

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ALL WELD SYMBOLS PER ANSI/AWS/A2.4-1986.
2. ALL WELDS PER ANSI/AWS/D1.1-1990.
3. SAW OR FLAME-CUT PERMISSIBLE FOR ITEMS 8 THRU 10 EXCEPT FOR TAPPED AND MACHINED HOLES.
4. BEAD BLAST AND STEAM CLEAN AS APPROPRIATE.
5. FOR ANY 6" x 4" RECTANGULAR TUBE WHICH WILL HAVE OPEN ENDS, REMOVE EXCESS WELD FROM INSIDE TUBE - IN 4 INCHES.
6. USE OF 1/8" DIAMETER ROD AS A FILLER FOR ALL FLARE BEVEL WELDS IS PERMISSIBLE.
7. STRESS RELIEVE ENTIRE STRUCTURE AFTER ALL WELDING.

8. SURFACE TREATMENT PRIOR TO FINISH MACHINING:

- A) CLEAN ALL SURFACES NOT TO BE SUBSEQUENTLY MACHINED BY ABRASIVE BLASTING (USING FINE GLASS BEADS) TO A MINIMUM SSPC SP-10 (SA2 1/2) NEAR-WHITE BLAST.
- B) PLUG ALL REAMED AND TAPPED HOLES.
- C) ALL SURFACES TO BE FREE OF BURRS, CHIPS, SCALE, SLAG, RUST, DIRT, OIL AND GREASE.

9. SURFACE TREATMENT AFTER FINISH MACHINING:

- A) **PLATING:** ELECTROLESS NICKEL PLATE ENTIRE WELDMENT,
ACCORDING TO MIL-C26074E, TO A THICKNESS OF
.0005 MIN. / .001 MAX.
- B) PLUG ALL REAMED AND TAPPED HOLES.

10. APPROXIMATE WEIGHT = 514 lb.

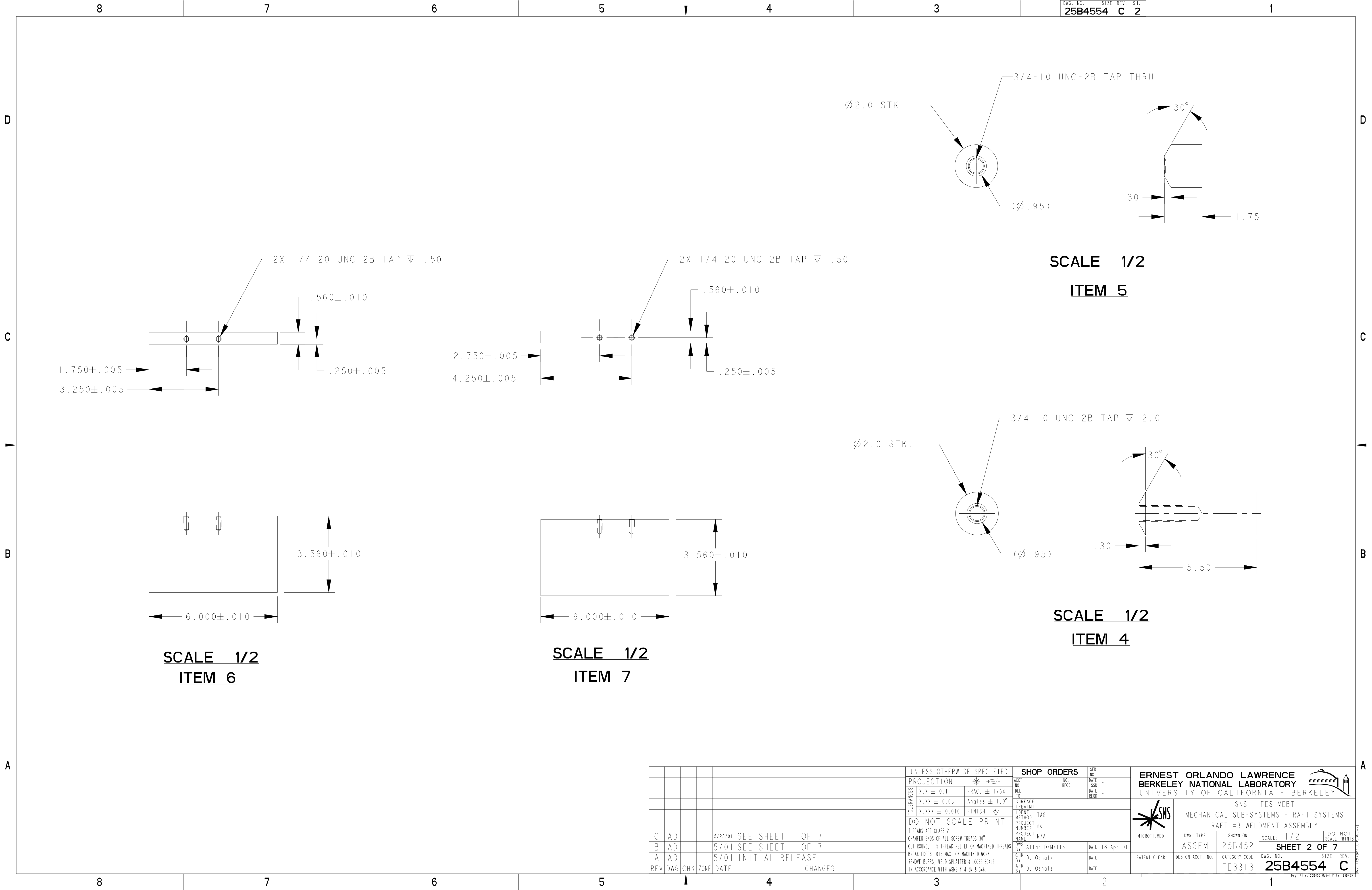
SCALE 1/2

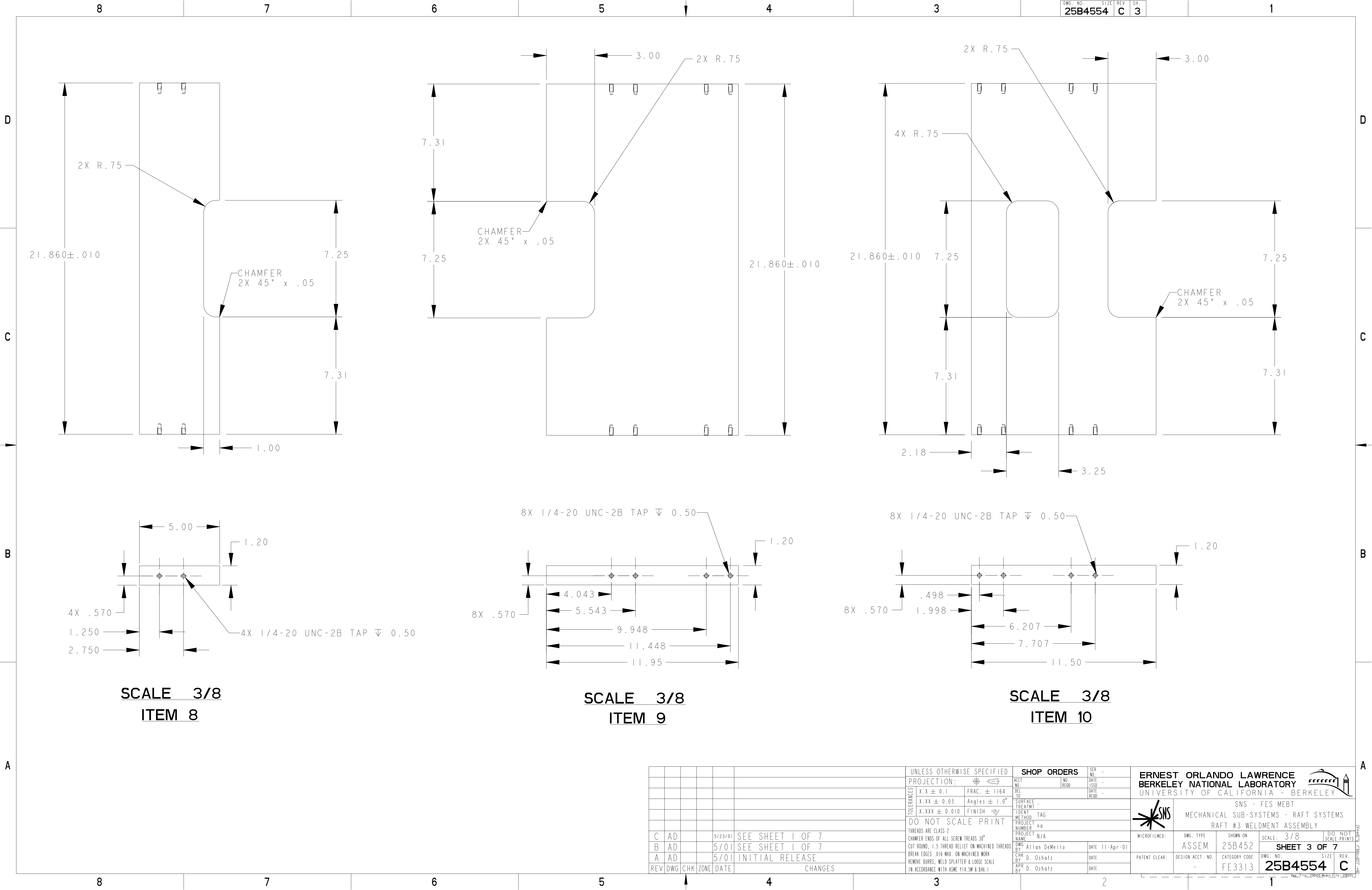
11	25B455-11	1	TUBING, RECT 5" x 3" x 3/8" WALL STL ASTM A-500	CARBON STEEL
10	25B455-10	1	PLATE, 21.86" x 11.50" x 1.20" AISI 1015-1025 STEEL PLATE	CARBON STEEL
9	25B455-9	1	PLATE, 21.86" x 11.95" x 1.20" AISI 1015-1025 STEEL PLATE	CARBON STEEL
8	25B455-8	1	PLATE, 21.86" x 5.00" x 1.20" AISI 1015-1025 STEEL PLATE	CARBON STEEL
7	25B455-7	1	PLATE, 6" x 3 9/16" x 9/16" AISI 1015-1025 STEEL PLATE	CARBON STEEL
6	25B455-6	1	PLATE, 6" x 3 9/16" x 9/16" AISI 1015-1025 STEEL PLATE	CARBON STEEL
5	25B455-5	3	BAR, ROUND 2" DIA x 1 3/4" LG STL ASTM A108	CARBON STEEL
4	25B455-4	3	BAR, ROUND 2" DIA x 5 1/2" LG STL ASTM A108	CARBON STEEL
3	25B455-3	1	TUBING, RECT 6" x 4" x 1/2" WALL STL ASTM A-500	CARBON STEEL
2	25B455-2	1	TUBING, RECT 6" x 4" x 1/2" WALL STL ASTM A-500	CARBON STEEL
1	25B455-1	4	TUBING, RECT 5" x 2" x 5/16" WALL STL ASTM A-500	CARBON STEEL
ITEM	PART NO	REQD	DESCRIPTION	MATERIAL

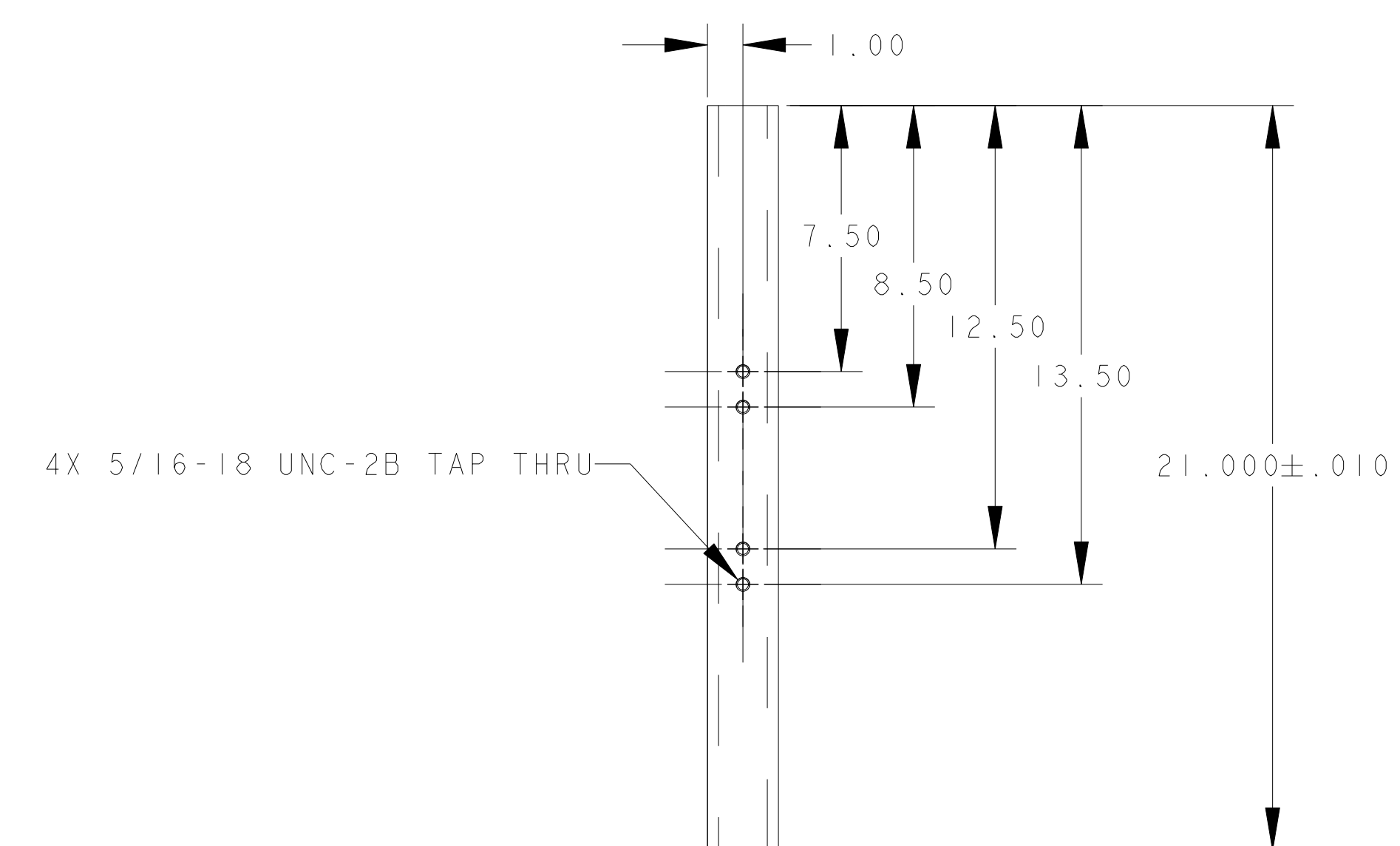
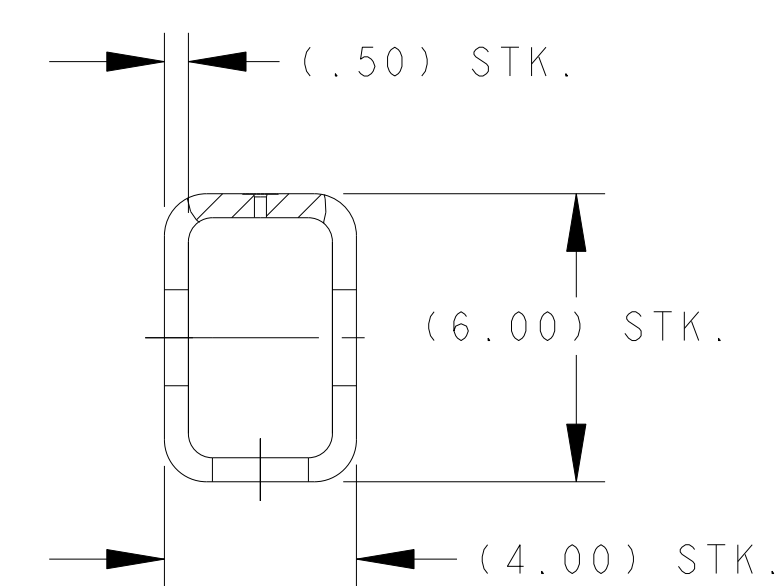
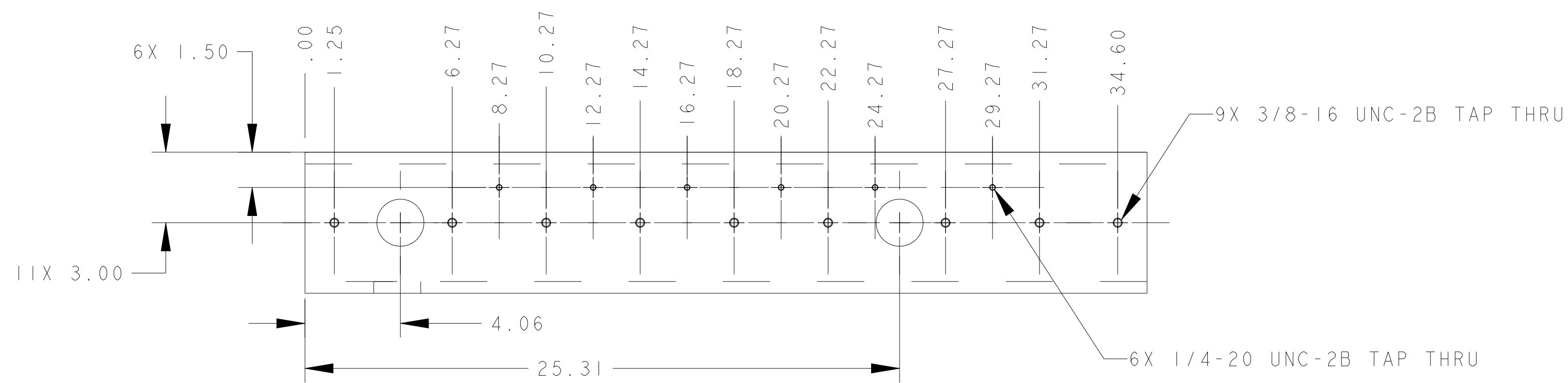
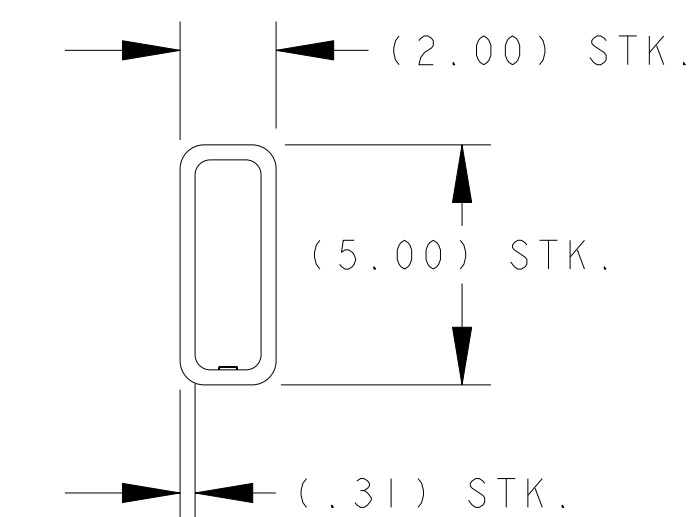
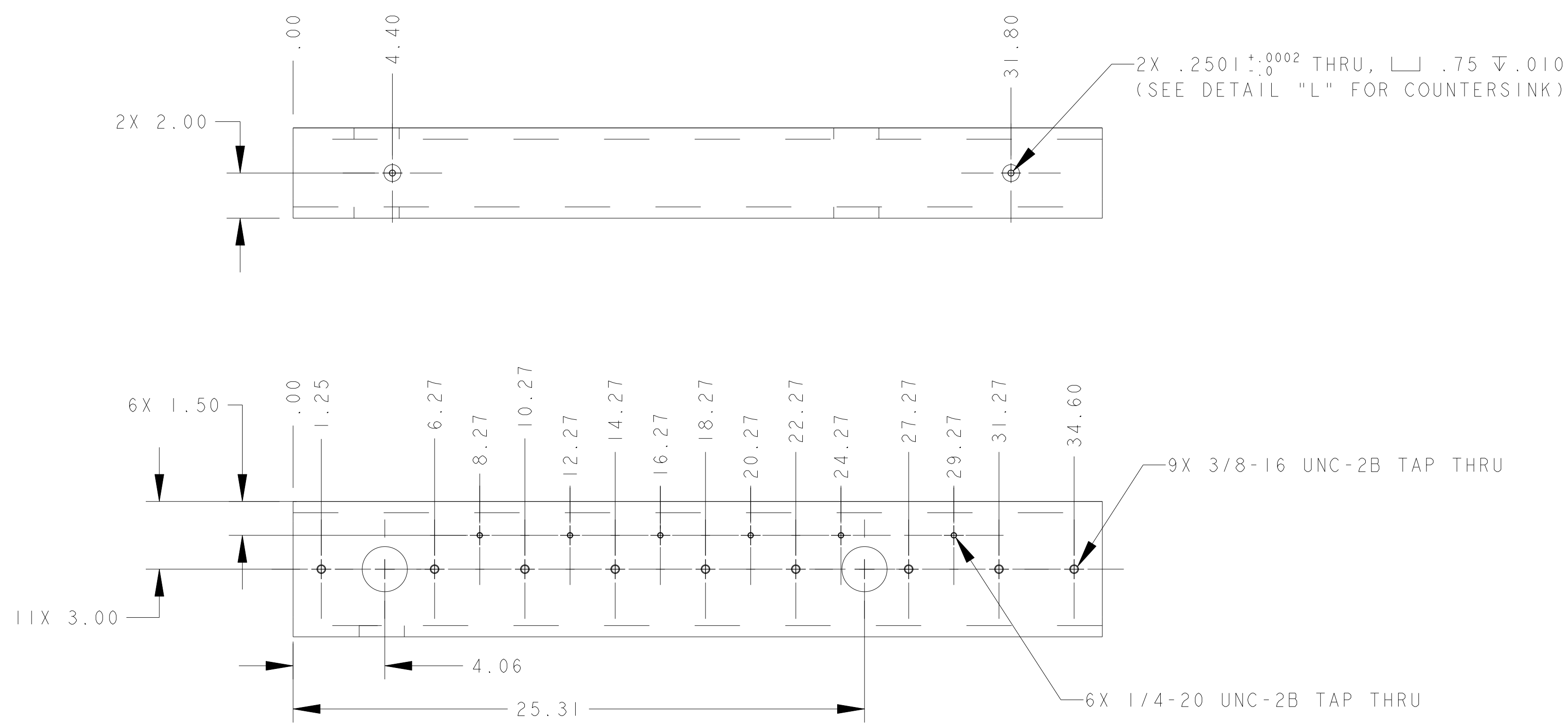
					UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.		DESCRIPTION		REFERENCE			
					PROJECTION: 		ACCT NO. NO. RECD		DATE ISSD DATE RECD		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY					
C	AD	5/23/01	CHANGE 2 1/2" x 5" x 3/8" WALL RECTANGULAR TUBING TO 2" x 5" x 5/16" WALL (14X) CHANGE 2 1/2" x 5" x 3/8" WALL RECTANGULAR TUBING TO 3" x 5" x 3/8" WALL (11X) OTHER REVISIONS TOO EXTENSIVE TO LIST		X.X ± 0.1 FRAC. ± 1/64 X.XX ± 0.03 Angles ± 1.0° TOLERANCES X.XXX ± 0.010 FINISH 125/		SURFACE TREATMENT IDENT METHOD TAG PROJECT NUMBER na PROJECT NAME N/A DWG BY Allan DeMello DATE 18-Apr-01				 SNS - FES MBET MECHANICAL SUB-SYSTEMS - RAFT SYSTEMS RAFT #3 WELDMENT ASSEMBLY					
B	AD	5/01	CHANGE .400 FROM A BASIC DIMENSION TO ±.010 SHT. 6 OF 7 ADD 5/16-18 HOLES (12X) SHT. 6 OF 7		DO NOT SCALE PRINT THREADS ARE CLASS 2 CHAMFER ENDS OF ALL SCREW THREADS 30° CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS				MICROFILMED:				DWG. TYPE SHOWN ON		SCALE: 1/2 DO NOT SCALE PRINTS	
A	AD	5/01	INITIAL RELEASE		BREAK EDGES .016 MAX. ON MACHINED WORK REMOVE BURRS, WELD SPATTER & LOOSE SCALE IN ACCORDANCE WITH ASME Y14.5M & B46.1		CHK BY D. Oshatz DATE APP BY D. Oshatz DATE		PATENT CLEAR:				DESIGN ACCT. NO. CATEGORY CODE		DWG. NO. SIZE REV.	
REV	DWG	CHK	ZONE	DATE	CHANGES						ASSEMBLY		25B452		SHEET 1 OF 7	
											FE3313		25B4554		C	

SHOP ORDERS			SER. NO. -	ERNEST ORLANDO LAWRENCE						
ACCT NO.	NO. RECD	DATE ISSD	BERKELEY NATIONAL LABORATORY							
DEL TO	DATE RECD	DATE RECD	UNIVERSITY OF CALIFORNIA - BERKELEY							
SURFACE TREATMENT				SNS - FES MEBT						
IDENT METHOD	TAG	MECHANICAL SUB-SYSTEMS - RAFT SYSTEMS								
PROJECT NUMBER	na	RAFT #3 WELDMENT ASSEMBLY								
PROJECT NAME	N/A									
AUG	DWG BY	Allan DeMello	DATE	18-Apr-01	MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE:	1/2	DO NOT SCALE PRINTS
	CHK BY	D. Oshatz	DATE		PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	SIZE	REV.
	APR	D. Oshatz	DATE			-	FE3313	25B4554	C	

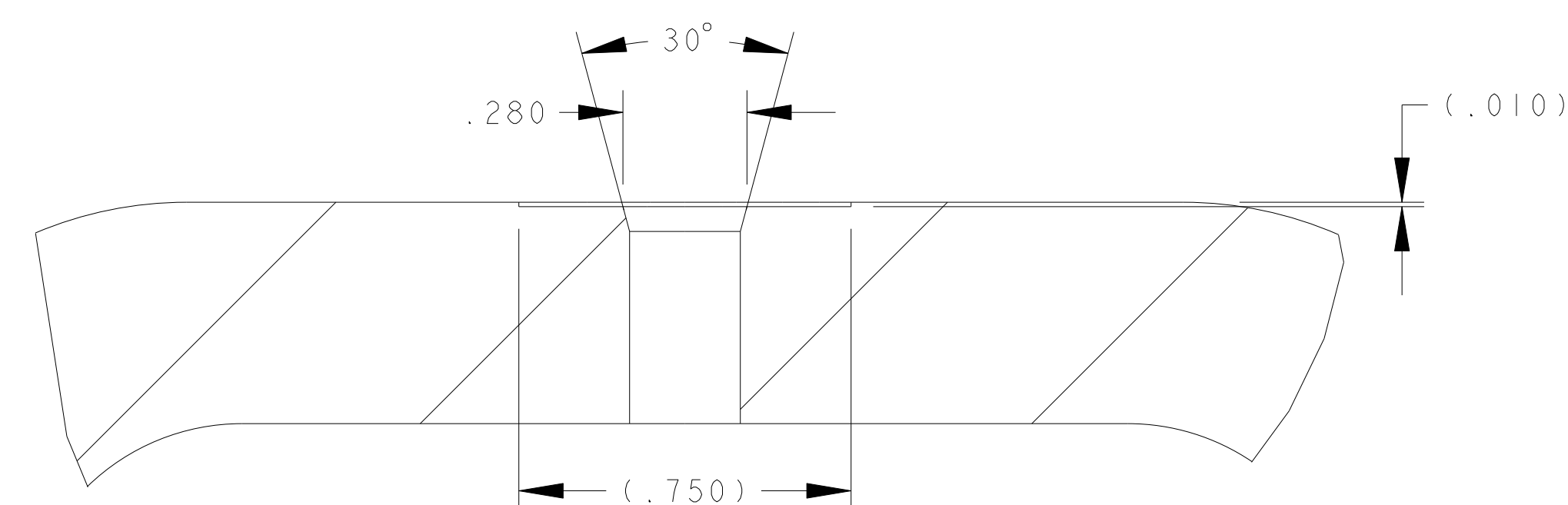
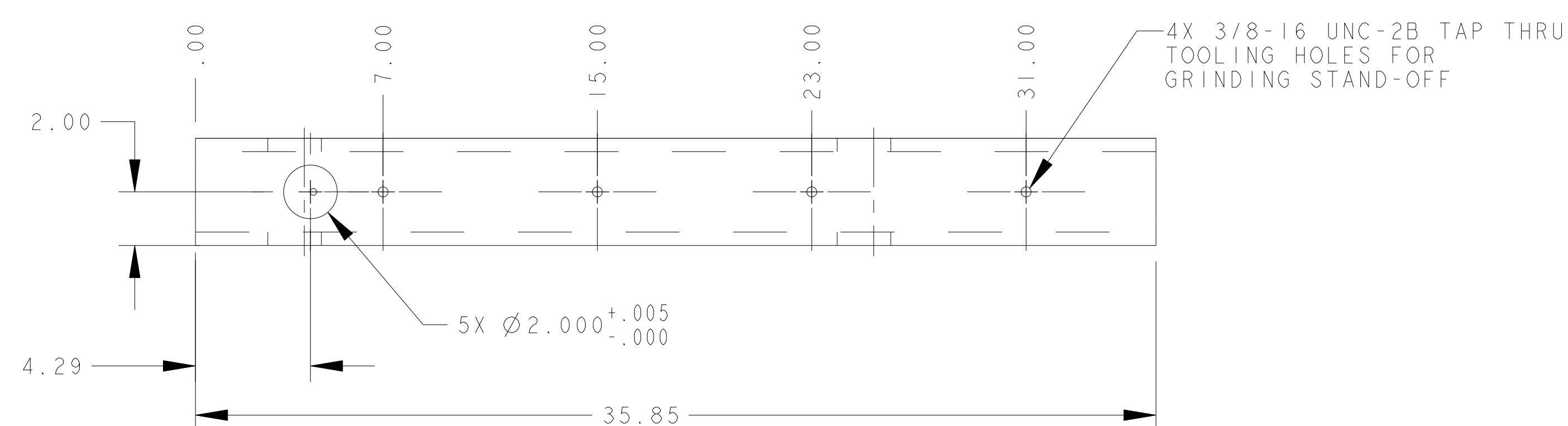
ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY			
		SNS - FES MEBT MECHANICAL SUB-SYSTEMS - RAFT SYSTEMS RAFT #3 WELDMENT ASSEMBLY	
MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON 25B452	SCALE: 1/2 DO NOT SCALE PRINTS
PATENT CLEAR:	DESIGN ACCT. NO. -	CATEGORY CODE FE3313	SHEET 1 OF 7 DWG. NO. 25B4554 SIZE C REV.



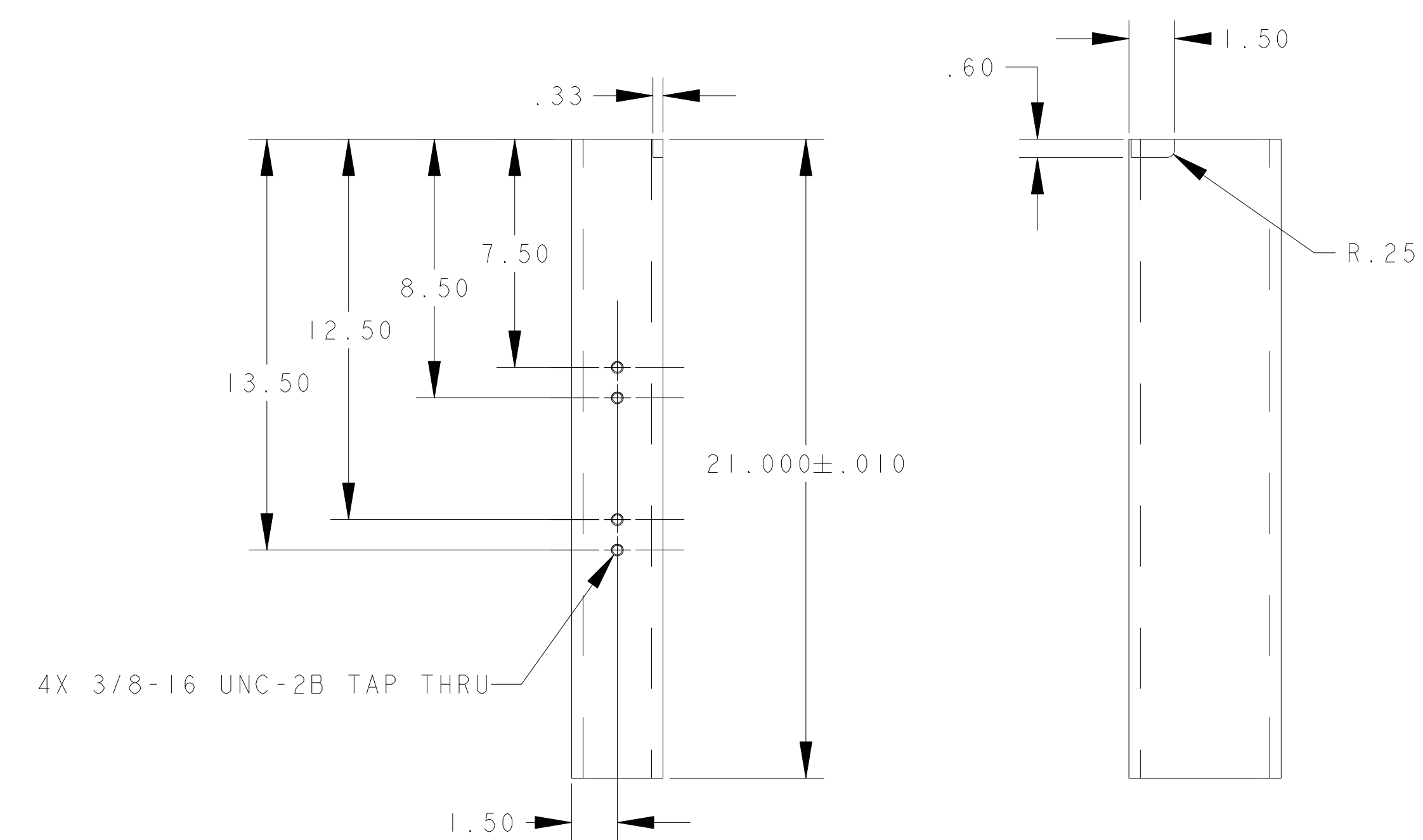
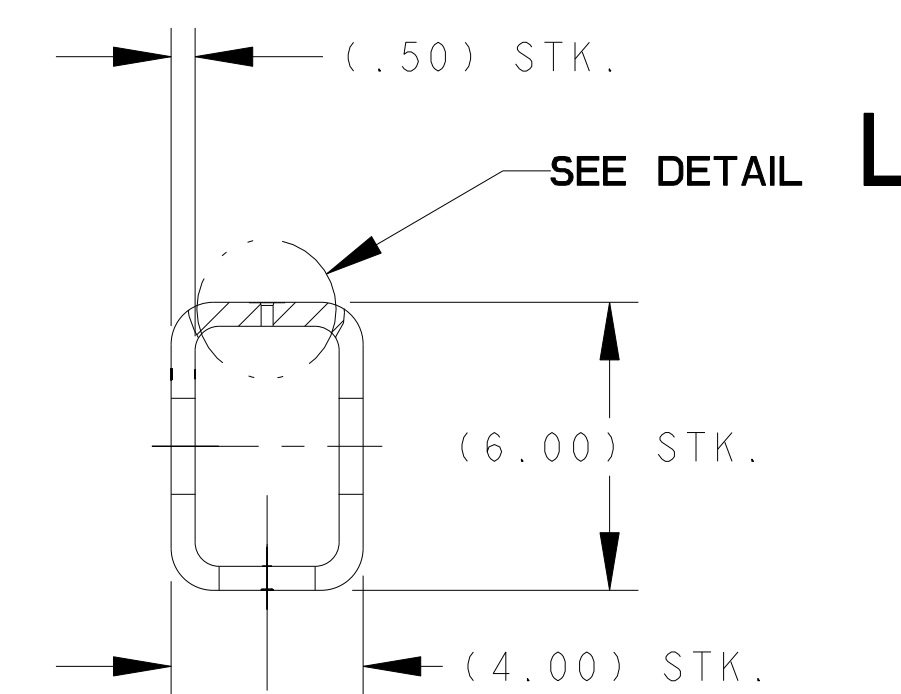
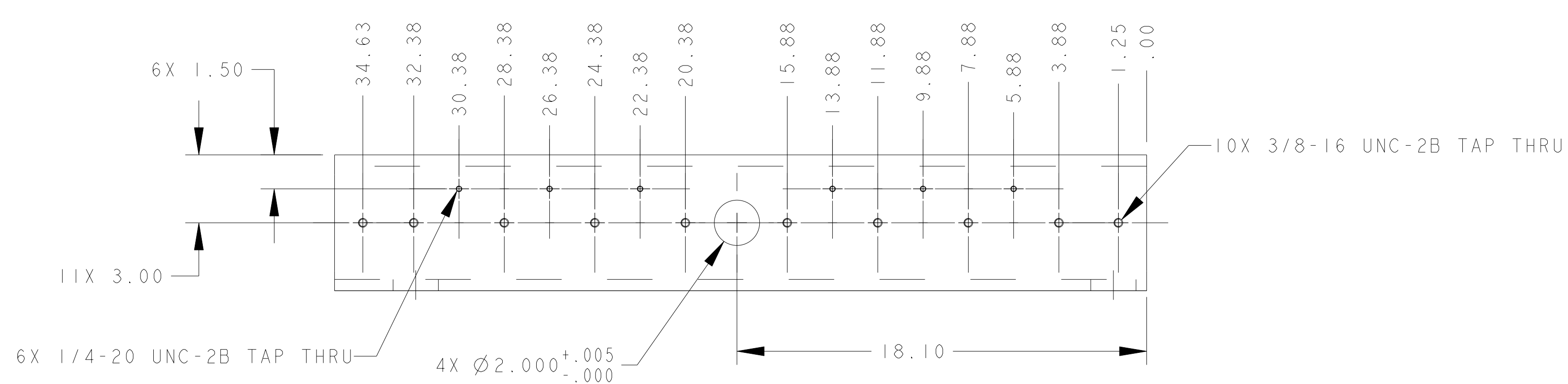
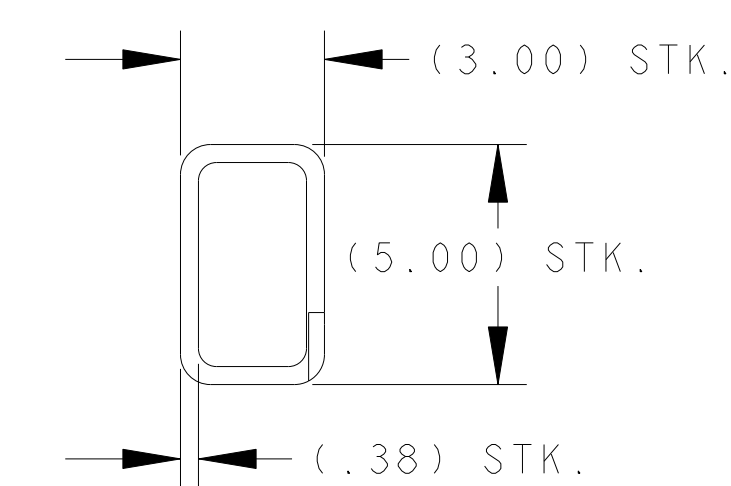
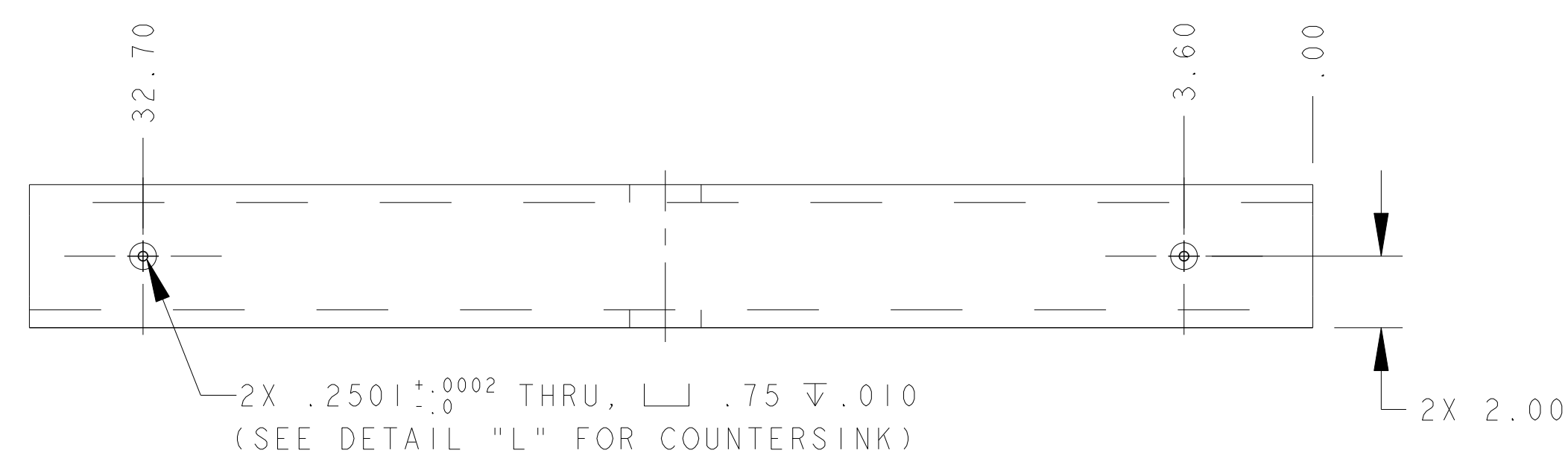




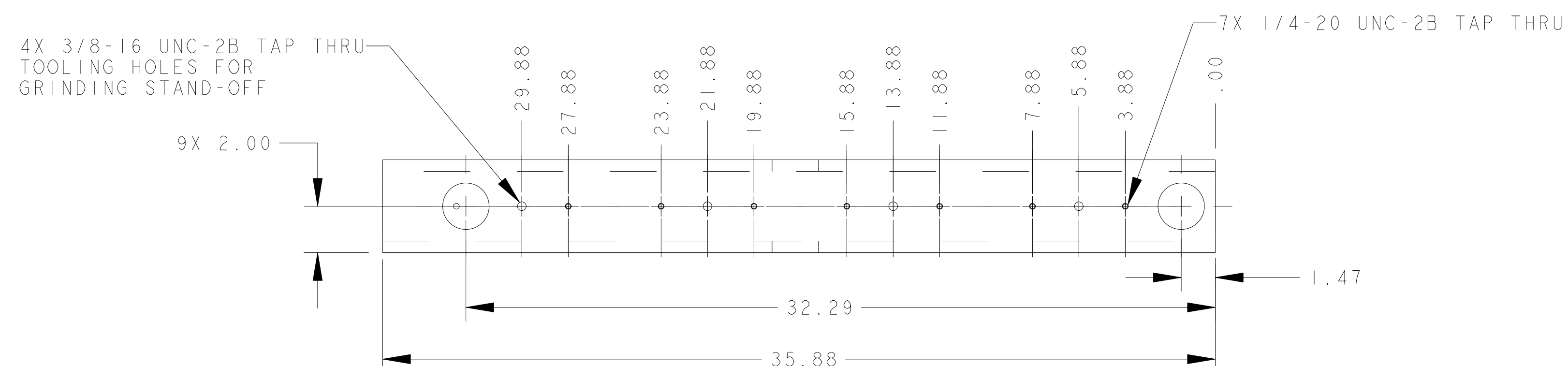
SCALE 1/4
ITEM 1



DETAIL SCALE **L**
3/1

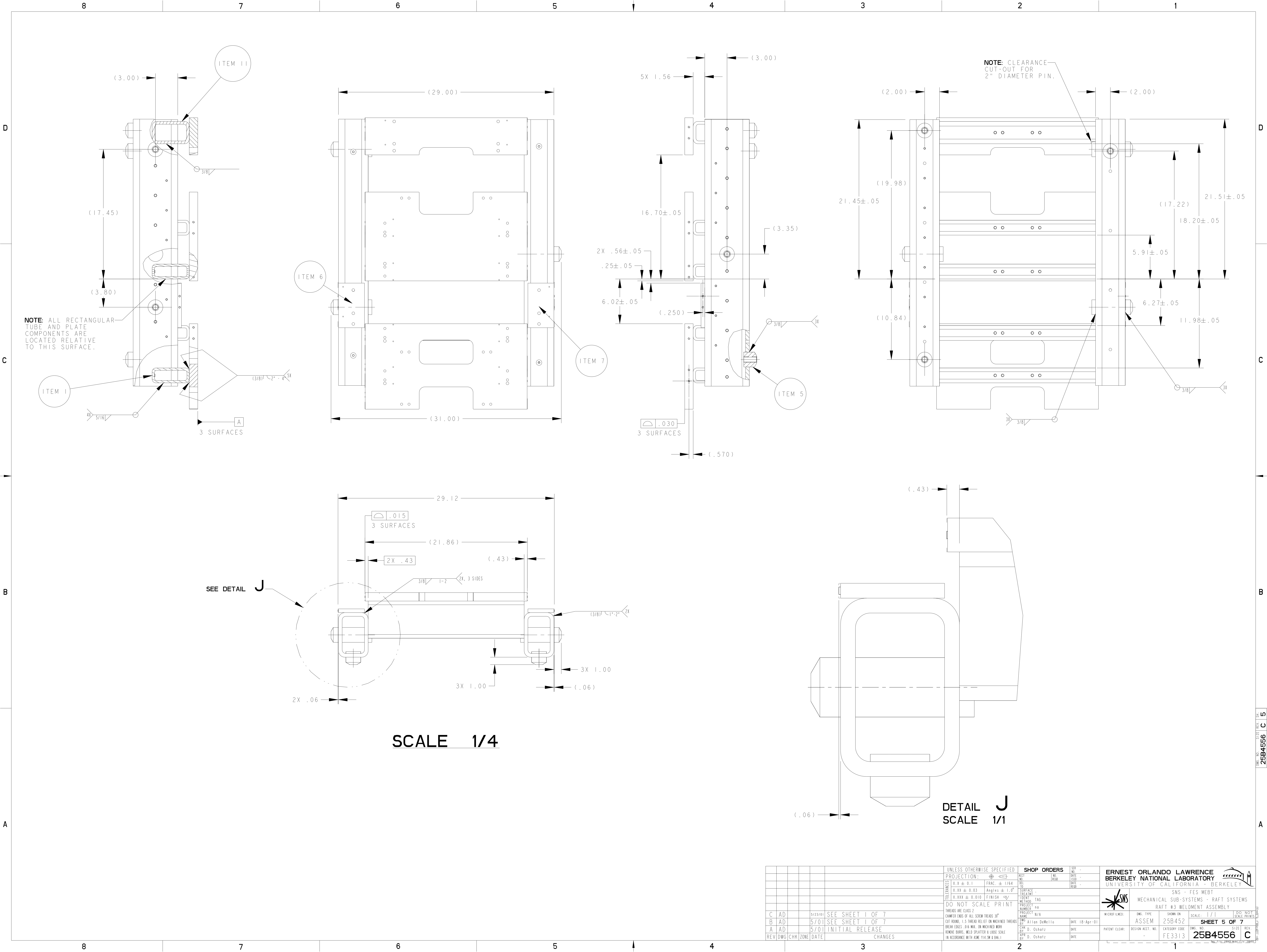


SCALE 1/4
ITEM 12

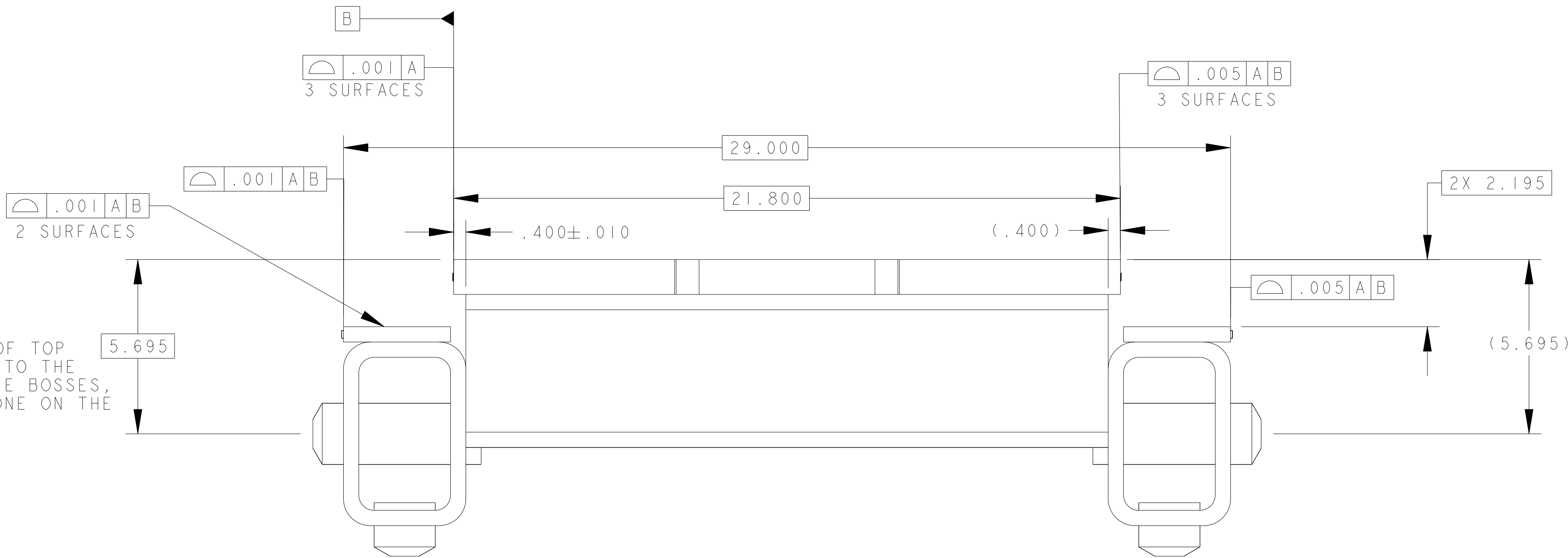
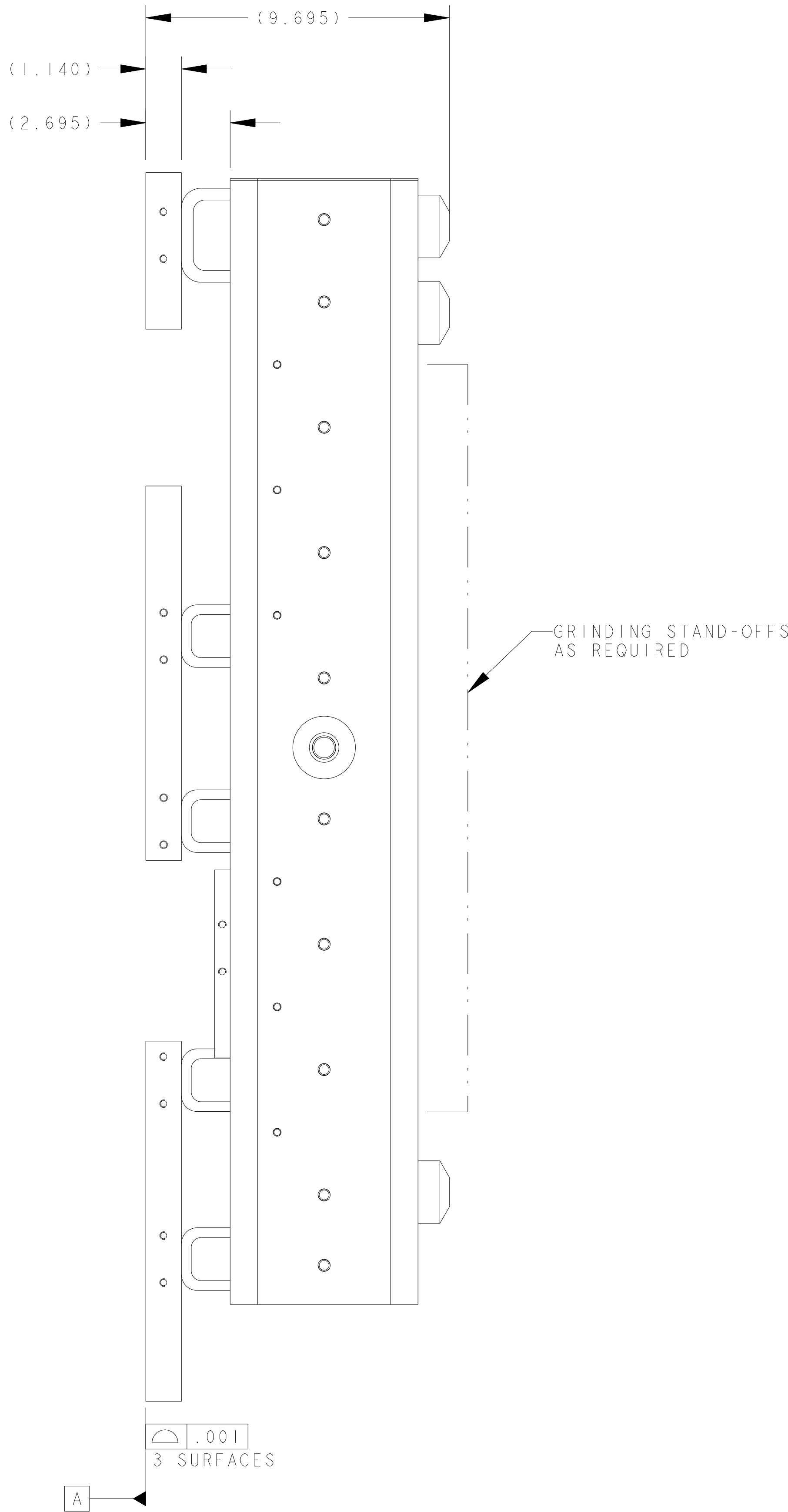
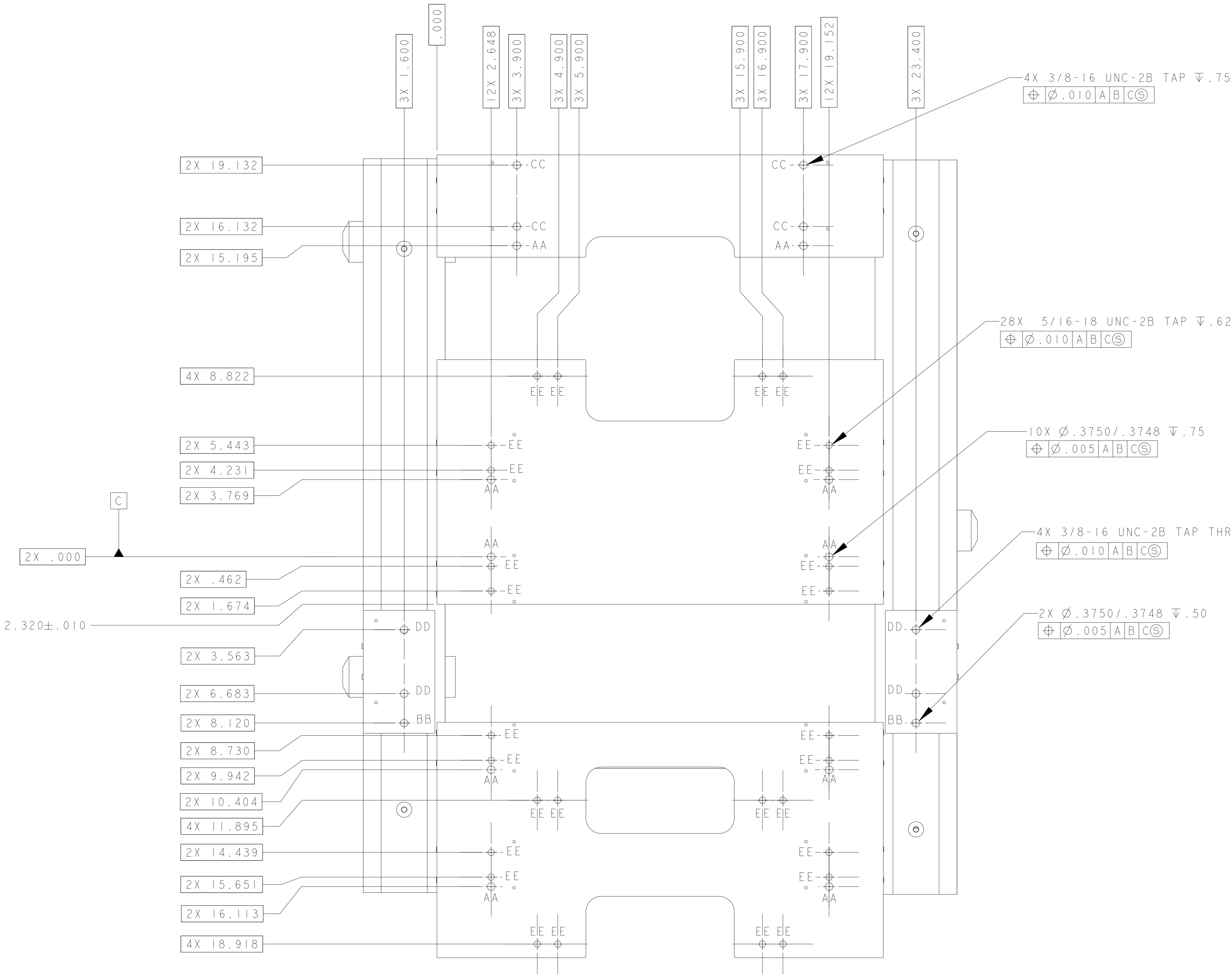


SCALE 1/4
ITEM 3

										UNLESS OTHERWISE SPECIFIED PROJECTION: X.X ± 0.1 FINISH ± 1/64 X.X ± 0.03 Angles ± 1.0° X.XX ± 0.010 FINISH ± 1/2										SHOP ORDERS SCL NO. _____ MATERIAL _____ DATE _____ BY _____ RECOR _____										SER NO. _____ DATE _____ BY _____ RECOR _____										ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - 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NO. _____										REV. _____																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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				UNLESS OTHERWISE SPECIFIED				SHOP ORDERS				SNS - FES MEBT			
				PROJECTION:				ACCT. NO. _____				DATE: _____			
				TOLERANCES: X.X ± 0.1				DATE: _____				DATE: _____			
				X.XX ± 0.03				DATE: _____				DATE: _____			
				Angles ± 1.0°				DATE: _____				DATE: _____			
				X.XXX ± 0.010				DATE: _____				DATE: _____			
				FINISH: 125/				DATE: _____				DATE: _____			
				DO NOT SCALE PRINT				DATE: _____				DATE: _____			
				THREADS ARE CLASS 2				DATE: _____				DATE: _____			
				CHAMFER ENDS OF ALL SCREW THREADS 30°				DATE: _____				DATE: _____			
				CUT ROUNDS: 1/8" MAX. ON MACHINED THREADS				DATE: _____				DATE: _____			
				BREAK EDGES: .016 MAX. ON MACHINED WORK				DATE: _____				DATE: _____			
				REMOVE BURRS, WELD SPATTER & GROSS SCALE				DATE: _____				DATE: _____			
				IN ACCORDANCE WITH ASME Y14.3M & Y14.5				DATE: _____				DATE: _____			
				CHANGES				DATE: _____				DATE: _____			
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FINAL MACHINING

NOTE: AFTER MACHINING SIDES OF ITEMS 6,7,8,9 AND 10 REMOVE ANY BURRS FROM TAPPED HOLES.

HOLE DESCRIPTIONS

HOLE	DESCRIPTION (FOR REFERENCE ONLY)
AA	$\varnothing$.3750/.3748 ∇ .75
BB	$\varnothing$.3750/.3748 ∇ .50
CC	3/8-16 UNC-2B ∇ .75
DD	3/8-16 UNC-2B ∇ THRU
EE	5/16-18 UNC-2B ∇ .62

SCALE 3/8

				UNLESS OTHERWISE SPECIFIED				SHOP ORDERS				SER. NO. _____			
				PROJECTION: 				ACCT. NO. _____				PROJECT NAME _____			
				TOLERANCES:				SUBJECT _____				DATE _____			
				X.X $\pm$ 0.1				FRAC. $\pm$ 1/64				DATE _____			
				X.XX $\pm$ 0.03				Angles $\pm$ 1.0°				DATE _____			
				X.XXX $\pm$ 0.010				FINISH 125/				DATE _____			
				DO NOT SCALE PRINT				IDENT. TAG _____				DATE _____			
				THREDS ARE CLASS 2				MEAS. TAG _____				DATE _____			
				CHAMFER ENDS OF ALL SCREW THREADS 30°				QUANTITY _____				DATE _____			
				CUT ROUNDS, 1.5 THREAD RELIEF ON MACHINED THREADS				NAME _____				DATE 13-Apr-01			
				BREAK EDGES .016 MAX. ON MACHINED WORK				BY ALAN DeMello				DATE _____			
				REMOVE BURRS, WELD SPATTER & GROSS SCALE				BY D. Oshatz				DATE _____			
				IN ACCORDANCE WITH ASME Y14.3M & B46.1				BY D. Oshatz				DATE _____			

