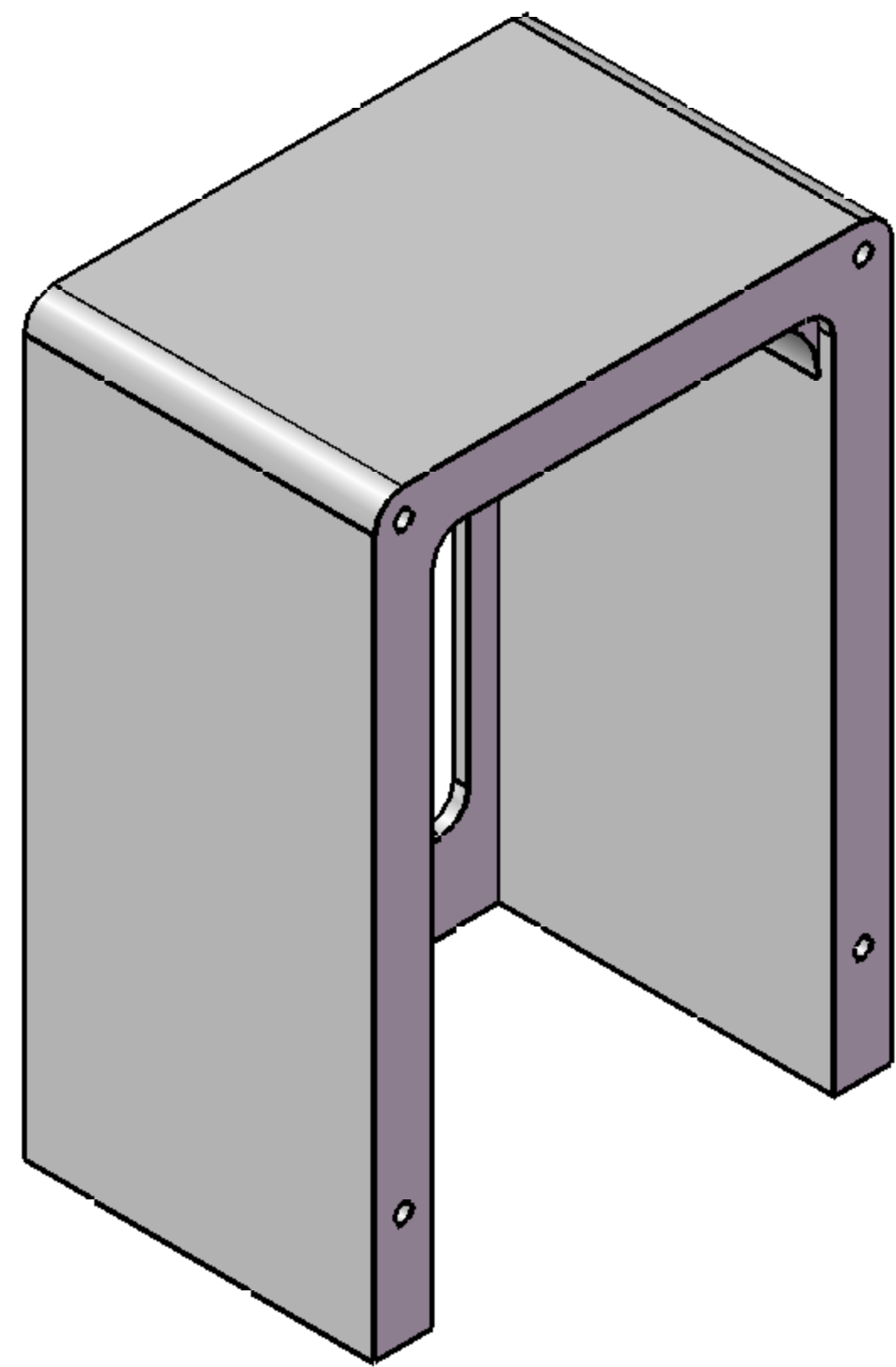


| TAG | X LOC | Y LOC | SIZE |
|-----|--------|--------|--|
| A1 | 1.121 | -7.396 | ϕ 0.250 ∇ 0.375 |
| A2 | 1.250 | -0.979 | |
| A3 | 3.250 | -0.979 | |
| B1 | 12.500 | -5.768 | ϕ 0.201 ∇ 0.425 1/4-20 UNC ∇ 0.500 |
| A4 | 12.500 | -4.018 | |
| B2 | 12.500 | -2.268 | |
| B3 | 13.500 | -4.018 | ϕ 0.201 ∇ 0.850 1/4-20 UNC ∇ 0.500 |
| C1 | 1.500 | -0.354 | |
| E1 | 2.250 | -0.354 | |
| F1 | 4.583 | -6.935 | ϕ 0.201 ∇ 0.375 1/4-20 UNC ∇ 0.300 |
| F2 | 4.583 | -1.101 | |
| F3 | 10.417 | -6.935 | |
| F4 | 10.417 | -1.101 | |
| G1 | 11.500 | -5.768 | |
| G2 | 11.500 | -2.268 | |
| G3 | 12.500 | -4.768 | |
| G4 | 12.500 | -3.268 | |
| G5 | 13.500 | -5.768 | |
| G6 | 13.500 | -2.268 | |

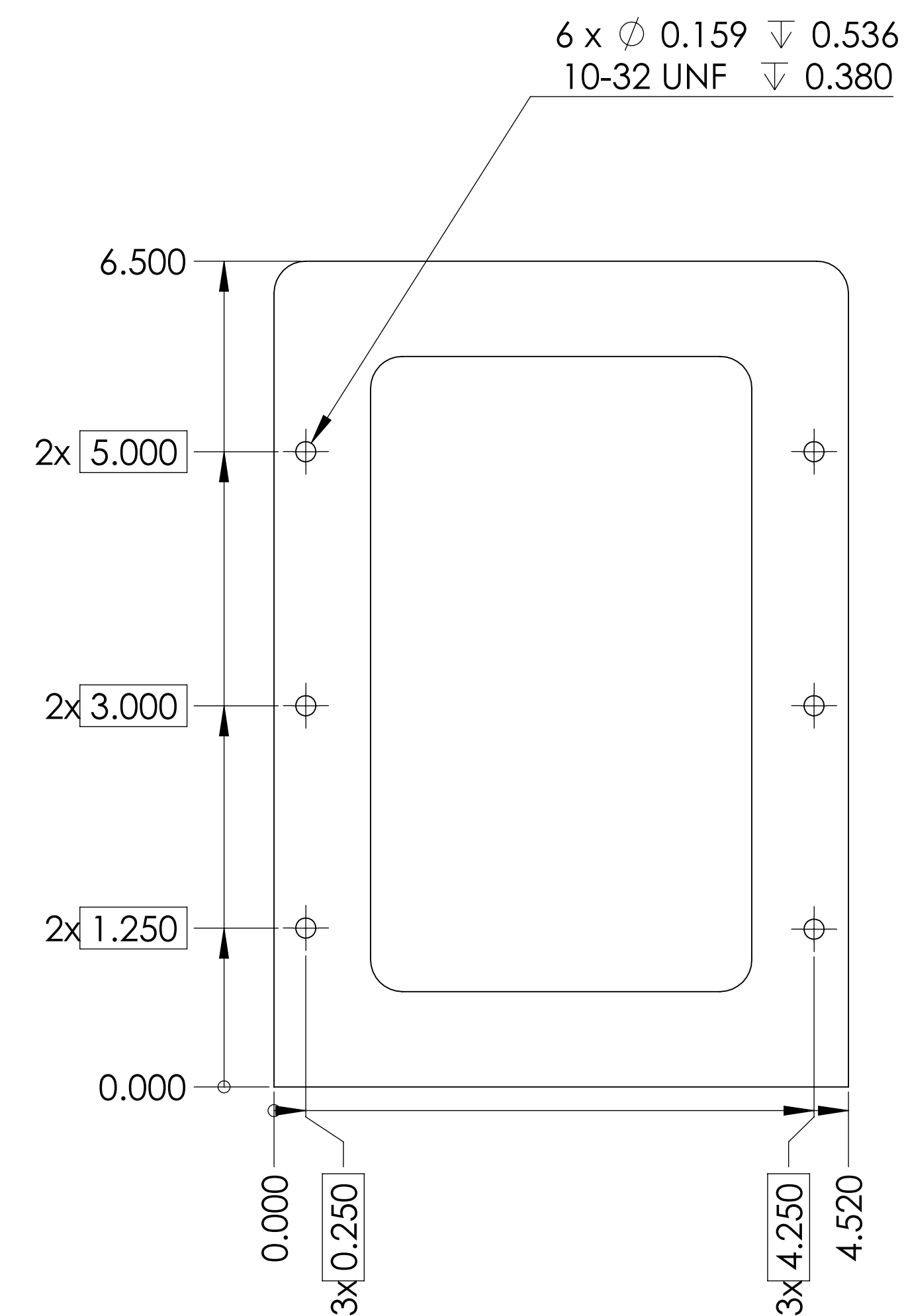
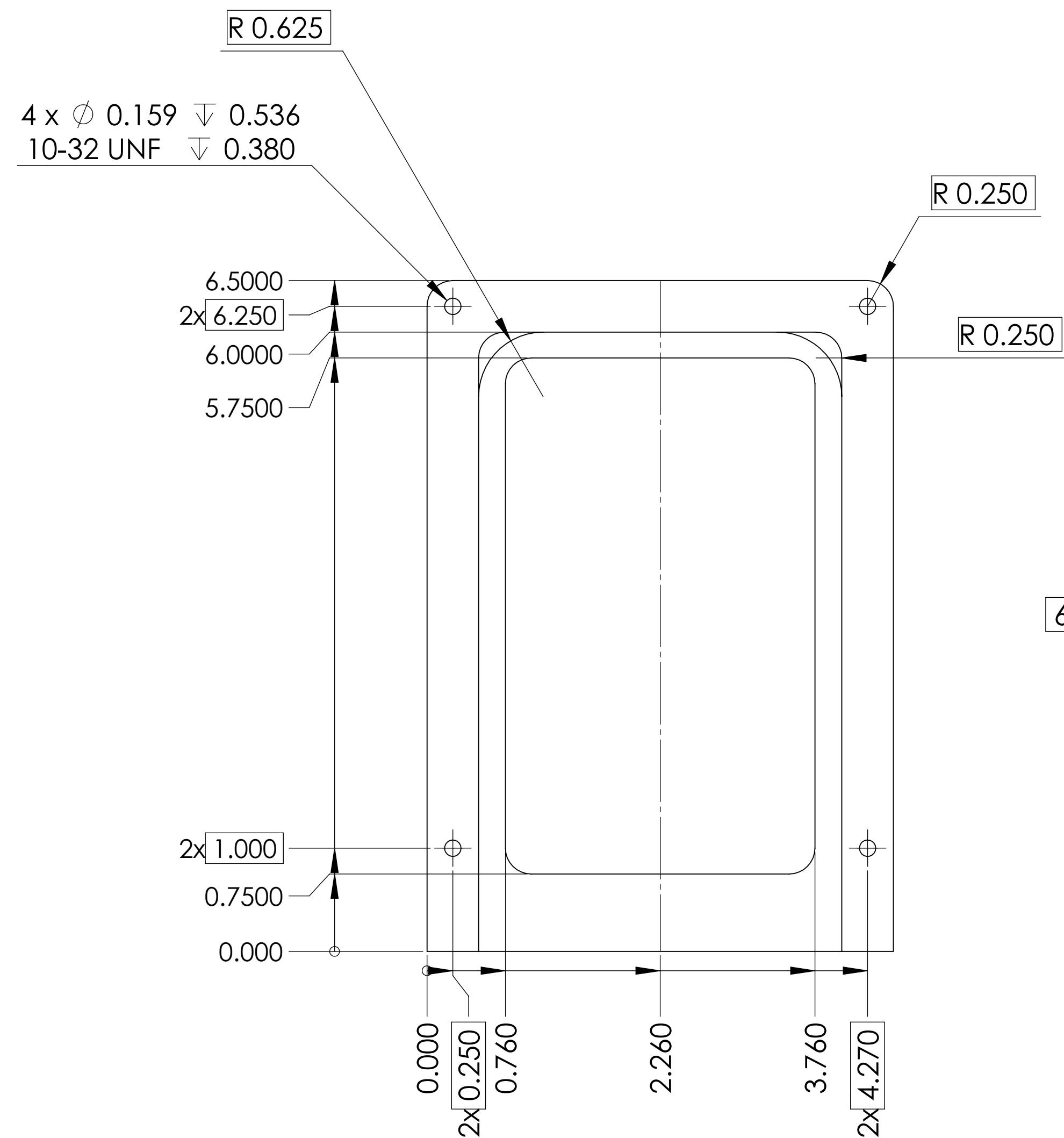
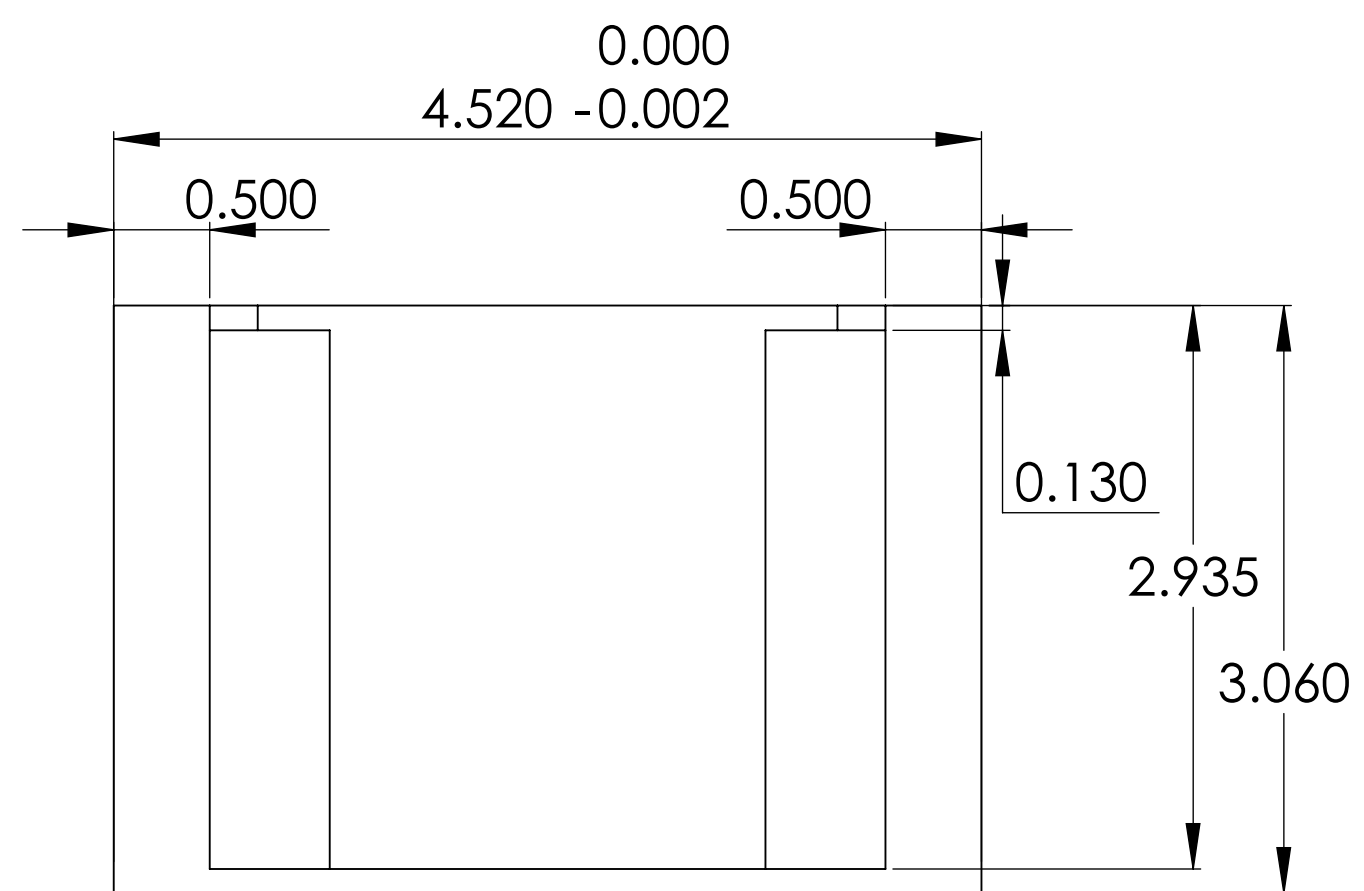


2. ASSEMBLE TO FIT ASSEMBLY 10-001.
 1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010.
 NOTES: UNLESS OTHERWISE SPECIFIED

| | | | | | |
|--|--|-----------------------|--|---|----------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" \pm .03 ANGLES \pm 1/2 .XXX" \pm .010 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| MACHINE FINISH 32/ DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD F.E. Rojas DATE | | | |
| MATERIAL Al 6061 | | CHK | | POETS on IRTF Casing: Bottom Lid | |
| NEXT ASSEMBLY 10-001 USED ON | | STRCT | | | |
| APPLICATION | | MATL | | SCALE D | CAGE NO 10-006 |
| | | THRM CONT | | FILE: PART | REV B |
| | | ENGR F.E. Rojas | | SCALE 1/1 | UNCLASSIFIED |
| | | DSGN SUPV | | SHEET 1 OF 1 | |

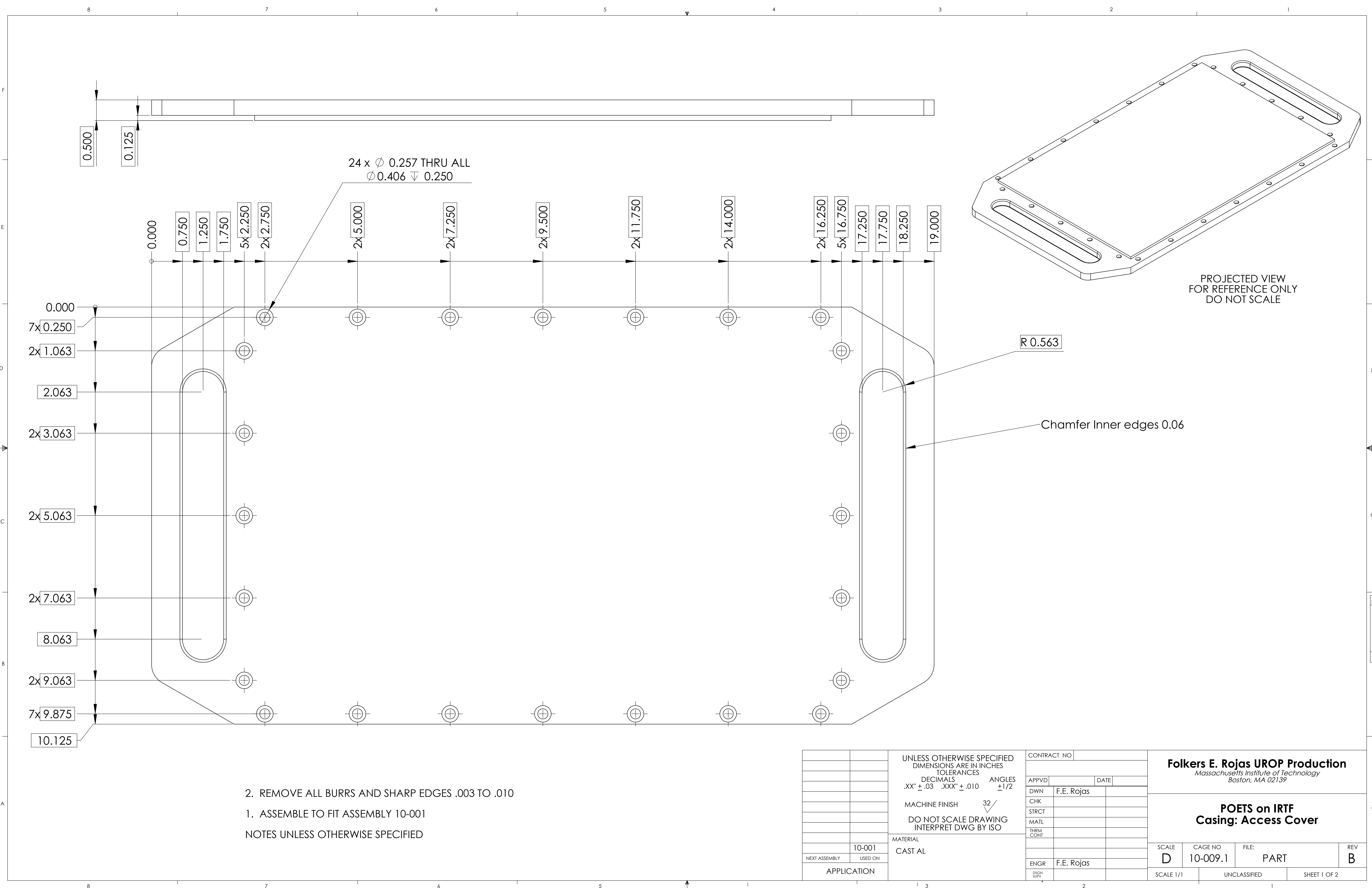


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2. ASSEMBLE TO FIT WITH ASSEMBLY 10-001
1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010
NOTES: UNLESS OTHERWISE SPECIFIED.

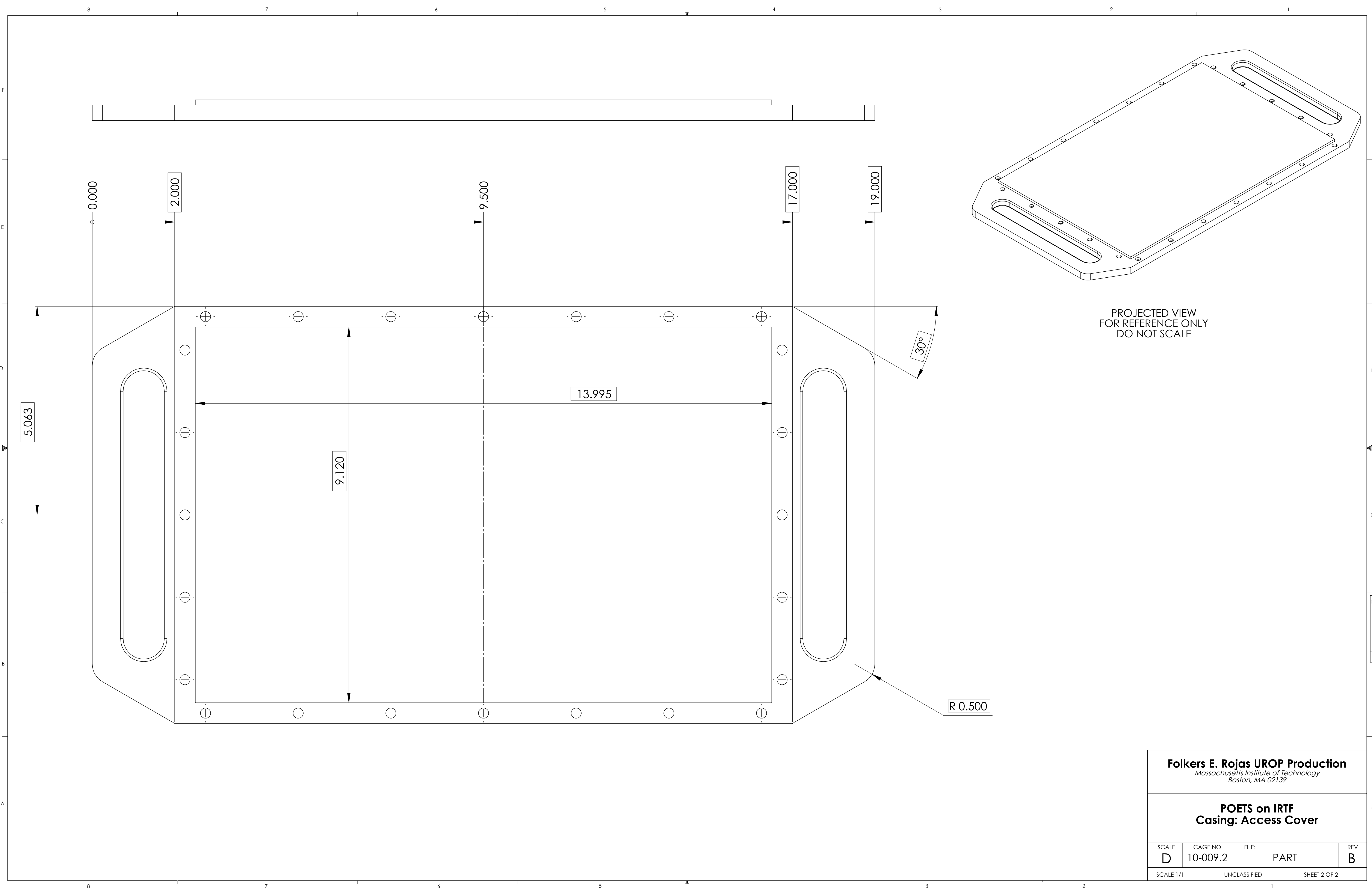
| | | | | | | | |
|---------------------------------|--|--|--|-----------------|--|--|--|
| | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" ± .03 ANGLES ± 1/2 .XXX" ± .010 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| | | MACHINE FINISH 32 DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD DATE | | | |
| | | MATERIAL CAST AL | | DWN F.E. Rojas | | POETS on IRTF Casing: Left Lid Cover | |
| | | APPLICATION | | CHK | | | |
| 10-001 NEXT ASSEMBLY USED ON | | | | STRCT | | SCALE D | |
| | | | | MATL | | CAGE NO 10-007 | |
| | | | | THRM CONT | | FILE: PART | |
| | | | | ENGR F.E. Rojas | | REV B | |
| | | | | DSGN SUPV | | SCALE 1/1 UNCLASSIFIED SHEET 1 OF 1 | |



PROJECTED VIEW
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DO NOT SCALE

- 2. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010
 - 1. ASSEMBLE TO FIT ASSEMBLY 10-001
- NOTES UNLESS OTHERWISE SPECIFIED

| | | | | | | | |
|------------------------------------|--|--|--|-----------------------|--|--|--|
| | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS ANGLES .XX" ± .03 .XXX" ± .010 ± 1/2 | | CONTRACT NO | | Folkers E. Rojas UROP Production <i>Massachusetts Institute of Technology Boston, MA 02139</i> | |
| | | MACHINE FINISH 32 DO NOT SCALE DRAWING INTERPRET DWG BY ISO | | APPVD F.E. Rojas DATE | | | |
| | | MATERIAL CAST AL | | DWN F.E. Rojas | | POETS on IRTF Casing: Access Cover | |
| | | APPLICATION | | CHK | | | |
| NEXT ASSEMBLY 10-001 USED ON | | | | STRCT | | SCALE D | |
| | | | | MATL | | CAGE NO 10-009.1 | |
| | | | | THRM CONT | | FILE: PART | |
| | | | | ENGR F.E. Rojas | | REV B | |
| | | | | DSGN SUPV | | SCALE 1/1 UNCLASSIFIED SHEET 1 OF 2 | |



PROJECTED VIEW
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DO NOT SCALE

Folkers E. Rojas UROP Production
Massachusetts Institute of Technology
Boston, MA 02139

**POETS on IRTF
Casing: Access Cover**

| | | | |
|-------------------|---------------------|---------------|-----------------|
| SCALE D | CAGE NO 10-009.2 | FILE: PART | REV B |
| SCALE 1/1 | UNCLASSIFIED | SHEET 2 OF 2 | |

REV
10-009.2-B
D